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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2007

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission file number: 001-33277

SYNTA PHARMACEUTICALS CORP.

(Exact name of registrant as specified in its charter)

Delaware	**04-3508648**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
45 Hartwell Avenue **Lexington, Massachusetts**	**02421**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code **(781) 274-8200**

Securities registered pursuant to Section 12(b) of the Exchange Act:

Title of each class	**Name of each exchange on which registered**
Common Stock, $0.0001 Par Value Per Share	The NASDAQ Stock Market LLC

Securities registered pursuant to Section 12(g) of the Exchange Act:
None.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☐	Accelerated filer ☐	Non-accelerated filer ☒ (Do not check if a smaller reporting company)	Smaller reporting company ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of the registrant's common stock held by non-affiliates of the registrant (without admitting that any person whose shares are not included in such calculation is an affiliate), computed by reference to the price at which the common stock was last sold on June 29, 2007, the last business day of the registrant's most recently completed second fiscal quarter, was $145,161,182.

As of March 14, 2008 the registrant had 33,873,538 shares of common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

The following documents (or parts thereof) are incorporated by reference into the following parts of this Annual Report on Form 10-K: Certain information required in Part III of this Annual Report on Form 10-K is incorporated from the registrant's Proxy Statement for the 2008 Annual Meeting of Stockholders to be held on June 11, 2008.

PART I

Item 1. BUSINESS

Overview

We are a biopharmaceutical company focused on discovering, developing, and commercializing small molecule drugs to extend and enhance the lives of patients with severe medical conditions, including cancer and chronic inflammatory diseases. We have a unique chemical compound library, an integrated discovery engine, and a diverse pipeline of clinical- and preclinical-stage drug candidates with distinct mechanisms of action and novel chemical structures. We have three drug candidates in clinical trials, one drug candidate in preclinical studies, and one program undergoing lead optimization. We discovered and developed each of our drug candidates internally using our compound library and discovery capabilities. At present, other than our lead drug candidate, elesclomol, we retain all rights to each of our drug candidates and programs, across all geographic markets and therapeutic indications. We have entered into a partnership with GlaxoSmithKline, or GSK, for the joint development and commercialization of elesclomol.

Our Lead Drug Candidate, Elesclomol (formerly, STA-4783)

Our most advanced clinical-stage drug candidate, elesclomol, is a novel, injectable, small molecule compound that triggers apoptosis, or programmed cell death, in cancer cells, which we believe has potential for the treatment of a broad range of cancer types.

In September 2006, we announced positive results for elesclomol in combination with paclitaxel, a leading chemotherapeutic agent, in a double-blind, randomized, controlled, multicenter Phase 2b clinical trial in patients with stage IV metastatic melanoma. We believe that this is the first blinded clinical trial of a drug candidate for the treatment of metastatic melanoma in 30 years to meet its primary endpoint with statistical significance. In November 2006, we received Fast Track designation from the U.S. Food and Drug Administration, or FDA, for the development of elesclomol for the treatment of metastatic melanoma. In December 2007, we received orphan drug designation for elesclomol in this indication in the United States from the FDA. Orphan drug status is designed to encourage biotechnology and pharmaceutical companies to develop drugs for rare diseases affecting fewer than 200,000 people in the United States. Assuming that elesclomol is approved by the FDA, we will be entitled to seven years of market exclusivity for elesclomol for the treatment of patients with metastatic melanoma.

Based on the results of our Phase 2b trial, we initiated a global, pivotal Phase 3 clinical trial of elesclomol in metastatic melanoma, called the SYMMETRY trial, in the third quarter of 2007. The SYMMETRY trial is being conducted under the terms of a Special Protocol Assessment, or SPA, agreed to by the FDA. The SPA process provides for a written agreement between a clinical trial sponsor and the FDA that the proposed design and planned analyses of the clinical trial is sufficient to support regulatory approval of a drug candidate, unless public health concerns unrecognized at the time of the protocol assessment become evident. The SYMMETRY trial is enrolling patients with stage IV metastatic melanoma who have not received prior chemotherapy but who may have already been treated with non-chemotherapeutic agents, such as biologics. Approximately 630 patients will be enrolled in the blinded, randomized, controlled study, which generally mirrors the design of our Phase 2b trial and will be conducted at approximately 150 centers worldwide.

As with our prior Phase 2b trial, patients enrolled in the SYMMETRY trial will be randomized to receive either elesclomol plus paclitaxel or paclitaxel alone. The dosage of each agent, the dosing schedule, and the primary endpoint—progression free survival, or PFS—are the same as in our prior Phase 2b trial. The SYMMETRY trial increases the total number of patients enrolled from the prior Phase 2b trial and includes central review of radiology scans, stratification to ensure balance between

treatment and control arms, and a no-crossover design for facilitating the assessment of overall survival, or OS.

Based on our current enrollment projections and event rate targets, we expect to complete enrollment and initiate the primary endpoint analysis of the SYMMETRY trial by the end of 2008. Assuming that the results of the PFS analysis are positive, we plan to submit a new drug application, or NDA, to the FDA in the first half of 2009. If actual enrollment or event rates differ from our current projections, our target dates for completing the PFS analysis and submitting the NDA will likely change.

In October 2007, we entered into a collaborative development, commercialization and license agreement with GSK for elesclomol (hereinafter referred to as the GSK Agreement), under which we are eligible to receive up to $1.01 billion in milestones and other payments, as well as share 40-50% of the profits and losses from sales in the United States and receive double-digit tiered royalties from sales outside of the United States. Under the terms of the GSK Agreement, the companies will jointly develop and commercialize elesclomol in the United States, and GSK will have exclusive responsibility for the development and commercialization of elesclomol outside the United States. Pursuant to the agreement, we received a non-refundable upfront cash payment of $80 million in November 2007. We are also eligible to receive potential pre-commercial milestone payments from GSK of up to $585 million, which include both payments for operational progress, such as trial initiation and enrollment, and payments for positive clinical and regulatory outcomes, such as regulatory approval. In addition, we are eligible to receive up to $300 million in potential commercial milestone payments from GSK based on achieving certain net sales thresholds.

Our Phase 2b clinical trial of elesclomol enrolled a total of 81 metastatic melanoma patients at 21 centers in the United States. This clinical trial was conducted in a double-blind, randomized, controlled fashion and compared the effects of elesclomol in combination with paclitaxel, a widely used chemotherapy, versus paclitaxel alone. The primary endpoint for assessing efficacy was PFS. PFS is calculated for each patient by measuring the time from the patient's assignment to a treatment group in the trial until a PFS event, which is the earlier of tumor progression or death. In published guidelines and actions related to clinical trials conducted by other companies, the FDA has previously indicated PFS is an acceptable endpoint for registration in metastatic melanoma and other cancer types.

In our Phase 2b trial, elesclomol plus paclitaxel demonstrated a statistically significant improvement in PFS compared to treatment with paclitaxel alone. In the intent-to-treat analysis, which includes all 81 patients, median PFS increased from 1.8 months for patients treated with paclitaxel alone to 3.7 months for patients treated with elesclomol plus paclitaxel. The percentage of patients who survived and were free of tumor progression at six months more than doubled from 15% for patients treated with paclitaxel alone to 35% for patients treated with elesclomol plus paclitaxel. The statistical significance of the improvement in PFS is described by a *P*-value, which measures the probability that the difference is due to chance alone. A *P*-value of less than 0.05 is considered statistically significant and unlikely due to chance. The *P*-value in this analysis was 0.035.

In the per-protocol analysis of the trial results, which includes the 77 patients who could be evaluated for efficacy as specified in the trial protocol, median PFS increased from 1.8 months for patients treated with paclitaxel alone to 4.4 months for patients treated with elesclomol plus paclitaxel. The percentage of patients who survived and were free of tumor progression at six months more than doubled from 15% for patients treated with paclitaxel alone to 37% for patients treated with elesclomol plus paclitaxel. The *P*-value in this analysis was 0.017.

A recently published meta-analysis by Korn et al. of 42 clinical trials incorporating 2,100 patients with stage IV metastatic melanoma showed a median PFS of 1.7 months and a six month PFS rate of

14.5%. Results for patients in the control arm of our Phase 2b trial—a median PFS of 1.8 months and a six month PFS rate of 15%—are consistent with the Korn et al. data and other historical data.

In addition to a statistically significant result for the primary endpoint, PFS, we observed a positive trend for the secondary endpoint, tumor response rate, which measures the percentage of patients who have experienced a substantial decrease in tumor size as defined by the industry standard Response Evaluation Criteria in Solid Tumors, or RECIST, criteria. Patients who received elesclomol plus paclitaxel showed a 15% tumor response rate, versus a 4% tumor response rate for patients who received paclitaxel alone. While the positive trend in the secondary endpoint for this trial was encouraging, it did not reach statistical significance. Our Phase 2b trial did not include a sufficient number of patients to detect this level of difference with statistical significance. In contrast, our Phase 3 trial will enroll a sufficient number of patients to detect this level of difference with statistical significance.

Our Phase 2b trial also included a planned analysis of OS, measuring the time from each patient's random treatment assignment until death from any cause. However, at the time that we performed this analysis, most patients were still alive and as a consequence, the results we obtained were not meaningful. After concluding the planned study, we filed a protocol amendment permitting collection of further OS data. We analyzed these data after those patients not known to have died had been followed for more than two years. The results of this further analysis demonstrated a median OS of 11.9 months for patients randomly assigned to elesclomol plus paclitaxel versus 7.8 months for patients randomly assigned to paclitaxel alone. As with the increased tumor response rate, the improvement in median OS was encouraging, but did not achieve statistical significance. Our Phase 2b trial did not have sufficient numbers of patients to detect this level of difference with statistical significance. In contrast, our Phase 3 trial has been designed to have sufficient statistical power to detect a difference from nine months to 12 months in OS.

In addition to an encouraging OS difference between the two arms of our Phase 2b trial, we believe that the 11.9 month median OS result and the one year OS rate of 49% in the patients who received elesclomol plus paclitaxel compare favorably with survival data from melanoma trials reported by others. As described in a 2006 paper by Tarhini and Agarwala, prior clinical trials in a similar patient population have shown median OS of six to nine months, and no current therapy has shown an OS benefit. The Korn et al. publication reported a median OS of 6.2 months and a one year survival rate of 25.5%.

Our Phase 2b trial included both first-line patients, those that had not received prior chemotherapy, and second-line patients, those that had received one prior chemotherapy regimen. We explored the effect on PFS in those two subgroups. While we saw a PFS benefit from treatment with elesclomol in both groups of patients, the benefit was greater in the first-line group. The second-line patient population (N=49) experienced an improvement in median PFS from 1.8 months to 2.6 months; the first-line patient population (N=32) experienced an improvement in median PFS from 1.8 months to 7.1 months. While these subset analyses are based on a smaller number of patients than the overall trial, the pronounced benefit in the first-line population did achieve statistical significance, with a *P*-value of 0.02. Together with our medical advisors, we decided to conduct the Phase 3 trial in the first-line patient population, which we believe is the most likely to show the greatest benefit from treatment with elesclomol.

We submitted the initial investigational new drug application, or IND, for elesclomol in September 2002. Including the patients treated in the Phase 2b metastatic melanoma clinical trial, we have treated a total of approximately 300 patients at over 50 medical centers in the United States and Canada with elesclomol. Elesclomol has been well tolerated, with toxicities of the elesclomol plus paclitaxel combination generally similar to those of paclitaxel alone, and the incidences of individual severe adverse events generally less than 10%.

Our Other Drug Candidates and Research Programs

Elesclomol was discovered and developed internally by our scientists, using our chemical compound library and our biology, chemistry, and pharmaceutical development capabilities. In addition to elesclomol, we have discovered and developed three other drug candidates currently in clinical or preclinical development, each of which has a distinct chemical structure, mechanism of action, and market opportunity. We also have one program in the lead optimization stage of discovery and other programs in earlier stages of discovery.

Oncology

STA-9090. STA-9090 is a novel, injectable, small molecule drug candidate we are developing for the treatment of cancer. STA-9090 inhibits heat shock protein 90, or Hsp90, a chaperone protein that regulates the activity of numerous signaling proteins that trigger uncontrolled proliferation in cancer cells, in particular kinase proteins. Examples of kinase proteins include c-Kit, Bcr-Abl, Her2, EGFR, and others that are the targets of approved direct kinase inhibitors such as Gleevec, Herceptin, Tarceva, and Erbitux. We believe that inhibiting kinases indirectly, by disrupting the chaperone activities of Hsp90, provides two advantages: first, a means to simultaneously attack multiple cancer-promoting kinases; and, second, an ability to kill tumor cells with mutated kinases that have lost responsiveness to a direct kinase inhibitor. We have shown in preclinical experiments that STA-9090 is significantly more potent against certain types of cancer cells than Gleevec, as well as the two Hsp90 inhibitors furthest along in clinical development, 17-AAG and 17-DMAG. STA-9090 is further differentiated from these Hsp90 inhibitors because it is a novel chemical structure that is not a derivative or analog of the natural product geldanamycin. We believe that this creates a distinct activity profile for STA-9090 and is a competitive advantage. We are currently conducting two Phase 1 studies to identify the maximum tolerated dose of STA-9090 based on once- and twice-a-week intravenous dosing schedules, respectively. In addition to an evaluation of safety and tolerability, patients in these studies will be assessed for biological activity based on biomarker responses and clinical response rates based on the RECIST criteria. We intend to initiate a third STA-9090 Phase 1 trial in hematologic cancers in the second half of 2008.

STA-9584. STA-9584 is a novel, injectable, small molecule compound that disrupts the blood vessels that supply tumors with oxygen and essential nutrients. In preclinical experiments, STA-9584 has shown strong anti-tumor activity in a broad range of cancer models, including prostate, lung, breast, melanoma, and lymphoma. In preclinical testing, STA-9584 has been shown to act against established tumor vessels, a mechanism that is differentiated from the mechanism of anti-angiogenesis inhibitors such as Avastin, which prevents the formation of new tumor vessels. This program is currently in preclinical development.

Autoimmune and Inflammatory Diseases

Apilimod (STA-5326). Apilimod is a novel, orally administered, small molecule drug candidate we are developing for the treatment of autoimmune and other chronic inflammatory diseases. Apilimod inhibits the production of the cytokines interleukin-12, or IL-12, and interleukin-23, or IL-23, and thereby down-regulates the inflammation pathways that underlie certain autoimmune and inflammatory diseases. We submitted the initial IND for apilimod in March 2003. We are currently conducting a Phase 2a clinical trial of apilimod in patients with rheumatoid arthritis, or RA, and sponsoring a Phase 2a clinical trial in patients with gastrointestinal manifestations of common variable immunodeficiency, or CVID. Both the RA and CVID Phase 2a studies completed initial enrollment. Based on the data we have reviewed to date from the CVID trial and a strategic review of the apilimod program, we have decided to complete the ongoing CVID trial, but not to further pursue this indication for apilimod. The preliminary results of the first 22 patients in the RA trial showed encouraging biomarker and clinical signals suggesting activity of apilimod in this indication. We have

elected to enroll an additional cohort in the RA Phase 2a trial to explore a higher dose of apilimod. We expect to complete enrollment of this higher dose cohort in the second half of 2008.

CRAC ion channel inhibitor. We have developed novel, small molecule inhibitors of calcium release activated calcium, or CRAC, ion channels expressed on immune cells. The CRAC ion channel is the primary route for calcium entry into T cells and other immune cells, regulating multiple immune cell processes important for initiating and maintaining an inflammatory immune response. We have demonstrated in preclinical experiments that our CRAC ion channel inhibitors selectively inhibit the production of critical pro-inflammatory cytokines, such as interleukin-2, or IL-2, and TNF a by immune cells, and that these compounds are effective in multiple animal models of immune diseases, including models of arthritis. This program is in the lead optimization stage of discovery.

Our Drug Candidate Pipeline

The following table summarizes our most advanced drug candidates currently in clinical or preclinical development:

	Product Candidate	Disease	Stage	Status	Worldwide Commercial Rights
Oncology	**Elesclomol (formerly STA-4783)** Oxidative stress inducer	Metastatic melanoma	Phase 2b	Completed—met primary endpoint	Synta and GSK share U.S. commercial rights GSK has exclusive rights outside U.S.
			Phase 3	Expect to submit NDA 1H 2009	
		Additional cancers	Phase 2	Expect to initiate in 2008	
	STA-9090 Hsp90 inhibitor	Cancer	Phase 1	Two Phase 1 trials ongoing	Synta
	STA-9584 Vascular disrupting agent	Cancer	Preclinical development	Ongoing	Synta
Inflammatory Diseases	**Apilimod (STA-5326)** Oral IL-12/23 inhibitor	Rheumatoid arthritis	Phase 2a	Expect to complete enrollment in 2H 2008	Synta
	Oral CRAC ion channel inhibitor	Autoimmune diseases, transplant	Lead optimization	Ongoing	Synta

In the above table, lead optimization indicates that compounds have shown activity, selectivity, and efficacy in *in vivo* models, as well as an acceptable preliminary safety profile. These compounds are being optimized for potency, drug-like properties, and safety before entering into preclinical development. Preclinical development activities include manufacturing, formulation, and full toxicology studies in preparation for a Phase 1 clinical trial. Phase 1 indicates initial clinical safety testing and pharmacological profiling in healthy volunteers, with the exception that Phase 1 clinical trials in oncology are typically performed in patients with cancer. Phase 2 involves efficacy testing and continued safety testing in patients with a specific disease, and may include separate Phase 2a and Phase 2b clinical trials. Phase 2a clinical trials typically test the drug candidate in a small number of patients and are designed to provide early information on drug safety and efficacy. Phase 2b clinical trials typically involve larger numbers of patients and comparison with placebo, standard treatments, or other active comparators. Phase 3 indicates a confirmatory study of efficacy and safety in a larger patient population, and typically involves comparison with placebo, standard treatments, or other active comparators.

Oncology Programs

We have two clinical-stage programs and one preclinical-stage program in oncology:

- *Elesclomol.* Our most advanced clinical-stage drug candidate, elesclomol, has achieved positive results in a double-blind, randomized, controlled, multicenter Phase 2b clinical trial in patients with stage IV metastatic melanoma. We are conducting the SYMMETRY trial, a global, pivotal Phase 3 clinical trial in metastatic melanoma, under the terms of an SPA agreement with the FDA. We have entered into a partnership with GSK to jointly develop and commercialize elesclomol.

- *STA-9090.* STA-9090, our novel, small molecule Hsp90 inhibitor, is in two Phase 1 clinical trials.

- *STA-9584.* STA-9584, our novel small molecule compound that disrupts the blood vessels that supply tumors with oxygen and essential nutrients, is in preclinical development.

Oncology Background

Cancers are diseases characterized by abnormal and uncontrolled cell growth and division, typically leading to tumor formation. As a tumor grows, it can directly disrupt organ function at its site of origin. In addition, cancer cells can also spread to other organs, such as the brain, bones and liver, by a process called metastasis. The growth of metastatic tumors at these new sites can disrupt the function of these other organs. There are many kinds of cancer, but all are characterized by uncontrolled growth of abnormal cells.

The World Health Organization estimates that more than 11 million people are diagnosed with cancer every year worldwide, and seven million people die from the disease annually. The American Cancer Society estimates that approximately 1.4 million people in the United States will be diagnosed with cancer in 2008, and approximately 566,000 people will die from the disease.

Anti-cancer agents are the second largest therapeutic class of pharmaceuticals in the world, with global sales of $34.6 billion in 2006.

Melanoma

Melanoma is the deadliest type of skin cancer and is the sixth most commonly diagnosed cancer in the United States. The National Cancer Institute has estimated that the prevalence of melanoma in the United States, or the number of patients alive who have been diagnosed with the disease, currently is more than 660,000. The American Cancer Society estimates that in 2008 the incidence, or number of newly diagnosed cases, of melanoma in the United States will be approximately 62,500, with 8,400 deaths from the disease. According to a December 2006 Datamonitor report, the incidence of melanoma has doubled every decade for the past 40 years, faster than any other cancer type, and is currently the fifth and sixth leading cause of global cancer mortality within males and females, respectively.

Melanoma is classified into four stages, which are based on well-defined criteria, including characteristics of the primary tumors, involvement of the regional lymph nodes, and the extent and location of metastases. When melanoma is discovered and treated in the early stages, where the cancer is confined to a local area, patients have a relatively high rate of survival. For example, stage I patients have a five-year survival rate of between 90 and 95%. Once melanoma has advanced to stage III, where the cancer has spread to the regional lymph nodes, or stage IV, where the cancer has spread to distant organs, the prognosis for patients is much worse, with five-year survival rates less than 20%. We are unaware of any reliable industry survey data specifically for the prevalence of metastatic melanoma in the United States or worldwide. Commonly used estimates assume that 5-10% of all patients diagnosed

have metastatic disease, which estimates the prevalence of metastatic melanoma at approximately 30,000 to 60,000 patients in the United States.

Limitations of Current Treatments for Metastatic Melanoma

For early stage melanoma, surgical removal of the primary melanoma lesion is the standard of care. Surgical removal may also be performed to remove distant skin metastases, lymph nodes or other organs to which the cancer has spread. Sometimes interferon alpha-2b is administered to patients as an adjuvant to surgery to reduce the rate of disease relapse. This is the only drug approved by the FDA for use in such a role.

For metastatic melanoma, treatment options are limited. Single-agent chemotherapy has typically shown PFS of less than two months. Randomized trials comparing combination chemotherapy against single agent chemotherapy have shown significant toxicity with no significant improvement in survival. Dacarbazine, also known as DTIC, has been one of the most studied drugs in this setting, either alone or in combination, and is the only FDA-approved chemotherapy for the treatment of metastatic melanoma. However, when DTIC is used as a single agent, it has been shown to have limited clinical benefits. Various other single-agent chemotherapies such as temozolomide, fotemustine and oblimersen have been tested against or in combination with DTIC. Response rates from controlled studies have typically been between 6% to 25% with median time to progression/ PFS of 1.8 to 2.4 months. Immunotherapy with IL-2 has been approved by the FDA based on longer duration responses than typically observed with chemotherapy, but these responses occur only in a small subset of patients, and treatment with IL-2 is accompanied by severe toxicities. No agents other than DTIC or IL-2 have been approved by the FDA for the treatment of metastatic melanoma. Therefore, we believe there is an urgent need in metastatic melanoma for additional therapies demonstrating meaningful clinical benefit, favorable safety profiles, and broad patient applicability.

Taxanes

The class of drugs known as taxanes is the market-leading class of chemotherapeutic drugs, with over $2 billion in worldwide sales in 2005. Approved taxanes include Taxol, a formulation of paclitaxel first approved in 1992 and marketed by Bristol-Myers Squibb, which achieved peak sales of approximately $1.6 billion in 2000 before patent expiry; Taxotere (docetaxel), which is marketed by Sanofi-Aventis and had global sales of approximately 1.5 billion euros in 2006; Abraxane, a paclitaxel protein conjugate marketed by Abraxis Pharmaceutical Partners; and several generic versions of paclitaxel. Taxanes have shown efficacy across a wide range of cancer types and have been approved by the FDA for the treatment of prostate, ovarian, breast, and non-small cell lung cancers, as well as Kaposi's sarcoma. Additionally, we believe taxanes are prescribed off-label for other cancer types, including metastatic melanoma, head and neck, uterine, stomach, esophageal, and bladder. In metastatic melanoma, the response rate of single agent paclitaxel has been reported as less than 20%. A study published in 2002 in *Cancer Investigation* showed that combining DTIC and paclitaxel for the treatment of metastatic melanoma was not superior to using either agent alone. Other anti-cancer agents that are sometimes added to taxanes in an attempt to improve efficacy include Paraplatin, a formulation of carboplatin marketed by Bristol-Myers Squibb. While in some cases the addition may increase treatment efficacy, carboplatin has been shown to add substantial toxicity. As a result, we believe there is a significant opportunity for agents that can enhance the anti-tumor effects of taxanes without adding undesirable side effects.

Our Lead Clinical Development Program—Elesclomol

Elesclomol is a novel, small molecule drug candidate that induces programmed cell death in a wide variety of cancer cell types *in vitro,* and has demonstrated anti-cancer activity in a broad range of preclinical cancer models. We believe that the anti-cancer activity of elesclomol is due to its ability to directly increase oxidative stress, as measured by the level of reactive oxygen species, or ROS, inside cancer cells. Because cancer cells have an elevated level of oxidative stress relative to non-cancer cells, we believe that the increase in ROS induced by elesclomol causes cancer cells to exceed a breaking point that triggers tumor cell death, while causing minimal damage to normal cells. In our preclinical models, we have observed anti-cancer activity of elesclomol both as a single agent and in combination with widely used anti-cancer therapies, such as paclitaxel, docetaxel, gemcitabine, and rituximab.

We have completed six clinical trials with elesclomol in cancer patients, in which a total of approximately 300 patients have been treated at over 50 medical centers in the United States and Canada. Based on the positive results observed in our Phase 2b clinical trial in metastatic melanoma, we initiated a global, pivotal Phase 3 clinical trial in metastatic melanoma in the third quarter of 2007, the SYMMETRY trial. The protocol is being conducted under an SPA agreed to by the FDA. The SPA process may result in a written agreement between a clinical trial sponsor and the FDA that the design and planned analyses of the clinical trial will support regulatory approval, unless public health concerns unrecognized at the time of the protocol assessment become evident. However, the approval decision may be made on the basis of a number of factors, including the degree of clinical benefit, and the FDA is not obligated to approve elesclomol as a result of the SPA, even if the clinical outcome is positive.

Elesclomol has also received Fast Track designation from the FDA for the treatment of metastatic melanoma. The FDA grants Fast Track designation for drug candidates intended to treat serious or life threatening conditions and that demonstrate the potential to address unmet medical needs. Fast Track designation can facilitate the development of a drug candidate and expedite its review by allowing for more frequent and timely meetings with the FDA and submission of an NDA on a rolling basis. However, Fast Track designation does not alter the standards for approval of a drug candidate, including the need for clinical trials that demonstrate safety and efficacy, nor does it mean that the FDA will expedite approval of a drug candidate. In addition, Fast Track designation does not increase the likelihood of approval of a drug candidate.

In December 2007, we also received orphan drug designation for elesclomol for metastatic melanoma in the United States from the FDA. Orphan drug status is designed to encourage biotechnology and pharmaceutical companies to develop drugs for rare diseases affecting fewer than 200,000 people in the United States. Assuming that elesclomol is approved by the FDA, we will be entitled to seven years of market exclusivity for elesclomol for the treatment of patients with metastatic melanoma. In October 2007, we entered into a partnership with GSK for the joint development and commercialization of elesclomol.

Our Phase 2b Clinical Trial in Metastatic Melanoma

Summary

Our Phase 2b clinical trial enrolled a total of 81 metastatic melanoma patients at 21 centers in the United States. This clinical trial was conducted in a double-blind, randomized, controlled fashion and compared the effects of elesclomol in combination with paclitaxel, the most widely used taxane, versus paclitaxel alone. The primary endpoint for assessing efficacy was PFS. PFS is considered an acceptable endpoint for registration in metastatic melanoma and other cancer types, as supported by the current FDA draft guidance set forth in *Clinical Trial Endpoints for the Approval of Cancer Drugs and Biologics* issued in April 2005, and by the EMEA guidance set forth in the draft of Appendix 1 *Methodological Considerations for Using Progression-Free Survival (PFS) as Primary Endpoint in Confirmatory Trials for*

Registration issued in July 2006 to the *Guideline on the Evaluation of Anti-cancer Medicinal Products in Man* , which became effective in June 2006.

In September 2006, we presented the results from our Phase 2b clinical trial at the joint meeting of Perspectives in Melanoma X and the Third International Melanoma Research Congress, held in The Netherlands. Patients who received elesclomol plus paclitaxel showed a statistically significant improvement in PFS compared to those who received paclitaxel alone. Consistent with safety data for elesclomol gathered from other clinical trials, elesclomol was well tolerated in this clinical trial, with toxicities of the elesclomol plus paclitaxel combination generally similar to those of paclitaxel alone.

Clinical Trial Design

The primary objective of our Phase 2b clinical trial was to assess the efficacy in stage IV metastatic melanoma patients of once-weekly treatment of elesclomol plus paclitaxel versus paclitaxel alone, based on the endpoint of PFS. Secondary endpoints were objective response rate, duration of tumor responses, and studies of adverse events and laboratory abnormalities. Once-weekly treatments of elesclomol (213 mg/m^2) plus paclitaxel (80 mg/m^2) or paclitaxel alone (80 mg/m^2) were delivered for three weeks, followed by one week with no treatment. Investigators were permitted to repeat these four-week cycles until disease progression. Tumor assessments were performed at baseline and every other cycle thereafter.

Disease progression and tumor response were defined based on industry standard RECIST criteria, which are the unified response assessment criteria agreed to by the World Health Organization, United States National Cancer Institute, and European Organisation for Research and Treatment of Cancer. RECIST defines disease progression and tumor response based on an assessment of target and non-target lesions. A 20% or greater increase in the sum of the greatest diameters in target lesions, or unequivocal progression in non-target lesions, or the appearance of a new lesion is defined as disease progression. A reduction in the sum of the diameters of at least 30% as compared to baseline is defined as a partial response, or PR. A complete disappearance of target and non-target lesions (and the normalization of any tumor markers) constitutes a complete response, or CR. Both PRs and CRs must be confirmed by repeat assessments at least four weeks after the PR or CR was first documented. A response assessment of stable disease indicates that a CR, a PR or disease progression has not occured at that timepoint. Non-progression refers to an assessment of CR, PR, or stable disease. Objective response rate is typically defined as the sum of PR and CR assessments.

In this clinical trial, we enrolled patients who had received up to one prior chemotherapy treatment. An unlimited number of prior immunotherapy treatments were also allowed, provided that a period of four weeks subsequent to the last treatment elapsed prior to trial entry. Patients with Eastern Cooperative Oncology Group, or ECOG, performance status greater than 2 were excluded, as were patients with any brain metastases. The ECOG performance status is a standard patient assessment tool used in determining the care of cancer patients. Patients with an ECOG score of 3 or 4 are significantly disabled by their disease and are often excluded from clinical trials.

Two-thirds of patients were assigned to treatment with elesclomol plus paclitaxel, with the remaining one-third of patients assigned to treatment with paclitaxel alone. We chose this 2:1 weighting ratio to contribute more productively to the safety database for elesclomol than an even randomization, while still allowing for a statistical comparison of treatment effects. Patients who progressed on paclitaxel alone were given the option to crossover to elesclomol plus paclitaxel and were then treated until further progression.

Clinical Trial Results

The intent-to-treat analysis, which includes all 81 randomly assigned patients, showed that patients assigned to elesclomol plus paclitaxel experienced a statistically significant increase in PFS, with a

P-value of 0.035. The median PFS in this analysis increased from 1.8 months for patients assigned to paclitaxel alone to 3.7 months for patients assigned to elesclomol plus paclitaxel. The percentage of patients who survived and were free of tumor progression at six months more than doubled from 15% for patients assigned to paclitaxel alone to 35% for patients assigned to elesclomol plus paclitaxel. The hazard ratio for PFS in this analysis was 0.58, indicating that patients assigned to elesclomol plus paclitaxel had a 42% reduction in the risk of disease progression or death relative to patients assigned to paclitaxel alone.

The objective response rate, counting complete and partial responses, was 15.1% for patients assigned to elesclomol plus paclitaxel versus 3.6% for patients assigned to paclitaxel alone (*P*-value=0.153). This result showed an encouraging trend but did not reach statistical significance. We were able to obtain complete progression data on only three of the nine patients that were responders in the trial, and as a result had insufficient data to perform an analysis on duration of response.

The table below summarizes the median PFS, the PFS at six months, the hazard ratio, and the objective response rates for the intent-to-treat population.

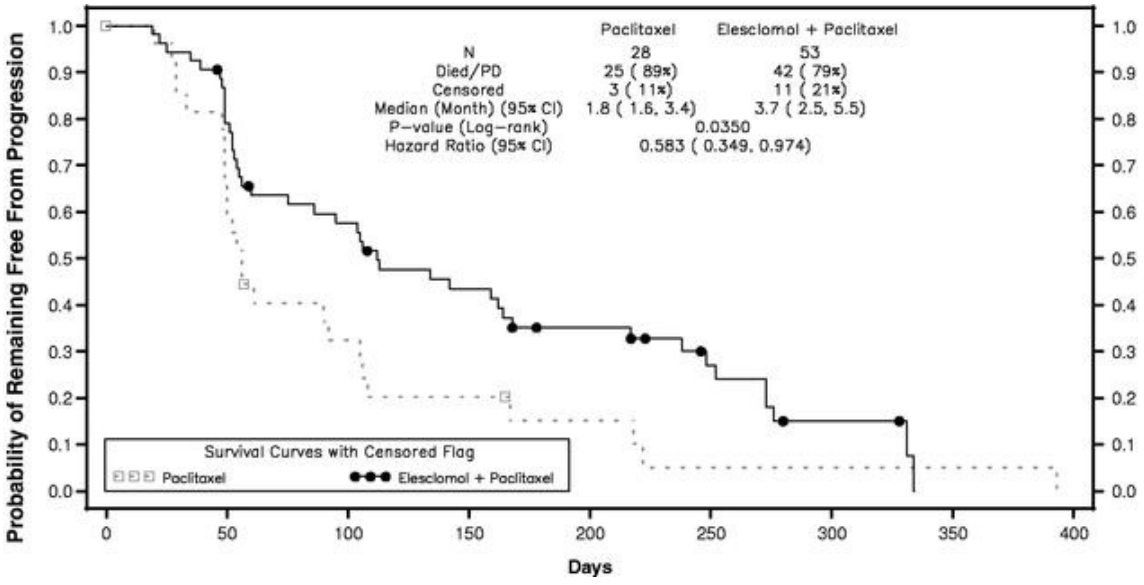
		Elesclomol + Paclitaxel N=53	Paclitaxel alone N=28	*P*-value(1)	Hazard ratio(2)
Intent-to-treat analysis (N=81)	PFS:			0.035	0.583
	• Median (months)	3.68	1.84		
	• At 6 months (% of patients)	35%	15%		
	Objective response rate(3)	15.1%	3.6%	0.153	

(1) *P*-value measures the probability that the difference is due to chance alone. A *P*-value of less than 0.05 is considered statistically significant and unlikely to be due to chance alone.

(2) Hazard ratio is an estimate of comparative risk between the two treatment groups. A hazard ratio of 1 can be interpreted as no decrease in risk, while a hazard ratio of 0.58 can be thought of as a 42% reduction in risk of occurrence for the event as compared to the control group.

(3) Objective response rate is defined as the sum of complete and partial tumor response rates, as assessed by RECIST.

The figure below shows the Kaplan-Meier plots of PFS in this clinical trial for the intent-to-treat population.



In the per-protocol analysis of the trial results, which includes the 77 patients who could be evaluated for efficacy as specified in the trial protocol, median PFS increased from 1.8 months for patients treated with paclitaxel alone to 4.4 months for patients treated with elesclomol plus paclitaxel. The percentage of patients who survived and were free of tumor progression at six months more than doubled from 15% for patients treated with paclitaxel alone to 37% for patients treated with elesclomol plus paclitaxel. The *P*-value in this analysis was 0.017.

This Phase 2b trial also included a planned OS analysis, measuring the time from each patient's random treatment assignment until death from any cause. However, at the time that we performed this analysis, most patients were still alive and as a consequence, the results we obtained were not meaningful. After concluding the planned study, we filed a protocol amendment permitting collection of further OS data. We analyzed these data after those patients not known to have died had been followed for more than two years. The results of this further analysis demonstrated a median OS of 11.9 months for patients randomly assigned to elesclomol plus paclitaxel versus 7.8 months for patients randomly assigned to paclitaxel alone. As with the increased tumor response rate, the improvement in OS was encouraging, but did not achieve statistical significance. Our Phase 2b trial did not have sufficient numbers of patients to detect this level of difference with statistical significance.

As is common in Phase 2 trials focused on PFS, our Phase 2b trial used a crossover design, in which patients who were initially randomized to the paclitaxel control arm were eligible to crossover and receive elesclomol plus paclitaxel after their disease had progressed. As a result, the paclitaxel control arm of our study included both patients who eventually received elesclomol and patients who never received elesclomol. The crossover design makes it more difficult to compare in this trial OS in patients who received elesclomol with OS in patients who never received elesclomol. Therefore, we believe it is also helpful to consider survival times in studies reported in the medical literature. The 11.9 month median OS result and the one year OS rate of 49% in the patients who received elesclomol plus paclitaxel compare favorably with these historical data. As described in a 2006 paper by Tarhini and Agarwala, prior clinical trials in a similar patient population have shown median OS of six to nine months, and no current therapy has shown an OS benefit. The Korn et al. publication reported a median OS of 6.2 months and a one year survival rate of 25.5%. Our SYMMETRY Phase 3 trial does not employ a crossover design in order to provide a clear comparison of OS between the paclitaxel alone control arm and the elesclomol plus paclitaxel treatment arm.

Safety Profile

Elesclomol was well tolerated in this clinical trial. As shown in the table below, the incidence of any specific high severity adverse event, as reported by investigators, was less than 10%. We believe this compares favorably with treatments for metastatic melanoma such as the CVD regimen (cisplatin, vinblastine, and DTIC) or the Dartmouth regimen (DTIC, cisplatin, carmustine, and tamoxifen) that have reported substantially greater incidences of high severity adverse events. The incidence of such events that occurred in 2% or more of the patients treated with elesclomol plus paclitaxel was as follows:

Grade 3 or Higher Adverse Events(1)(2)

	Elesclomol + Paclitaxel (N=52)	Paclitaxel (N=28)
Neutropenia(3)	4(7.7%)	0(0%)
Back pain	2(3.8%)	2(7.1%)
Fatigue	2(3.8%)	2(7.1%)
Neuropathy(4)	2(3.8%)	1(3.6%)

(1) As specified in the clinical trial protocol, the patient population for evaluating safety includes only those patients who received at least one treatment with elesclomol plus paclitaxel or paclitaxel alone. This represents 80 of the total 81 patients enrolled in the trial.

(2) Grade refers to the National Cancer Institute's Common Terminology Criteria, or CTC, for adverse events. The CTC are commonly used in cancer clinical trials and are based on a 5-point severity scale with the following classifications: mild=1, moderate=2, severe=3, life-threatening=4, and fatal=5.

(3) Neutropenia is an abnormal decrease in a type of white blood cells.

(4) Neuropathy is abnormal or diminished nerve sensation.

The adverse events seen across all severity grades in this clinical trial were typical of those expected from paclitaxel alone. The most common adverse events seen in the elesclomol plus paclitaxel group included fatigue, alopecia, constipation, nausea, hypoaesthesia, arthralgia, insomnia, diarrhea, and anemia.

Subgroup Analysis by Prior Chemotherapy

Our Phase 2b trial included both patients who had received no prior chemotheraphy and patients who had received one prior regimen of chemotherapy, in order to help assess which group might benefit the most and help us design future clinical trials. In the analysis of these groups, we used the same definition for what type of treatment constitutes prior chemotherapy as is now being used in our Phase 3 trial. This definition was agreed to with the FDA in our SPA process. Although the prior chemotherapy subset analysis was performed post hoc and relies upon a relatively small number of patients, and must therefore be interpreted cautiously, we saw an especially pronounced benefit from treatment with elesclomol in the group that had not received any prior chemotherapy, also called the first-line or chemotherapy-naïve group. The median PFS more than tripled for first-line patients randomly assigned to elesclomol plus paclitaxel (N=24; 7.1 months) versus first-line patients randomly assigned to paclitaxel alone (N=8; 1.8 months). The hazard ratio describing the difference in PFS between the two groups was 0.315, denoting a 68.5% reduction in the risk of disease progression or death for first-line patients randomly assigned to elesclomol plus paclitaxel relative to first-line patients randomly assigned to paclitaxel alone. This difference had a *P*-value of .019. Based on the encouraging results for the first-line patient group, we have designed the SYMMETRY Phase 3 trial to enroll only first-line, chemotherapy-naïve metastatic melanoma patients.

The results are illustrated in the table below.

Prior chemotherapy treatment		**Elesclomol + Paclitaxel**	**Paclitaxel alone**
None			
(N=32)	Median PFS	7.1 months	1.8 months
	Median OS	15.9 months	10.0 months
	Objective response rate	21%(5/24)	0%(0/8)
One			
(N=49)	Median PFS	2.8 months	1.8 months
	Median OS	9.0 months	7.8 months
	Objective response rate	10%(3/29)	5%(1/20)

We also observed that the results for treatment with paclitaxel alone in patients who have received no prior chemotherapy are comparable to results previously reported for patients treated with DTIC alone who had received no prior chemotherapy. For example, in a 771-patient, randomized clinical trial comparing treatment with DTIC versus DTIC plus oblimersen in patients with no prior chemotherapy, which was published in the *Journal of Clinical Oncology* in October 2006, the median PFS in patients who were treated with DTIC alone was 1.6 months.

Results From the Lead-in, Phase 2a Stage of the Trial

This clinical trial employed a two-stage, lead-in design, with an open-label, single-arm Phase 2a stage prior to the commencement of the blinded, randomized, controlled Phase 2b stage. The objective of the Phase 2a stage was to evaluate the safety of elesclomol plus paclitaxel, determine the recommended dose level, and to assess whether it demonstrated sufficient activity to warrant further study. A total of 31 patients were enrolled in this stage, of which 28 were treated at what was determined to be the elesclomol recommended dose level (213 mg/m^2). Of these 28 patients, four achieved an objective response as assessed by RECIST, and an additional 11 achieved stable disease, for a total non-progression rate of 15 out of 28 (54%). This met the pre-specified efficacy criteria, supporting the decision to proceed with enrolling the 81 additional patients for the Phase 2b stage of the trial. The addition of elesclomol to paclitaxel was well tolerated on the weekly schedule. Median PFS was 5.2 months and median OS was 13.4 months in the 28 patients that received the 213 mg/m^2 dose level.

Our Phase 3 SYMMETRY Trial

Based on the results of our Phase 2b trial, in the third quarter of 2007, we initiated a global, pivotal Phase 3 clinical trial of elesclomol in first-line, stage IV melanoma patients called the SYMMETRY trial. The SYMMETRY trial is being conducted under the terms of an SPA agreement with the FDA. The SPA process may result in a written agreement between a clinical trial sponsor and the FDA that the design and planned analyses of the clinical trial is sufficient to support regulatory approval. The agreement is binding on the FDA unless public health concerns that were not recognized at the time of the protocol assessment become evident. However, the FDA is not obligated to approve elesclomol as a result of the SPA, even if the clinical outcome is positive. The SYMMETRY trial is enrolling patients with stage IV metastatic melanoma who have not received prior chemotherapy but who may have already been treated with non-chemotherapeutic agents such as biologics. Approximately 630 patients will be enrolled in the blinded, randomized, controlled study, which will be conducted at approximately 150 centers worldwide. Patients will be randomized (1:1) to elesclomol (213 mg/m^2) plus paclitaxel (80 mg/m^2) or paclitaxel alone (80 mg/m^2) and will receive three weekly treatments and one week without treatment per each four week cycle. If tolerated, treatment will continue until disease progression. Patients will be stratified according to lactate dehydrogenase, or LDH, levels (elevated or normal), M-grade status (Mla/b or Mlc), prior treatment history (zero or one prior regimen with biologics or other non-chemotherapies), and reason for discontinuation of prior treatment (disease progression or other). LDH is an enzyme that is normally present throughout the body, but blood levels of LDH become elevated when tissue damage occurs. Elevated LDH levels in melanoma patients are associated with a poorer disease prognosis and a decreased survival rate compared to normal LDH levels. Similarly, M-grade status is a measure of spread of disease and is considered to be a prognostic factor for OS in melanoma. By stratifying patients for these prognostic factors in addition to prior treatment history and reason for discontinuation, the Phase 3 trial design seeks to evenly balance patients with similar disease status across the treatment and control arms of the trial. Responses will be assessed using industry standard RECIST criteria at baseline and at a minimum every other cycle, with radiology scans being assessed by independent, blinded reviewers at a central site.

The control arm treatment, the combination arm treatment, the doses, the schedule, and the primary endpoint—PFS—are the same as in the Phase 2b trial. This trial increases the total number of patients enrolled from the prior trial and includes central review of radiology scans, stratification to ensure balance between treatment arms, and a no-crossover design for facilitating the assessment of OS. In addition, the SYMMETRY Phase 3 clinical trial is only enrolling patients who have not received prior chemotherapy, while the prior Phase 2b trial enrolled both chemotherapy-naïve patients as well as patients who received one prior treatment with chemotherapy.

There are two planned analyses for PFS, which is the primary endpoint of the SYMMETRY Phase 3 trial:

- An interim analysis to assess safety and non-futility will be conducted by an independent Data Monitoring Committee.

- The final analysis for PFS will be conducted after two criteria have been satisfied: a prespecified minimum number of PFS events, approximately 160 events, has occurred and full trial enrollment has been completed. At the time of the final analysis for PFS, a first interim analysis will also be performed for OS, a secondary endpoint.

Following the PFS analyses, two additional analyses for OS are planned in the SYMMETRY trial: a second interim analysis and a final OS analysis.

The SYMMETRY trial has been designed with at least 90% power to detect a statistically significant improvement in PFS, as well as 80% power to detect a difference in OS. Projections and powering assumptions are based on detecting an improvement of three to five months in PFS (hazard ratio 0.60), and nine to 12 months in OS (hazard ratio 0.75), respectively. These limits correspond to a minimum of approximately 160 PFS events and 390 OS events. Secondary endpoints in addition to OS include response rate, clinical benefit rate (defined as complete response, partial response, or stable disease at 24 weeks), and duration of response.

Additional Clinical Trial Results

We completed a Phase 1 clinical trial of elesclomol in combination with paclitaxel in October 2004. This clinical trial, which enrolled 35 patients, was designed to assess the safety, pharmacokinetics, and efficacy of elesclomol with paclitaxel in a broad cancer patient population. The combination of elesclomol plus paclitaxel was well tolerated, with minimal toxicity attributed to elesclomol at all doses tested. Partial response or stable disease was observed in several cancer types, including melanoma, ovarian, Kaposi's sarcoma, angiosarcoma, parotid gland adenocarcinoma, colorectal, pancreatic and paraganglioma. In some patients, these cancers had previously progressed to more advanced stages during treatment with paclitaxel alone.

Based on the promising signs of activity and safety results we observed in our Phase 1 clinical trial, we initiated Phase 2 clinical trials in malignant melanoma, soft tissue sarcoma, and non-small cell lung cancer. Together these trials have enrolled approximately 300 patients at over 50 medical centers throughout the United States and Canada. These trials were designed to assess response rates, non-progression rates, and PFS, and to further expand the safety database for elesclomol.

We completed a Phase 2 clinical trial of elesclomol in 84 patients with soft tissue sarcoma in 2005, the results of which were inconclusive. We designed this two-stage Phase 2 clinical trial to assess activity based on response rate and non-progression rate, or NPR. This clinical trial utilized a single-arm design. All patients received weekly treatments of the combination of paclitaxel (80 mg/m^2) and elesclomol (213 mg/m^2) for three weeks, followed by one week off-treatment. These four-week cycles were repeated until the earlier of disease progression, or a minimum of four months. We enrolled patients with soft tissue sarcoma who had failed at least one prior chemotherapy treatment. In the first stage, 30 eligible patients were evaluated for objective response or disease stabilization after three months and met the predefined criteria for expansion of enrollment. Upon completion of the trial, the Kaplan-Meier estimate of NPR at three months was 35%, with a 95% confidence interval of between 24.3% and 45.8%. A recent publication by Van Glabbeke et al. proposed a criterion of NPR at three months >=40% to suggest drug activity in this indication. Given that the observed confidence interval includes 40%, this result did not definitively establish evidence of clinical activity or lack thereof. The observed safety profile of elesclomol plus paclitaxel was acceptable. Pending the results of our SYMMETRY Phase 3 trial of elesclomol in malignant melanoma and further investigation of different

drug combinations, we may consider future development of elesclomol in sarcoma, based on a different elesclomol dose, dosing schedule or drug combination regimen.

We completed a Phase 2 clinical trial of elesclomol in 103 patients with non-small cell lung cancer in 2005. We designed this two-stage trial to compare the effect of a standard first-line lung cancer combination therapy, paclitaxel and carboplatin, with the effect of this same combination therapy plus elesclomol. Patients included in this study were diagnosed with either stage IIIb or stage IV non-small cell lung cancer and had not received prior chemotherapy. The objective of the first stage, open-label portion was to determine the recommended dose for the second stage. In the second stage, patients were randomly assigned either to receive elesclomol plus paclitaxel and carboplatin, or to receive paclitaxel and carboplatin alone. Patients received one treatment of paclitaxel and carboplatin, with or without elesclomol, every three weeks. These three-week cycles were repeated until the earlier of disease progression or completion of six cycles. Efficacy was assessed using RECIST, and the primary endpoint in this clinical trial was time-to-progression. No improvement was observed in time-to-progression between elesclomol plus paclitaxel plus carboplatin, compared to paclitaxel plus carboplatin. In comparison to patients in our Phase 2b metastatic melanoma trial, patients in this clinical trial received both a less frequent dose of elesclomol (once every three weeks compared to once a week for three weeks), and a lower total dose of elesclomol during each monthly cycle (266 mg/m^2 compared to 639 mg/m^2). Pending the results of our SYMMETRY Phase 3 trial of elesclomol in malignant melanoma and further investigation of different drug combinations, we may consider future development of elesclomol in non-small cell lung cancer, based on a different elesclomol dose, dosing schedule or combination regimen.

Safety Results from all Clinical Trials to Date with Elesclomol

In order to assess the safety profile of elesclomol based on all of the clinical trials completed to date, we collected and integrated the adverse event data for all 352 subjects who participated in the six clinical trials conducted with elesclomol, including the Phase 2b melanoma trial.

Of the 352 subjects in these trials, 298 received the elesclomol plus paclitaxel combination. Of these 298 subjects, 239 received elesclomol in combination with paclitaxel, and 59 received elesclomol in combination with paclitaxel and carboplatin. All participating subjects suffered from solid tumor cancers.

The following table presents the most recent findings of grade 3 or higher adverse events across all clinical trials that were reported in ≥3% of subjects in the elesclomol plus paclitaxel treatment group.

Grade 3 or Higher Adverse Events

	Elesclomol plus Paclitaxel (N = 239)(1)	Paclitaxel Alone (N = 30)(2)
Neutropenia	15 (6%)	0
Anemia	8 (3%)	1 (3%)
DVT	8 (3%)	1 (3%)
Fatigue	8 (3%)	2 (7%)
Hyperglycemia	8 (3%)	1 (3%)
Dyspnea	7 (3%)	1 (3%)
Hypophosphatemia	7 (3%)	1 (3%)
Leukopenia	6 (3%)	0
Extremity Pain	6 (3%)	0

(1) Of the 239 patients, 224 received the same or higher dose of elesclomol plus paclitaxel as we used in the Phase 2b melanoma trial. Of these 224 patients, 201 patients were on the same once per

week schedule as in the Phase 2b melanoma trial and 23 patients were on a once every three week schedule.

(2) Includes the 28 patients in the control arm of the Phase 2b melanoma trial.

Consistent with the results observed in our melanoma Phase 2b trial, there was a small increase in observations of neutropenia: 6% of elesclomol plus paclitaxel subjects versus 0% of the paclitaxel alone subjects. Frequencies of other grade 3 or higher adverse events were similar for the two treatment groups, and in some cases, occurred at slightly lower frequencies in the elesclomol plus paclitaxel group. In addition, we did not observe any clinically relevant trends in any of the other hematology, serum chemistry, or urinalysis testing on these patients.

Frequencies of adverse events of all grades of severity were comparable between the two groups. Types of adverse events that were reported as occurring in at least 20% of subjects who received elesclomol plus paclitaxel were as follows, for the combination and for paclitaxel alone, respectively: asthenic conditions (54% versus 53%), nausea and vomiting symptoms (44% versus 53%), alopecias (44% versus 53%), musculoskeletal and connective tissue signs and symptoms (36% versus 43%), edema (27% versus 20%), gastrointestinal atonic and hypomotility disorders (24% versus 30%), non-infective diarrhea (23% versus 17%), peripheral neuropathies (23% versus 23%), anemias (21% versus 20%), appetite disorders (21% versus 20%), joint related signs and symptoms (21% versus 10%), and coughing and associated symptoms (21% versus 27%). Asthenic conditions generally refers to lack of strength or weakness throughout or in a particular area of the body. Edema is swelling caused by fluid accumulation in bodily tissues. Gastrointestinal atonic and hypomotility disorders generally refer to muscle weakness and decreased movement, respectively, in the gastrointestinal tract. Anemia is the abnormal reduction in red blood cells.

We believe the integrated analysis of adverse event data from all 239 subjects who received the elesclomol plus paclitaxel combination shows that elesclomol plus paclitaxel was well tolerated and that the adverse events and laboratory results were similar to those expected for paclitaxel alone.

Elesclomol Mechanism of Action

Elesclomol is a novel, injectable small molecule that we believe rapidly and potently induces the generation of ROS in cancer cells, increasing the level of oxidative stress in cancer cell and ultimately leading to cancer cell death by apoptosis (programmed cell death).

ROS is a collective term used to describe chemical species that are produced as byproducts of normal oxygen metabolism and include superoxide, hydrogen peroxide, and the hydroxyl radical. In normal cells, ROS are produced at low levels and are effectively neutralized by the cells' antioxidant system. In contrast, cancer cells produce elevated levels of ROS due to their increased metabolic activity, resulting in oxidative stress. Sustained levels of ROS that exceed the cells' antioxidant capacity can readily induce cell death by apoptosis. We believe that oxidative stress is one of the most fundamental differences between cancer cells and normal cells, and that this difference causes cancer cells to be particularly vulnerable to agents that can selectively elevate ROS.

We believe the evidence that the primary mechanism of action of elesclomol is through induction of ROS is strong. This evidence includes:

- Gene transcript profiles of cancer cells before versus after application of elesclomol show the characteristic signatures of an immediate, potent oxidative stress response. This response includes the rapid induction of heat shock protein genes such as heat shock protein 70, or Hsp70, metallothioneins, antioxidants, and other stress response genes.

- Direct cellular measurements of specific ROS agents, such as hydrogen peroxide, show strong time-dependent and dose-dependent induction by elesclomol.

- The effects of elesclomol are eliminated by applying antioxidants known to reduce ROS, or inhibitors that block the generation of ROS.

Once ROS levels in cancer cells exceed the breaking point, cell death occurs through apoptosis from the intrinsic mitochondrial pathway. Apoptotic cell death through the mitochondrial pathway involves the oxidation of cardiolipin, release of cytochrome c from the mitochondria, and activation of the caspase cascade. By increasing ROS and activating the intrinsic mitochondrial apoptosis pathway, we believe that in addition to inducing apoptosis as a single agent, elesclomol can enhance the anti-cancer activity of other chemotherapeutic agents that act through the same pathway. We have shown in preclinical *in vivo* models that elesclomol significantly enhanced the anti-tumor activity of paclitaxel, rituximab, and gemcitabine, while adding minimal additional toxicity. These results have been demonstrated in a variety of animal models of cancer, including breast, lung, lymphoma, colorectal, cervical carcinoma and melanoma.

Our preclinical safety studies showed that the addition of elesclomol added little or no toxicity to that seen with paclitaxel alone, and that elesclomol has a relatively high therapeutic index, or margin between effective dose and toxic dose. We believe that the favorable safety profile that has been observed preclinically and clinically with elesclomol is due to the pronounced difference between cancer cells and normal cells in their respective ability to recover from such an increase in oxidative stress.

Elevated oxidative stress is one of the most fundamental features that differentiates cancer cells from normal cells. By taking advantage of this fundamental difference, we believe elesclomol offers the potential for a novel anti-cancer approach that is broadly effective across cancer types in conjunction with ROS-sensitive chemotherapeutics such as paclitaxel, while maintaining an attractive safety profile.

Additional Cancer Types for Future Clinical Development

Based on the activity seen in a broad range of tumor models in preclinical experiments, and our understanding of the mechanism of action, which is not specific to melanoma, we believe that elesclomol has the potential to treat many forms of cancer. We prioritize our clinical development plans based on a number of criteria, including scientific rationale and degree of unmet medical need. Based on these criteria, we believe there are several attractive opportunities for the further clinical development of elesclomol, including:

- *Cancers having elevated levels of ROS.* We believe that cancer types having elevated levels of oxidative stress may be particularly susceptible to the increase in ROS caused by treatment with elesclomol. In addition to melanoma, other solid tumor cancer types known to have high levels of oxidative stress include breast, prostate, ovarian, and pancreatic. Hematologic cancers, such as leukemias, are also known to have elevated levels of ROS, and may represent attractive potential development opportunities.

- *Cancers in which we have observed signs of activity of elesclomol in our Phase 1 clinical trial.* In our Phase 1 clinical trial, partial response or disease stabilization was observed in several cancer types, including melanoma, ovarian, Kaposi's sarcoma, angiosarcoma, parotid gland adenocarcinoma, colorectal, pancreatic and paraganglioma. In particular, one patient with a history of recurrent ovarian cancer had a documented partial response to treatment with elesclomol plus paclitaxel after having failed multiple prior chemotherapeutic regimens. This patient received a special protocol exception from the FDA in order to continue on elesclomol plus paclitaxel beyond the end of the clinical trial and received a total of eight cycles of treatment. We believe that these cancer types may warrant further exploration.

- *Adjuvant treatment of earlier-stage melanoma.* Adjuvant therapy with interferon alfa-2b, an immunotherapy marketed as Intron A by Schering-Plough, is FDA-approved for use following surgical removal of melanoma to reduce the likelihood of disease recurrence. We believe the safety profile, the results from our Phase 2b trial in malignant melanoma, and the mechanism of action of elesclomol suggest exploring usage of elesclomol in earlier-stage melanoma patients.

We are evaluating these opportunities with our partner, GSK, and expect to announce plans to initiate Phase 2 clinical trials in one or more of these indications in 2008.

New Formulations

To date, except for a human bridging study utilizing the salt form of elesclomol, all of our clinical trials have been conducted using the first formulation of elesclomol that we developed, a free acid form. We intend to continue to use this formulation in our SYMMETRY Phase 3 clinical trial of elesclomol for metastatic melanoma, as well as for our initial commercial product if elesclomol is approved. The free acid form of elesclomol is a powder that is dissolved in the paclitaxel-Cremophor solution, diluted in a saline infusion bag and co-administered via the same infusion line. In order to use the free acid form of elesclomol with other oncology products, including taxanes other than paclitaxel, it must be dissolved in an organic solvent, such as Cremophor, that may cause additional toxicities due to the presence of the organic solvent.

We have developed a second, water-soluble form of elesclomol, a sodium salt formulation, that does not require dissolving with an organic solvent such as Cremophor. This sodium salt formulation may be more easily used with other taxanes and other oncology products that are formulated differently than paclitaxel, or potentially used as a single agent without need for an organic solvent. In 2005, we conducted a human bridging study using this salt form and observed pharmacokinetic equivalence between the salt and free acid forms of elesclomol. We intend to explore the use of this new salt form of elesclomol in future clinical trials both as a single agent, and in combination with other anti-cancer agents. We expect to begin clinical trials with this new salt form in the second half of 2008.

Other Oncology Programs

STA-9090 and Our Hsp90 Inhibitor Program

We are using our internal chemistry and drug optimization expertise in the area of heat shock proteins to develop novel synthetic small molecule inhibitors of Hsp90 for the treatment of cancer. STA-9090 is a novel chemical entity that selectively inhibits the activity of Hsp90. This program is currently in Phase 1 clinical development, with two Phase 1 trials ongoing to explore once- and twice-a-week dosing regimens, respectively. We intend to initiate a third STA-9090 Phase 1 trial in hematologic cancers in the second half of 2008.

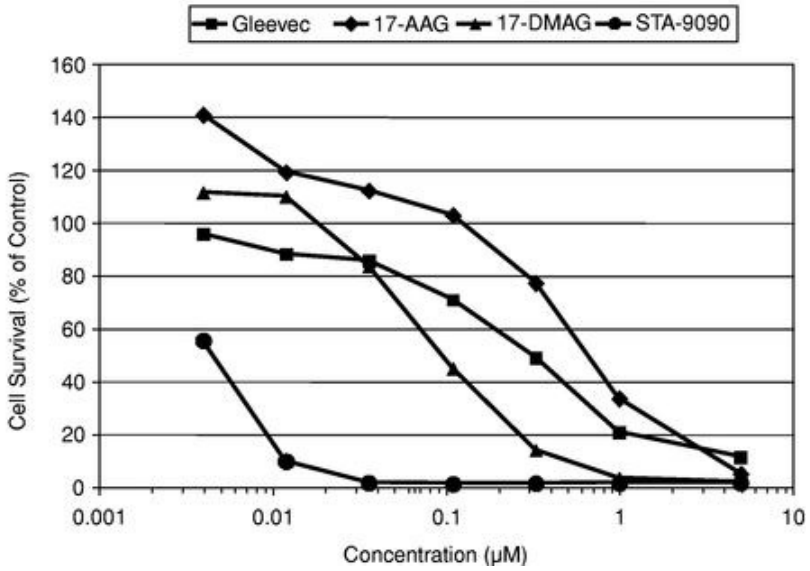
Hsp90 is a chaperone protein that regulates the folding, stability, and function of numerous signaling proteins that trigger uncontrolled proliferation in cancer cells. Many of the proteins that require Hsp90 for their folding and activity are kinases that regulate tumor survival, proliferation, and angiogenesis. These include well-recognized cancer targets such as Bcr-Abl, Her2, EGFR, c-Kit, c-Met, Flt3, and BRAF, which are the targets of approved anti-cancer drugs such as Gleevec, Herceptin, Tarceva, and Erbitux, all of which are direct inhibitors of these kinase proteins. We believe that inhibiting kinases indirectly, by disrupting the chaperone activities of Hsp90, provides two advantages: first, a means to simultaneously attack multiple cancer-promoting kinases; and, second, an ability to kill tumor cells with mutated kinases that have lost responsiveness to direct kinase inhibitors. Furthermore, because cancer cells have far greater levels of active Hsp90 than normal cells, we believe that inhibitors of Hsp90 may selectively halt proliferation of tumor cells and thereby cause cancer cell death.

A number of companies have programs targeting inhibition of Hsp90 for the treatment of various forms of cancer. Based on results from experiments we conducted in both cell models and preclinical animal models, we believe that our lead compound, STA-9090, displays substantially higher potency than competing Hsp90 inhibitors in development. In addition to the higher potency of STA-9090 in certain cancer types, these experiments also demonstrated that STA-9090 may be active against cancer cell types for which other Hsp90 inhibitors have not shown activity. We believe these findings suggest a potential competitive advantage for STA-9090 in treating those cancers.

To our knowledge, the Hsp90 inhibitors that are furthest along in clinical development are 17-AAG, or tanespimycin, and 17-DMAG, or alvespimycin. These compounds are being developed by Kosan Biosciences for several cancer types including multiple myeloma, breast cancer, and melanoma. Recently, Kosan announced that it plans to discontinue development of alvespimycin in favor of tanespimycin. Both of these compounds are derivatives of the natural product, geldanamycin, and have been observed to have certain serious side effects, including liver toxicities. In contrast, STA-9090 is a novel small molecule compound that is not a geldanamycin derivative or analog. In addition, while 17-AAG and 17-DMAG have complex routes of synthesis, STA-9090 has a relatively simple route of synthesis.

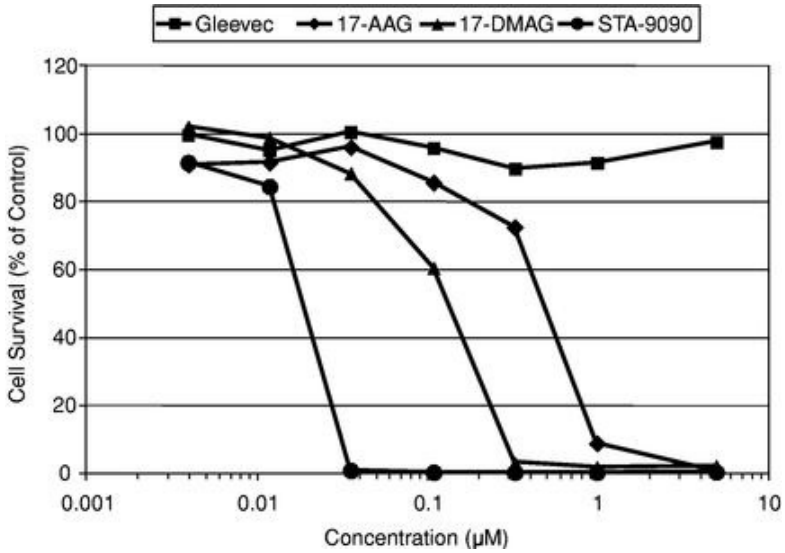
In the figures below we illustrate what we believe are the two key potential advantages of our Hsp90 inhibitor, STA-9090: improved potency and the activity against cancers that have developed resistance to kinase inhibitors.

Improved potency. One of the several kinases that we have observed in preclinical testing to be more sensitive to STA-9090 than to other Hsp90 inhibitors is c-Kit. c-Kit plays a critical role in several cancer types including gastrointestinal stromal tumors, or GIST, acute myelogenous leukemia, or AML, and mastocytomas. The c-Kit gene is often mutated in cancers and can drive uncontrolled cancer cell proliferation. Inhibition of Hsp90 leads to the degradation and loss of c-Kit. In preclinical testing we have found that STA-9090 is more effective in causing the loss of c-Kit relative to other Hsp90 inhibitors such as 17-AAG and 17-DMAG. This loss of c-Kit leads to the death of those cancer types that depend upon c-Kit for their growth and survival. The figure below shows the result of an *in vitro* experiment we conducted comparing the activity of STA-9090 against human AML tumor cells with the two leading Hsp90 inhibitors, 17-AAG and 17-DMAG, and with the Bcr-Abl and c-Kit kinase inhibitor Gleevec. This figure shows that STA-9090 was 25-fold to 170-fold more effective in tumor cell killing than these other agents in this experiment, as measured by the IC_{50} (the dose that killed 50% of tumor cells).



Activity against cancers that develop resistance to kinase inhibitors. In patients who are treated for cancers with kinase inhibitors such as Gleevec, an initial period of responding to treatment can be followed by a relapse, in which the disease rapidly worsens and no longer responds to further treatment with that kinase inhibitor. This relapse is believed to be due to the appearance of new mutations in the target kinase. In contrast to direct kinase inhibitors, STA-9090 is an indirect kinase inhibitor that acts

by inhibiting Hsp90 rather than the kinases themselves. STA-9090 therefore has the potential to be effective in inhibiting both the original and the mutant kinases. The figure below illustrates this point. In an *in vitro* experiment, a tumor cell line with a Gleevec-resistant mutation in c-Kit is no longer killed by Gleevec. In contrast, STA-9090 demonstrates potent killing of these cells. This figure also shows that STA-9090 is substantially more potent than the competing Hsp90 inhibitors, 17-AAG or 17-DMAG, in this model, as with the previous model.



In addition to the activity shown in cancer cells in the figures above, we have shown that STA-9090 is more potent than 17-AAG in a range of additional cancer cell models as well as in multiple preclinical animal models of human cancer types including lung, prostate carcinoma, breast, gastric, melanoma, lymphoma, multiple myeloma, acute myelogenous leukemia, and chronic myeloid leukemia.

We believe that our preclinical data suggest the potential for using STA-9090 to treat patients whose cancers have relapsed following treatment with small molecule kinase inhibitors such as Gleevec, Sutent, or Tarceva. In addition, we believe that knowledge of which cancer-causing proteins are most susceptible to treatment with STA-9090 will help us to focus our clinical development on cancer types most likely to respond to treatment with our drug candidate.

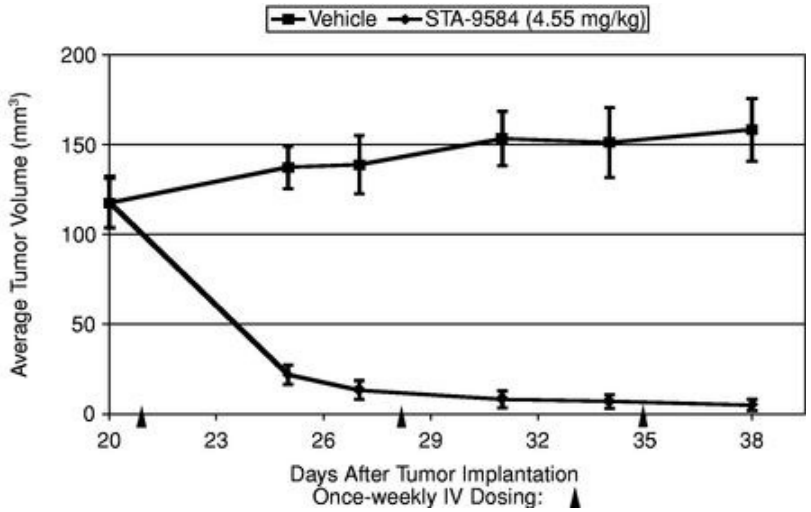
STA-9584—Our Vascular Disrupting Agent

STA-9584 is a novel anti-cancer agent with a dual mechanism of action: STA-9584 disrupts the vessels feeding tumors, which can choke off the supply of oxygen and nutrients, and, in addition, STA-9584 directly causes tumor cell death by inhibiting microtubules, which are cellular structures that play an important role in cell division and proliferation. STA-9584 has demonstrated strong activity in a range of animal models of human tumors, including prostate, lung, breast, melanoma, and lymphoma. This program is in preclinical development.

Because rapidly growing cancer cells have a high demand for oxygen and nutrients, tumors cause new blood vessels to grow in order to supply those needs. Those new vessels differ from normal blood vessels in that they are fragile and weak, forming disorganized and tortuous networks. We believe that drugs that disrupt tumor vessels, or tumor vasculature, could therefore starve tumor cells of oxygen and nutrients, leading to the rapid death of these cells, including tumor cells resistant to other therapies. Vascular disruption contrasts with anti-angiogenic approaches, such as the proposed mechanism of action of approved cancer drugs such as Avastin, which inhibit the growth of new tumor blood vessels but are not believed to affect established tumor vasculature.

To our knowledge, of the drug candidates in the category of vascular disrupting agents, combretastatin is one of the most advanced in development. We believe the dual mechanism of action of STA-9584 represents an important difference from combretastatin, in that STA-9584 both disrupts tumor vasculature and directly kills tumor cells through inhibiting microtubules. Consistent with this dual mechanism, we have observed in our preclinical models that STA-9584 causes tumor cell death throughout the tumor, both at the tumor core and rim, whereas vascular disrupting agents such as combretastatin cause tumor cell death primarily at the core of tumors, where the demand for oxygen and nutrients is most pronounced.

We believe the high potency of STA-9584 and acceptable therapeutic index in our preclinical models make this compound a promising candidate for treatment of a wide range of solid-tumor cancers. An example of the potency of STA-9584 is shown in the figure below, in which STA-9584 leads to complete tumor elimination in a preclinical model of prostate cancer. In this preclinical study, PC-3 human prostate cancer cells were implanted subcutaneously into nude mice. Once tumors reached over 100 mm^3 in size, mice were treated with a placebo control or STA-9584 by intravenous injection once per week. Three doses of STA-9584 caused the regression of tumors.



Inflammatory Disease Programs

We have the following two inflammatory disease programs in development:

- *Apilimod (STA-5326).* Apilimod is our novel, orally administered, small molecule drug candidate that inhibits the production of the cytokines IL-12 and IL-23, which are believed to be important regulators of the biological processes underlying certain autoimmune and inflammatory diseases. We are currently conducting a Phase 2a clinical trial in patients with RA and sponsoring a Phase 2a clinical trial in patients with CVID. Both the RA and CVID Phase 2a studies completed initial enrollment. Based on the data we have reviewed to date from the CVID trial and a strategic review of the apilimod program, we have decided to complete the ongoing CVID trial, but not to further pursue this indication for apilimod. The preliminary results of the first 22 patients in the RA trial showed encouraging biomarker and clinical signals suggesting possible activity of apilimod in this indication. We have elected to enroll an additional cohort in the RA Phase 2a trial to explore a higher dose of apilimod. We expect to complete enrollment of this higher dose cohort in the second half of 2008.

- *CRAC ion channel inhibitors.* We are developing inhibitors of CRAC, ion channels expressed on immune cells, for the treatment of autoimmune diseases, transplant rejection, asthma, and

allergy. We have discovered a family of novel, small molecule, orally administered CRAC ion channel inhibitors that are both selective and highly potent.

Inflammatory Disease Background

Inflammatory diseases are typically caused by aberrant activity of the immune system. The immune system normally protects the body from injury and infection, but in autoimmune diseases it attacks and damages the body's own tissues. Major autoimmune diseases include rheumatoid arthritis, psoriasis, Crohn's disease, and multiple sclerosis. Together, these diseases afflict over seven million people in the United States and over 21 million people worldwide.

Despite the availability of numerous therapeutic options for these diseases, inflammatory diseases remain major causes of impairment of daily activities, reduced quality of life, significant disability, and sometimes death. Current therapeutic treatments for chronic inflammatory diseases have the potential to cause musculoskeletal, endocrinologic, neurologic, and metabolic side effects, which can limit their long-term use. The limitations of conventional treatments, together with a growing understanding of the pathogenesis of inflammatory diseases, have stimulated significant interest in the development of targeted immune modulators for the management of chronic inflammatory diseases.

Apilimod (STA-5326) and Our Oral IL-12/23 Inhibitor Program

We believe we have discovered the first oral, small molecule, selective inhibitors of the cytokines IL-12 and IL-23. The IL-12 cytokine is an important "master switch" that triggers the immune response of the T cell known as T helper type 1, or T_h1. T cells play a critical role in the coordination of the body's immune response, and while T_h1 cells are normally involved in the body's defense against intracellular attack by bacteria and other micro-organisms, an overactive T_h1 response can lead to various autoimmune or inflammatory diseases including Crohn's disease, psoriasis, RA, multiple sclerosis, and CVID. The IL-23 cytokine is critical to the generation of the T cells which produce other pro-inflammatory proteins believed to be important to maintaining the immune response. We believe that the Phase 2 clinical trial results observed with anti-IL-12/23 antibody therapies validate the inhibition of IL-12/23 activity as a promising approach for the treatment of inflammatory and autoimmune diseases.

We have conducted or sponsored 11 Phase 1 and Phase 2 clinical trials with our lead compound, apilimod, also designated STA-5326, or its salt form, apilimod mesylate, also designated STA-5326m. Our blinded, randomized clinical trials for apiliomd in Crohn's disease and psoriasis did not achieve their primary endpoints, and the preliminary data we have seen from the open label Phase 2a CVID trial do not demonstrate a high degree of clinical benefit. Following a strategic review of this program, we decided not to pursue further development of apilimod in these indications at this time. Our biomarker study in RA showed promising signs of activity, and we have elected to enroll an additional cohort to explore a higher dose of apilimod.

We believe that the collective evidence from our trials and from trials with other agents that target IL-12 and IL-23 show that this mechanism represents a promising therapeutic approach. Based on our data, we believe that the pharmaceutical properties of our first-generation compound may not be optimal for treating these indications. Pending the results from our RA study, we may elect to pursue such indications in the future with other compounds that offer improved pharmaceutical properties.

Rheumatoid Arthritis

RA is a chronic autoimmune disease that is primarily characterized by joint synovial inflammation that can lead to long-term joint damage, chronic pain, loss of function and disability. Over two million people suffer from the disease in the United States. We are currently conducting a randomized, placebo-controlled Phase 2a clinical trial of apilimod in RA patients with moderate to severe disease.

All patients in this clinical trial are to be treated with methotrexate, a commonly used drug to treat RA, in addition to receiving either apilimod or placebo. The primary endpoint of this trial is based on an assessment of markers of inflammation in joint tissue after four to eight weeks of treatment. We believe that tissue assessments will provide an objective measure that will allow conclusions regarding potential efficacy to be based on a smaller number of patients. The preliminary results of the first 22 patients in this trial showed encouraging biomarker and clinical signals suggesting activity of apilimod in this indication. We have elected to enroll an additional cohort in the RA Phase 2a trial to explore a higher dose of apilimod. We expect to complete enrollment of this additional cohort in the second half of 2008.

Psoriasis

Psoriasis is a chronic, inflammatory skin disorder that is characterized by thickened, red areas of skin that are covered with scales. The area of skin affected can range from discrete, localized patches, to extensive areas of the body. The joints, nails, and mucous membranes may also be affected by the disease. Chronic plaque psoriasis is the most common form of psoriasis. This disease involves the formation of plaques, which are circular-to-oval, elevated, and often scaly skin lesions that contain swollen blood vessels and infiltrating immune cells. Affected areas are characterized by itching, swelling, and pain, all of which can impair daily activities and sleep.

We conducted two complementary Phase 2 clinical trials of apilimod for the treatment of moderate to severe chronic plaque psoriasis. In each of these trials patients were treated for 12 consecutive weeks. One psoriasis trial was an open-label Phase 2a clinical trial designed to assess the biological response to apilimod through histological studies of skin biopsies. While the data showed signs of activity, as assessed both histologically and clinically, strong clinical benefit was not demonstrated. Another psoriasis trial was a double-blind, randomized, placebo-controlled, multicenter Phase 2b clinical trial of 212 patients. Despite observing a difference between apilimod and placebo, the primary endpoint of the trial was not achieved, and the magnitude of clinical benefit did not warrant advancement into Phase 3 clinical trials at the doses and with the formulation tested.

Crohn's Disease

Crohn's disease is a chronic inflammatory bowel disease characterized by inflammation at points throughout the length of the gastrointestinal, or digestive, tract. Symptoms can be severe and include abdominal pain, frequent diarrhea and intestinal bleeding. In addition, patients with Crohn's disease may experience malnutrition and an increased risk of colorectal cancer.

We initiated three Phase 2 clinical trials in moderate-to-severe Crohn's disease: a 73-patient Phase 2a clinical trial, a planned 282-patient Phase 2b clinical trial and a planned 12-patient biomarker trial. The Phase 2a clinical trial was an open-label, dose-escalating study to assess the safety, pharmacokinetics, and efficacy of apilimod. In this trial, a capsule formulation containing the free base form of apilimod was studied. Promising signs of activity were observed. In the Phase 2b study, we switched formulation to a tablet containing the mesylate form of apilimod. This Phase 2b study was a double-blind, randomized, placebo-controlled, multicenter clinical trial with two treatment arms and one placebo arm. As specified in the protocol, an interim analysis was performed after half the patients expected to be enrolled in the trial had completed treatment. This analysis indicated a low likelihood of achieving the primary endpoint in the trial, and thus, the Phase 2b and biomarker trials were terminated at that point.

CRAC Ion Channel Inhibitors

Ion channels have proven to be very attractive targets for small molecule drug development. Examples of successful ion channel modulating drugs include Norvasc, which is marketed by Pfizer for

the treatment of hypertension, and Ambien, which is marketed by Sanofi-Aventis for the treatment of insomnia. Ion channel modulators developed to date target channels on excitable cells, which are cells that transmit electrical signals, such as muscle cells and nerve cells, and have been primarily developed for treating cardiac or central nervous system conditions. While ion channels in excitable cells are involved in the electrical signaling of those cells, ion channels are also known to play an important role in the signaling pathways and function of certain non-excitable cell types, such as immune cells.

We are developing small molecule inhibitors of CRAC, ion channels expressed on immune cells. The CRAC ion channel is the primary route for calcium entry into T cells and mast cells. Calcium entry regulates multiple immune cell processes, including T cell proliferation and cytokine secretion, which are important for initiating and sustaining an inflammatory immune response. The relevance of inhibiting this biological pathway has been validated by the clinical and market success of the calcineurin inhibitors, cyclosporin and tacrolimus, in treating autoimmune diseases and transplant rejection. The calcineurin inhibitors, however, act on both immune and non-immune cell types and have substantial toxicities. By more selectively inhibiting the same biological pathway, therapies that inhibit CRAC ion channels offer the potential of modulating the immune system with fewer toxicities. Such therapies may hold promise for treating immune disorders such as RA, psoriasis, multiple sclerosis, transplant rejection, allergy, or asthma.

We have discovered a family of novel, small molecule, orally administered CRAC ion channel inhibitors that are both selective and highly potent. We have demonstrated in preclinical experiments that these compounds inhibit the production by immune cells of multiple critical pro-inflammatory cytokines, such as IL-1, IL-2, IL-6, and TNFa, which are critical to immune disorders such as RA and transplant rejection. We have also demonstrated that some of these compounds inhibit mast cell degranulation and the release of histamines, which is believed to be important for the treatment of allergy and asthma. We have shown that our compounds are effective in multiple animal models of immune diseases, including models of arthritis. This program is in the lead optimization stage.

Our Drug Discovery Capabilities

Our drug discovery approach is based on the close integration and rapid cycle times among our chemistry, biology, and pharmaceutical development groups. Drug candidates are typically identified using novel chemical structures from our chemical compound library in cell-based assays that are designed to preserve the complexity of biological signaling. Early *in vivo* testing and a rapid optimization process allow us to generate a high number of promising leads from our screening hits, improve the profiles of our compounds, and, in some cases, discover novel pathways or mechanisms of action with the potential to define entirely new categories of treatment.

Our approach integrates the following capabilities and resources:

- *Unique chemical compound library.* Our chemical library contains over 100,000 small molecules and numerous plant extracts collected from universities, non-profit institutions, other organizations, and commercial sources. Many of our compounds are proprietary and not available from commercial sources. This library represents a diverse and distinct set of chemical structures that was not generated using combinatorial chemistry and continues to be a valuable source of lead compounds for drug discovery. We are continuing our compound collection efforts. In addition, for each of our discovery programs we build focused libraries dedicated to particular drug targets. We have modeled the three-dimensional structure of most of our compounds, allowing us to use computer-based, or *in silico*, screening to identify new drug candidates.

- *Broad set of screening assays.* We have high throughput screening capabilities linked to our chemical library that facilitate the rapid identification of new drug candidates. We have developed a wide variety of biochemical and cell-based *in vitro* assays designed to identify

promising compounds for treating cancer, immune disorders and other diseases, which form the basis of our initial screening efforts. In addition to assays for identifying new compounds, we have also developed assays we use for early optimization of safety and pharmacokinetic properties.

- *Robust in vivo testing capabilities.* We have substantial *in vivo* testing facilities that we use for evaluating the safety, efficacy, and pharmaceutical properties of our compounds, including absorption, distribution, metabolism, elimination, and toxicology properties. These facilities are equipped for detailed experimental measurements and surgical tasks, such as the rodent microsurgery we use for sophisticated toxicology assessments. We have experience with a wide range of animal models of disease, including multiple models in cancer, inflammatory diseases and metabolic diseases. We believe the ability to complete early testing of compounds *in vivo*, internally and without dependencies on third parties, is a valuable advantage in our ability to rapidly optimize the pharmaceutical properties of our most promising compounds.

- *Multi-functional chemistry capabilities.* We possess a full range of chemistry capabilities, including medicinal chemistry, analytical chemistry, physical chemistry, process development and computational chemistry. Our approach to medicinal chemistry applies the rigorous exploration of permutations of biologically active molecular components to optimize lead compounds. Our in-house process development capability of characterizing and specifying manufacturing processes for our compounds allows us to reduce dependencies on third parties and is an important advantage in our ability to successfully commercialize our drug candidates.

- *Methods for novel target elucidation and validation.* Our scientists use expression profiling, RNA interference, affinity purification, proteomics, electrophysiology, and other methods to identify the therapeutic intervention points of novel, promising compounds.

Manufacturing

Our drug candidates and preclinical compounds are small molecules that can be readily synthesized by processes that we have developed. Utilizing our medicinal chemistry and process development capabilities, we have developed manufacturing processes to produce the active pharmaceutical ingredient, or API, for our drug candidates. We also have the internal capability to synthesize small molecule compounds in quantities of up to several hundred grams for use in our preclinical studies, including proof-of-concept studies in animal models, early pharmacokinetic assays, initial toxicology studies, and formulation development. We currently contract with third parties for the synthesis of all materials used in our clinical trials and rely on third party manufacturers for the supply of our drug candidates in bulk quantities and for the production of suitable dosage forms.

The starting materials and reagents required for synthesizing our drug candidates and preclinical compounds are commercially available from multiple sources. We have established a quality control and quality assurance program, including a set of standard operating procedures, analytical methods, and specifications, designed to ensure that our drug candidates are manufactured in accordance with the FDA's current Good Manufacturing Practices, or cGMP, and other applicable domestic and foreign regulations. We have selected manufacturers that we believe comply with cGMP and other applicable regulatory standards. We do not currently expect to manufacture cGMP material internally for our clinical trials nor undertake the commercial scale manufacture of our drug candidates after approval. We are discussing with our current suppliers and other third party manufacturers the long-term supply and manufacture of these and other drug candidates we may develop.

Elesclomol Manufacturing

We are currently working with two contract manufacturers to produce elesclomol in its free acid form, which is the API that is being used in the SYMMETRY Phase 3 clinical trial of elesclomol for

metastatic melanoma. We intend to use one of these manufacturers as the primary supplier of elesclomol API and the other as a backup API manufacturer for the SYMMETRY trial and other clinical trials of elesclomol that we may initiate. We have contracts with each of these manufacturers to produce elesclomol API in quantities we believe will be sufficient for our current clinical trial needs, and we believe that they have already successfully produced elesclomol API in the quantities and to the specifications needed for the SYMMETRY Phase 3 trial. If additional API is required and the primary manufacturer we choose to provide elesclomol API should become unavailable to us for any reason, we believe the backup manufacturer will be able to provide us with sufficient elesclomol API with little or no delays. If both of these manufacturers should become unavailable, we believe that there are a number of potential replacements, as our processes are not technically complex nor manufacturer-specific. However, we may incur some added cost and delay in identifying or qualifying such replacements, including delays associated with transferring the process to the new manufacturer and conducting API manufacturing runs.

We are using several different manufacturers for various process steps in the preparation of elesclomol drug product. Although we believe that most of these steps are routine and can be accomplished by other possible manufacturers, the powder filling step involves highly specialized processing, including the automated filling of vials with elesclomol API in a sterile environment. We believe that our selected manufacturer for this step may be one of a limited number of third party contract manufacturers currently capable of conducting this process on our behalf. We have entered into an agreement with this third-party manufacturer for the SYMMETRY Phase 3 clinical trial of elesclomol for metastatic melanoma and other manufacturing runs required for NDA submission to the FDA.

Under the terms of our agreement with GSK, GSK is responsible for commercial manufacturing of elesclomol API and drug product.

Sales and Marketing

We currently have limited marketing, sales or distribution capabilities. In order to commercialize any of our drug candidates, we must develop these capabilities internally or through collaboration with third parties. In selected therapeutic areas where we feel that any approved products can be commercialized by a specialty sales force that calls on a limited and focused group of physicians, we currently plan to participate in the commercialization of these drug candidates. In therapeutic areas that require a large sales force selling to a large and diverse prescribing population, we currently plan to partner our drug candidates for commercialization.

In our partnership with GSK, we have retained rights to co-commercialize and co-promote our lead oncology drug candidate, elesclomol, in the United States. While the primary diagnosing physicians for melanoma are dermatologists and primary care physicians, care of patients with metastatic melanoma is referred to oncologists, surgical oncologists and dermatological oncologists. In the United States, oncology is a highly concentrated specialty, with approximately 650 community cancer programs and oncology private practices and approximately 9,000 oncologists in private practice. We believe this concentration of target physicians can be effectively addressed by a relatively small specialty sales force.

We have begun to build the commercial infrastructure necessary to bring elesclomol to market in collaboration with our partner, GSK. In addition to a specialty sales force, sales management, internal sales support, and an internal marketing group, we will need to establish capabilities to manage key accounts, such as managed care organizations, group purchasing organizations, specialty pharmacies, and government accounts including Veterans Affairs and the Department of Defense. Outside the United States, GSK has exclusive rights to commercialize elesclomol.

Competition

The development and commercialization of new drugs is highly competitive. We will face competition with respect to all drug candidates we may develop or commercialize in the future from pharmaceutical and biotechnology companies worldwide. The key competitive factors affecting the success of any approved product will be its efficacy, safety profile, price, method of administration and level of promotional activity. The efficacy and safety profile of our drug candidates relative to competitors will depend upon the results of our clinical trials and experience with the approved product in the commercial marketplace.

Elesclomol. If approved for the treatment of metastatic melanoma, elesclomol may compete with:

- Drugs that are approved by the FDA for the treatment of metastatic melanoma. Currently, in the United States, there are only two drugs approved for the treatment of metastatic melanoma: dacarbazine/DTIC and the injectable protein IL-2. In addition, interferon alfa-2b, also an injectable protein, is the only drug approved for use as an adjuvant to surgery to prevent relapse of melanoma.

- Drugs that are not approved for the treatment of metastatic melanoma, but are used off-label either alone or in combination to treat the disease, including taxanes, temozolomide, vincristine, carmustine, melphalan, and platinum-chemotherapeutics, such as cisplatin and carboplatin.

- Compounds in development for metastatic melanoma. Compounds in clinical development may be grouped into six categories: (1) the kinase inhibitors such as Nexavar, being developed by Bayer and Onyx; Sutent, being developed by Pfizer; and ispinesib, being developed by Cytokinetics and GSK; (2) the anti-CTLA-4 monoclonal antibodies, ipilimumab and tremelumimab; (3) the anti-integrin volociximab; (4) injectable angiogenesis inhibitors, such as Avastin; (5) cancer vaccines such as M-Vax and MDX-1379; and (6) derivatives, analogs, or reformulations of known chemotherapies, such as Abraxane, or other chemotherapies.

Apilimod. If approved, apilimod is expected to compete against the currently approved therapies for the treatment of chronic inflammatory diseases, including:

- large-molecule, injectable TNF-antagonists, including: Remicade, marketed by Johnson & Johnson; Enbrel, marketed by Amgen and Wyeth Pharmaceuticals; and Humira, marketed by Abbott Laboratories; and

- broadly immunosuppressive small molecule agents including corticosteroids and azathioprine.

Apilimod may also compete with CNTO-1275 currently in clinical trials and ABT-874 currently awaiting approval, two injectable antibody-based clinical candidates targeting IL-12 that are being developed by Johnson & Johnson and Abbott Laboratories, respectively. We expect that as an oral, small molecule drug, apilimod may prove competitive relative to current and future biologic therapies in manufacturing costs and convenience of administration. We are not aware of any orally administered, selective inhibitors of IL-12 production in clinical trials. Other novel, oral agents in development for inflammatory diseases represent potential competition to apilimod. These include chemokine inhibitors, oral fumarates, and calcineurin inhibitors.

STA-9090. If approved, STA-9090 may compete against the currently approved therapies for the treatment of cancers and other cancer treatments currently under development. In particular, STA-9090 may compete with 17-AAG, being developed by Kosan, and other agents that inhibit Hsp90, including Hsp90 inhibitors from Medimmune/Infinity, BiogenIdec, Novartis/Vernalis, Pfizer/Serenex, and Astex.

STA-9584. If approved, STA-9584 may compete with the currently approved therapies for the treatment of cancers, and other cancer treatments currently under development, including other vascular disrupting agents, such as ABT-751, being developed by Abbott Laboratories; AS1404, being

developed by Novartis/Antisoma; CA4P, being developed by Oxigene; EXEL-0999, being developed by Exelixis; and ZD6126, being developed by Angiogene.

Many of our potential competitors have substantially greater financial, technical, and personnel resources than us. In addition, many of these competitors have significantly greater commercial infrastructures. Our ability to compete successfully will depend largely on our ability to leverage our experience in drug discovery, development and commercialization to:

- discover and develop medicines that are superior to other products in the market;
- attract high-quality scientific, product development, and commercial personnel;
- obtain patent and/or proprietary protection for our medicines and technologies;
- obtain required regulatory approvals;
- selectively commercialize certain drug candidates in indications treated by specialist physicians; and
- selectively partner with pharmaceutical companies in the development and commercialization of certain drug candidates.

Patents and Proprietary Rights

Our success depends in part on our ability to obtain and maintain proprietary protection for our drug candidates, technology, and know-how, to operate without infringing on the proprietary rights of others, and to prevent others from infringing our proprietary rights. Our policy is to seek to protect our proprietary position by, among other methods, filing U.S. and foreign patent applications related to our proprietary technology, inventions, and improvements that are important to the development of our business. We also rely on trade secrets, know-how, continuing technological innovation, and in-licensing opportunities to develop and maintain our proprietary position.

As of March 14, 2008, our patent portfolio had a total of 602 patents and patent applications worldwide, including specific patent filings with claims to the composition-of-matter and methods of use of elesclomol and apilimod. We own or have exclusively licensed a total of 23 issued U.S. patents and 94 U.S. patent applications, as well as 485 foreign counterparts to these patents and patent applications. With respect to elesclomol, we have two issued U.S. patents that claim the chemical structure of elesclomol that expire no earlier than 2022. Both of these issued U.S. patents also claim related chemical structures, pharmaceutical compositions, and methods for treating a subject with cancer. In addition, we have filed several U.S. patent applications that have the potential to extend the patent life of elesclomol, including U.S. patent applications claiming aspects of the treatment regimen for metastatic melanoma which, if issued, would expire no earlier than 2026. We have also filed a U.S. patent application claiming the salt form of elesclomol which, if issued, would expire no earlier than 2025.

With respect to apilimod, we have two issued U.S. patents that claim the chemical structure of apilimod and methods for treating specific disorders using apilimod, respectively. These patents expire no earlier than 2021.

We have pending U.S. patent applications covering compositions-of-matter, methods of treatment and other aspects of our STA-9090, STA-9584 and our CRAC ion channel program. The patent term of our U.S. patents may potentially be extended under applicable law or regulations, such as the Patent Term Restoration Act. Counterpart filings to these patents and patent applications have been made in a number of other jurisdictions, including Europe and Japan.

We have also in-licensed various technologies to complement our ongoing clinical and research programs. These licenses generally extend for the term of the related patent and contain customary

royalty, termination, and other provisions. We have license agreements with Beth Israel Deaconess Medical Center and The Queen's Medical Center, Inc. that provide us with the exclusive commercial right to certain patent filings made by Beth Israel and Queen's Medical in the field of ion channels. We do not believe that these license agreements are currently material to our business. We have exclusive license rights to a patent filing made by Dana-Farber Cancer Institute covering combinations of ingredients that could potentially relate to our elesclomol/taxane combination therapy, should such patent claims issue. We would owe nominal royalty payments to Dana-Farber if any of the claims which ultimately issue under a patent or that are pending in an application from this patent filing cover a commercial product. We also have a non-exclusive license to a U.S. patent assigned to Columbia University that could potentially cover a possible aspect of the elesclomol mechanism. This license is not royalty bearing unless we include specific mechanism language on the label of any approved product, in which case a nominal royalty would be owed.

Government Regulation and Product Approval

Government authorities in the United States, at the federal, state and local level, and other countries extensively regulate, among other things, the research, development, testing, manufacture, labeling, packaging, promotion, storage, advertising, distribution, marketing and export and import of products such as those we are developing. Our drugs must be approved by the FDA through the NDA process before they may be legally marketed in the United States.

United States Government Regulation

NDA Approval Processes

In the United States, the FDA regulates drugs under the Federal Food, Drug and Cosmetic Act, or the FDCA, and implementing regulations. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process or after approval, may subject an applicant to administrative or judicial sanctions. These sanctions could include:

- the FDA's refusal to approve pending applications;
- license suspension or revocation;
- withdrawal of an approval;
- a clinical hold;
- warning letters;
- product recalls;
- product seizures;
- total or partial suspension of production or distribution; or
- injunctions, fines, civil penalties or criminal prosecution.

Any agency or judicial enforcement action could have a material adverse effect on us. The process of obtaining regulatory approvals and the subsequent substantial compliance with appropriate federal, state, local, and foreign statutes and regulations require the expenditure of substantial time and financial resources.

The process required by the FDA before a drug may be marketed in the United States generally involves the following:

- completion of preclinical laboratory tests according to Good Laboratory Practices;
- submission of an IND, which must become effective before human clinical trials may begin;

- performance of adequate and well-controlled human clinical trials according to Good Clinical Practices to establish the safety and efficacy of the proposed drug for its intended use;

- submission to the FDA of an NDA;

- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the product is produced to assess compliance with current cGMP, to assure that the facilities, methods and controls are adequate to preserve the drug's identity, strength, quality and purity; and

- FDA review and approval of the NDA.

Once a pharmaceutical candidate is identified for development, it enters the preclinical testing stage. Preclinical tests include laboratory evaluations of product chemistry, toxicity and formulation, as well as animal studies. An IND sponsor must submit the results of the preclinical tests, together with manufacturing information and analytical data, to the FDA as part of the IND. Some preclinical or nonclinical testing may continue even after the IND is submitted. In addition to including the results of the preclinical studies, the IND will also include a protocol detailing, among other things, the objectives of the clinical trial, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated if the first phase lends itself to an efficacy determination. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, specifically places the sponsor on clinical hold. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before clinical trials can begin.

All clinical trials must be conducted under the supervision of one or more qualified investigators in accordance with good clinical practice regulations. These regulations include the requirement that all research subjects provide informed consent. Further, an institutional review board, or IRB, at each institution participating in the clinical trial must review and approve the plan for any clinical trial before it commences at that institution. Each new clinical protocol must be submitted to the FDA as part of the IND. Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA and more frequently if serious adverse events occur.

Human clinical trials are typically conducted in three sequential phases that may overlap or be combined:

- *Phase 1.* The drug is initially introduced into healthy human subjects or patients with the disease and tested for safety, dosage tolerance, pharmacokinetics, pharmacodynamics, absorption, metabolism, distribution and elimination. In the case of some products for severe or life-threatening diseases, especially when the product may be too inherently toxic to ethically administer to healthy volunteers, the initial human testing is often conducted in patients.

- *Phase 2.* Involves studies in a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance and optimal dosage.

- *Phase 3.* Clinical trials are undertaken to further evaluate dosage, clinical efficacy and safety in an expanded patient population at geographically dispersed clinical study sites. These studies are intended to establish the overall risk-benefit ratio of the product and provide, if appropriate, an adequate basis for product labeling.

Phase 1, Phase 2, and Phase 3 testing may not be completed successfully within any specified period, if at all. The FDA or the sponsor may suspend a clinical trial at any time on various grounds, including a finding that the research subjects or patients are being exposed to an unacceptable health risk. In addition, an IRB can suspend or terminate approval of a clinical trial at its institutions for several reasons, including if the clinical trial is not being conducted in accordance with the IRB's requirements or if the drug has been associated with unexpected serious harm to patients.

During the development of a new drug, sponsors are given an opportunity to meet with the FDA at certain points. These points are prior to submission of an IND, at the end of Phase 2, and before an NDA is submitted. These meetings can provide an opportunity for the sponsor to share information about the data gathered to date, for the FDA to provide advice, and for the sponsor and FDA to reach agreement on the next phase of development. Sponsors typically use the end of Phase 2 meeting to discuss their Phase 2 clinical results and present their plans for the pivotal Phase 3 clinical trial that they believe will support approval of the new drug. If a Phase 2 clinical trial is the subject of discussion at an end of Phase 2 meeting with the FDA, a sponsor may be able to request a SPA, the purpose of which is to reach agreement with the FDA on the design of the Phase 3 clinical trial protocol design and analysis that will form the primary basis of an efficacy claim. If such an agreement is reached, it will be documented and made part of the administrative record, and it will be binding on the FDA unless public health concerns unrecognized at the time of protocol assessment are evident, and may not be changed except under a few specific circumstances.

Concurrent with clinical trials, companies usually complete additional animal studies and must also develop additional information about the chemistry and physical characteristics of the drug and finalize a process for manufacturing the product in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the drug candidate and the manufacturer must develop methods for testing the quality, purity and potency of the final drugs. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the drug candidate does not undergo unacceptable deterioration over its shelf-life.

The results of product development, preclinical studies and clinical studies, along with descriptions of the manufacturing process, analytical tests conducted on the chemistry of the drug, results of chemical studies and other relevant information are submitted to the FDA as part of an NDA requesting approval to market the product. The submission of an NDA is subject to the payment of user fees, but a waiver of such fees may be obtained under specified circumstances. The FDA reviews all NDAs submitted before it accepts them for filing. It may request additional information rather than accept a NDA for filing. In this event, the NDA must be resubmitted with the additional information. The resubmitted application also is subject to review before the FDA accepts it for filing.

Once the submission is accepted for filing, the FDA begins an in-depth review. The FDA may refuse to approve an NDA if the applicable regulatory criteria are not satisfied or may require additional clinical or other data. Even if such data are submitted, the FDA may ultimately decide that the NDA does not satisfy the criteria for approval. The FDA reviews an NDA to determine, among other things, whether a product is safe and effective for its intended use and whether its manufacturing is cGMP-compliant to assure and preserve the product's identity, strength, quality and purity. Before approving an NDA, the FDA will inspect the facility or facilities where the product is manufactured and tested.

Satisfaction of FDA requirements or similar requirements of state, local and foreign regulatory authorities typically takes at least several years and the actual time required may vary substantially, based upon, among other things, the indication and the type, complexity and novelty of the product. Government regulation may delay or prevent marketing of potential products for a considerable period of time and impose costly procedures upon our activities. Success in early stage clinical trials does not assure success in later stage clinical trials. Data obtained from clinical activities are not always

conclusive and may be susceptible to varying interpretations, which could delay, limit or prevent regulatory approval. The FDA may not grant approval on a timely basis, or at all. Even if a product receives regulatory approval, the approval may be significantly limited to specific diseases and dosages or the indications for use may otherwise be limited, which could restrict the commercial application of the product. Further, even after regulatory approval is obtained, later discovery of previously unknown problems with a product may result in restrictions on the product or even complete withdrawal of the product from the market. Delays in obtaining, or failures to obtain, regulatory approvals for any drug candidate could substantially harm our business and cause our stock price to drop significantly. In addition, we cannot predict what adverse governmental regulations may arise from future U.S. or foreign governmental action.

Expedited Review and Approval

The FDA has various programs, including Fast Track, priority review, and accelerated approval, that are intended to expedite or simplify the process for reviewing drugs, and/or provide for approval on the basis of surrogate endpoints. Even if a drug qualifies for one or more of these programs, we cannot be sure that the FDA will not later decide that the drug no longer meets the conditions for qualification or that the time period for FDA review or approval will be shortened. Generally, drugs that may be eligible for these programs are those for serious or life-threatening conditions, those with the potential to address unmet medical needs, and those that offer meaningful benefits over existing treatments. Fast Track designation applies to the combination of the product and the specific indication for which it is being studied. Although Fast Track and priority review do not affect the standards for approval, the FDA will attempt to facilitate early and frequent meetings with a sponsor of a Fast Track designated drug and expedite review of the application for a drug designated for priority review. Drugs that receive an accelerated approval may be approved on the basis of adequate and well-controlled clinical trials establishing that the drug product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit or on the basis of an effect on a clinical endpoint other than survival or irreversible morbidity. As a condition of approval, the FDA may require that a sponsor of a drug receiving accelerated approval perform post-marketing clinical trials. We have applied for and received Fast Track designation from the FDA for elesclomol for the treatment of metastatic melanoma. However, there can be no assurance that elesclomol will be reviewed or approved more expeditiously than would otherwise have been the case.

Patent Term Restoration and Marketing Exclusivity

Depending upon the timing, duration and specifics of FDA approval of the use of our drugs, some of our U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent restoration term of up to five years as compensation for patent term lost during product development and the FDA regulatory review process. However, patent term restoration cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date. The patent term restoration period is generally one-half the time between the effective date of an IND, and the submission date of an NDA, plus the time between the submission date of an NDA and the approval of that application. Only one patent applicable to an approved drug is eligible for the extension and the extension must be applied for prior to expiration of the patent. The United States Patent and Trademark Office, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. In the future, we intend to apply for restorations of patent term for some of our currently owned or licensed patents to add patent life beyond their current expiration date, depending on the expected length of clinical trials and other factors involved in the submission of the relevant NDA.

Market exclusivity provisions under the FDCA also can delay the submission or the approval of certain applications. The FDCA provides a five-year period of non-patent marketing exclusivity within the United States to the first applicant to gain approval of an NDA for a new chemical entity. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. During the exclusivity period, the FDA may not accept for review an abbreviated new drug application, or ANDA, or a 505(b)(2) NDA submitted by another company for another version of such drug where the applicant does not own or have a legal right of reference to all the data required for approval. However, an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement. The FDCA also provides three years of marketing exclusivity for an NDA, 505(b)(2) NDA or supplement to an existing NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, for example, for new indications, dosages, or strengths of an existing drug. This three-year exclusivity covers only the conditions associated with the new clinical investigations and does not prohibit the FDA from approving ANDAs for drugs containing the original active agent. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA; however, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to all of the preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness.

Orphan Drug Designation

Under the Orphan Drug Act, the FDA may grant orphan drug designation to drugs intended to treat a rare disease or condition, which is generally a disease or condition that affects fewer than 200,000 individuals in the United States, or more than 200,000 individuals in the United States and for which there is no reasonable expectation that the cost of developing and making available in the United States a drug for this type of disease or condition will be recovered from sales in the United States for that drug. Orphan drug designation must be requested before submitting an NDA. After the FDA grants orphan drug designation, the identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. Orphan drug designation does not convey any advantage in or shorten the duration of the regulatory review and approval process.

If a product that has orphan drug designation subsequently receives the first FDA approval for the disease for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications to market the same drug for the same indication, except in very limited circumstances, for seven years. Orphan drug exclusivity, however, also could block the approval of one of our products for seven years if a competitor obtains approval of the same drug as defined by the FDA or if our drug candidate is determined to be contained within the competitor's product for the same indication or disease.

We have been granted orphan drug designation from the FDA for elesclomol for the treatment of metastatic melanoma and plan to apply for orphan drug designation for other elesclomol indications and for other drug candidates that meet the criteria for orphan designation. We may not be awarded orphan drug status for elesclomol in indications other than melanoma or for any of our other drug candidates or indications. In addition, obtaining FDA approval to market a product with orphan drug exclusivity may not provide us with a material commercial advantage.

Pediatric Exclusivity

Section 505A of the FDCA, as amended by the FDA Amendments Act of 2007, permits certain drugs to obtain an additional six months of exclusivity, if the sponsor submits information requested in writing by the FDA, or a Written Request, relating to the use of the drug in children. The FDA may not issue a Written Request for studies on unapproved or approved indications or where it determines

that information relating to the use of a drug in a pediatric population, or part of the pediatric population, may not produce health benefits in that population.

We have not requested or received a Written Request for such pediatric studies, although we may ask the FDA to issue a Written Request for such studies in the future. To receive the six-month pediatric market exclusivity, we would have to receive a Written Request from the FDA, conduct the requested studies in accordance with a written agreement with the FDA or, if there is no written agreement, in accordance with commonly accepted scientific principles, and submit reports of the studies. The FDA will accept the reports upon its determination that the studies were conducted in accordance with and are responsive to the original Written Request or commonly accepted scientific principles, as appropriate, and that the reports comply with the FDA's filing requirements. The FDA may not issue a Written Request for such studies or accept the reports of the studies.

Post-approval Requirements

Once an approval is granted, the FDA may withdraw the approval if compliance with regulatory standards is not maintained or if problems occur after the product reaches the market. After approval, some types of changes to the approved product, such as adding new indications, manufacturing changes and additional labeling claims, are subject to further FDA review and approval. In addition, the FDA may require testing and surveillance programs to monitor the effect of approved products that have been commercialized, and the FDA has the power to prevent or limit further marketing of a product based on the results of these post-marketing programs.

Any drug products manufactured or distributed by us pursuant to FDA approvals are subject to continuing regulation by the FDA, including, among other things:

- record-keeping requirements;
- reporting of adverse experiences with the drug;
- providing the FDA with updated safety and efficacy information;
- drug sampling and distribution requirements;
- notifying the FDA and gaining its approval of specified manufacturing or labeling changes;
- complying with certain electronic records and signature requirements; and
- complying with FDA promotion and advertising requirements.

Drug manufacturers and their subcontractors are required to register their establishments with the FDA and some state agencies, and are subject to periodic unannounced inspections by the FDA and some state agencies for compliance with cGMP and other laws.

We rely, and expect to continue to rely, on third parties for the production of clinical and commercial quantities of our products. Future FDA and state inspections may identify compliance issues at the facilities of our contract manufacturers that may disrupt production or distribution, or require substantial resources to correct.

From time to time, legislation is drafted, introduced and passed in Congress that could significantly change the statutory provisions governing the approval, manufacturing and marketing of products regulated by the FDA. In addition, FDA regulations and guidance are often revised or reinterpreted by the agency in ways that may significantly affect our business and our products. It is impossible to predict whether legislative changes will be enacted, or FDA regulations, guidance or interpretations changed or what the impact of such changes, if any, may be.

Foreign Regulation

In addition to regulations in the United States, we will be subject to a variety of foreign regulations governing clinical trials and commercial sales and distribution of our products. Whether or not we obtain FDA approval for a product, we must obtain approval by the comparable regulatory authorities of foreign countries before we can commence clinical trials or marketing of the product in those countries. The approval process varies from country to country and the time may be longer or shorter than that required for FDA approval. The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary greatly from country to country.

Under European Union regulatory systems, we may submit marketing authorization applications either under a centralized or decentralized procedure. The centralized procedure, which is compulsory for medicines produced by biotechnology or those medicines intended to treat AIDS, cancer, neurodegenerative disorders, or diabetes and optional for those medicines which are highly innovative, provides for the grant of a single marketing authorization that is valid for all European Union member states. The decentralized procedure provides for mutual recognition of national approval decisions. Under this procedure, the holder of a national marketing authorization may submit an application to the remaining member states. Within 90 days of receiving the applications and assessments report each member state must decide whether to recognize approval. If a member state does not recognize the marketing authorization, the disputed points are eventually referred to the European Commission, whose decision is binding on all member states.

As in the United States, we may apply for designation of a product as an orphan drug for the treatment of a specific indication in the European Union before the application for marketing authorization is made. Orphan drugs in Europe enjoy economic and marketing benefits, including up to 10 years of market exclusivity for the approved indication unless another applicant can show that its product is safer, more effective or otherwise clinically superior to the orphan-designated product.

Reimbursement

Sales of pharmaceutical products depend in significant part on the availability of third-party reimbursement. Third-party payors include government health administrative authorities, managed care providers, private health insurers and other organizations. We anticipate third-party payors will provide reimbursement for our products. However, these third-party payors are increasingly challenging the price and examining the cost-effectiveness of medical products and services. In addition, significant uncertainty exists as to the reimbursement status of newly approved healthcare products. We may need to conduct expensive pharmacoeconomic studies in order to demonstrate the cost-effectiveness of our products. Our product candidates may not be considered cost-effective. It is time consuming and expensive for us to seek reimbursement from third-party payors. Reimbursement may not be available or sufficient to allow us to sell our products on a competitive and profitable basis.

The passage of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, or the MMA, imposes new requirements for the distribution and pricing of prescription drugs for Medicare beneficiaries, and includes a major expansion of the prescription drug benefit under a new Medicare Part D. Medicare Part D went into effect on January 1, 2006. Under Part D, Medicare beneficiaries may enroll in prescription drug plans offered by private entities which will provide coverage of outpatient prescription drugs. Part D plans include both stand-alone prescription drug benefit plans and prescription drug coverage as a supplement to Medicare Advantage plans. Unlike Medicare Part A and B, Part D coverage is not standardized. Part D prescription drug plan sponsors are not required to pay for all covered Part D drugs, and each drug plan can develop its own drug formulary that identifies which drugs it will cover and at what tier or level. However, Part D prescription drug formularies must include drugs within each therapeutic category and class of covered Part D drugs, though not necessarily all the drugs in each category or class. Any formulary used by a

Part D prescription drug plan must be developed and reviewed by a pharmacy and therapeutic committee.

It is not clear what effect the MMA will have on the prices paid for currently approved drugs and the pricing options for new drugs approved after January 1, 2006. Government payment for some of the costs of prescription drugs may increase demand for products for which we receive marketing approval. However, any negotiated prices for our products covered by a Part D prescription drug plan will likely be lower than the prices we might otherwise obtain. Moreover, while the MMA applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own payment rates. Any reduction in payment that results from the MMA may result in a similar reduction in payments from non-governmental payors.

We expect that there will continue to be a number of federal and state proposals to implement governmental pricing controls and limit the growth of healthcare costs, including the cost of prescription drugs. At the present time, Medicare is prohibited from negotiating directly with pharmaceutical companies for drugs. However, Congress is currently considering passing legislation that would lift the ban on federal negotiations. While we cannot predict whether such legislative or regulatory proposals will be adopted, the adoption of such proposals could have a material adverse effect on our business, financial condition and profitability.

In addition, in some foreign countries, the proposed pricing for a drug must be approved before it may be lawfully marketed. The requirements governing drug pricing vary widely from country to country. For example, the European Union provides options for its member states to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. A member state may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any of our products.

Employees

We believe that our success will depend greatly on our ability to identify, attract, and retain capable employees. As of March 14, 2008, we had 175 full time employees, including a total of 70 employees who hold M.D. or Ph.D. degrees. 135 of our employees are primarily engaged in research and development activities, and 40 are primarily engaged in general and administrative activities. Our employees are not represented by any collective bargaining unit, and we believe our relations with our employees are good.

Company History and Available Information

We commenced operations in July 2001. In September 2002, we acquired Principia Associates, Inc., which had previously acquired Shionogi BioResearch Corp., a U.S.-based drug discovery subsidiary of the Japanese pharmaceutical company, Shionogi & Co., Ltd. In this acquisition, we acquired a unique chemical compound library, an integrated set of drug discovery capabilities, and a pipeline of preclinical and research programs. Since 2002, we have been advancing these programs into later stages of development; discovering and developing additional drug candidates; and expanding our management and scientific teams and capabilities to support more advanced stages of drug development and commercialization.

Our principal executive offices are located at 45 Hartwell Avenue, Lexington, Massachusetts 02421, and our telephone number is (781) 274-8200. Our website address is www.syntapharma.com. The information contained on our website is not incorporated by reference into, and does not form any part of, this Annual Report on Form 10-K. We have included our website address as a factual reference and

do not intend it to be an active link to our website. Our trademarks include Synta Pharmaceuticals, our corporate logo, SYMMETRY and the SYMMETRY logo. Other service marks, trademarks and trade names appearing in this Annual Report on Form 10-K are the property of their respective owners. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and all amendments to those reports, are available free of charge through the Investors section of our website as soon as reasonably practicable after such materials have been electronically filed with, or furnished to, the Securities and Exchange Commission.

Item 1A. RISK FACTORS

If any of the following risks occurs, our business, business prospects, financial condition, results of operations, or cash flows could be materially harmed.

Risks Related to Our Financial Position and Need for Additional Capital

We have incurred significant losses since our inception, and we expect to incur losses for the foreseeable future and may never reach profitability.

Since inception we have incurred significant operating losses and, as of December 31, 2007, we had an accumulated deficit of $300.1 million. We expect to continue to incur significant operating expenses and capital expenditures and anticipate that our expenses and losses will increase substantially in the foreseeable future as we:

- complete the SYMMETRY trial, our pivotal Phase 3 clinical trial of elesclomol for the treatment of metastatic melanoma that was initiated in the third quarter of 2007 and potentially initiate Phase 2 clinical trials of elesclomol in additional cancer types;
- begin to perform and fund pre-commercialization activities, and establish sales and marketing functions and commercial manufacturing arrangements for elesclomol, consistent with our obligations under our collaborative development, commercialization and license agreement, or the GSK Agreement, with GlaxoSmithKline, or GSK;
- complete the current Phase 2a clinical trial of apilimod for the treatment of rheumatoid arthritis, or RA and possibly initiate Phase 2 clinical trials of apilimod in additional inflammatory disease indications;
- initiate additional Phase 3 clinical trials of elesclomol and one or more Phase 3 clinical trials of apilimod, if supported by Phase 2 results;
- complete the Phase 1 clinical trials of STA-9090 that were initiated in the fourth quarter of 2007, initiate additional Phase 1 trials and initiate any later-stage clinical trials, if supported by Phase 1 results;
- complete preclinical development of STA-9584 and initiate clinical trials, if supported by positive preclinical data;
- advance our CRAC ion channel inhibitor program into clinical trials, if supported by positive preclinical data;
- discover, develop, and seek regulatory approval for backups of our current drug candidates and other new drug candidates;
- identify additional compounds or drug candidates and acquire rights from third parties to those compounds or drug candidates through licenses, acquisitions or other means;
- commercialize any approved drug candidates;
- hire additional clinical, scientific, and management personnel; and

- add operational, financial, and management information systems and personnel.

We must generate significant revenue to achieve and maintain profitability. Even if we succeed in developing and commercializing one or more of our drug candidates, we may not be able to generate sufficient revenue and we may never be able to achieve or maintain profitability.

Our operating history may make it difficult to evaluate the success of our business to date and to assess our future viability.

We commenced operations in July 2001 and are a development-stage company. Our operations to date have been limited to organizing and staffing our company, acquiring, developing, and securing our technology, and undertaking preclinical studies and clinical trials of our drug candidates. We have not yet demonstrated an ability to obtain regulatory approval, formulate and manufacture a commercial-scale product, or conduct sales and marketing activities necessary for successful product commercialization. Consequently, any predictions about our future success or viability may not be as accurate as they could be if we had a longer operating history or had previously discovered, developed, and/or commercialized an approved product.

If we fail to obtain the capital necessary to fund our operations, we will be unable to successfully develop and commercialize our lead drug candidates.

Although we have raised substantial capital to date, we may require additional capital in order to complete clinical development and commercialize our drug candidates, elesclomol, apilimod, STA-9090, and STA-9584, and to conduct the research and development and clinical and regulatory activities necessary to bring other drug candidates to market. We initiated the SYMMETRY trial, our global, pivotal Phase 3 clinical trial of elesclomol for the treatment of metastatic melanoma, in the third quarter of 2007, and we expect the remaining costs necessary for the new drug application, or NDA, submission, including the cost of the clinical trial, clinical drug supplies, registration manufacturing and regulatory activities necessary to compile the NDA submission, together with the costs of related nonclinical toxicology and other testing to support the trial, will be in the range of $60 million to $70 million. We may not have sufficient capital, however, to fully fund certain other activities, including activities related to the continued clinical development of our other lead drug candidates and advancement of our other programs. Our future capital requirements will depend on many factors that are currently unknown to us, including:

- our ability to fulfill our obligations and otherwise maintain our agreement with GSK;
- the progress and results of the SYMMETRY trial, our global, pivotal Phase 3 clinical trial of elesclomol for the treatment of metastatic melanoma that was initiated in the third quarter of 2007;
- the progress and results of any additional Phase 2 clinical trials of elesclomol in other cancer types we may initiate;
- the costs of performing and funding pre-commercialization activities, and establishing sales and marketing functions and commercial manufacturing arrangements for elesclomol, consistent with our obligations under our agreement with GSK;
- the progress and results of the current Phase 2a clinical trial of apilimod for the treatment of RA and any future Phase 2 clinical trials we may initiate for other inflammatory disease indications;
- the progress and results of any additional Phase 3 clinical trials of elesclomol in other cancer types and any Phase 3 clinical trials of apilimod we may initiate in the future based on the results of Phase 2 clinical trials;

- the progress and results of our Phase 1 clinical trials of STA-9090 initiated in the fourth quarter of 2007, any additional Phase 1 clinical trials of STA-9090 and any later-stage clinical trials we may initiate in the future based on the results of the Phase 1 clinical trials;
- the results of our preclinical studies and testing of STA-9584 and our CRAC ion channel inhibitor program, and our decision to initiate clinical trials, if supported by the preclinical results;
- the costs, timing, and outcome of regulatory review of elesclomol, apilimod, STA-9090 and our preclinical drug candidates;
- the scope, progress, results, and cost of preclinical development, clinical trials, and regulatory review of any new drug candidates we may discover or acquire;
- the costs of preparing, filing, and prosecuting patent applications and maintaining, enforcing, and defending intellectual property-related claims;
- our ability to establish additional strategic collaborations and licensing or other arrangements on terms favorable to us;
- the costs to satisfy our obligations under potential future collaborations; and
- the timing, receipt, and amount of sales or royalties, if any, from elesclomol, apilimod, STA-9090, STA-9584, and our other potential products.

Our funding requirements will depend on a number of factors, including:

- the progress of our research and development programs, including the completion of preclinical studies and clinical trials for our current drug candidates and the results from these studies and trials;
- the number of drug candidates we advance into later-stage clinical trials and the scope of our research and development programs;
- our ability to discover additional drug candidates using our drug discovery technology and advance them into clinical development;
- the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims for our drug discovery technology and drug candidates and avoiding infringing the intellectual property of others;
- the time and costs involved in obtaining regulatory approvals for our drug candidates;
- our ability to establish and maintain collaborative arrangements, including our agreement with GSK;
- the potential in-licensing of other products or technologies or the acquisition of complementary businesses;
- the cost of manufacturing, marketing and sales activities, if any; and
- the timing, receipt and amount of revenue, if any, from our drug candidates.

There can be no assurance that additional funds will be available when we need them on terms that are acceptable to us, or at all. If adequate funds are not available on a timely basis, we may be required to:

- terminate, significantly modify or delay our research and development programs;
- reduce our planned commercialization efforts; or

- obtain funds through collaborators that may require us to relinquish rights to our technologies or drug candidates that we might otherwise seek to develop or commercialize independently.

Based on our current operating plans, we expect our existing funds to be sufficient to fund operations through at least 2008. Payment to us by GSK of milestones for our operational progress and achievement of certain success criteria leading to the approval by the FDA of elesclomol for the treatment of metastatic melanoma could extend our cash availability, as could payments of milestones in connection with the development of elesclomol in other cancer indications and achievement of certain net sales thresholds. Based on our current operating plans, we expect to receive between $40 million and $50 million in operational progress milestone payments, under our agreement with GSK, in 2008. However, our operating plans may change as a result of many factors currently unknown to us, and we may need additional funds sooner than planned. In addition, we may seek additional capital due to favorable market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans.

Raising additional capital may cause dilution to existing stockholders, restrict our operations or require us to relinquish rights.

We may seek the additional capital necessary to fund our operations through public or private equity offerings, debt financings, and collaborative and licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, existing stockholders' ownership interests will be diluted and the terms may include liquidation or other preferences that adversely affect their rights as a stockholder. Pursuant to the terms of our collaboration with GSK, GSK may, subject to our agreement, purchase up to $45 million of our common stock in two separate tranches upon the future achievement of specified development and regulatory milestones. In the first tranche, GSK would be obligated, at our sole discretion, to purchase $25 million of our common stock. In the second tranche, which is subject to agreement by both GSK and us, GSK would purchase $20 million of our common stock. The per share purchase price under each tranche is at a specified premium. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions such as incurring additional debt, making capital expenditures, or declaring dividends. If we raise additional funds through collaboration and licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies or drug candidates, or grant licenses on terms that are not favorable to us.

Risks Related to the Development and Regulatory Approval of Our Drug Candidates

Our success is largely dependent on the success of our lead drug candidate, elesclomol, as well as our other drug candidates, and we cannot be certain that we will be able to obtain regulatory approval for or successfully commercialize any of these drug candidates.

We have invested a significant portion of our time and financial resources in the development of our lead drug candidate, elesclomol, for the treatment of cancer. We have also invested a significant amount of time and financial resources in the development of our other drug candidates, apilimod, STA-9090 and STA-9584. We anticipate that our success will depend largely on the receipt of regulatory approval and successful commercialization of these drug candidates. The future success of these drug candidates will depend on several factors, including the following:

- our ability to provide acceptable evidence of their safety and efficacy;
- receipt of marketing approval from the Food and Drug Administration, or FDA, and any similar foreign regulatory authorities;
- successful formulation of an efficacious and commercially viable form of apilimod;

- obtaining and maintaining commercial manufacturing arrangements with third-party manufacturers or establishing commercial-scale manufacturing capabilities;

- establishing an internal sales force or collaborating with pharmaceutical companies or contract sales organizations to market and sell any approved drug; and

- acceptance of any approved drug in the medical community and by patients and third-party payors.

Many of these factors are beyond our control. Accordingly, there can be no assurance that we will ever be able to generate revenues through the sale of an approved product.

If we do not obtain the required regulatory approval, we will be unable to market and sell our drug candidates.

Elesclomol, apilimod, STA-9090, STA-9584, and any other drug candidates we may discover or acquire and seek to commercialize are subject to extensive governmental regulations relating to development, clinical trials, manufacturing, and commercialization. Rigorous preclinical testing and clinical trials and an extensive regulatory approval process are required to be successfully completed in the United States and in many foreign jurisdictions before a new drug can be sold. Satisfaction of these and other regulatory requirements is costly, time consuming, uncertain, and subject to unanticipated delays. The time required to obtain approval by the FDA is unpredictable but typically exceeds five years following the commencement of clinical trials, depending upon the complexity of the drug candidate. We initiated clinical development of elesclomol, apilimod and STA-9090 in 2002, 2003 and 2007, respectively, and thus far, these drug candidates have been studied in only a relatively small number of patients. We initiated the SYMMETRY trial, our global, pivotal Phase 3 clinical trial of elesclomol for the treatment of metastatic melanoma, in the third quarter of 2007. Apilimod is currently in Phase 2a clinical trials for the treatment of RA. We initiated two Phase 1 clinical trials of STA-9090 in the fourth quarter of 2007. STA-9584 is in preclinical development.

We have limited experience in conducting and managing the clinical trials necessary to obtain regulatory approvals, including approval by the FDA. In connection with the clinical trials of elesclomol, apilimod, STA-9090 and STA-9584 and any other drug candidate we may seek to develop in the future, we face risks that:

- the drug candidate may not prove to be efficacious;

- the dosing of the drug candidate in a particular clinical trial may not be at an optimal level (for example, we are uncertain whether the Phase 2 clinical trial results for elesclomol in sarcoma and non-small cell lung cancer and Phase 2 clinical trial results for apilimod in psoriasis and Crohn's disease were the result of suboptimal dosing amounts and/or dosing schedules);

- patients may die or suffer other adverse effects for reasons that may or may not be related to the drug candidate being tested;

- the results may not confirm the positive results of earlier clinical trials; and

- the results may not meet the level of statistical significance required by the FDA or other regulatory agencies for marketing approval.

Of the large number of drugs in development, only a small percentage result in the submission of an NDA to the FDA and even fewer are approved for commercialization. Furthermore, even if we do receive regulatory approval to market a commercial product, any such approval may be subject to limitations on the indicated uses for which we may market the product.

We will need to demonstrate the safety and efficacy of elesclomol in one or more Phase 3 clinical trials in order to obtain FDA approval for use in the treatment of metastatic melanoma, and there can be no assurance that elesclomol will achieve positive results in further clinical testing.

Positive results in early clinical trials of a drug candidate may not be replicated in later clinical trials. A number of companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in late-stage clinical trials even after achieving promising results in earlier-stage development. Although our Phase 2b clinical trial of elesclomol for the treatment of metastatic melanoma achieved the primary endpoint of increasing progression-free survival, or PFS, there can be no assurance that the SYMMETRY trial, our global, pivotal Phase 3 trial for the treatment of metastatic melanoma, will achieve positive results. A number of factors could contribute to a lack of positive results in the SYMMETRY trial. For example, in our Phase 2b clinical trial, the majority of patients had been treated with prior chemotherapy, whereas our SYMMETRY trial will enroll only patients who have received no prior treatment with chemotherapy. In addition, the clinical investigators involved in the Phase 2b clinical trial used their judgment to determine when a patient's melanoma had progressed, using the criteria defined in the trial protocol and, among other factors, either CT or magnetic resonance imaging scans of a patient's tumors. In some past clinical trials by other companies involving similar subjective judgments, it has been reported that the variation among clinical trial sites in determining progression contributed to positive results. In the SYMMETRY trial, we will use a single centralized radiological reading center to review all patient scans, which could cause the results of our SYMMETRY trial to differ from those observed in our Phase 2b clinical trial.

In the SYMMETRY trial, we will seek to stratify, or evenly allocate to each trial arm, patients having certain strong prognostic factors, such as elevated lactate dehydrogenase, or LDH, levels. However, we may not be able to effectively stratify all such prognostic factors evenly. Although we found that patients with elevated LDH were evenly distributed between the elesclomol plus paclitaxel arm and the paclitaxel control arm in our Phase 2b clinical trial, we noted that the M-grade distribution of patients was uneven. M-grade is a measure of the degree of metastasis, or spread of the disease. In our Phase 2b clinical trial, 53% of the patients in the elesclomol plus paclitaxel group were classified by the clinical investigator as M1c, the most advanced stage of metastatic melanoma, compared to 75% in the paclitaxel alone group. However, we believe that M-grade distribution between the treatment and control arms did not impact the positive results of that trial. The median PFS for M1c patients who received elesclomol plus paclitaxel was 3.7 months versus 1.8 months for M1c patients who received paclitaxel alone. This result suggests a PFS benefit regardless of M-grade status of the patient. Further, a statistical analysis that we conducted evaluating the impact of multiple variables, including LDH levels, liver metastases and M-grade classification, showed that, firstly, investigator-reported M-grade was not a prognostic factor in this study, and secondly, that the M-grade distribution between the two arms did not contribute to the positive outcome of this clinical trial. Furthermore, published results from historical trials show that the degree of metastasis may not be prognostic for PFS, although it appears to be prognostic for OS, as described, for example, in the recent Korn et al. paper. Despite these analyses, however, we cannot provide complete assurance that the M-grade distribution did not have an impact on the Phase 2b trial results or that if evenly distributed in a future trial, that the clinical trial results would not be altered. We also recently analyzed the Phase 2b data in a post hoc fashion by each patient's prior chemotherapy status. The median PFS for chemotherapy-naïve patients who received elesclomol plus paclitaxel (N=24) was 7.1 months versus 1.8 months for chemotherapy-naïve patients assigned to the paclitaxel control arm (N=8). We noted that patients who had at least one prior chemotherapy had a lesser PFS benefit: elesclomol plus paclitaxel (N=29) versus paclitaxel alone (N=20) of 2.8 months versus 1.8 months median PFS, respectively. We have selected chemotherapy-naïve patients only as the population for our Phase 3 clinical trial and therefore, do not expect these differences to negatively impact the likelihood of success of our Phase 3 trial. However, we can give no assurances that the Phase 2b trial results were not influenced by these differences.

If we do not receive positive results in our SYMMETRY trial, we may not be able to obtain regulatory approval or commercialize elesclomol for this indication and our development of elesclomol for other indications may be delayed or cancelled.

Even if our SYMMETRY trial of elesclomol for the treatment of metastatic melanoma achieves the primary endpoint of increasing PFS, the FDA may not find the increase to be clinically meaningful or the FDA might still require us to establish an overall survival benefit prior to registration.

The primary endpoint of our recently-completed Phase 2b clinical trial of elesclomol for treating metastatic melanoma was PFS, and PFS is also the primary endpoint of our global, pivotal Phase 3 SYMMETRY trial of elesclomol for the treatment of metastatic melanoma. PFS, which measures for each patient the time from assignment to a treatment group until the earlier of tumor progression or death, is an endpoint that the FDA and/or its Oncologic Drug Advisory Committee, or ODAC, have previously indicated may be acceptable for registration in melanoma and other cancer types in clinical trials by other companies. However, no therapy for the treatment of melanoma has been approved to date based on a PFS endpoint. In our initial meeting and later discussions with the FDA on the design of our SYMMETRY trial for elesclomol, the FDA accepted our use of PFS as the primary endpoint in this trial and overall survival, or OS, as the secondary endpoint, although the FDA noted that the magnitude of an increase in PFS would need to be clinically meaningful in order to support approval of elesclomol based on the PFS endpoint. We can give no assurances, however, that the FDA or any other regulatory body will not require a different primary endpoint, such as OS, or additional efficacy endpoints for registration. If the FDA requires a different or any additional efficacy endpoints, we may be required to conduct larger or longer Phase 3 clinical trials than currently planned to achieve a statistically significant result to enable approval of elesclomol for the treatment of metastatic melanoma.

Further, we applied to the FDA for Special Protocol Assessment, or SPA, of the SYMMETRY trial of elesclomol for the treatment of metastatic melanoma. The SPA process may result in a written agreement between a clinical trial sponsor and the FDA that the design and planned analyses of the clinical trial will support regulatory approval, unless public health concerns unrecognized at the time of the protocol assessment become evident. Following discussions with the FDA, we received a response letter stating that the FDA has completed its review of our SPA application and has determined that the design and planned analyses of our study adequately address the objectives necessary to support a regulatory submission. However, the approval decision may be made based on a number of factors, including the degree of clinical benefit, and the FDA is not obligated to approve elesclomol as a result of the SPA, even if the clinical outcome is positive. Therefore, we cannot provide assurance that positive results in the SYMMETRY trial will be sufficient for FDA approval of elesclomol.

In addition, in order to detect a statistically significant result in our SYMMETRY trial for the primary endpoint of PFS, we believe that we will need to enroll and evaluate between 250 and 300 patients. However, based on our communications with the FDA and our medical advisors, we intend to use OS as a secondary endpoint, and estimate that we will need to enroll approximately 630 patients to detect a statistically significant benefit in this endpoint. We plan to conduct the final analysis for the PFS primary endpoint after two criteria have been satisfied: a prespecified minimum number of PFS events have occurred and full enrollment has been completed. Although we do not currently expect any delay in the availability of the PFS results beyond that point, there can be no assurance that future discussions with the FDA will not result in further delay of the analysis or in the release of this data. In addition, even if the SYMMETRY trial shows statistically and clinically meaningful benefits in the PFS primary endpoint, the FDA may decide to wait to review data relative to the OS secondary endpoint before considering elesclomol for approval. In our Phase 2b trial of elesclomol for metastatic melanoma, during a post-hoc analysis of patients as originally randomized, we noted an improvement in median OS for patients randomized to the elesclomol plus paclitaxel arm (median OS = 11.9 months)

as compared to those patients randomized to the paclitaxel alone arm (median OS = 7.8 months), but the difference did not achieve statistical significance. Although we are encouraged by the improvement in OS we observed in our Phase 2b clinical trial of elesclomol for metastatic melanoma, we note that OS was not a pre-defined endpoint of that trial, the analysis we performed was not prospectively defined and the results might have been influenced by a number of confounding factors, including the cross-over design of the trial, prior treatments and further treatments received following treatment on our trial. We can give no assurance that we will obtain positive OS data in the SYMMETRY trial that are sufficient to achieve the secondary endpoint of the trial, or establish an OS benefit trend at all. If the FDA were to approve elesclomol based on the data from the PFS endpoint and the results of the OS secondary endpoint are not positive, the FDA may limit the use of elesclomol or even withdraw it from the market.

If the FDA requires additional clinical data prior to registration, we may need to conduct more, larger or longer Phase 3 clinical trials than currently planned.

Prior to approving a new drug, the FDA typically requires that the efficacy of the drug be demonstrated in two double-blind, controlled studies. In light of the unmet medical need in metastatic melanoma and the results of our Phase 2b clinical trial, we believe that we will be required to conduct only a single Phase 3 clinical trial of elesclomol. However, the FDA has indicated that the trial must provide compelling evidence of clinically meaningful benefit in order to warrant consideration for marketing approval, and the FDA has noted that a trial that is merely statistically positive may not provide sufficient evidence to support an NDA filing or approval of a drug candidate. If the FDA determines that the results of our SYMMETRY trial do not have a clinically meaningful benefit, or if the FDA requires us to conduct additional Phase 3 clinical trials of elesclomol prior to seeking approval, we will incur significant additional development costs and commercialization of elesclomol may be prevented or delayed.

If the current formulation and method of administering elesclomol is not commercially feasible, we may not be able to commercialize elesclomol without reformulation and conducting additional clinical trials.

To date, other than a human bridging study of a salt form of elesclomol, all of our clinical trials have been and are being conducted using the free acid form of elesclomol, which we intend to continue to use in our clinical trials planned for 2008, as well as in our initial commercial product. Because this free acid form of elesclomol is not water soluble, prior to administration, it must be dissolved in an organic solvent. In the completed Phase 2b clinical trial in metastatic melanoma, this was achieved by combining the elesclomol with a volume of organic solvent included in the paclitaxel solution and agitating the resulting mixture with a sonication machine for up to 45 minutes. Once the elesclomol was fully dissolved, the resulting solution was added to the remaining paclitaxel solution, and the combined elesclomol/paclitaxel solution was administered to the patient. We have improved the process for preparing the active pharmaceutical ingredient, or API, and drug product of elesclomol, such that elesclomol can now be dissolved in the paclitaxel solution without sonication. We believe these improved procedures replicate the results of the prior methods and are suitable for preparing drug product for clinical trials and commercialization. These improved procedures will be used in our SYMMETRY trial and any Phase 2 clinical trials that we may initiate in additional cancer indications using the free acid form of elesclomol. We have taken steps to ensure that the medical personnel responsible for formulating elesclomol are properly trained to carry out the new dissolution process. Although we believe that the changes in the procedures for preparing and dissolving elesclomol prior to administration will not affect the efficacy or pharmaceutical properties of the treatment, there can be no assurance that the results of future trials will not be affected by these changes. In addition, in order to use the free acid form of elesclomol with other oncology products, including taxanes other than paclitaxel, it must be dissolved in an organic solvent, which may cause additional toxicity due to the presence of the organic solvent.

We have developed a water-soluble salt form of elesclomol that does not need to be dissolved in an organic solvent and therefore may be used more easily with other oncology products or potentially, as a stand alone agent without need for an organic solvent. We intend to explore the use of this new salt form of elesclomol in future clinical trials. However, it is also our intention to use the free acid form of elesclomol in our initial commercial product. If the free acid form does not prove to be commercially feasible and we are required to commercialize the salt form of elesclomol, it will require additional formulation development efforts and clinical studies which would delay the commercialization of this drug candidate.

While we believe elesclomol may have applicability to a broad range of solid tumor cancers, including tumor types other than melanoma, our clinical trials of elesclomol in non-small cell lung cancer and soft tissue sarcoma have shown negative or inconclusive results.

Based on our understanding of the mechanism of action and the preclinical activity we have seen with elesclomol, which included showing activity in a broad range of cancer types, we intend to conduct clinical trials of elesclomol in a number of other cancer indications in addition to melanoma. In addition to our Phase 2b clinical trial in metastatic melanoma, we have also conducted Phase 2 clinical trials of elesclomol in sarcoma and non-small cell lung cancer. The results of the soft tissue sarcoma clinical trial did not definitively establish evidence of clinical activity. In the non-small cell lung cancer clinical trial, no improvement was observed in time-to-progression between combination treatment with elesclomol and a standard first-line combination therapy. Although we are currently analyzing these data further to assess future development of elesclomol in sarcoma and non-small cell lung cancer, including assessing the possibility for a potential future clinical trial in non-small cell lung cancer at a more frequent dosing schedule and higher dose than previously tested, there can be no assurances that we will continue the development of elesclomol in these indications or that elesclomol will prove effective in and be approved for treating these or other forms of cancer.

Because our drug candidates are in an early stage of development, there is a high risk of failure, and we may never succeed in developing marketable products or generating product revenue.

We have no drug candidates that have received regulatory approval for commercial sale. We do not expect to have any commercial products on the market until at least 2009, if at all. We are exploring human diseases at the cellular level and attempting to develop drug candidates that intervene with cellular processes. Drug development is an uncertain process that involves trial and error, and we may fail at numerous stages along the way. Success in preclinical studies of a drug candidate may not be predictive of similar results in humans during clinical trials, and successful results from early or small clinical trials of a drug candidate may not be replicated in later and larger clinical trials. For example, although preclinical data and Phase 2a clinical trial results suggested that apilimod had activity in psoriasis and Crohn's disease, our Phase 2b clinical trials of apilimod in those indications did not demonstrate clinical benefit. Accordingly, the results from preclinical studies and the completed and ongoing clinical trials for our drug candidates may not be predictive of the results we may obtain in later stage clinical trials.

If clinical trials for our drug candidates, including elesclomol and apilimod, are prolonged or delayed, we may be unable to commercialize our drug candidates on a timely basis, which would require us to incur additional costs and delay our receipt of any revenue from potential product sales.

We cannot predict whether we will encounter problems with any of our completed, ongoing or planned clinical trials that will cause us or any regulatory authority to delay or suspend those clinical trials or delay the analysis of data derived from them. A number of events, including any of the following, could delay the completion of our ongoing and planned clinical trials and negatively impact

our ability to obtain regulatory approval for, and to market and sell, a particular drug candidate, including our clinical drug candidates elesclomol and apilimod:

- conditions imposed on us by the FDA or any foreign regulatory authority regarding the scope or design of our clinical trials;
- delays in obtaining, or our inability to obtain, required approvals from institutional review boards or other reviewing entities at clinical sites selected for participation in our clinical trials;
- insufficient supply or deficient quality of our drug candidates or other materials necessary to conduct our clinical trials;
- delays in obtaining regulatory agency agreement for the conduct of our clinical trials;
- lower than anticipated enrollment and retention rate of subjects in clinical trials;
- negative or inconclusive results from clinical trials, or results that are inconsistent with earlier results, that necessitate additional clinical studies (for example, due to patient-to-patient pharmacokinetic variability);
- serious and unexpected drug-related side effects experienced by patients in clinical trials; or
- failure of our third-party contractors to comply with regulatory requirements or otherwise meet their contractual obligations to us in a timely manner.

Commercialization of our drug candidates may be delayed by the imposition of additional conditions on our clinical trials by the FDA or the requirement of additional supportive studies by the FDA. In addition, clinical trials require sufficient patient enrollment, which is a function of many factors, including the size of the patient population, the nature of the trial protocol, the proximity of patients to clinical sites, the availability of effective treatments for the relevant disease, the conduct of other clinical trials that compete for the same patients as our clinical trials, and the eligibility criteria for our clinical trials. For example, competing trials for melanoma treatments or the emergence of new approved therapies may make it more difficult to enroll patients in our SYMMETRY trial on the schedule currently planned. We are aware of other ongoing clinical trials of drug candidates for the treatment of metastatic melanoma, including Nexavar, Sutent, Avasba, Avastin, ipilimumab, and tremelumimab. Enrollment efforts and future results with respect to these trials could also adversely impact patient enrollment in our SYMMETRY trial. We have had satisfactory patient enrollment in our completed clinical trials. However, in our SYMMETRY trial, we expect to enroll approximately 630 patients with stage IV metastatic melanoma, which is significantly more patients than we enrolled in our completed Phase 2b clinical trial for elesclomol. Initiation of the SYMMETRY trial in certain geographical regions has been slower than we expected, which increases the risk that full trial enrollment may be delayed beyond our initial goal. To increase the likelihood of our meeting the overall enrollment timeline for this trial, we are taking several specific actions, including potentially increasing the target number of clinical sites. Despite these efforts, if patient enrollment remains below our initial projections, the completion of this trial will be delayed. Delays in patient enrollment can result in increased costs and longer development times. Our failure to enroll patients in our clinical trials could delay the completion of the clinical trial beyond our current expectations. In addition, the FDA could require us to conduct clinical trials with a larger number of subjects than we have projected for any of our drug candidates. We may not be able to enroll a sufficient number of patients in a timely or cost-effective manner. Furthermore, enrolled patients may drop out of our clinical trials, which could impair the validity or statistical significance of the clinical trials.

We do not know whether our clinical trials will begin as planned, will need to be restructured, or will be completed on schedule, if at all. Delays in our clinical trials will result in increased development costs for our drug candidates. In addition, if our clinical trials are delayed, our competitors may be able

to bring products to market before we do and the commercial viability of our drug candidates, including our drug candidates elesclomol and apilimod, could be limited.

Failure to comply with foreign regulatory requirements governing human clinical trials and marketing approval for drugs could prevent us from selling our drug candidates in foreign markets, which may adversely affect our operating results and financial condition.

The requirements governing the conduct of clinical trials, product licensing, pricing, and reimbursement for marketing our drug candidates outside the United States vary greatly from country to country and may require additional testing. While GSK has exclusive responsibility to develop elesclomol outside the United States, we also expect that our future clinical development of apilimod, STA-9090 and other drug candidates will involve a number of clinical trials in foreign jurisdictions, particularly in Europe. We have no experience in obtaining foreign regulatory approvals. The time required to obtain approvals outside the United States may differ from that required to obtain FDA approval. We or GSK may not obtain foreign regulatory approvals on a timely basis, if at all. Approval by the FDA does not ensure approval by regulatory authorities in other countries, and approval by one foreign regulatory authority does not ensure approval by regulatory authorities in other countries or by the FDA. Failure to comply with these regulatory requirements or obtain required approvals could impair our and GSK's ability to develop foreign markets for our drug candidates and may have a material adverse effect on our results of operations and financial condition.

Our drug candidates will remain subject to ongoing regulatory review even if they receive marketing approval, and if we fail to comply with continuing regulations, we could lose these approvals and the sale of any approved commercial products could be suspended.

Even if we receive regulatory approval to market a particular drug candidate, the manufacturing, labeling, packaging, adverse event reporting, storage, advertising, promotion, and record keeping related to the product will remain subject to extensive regulatory requirements. If we fail to comply with the regulatory requirements of the FDA and other applicable domestic and foreign regulatory authorities or previously unknown problems with any approved commercial products, manufacturers, or manufacturing processes are discovered, we could be subject to administrative or judicially imposed sanctions, including:

- restrictions on the products, manufacturers, or manufacturing processes;
- untitled or warning letters;
- civil or criminal penalties;
- fines;
- injunctions;
- product seizures or detentions;
- import bans;
- voluntary or mandatory product recalls and related publicity requirements;
- suspension or withdrawal of regulatory approvals;
- total or partial suspension of production; and
- refusal to approve pending applications for marketing approval of new products or supplements to approved applications.

If side effects increase or are identified during the time our drug candidates are in development or after they are approved and on the market, we may be required to perform lengthy additional clinical trials, change the labeling of any such products, or withdraw any such products from the market, any of which would hinder or preclude our ability to generate revenues.

In our completed Phase 2b clinical trial of elesclomol for metastatic melanoma, there were four patients with possible or probable drug-related serious adverse events related to treatment with elesclomol. The first event involved a patient who developed lichenoid dermatitis, a severe rash-like condition, which was considered by the investigator to be possibly related to treatment. The second event involved a patient who experienced atrial fibrillation with rapid ventricular response. This event was also considered by the investigator to be possibly related to treatment. The third event involved an infection which, despite a normal absolute neutrophil count was considered by the investigator to be possibly related to treatment. The fourth event involved severe dehydration that was considered by the investigator to be probably related to treatment. If the incidence of these events increases or if other effects are identified after any of our drug candidates are approved and on the market:

- regulatory authorities may withdraw their approvals;
- we may be required to reformulate any such products, conduct additional clinical trials, make changes in labeling of any such products, or implement changes to or obtain new approvals of our or our contractors' manufacturing facilities;
- we may experience a significant drop in the sales of the affected products;
- our reputation in the marketplace may suffer; and
- we may become the target of lawsuits, including class action suits.

Any of these events could harm or prevent sales of the affected products or could substantially increase the costs and expenses of commercializing and marketing any such products.

We have also observed significant toxicities in preclinical animal studies of our clinical drug candidate, STA-9090. If significant toxicities occur at a clinical dose of STA-9090 which is not sufficiently efficacious, we may not be able to demonstrate an adequate therapeutic index to obtain regulatory approval for STA-9090.

While we choose to test our drug candidates in specific clinical indications based in part on our understanding of their mechanisms of action, our understanding may be incorrect or incomplete and, therefore, our drugs may not be effective against the diseases tested in our clinical trials.

Our rationale for selecting the particular therapeutic indications for each of our drug candidates is based in part on our understanding of the mechanism of action of these drug candidates. However, our understanding of the drug candidate's mechanism of action may be incomplete or incorrect, or the mechanism may not be clinically relevant to the diseases treated. In such cases, our drug candidates may prove to be ineffective in the clinical trials for treating those diseases.

We deal with hazardous materials and must comply with environmental laws and regulations, which can be expensive and restrict how we do business.

Our activities involve the controlled storage, use, and disposal of hazardous materials, including cytotoxic agents, genotoxic agents, infectious agents, corrosive, explosive and flammable chemicals, and various radioactive compounds. We are subject to federal, state, and local laws and regulations governing the use, manufacture, storage, handling, and disposal of these hazardous materials. Although we believe that our safety procedures for the handling and disposing of these materials comply with the standards prescribed by these laws and regulations, we cannot eliminate the risk of accidental contamination or injury from these materials.

In the event of an accident, state or federal authorities may curtail our use of these materials, and we could be liable for any civil damages that result, which may exceed our financial resources and may seriously harm our business. We currently maintain insurance covering hazardous waste clean up costs in an amount of up to $250,000 per site. Because we believe that our laboratory and materials handling policies and practices sufficiently mitigate the likelihood of materials liability or third-party claims, we currently carry no insurance covering such claims. While we believe that the amount of insurance we carry is sufficient for typical risks regarding our handling of these materials, it may not be sufficient to cover pollution conditions or other extraordinary or unanticipated events. Additionally, an accident could damage, or force us to shut down, our operations. In addition, if we develop a manufacturing capacity, we may incur substantial costs to comply with environmental regulations and would be subject to the risk of accidental contamination or injury from the use of hazardous materials in our manufacturing process.

Risks Related to Our Dependence on Third Parties

We have recently entered into an agreement with GSK relating to the development and commercialization of elesclomol. If this agreement is unsuccessful or terminated by GSK for any reason, our ability to commercialize elesclomol on a timely basis, or at all, could be affected and our business could be materially harmed.

On October 8, 2007, we entered into a Collaborative Development, Commercialization and License Agreement with GSK for the joint development and commercialization of elesclomol. We do not have a history of working together with GSK and cannot predict the success of this collaboration. The agreement involves a complex allocation of responsibilities, costs and benefits and provides for milestone payments to us upon the achievement of specified operational progress, positive clinical and regulatory outcomes and sales milestones.

With respect to responsibilities and control over decisions, we and GSK have established a series of joint committees which will be responsible for the development and commercialization of elesclomol. We have the right, but not the obligation to participate in these various joint governance committees. Under the committee structure, if the committees are unable to reach a decision, the matter is referred to senior executives of each of the parties. Each party has ultimate decision making authority with respect to a specified set of issues. For certain other specified issues, the matter must be resolved by consensus of the parties, and for all other issues, the matter must be resolved through arbitration. Accordingly, GSK's failure to devote sufficient resources to the development and commercialization of elesclomol or the failure of the parties to reach consensus on the conduct of development or commercialization activities with respect to elesclomol may delay its clinical development, which could lead to the delay in payment of clinical and regulatory milestones under the collaboration agreement and may delay commercialization of elesclomol.

In addition, the agreement provides that GSK may terminate the agreement upon not less than three months' written notice at any time prior to the date of the first commercial sale of an elesclomol product and not less than six months' written notice at any time on and after such date, in which case GSK may be obligated in certain circumstances to make additional payments to us.

Loss of GSK as a collaborator in the development or commercialization of elesclomol, any dispute over the terms of, or decisions regarding, the agreement, or any other adverse developments in our relationship with GSK could result in our inability to fully develop and/or commercialize elesclomol, or at all, and could materially harm our business and could accelerate our need for additional capital.

We rely on third parties to conduct our clinical trials, and those third parties may not perform satisfactorily, including failing to meet established deadlines for the completion of such clinical trials.

We do not have the ability to independently conduct clinical trials for our drug candidates, and we rely on third parties such as contract research organizations, medical institutions, and clinical investigators to perform this function. Our reliance on these third parties for clinical development activities reduces our control over these activities. Furthermore, these third parties may also have relationships with other entities, some of which may be our competitors. To date, our contract research organizations and other similar entities with which we are working have performed well; however, if these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may be delayed in obtaining regulatory approvals for our drug candidates and may be delayed in our efforts to successfully commercialize our drug candidates for targeted diseases.

We have no manufacturing capacity and depend on third-party manufacturers to produce our clinical trial drug supplies.

We do not currently operate manufacturing facilities for clinical or commercial production of elesclomol, apilimod or STA-9090, or any of our preclinical drug candidates. We have limited experience in drug manufacturing, and we lack the resources and the capabilities to manufacture any of our drug candidates on a clinical or commercial scale. As a result, we currently rely on third-party manufacturers to supply, store, and distribute drug supplies for our clinical trials and anticipate future reliance on a limited number of third-party manufacturers until we increase the number of manufacturers with whom we contract. Any performance failure on the part of our existing or future manufacturers could delay clinical development or regulatory approval of our drug candidates or commercialization of any approved products, producing additional losses and depriving us of potential product revenue.

Our drug candidates require precise, high quality manufacturing. Failure by our contract manufacturers to achieve and maintain high manufacturing standards could result in patient injury or death, product recalls or withdrawals, delays or failures in testing or delivery, cost overruns, or other problems that could seriously hurt our business. Contract manufacturers may encounter difficulties involving production yields, quality control, and quality assurance. These manufacturers are subject to ongoing periodic unannounced inspection by the FDA and corresponding state and foreign agencies to ensure strict compliance with current Good Manufacturing Practice, or cGMP, and other applicable government regulations and corresponding foreign standards; however, we do not have control over third-party manufacturers' compliance with these regulations and standards.

If for some reason our contract manufacturers cannot perform as agreed, we may be unable to replace such third-party manufacturers in a timely manner and the production of our drug candidates would be interrupted, resulting in delays in clinical trials and additional costs. Switching manufacturers may be difficult because the number of potential manufacturers is limited and the FDA must approve any replacement manufacturer prior to manufacturing our drug candidates. Such approval would require new testing and compliance inspections. In addition, a new manufacturer would have to be educated in, or develop substantially equivalent processes for, production of our drug candidates after receipt of FDA approval. It may be difficult or impossible for us to find a replacement manufacturer on acceptable terms quickly, or at all.

We are using a single manufacturer for the supply of elesclomol powder-filled vials for the SYMMETRY trial, our global, pivotal Phase 3 clinical trial for the treatment of metastatic melanoma and potentially, for commercial supply, and the failure of this manufacturer to supply sufficient quantities of elesclomol powder-filled vials could have a material adverse effect on our business.

We are using a single manufacturer for the supply of elesclomol powder-filled vials for the SYMMETRY trial, our global, pivotal Phase 3 clinical trial for the treatment of metastatic melanoma and potentially, for commercial supply, if approved. This process involves highly specialized processing, including the automated filling of vials with elesclomol under sterile conditions. We believe that this manufacturer may be one of a limited number of third-party contract manufacturers currently capable of conducting this process on our behalf. We have entered into a clinical supply agreement and a quality agreement with this manufacturer for the production of elesclomol drug product, which we believe will satisfy our manufacturing requirements for the SYMMETRY trial and additional Phase 2 clinical trials of elesclomol for other cancer indications. Although the clinical supply agreement notes that the parties have a mutual desire to enter into good faith negotiations for commercial supply services, if circumstances allow, there are no terms in this contract relating to commercial supply of elesclomol, and we cannot assure that we will be able to enter into a commercial supply agreement with this manufacturer on commercially reasonable terms, or at all. Any performance failure on the part of this manufacturer or the failure to enter an appropriate commercial supply agreement on reasonable terms in the future, assuming GSK decides to contract with this manufacturer or other circumstances so require, could delay clinical development, regulatory approval or commercialization of elesclomol, which could have a material adverse effect on our business. Moreover, although we believe we have identified a suitable backup manufacturer for elesclomol powder-filled vials, neither GSK nor we have an agreement with this manufacturer for producing this product and there can be no assurance that we will be able to enter into such an agreement on favorable terms, if at all.

We anticipate continued reliance on third-party manufacturers if we are successful in obtaining marketing approval from the FDA and other regulatory agencies for any of our drug candidates.

To date, our drug candidates have been manufactured in relatively small quantities for preclinical testing and clinical trials by third-party manufacturers. If the FDA or other regulatory agencies approve any of our drug candidates for commercial sale, we expect that we would continue to rely, at least initially, on third-party manufacturers to produce commercial quantities of our approved drug candidates. These manufacturers may not be able to successfully increase the manufacturing capacity for any of our approved drug candidates in a timely or economic manner, or at all. Significant scale-up of manufacturing may require additional validation studies, which the FDA must review and approve. If they are unable to successfully increase the manufacturing capacity for a drug candidate, particularly elesclomol, or we are unable to establish our own manufacturing capabilities, the commercial launch of any approved products may be delayed or there may be a shortage in supply.

If we do not establish additional collaborations, we may have to alter our development plans.

Our drug development programs and potential commercialization of our drug candidates will require substantial additional cash to fund expenses. Although we have established a collaboration with GSK relating to the joint development and commercialization of elesclomol, our strategy also includes potentially selectively collaborating with leading pharmaceutical and biotechnology companies to assist us in furthering development and potential commercialization of some of our other drug candidates. We may enter into one or more of such collaborations in the future, especially for target indications in which the potential collaborator has particular therapeutic expertise or that involve a large, primary care market that must be served by large sales and marketing organizations or for markets outside of North America. We face significant competition in seeking appropriate collaborators and these collaborations are complex and time-consuming to negotiate and document. We may not be able to

negotiate collaborations on acceptable terms, or at all. If that were to occur, we may have to curtail the development of a particular drug candidate, reduce or delay its development program or one or more of our other development programs, delay its potential commercialization or reduce the scope of our sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to increase our expenditures to fund development or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms, or at all. If we do not have sufficient funds, we will not be able to bring our drug candidates to market and generate product revenue.

If we are unable to establish sales and marketing capabilities or enter into agreements with third parties to market and sell our drug candidates, we may be unable to generate product revenue or co-commercialize elesclomol under our arrangement with GSK.

Although we have entered into a collaborative development, commercialization and license agreement with GSK for elesclomol, we do not currently have an organization for the sales, marketing, and distribution of pharmaceutical products. In order to co-commercialize elesclomol in the United States under our arrangement with GSK or market any other products that may be approved by the FDA, we must build our sales, marketing, managerial, and other non-technical capabilities or make arrangements with third parties to perform these services. If we are unable to establish adequate sales, marketing, and distribution capabilities, whether independently or with third parties, our share in elesclomol profits with GSK may be diminished or we may not be able to generate product revenue and we may not become profitable.

Risks Related to Our Intellectual Property

If our patent position does not adequately protect our drug candidates or any future products, others could compete against us more directly, which would harm our business.

As of March 14, 2008, our patent portfolio consisted of a total of 602 patents and patent applications worldwide. We own or license a total of 23 issued U.S. patents and 94 U.S. patent applications, as well as 485 foreign patents and patent applications. We have issued U.S. composition-of-matter patents claiming the chemical structures of elesclomol and apilimod.

Our commercial success will depend in part on our ability to obtain additional patents and protect our existing patent position as well as our ability to maintain adequate protection of other intellectual property for our technologies, drug candidates, and any future products in the United States and other countries. If we do not adequately protect our intellectual property, competitors may be able to use our technologies and erode or negate any competitive advantage we may have, which could harm our business and ability to achieve profitability. The laws of some foreign countries do not protect our proprietary rights to the same extent as the laws of the United States, and we may encounter significant problems in protecting our proprietary rights in these countries.

The patent positions of biotechnology and pharmaceutical companies, including our patent position, involve complex legal and factual questions, and, therefore, validity and enforceability cannot be predicted with certainty. Patents may be challenged, deemed unenforceable, invalidated, or circumvented. We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our proprietary technologies, drug candidates, and any future products are covered by valid and enforceable patents or are effectively maintained as trade secrets.

In addition, although we do not believe that any of the patents or patent applications that we currently license are material to our business, we may in the future license intellectual property that is material to us. In such cases, we may be dependent upon the licensors to obtain, maintain and enforce patent protection for the licensed intellectual property. These licensors may not successfully prosecute patent applications or may fail to maintain issued patents. The licensors may also determine not to

pursue litigation against other companies that infringe the patents, or may pursue such litigation less aggressively than we would. If any of the foregoing occurs, and the terms of any such future license do not allow us to assume control of patent prosecution, maintenance and enforcement, any competitive advantage we may have due to the license may be diminished or eliminated.

The degree of future protection for our proprietary rights is uncertain, and we cannot ensure that:

- we or our licensors were the first to make the inventions covered by each of our pending patent applications;
- we or our licensors were the first to file patent applications for these inventions;
- others will not independently develop similar or alternative technologies or duplicate any of our technologies;
- any of our or our licensors' pending patent applications will result in issued patents;
- any of our or our licensors' patents will be valid or enforceable;
- any patents issued to us or our licensors and collaborators will provide a basis for commercially viable products, will provide us with any competitive advantages or will not be challenged by third parties;
- we will develop additional proprietary technologies or drug candidates that are patentable; or
- the patents of others will not have an adverse effect on our business.

Although third parties may challenge our rights to, or the scope or validity of our patents, to date we have not received any communications from third parties challenging our patents or patent applications covering our drug candidates.

We typically file for patent protection first on the composition-of-matter of our drug candidates and also claim their activities and methods for their production and use to the extent known at that time. As we learn more about the mechanisms of action and new methods of manufacture and use of these drug candidates, we generally file additional patent applications for these new inventions. Although our patents may prevent others from making, using, or selling similar products, they do not ensure that we will not infringe the patent rights of third parties. For example, because we sometimes identify the mechanism of action or molecular target of a given drug candidate after identifying its composition-of-matter and therapeutic use, we may not be aware until the mechanism or target is further elucidated that a third party has an issued or pending patent claiming biological activities or targets that may cover our drug candidate. If such a patent exists or is granted in the future, we cannot provide assurances that a license will be available on commercially reasonable terms, or at all.

We may be unable to adequately prevent disclosure of trade secrets and other proprietary information.

We rely on trade secrets to protect our proprietary technologies, especially where we do not believe patent protection is appropriate or obtainable. However, trade secrets are difficult to protect. We rely in part on confidentiality agreements with our employees, consultants, outside scientific collaborators, sponsored researchers, and other advisors to protect our trade secrets and other proprietary information. These agreements may not effectively prevent disclosure of confidential information and may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. In addition, others may independently discover our trade secrets and proprietary information. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

Litigation or other proceedings or third-party claims of intellectual property infringement would require us to spend time and money and could prevent us from developing or commercializing our drug candidates.

Our commercial success will depend in part on not infringing upon the patents and proprietary rights of other parties and enforcing our own patents and proprietary rights against others. Certain of our research and development programs are in highly competitive fields in which numerous third parties have issued patents and patent applications with claims closely related to the subject matter of our programs. We are not currently aware of any litigation or other proceedings or claims by third parties that our drug candidates, technologies or methods infringe their intellectual property.

However, while it is our practice to conduct freedom to operate searches and analyses, we cannot guarantee that we have identified every patent or patent application that may be relevant to the research, development or commercialization of our drug candidates. In the case of patent applications, we assess the likelihood of claims in pending, third party patent applications being allowed which may interfere with our freedom to operate relative to our drug candidates. We cannot provide assurances that our assessments in this regard will be correct and that patent claims covering our drug candidates that were assessed a low likelihood of issuance by us will not issue to a third party in the future. Moreover, there can be no assurance that third parties will not assert against us patents that we believe are not infringed by us or are invalid. For example, we are aware of a U.S. patent and a related European patent that claim generic chemical structures, pharmaceutical formulations and methods of treatment relating to compounds similar to STA-9090 and a U.S. patent that claims methods of treating certain cancers using heat shock protein 90, or Hsp90, inhibitors. The claims of these patents may be relevant to the commercialization of our drug candidate, STA-9090. However, based on our analysis of these patents, we do not believe that the manufacture, use, importation or sale of STA-9090 would infringe any valid claim of these patents. However, we cannot guarantee that these patents would not be asserted against us and, if asserted, that a court would find these patents to be invalid or not infringed.

In the event of a successful infringement action against us with respect to any third party patent rights, we may be required to:

- pay substantial damages;
- stop developing, commercializing, and selling the infringing drug candidates or approved products;
- stop utilizing the infringing technologies and methods in our drug candidates or approved products;
- develop non-infringing products, technologies, and methods; and
- obtain one or more licenses from other parties, which could result in our paying substantial royalties or our granting of cross licenses to our technologies.

We may not be able to obtain licenses from other parties at a reasonable cost, or at all. If we are not able to obtain necessary licenses at a reasonable cost, or at all, we could encounter substantial delays in product introductions while we attempt to develop alternative technologies, methods, and products, which we may not be able to accomplish.

We may be subject to claims that we have wrongfully hired an employee from a competitor or that we or our employees have wrongfully used or disclosed alleged confidential information or trade secrets of their former employers.

As is commonplace in our industry, we employ individuals who were previously employed at other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although no claims against us are currently pending, we have previously been subject to a claim by an

alleged competitor that a prospective employee we sought to hire was bound by an ongoing non-competition obligation which prevented us from hiring this employee. We may be subject in the future to claims that our employees or prospective employees are subject to a continuing obligation to their former employers (such as non-competition or non-solicitation obligations) or claims that our employees or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management.

Risks Related to the Commercialization of Our Drug Candidates

If physicians and patients do not accept our future products or if the markets for indications for which any drug candidate is approved is smaller than expected, we may be unable to generate significant revenue, if any.

Even if elesclomol, apilimod, STA-9090, STA-9584 or any other drug candidates we may develop or acquire in the future obtain regulatory approval, they may not gain market acceptance among physicians, healthcare payors, patients, and the medical community. Physicians may elect not to recommend these drugs for a variety of reasons including:

- timing of market introduction of competitive products, including other melanoma treatments currently in development (such as Nexavar, Sutent, ispinesib, ipilimumab, tremelumimab, volociximab, M-Vax and MDX-1379, as well as forms of chemotherapy);
- demonstration of clinical safety and efficacy compared to other products;
- cost-effectiveness;
- availability of reimbursement from managed care plans and other third-party payors;
- convenience and ease of administration;
- prevalence and severity of adverse side effects;
- other potential advantages of alternative treatment methods; and
- ineffective marketing and distribution support of our products.

If our approved drugs fail to achieve market acceptance, we may not be able to generate significant revenue and our business would suffer.

In addition, we have initiated a Phase 3 clinical trial for our most advanced clinical-stage candidate, elesclomol, in patients with stage IV metastatic melanoma. We currently estimate that there are relatively few people with metastatic melanoma in the United States. Accordingly, even if we are successful in obtaining regulatory approval to market elesclomol for this indication, the market for this indication may not be sufficient to generate significant revenue and our business would suffer.

If the government and third-party payors fail to provide adequate coverage and reimbursement rates for our future products, if any, our revenue and prospects for profitability will be harmed.

In both domestic and foreign markets, our sales of any future products will depend in part upon the availability of reimbursement from third-party payors. Such third-party payors include government health programs such as Medicare, managed care providers, private health insurers, and other organizations. These third-party payors are increasingly attempting to contain healthcare costs by demanding price discounts or rebates and limiting both coverage and the amounts that they will pay for new drugs, and, as a result, they may not cover or provide adequate payment for our drugs. We might need to conduct post-marketing studies in order to demonstrate the cost-effectiveness of any future products to such payors' satisfaction. Such studies might require us to commit a significant amount of

management time and financial and other resources. Our future products might not ultimately be considered cost-effective. Adequate third-party reimbursement might not be available to enable us to maintain price levels sufficient to realize an appropriate return on investment in product development.

U.S. and foreign governments continue to propose and pass legislation designed to reduce the cost of healthcare. For example, in some foreign markets, the government controls the pricing and profitability of prescription pharmaceuticals. In the United States, we expect that there will continue to be federal and state proposals to implement similar governmental controls. In addition, recent changes in the Medicare program and increasing emphasis on managed care in the United States will continue to put pressure on pharmaceutical product pricing. Cost control initiatives could decrease the price that we would receive for any products in the future, which would limit our revenue and profitability. Accordingly, legislation and regulations affecting the pricing of pharmaceuticals might change before our drug candidates are approved for marketing. Adoption of such legislation could further limit reimbursement for pharmaceuticals.

For example, the Medicare Prescription Drug Improvement and Modernization Act of 2003, or MMA, changes the way Medicare will cover and pay for pharmaceutical products. The legislation expanded Medicare coverage for drug purchases by the elderly and disabled and introduced new reimbursement methodologies, based on average sales prices for drugs that are administered in an in-patient setting or by physicians, such as elesclomol, if approved. In addition, this legislation provides authority for limiting the number of drugs that will be covered in any therapeutic class. Although we do not know what the full impact of the new reimbursement methodologies will have on the prices of new drugs, we expect that there will be added pressure to contain and reduce costs. These cost reduction initiatives and other provisions of this legislation could decrease the coverage and price that we receive for any approved products and could seriously harm our business. While the MMA applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates, and any reduction in reimbursement that results from the MMA may result in a similar reduction in payments from private payors.

If a successful product liability claim or series of claims is brought against us for uninsured liabilities or in excess of insured liabilities, we could be forced to pay substantial damage awards.

The use of any of our drug candidates in clinical trials, and the sale of any approved products, might expose us to product liability claims. We currently maintain product liability insurance coverage in an amount of up to $10.0 million, which we believe is adequate for our clinical trials currently in progress. We monitor the amount of coverage we maintain as the size and design of our clinical trials evolve and intend to adjust the amount of coverage we maintain accordingly. However, there can be no assurance that such insurance coverage will fully protect us against some or all of the claims to which we might become subject. We might not be able to maintain adequate insurance coverage at a reasonable cost or in sufficient amounts or scope to protect us against potential losses. In the event a claim is brought against us, we might be required to pay legal and other expenses to defend the claim, as well as uncovered damages awards resulting from a claim brought successfully against us. Furthermore, whether or not we are ultimately successful in defending any such claims, we might be required to direct financial and managerial resources to such defense and adverse publicity could result, all of which could harm our business.

If we inadvertently violate the guidelines pertaining to promotion and advertising of our clinical candidates or approved products, we may be subject to disciplinary action by the FDA's Division of Drug Marketing, Advertising, and Communications or other regulatory bodies.

The FDA's Division of Drug Marketing, Advertising, and Communications, or DDMAC, is responsible for reviewing prescription drug advertising and promotional labeling to ensure that the information contained in these materials is not false or misleading. There are specific disclosure

requirements and the applicable regulations mandate that advertisements cannot be false or misleading or omit material facts about the product. Prescription drug promotional materials must present a fair balance between the drug's effectiveness and the risks associated with its use. Most warning letters from DDMAC cite inadequate disclosure of risk information.

DDMAC prioritizes its actions based on the degree of risk to the public health, and often focuses on newly introduced drugs and those associated with significant health risks. There are two types of letters that DDMAC typically sends to companies which violate its drug advertising and promotional guidelines: notice of violation letters, or untitled letters, and warning letters. In the case of an untitled letter, DDMAC typically alerts the drug company of the violation and issues a directive to refrain from future violations, but does not typically demand other corrective action. A warning letter is typically issued in cases that are more serious or where the company is a repeat offender. Although we have not received any such letters from DDMAC, we may inadvertently violate DDMAC's guidelines in the future and be subject to a DDMAC untitled letter or warning letter, which may have a negative impact on our business.

Risks Related to Our Industry

We may not be able to keep up with the rapid technological change in the biotechnology and pharmaceutical industries, which could make any future approved products obsolete and reduce our revenue.

Biotechnology and related pharmaceutical technologies have undergone and continue to be subject to rapid and significant change. Our future will depend in large part on our ability to maintain a competitive position with respect to these technologies. Our competitors may render our technologies obsolete by advances in existing technological approaches or the development of new or different approaches, potentially eliminating the advantages in our drug discovery process that we believe we derive from our research approach and proprietary technologies. In addition, any future products that we develop, including our clinical drug candidates, elesclomol, apilimod and STA-9090, and our preclinical drug candidate, STA-9584, may become obsolete before we recover expenses incurred in developing those products, which may require that we raise additional funds to continue our operations.

Our market is subject to intense competition. If we are unable to compete effectively, our drug candidates may be rendered noncompetitive or obsolete.

We are engaged in segments of the pharmaceutical industry that are highly competitive and rapidly changing. Many large pharmaceutical and biotechnology companies, academic institutions, governmental agencies, and other public and private research organizations are pursuing the development of novel drugs that target cancer and chronic inflammatory diseases. We face, and expect to continue to face, intense and increasing competition as new products enter the market and advanced technologies become available. In addition to currently approved drugs, there are a significant number of drugs that are currently under development and may become available in the future for the treatment of cancer and chronic inflammatory diseases. We would expect our drug candidates to compete with marketed drugs and drug candidates currently under development, including the following:

- *Elesclomol.* If approved, we would expect elesclomol to compete with currently approved drugs for the treatment of metastatic melanoma, including dacarbazine/DTIC marketed by Bayer, and generic versions thereof, the injectable protein interleukin 2, or IL-2, marketed by Chiron, and the injectable protein interferon alfa-2b, marketed by Schering-Plough. Elesclomol may also compete with drug candidates currently in clinical development by other companies, including: (1) kinase inhibitors such as Nexavar, being developed by Bayer and Onyx, Sutent, being developed by Pfizer, and ispinesib, being developed by Cytokinetics and GSK; (2) the

anti-CTLA-4 monoclonal antibodies, ipilimumab and tremelumimab; (3) the anti-integrin volociximab; (4) injectable angiogenesis inhibitors, such as Avastin; (5) cancer vaccines such as M-Vax and MDX-1379; and (6) derivatives, analogs, or reformulations of known chemotherapies, such as Abraxane, or other cytotoxic chemotherapies. In addition, elesclomol may compete against drugs not currently approved for the treatment of metastatic melanoma, but which are commonly used off-label to treat this disease, such as taxanes, temozolomide, vincristine, carmustine, melphalan, and platinum-chemotherapeutics, such as cisplatin and carboplatin.

- *Apilimod.* If approved, we would expect apilimod to compete with other treatments of chronic inflammatory diseases, including (1) large-molecule, injectable TNFa antagonists, such as Remicade, marketed by Johnson & Johnson, Enbrel, marketed by Amgen and Wyeth Pharmaceuticals, and Humira, marketed by Abbott Laboratories, (2) broadly immunosuppressive small molecule agents, including corticosteroids, methotrexate, and azathioprine, and (3) injectible antibodies targeting IL-12, including CNTO-1275 currently in clinical trials and ABT-874 currently awaiting approval, being developed by Johnson & Johnson and Abbott Laboratories, respectively.

- *STA-9090.* If approved, we would expect STA-9090 to compete with the currently approved therapies for the treatment of cancers, and other cancer treatments currently under development, including 17-AAG, being developed by Kosan, and other agents that inhibit Hsp90, including Hsp90 inhibitors being developed by AstraZenica/Medimmune/Infinity, BiogenIdec, Novartis/Vernalis, and Astex.

- *STA-9584.* If approved, we would expect STA-9584 to compete with the currently approved therapies for the treatment of cancers, and other cancer treatments currently under development, including other vascular disrupting agents, such as ABT-751, being developed by Abbott Laboratories; AS1404, being developed by Novartis/Antisoma, CA4P, being developed by Oxigene, EXEL-0999, being developed by Exelixis, and ZD6126, being developed by Angiogene.

Many of our competitors have:

- significantly greater financial, technical and human resources than we have and may be better equipped to discover, develop, manufacture and commercialize drug candidates;

- more extensive experience in preclinical testing and clinical trials, obtaining regulatory approvals and manufacturing and marketing pharmaceutical products;

- drug candidates that have been approved or are in late-stage clinical development; and/or

- collaborative arrangements in our target markets with leading companies and research institutions.

Competitive products may render our products obsolete or noncompetitive before we can recover the expenses of developing and commercializing our drug candidates. Furthermore, the development of new treatment methods and/or the widespread adoption or increased utilization of any vaccine for the diseases we are targeting could render our drug candidates noncompetitive, obsolete or uneconomical. If we successfully develop and obtain approval for our drug candidates, we will face competition based on the safety and effectiveness of our drug candidates, the timing of their entry into the market in relation to competitive products in development, the availability and cost of supply, marketing and sales capabilities, reimbursement coverage, price, patent position and other factors. If we successfully develop drug candidates but those drug candidates do not achieve and maintain market acceptance, our business will not be successful.

Risks Related to Employee Matters and Managing Growth

Our future success depends on our ability to retain our chief executive officer and other key executives and to attract, retain, and motivate qualified personnel.

We are highly dependent on Safi R. Bahcall, Ph.D., our President and Chief Executive Officer, and the other principal members of our executive and scientific teams. All of the agreements with these principal members of our executive and scientific teams provide that employment is at-will and may be terminated by the employee at any time and without notice. Although we do not have any reason to believe that we may lose the services of any of these persons in the foreseeable future, the loss of the services of any of these persons might impede the achievement of our research, development, and commercialization objectives. Recruiting and retaining qualified scientific personnel and possibly sales and marketing personnel will also be critical to our success. We may not be able to attract and retain these personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of scientific personnel from universities and research institutions. We do not maintain "key person" insurance on any of our employees. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us.

We expect to expand our development, clinical research, and marketing capabilities, and as a result, we may encounter difficulties in managing our growth, which could disrupt our operations.

We expect to experience significant growth in the number of our employees and the scope of our operations. To manage our anticipated future growth, we must continue to implement and improve our managerial, operational, and financial systems, expand our facilities, and continue to recruit and train additional qualified personnel. Due to our limited resources, we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel. The physical expansion of our operations may lead to significant costs and may divert our management and business development resources. Any inability to manage growth could delay the execution of our business plans or disrupt our operations.

If we make strategic acquisitions, we will incur a variety of costs and might never realize the anticipated benefits.

All of our acquisitions to date have been of related parties. Accordingly, we have very limited experience in independently identifying acquisition candidates and integrating the operations of truly independent acquisition candidates with our company. Currently we are not a party to any acquisition agreements, nor do we have any understanding or commitment with respect to any such acquisition. If appropriate opportunities become available, however, we might attempt to acquire approved products, additional drug candidates, or businesses that we believe are a strategic fit with our business. If we pursue any transaction of that sort, the process of negotiating the acquisition and integrating an acquired product, drug candidate, or business might result in operating difficulties and expenditures and might require significant management attention that would otherwise be available for ongoing development of our business, whether or not any such transaction is ever consummated. Moreover, we might never realize the anticipated benefits of any acquisition. Future acquisitions could result in potentially dilutive issuances of equity securities, the incurrence of debt, contingent liabilities, or impairment expenses related to goodwill, and impairment or amortization expenses related to other intangible assets, which could harm our financial condition.

Risks Related to Our Common Stock

Our stock price has been and is likely to continue to be volatile and the market price of our common stock may drop.

Prior to our February 2007 initial public offering, there was not a public market for our common stock. There is a limited history on which to gauge the volatility of our stock price; however, since our common stock began trading on The NASDAQ Global Market on February 6, 2007 through December 31, 2007, our stock price has fluctuated from a low of $4.93 to a high of $11.25. In addition, the stock market has recently experienced significant volatility, particularly with respect to pharmaceutical, biotechnology, and other life sciences company stocks. The volatility of pharmaceutical, biotechnology, and other life sciences company stocks often does not relate to the operating performance of the companies represented by the stock. Some of the factors that may cause the market price of our common stock to fluctuate include:

- progress in and results from the SYMMETRY trial, our global, pivotal Phase 3 clinical trial of elesclomol for the treatment of metastatic melanoma;
- plans for, progress in, and results from any other future clinical trials of elesclomol;
- results of our current Phase 2a or any future clinical trials of apilimod we may initiate;
- results of our current Phase 1 clinical trials of STA-9090, and results from any other future clinical trials of STA-9090;
- results of clinical trials conducted by others on drugs that would compete with our drug candidates;
- failure or delays in advancing STA-9584 or our CRAC ion channel inhibitor program, or other drug candidates we may discover or acquire in the future, into clinical trials;
- failure or discontinuation of any of our research programs;
- developments relating to our agreement with GSK or any future collaborations we may enter into;
- issues in manufacturing our drug candidates or approved products;
- regulatory developments or enforcement in the United States and foreign countries;
- developments or disputes concerning patents or other proprietary rights;
- introduction of technological innovations or new commercial products by us or our competitors;
- changes in estimates or recommendations by securities analysts, if any cover our common stock;
- public concern over our drug candidates or any approved products;
- litigation;
- future sales of our common stock;
- general market conditions;
- changes in the structure of healthcare payment systems;
- failure of any of our drug candidates, if approved, to achieve commercial success;
- economic and other external factors or other disasters or crises;

- period-to-period fluctuations in our financial results; and
- overall fluctuations in U.S. equity markets.

These and other external factors may cause the market price and demand for our common stock to fluctuate substantially, which may limit or prevent investors from readily selling their shares of common stock and may otherwise negatively affect the liquidity of our common stock. In addition, in the past, when the market price of a stock has been volatile, holders of that stock have instituted securities class action litigation against the company that issued the stock. If any of our stockholders brought a lawsuit against us, we could incur substantial costs defending the lawsuit. Such a lawsuit could also divert the time and attention of our management.

Insiders have substantial control over us which could delay or prevent a change in corporate control or result in the entrenchment of management and/or the board of directors.

Our directors, executive officers and principal stockholders, together with their affiliates and related persons, beneficially own, in the aggregate, approximately 48% of our outstanding common stock. These stockholders, if acting together, may have the ability to determine the outcome of matters submitted to our stockholders for approval, including the election and removal of directors and any merger, consolidation, or sale of all or substantially all of our assets. In addition, these persons, acting together, may have the ability to control the management and affairs of our company. Accordingly, this concentration of ownership may harm the market price of our common stock by:

- delaying, deferring, or preventing a change in control;
- entrenching our management and/or the board of directors;
- impeding a merger, consolidation, takeover, or other business combination involving us; or
- discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of us.

Provisions of our charter, bylaws, and Delaware law may make an acquisition of us or a change in our management more difficult.

Certain provisions of our restated certificate of incorporation and restated bylaws could discourage, delay, or prevent a merger, acquisition, or other change in control that stockholders may consider favorable, including transactions in which stockholders might otherwise receive a premium for their shares. These provisions also could limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. Stockholders who wish to participate in these transactions may not have the opportunity to do so. Furthermore, these provisions could prevent or frustrate attempts by our stockholders to replace or remove our management. These provisions:

- allow the authorized number of directors to be changed only by resolution of our board of directors;
- establish a classified board of directors, providing that not all members of the board of directors be elected at one time;
- authorize our board of directors to issue without stockholder approval blank check preferred stock that, if issued, could operate as a "poison pill" to dilute the stock ownership of a potential hostile acquirer to prevent an acquisition that is not approved by our board of directors;
- require that stockholder actions must be effected at a duly called stockholder meeting and prohibit stockholder action by written consent;
- establish advance notice requirements for stockholder nominations to our board of directors or for stockholder proposals that can be acted on at stockholder meetings;
- limit who may call stockholder meetings; and

- require the approval of the holders of 80% of the outstanding shares of our capital stock entitled to vote in order to amend certain provisions of our restated certificate of incorporation and restated bylaws.

In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which may, unless certain criteria are met, prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us for a prescribed period of time.

We do not anticipate paying cash dividends, and accordingly, our stockholders must rely on stock appreciation for any return on their investment.

We currently intend to retain our future earnings, if any, to fund the development and growth of our business. As a result, capital appreciation, if any, of our common stock will be the sole source of gain on an investment in our common stock for the foreseeable future.

Item 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

Item 2. PROPERTIES

Our operations are based primarily in Lexington, Massachusetts, which is located approximately 10 miles west of Boston, Massachusetts. We currently lease a total of 68,730 square feet of office and laboratory space in Lexington and 15,000 square feet of office and laboratory space in the neighboring town of Bedford, Massachusetts. We lease the following properties:

Location	Approximate Square Feet	Use	Lease Expiration Date
45 Hartwell Avenue Lexington, Massachusetts	24,420	Office and Laboratory	Nov. 2011
91 Hartwell Avenue Lexington, Massachusetts	21,830	Office	August 2009
125 Hartwell Avenue Lexington, Massachusetts	22,480	Office and Laboratory	Nov. 2011
45-47 Wiggins Avenue Bedford, Massachusetts	15,000	Office and Laboratory	Oct. 2011

We believe our facilities are adequate for our current needs.

Item 3. LEGAL PROCEEDINGS

We are currently not a party to any material legal proceedings.

Item 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

No matters were submitted to a vote of security holders during the fourth quarter of the year ended December 31, 2007.

PART II

Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

Our common stock began trading on The NASDAQ Global Market on February 6, 2007 under the symbol "SNTA." Prior to that time, there was no established public trading market for our common stock. The following table sets forth the high and low sales prices of our common stock as quoted on The NASDAQ Global Market for the periods indicated.

2007:	High	Low
First Quarter (from February 6, 2007)	$ 10.10	$ 8.07
Second Quarter	10.27	7.92
Third Quarter	9.86	4.93
Fourth Quarter	11.25	6.31

Stockholders

As of March 14, 2008, there were approximately 149 stockholders of record of the 33,873,538 outstanding shares of our common stock.

Dividends

We have never paid or declared any cash dividends on our common stock. We currently intend to retain all available funds and any future earnings to fund the development and expansion of our business, and we do not anticipate paying any cash dividends in the foreseeable future. Any future determination to pay dividends will be at the discretion of our board of directors and will depend on our financial condition, results of operations, capital requirements, and other factors that our board of directors deems relevant. In addition, the terms of any future debt or credit facility may preclude us from paying dividends.

Unregistered Sales of Securities

During the year ended December 31, 2007, we sold 2,750 shares of common stock to employees or former employees through the exercise of options that were not registered under the Securities Act. These shares were issued pursuant to written compensatory plans or arrangements with our employees, directors and consultants, in reliance on the exemption from registration provided by Rule 701 under the Securities Act.

Issuer Purchases of Equity Securities

None.

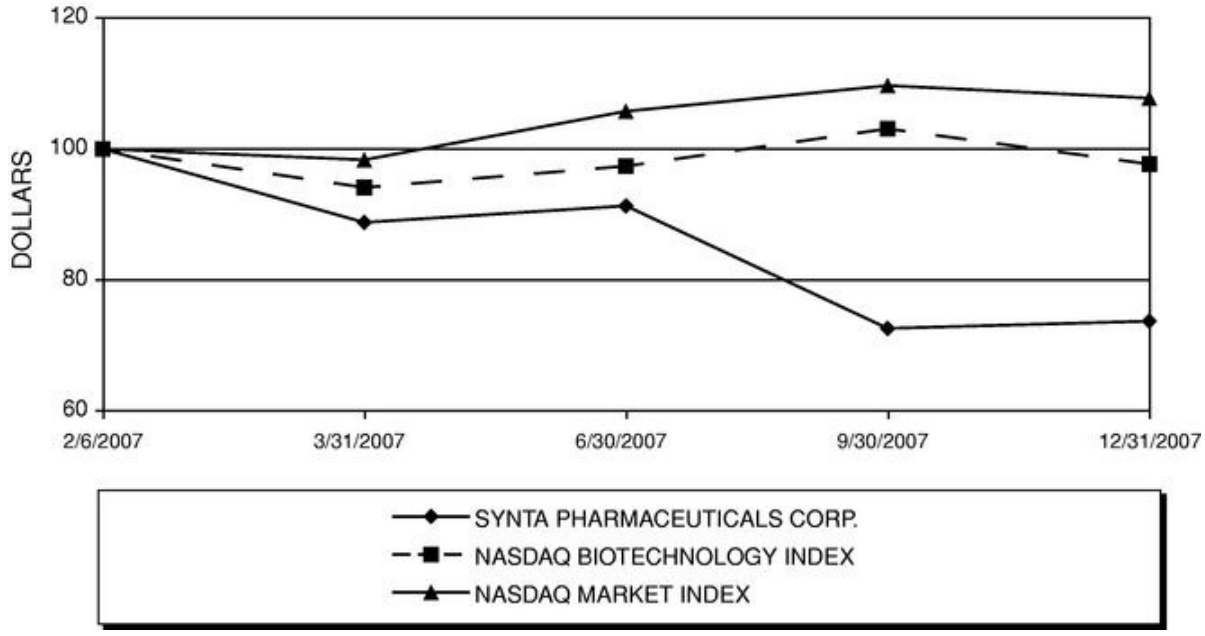
Use of Proceeds from Registered Securities

The Registration Statement on Form S-1 (Reg. No. 333-138894) in connection with our initial public offering was declared effective by the Securities and Exchange Commission on February 6, 2007. In our initial public offering, we sold 5,000,000 shares of our common stock at an initial public offering price per share of $10.00. As of December 31, 2007, all of the net proceeds of the offering had been used to fund operations. There had been no material change in the planned use of proceeds from our initial public offering as described in our final prospectus dated February 6, 2007 filed with the SEC pursuant to Rule 424(b)(4).

Stock Performance Graph

The following graph compares the cumulative total stockholder return on our common stock from February 6, 2007 (the first trading date following our initial public offering) to December 31, 2007 with the cumulative total return of (i) the NASDAQ Market Index and (ii) the NASDAQ Biotechnology Index. This graph assumes the investment of $100.00 on February 6, 2007 in our common stock, the NASDAQ Market Index and the NASDAQ Biotechnology Index, and assumes any dividends are reinvested. We have not paid anydividends on our common stock, and we do not include dividends in the representation of our performance. The stock price performance on the graph below does not necessarily indicate future price performance.

COMPARISON OF CUMULATIVE TOTAL RETURN
AMONG SYNTA PHARMACEUTICALS CORP.,
NASDAQ BIOTECH AND NASDAQ MARKET INDEX



	2/06/2007	3/31/2007	6/30/2007	9/30/2007	12/31/2007
Synta Pharmaceuticals Corp.	$ 100.00	$ 88.78	$ 91.31	$ 72.61	$ 73.71
NASDAQ Biotech	$ 100.00	$ 94.11	$ 97.37	$ 103.07	$ 97.68
NASDAQ Market Index	$ 100.00	$ 98.33	$ 105.74	$ 109.66	$ 107.75

The information in this section shall not be deemed "soliciting material" or to be "filed" with the Securities and Exchange Commission, and is not to be incorporated by reference in any filing of Synta Pharmaceuticals Corp. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Annual Report on Form 10-K and irrespective of any general incorporation language in those filings.

Item 6. SELECTED FINANCIAL DATA

The following table sets forth our selected consolidated financial data and has been derived from our audited consolidated financial statements. Consolidated balance sheets as December 31, 2007 and 2006, as well as consolidated statements of operations for the years ended December 31, 2007, 2006, and 2005, and the report thereon are included elsewhere in this Annual Report on Form 10-K. The information below should be read in conjunction with our audited consolidated financial statements (and notes thereon) and "Management's Discussion and Analysis of Financial Condition and Results of Operations," included below in Item 7.

	Years ended December 31,				
	2007	2006	2005	2004	2003
Consolidated Statement of Operations Data:					
Collaboration revenue	$ 743	$ —	$ —	$ —	$ —
Grant revenue	—	—	—	173	1,304
Total revenues	743	—	—	173	1,304
Operating expenses					
Research and development	52,025	50,503	59,901	38,136	24,337
In-process research and development		—	—	1,583	—
General and administrative	14,934	8,648	11,279	7,383	5,261
Total operating expenses	66,959	59,151	71,180	47,102	29,598
Loss from operations	(66,216)	(59,151)	(71,180)	(46,929)	(28,294)
Investment income, net	2,721	1,881	2,317	995	416
Net loss	(63,495)	(57,270)	(68,863)	(45,934)	(27,878)
Convertible preferred stock dividends	—	1,859	—	—	—
Convertible preferred stock beneficial conversion charge	58,585	—	—	—	—
Net loss attributable to common stockholders	$ (122,080)	$ (59,129)	$ (68,863)	$ (45,934)	$ (27,878)
Basic and diluted net loss attributable to common stockholders per share	$ (3.76)	$ (2.66)	$ (3.09)	$ (2.46)	$ (1.86)
Weighted average shares used in computing basic and diluted net loss per common share	32,466	22,265	22,253	18,704	15,024

	As of December 31,				
	2007	2006	2005	2004	2003
Consolidated Balance Sheet Data:					
Cash, cash equivalents and marketable securities	$ 115,577	$ 46,824	$ 62,057	$ 124,968	$ 76,226
Working capital	96,225	36,081	48,476	113,147	73,564
Total assets	122,649	54,789	71,210	132,019	80,387
Capital lease obligations, net of current portion	2,815	3,170	4,259	1,188	—
Deferred collaboration revenue, net of current portion(1)	74,166	—	—	—	—
Convertible preferred stock	—	41,820	—	—	—
Common stock	3	2	2	2	2
Additional paid-in capital	324,946	234,807	239,029	238,930	144,154
Accumulated deficit	(300,053)	(236,558)	(179,288)	(110,425)	(64,491)
Total stockholders' equity (deficit)	24,896	(1,747)	52,477	117,956	76,891

(1) In October 2007, we entered into the GSK Agreement with GSK for elesclomol. See Notes 2 and 8 in the accompanying consolidated financial statements.

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This Management's Discussion and Analysis of Financial Condition and Results of Operations should be read together with the consolidated financial statements, related notes and other financial information included elsewhere in this Annual Report on Form 10-K.

Overview

We are a biopharmaceutical company focused on discovering, developing, and commercializing small molecule drugs to extend and enhance the lives of patients with severe medical conditions, including cancer and chronic inflammatory diseases. We have a unique chemical compound library, an integrated discovery engine, and a diverse pipeline of clinical- and preclinical-stage drug candidates with distinct mechanisms of action and novel chemical structures. We have three drug candidates in clinical trials, one drug candidate in preclinical studies, and one program in the lead optimization stage of discovery, as well as other programs in earlier stages of discovery. We discovered and developed each of our drug candidates internally using our compound library and discovery capabilities. At present, other than our lead drug candidate, elesclomol, we retain all rights to each of our drug candidates and programs, across all geographic markets and therapeutic indications. We have entered into a partnership with GlaxoSmithKline, or GSK, for the joint development and commercialization of elesclomol.

Our Lead Drug Candidate, Elesclomol (formerly, STA-4783)

Our most advanced clinical-stage drug candidate, elesclomol, is a novel, injectable, small molecule compound that triggers apoptosis, or programmed cell death, in cancer cells, which we believe has potential for the treatment of a broad range of cancer types.

In September 2006, we announced positive results for elesclomol in combination with paclitaxel, a leading chemotherapeutic agent, in a double-blind, randomized, controlled, multicenter Phase 2b clinical trial in patients with stage IV metastatic melanoma. We believe that this is the first blinded clinical trial of a drug candidate for the treatment of metastatic melanoma in 30 years to meet its primary endpoint with statistical significance. In November 2006, we received Fast Track designation from the U.S. Food and Drug Administration, or FDA, for the development of elesclomol for the treatment of metastatic melanoma. In December 2007, we received orphan drug designation for elesclomol in this indication in the United States from the FDA. Orphan drug status is designed to encourage biotechnology and pharmaceutical companies to develop drugs for rare diseases affecting fewer than 200,000 people in the United States. Assuming that elesclomol is approved by the FDA, we will be entitled to seven years of market exclusivity for elesclomol for the treatment of patients with metastatic melanoma.

Based on the results of our Phase 2b trial, we initiated a global, pivotal Phase 3 clinical trial of elesclomol in metastatic melanoma, called the SYMMETRY trial, in the third quarter of 2007. The SYMMETRY trial is being conducted under the terms of a Special Protocol Assessment, or SPA, agreed to by the FDA. The SPA process provides for a written agreement between a clinical trial sponsor and the FDA that the proposed design and planned analyses of the clinical trial is sufficient to support regulatory approval of a drug candidate, unless public health concerns unrecognized at the time of the protocol assessment become evident. The SYMMETRY trial is enrolling patients with stage IV metastatic melanoma who have not received prior chemotherapy but who may have already been treated with non-chemotherapeutic agents, such as biologics. Approximately 630 patients will be enrolled in the blinded, randomized, controlled study, which generally mirrors the design of our Phase 2b trial and will be conducted at approximately 150 centers worldwide.

As with our prior Phase 2b trial, patients enrolled in the SYMMETRY trial will be randomized to receive either elesclomol plus paclitaxel or paclitaxel alone. The dosage of each agent, the dosing schedule, and the primary endpoint—progression free survival, or PFS—are the same as in our prior Phase 2b trial. The SYMMETRY trial increases the total number of patients enrolled from the prior Phase 2b trial and includes central review of radiology scans, stratification to ensure balance between treatment and control arms, and a no-crossover design for facilitating the assessment of overall survival, or OS.

Based on our current enrollment projections and event rate targets, we expect to complete enrollment and initiate the primary endpoint analysis of the SYMMETRY trial by the end of 2008. Assuming that the results of the PFS analysis are positive, we plan to submit a new drug application, or NDA, to the FDA in the first half of 2009. If actual enrollment or event rates differ from our current projections, our target dates for completing the PFS analysis and submitting the NDA will likely change.

In October 2007, we entered into a collaborative development, commercialization and license Agreement with GSK for elesclomol, under which we are eligible to receive up to $1.01 billion in milestones and other payments, as well as share 40-50% of the profits and losses from sales in the United States and receive double-digit tiered royalties from sales outside of the United States. Under the terms of the GSK Agreement, the companies will jointly develop and commercialize elesclomol in the United States, and GSK will have exclusive responsibility for the development and commercialization of elesclomol outside the United States. Pursuant to the agreement, we received a non-refundable upfront cash payment of $80 million in November 2007. We are also eligible to receive potential pre-commercial milestone payments from GSK of up to $585 million, which include both payments for operational progress, such as trial initiation and enrollment, and payments for positive clinical and regulatory outcomes, such as regulatory approval. Of the $585 million in potential payments, $135 million are related to the development in metastatic melanoma and up to $450 million are related to the development of elesclomol in other cancer indications. In addition, we are eligible to receive up to $300 million in potential commercial milestone payments from GSK based on achieving certain net sales thresholds. We will take the lead role and fund, up to a specified amount, all activities related to seeking FDA approval of elesclomol for the treatment of metastatic melanoma. We will also fund early clinical development of elesclomol in two other cancer indications. All other worldwide development costs will be shared, with us responsible for a modest proportion of those costs. In the United States, our share of the operating profits and losses from the commercialization and sales of elesclomol will be 40-50%, with the percentage increasing as the level of annual sales increases. We may elect not to participate in co-commercialization, in which case we would earn royalties in lieu of profit-sharing. Outside of the United States, we will receive double-digit tiered royalties. Under the GSK Agreement, GSK may, subject to our agreement, purchase up to $45 million of our common stock in two separate tranches upon the achievement of specified development and regulatory milestones. In the first tranche, GSK would be obligated to buy $25 million of our common stock at our sole discretion. We attributed $260,000 of value to this option to require GSK to purchase our common stock. The second tranche of $20 million of common stock would be subject to the agreement of both us and GSK. The per share purchase price under each tranche would be at a specified premium. GSK may terminate the agreement upon not less than three months' written notice at any time prior to the date of the first commercial sale of an elesclomol product and upon not less than six months' written notice at any time on and after such date, in which case GSK may be obligated in certain circumstances to make additional payments to us. Under the GSK Agreement, we have the right, but not the obligation to participate in various joint governance committees. The agreement was subject to the Hart-Scott-Rodino Act and has received clearance by the U.S. government.

Our Other Oncology Drug Candidates and Research Programs

STA-9090. STA-9090 is a novel, injectable, small molecule drug candidate we are developing for the treatment of cancer. STA-9090 inhibits heat shock protein 90, or Hsp90, a chaperone protein that regulates the activity of numerous signaling proteins that trigger uncontrolled proliferation in cancer cells, in particular kinase proteins. Examples of kinase proteins include c-Kit, Bcr-Abl, Her2, EGFR, and others that are the targets of approved direct kinase inhibitors such as Gleevec, Herceptin, Tarceva, and Erbitux. We believe that inhibiting kinases indirectly, by disrupting the chaperone activities of Hsp90, provides two advantages: first, a means to simultaneously attack multiple cancer-promoting kinases; and, second, an ability to kill tumor cells with mutated kinases that have lost responsiveness to a direct kinase inhibitor. We have shown in preclinical experiments that STA-9090 is significantly more potent against certain types of cancer cells than Gleevec, as well as the two Hsp90 inhibitors furthest along in clinical development, 17-AAG and 17-DMAG. STA-9090is further differentiated from these Hsp90 inhibitors because it is a novel chemical structure that is not a derivative or analog of the natural product geldanamycin. We believe that this creates a distinct activity profile for STA-9090 and is a competitive advantage. We are currently conducting two Phase 1 studies to identify the maximum tolerated dose of STA-9090 based on once- and twice-a-week intravenous dosing schedules, respectively. In addition to an evaluation of safety and tolerability, patients in these studies will be assessed for biological activity based on biomarker responses and clinical response rates based on the RECIST criteria.

STA-9584. STA-9584 is a novel, injectable, small molecule compound that disrupts the blood vessels that supply tumors with oxygen and essential nutrients. In preclinical experiments, STA-9584 has shown strong anti-tumor activity in a broad range of cancer models, including prostate, lung, breast, melanoma, and lymphoma. In preclinical testing, STA-9584 has been shown to act against established tumor vessels, a mechanism that is differentiated from the mechanism of anti-angiogenesis inhibitors such as Avastin, which prevents the formation of new tumor vessels. This program is currently in preclinical development.

Autoimmune and Inflammatory Diseases

Apilimod (STA-5326). Apilimod is a novel, orally administered, small molecule drug candidate we are developing for the treatment of autoimmune and other chronic inflammatory diseases. Apilimod inhibits the production of the cytokines interleukin-12, or IL-12, and interleukin-23, or IL-23, and thereby down-regulates the inflammation pathways that underlie certain autoimmune and inflammatory diseases. We are currently conducting a Phase 2a clinical trial of apilimod in patients with rheumatoid arthritis, or RA. The preliminary results of the first 22 patients in the RA trial showed encouraging biomarker and clinical signals suggesting activity of apilimod in this indication. We have elected to enroll an additional cohort in the RA Phase 2a trial to explore a higher dose of apilimod. We expect to complete enrollment of this higher dose cohort in the second half of 2008.

CRAC ion channel inhibitor. We have developed novel, small molecule inhibitors of calcium release activated calcium, or CRAC, ion channels expressed on immune cells. The CRAC ion channel is the primary route for calcium entry into T cells and other immune cells, regulating multiple immune cell processes important for initiating and maintaining an inflammatory immune response. We have demonstrated in preclinical experiments that our CRAC ion channel inhibitors selectively inhibit the production of critical pro-inflammatory cytokines, such as interleukin-2, or IL-2, and TNF a by immune cells, and that these compounds are effective in multiple animal models of immune diseases, including models of arthritis. This program is in the lead optimization stage of discovery.

Initial Public Offering

In February 2007, we raised $50.0 million in gross proceeds from the sale of 5,000,000 shares of our common stock in our initial public offering, or the IPO, at $10.00 per share. The net offering proceeds to us after deducting approximately $5.3 million in expenses for underwriters' discounts, fees and commissions, legal, accounting, printing, listing and filing fees, and miscellaneous expenses were approximately $44.7 million. All outstanding shares of our Series A convertible preferred stock and $1.9 million in accumulated dividends on the Series A convertible preferred stock were converted into 6,278,765 shares of common stock upon the completion of the IPO. In accordance with Emerging Issues Task Force, or EITF, No. 98-5, *Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustable Conversion Ratios*, and EITF No. 00-27, *Application of Issue No. 98-5 to Certain Convertible Instruments,* we recorded a non-cash beneficial conversion charge of approximately $58.6 million in February 2007 in connection with the contingent adjustable conversion feature of the Series A convertible preferred stock.

We were incorporated in March 2000 and commenced operations in July 2001. Since that time, we have been principally engaged in raising capital and in the discovery and development of novel drug candidates.

Since our inception, we have had no revenues from product sales. We have funded our operations principally with $195.4 million in net proceeds from private placements of our common stock, $40.0 million in net proceeds from a private placement of our Series A convertible preferred stock, $44.7 million in net proceeds from our initial public offering, and an $80 million non-refundable upfront payment under the GSK Agreement, which, together with the exercise of common stock warrants and options, provided aggregate net cash proceeds of approximately $361.4 million through December 31, 2007.

We have devoted substantially all of our capital resources to the research and development of our drug candidates. We have never been profitable and, as of December 31, 2007, we had an accumulated deficit of $300.1 million. We expect to incur significant and increasing operating losses for the foreseeable future as we advance our drug candidates from discovery through preclinical development and clinical trials and seek regulatory approval and eventual commercialization. In addition to these increasing research and development expenses, we expect general and administrative costs to increase in connection with additional headcount, public-company requirements and compliance, commercial development and medical community relations, as we, together with GSK, prepare for the potential launch of elesclomol. We will need to generate significant revenues to achieve profitability and may never do so.

Financial Operations Overview

Revenue

We have not yet generated any product revenue and do not expect to generate any product revenue for the foreseeable future. We will seek to generate revenue from product sales and from future collaborative or strategic relationships, which could include research and development, milestone payments, profit sharing and royalties. In October 2007, we entered into the GSK Agreement with GSK for our lead drug candidate, elesclomol. The $80 million non-refundable upfront payment we received from GSK in November 2007, together with the $260,000 estimated value of an option to require GSK to purchase $25 million of our common stock, is being recognized as collaboration revenue using the time-based model over the estimated performance period, the 15-year period through the earliest expiration date of the related patents, which we estimate to be the effective life of the GSK Agreement (see Revenue Recognition in the Critical Accounting Policies and Estimates section). In 2007, we recognized $743,000 of collaboration revenue under the GSK Agreement. In the future, we expect any revenue we generate will fluctuate from quarter-to-quarter as a result of the timing and amount of

payments received under the GSK Agreement and from future collaborations or strategic relationships, and the amount and timing of payments we receive upon the sale of our drug candidates, to the extent any are successfully commercialized.

Research and Development

Research and development expense consists of costs incurred in connection with developing and advancing our drug discovery technology and identifying and developing our drug candidates. We charge all research and development expenses to operations as incurred.

Our research and development expense consists of:

- internal costs associated with research, preclinical and clinical activities;
- payments to third party contract research organizations, investigative sites and consultants in connection with our preclinical and clinical development programs;
- costs associated with drug formulation and supply of drugs for clinical trials;
- personnel related expenses, including salaries, stock-based compensation, benefits and travel; and
- overhead expenses, including rent and maintenance of our facilities, and laboratory and other supplies.

We do not know if we will be successful in developing our drug candidates. While expenses associated with the completion of our current clinical programs are expected to be substantial and increase, we believe that accurately projecting total program-specific expenses through commercialization is not possible at this time. The timing and amount of these expenses will depend upon the costs associated with potential future clinical trials of our drug candidates, and the related expansion of our research and development organization, regulatory requirements, advancement of our preclinical programs and product manufacturing costs, many of which cannot be determined with accuracy at this time based on our stage of development. This is due to the numerous risks and uncertainties associated with the duration and cost of clinical trials, which vary significantly over the life of a project as a result of unanticipated events arising during clinical development, including with respect to:

- the number of clinical sites included in the trial;
- the length of time required to enroll suitable subjects;
- the number of subjects that ultimately participate in the trials; and
- the efficacy and safety results of our clinical trials and the number of additional required clinical trials.

Our expenditures are subject to additional uncertainties, including the terms and timing of regulatory approvals and the expense of filing, prosecuting, defending or enforcing any patent claims or other intellectual property rights. In addition, we may obtain unexpected or unfavorable results from our clinical trials. We may elect to discontinue, delay or modify clinical trials of some drug candidates or focus on others. A change in the outcome of any of the foregoing variables in the development of a drug candidate could mean a significant change in the costs and timing associated with the development of that drug candidate. For example, if the FDA or other regulatory authority were to require us to conduct clinical trials beyond those that we currently anticipate, or if we experience significant delays in any of our clinical trials, we would be required to expend significant additional financial resources and time on the completion of clinical development. Additionally, future commercial and regulatory factors beyond our control will evolve and therefore impact our clinical development programs and plans over time.

Despite this uncertainty, however, our development strategy for our lead clinical-stage drug candidate, elesclomol, is currently based on a number of assumptions that allow us to make broad estimates of certain clinical trial expenses. We initiated the SYMMETRY trial, our global, pivotal Phase 3 clinical trial of elesclomol for the treatment of metastatic melanoma, in the third quarter of 2007, and we expect the remaining costs necessary for the NDA submission, including the cost of the clinical trial, clinical drug supplies, registration manufacturing and regulatory activities necessary to compile the NDA submission, together with the costs of related nonclinical toxicology and other testing to support the trial, will be in the range of $60 million to $70 million. We do not expect to receive regulatory approval of any of our drug candidates until 2009 at the earliest, if at all.

Beyond our three lead drug candidates, we anticipate that we will select drug candidates and research projects for further development on an ongoing basis in response to their preclinical and clinical success, as well as commercial potential.

General and Administrative

General and administrative expense consists primarily of salaries and related expenses for personnel in executive, finance, business and commercial development, investor and medical community relations, human resources and administrative functions. Other costs include stock-based compensation costs, directors' and officers' liability insurance premiums, legal costs of pursuing patent protection of our intellectual property, fees for general legal, accounting, public-company requirements and compliance, and other professional services, as well as overhead-related costs not otherwise included in research and development. We anticipate increases in costs of commercial development and medical community relations, as we, together with GSK, prepare for the potential launch of elesclomol.

Convertible Preferred Stock Dividends

Convertible preferred stock dividends consisted of cumulative but undeclared dividends that were payable on our Series A convertible preferred stock. The Series A convertible preferred stock accrued dividends at 8% per year. All outstanding shares of our Series A convertible preferred stock and the $1.9 million in accumulated dividends were converted into 6,278,765 shares of our common stock upon completion of the IPO in February 2007.

Critical Accounting Policies and Estimates

Our management's discussion and analysis of our financial condition and results of operations are based on our financial statements which have been prepared in accordance with U.S. generally accepted accounting principles, or GAAP. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reported periods. We are required to make estimates and judgments with respect to accrued expenses, acquisitions and stock-based compensation. We base our estimates on historical experience, known trends and events, and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources and the reported amounts of revenues and expenses. Actual results may differ from these estimates under different assumptions or conditions.

We believe the following accounting policies and estimates are most critical to aid you in understanding and evaluating our reported financial results.

Revenue Recognition

Collaboration and License Agreements

Our principal sources of revenue may include upfront payments, development milestone payments, reimbursements of development costs, profit sharing payments, sales milestones and royalties from our collaborations. We recognize revenue from these sources in accordance with Staff Accounting Bulletin 104, "*Revenue Recognition*", or SAB 104, Emerging Issues Task Force, or EITF, No. 99-19, "*Reporting Revenue Gross as a Principal Versus Net as an Agent*", or EITF No. 99-19, and EITF No. 00-21, "*Revenue Arrangements with Multiple Deliverables*", or EITF No. 00-21. The application of EITF No. 00-21 requires subjective analysis and requires management to make estimates and assumptions about whether deliverables within multiple- element arrangements are separable from the other aspects of the contractual arrangement into separate units of accounting and to determine the fair value to be allocated to each unit of accounting.

We entered into the GSK Agreement with GSK in October 2007. We evaluated the multiple deliverables within the GSK Agreement in accordance with the provisions of EITF No. 00-21 to determine whether the delivered elements that are our obligation have value to GSK on a stand-alone basis and whether objective reliable evidence of fair value of the undelivered items exists. Deliverables that meet these criteria are considered a separate unit of accounting. Deliverables that do not meet these criteria are combined and accounted for as a single unit of accounting. The appropriate recognition of revenue is then applied to each separate unit of accounting.

Our deliverables under the GSK Agreement, including the related rights and obligations, contractual cash flows and performance periods, are more fully described in Note 8 in the accompanying consolidated financial statements, and are considered a single unit of accounting.

The GSK Agreement consists of the following key funding streams: a non-refundable upfront payment, product development milestone payments, reimbursements of certain development costs, sales milestone payments, profit sharing payments and product royalty payments. The cash flows associated with the single unit of accounting from the development portion of the GSK Agreement are recognized as revenue using a time-based model. Under this model, cash flow streams are recognized as revenue over the estimated performance period. Upon receipt of cash payments, revenue is recognized to the extent the accumulated service time, if any, has occurred. The remainder is deferred and recognized as revenue ratably over the remaining estimated performance period. A change in the period of time expected to complete the deliverable is accounted for as a change in estimate on a prospective basis. Revenue is limited to amounts that are nonrefundable and that GSK is contractually obligated to pay us.

The $80 million non-refundable upfront payment we received from GSK in November 2007, together with the $260,000 estimated value of an option to require GSK to purchase $25 million of our common stock, is being recognized as collaboration revenue using the time-based model over the estimated performance period, the 15-year period through the earliest expiration date of the related patents, which we estimate to be the effective life of the GSK Agreement. We are also recognizing product development milestone payments and reimbursements of development costs as collaboration revenue using the time-based model over the same performance period through November 2022. Based on the guidance of EITF No. 99-19, we have determined that we are acting as a principal under the GSK Agreement and, as such, have recorded these amounts as collaboration revenue. In 2007, we recognized $743,000 of collaboration revenue under the GSK Agreement.

Profit sharing payments are based upon a formula that provides for a range of 40-50% of net profits earned on U.S. sales of products included in the GSK Agreement. Royalty revenues are based upon a percentage of sales in non-U.S. territories. Profit sharing payments and royalties from the sales of products included in the GSK Agreement will be recorded on the accrual basis when results are reliably measurable, collectability is reasonably assured and all other revenue recognition criteria are

met. Sales milestones, which are based upon the achievement of certain agreed-upon sales thresholds, will be recorded when the respective sales threshold is achieved and collectability is reasonably assured.

Deferred Collaboration Revenue

Consistent with our policy on revenue recognition, deferred collaboration revenue represents cash received in advance for licensing fees, option fees, consulting, research and development contracts and related cost sharing and supply agreements. Such payments are reflected as deferred collaboration revenue until revenue can be recognized under our revenue recognition policy. Deferred collaboration revenue is classified as current if management believes we will complete the earnings process and be able to recognize the deferred amount as revenue within 12 months of the balance sheet date. At December 31, 2007, total deferred collaboration revenue was approximately $79.5 million, of which $5.4 million was current and will be recognized as revenue during 2008.

Accrued Expenses

As part of the process of preparing financial statements, we are required to estimate accrued expenses. This process involves identifying services which have been performed on our behalf, and estimating the level of service performed and the associated cost incurred for such service as of each balance sheet date in our financial statements. Given our current business, the primary area of uncertainty concerning accruals which could have a material effect on our business is with respect to service fees paid to contract manufacturers in conjunction with the production of clinical drug supplies and to contract research organizations in connection with our preclinical studies and clinical trials. In connection with all of the foregoing service fees, our estimates are most affected by our understanding of the status and timing of services provided. The majority of our service providers, including contract research organizations, invoice us in arrears for services performed. In the event that we do not identify some costs which have begun to be incurred, or we under or over estimate the level of services performed or the costs of such services in a given period, our reported expenses for such period would be too low or too high. We currently reflect the over or under accrual of expenses directly in our operations in the period the amount was determined.

Our arrangements with contract research organizations in connection with clinical trials often provide for payment prior to commencing the project or based upon predetermined milestones throughout the period during which services are expected to be performed. We recognize expense relating to these arrangements based on the various services provided over the estimated time to completion. The date on which services commence, the level of services performed on or before a given date, and the cost of such services are often determined based on subjective judgments. We make these judgments based upon the facts and circumstances known to us based on the terms of the contract or our ongoing monitoring of service performance. In the years ended December 31, 2007, 2006 and 2005, respectively, we had arrangements with multiple contract research organizations whereby these organizations commit to performing services for us over multiple reporting periods. We currently recognize and plan to continue to recognize the expenses associated with these arrangements based on our expectation of the timing of the performance of components under these arrangements by these organizations. Generally, these components consist of the costs of setting up the trial, monitoring the trial, closing the trial and preparing the resulting data.

With respect to financial reporting periods presented in this Annual Report on Form 10-K, and based on our receipt of invoices from our third party providers, the timing of our actual costs incurred have not differed materially from our estimated timing of such costs. In light of the foregoing, we do not believe our estimates of future expenses and our practice of making judgments concerning the accrual of expenses are reasonably likely to change in the future. There were no changes in our estimates and accruals for contract service fees that had a material effect on our net losses in the years ended December 31, 2007, 2006 and 2005, respectively.

Stock-Based Compensation

Effective January 1, 2006, we adopted Statement of Financial Accounting Standards, or SFAS, No. 123R, *Share-Based Payment,* or SFAS No. 123R, for stock-based awards to employees, using the modified prospective method of transition for awards granted after January 17, 2005 (valued using the fair value method), and using the prospective method for awards granted prior to January 17, 2005 (valued using the minimum value method). Therefore, compensation cost recognized in the years ended December 31, 2007 and 2006 includes: (1) compensation costs related to the vesting of stock options granted after January 17, 2005 but prior to January 1, 2006, based on the grant date fair value method estimated in accordance with the provisions of SFAS No. 123, *Accounting for Stock-Based Compensation,* or SFAS No. 123, adjusted for estimated forfeitures, (2) compensation costs related to the continued vesting of nonvested restricted stock awards granted prior to January 1, 2006, and (3) compensation costs for all share-based payments granted or modified subsequent to January 1, 2006, based on the provisions of SFAS No. 123R.

We continue to use the Black-Scholes option pricing model as the most appropriate valuation method for our option grants. The Black-Scholes model requires inputs for risk-free interest rate, dividend yield, volatility and expected lives of the options. Since we do not have a significant history of stock trading activity, expected volatility is based on historical data from several public companies similar in size and value to us. We will continue to use a weighted average approach using historical volatility and other similar public entity volatility information until historical volatility of our common stock is relevant to measure expected volatility for future option grants. We estimate the forfeiture rate based on historical data. Our options generally vest 25% after one year of service and quarterly over three years thereafter. Based on an analysis of historical forfeitures, we applied a forfeiture rate of 10% to all options that vest upon completion of the first year of service following the date of grant. The analysis will be re-evaluated at least annually and the forfeiture rate will be adjusted as necessary. The risk-free interest rate for periods within the contractual life of the option is based on the U.S. Treasury yield curve in effect at the time of the grant. The expected lives for options granted represents the period of time that options granted are expected to be outstanding. Since January 1, 2006, we have used the simplified method for determining the expected lives of options.

For awards with graded vesting, we allocate compensation costs under SFAS No. 123R on a straight-line basis over the requisite service period. Accordingly, we amortized the fair value of each option over each option's service period, which is generally the vesting period.

We account for stock options issued to non-employees in accordance with the provisions of SFAS No. 123 and EITF No. 96-18, *Accounting for Equity Instruments that are Issued to Other than Employees, or in Conjunction with Selling Goods or Services,* which requires valuing and remeasuring such stock options to the current fair value until the performance date has been reached.

Certain of our options granted to non-employees that are fully vested and no longer subject to a performance requirement are subject to EITF Issue No. 00-19, *Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock*, which requires the stock options held by certain non-employee consultants to be accounted for as liability awards. The fair value of these vested and unexercised awards was recognized as liability awards starting in April 2007 following the registration of stock options under Form S-8, using the Black-Scholes model. As of December 31, 2007, a liability of $1,343,000 was reflected in the balance sheet as other current liabilities. The fair value of the award is re-measured at each financial statement reporting date until the options are exercised or expire. When and if non-employee consultants exercise their options or the options expire, the corresponding liability will be reclassified to equity. As of December 31, 2007, vested stock options to acquire 312,911 shares of common stock held by non-employee consultants remained unexercised.

Our net loss for the years ended December 31, 2007 and 2006 includes $5.4 million and $4.8 million, respectively, of compensation costs and no income tax benefit related to our stock-based compensation arrangements for employee and non-employee awards. As of December 31, 2007, the total amount of unrecognized stock-based compensation expense is $12.6 million, which will be recognized over a weighted average period of 4.0 years.

Consolidated Results of Operations

Year Ended December 31, 2007 Compared with Year Ended December 31, 2006

Revenue

	Year Ended December 31,		2007 to 2006 Change	
	2007	2006	$	%
	(dollars in millions)			
Revenues	$ 0.7	$ —	$ 0.7	—

In October 2007, we entered into a collaborative development, commercialization and license agreement with GSK for elesclomol. Under the terms of the GSK Agreement, the companies will jointly develop and commercialize elesclomol in the United States, and GSK will have exclusive responsibility for the development and commercialization of elesclomol outside the United States. The $80 million non-refundable upfront payment we received from GSK in November 2007, together with the $260,000 estimated value of an option to require GSK to purchase $25 million of our common stock, is being recognized as collaboration revenue using the time-based model over the estimated performance period, the 15-year period through the earliest expiration date of the related patents, which we estimate to be the effective life of this agreement (see Notes 2 and 8 in the accompanying consolidated financial statements).

Research and Development Expense

	Year Ended December 31,		2007 to 2006 Change	
	2007	2006	$	%
	(dollars in millions)			
Clinical-stage drug candidates				
Elesclomol	$ 32.0	$ 9.6	$ 22.4	233%
Apilimod	1.3	16.8	(15.5)	(92)%
STA-9090	7.0	12.3	(5.3)	(43)%
Total clinical-stage drug candidates	40.3	38.7	1.6	4%
Early stage and discontinued programs	11.7	11.8	(0.1)	(1)%
Total research and development	$ 52.0	$ 50.5	$ 1.5	3%

In the year ended December 31, 2007, costs incurred under our elesclomol program increased by $22.4 million over the year ended December 31, 2006, including a $13.7 million increase for personnel costs, related research supplies, operational overhead and stock compensation, and an $8.7 million increase for external costs. These increases were principally due to start-up expenses incurred in connection with the SYMMETRY trial, our global, pivotal Phase 3 clinical trial of elesclomol for the treatment of metastatic melanoma, which was initiated in the third quarter of 2007, offset by non-recurring external costs incurred in 2006 in connection with the completion of the Phase 2b clinical trial for metastatic melanoma.

In the year ended December 31, 2007, costs incurred in connection with apilimod for the treatment of Crohn's disease decreased by $15.5 million over the year ended December 31, 2006,

including a $6.8 million decrease for personnel costs, related research supplies, operational overhead and stock compensation, and an $8.7 million decrease for non-recurring external costs. These decreases were principally due to the completion of the Phase 2b clinical trial in June 2006.

In the year ended December 31, 2007, costs incurred under our STA-9090 program decreased by $5.3 million over the year ended December 31, 2006, including a $2.9 million decrease for personnel costs, related research supplies, operational overhead and stock compensation, and a $2.4 million decrease for external costs. These decreases were principally due to the advancement of the program from preclinical development into clinical development upon the filing of an investigational new drug application in the third quarter of 2007 and the initiation of two Phase 1 clinical trials in the fourth quarter of 2007.

In addition, in the year ended December 31, 2007, costs incurred under our early-stage and discontinued programs decreased by $0.1 million over the year ended December 31, 2006, including a $0.6 million increase for personnel costs, related research supplies, operational overhead and stock compensation, offset by a $0.7 million decrease for external costs.

General and Administrative Expense

	Year Ended December 31,		2007 to 2006 Change	
	2007	2006	$	%
	(dollars in millions)			
General and administrative	$ 14.9	$ 8.6	$ 6.3	73%

The increase in general and administrative expense principally resulted from increases of $1.8 million for personnel costs and related overhead in connection with increased headcount, and $4.4 million in external professional fees, including investor and medical community relations, public-company reporting and compliance requirements and increased director and officer insurance premiums following completion of our IPO in February 2007, and intellectual property and general legal fees, as well as a $0.1 million increase in stock-based compensation.

Investment Income, Net

	Year Ended December 31,		2007 to 2006 Change	
	2007	2006	$	%
	(dollars in millions)			
Investment income, net	$ 2.7	$ 1.9	$ 0.8	42%

The increase in net investment income was principally due to the higher average cash balances resulting from the net cash proceeds of $44.7 million raised from the sale of our common stock in the IPO in February 2007 and the $80 million non-refundable upfront payment received from GSK in November 2007.

Net Loss

	Year Ended December 31,		2007 to 2006 Change	
	2007	2006	$	%
	(dollars in millions except for net loss per share)			
Net loss	$ (63.5)	$ (57.3)	$ (6.2)	(11)%
Basic and diluted net loss per share attributable to common stockholders	$ (3.76)	$ (2.66)		

The increase in the basic and diluted net loss per share attributable to common stockholders was principally due to the non-cash beneficial conversion charge of approximately $58.6 million that was recognized in February 2007 in connection with the contingent adjustable conversion feature of the Series A convertible preferred stock that converted into common stock upon the completion of the IPO in February 2007, offset in part by an increase in the number of weighted average common shares outstanding resulting from the sale of 5,000,000 shares of common stock and the conversion of the Series A preferred stock and accumulated dividends into 6,278,765 shares of common stock in connection with the IPO.

Year Ended December 31, 2006 Compared with Year Ended December 31, 2005

Revenue

There were no revenues in the years ended December 31, 2006 and 2005.

Research and Development Expense

	Year Ended December 31,		2006 to 2005 Change	
	2006	2005	$	%
	(dollars in millions)			
Clinical-stage drug candidates				
Elesclomol	$ 9.6	$ 14.0	$ (4.4)	(31)%
Apilimod	16.8	27.5	(10.7)	(39)%
STA-9090	12.3	4.6	7.7	167%
Total clinical-stage drug candidates	38.7	46.1	(7.4)	(16)%
Early stage and discontinued programs	11.8	13.8	(2.0)	(14)%
Total research and development	$ 50.5	$ 59.9	$ (9.4)	(16)%

In the year ended December 31, 2006, costs incurred under our elesclomol program decreased by $4.4 million over the year ended December 31, 2005, including a $5.2 million decrease for non-recurring external costs incurred in 2005 and in the first half of 2006 in connection with the completion of certain clinical trials, offset by a $0.8 million increase for personnel costs, related research supplies, operational overhead and stock compensation.

In the year ended December 31, 2006, costs incurred in connection with apilimod decreased by $10.7 million over the year ended December 31, 2005, including a $4.0 million decrease for personnel costs, related research supplies, operational overhead and stock compensation, and a $6.7 million decrease for non-recurring external costs incurred in 2005 in connection with the completion of early-stage clinical trials.

In the year ended December 31, 2006, costs incurred under our STA-9090 program increased by $7.7 million over the year ended December 31, 2005, including a $4.8 million increase for personnel costs, related research supplies, operational overhead and stock compensation, and a $2.9 million increase for external costs. These increases were principally due to the advancement of the program from the discovery phase into preclinical development.

In addition, in the year ended December 31, 2006, costs incurred under our early-stage and discontinued programs decreased by $2.0 million over the year ended December 31, 2005, including a $0.2 million increase for personnel costs, related research supplies, operational overhead and stock compensation, offset by a $2.2 million decrease for external costs.

General and Administrative Expense

	Year Ended December 31,		2006 to 2005 Change	
	2006	2005	$	%
	(dollars in millions)			
General and administrative	$ 8.6	$ 11.3	$ (2.7)	(24)%

The decrease in general and administrative expense was principally due to $2.4 million incurred in connection with the filing of a Registration Statement on Form S-1 with the Securities and Exchange Commission in 2005 relating to an initial public offering of our common stock. We determined that we would not complete the planned offering and withdrew the filing in June 2005. The related costs were expensed in the year ended December 31, 2005 as we did not reactivate and complete the offering within 90 days of the withdrawal of the filing. This decrease was also due to decreases of $0.6 million for personnel costs and related overhead due principally to decreased headcount and $0.3 million in external professional fees, principally for general legal and other consulting services, offset by an increase in stock-based compensation of $0.6 million principally related to the net effect of the increased expense in connection with implementation of SFAS No. 123R less the impact of the conclusion of vesting of certain non-employee options in 2005.

Investment Income, Net

	Year Ended December 31,		2006 to 2005 Change	
	2006	2005	$	%
	(dollars in millions)			
Investment income, net	$ 1.9	$ 2.3	$ (0.4)	(17)%

The decrease in investment income was principally due to a decrease in average cash balances as a result of the use of existing cash resources during 2005 and 2006, prior to the net cash proceeds of $40.0 million raised from the sale of our Series A convertible preferred stock in June 2006.

Convertible Preferred Stock Dividends

Series A convertible preferred stock dividends were $1.9 million for the year ended December 31, 2006 due to the issuance of the Series A convertible preferred stock in June 2006. The Series A convertible preferred stock dividends accrued at the rate of 8% per year.

Net Loss

	Year Ended December 31,		2006 to 2005 Change	
	2006	2005	$	%
	(dollars in millions except for net loss per share)			
Net loss	$ (57.3)	$ (68.9)	$ 11.6	17%
Basic and diluted net loss per share attributable to common stockholders	$ (2.66)	$ (3.09)		

The decreases in net loss and basic and diluted net loss per share attributable to common stockholders were principally due to the completion of several clinical trials in 2005 and in the first half of 2006.

Liquidity and Capital Resources

Sources of Liquidity

We have incurred significant operating losses since our inception. We have funded our operations principally with $195.4 million in net proceeds from private placements of our common stock, $40.0 million in net proceeds from a private placement of our Series A convertible preferred stock, $44.7 million in net proceeds from the IPO, and the $80 million non-refundable upfront payment under the GSK Agreement, which, together with the exercise of common stock warrants and options, provided aggregate net cash proceeds of approximately $361.4 million through December 31, 2007. We have also generated funds from government grant revenues, equipment lease financings and investment income.

As of December 31, 2007, we had cash and cash equivalents of $115.6 million, an increase of $68.8 million from $46.8 million as of December 31, 2006. This increase principally reflects $44.7 million of net proceeds from our IPO, an $80 million non-refundable upfront payment under the GSK Agreement and our net loss of $63.5 million during the year ended December 31, 2007, as adjusted for non-cash charges for depreciation and stock-based compensation, and changes in working capital.

In October 2007, we entered into the GSK Agreement with GSK and received a non-refundable upfront cash payment of $80 million in November 2007. We are also eligible to receive potential pre-commercial milestone payments from GSK of up to $585 million, which include both payments for operational progress, such as trial initiation and enrollment, and payments for positive clinical and regulatory outcomes, such as regulatory approval. Of the $585 million in potential payments, $135 million are related to the development in metastatic melanoma and up to $450 million are related to the development of elesclomol in other cancer indications. In addition, we are eligible to receive up to $300 million in potential commercial milestone payments from GSK based on achieving certain net sales thresholds. Based on our current operating plans, we expect to receive between $40 million and $50 million in operational progress milestone payments in 2008.

Under our equipment lease agreement, we may periodically directly lease, or sell and lease back up to a maximum outstanding balance of $6.0 million of equipment and leasehold improvements. In June 2007, this agreement was extended through June 2008. As of December 31, 2007, approximately $1.4 million was available under this revolving lease line for future property and equipment expenditures.

Cash Flows

The following table provides information regarding our cash position, cash flows and capital expenditures for the years ended December 31, 2007, 2006 and 2005 (in millions).

	Year Ended December 31,		
	2007	2006	2005
	(dollars in millions)		
Cash, cash equivalents and marketable securities	$ 115.6	$ 46.8	$ 62.1
Working capital	96.2	36.1	48.5
Cash flows provided by (used in):			
Operating activities	27.2	(53.0)	(61.9)
Investing activities	10.8	23.6	39.2
Financing activities	43.9	39.3	3.8
Capital expenditures (included in investing activities)	(2.4)	(1.6)	(4.9)

Our operating activities provided cash of $27.2 million in the year ended December 31, 2007, including the $80 million non-refundable upfront payment received under the GSK Agreement in November 2007, offset by $52.8 million in the use of cash in operating activities. Our operating activities used cash of $53.0 million and $61.9 million in the years ended December 31, 2006 and 2005, respectively. The use of cash in all of these periods principally resulted from our losses from operations, as adjusted for non-cash charges for depreciation and stock-based compensation, and changes in our working capital accounts.

Our investing activities provided cash of $10.8 million, $23.6 million and $39.2 million in the years ended December 31, 2007, 2006 and 2005, respectively. Our investing activities in 2007 included sales and maturities of marketable securities in our investment portfolio in the amount of $28.1 million, offset by the purchases of marketable securities in the amount of $15.0 million and purchases of property and equipment in the amount of $2.4 million. Our investing activities in 2006 included sales and maturities of marketable securities in our investment portfolio in the amount of $143.4 million, offset by the purchases of marketable securities in the amount of $118.2 million and purchases of property and equipment in the amount of $1.6 million. Our investing activities in 2005 included sales and maturities of marketable securities in our investment portfolio in the amount of $228.4 million, offset by the purchases of marketable securities in the amount of $184.4 million and purchases of property and equipment in the amount of $4.9 million, including a research and development expansion of one of our facilities.

Our financing activities provided $43.9 million, $39.3 million and $3.8 million in the years ended December 31, 2007, 2006 and 2005, respectively. In February 2007, we raised net cash proceeds of $44.7 million from the sale of 5,000,000 shares of common stock in the IPO. In June 2006, we raised gross proceeds of $40.0 million from the sale of 8,000,000 shares of our Series A convertible preferred stock. We raised $2.0 million, $1.4 million and $4.7 million in proceeds from the sale and lease-back of property and equipment in the years ended December 31, 2007, 2006 and 2005, respectively. We repaid $2.6 million, $2.1 million and $1.1 million in capital equipment leases in the years ended December 31, 2007, 2006 and 2005, respectively. In January 2007, we repurchased 29,046 shares of our previously restricted common stock in the amount of $0.3 million from certain officers and non-officer employees in order to fund the minimum statutory tax withholding requirements related to the vesting of 80,000 shares of restricted common stock.

Contractual Obligations and Commitments

The following tables summarize our contractual obligations at December 31, 2007 and the effects such obligations are expected to have on our liquidity and cash flows in future periods (in millions).

Contractual Obligations (as of December 31, 2007)	Total	2008	2009 through 2010	2011 through 2012	More than 5 years
Capital lease obligations(1)	$ 5.9	$ 2.8	$ 2.8	$ 0.3	$ —
Operating lease obligations	6.7	2.0	3.3	1.4	—
Research and development contracts	36.1	26.4	9.7	—	—
Consulting	0.2	0.1	0.1	—	—
Purchase obligations	0.2	0.1	0.1	—	—
Total	$ 49.1	$ 31.4	$ 16.0	$ 1.7	—

(1) Including scheduled interest payments.

Research and development contracts principally include contracts for human clinical studies, animal studies and clinical manufacturing. The future research and development contract obligations in the table of Contractual Obligations above assume that each of the studies and related manufacturing

contracts is completed as planned. In the event a study or manufacturing contract is terminated prior to planned completion by mutual agreement between the contractor and us, the amount paid under such contracts may be less than the amounts presented.

Under various license agreements, substantially all of which are related to our early-stage discovery programs, we may be obligated to pay up to an aggregate of $3.9 million if specified development and commercialization milestones are met, as follows (in thousands). These amounts are not included in the table of Contractual Obligations above.

Milestone	Amount
Phase 1 clinical trials	$ 150
Phase 2 clinical trials	250
Phase 3 clinical trials	350
Completion of Phase 3 clinical trials	75
FDA new drug approval	1,875
European market approval	500
Other	650
Total	$ 3,850

Funding Requirements

We expect to incur substantial expenses and generate significant operating losses as we continue to advance our drug candidates into preclinical studies and clinical trials and as we:

- complete the SYMMETRY trial, our global, pivotal Phase 3 clinical trial of elesclomol for the treatment of metastatic melanoma, that was initiated in the third quarter of 2007, and initiate Phase 2 clinical trials of elesclomol in other cancer types;
- begin to perform and fund pre-commercialization activities, and establish sales and marketing functions and commercial manufacturing arrangements for elesclomol, consistent with our obligations under our agreement with GSK;
- complete the current Phase 2a clinical trial of apilimod for the treatment of RA, and possibly initiate Phase 2 clinical trials of apilimod in other inflammatory disease indications;
- initiate additional Phase 3 clinical trials of elesclomol in other cancer types and one or more Phase 3 clinical trials of apilimod, if supported by Phase 2 results;
- complete two Phase 1 clinical trials of STA-9090 that were initiated in the fourth quarter of 2007, initiate additional Phase 1 trials and initiate any later-stage additional clinical trials, if supported by Phase 1 results;
- complete preclinical development of STA-9584 and initiate clinical trials, if supported by positive preclinical data;
- advance our CRAC ion channel inhibitor program into clinical trials, if supported by positive preclinical data;
- discover, develop, and seek regulatory approval for backups of our current drug candidates and other new drug candidates;
- identify additional compounds or drug candidates and acquire rights from third parties to those compounds or drug candidates through licenses, acquisition or other means;
- commercialize any approved drug candidates;

- hire additional clinical, scientific, and management personnel; and
- add operational, financial, and management information systems and personnel.

Our funding requirements will depend on a number of factors, including:

- the progress of our research and development programs, including the completion of preclinical studies and clinical trials for our current drug candidates and the results from these studies and trials;
- the number of drug candidates we advance into later-stage clinical trials and the scope of our research and development programs;
- our ability to discover additional drug candidates using our drug discovery technology and advance them into clinical development;
- the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims for our drug discovery technology and drug candidates and avoiding infringing the intellectual property of others;
- the time and costs involved in obtaining regulatory approvals for our drug candidates;
- our ability to establish and maintain collaborative arrangements, including our agreement with GSK;
- the potential in-licensing of other products or technologies or the acquisition of complementary businesses;
- the cost of manufacturing, marketing and sales activities, if any; and
- the timing, receipt and amount of revenue, if any, from our drug candidates.

We do not anticipate that we will generate product revenue for the next several years. We expect our continuing operating losses to result in increases in cash used in operations over the next several years. Based on our current operating plans, we expect our existing funds will be sufficient to fund operations through at least 2008. Payment to us by GSK of milestones for our operational progress and achievement of certain success criteria leading to the approval by the FDA of elesclomol for the treatment of metastatic melanoma could extend our cash availability, as could payments of milestones in connection with the development of elesclomol in other cancer indications and achievement of certain net sales thresholds. Based on our current operating plans, we expect to receive between $40 million and $50 million in operational progress milestone payments, under our agreement with GSK, in 2008. However, we may require significant additional funds earlier than we currently expect in order to conduct additional clinical trials and seek regulatory approval of our drug candidates. Because of the numerous risks and uncertainties associated with the development and commercialization of our drug candidates, we are unable to estimate the amounts of increased capital outlays and operating expenditures associated with our current and anticipated clinical trials.

Additional funding may not be available to us on acceptable terms or at all. In addition, the terms of any financing may adversely affect the holdings or the rights of our stockholders. For example, if we raise additional funds by issuing equity securities or by selling debt securities, if convertible, further dilution to our existing stockholders may result. To the extent our capital resources are insufficient to meet our future capital requirements, we will need to finance our future cash needs through public or private equity offerings, collaboration agreements, debt financings or licensing arrangements.

If adequate funds are not available, we may be required to terminate, significantly modify or delay our research and development programs, reduce our planned commercialization efforts, or obtain funds through collaborators that may require us to relinquish rights to our technologies or drug candidates

that we might otherwise seek to develop or commercialize independently. We may elect to raise additional funds even before we need them if the conditions for raising capital are favorable.

Cash, Cash Equivalents and Marketable Securities

As of December 31, 2007, we had cash and cash equivalents of $115.6 million consisting of cash deposited in a highly rated financial institution in the United States and in short-term money market funds. Subsequent to year-end we transferred our invested funds to a short-term U.S. Treasury money market fund. The primary objective of our investment activities is to preserve our capital for the purpose of funding operations and we do not enter into investments for trading or speculative purposes. We believe that we did not have material exposure to high-risk investments, such as mortgage-backed securities, auction rate securities or other special investment vehicles, or SIV's, within our money-market fund investments. We also believe that we do not have any material exposure to changes in fair value as a result of changes in interest rates. Declines in interest rates, however, would reduce future investment income.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements or relationships with unconsolidated entities of financial partnerships, such as entities often referred to as structured finance or special purpose entities.

Tax Loss Carryforwards

In 2005 and in 2007, we performed analyses to determine if there were changes in ownership, as defined by Section 382 of the Internal Revenue Code, that would limit our ability to utilize certain net operating loss and tax credit carryforwards. We determined that we experienced a change in ownership, as defined by Section 382, in connection with the acquisition of Principia Associates, Inc. on September 20, 2002, but did not experience a change in ownership upon the effectiveness of our IPO. As a result, the utilization of our federal tax net operating loss carryforwards generated prior to the ownership change is limited. As of December 31, 2007 we have net operating loss carryforwards for U.S. federal tax purposes of approximately $259.1 million, after taking into consideration net operating losses expected to expire unused as a result of this limitation, and the remainder will expire in varying amounts through 2027 unless utilized. In addition, as of December 31, 2007, we have state net operating loss carryforwards of approximately $243.6 million, which will expire through 2011 unless utilized. The utilization of these net operating loss carryforwards may be further limited as we experience future ownership changes as defined in Section 382 of the Internal Revenue Code.

Recently Issued Accounting Pronouncements

In December 2007, the Financial Accounting Standards Board or the FASB, issued SFAS No. 141R, *Business Combinations,* or SFAS No. 141R. The pronouncement establishes principles and requirements for how an acquirer recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed, any noncontrolling interest in the acquiree and the goodwill acquired. The pronouncement also establishes disclosure requirements to enable the evaluation of the nature and financial effects of the business combination. SFAS No. 141R is effective for fiscal years beginning after December 15, 2008. We are currently evaluating SFAS No. 141R and the impact it may have on our results of operations or financial position.

In December 2007, the FASB issued SFAS No. 160, *Noncontrolling Interests in Consolidated Financial Statements—an Amendment of ARB No. 51,* or SFAS No. 160. The pronouncement establishes accounting and reporting standards pertaining to ownership interests in subsidiaries held by parties other than the parent, the amount of net income attributable to the parent and to the noncontrolling

interest, changes in a parent's ownership interest, and the valuation of any retained noncontrolling equity investment when a subsidiary is deconsolidated. The pronouncement also establishes disclosure requirements that identify and distinguish between the interests of the parent and the interests of the noncontrolling owners. SFAS No. 160 is effective for fiscal years beginning on or after December 15, 2008. We are currently evaluating SFAS No. 160 and the impact it may have on our results of operations or financial position.

In June 2007, the EITF issued EITF No. 07-03, *Accounting for Nonrefundable Advance Payments for Goods or Services to Be Used in Future Research and Development Activities,* or EITF No. 07-03, which provides guidance for upfront payments related to goods and services of research and development activities. EITF No. 07-03 is effective for fiscal years beginning after December 15, 2007. We do not believe the adoption of EITF No. 07-03 will have a material impact on our overall financial position or results of operations.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities*, or SFAS No. 159, including an amendment of SFAS No. 115, which permits entities to choose to measure many financial instruments and certain other items at fair value that are not currently required to be measured at fair value. SFAS No. 159 is effective for us beginning in 2008. We do not believe the adoption of SFAS No. 159 will have a material impact on our overall financial position or results of operations.

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements*, or SFAS No. 157, which provides guidance for using fair value to measure assets and liabilities. The pronouncement clarifies (1) the extent to which companies measure assets and liabilities at fair value; (2) the information used to measure fair value; and (3) the effect that fair value measurements have on earnings. SFAS No. 157 will apply whenever another standard requires (or permits) assets or liabilities to be measured at fair value. SFAS No. 157 will be applicable to us for fiscal years beginning after November 15, 2007. In February 2008, the FASB issued SFAS No. 157-1 and No. 157-2 which delay the effective date of SFAS No. 157 for one year for certain non-financial assets and liabilities and removes certain leasing transactions from its scope. We do not believe the adoption of SFAS No. 157 will have a material impact on our overall financial position or results of operations.

In July 2006, the FASB issued FASB Interpretation No. 48, *Accounting for Uncertainty in Income Taxes—an interpretation of FAS 109*, or Interpretation No. 48. This interpretation clarifies the accounting for uncertainty in income taxes recognized in a company's financial statements in accordance with FASB Statement No. 109, *Accounting for Income Taxes.* This interpretation prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken in a tax return. It also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. Interpretation No. 48 is effective for fiscal years beginning after December 15, 2006. We adopted Interpretation No. 48 effective January 1, 2007 and its adoption had no impact on our consolidated results of operations and financial position.

Certain Factors That May Affect Future Results of Operations

The Securities and Exchange Commission encourages companies to disclose forward-looking information so that investors can better understand a company's future prospects and make informed investment decisions. This Annual Report on Form 10-K contains such "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995.

Words such as "may," "anticipate," "estimate," "expects," "projects," "intends," "plans," "believes" and words and terms of similar substance used in connection with any discussion of future operating or financial performance, identify forward-looking statements. All forward-looking statements are management's present expectations of future events and are subject to a number of risks and

uncertainties that could cause actual results to differ materially and adversely from those described in the forward-looking statements. These risks include, but are not limited to those set forth under the heading "Risk Factors" contained in Item 1A of this Annual Report on Form 10-K.

In light of these assumptions, risks and uncertainties, the results and events discussed in the forward-looking statements contained in this Annual Report on Form 10-K or in any document incorporated by reference might not occur. Stockholders are cautioned not to place undue reliance on the forward-looking statements, which speak only as of the date of this Annual Report on Form 10-K. We are not under any obligation, and we expressly disclaim any obligation, to update or alter any forward-looking statements, whether as a result of new information, future events or otherwise. All subsequent forward-looking statements attributable to Synta or to any person acting on its behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest Rate Sensitivity. As of December 31, 2007, we had cash and cash equivalents of $115.6 million consisting of cash deposited in a highly rated financial institution in the United States and in short-term money market funds. Subsequent to year-end we transferred our invested funds to a short-term U.S. Treasury money market fund. The primary objective of our investment activities is to preserve our capital for the purpose of funding operations and we do not enter into investments for trading or speculative purposes. We believe that we did not have material exposure to high-risk investments such as mortgage-backed securities, auction rate securities or other special investment vehicles, or SIV's, within our money-market fund investments. We believe that we do not have any material exposure to changes in fair value as a result of changes in interest rates. Declines in interest rates, however, would reduce future investment income. During the year ended December 31, 2007, we had investment income of $3.2 million. If overall interest rates fell by 10% during the year ended December 31, 2007, our interest income would have decreased by less than $0.3 million, assuming consistent investment levels.

Capital Market Risk. We currently have no product revenues and depend on funds raised through other sources. One possible source of funding is through further equity offerings. Our ability to raise funds in this manner depends upon capital market forces affecting our stock price.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The information required by this Item 8 is included at the end of this Annual Report on Form 10-K beginning on page F-1.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

Item 9A(T). CONTROLS AND PROCEDURES

(a) *Evaluation of Disclosure Controls and Procedures.* Our principal executive officer and principal financial officer, after evaluating the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended) as of the end of the period covered by this Annual Report on Form 10-K, have concluded that, based on such evaluation, our disclosure controls and procedures were adequate and effective. In designing and evaluating our disclosure controls and procedures, our management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and our management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

(b) *Changes in Internal Controls.* There were no changes in our internal control over financial reporting, identified in connection with the evaluation of such internal control that occurred during the fourth quarter of our last fiscal year, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's Report On Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended. Our internal control system was designed to provide reasonable assurance to our management and board of directors regarding the preparation and fair presentation of published financial statements. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2007. In making this assessment, it used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control-Integrated Framework. Based on our assessment we believe that, as of December 31, 2007, our internal control over financial reporting is effective based on those criteria.

This Annual Report on Form 10-K does not include an attestation report of our registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by our registered public accounting firm pursuant to temporary rules of the Securities and Exchange Commission that permit us to provide only management's report in this Annual Report.

Item 9B. OTHER INFORMATION

Not applicable.

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The response to this item is incorporated by reference from the discussion responsive thereto under the captions "Management," "Section 16(a) Beneficial Ownership Reporting Compliance" and "Code of Conduct and Ethics" in our Proxy Statement for the 2008 Annual Meeting of Stockholders to be held on June 11, 2008.

We have adopted a code of conduct and ethics that applies to all of our directors, officers and employees. This code is publicly available on our website at *www.syntapharma.com.* Amendments to the code of conduct and ethics or any grant of a waiver from a provision of the code requiring disclosure under applicable Securities and Exchange Commission and The NASDAQ Stock Market rules will be disclosed in a Current Report on Form 8-K.

Item 11. EXECUTIVE COMPENSATION

The response to this item is incorporated by reference from the discussion responsive thereto under the captions "Compensation Discussion and Analysis," "Executive Compensation," "Management—Committees of the Board of Directors and Meetings," "Management—Compensation Committee Interlocks and Insider Participation" and "Compensation Committee Report" in our Proxy Statement for the 2008 Annual Meeting of Stockholders to be held on June 11, 2008.

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The response to this item is incorporated by reference from the discussion responsive thereto under the captions "Security Ownership of Certain Beneficial Owners and Management" and "Executive Compensation—Equity Compensation Plan Information" in our Proxy Statement for the 2008 Annual Meeting of Stockholders to be held on June 11, 2008.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The response to this item is incorporated by reference from the discussion responsive thereto under the caption "Certain Relationships and Related Person Transactions," "Management—The Board of Directors" and "Management—Director Independence" in our Proxy Statement for the 2008 Annual Meeting of Stockholders to be held on June 11, 2008.

Item 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The response to this item is incorporated by reference from the discussion responsive thereto under the caption "Independent Public Accountants" in our Proxy Statement for the 2008 Annual Meeting of Stockholders to be held on June 11, 2008.

PART IV

Item 15. **EXHIBITS AND FINANCIAL STATEMENT SCHEDULES**

Item 15(a) The following documents are filed as part of this Annual Report on Form 10-K:

Item 15(a)(1) and (2) The Consolidated Financial Statements beginning on page F-1 are filed as part of this Annual Report on Form 10-K. Other financial statement schedules have not been included because they are not applicable or the information is included in the financial statements or notes thereto.

Item 15(a)(3) Exhibits

The following is a list of exhibits filed as part of this Annual Report on Form 10-K.

Exhibit Number	Description of Exhibit
3.1(1)	Restated Certificate of Incorporation of the Registrant. (3.2)
3.2(1)	Restated Bylaws of the Registrant. (3.4)
4.1(1)	Form of Common Stock Certificate. (4.1)
4.2.1(1)	Amended and Restated Investor Rights Agreement, dated December 13, 2002, by and among the Registrant and certain stockholders of the Registrant. (4.2.1)
4.2.2(1)	First Amendment, dated January 11, 2005, to the Amended and Restated Investor Rights Agreement, dated December 13, 2002, by and among the Registrant and certain stockholders of the Registrant. (4.2.2)
4.2.3(1)	Second Amendment, dated January 31, 2007, to the Amended and Restated Investor Rights Agreement, dated December 13, 2002, by and among the Registrant and certain stockholders of the Registrant. (4.2.3)
10.1(1)*	2001 Stock Plan. (10.1)
10.2(1)*	2006 Stock Plan. (10.2)
10.2(a)(1)*	Form of incentive stock option agreement under 2006 Stock Plan. (10.2(a))
10.2(b)(1)*	Form of nonqualified stock option agreement under 2006 Stock Plan. (10.2(b))
10.2(c)(1)*	Form of restricted stock agreement under 2006 Stock Plan. (10.2(c))
10.2(d)(1)*	Form of nonqualified stock option agreement for directors under 2006 Stock Plan. (10.2(d))
10.2(e)(1)*	Form of restricted stock agreement for directors under 2006 Stock Plan. (10.2(e))
10.3(1)*	Director Compensation Policy. (10.3)
10.4*	Non-Qualified Stock Option Agreement, dated February 27, 2008, by and between the Registrant and Keith R. Gollust.
10.5(1)	Duffy Hartwell Limited Partnership Commercial Lease, dated November 4, 1996, by and between Duffy Hartwell Limited Partnership and Shionogi BioResearch Corp., as amended by First Amendment to Commercial Lease, dated August 30, 2006. (10.5)

10.6(1)	Lease of 125 Hartwell Avenue, Lexington, MA, dated October 26, 1992, by and between Fuji ImmunoPharmaceuticals Corp. and 125 Hartwell Trust, as amended by First Amendment dated January 31, 1993, Second Amendment dated October 1, 1997, Third Amendment dated November 1, 2002, Assignment and Assumption of Lease and Consent of Release by Landlord and Fourth Amendment of Lease, dated July 9, 2004, Fifth Amendment, dated October 22, 2004 and Sixth Amendment, dated August 1, 2005. (10.6)
10.6.1	Seventh Amendment, dated November 26, 2007, to Lease of 125 Hartwell Avenue, Lexington, MA, dated October 26, 1992, by and between the Registrant, as successor-by-assignment, and 125 Hartwell Trust.
10.7(1)	Lease, dated January 13, 2005, by and between the Registrant and Mortimer B. Zuckerman and Edward H. Linde, Trustees of 91 Hartwell Avenue Trust, as extended on August 14, 2006. (10.7)
10.7.1	First Amendment to Lease, dated as of September 7, 2007, to Lease, dated January 13, 2005, by and between the Registrant and Mortimer B. Zuckerman and Edward H. Linde, Trustees of 91 Hartwell Avenue Trust.
10.8(1)	Pinnacle Properties Management, Inc. Standard Form Commercial Lease, dated May 31, 1999, by and between 6-8 Preston Court, L.L.C. and Asiana Pharmaceuticals Corporation, as amended by Amendment to Lease #1, dated July 31, 2000, Amendment to Lease #2, dated November 26, 2001, and Amendment to Lease #3, dated December 2003, and as assigned to the Registrant by Assignment and Assumption of Lease and Landlord's Consent, dated May 25, 2005, and Subordination, Non-Disturbance and Attornment Agreement, dated May 25, 2005. (10.8)
10.9(1)	Master Lease Agreement, dated November 10, 2004, by and between the Registrant and General Electric Capital Corporation, as amended by Letter Agreement, dated June 24, 2005, and as extended by Letter Agreement, dated November 29, 2006. (10.9)
10.9.1	Extension, dated as of June 29, 2007, of Master Lease Agreement, dated November 10, 2004, by and between the Registrant and General Electric Capital Corporation, as amended.
10.10(1)*	Letter Agreement, dated April 18, 2005, by and between the Registrant and Safi R. Bahcall, Ph.D. (10.13)
10.11(1)*	Letter Agreement, dated October 12, 2002, by and between the Registrant and Dr. Keizo Koya. (10.14)
10.12(1)*	Letter Agreement, dated January 22, 2003, by and between the Registrant and Dr. James Barsoum. (10.15)
10.13(1)*	Letter Agreement, dated April 15, 2004, by and between the Registrant and Dr. Jeremy Chadwick. (10.16)
10.14(1)*	Letter Agreement, dated February 19, 2004, by and between the Registrant and Keith Ehrlich. (10.17)
10.15(1)*	Letter Agreement, dated January 14, 2003, by and between the Registrant and Wendy E. Rieder. (10.18)
10.16(1)*	Letter Agreement, dated March 24, 2005, by and between the Registrant and Eric W. Jacobson. (10.19)

10.17(1)*	Letter Agreement, dated February 27, 2006, by and between the Registrant and Martin D. Williams. (10.20)
10.18(1)*	Agreement and Release, dated January 14, 2005, by and between the Registrant and Lan Bo Chen, Ph.D. (10.22)
10.19(1)*	Consulting Agreement, dated April 18, 2005, by and between the Registrant and Lan Bo Chen, Ph.D. (10.23)
10.19.1*	Amendment to Consulting Agreement, dated March 23, 2007, by and between the Registrant and Lan Bo Chen, Ph.D.
10.20(1)*	Form of Indemnification Agreement between the Registrant and its directors and executive officers. (10.26)
10.21(1)	Lease Agreement, dated December 14, 2006, by and between ARE-MA Region No. 24, LLC and the Registrant. (10.27)
10.22(2)*	Summary of compensation arrangements applicable to the Registrant's Named Executive Officers (2006 bonus and 2007 salary increases). (10.27)
10.23*	Summary of bonus arrangements applicable to the Registrant's Named Executive Officers.
10.24**	Collaborative Development, Commercialization and License Agreement, dated October 8, 2007 by and between the Registrant and GlaxoSmithKline.
21.1(2)	List of Subsidiaries. (21.1)
23.1	Consent of KPMG LLP, Independent Registered Public Accounting Firm.
31.1	Certification of Principal Executive Officer under Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Principal Accounting and Financial Officer under Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of the Principal Executive Officer and the Principal Accounting and Financial Officer under Section 906 of the Sarbanes-Oxley Act of 2002.

* Management contract, compensatory plan or arrangement.

** Confidential portions of these documents have been filed separately with the Securities and Exchange Commission pursuant to a request for confidential treatment.

(1) Incorporated by reference from the Registrant's Registration Statement on Form S-1, as amended (Registration No. 333-138894), initially filed with the Securities and Exchange Commission on November 22, 2006.

(2) Incorporated by reference from the Registrant's Annual Report on Form 10-K for the year ended December 31, 2006 (File No. 001-33277).

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

SYNTA PHARMACEUTICALS CORP.

Date: March 20, 2008

By: /s/ SAFI R. BAHCALL, PH.D.

Safi R. Bahcall, Ph.D.
President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated below and on the dates indicated.

Signatures	Title	Date
/s/ SAFI R. BAHCALL, PH.D. Safi R. Bahcall, Ph.D.	President, Chief Executive Officer and Director (principal executive officer)	March 20, 2008
/s/ KEITH S. EHRLICH, C.P.A. Keith S. Ehrlich, C.P.A.	Vice President, Finance and Administration, Chief Financial Officer (principal accounting and financial officer)	March 20, 2008
/s/ KEITH R. GOLLUST Keith R. Gollust	Chairman of the Board	March 20, 2008
/s/ LAN BO CHEN, PH.D. Lan Bo Chen, Ph.D.	Director	March 20, 2008
/s/ BRUCE KOVNER Bruce Kovner	Director	March 20, 2008
/s/ WILLIAM REARDON, C.P.A. William Reardon, C.P.A.	Director	March 20, 2008
/s/ ROBERT N. WILSON Robert N. Wilson	Director	March 20, 2008

INDEX TO FINANCIAL STATEMENTS

SYNTA PHARMACEUTICALS CORP.

Years ended December 31, 2007, 2006, and 2005

Report of Independent Registered Public Accounting Firm

The Board of Directors
Synta Pharmaceuticals Corp.:

We have audited the accompanying consolidated balance sheets of Synta Pharmaceuticals Corp. (the Company) as of December 31, 2007 and 2006, and the related consolidated statements of operations, stockholders' equity (deficit) and comprehensive loss, and cash flows for each of the years in the three-year period ended December 31, 2007. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Synta Pharmaceuticals Corp. as of December 31, 2007 and 2006, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2007 in conformity with U.S. generally accepted accounting principles.

As discussed in Note 2 to the consolidated financial statements, the Company adopted Statement of Financial Accounting Standard (SFAS) No. 123R, *Share-Based Payment,* effective January 1, 2006.

/s/ KPMG LLP

Boston, Massachusetts
March 19, 2008

SYNTA PHARMACEUTICALS CORP.

Consolidated Balance Sheets

(in thousands, except share and per share amounts)

	December 31, 2007	December 31, 2006
Assets		
Current assets:		
Cash and cash equivalents	$ 115,577	$ 33,687
Restricted cash	83	540
Marketable securities available-for-sale	—	13,137
Prepaid expenses and other current assets	1,337	263
Total current assets	116,997	47,627
Property and equipment, net	5,576	6,067
Deferred offering costs	—	963
Other assets	76	132
Total assets	$ 122,649	$ 54,789
Liabilities and Stockholders' Equity (Deficit)		
Current liabilities:		
Accounts payable	$ 2,488	$ 2,632
Accrued expenses	9,184	6,127
Capital lease obligations—current	2,406	2,330
Deferred collaboration revenue—current	5,351	—
Other current liabilities	1,343	—
Deferred grant revenue	—	457
Total current liabilities	20,772	11,546
Deferred collaboration revenue—long-term	74,166	—
Capital lease obligations—long-term	2,815	3,170
Total long-term liabilities	76,981	3,170
Total liabilities	97,753	14,716
Convertible preferred stock, at redemption value:		
Series A convertible preferred stock, $0.0001 par value per share. Authorized: no shares at December 31, 2007 and 8,000,000 shares at December 31, 2006; no shares issued and outstanding at December 31, 2007 and 8,000,000 shares issued and outstanding at December 31, 2006	—	41,820
Stockholders equity (deficit):		
Preferred stock, par value $0.0001 per share. Authorized: 5,000,000 shares at December 31, 2007 and no shares at December 31, 2006; no shares issued and outstanding at December 31, 2007 and at December 31, 2006	—	—

Common stock, par value $0.0001 per share. Authorized: 100,000,000 shares at December 31, 2007 and 158,000,000 shares at December 31, 2006; 33,875,948 shares issued and outstanding at December 31, 2007 and 22,564,068 shares issued and outstanding at December 31, 2006	3	2
Additional paid-in-capital	324,946	234,807
Accumulated other comprehensive income	—	2
Accumulated deficit	(300,053)	(236,558)
Total stockholders' equity (deficit)	24,896	(1,747)
Total liabilities and stockholders' equity (deficit)	$ 122,649	$ 54,789

See accompanying notes to consolidated financial statements.

SYNTA PHARMACEUTICALS CORP.

Consolidated Statements of Operations

(in thousands, except share and per share amounts)

	Years ended December 31		
	2007	**2006**	**2005**
Collaboration revenue	$ 743	$ —	—
Operating expenses:			
Research and development	52,025	50,503	59,901
General and administrative	14,934	8,648	11,279
Total operating expenses	66,959	59,151	71,180
Loss from operations	(66,216)	(59,151)	(71,180)
Other income:			
Investment income, net	2,721	1,881	2,317
Net loss	(63,495)	(57,270)	(68,863)
Convertible preferred stock dividends	—	1,859	—
Convertible preferred stock beneficial conversion charge	58,585	—	—
Net loss attributable to common stockholders	$ (122,080)	$ (59,129)	$ (68,863)
Basic and diluted weighted average common shares outstanding	32,466,006	22,265,242	22,253,423
Basic and diluted net loss attributable to common stockholders per share	$ (3.76)	$ (2.66)	$ (3.09)

See accompanying notes to consolidated financial statements.

SYNTA PHARMACEUTICALS CORP.

Consolidated Statements of Stockholders' Equity (Deficit) and Comprehensive Loss

(in thousands, except share amounts)

	Common stock							
	Shares	Amount	Additional paid-in capital	Deferred compensation	Accumulated other comprehensive income (loss)	Accumulated deficit	Total stockholders' equity (deficit)	Comprehensive loss
Balance at December 31, 2004	22,550,699	$ 2	$ 238,930	$ (10,435)	$ (116)	$ (110,425)	$ 117,956	$ (46,083)
Issuance of restricted common shares	96,589	—	1,425	(1,425)	—	—	—	
Forfeitures of restricted common shares	(40,000)	—	(881)	743	—	—	(138)	
Exercise of stock warrants	67,138	—	134	—	—	—	134	
Issuance of stock options for services	—	—	201	(201)	—	—	—	
Forfeitures of stock options for services	—	—	(329)	329	—	—	—	
Remeasurement of stock options for services	—	—	(451)	451	—	—	—	
Compensation expense related to stock options for services	—	—	—	1,142	—	—	1,142	
Compensation expense related to issuance of stock options and restricted stock below fair value	—	—	—	2,171	—	—	2,171	
Unrealized gains on marketable securities	—	—	—	—	75	—	75	75
Net loss	—	—	—	—	—	(68,863)	(68,863)	(68,863)
Balance at December 31, 2005	22,674,426	2	239,029	(7,225)	(41)	(179,288)	52,477	(68,788)
Eliminate deferred stock compensation	—	—	(7,225)	7,225	—	—	—	
Convertible preferred stock dividends	—	—	(1,859)	—	—	—	(1,859)	
Forfeitures of restricted common shares	(127,500)	—	—	—	—	—	—	
Issuance of common shares for services	4,875	—	69	—	—	—	69	
Issuance of restricted common shares	12,142	—	—	—	—	—	—	
Exercise of stock options	125	—	2	—	—	—	2	
Compensation expense related to stock options for services	—	—	4,791	—	—	—	4,791	
Unrealized gains on marketable securities	—	—	—	—	43	—	43	43
Net loss	—	—	—	—	—	(57,270)	(57,270)	(57,270)
Balance at December 31, 2006	22,564,068	2	234,807	—	2	(236,558)	(1,747)	(57,227)
Issuance of common shares in IPO, net	5,000,000	—	44,660	—	—	—	44,660	
Conversion of convertible preferred stock	6,278,765	1	41,819	—	—	—	41,820	
Issuance of restricted common shares	15,661	—	—	—	—	—	—	
Repurchase of previously restricted common shares	(29,046)	—	(290)	—	—	—	(290)	
Exercise stock options	51,500	—	136	—	—	—	136	
Forfeitures of restricted common shares	(5,000)	—	—	—	—	—	—	
Issuance of common stock purchase obligation	—	—	(260)	—	—	—	(260)	
Compensation expense related to stock options for services	—	—	5,924	—	—	—	5,924	
Reclassification of vested stock options granted to non-employee consultants to liabilities	—	—	(1,850)	—	—	—	(1,850)	
Unrealized losses on marketable securities	—	—	—	—	(2)	—	(2)	(2)
Net loss	—	—	—	—	—	(63,495)	(63,495)	(63,495)
Balance at December 31, 2007	33,875,948	$ 3	$ 324,946	—	$ —	$ (300,053)	$ 24,896	$ (63,497)

See accompanying notes to consolidated financial statements.

SYNTA PHARMACEUTICALS CORP.

Consolidated Statements of Cash Flows

(in thousands)

	Years ended December 31		
	2007	2006	2005
Cash flows from operating activities:			
Net loss	$ (63,495)	$ (57,270)	$ (68,863)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Expense deferred offering costs	—	—	1,085
Other stock-related compensation expense	5,417	4,791	3,175
Depreciation and amortization	3,351	3,655	2,455
Changes in operating assets and liabilities:			
Restricted cash	457	(83)	—
Prepaid expenses and other current assets	(1,074)	173	161
Other assets	56	1	(17)
Accounts payable	(144)	(729)	476
Accrued expenses	3,854	(3,523)	(354)
Deferred revenue	78,800	—	—
Net cash provided by (used in) operating activities	27,222	(52,985)	(61,882)
Cash flows from investing activities:			
Purchases of marketable securities	(15,014)	(118,204)	(184,365)
Sales and maturities of marketable securities	28,149	143,358	228,424
Purchases of property and equipment	(2,350)	(1,580)	(4,883)
Net cash provided by investing activities	10,785	23,574	39,176
Cash flows from financing activities:			
Proceeds from issuances of common stock and exercise of common stock warrants, net	44,660	—	134
Proceeds from issuance of convertible preferred stock, net	—	39,961	—
Proceeds from exercise of stock options	136	2	—
Repurchase of restricted common stock	(290)	—	—
Proceeds from sale—leaseback of property and equipment	1,994	1,412	4,745
Payment of capital lease obligations	(2,617)	(2,086)	(1,100)
Net cash provided by financing activities	43,883	39,289	3,779
Net increase (decrease) in cash and cash equivalents	81,890	9,878	(18,927)
Cash and cash equivalents at beginning of period	33,687	23,809	42,736
Cash and cash equivalents at end of period	$ 115,577	$ 33,687	$ 23,809
Supplemental disclosure of noncash investing and financing activities:			
Acquisition of equipment under capital leases	$ 2,338	$ 1,412	$ 5,549
Convertible preferred stock beneficial conversion charge	$ 58,585	—	—

Convertible preferred stock dividends	—	$ 1,859	—
Conversion of preferred stock	$ 41,820	—	—
Issuance of common stock purchase obligation	$ 260	—	—
Supplemental disclosure of cash flow information:			
Cash paid for interest	$ 536	$ 574	$ 274

See accompanying notes to consolidated financial statements.

(1) Nature of Business

The Company was incorporated in March 2000 and commenced operations in July 2001. The Company is a biopharmaceutical company focusing on discovering, developing and commercializing small molecule drugs that address severe medical conditions, including cancer and chronic inflammatory diseases.

The Company is subject to risks common to emerging companies in the drug development and pharmaceutical industry including, but not limited to, uncertainty of product development and commercialization, lack of marketing and sales history, dependence on key personnel, uncertainty of market acceptance of products, product liability, uncertain protection of proprietary technology, potential inability to raise additional financing and compliance with the Food and Drug Administration (FDA) and other government regulations.

In February 2007, the Company sold 5,000,000 shares of its common stock at $10.00 per share in an initial public offering (IPO), resulting in net proceeds of approximately $44.7 million (see Note 5).

In October 2007, the Company and GlaxoSmithKline (GSK) entered into a collaborative development, commercialization and license agreement for elesclomol. Under the terms of the agreement (the GSK Agreement), the Company received a non-refundable upfront cash payment of $80 million in November 2007 (see Note 8).

The Company has incurred significant operating losses since its inception and, as a result, at December 31, 2007 had an accumulated deficit of $300.1 million. Operations have been funded principally through the sale of common stock and convertible preferred stock, the upfront payment from GSK, and capital leases. At December 31, 2007, the Company had approximately $115.6 million in cash and cash equivalents.

Based on the Company's current operating plans, it expects its existing funds will be sufficient to fund operations through at least 2008. Payment to the Company by GSK of milestones for operational progress and achievement of certain success criteria leading to the approval by the FDA of elesclomol for the treatment of metastatic melanoma could extend the Company's cash availability, as could payments of milestones in connection with the development of elesclomol in other cancer indications and achievement of certain net sales thresholds. However, the Company may require significant additional funds earlier than it currently expects to conduct additional clinical trials and seek regulatory approval of its drug candidates. No assurances can be made that future capital will be available on terms acceptable to the Company to support its long-term liquidity needs.

Beginning in the fourth quarter of 2007, the Company was no longer a development-stage enterprise when it began recognizing revenue under the GSK Agreement.

(2) Summary of Significant Accounting Policies

Principles of Consolidation

The consolidated financial statements include the financial statements of the Company and its wholly owned subsidiaries. All significant intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect

(2) Summary of Significant Accounting Policies (Continued)

certain reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting periods. Significant items subject to such estimates and assumptions include long-term contract accruals, recoverability of long-lived and deferred tax assets, valuation of acquired in-process research and development, measurement of stock-based compensation, and the fair value of the Company's common stock. The Company bases its estimates on historical experience and various other assumptions that management believes to be reasonable under the circumstances. Changes in estimates are recorded in the period in which they become known. Actual results could differ from those estimates.

Cash and Cash Equivalents

Cash equivalents include money market funds and marketable securities. The Company considers all highly liquid investments with original maturities of three months or less at the date of purchase to be cash equivalents. Changes in cash and cash equivalents may be affected by shifts in investment portfolio maturities, as well as actual cash disbursements to fund operations.

Marketable Securities

The Company considers its marketable securities available-for-sale in accordance with SFAS No. 115, *Accounting for Certain Investments in Debt and Equity Securities*. Marketable securities consist of investments in high-grade corporate, government and government agency obligations that are classified as available-for-sale. Since these securities are available to fund current operations they are classified as current assets on the consolidated balance sheets. Marketable securities are stated at fair value, including accrued interest, with their unrealized gains and losses included as a component of accumulated other comprehensive income (loss), which is a separate component of stockholders' equity, until such gains and losses are realized. The fair value of these securities is based on quoted market prices. If a decline in value is considered other-than-temporary, based on available evidence, the unrealized loss is transferred from accumulated other comprehensive income (loss) to the consolidated statement of operations. Realized gains and losses are determined on the specific identification method.

During the years ended December 31, 2007, 2006 and 2005, the Company recorded no realized gains and losses on marketable securities, and there were no unrealized gains and losses as of December 31, 2007. There were no charges to write down marketable securities in 2007 and 2006.

Credit Risk and Concentrations

Financial instruments that potentially subject the Company to a concentration of credit risk consist of money market funds and marketable securities. Deposits with banks may exceed the amount of insurance provided on such deposits. Generally, these deposits may be redeemed upon demand and, therefore, bear minimal risk. Marketable securities consist of investments in high-grade corporate, government and government agency obligations. The Company's policy for investments in marketable securities, approved by the board of directors, establishes guidelines relating to diversification and maturities that allows the Company to manage risk.

As of December 31, 2007, the Company had cash and cash equivalents of $115.6 million consisting of cash deposited in a highly rated financial institution in the United States and in short-term money market funds. Subsequent to year-end, the Company transferred its invested funds to a short-term U.S.

(2) Summary of Significant Accounting Policies (Continued)

Treasury money market fund. The primary objective of the Company's investment activities is to preserve its capital for the purpose of funding operations and the Company does not enter into investments for trading or speculative purposes. The Company believes that it did not have material exposure to high-risk investments, such as mortgage-backed securities, auction rate securities or other special investment vehicles, or SIV's, within its money-market fund investments. The Company also believes that it does not have any material exposure to changes in fair value as a result of changes in interest rates. Declines in interest rates, however, would reduce future investment income.

Fair Value of Financial Instruments

The carrying amounts of the Company's financial instruments, which include cash equivalents, marketable securities, and capital lease obligations, approximate their fair values.

Property and Equipment

Property equipment and software is carried at cost and depreciated using the straight-line method over the estimated useful lives of the related assets, which range from three to five years. Leasehold improvements are amortized over the lesser of the lease term or estimated useful life.

Research and Development Costs

Research and development costs are expensed as incurred in accordance with SFAS No. 2, *Accounting for Research and Development Costs.* Research and development costs are comprised of costs incurred in performing research and development activities, including salaries, benefits, facilities, research-related overhead, clinical trial costs, contracted services, technology acquisition license fees, and other external costs.

Patents

Costs to secure and defend patents are expensed as incurred and are classified as general and administrative expense in the Company's consolidated statements of operations. Patent expenses were approximately $2,515,000, $1,561,000 and $1,598,000 for the years ended December 31, 2007, 2006 and 2005, respectively.

Income Taxes

The Company accounts for income taxes in accordance with SFAS No. 109, *Accounting for Income Taxes.* Deferred tax assets and liabilities are determined based on differences between financial reporting and income tax basis of assets and liabilities, as well as net operating loss carryforwards, and are measured using the enacted tax rates and laws that are expected to be in effect when the differences reverse. Deferred tax assets may be reduced by a valuation allowance to reflect the uncertainty associated with their ultimate realization.

Impairment of Long-Lived Assets

The Company accounts for the impairment and disposition of long-lived assets in accordance with SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets* (SFAS No. 144). In accordance with SFAS No. 144, management assesses the potential impairments of its long-lived assets whenever events or changes in circumstances indicate that an asset's carrying value may not be

(2) Summary of Significant Accounting Policies (Continued)

recoverable. If the carrying value exceeds the undiscounted future cash flows estimated to result from the use and eventual disposition of the asset, the Company writes down the asset to its estimated fair value. Management believes that no long-lived assets were impaired as of December 31, 2007 and 2006.

Revenue Recognition

Collaboration and License Agreements

The Company's principal sources of revenue may include up front payments, development milestone payments, reimbursements of development costs, profit sharing payments, sales milestones and royalties from its collaborations. The Company recognizes revenue from these sources in accordance with Staff Accounting Bulletin (SAB) 104, "*Revenue Recognition*", or SAB 104, Emerging Issues Task Force (EITF) No. 99-19, "*Reporting Revenue Gross as a Principal Versus Net as an Agent*", or EITF No. 99-19, and EITF No. 00-21, "*Revenue Arrangements with Multiple Deliverables*", or EITF No. 00-21. The application of EITF No. 00-21 requires subjective analysis and requires management to make estimates and assumptions about whether deliverables within multiple-element arrangements are separable from the other aspects of the contractual arrangement into separate units of accounting and to determine the fair value to be allocated to each unit of accounting.

The Company entered into the GSK Agreement with GSK in October 2007. The Company evaluated the multiple deliverables within the GSK Agreement in accordance with the provisions of EITF No. 00-21 to determine whether the delivered elements that are the obligation of the Company have value to GSK on a stand-alone basis and whether objective reliable evidence of fair value of the undelivered items exists. Deliverables that meet these criteria are considered a separate unit of accounting. Deliverables that do not meet these criteria are combined and accounted for as a single unit of accounting. The appropriate recognition of revenue is then applied to each separate unit of accounting.

The Company's deliverables under the GSK Agreement, including the related rights and obligations, contractual cash flows and performance periods, are more fully described in Note 8 and are considered a single unit of accounting.

The GSK Agreement consists of the following key funding streams: an upfront payment, product development milestone payments, reimbursements of certain development costs, sales milestone payments, profit sharing payments and product royalty payments. The cash flows associated with the single unit of accounting from the development portion of the GSK Agreement are recognized as revenue using a time-based model. Under this model, cash flow streams are recognized as revenue over the estimated performance period. Upon receipt of cash payments, revenue is recognized to the extent the accumulated service time, if any, has occurred. The remainder is deferred and recognized as revenue ratably over the remaining estimated performance period. A change in the period of time expected to complete the deliverable is accounted for as a change in estimate on a prospective basis. Revenue is limited to amounts that are nonrefundable and that GSK is contractually obligated to pay to the Company.

The $80 million non-refundable upfront payment the Company received from GSK in November 2007, together with the $260,000 fair value of an option to require GSK to purchase $25 million of the Company's common stock, is being recognized as collaboration revenue using the time-based model over the estimated performance period, the 15-year period through the earliest expiration date of the related patents, which the Company estimates to be the effective life of the GSK Agreement. The

(2) Summary of Significant Accounting Policies (Continued)

Company is also recognizing product development milestone payments and reimbursements of development costs as collaboration revenue using the time-based model over the same performance period through November 2022. Based on the guidance of EITF No. 99-19, the Company has determined that it is acting as a principal under the GSK Agreement and, as such, records these amounts as collaboration revenue. In 2007, the Company recognized $743,000 of collaboration revenue under the GSK Agreement.

Profit sharing payments are based upon a formula that provides for a range of 40-50% of net profits earned on U.S. sales of products included in the GSK Agreement. Royalty revenues are based upon a percentage of sales in non-U.S. territories. Profit sharing payments and royalties from the sales of products included in the GSK Agreement will be recorded on the accrual basis when results are reliably measurable, collectibility is reasonably assured and all other revenue recognition criteria are met. Sales milestones, which are based upon the achievement of certain agreed-upon sales thresholds, will be recorded when the respective sales threshold is achieved and collectibility is reasonably assured.

Deferred Collaboration Revenue

Consistent with the Company's policy on revenue recognition, deferred collaboration revenue represents cash received in advance for licensing fees, option fees, consulting, research and development contracts and related cost sharing and supply agreements. Such payments are reflected as deferred collaboration revenue until revenue can be recognized under the Company's revenue recognition policy. Deferred collaboration revenue is classified as current if management believes the Company will complete the earnings process and be able to recognize the deferred amount as revenue within 12 months of the balance sheet date. At December 31, 2007, total deferred collaboration revenue was approximately $79.5 million, of which $5.4 million was current and will be recognized as revenue during 2008.

Stock-Based Compensation

(i) Stock-Based Compensation under APB No. 25

Prior to January 1, 2006, the Company applied the intrinsic-value-based method of accounting prescribed by Accounting Principles Board (APB) Opinion No. 25, *Accounting for Stock Issued to Employees,* and related interpretations including Financial Accounting Standards Board (FASB) Interpretation No. 44, *Accounting for Certain Transactions involving Stock Compensation, an Interpretation of APB Opinion No. 25,* in accounting for its employee stock options. Under this method, compensation expense is generally recorded on the date of grant only if the estimated fair value of the underlying stock exceeds the exercise price. Given the absence of an active market for the Company's common stock prior to the IPO, the board of directors historically has determined the estimated fair value of common stock on the dates of grant based on several factors, including progress against regulatory, clinical and product development milestones, sales of common stock to outside investors and the likelihood of achieving a liquidity event such as an initial public offering or sale of the Company. As a result, the Company recorded deferred compensation charges for the difference between the estimated fair value of the common stock and the exercise price of options granted at the date of grant. Compensation expense is recognized over the vesting period on a straight-line basis.

SFAS No. 123, *Accounting for Stock-Based Compensation* (SFAS No. 123) and SFAS No. 148,*Accounting for Stock-Based Compensation —Transition and Disclosure, an amendment of FASB Statement*

(2) Summary of Significant Accounting Policies (Continued)

No. 123, established accounting and disclosure requirements using a fair-value-based method of accounting for stock-based employee compensation plans. As permitted by existing accounting standards, the Company elected to continue to apply the intrinsic-value-based method of accounting described above, for options granted through December 31, 2005. The following table illustrates the effect on net loss attributable to common stockholders as if the fair-value-based method had been applied to all outstanding and unvested awards for the year ended December 31, 2005, prior to the adoption of SFAS No. 123(R), *Share-Based Payment* on January 1, 2006 (in thousands, except per share amounts).

	Year ended December 31, 2005
Net loss attributable to common stockholders, as reported	$ (68,863)
Add: stock-based employee compensation expense determined under the fair value method	(4,172)
Deduct: stock-based employee compensation expense included in reported net loss	2,034
Pro forma net loss attributable to common stockholders	$ (71,001)
Basic and diluted net loss attributable to common stockholders per common share, as reported	$ (3.09)
Basic and diluted net loss attributable to common stockholders per common share, pro forma	$ (3.19)

For the years ended December 31, 2007, 2006 and 2005, the fair value of each employee stock option award was estimated on the date of grant based on the fair value method using the Black-Scholes option pricing valuation model with the following weighted average assumptions:

	Years ended December 31,		
	2007	2006	2005
Risk-free interest rate	4.6%	4.63%	3.91%
Expected life in years	6.25 years	6.25 years	5 years
Volatility	75%	75%	70%
Expected dividend yield	—	—	—
Weighted average grant-date fair value	$6.11	$9.80	$13.40

(ii) Stock Based Compensation under SFAS No. 123(R):

Effective January 1, 2006, the Company adopted SFAS No. 123(R) using the modified prospective method of transition for employee stock option awards granted after January 17, 2005 (valued using the fair value method), and using the prospective method for awards granted prior to January 17, 2005 (valued using the minimum value method). Therefore, compensation cost recognized in the years ended December 31, 2007 and 2006 includes: (a) compensation costs related to the vesting of employee stock options granted after January 17, 2005 but prior to January 1, 2006, based on the grant date fair value method estimated in accordance with the provisions of SFAS No. 123 adjusted for estimated forfeitures (b) compensation costs related to the continued vesting of nonvested restricted stock awards granted prior to January 1, 2006, and (c) compensation costs for all share-based payments granted or modified subsequent to January 1, 2006, based on the provisions of SFAS No. 123(R).

(2) Summary of Significant Accounting Policies (Continued)

Prior to the adoption of SFAS No. 123(R), the Company presented its unamortized portion of deferred compensation cost for nonvested stock options in the consolidated statement of stockholders' equity (deficit) and comprehensive loss with a corresponding credit to additional paid-in capital. Upon the adoption of SFAS No. 123(R), these amounts were offset against each other. Under SFAS No. 123(R), an equity instrument is not considered to be issued until the instrument vests. As a result, compensation costs are recognized over the requisite service period with an offsetting credit to additional paid-in capital, and the deferred compensation balance of $7,225,000 at January 1, 2006 was netted against additional paid-in capital during the first quarter of 2006.

The Company uses the Black-Scholes option pricing model as the most appropriate valuation method for its option grants. The Black-Scholes model requires inputs for risk-free interest rate, dividend yield, volatility and expected lives of the options. Since the Company has a limited history of stock activity, expected volatility is based on historical data from several public companies similar in size and value to the Company. The Company will continue to use a weighted average approach using historical volatility and other similar public entity volatility information until historical volatility of the Company is relevant to measure expected volatility for future option grants. The Company estimates the forfeiture rate based on historical data. Based on an analysis of historical forfeitures, the Company has applied a forfeiture rate of 10% to all options that vest upon completion of the first year of service following the date of grant. The analysis will be re-evaluated at least annually and the forfeiture rate will be adjusted as necessary. The risk-free rate for periods within the contractual life of the option is based on the U.S. Treasury yield curve in effect at the time of the grant. The expected lives for options granted represents the period of time that options granted are expected to be outstanding. Since January 1, 2006 the Company has used the simplified method for determining the expected lives of options.

For awards with graded vesting, the Company allocates compensation costs under SFAS No. 123(R) on a straight-line basis over the requisite service period. The Company amortized the fair value of each option over each option's service period, which is generally the vesting period.

The Company's net loss for the years ended December 31, 2007 and 2006 includes $5,417,000 and $4,791,000, respectively, of compensation costs and no income tax benefit related to the Company's stock-based compensation arrangements for employee and nonemployee awards. As of December 31, 2007, the total amount of unrecognized stock-based compensation expense is $12,649,000 and will be recognized over a weighted average period of 4.0 years.

The Company accounts for stock options issued to non-employees in accordance with the provisions of SFAS No. 123 and EITF No. 96-18, *Accounting for Equity Instruments that are Issued to Other than Employees, or in Conjunction with Selling Goods or Services*, which requires valuing and remeasuring such stock options to the current fair value until the performance date has been reached.

Certain of the Company's options granted to non-employees that are fully vested and no longer subject to a performance requirement are subject to EITF Issue No. 00-19, *Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock*, which requires the stock options held by certain non-employee consultants to be accounted for as liability awards. The fair value of these vested and unexercised awards was recognized as liability awards starting in April 2007 following the registration of stock options under Form S-8, using the Black-Scholes model. As of December 31, 2007, a liability of $1,343,000 was reflected in the consolidated balance sheet as other current liabilities. The fair value of the award is re-measured at each financial statement reporting date until the options are exercised or expire. When and if non-employee consultants exercise their Company options or the Company options expire, the corresponding liability will be reclassified to equity. As of December 31, 2007, vested stock options to acquire 312,911 shares of common stock held by non-employee consultants remained unexercised.

(2) Summary of Significant Accounting Policies (Continued)

The following table outlines the details of recognized and unrecognized expense for these stock-based compensation arrangements (in thousands):

	Stock compensation expense for the years ended		Unrecognized stock compensation expense as of December 31, 2007
	2007	2006	
Employee stock options	$ 4,045	$ 2,752	$ 9,394
Repriced employee stock options	139	407	147
Employee options issued below fair value	10	60	17
Non-employee stock options	(444)	272	75
Restricted stock	1,667	1,300	3,016
	$ 5,417	$ 4,791	$ 12,649

Stock-based compensation expense is allocated as follows (in thousands):

	Years ended December 31,		
	2007	2006	2005
Research and development	$ 3,902	$ 3,372	$ 2,397
General and administrative	1,515	1,419	778
Total	$ 5,417	$ 4,791	$ 3,175

Certain of the employee stock options granted by the Company are structured to qualify as incentive stock options (ISOs). Under current tax regulations, the Company does not receive a tax deduction for the issuance, exercise or disposition of ISOs if the employee meets certain holding requirements. If the employee does not meet the holding requirements, a disqualifying disposition occurs, at which time the Company will receive a tax deduction. The Company does not record tax benefits related to ISOs unless and until a qualifying disposition occurs. In the event of a disqualifying disposition, the entire tax benefit is recorded as a reduction of income tax expense. The Company has not recognized any income tax benefit for the share-based compensation arrangement due to the fact that the Company does not believe it is more likely than not it will recognize any deferred tax assets from such compensation cost recognized in the current period.

Comprehensive Income (Loss)

SFAS No. 130, *Reporting Comprehensive Income*, requires that all components of comprehensive income (loss) be disclosed in the consolidated financial statements. Comprehensive income (loss) is defined as the change in equity of a business enterprise during a period from transactions, and other events and circumstances from non-owner sources. Changes in unrealized gains and losses on marketable securities represents the only difference between the Company's net loss and comprehensive loss.

Segment Reporting

The Company has adopted SFAS No. 131, *Disclosure About Segments of an Enterprise and Related Information,* which requires companies to report selected information about operating segments, as well

(2) Summary of Significant Accounting Policies (Continued)

as enterprise-wide disclosures about products, services, geographical area, and major customers. Operating segments are determined based on the way management organizes its business for making operating decisions and assessing performance. The Company has only one operating segment, the discovery, development and commercialization of drug products.

Basic and Diluted Net Loss Per Common Share

Net loss per share is computed based on the guidance of SFAS No. 128, *Earnings Per Share*, requiring companies to report both basic net loss per common share, which is computed using the weighted average number of common shares outstanding during the period, and diluted net loss per common share, which is computed using the weighted average number of common shares outstanding and the weighted average dilutive potential common shares outstanding using the treasury stock method. However, for all periods presented, diluted net loss per share is the same as basic net loss per share as the inclusion of weighted average shares of unvested restricted common stock and common stock issuable upon the exercise of stock options and warrants and conversion of convertible preferred stock would be anti-dilutive.

The following table summarizes securities outstanding as of each year-end which were not included in the calculation of diluted net loss per share as their inclusion would be anti-dilutive.

	December 31		
	2007	2006	2005
Common stock options	3,880,277	3,044,343	2,948,927
Nonvested restricted common stock	157,832	291,073	415,454
Convertible preferred stock	—	2,092,931	—

The convertible preferred stock and accrued dividends had been reflected as being converted into common stock using a $20.00 per share conversion factor. In February 2007, in connection with the IPO, all outstanding shares of the convertible preferred stock and accrued dividends were converted into common stock upon the completion of the IPO (see Note 5).

Recent Accounting Pronouncements

In December 2007, the Financial Accounting Standards Board or FSAB, issued SFAS No. 141R, *Business Combinations,* or SFAS No. 141R. The pronouncement establishes principles and requirements for how an acquirer recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed, any noncontrolling interest in the acquiree and the goodwill acquired. The pronouncement also establishes disclosure requirements to enable the evaluation of the nature and financial effects of the business combination. SFAS No. 141R is effective for fiscal years beginning after December 15, 2008. The Company is currently evaluating SFAS No. 141R and the impact it may have on its results of operations or financial position.

In December 2007, the FASB issued SFAS No. 160, *Noncontrolling Interests in Consolidated Financial Statements—an Amendment of ARB No. 51,* or SFAS No. 160. The pronouncement establishes accounting and reporting standards pertaining to ownership interests in subsidiaries held by parties other than the parent, the amount of net income attributable to the parent and to the noncontrolling interest, changes in a parent's ownership interest, and the valuation of any retained noncontrolling

(2) Summary of Significant Accounting Policies (Continued)

equity investment when a subsidiary is deconsolidated. The pronouncement also establishes disclosure requirements that identify and distinguish between the interests of the parent and the interests of the noncontrolling owners. SFAS No. 160 is effective for fiscal years beginning on or after December 15, 2008. The Company is currently evaluating SFAS No. 160 and the impact it may have on its results of operations or financial position.

In June 2007, the EITF issued EITF No. 07-03, *Accounting for Nonrefundable Advance Payments for Goods or Services to Be Used in Future Research and Development Activities,* or EITF No. 07-03, which provides guidance for upfront payments related to goods and services of research and development activities. EITF No. 07-03 is effective for fiscal years beginning after December 15, 2007. The Company does not believe the adoption of EITF No. 07-03 will have a material impact on its overall financial position or results of operations.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities*, or SFAS No. 159, including an amendment of SFAS No. 115, which permits entities to choose to measure many financial instruments and certain other items at fair value that are not currently required to be measured at fair value. SFAS No. 159 is effective for the Company beginning in 2008. The Company does not believe the adoption of SFAS No. 159 will have a material impact on its overall financial position or results of operations.

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements*, or SFAS No. 157, which provides guidance for using fair value to measure assets and liabilities. The pronouncement clarifies (1) the extent to which companies measure assets and liabilities at fair value; (2) the information used to measure fair value; and (3) the effect that fair value measurements have on earnings. SFAS No. 157 will apply whenever another standard requires (or permits) assets or liabilities to be measured at fair value. SFAS No. 157 will be applicable to us for fiscal years beginning after November 15, 2007. In February 2008, the FASB issued SFAS No. 157-1 and No. 157-2 which delay the effective date of SFAS No. 157 for one year for certain non-financial assets and liabilities and removes certain leasing transactions from its scope. The Company does not believe the adoption of SFAS No. 157 will have a material impact on its overall financial position or results of operations.

In July 2006, the FASB issued FASB Interpretation No. 48, *Accounting for Uncertainty in Income Taxes—an interpretation of FAS 109*, or Interpretation No. 48. This interpretation clarifies the accounting for uncertainty in income taxes recognized in a company's financial statements in accordance with FASB Statement No. 109, *Accounting for Income Taxes.* This interpretation prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken in a tax return. It also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. Interpretation No. 48 is effective for fiscal years beginning after December 15, 2006. The Company adopted this Interpretation No. 48 effective January 1, 2007 and its adoption had no impact on its consolidated results of operations and financial position.

(3) Cash, Cash Equivalents and Marketable Securities

A summary of cash and cash equivalents and available-for-sale marketable securities held by the Company as of December 31, 2007 and 2006 is as follows:

	December 31, 2007			
	Cost	Unrealized gains	Unrealized losses	Fair value
	(in thousands)			
Cash and cash equivalents:				
Cash and money market funds	$ 115,577	—	—	$ 115,577
Marketable securities:				
Corporate bonds:				
Due within 1 year	—	—	—	—
Total cash, cash equivalents and marketable securities	$ 115,577	$ —	$ —	$ 115,577

	December 31, 2006			
	Cost	Unrealized gains	Unrealized losses	Fair value
	(in thousands)			
Cash and cash equivalents:				
Cash and money market funds	$ 33,687	$ —	$ —	$ 33,687
Marketable securities:				
Corporate bonds:				
Due within 1 year	13,135	2	—	13,137
Total cash, cash equivalents and marketable securities	$ 46,822	$ 2	$ —	$ 46,824

(4) Property and Equipment

Property and equipment consist of the following at December 31:

	2007	2006
	(in thousands)	
Laboratory equipment	$ 10,110	$ 8,352
Leasehold improvements	4,238	3,854
Computers and software	1,961	1,414
Furniture and fixtures	791	677
	17,100	14,297
Less accumulated depreciation and amortization	(11,524)	(8,230)
	$ 5,576	$ 6,067

Depreciation and amortization expenses of property and equipment were approximately $3,351,000, $3,655,000 and $2,455,000 for the years ended December 31, 2007, 2006 and 2005, respectively. The net book value and accumulated depreciation of equipment under capital lease was $4,155,000 and $5,254,000 and $4,050,000 and $3,020,000, at December 31, 2007, and 2006, respectively.

(5) Stockholders' Equity

Capital Stock—Authorized Shares

In June 2006, the Company's stockholders approved an increase in the number of authorized shares of common stock from 150,000,000 shares to 158,000,000 shares and 8,000,000 shares of preferred stock all of which were designated as shares of Series A Convertible Preferred Stock, each share having a $0.0001 par value.

Each common stockholder is entitled to one vote for each share of stock held. The common stock will vote together with all other classes and series of stock of the Company as a single class on all actions to be taken by the Company's stockholders. Each share of common stock is entitled to receive dividends, as and when declared by the Company's board of directors.

The Company has never declared cash dividends on its common stock and does not expect to do so in the foreseeable future.

Reverse Stock Split

In January 2007, the Board of Directors and the stockholders of the Company approved (i) a 1-for-4 reverse stock split, which was effected on February 2, 2007, subject to a reduction for fractional shares that were paid for in cash, (ii) an adjustment of the authorized common shares to 100,000,000 and the authorized preferred shares to 5,000,000, which became effective upon the completion of the IPO, and (iii) an adjustment in the number of common shares reserved under the 2006 Stock Plan to 2,500,000. All share data shown in the accompanying consolidated financial statements has been retroactively restated to reflect the reverse split. The reverse stock split did not alter the par value of the common stock and the preferred stock, which is $0.0001 per share, or modify any voting rights or other terms of the common stock.

Initial Public Offering

In February 2007, the Company raised $50.0 million in gross proceeds from the sale of 5,000,000 shares of its common stock in the IPO at $10.00 per share. The net offering proceeds after deducting approximately $5.3 million in expenses for underwriters' discounts, fees and commissions, legal, accounting, printing, listing and filing fees, and miscellaneous expenses were approximately $44.7 million. As of December 31, 2006, the Company had incurred approximately $1.0 million in deferred IPO costs related to this offering, which were paid in 2007.

Convertible Preferred Stock

In June 2006, the Company sold 8,000,000 shares of its Series A Convertible Preferred Stock (the Preferred Stock) at a price of $5.00 per share resulting in gross proceeds of $40 million. The Preferred Stock accrued a cumulative annual dividend of 8% of its purchase price, and was automatically convertible into shares of the Company's common stock upon completion of an IPO. The number of shares of common stock into which each share of Preferred Stock was convertible was determined by dividing the Preferred Stock purchase price plus all accrued dividends by the lesser of $20.00 or 66.6667% of the offering price to the public of the IPO.

In February 2007, all outstanding shares of the Preferred Stock and $1.9 million in accumulated dividends on the Preferred Stock were converted into 6,278,765 shares of common stock upon the completion of the IPO.

(5) Stockholders' Equity (Continued)

In accordance with EITF No. 98-5, *Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustable Conversion Ratios,* and EITF No. 00-27, *Application of Issue No. 98-5 to Certain Convertible Instruments,* the Company recorded a non-cash beneficial conversion charge of approximately $58.6 million in February 2007 in connection with the contingent adjustable conversion feature of the Preferred Stock.

Issuance of Restricted Stock

During 2005 and 2004, the Company sold and issued 87,500 and 365,000 restricted shares of common stock, respectively, to its officers and certain employees at par value, of which 5,000, 127,500 and 40,000 of these restricted shares were forfeited in 2007, 2006 and 2005, respectively. Holders of 260,000 of the restricted shares employed by the Company in January 2007 became vested in 50% of the restricted stock. The remaining 50% vests upon the earlier of January 2009 or the approval of the Company's first new drug application (NDA) by the FDA. Holders of 25,000 shares of the restricted shares employed by the Company in January 2008 became vested in 50% of the restricted stock. The remaining 50% vests upon the earlier of January 2010 or the approval of the Company's first NDA by the FDA. During 2007, 2006 and 2005, the Company sold and issued 15,661, 12,142 and 9,089 shares of restricted stock, respectively, at par value to certain members of its Board of Directors in connection with their annual director fees. These restricted shares vest over the service periods. Compensation expense recognized for restricted shares was approximately $1,667,000, $1,300,000 and $1,916,000 in the years ended December 31, 2007, 2006 and 2005, respectively. The remaining unrecognized compensation expense on restricted stock at December 31, 2007 was $3,016,000. The weighted average period over which the balance is expected to be recognized is 1.1 years.

(6) Stock Option Plans

In March 2006, the Company terminated the 2001 Stock Plan and adopted the Synta Pharmaceuticals Corp. 2006 Stock Plan (the 2006 Stock Plan). The 2006 Stock Plan provides for the grant of incentive stock options, nonstatutory stock options and nonvested stock to employees, officers, directors and consultants to the Company. As of December 31, 2007, a total of 2,500,000 shares of common stock had been reserved for issuance under the 2006 Stock Plan. In February 2008, the board of directors increased the number of shares of common stock reserved for issuance to 3,800,000 under an "evergreen" provision, which provides for an annual increase based on the lesser of 1,300,000 shares, 5% of the Company's then outstanding shares of common stock, or such other amount as the board of directors may determine. The administration of the 2006 Stock Plan is under the general supervision of the board of directors. The exercise price of the stock options is determined by the board of directors, provided that incentive stock options are granted at not less than fair market value of the common stock on the date of grant and expire no later than ten years from the date the option is granted. Options generally vest over four years.

As of December 31, 2007, the Company had options outstanding to purchase 2,742,576 shares of its common stock, had outstanding 150,000 restricted shares of common stock and had no shares available for future issuance under the 2001 Stock Plan.

As of December 31, 2007, the Company had options outstanding to purchase 1,062,701 shares of its common stock, had outstanding 7,832 restricted shares of common stock and had available 1,409,496 shares available for future issuance under the 2006 Stock Plan.

(6) Stock Option Plans (Continued)

As of December 31, 2007, the Company had options outstanding to purchase 75,000 shares of its common stock that were granted outside of the 2001 Stock Plan and 2006 Stock Plan.

In February 2006, the Company's board of directors authorized the amendment of 933,075 stock options outstanding as of March 1, 2006 for active employees, board of directors and consultants under the 2001 Stock Option Plan having an exercise price of $16.00 and above to provide for such options to have an amended exercise price equal to the then fair value of $14.00 per share. The amendment affected 159 option holders, of which 150 were employees. The amendment was accounted for in the same manner as the cancellation of existing options and the grant of new options. The Company recognized compensation expense, in the amount of approximately $269,000, to reflect the incremental compensation for vested options in connection with the re-pricing and, $139,000 and $138,000, respectively, of additional compensation in the years ended December 31, 2007 and 2006, respectively, to reflect the amortization of the incremental compensation for the unvested options. As of December 31, 2007, the total amount of unrecognized additional stock-based compensation expense in connection with the amended shares is $147,000 and will be recognized over a weighted average period of 2.1 years.

Non-Vested ("Restricted") Stock Awards With Service Conditions

The Company's share-based compensation plan provides for awards of restricted shares of common stock to officers, other employees and non-employee directors. Restricted stock awards are subject to forfeiture if employment terminates during the prescribed retention period (see Note 5).

General Option Information

The following table summarizes stock option activity during the years ended December 31, 2007, 2006 and 2005:

	2007			2006			2005		
	Options available for grant	Shares	Weighted average exercise price of shares under plan	Options available for grant	Shares	Weighted average exercise price of shares under plan	Options available for grant	Shares	Weighted average exercise price of shares under plan
Outstanding at January 1	2,326,358	3,044,343	$ 11.89	382,992	2,948,927	$ 13.92	876,402	2,512,106	$ 11.80
Granted	(1,098,259)	1,082,598	8.82	(763,126)	750,984	14.00	(801,160)	704,571	22.00
Exercised	—	(51,500)	2.64	—	(125)	16.00	—	—	—
Cancelled(1)	87,647	(195,164)	11.57	300,242	(655,443)	15.84	307,750	(267,750)	15.32
Additional shares reserved(2)	93,750	—	—	2,406,250	—	—	—	—	—
Outstanding at December 31	1,409,496	3,880,277	$ 11.21	2,326,358	3,044,343	$ 11.88	382,992	2,948,927	$ 13.92
Exercisable at December 31		2,467,882	$ 11.66		2,011,393	$ 10.88		1,747,635	$ 10.80

(1) In March 2006, the Company terminated the 2001 Stock Plan and cancelled the then 93,472 shares reserved for future issuance.

Options cancelled subsequent to the March 2006 termination of the 2001 Stock Plan do not return to the pool of options available for future issuance.

Includes the effect of stock option cancellations for the period prior to termination of the 2001 Stock Plan of 277,593 shares.

Includes the effect of non-vested restricted stock cancellations for the period prior to termination of the 2001 Stock Plan of 112,500 shares.

(6) Stock Option Plans (Continued)

Includes the effect of stock option cancellations under the 2006 Stock Plan of 2,375 shares.

(2) In March 2006, the Company adopted the 2006 Stock Plan and authorized 2,406,250 shares for future issuance. In January 2007, the Company authorized the increase in shares reserved for future issuance from 2,406,250 to 2,500,000.

Included in the Company's stock options outstanding at December 31, 2007 are 332,180 options issued to non-employee consultants with a weighted average exercise price of $9.16 of which 312,911 are vested. The compensation expense is recorded over the respective vesting periods and is subject to variable accounting treatment prior to vesting, whereby the Company remeasures the fair value of the options at the end of each reporting period. Changes in the fair value may result in an expense or a credit in each reporting period. Compensation expense related to these options was approximately $(444,000), $272,000 and $1,142,000 for the years ended December 31, 2007, 2006 and 2005, respectively.

The following table summarizes information about outstanding and exercisable stock options at December 31, 2007:

	Options Outstanding				Options Exercisable			
Exercise price	Number outstanding	Weighted average remaining contractual life (years)	Weighted average exercise price per share	Aggregate intrinsic value	Number exercisable	Weighted average remaining contractual life	Weighted average exercise price per share	Aggregate intrinsic value
$ 2.00	116,012	3.89	$ 2.00	$ 545,256	116,012	3.89	$ 2.00	$ 545,256
6.07-8.88	796,902	9.26	8.54	—	—	—	—	—
10.00-10.84	1,598,593	5.56	10.83	—	1,425,493	5.13	10.93	—
14.00	1,368,770	7.34	14.00	—	926,377	7.07	14.00	—
	3,880,277	6.90	$ 11.21	$ 545,256	2,467,882	5.80	$ 11.66	$ 545,256

In April 2006, stock options to purchase 125 shares of the Company's common stock were exercised, resulting in proceeds of $2,000.

Between January 2007 through October 2007, stock options to purchase 51,500 shares of the Company's common stock were exercised, resulting in proceeds of $136,000, and having an intrinsic value of approximately $366,000 based on the closing price of the Company's common stock on the dates of these stock option exercises.

(6) Stock Option Plans (Continued)

General Restricted Shares Information

The following table summarizes restricted stock activity during the years ended December 31, 2007, 2006 and 2005:

	2007		2006		2005	
	Shares	Weighted average grant date fair value	Shares	Weighted average grant date fair value	Shares	Weighted average grant date fair value
Outstanding at January 1	291,073	$ 21.15	415,454	$ 20.31	365,000	$ 22.00
Granted	15,661	8.30	12,142	14.00	96,589	14.76
Vested	(143,902)	20.92	(9,023)	14.00	(6,135)	22.00
Cancelled	(5,000)	22.00	(127,500)	18.08	(40,000)	22.00
Outstanding at December 31	157,832	$ 20.05	291,073	$ 21.15	415,454	$ 20.31

In January 2007, the Company repurchased 29,046 shares of its previously restricted common stock from certain officers and non-officer employees in order to fund the minimum statutory tax withholding requirements related to the vesting of 80,000 shares of restricted common stock. In June 2007, these treasury shares were retired.

(7) Accrued Expenses

Accrued expenses consist of the following at December 31:

	2007	2006
	(in thousands)	
Contracted research costs	$ 3,517	$ 3,052
Compensation and benefits	3,165	1,196
Professional fees	1,721	1,451
Other	781	428
	$ 9,184	$ 6,127

(8) Collaborative Development, Commercialization and License Agreement

In October 2007, the Company and GSK entered into the GSK Agreement for elesclomol. Under the terms of the agreement, the companies will jointly develop and commercialize elesclomol in the United States, and GSK will have exclusive responsibility for the development and commercialization of elesclomol outside the United States. Pursuant to the agreement, the Company received a non-refundable upfront cash payment of $80 million in November 2007. The Company is also eligible to receive potential pre-commercial milestone payments from GSK of up to $585 million, which include both payments for operational progress, such as trial initiation and enrollment, and payments for positive clinical and regulatory outcomes, such as regulatory approval. Of the $585 million in potential payments, $135 million are related to the development in metastatic melanoma and $450 million are related to the development of elesclomol in other cancer indications. In addition, the Company is eligible to receive up to $300 million in potential commercial milestone payments from GSK based on

(8) Collaborative Development, Commercialization and License Agreement (Continued)

achieving certain net sales thresholds. The Company will take the lead role and fund, up to a specified amount, all activities related to seeking FDA approval of elesclomol for the treatment of metastatic melanoma. The Company will also fund early clinical development of elesclomol in two other cancer indications. All other worldwide development costs will be shared, with the Company responsible for a modest proportion of those costs. In the United States, the Company's share of the operating profits and losses from the commercialization and sales of elesclomol will be 40-50%, with the percentage increasing as the level of annual sales increases. The Company may elect not to participate in co-commercialization, in which case the Company would earn royalties in lieu of profit sharing. Outside of the United States, the Company will receive double-digit tiered royalties. Under the GSK Agreement, GSK may, subject to the agreement of the Company, purchase up to $45 million of the Company's common stock in two separate tranches upon the achievement of specified development and regulatory milestones. In the first tranche, GSK would be obligated to buy $25 million of the Company's common stock at the sole discretion of the Company. The Company attributed $260,000 of value to this option to require GSK to purchase our common stock. The second tranche of $20 million of common stock would be subject to the agreement of both the Company and GSK. The per share purchase price under each tranche would be at a specified premium. GSK may terminate the agreement upon not less than three months' written notice at any time prior to the date of the first commercial sale of an elesclomol product and upon not less than six months' written notice at any time on and after such date, in which case GSK may be obligated in certain circumstances to make additional payments to the Company. Under the GSK Agreement, the Company has the right, but not the obligation to participate in various joint governance committees. The agreement was subject to the Hart-Scott-Rodino Act and has received clearance by the U.S. government (see Note 2).

(9) Income Taxes

Differences between the actual tax benefit and tax benefit computed using the United States federal income tax rate is as follows:

	Years ended December 31		
	2007	2006	2005
	(in thousands)		
Income tax benefit at statutory rate	$ (21,588)	$ (19,472)	$ (23,414)
Stock-based compensation	716	579	—
Tax credits	(1,647)	(1,743)	(2,232)
Other	42	40	33
Change in valuation allowance	22,477	20,596	25,613
Income tax benefit	$ —	$ —	$ —

(9) Income Taxes (Continued)

The effects of temporary differences that give rise to significant portions of deferred tax assets and deferred tax liabilities at December 31, are presented below:

	2007	2006
	(in thousands)	
Deferred tax assets:		
Federal and state net operating loss carryforwards	$ 103,359	$ 80,157
Federal and state research and experimentation credits	9,886	8,310
Licenses	601	663
Depreciation and amortization	1,851	1,867
Deferred compensation	4,943	3,609
Other	936	743
Deferred tax assets	121,576	95,349
Less valuation allowance	(121,576)	(95,349)
Net deferred tax assets	$ —	$ —

The valuation allowance for deferred tax assets was approximately $121,576,000 and $95,349,000 as of December 31, 2007 and 2006, respectively. The increase in the total valuation allowance for the years ended December 31, 2007 and 2006 was approximately $26,227,000 and $24,345,000, respectively. The Company has established valuation allowances against its deferred tax assets because management believes that, after considering all of the available objective evidence, both historical and perspective, the realization of the deferred tax assets does not meet the "more likely than not" criteria under SFAS No. 109.

In 2005 and February 2007, the Company performed analyses to determine if there were changes in ownership, as defined by Section 382 of the Internal Revenue Code, that would limit its ability to utilize certain net operating loss and tax credit carryforwards. The Company determined that it experienced an ownership change, as defined by Section 382, in connection with its acquisition of Principia Associates, Inc. on September 20, 2002, but did not experience a change in ownership upon the effectiveness of the Company's IPO. As a result, the utilization of the Company's federal tax net operating loss carryforwards generated prior to the ownership change is limited. As of December 31, 2007, the Company has net operating loss carryforwards for U.S. federal tax purposes of approximately $259,076,000, after taking into consideration net operating losses expected to expire unused as a result of Section 382 limitations, and the remainder will expire in varying amounts through 2027 unless utilized. At December 31, 2007, the Company has state net operating loss carryforwards of approximately $243,596,000, which will expire through 2011 unless utilized. The utilization of these net operating loss carryforwards may be further limited if the Company experiences future ownership changes as defined in Section 382 of the Internal Revenue Code. At December 31, 2007, the Company had approximately $8,117,000 and $2,681,000, respectively, in federal and state research and development credits which expire through 2027 and 2022, respectively.

The Company is currently open to examination under the statute of limitations by the Internal Revenue Service and state jurisdictions for the tax years ended 2000 through 2006. Carryforward tax attributes generated in years past may still be adjusted upon future examination if they have or will be used in a future period. The Company is currently not under examination by the Internal Revenue Service or any other jurisdictions for any tax years. The Company adopted the provisions of FIN 48 in

(9) Income Taxes (Continued)

the first quarter of 2007. The Company has not recorded any interest and penalties on any unrecognized tax benefits since its inception.

(10) Commitments and Contingencies

Leases

The Company leases its research and office facilities under non-cancelable operating leases with terms expiring through 2011. Each of these leases contains renewal options ranging from one to five years.

In September 2007, the Company renewed a lease for one of its research and office facilities for an eighteen-month term with a fourteen-month renewal option.

In November 2007, the Company renewed a lease for one of its research and office facilities for a four-year term and two three-year renewal options.

The Company subleased laboratory and office space from its scientific founder, who is a major shareholder of the Company, under a tenant-at-will arrangement. This lease was assumed by the Company in May 2005. In January 2007, the Company entered into an early termination agreement for this research and office facility under which the Company was obligated to pay the landlord $68,000 for termination fees and expenses.

In November 2004, the Company entered into an agreement for a revolving property and equipment lease line of credit which was amended in 2005. Under the amended agreement, the Company may periodically directly lease, or sell and lease-back, up to $6.0 million of property and equipment, with payment periods of 36 or 48 months and a $1.00 purchase option at the end of each lease period. The lease rates are based upon a fixed base interest rate plus the respective prevailing 36- or 48-month U.S. Treasury Bill interest rates at the time of each funding. The leases are accounted for as capital leases. In June 2007, the agreement was extended through June 2008. As of December 31, 2007, the Company sold and leased back under this agreement an aggregate of approximately $9.5 million of its previously purchased property and equipment, of which approximately $3.1 million and $6.4 million were capitalized and are being paid over 36 and 48 months, respectively. As a result, the Company recorded net deferred gains of approximately $316,000, which is being amortized over the applicable lease periods, and as of December 31, 2007 approximately $65,000 in net deferred gains was unamortized. As of December 31, 2007, approximately $1.4 million was available under this lease line for future property and equipment expenditures. The Company also leases certain vehicles and equipment under various other non-cancellable capital and operating leases.

(10) Commitments and Contingencies (Continued)

Future minimum payments, excluding operating costs and taxes, under the Company's capital and non-cancellable operating leases, are approximately as follows (in thousands):

	Capital leases	Operating leases
Years ended December 31,		
2008	$ 2,828	$ 1,987
2009	1,939	1,836
2010	853	1,480
2011	311	1,351
2012	—	—
Total minimum lease payments	5,931	$ 6,654
Less: amount representing interest	(710)	
Present value of minimum capital lease payments	5,221	
Less current portions of capital lease obligations	(2,406)	
Capital lease obligations—long term	$ 2,815	

Rent expense was approximately $2,307,000, $1,914,000 and $2,217,000, for the years ended December 31, 2007, 2006 and 2005, respectively, including rent paid for the lease from its scientific founder in the amount of approximately $96,000 in 2005.

License Agreements

Queen's Medical Center

In March 2003, the Company entered into an exclusive, royalty-bearing license agreement with Queen's Medical Center (QMC) for certain technology related to ion channel technologies. Under the terms of the agreement, if certain milestones are met, the Company is obligated to make cash payments of up to an aggregate of $1.0 million. If commercialization is achieved, the Company will be required to pay royalties to QMC on the net sales of any product using the licensed technologies. In the event the Company grants a sublicense of the licensed technology, the Company is obligated to compensate QMC a percentage of all fees received from the sublicense.

Through December 31, 2007, no milestone, royalty, or sublicense payments had been earned by or paid to QMC.

Beth Israel Deaconess Medical Center

The Company acquired two exclusive licenses from Beth Israel Deaconess Medical Center (Beth Israel) relating primarily to monoclonal antibodies and ion channel technologies. Under the terms of the licenses, if certain milestones are met, the Company is required to make cash payments up to an aggregate of $2.0 million. If commercialization is achieved, the Company will be required to pay royalties on the net sales of any product using the licensed technologies. In the event the Company grants a sublicense of the licensed technologies, the Company is obligated to compensate Beth Israel a percentage of all fees received from the sublicense.

The Company also assumed an exclusive license with Beth Israel to specific know-how relating to certain calcium channels. Under the terms of the agreement, if certain milestones are met, the

(10) Commitments and Contingencies (Continued)

Company is required to make cash payments up to an aggregate of $800,000. If commercialization is achieved, the Company will be required to pay royalties on the net sales of any product using the licensed know-how.

Through December 31, 2007, no milestone, royalty or sublicense payments had been earned by or paid to Beth Israel.

Dana-Farber Cancer Institute

In July 2002, the Company entered into an exclusive license agreement with Dana-Farber Cancer Institute (DFCI) for certain patent rights relating to the use of immune system modulators with other agents for use against cancer. Under the terms of the agreement, if certain milestones are met, the Company is required to make cash payments up to an aggregate of $600,000. If commercialization is achieved, the Company will be required to pay nominal royalties on the net sales of any product using the licensed technologies.

Through December 31, 2007, no milestone, royalty or sublicense payments had been earned by or paid to DFCI.

Consulting Agreements

In October 2002, the Company entered into a consulting agreement with an SAB member for scientific advisory services which was amended in October 2003. Under the amended consulting agreement, the term was four years from the effective date of the amendment, and in exchange for a one-time payment of $400,000, the parties agreed to eliminate a one-time bonus payment to the SAB member based on the achievement of a certain performance milestone that was included in the original agreement. In addition to an annual consulting fee, the consultant was entitled to a bonus payment of a portion of any up-front or milestone payments received by the Company related to certain calcium channel technology during the four-year term of the amended agreement. In April 2007, the Company further amended this consulting agreement for a two-year term from the effective date of the amendment. In addition to the annual consulting fee, the consultant is entitled to potential bonus payments upon the Company entering into a partnership for certain calcium channel technology and upon the filing of an investigational new drug application (IND) with the FDA for a drug candidate developed under such a partnership.

Guarantees

As permitted under Delaware law, the Company's Certificate of Incorporation and Bylaws provide that the Company will indemnify certain of its officers and directors for certain claims asserted against them in connection with their service as an officer or director. The maximum potential amount of future payments that the Company could be required to make under these indemnification provisions is unlimited. However, the Company has purchased a directors' and officers' liability insurance policy that reduces its monetary exposure and enables it to recover a portion of any future amounts paid. The Company believes the estimated fair value of these indemnification arrangements is minimal.

The Company customarily agrees in the ordinary course of its business to indemnification provisions in agreements with clinical trials investigators in its drug development programs, in sponsored research agreements with academic and not-for-profit institutions, in various comparable

(10) Commitments and Contingencies (Continued)

agreements involving parties performing services for the Company in the ordinary course of business, and in its real estate leases. The Company has agreed to indemnify GSK and its affiliates under the GSK Agreement against losses incurred or imposed as a direct result of claims arising out of the manufacture, use or sale by the Company of any product, except with respect to claims or losses that result from a breach of the GSK Agreement by, or the gross negligence or willful misconduct of, GSK. The Company also expects to agree to certain indemnification provisions in any future drug discovery and development collaboration agreements. With respect to the Company's clinical trials and sponsored research agreements, these indemnification provisions typically apply to any claim asserted against the investigator or the investigator's institution relating to personal injury or property damage, violations of law or certain breaches of the Company's contractual obligations arising out of the research or clinical testing of the Company's compounds or drug candidates. With respect to lease agreements, the indemnification provisions typically apply to claims asserted against the landlord relating to personal injury or property damage caused by the Company, to violations of law by the Company or to certain breaches of the Company's contractual obligations. The indemnification provisions appearing in collaboration agreements are similar, but in addition provide some limited indemnification for its collaborator in the event of third-party claims alleging infringement of intellectual property rights. In each of the cases above, the term of these indemnification provisions generally survives the termination of the agreement, although the provision has the most relevance during the contract term and for a short period of time thereafter. The maximum potential amount of future payments that the Company could be required to make under these provisions is generally unlimited. The Company purchased insurance policies covering personal injury, property damage and general liability that reduce its exposure for indemnification and would enable it in many cases to recover a portion of any future amounts paid. The Company has never paid any material amounts to defend lawsuits or settle claims related to these indemnification provisions. Accordingly, the Company believes the estimated fair value of these indemnification arrangements is minimal.

(11) Related Party Transactions

In January 2005, the Company entered into an Agreement and Release with its scientific founder, who is a board member, whereby all outstanding matters regarding various oral understandings and arrangements between the scientific founder and the Company were resolved, including arrangements relating to (1) the assignment by the scientific founder of the benefit of his interests, if any, resulting from the Company's acquisition of the net assets of Cancer Genomics, Inc., Kava Pharmaceuticals, Inc. and SinglePixel Biomedical, Inc. (collectively, CKS), (2) the scientific founder's assignment of inventions, non-competition, non-solicitation and confidentiality agreements with the Company, and (3) a release by the scientific founder of any and all claims that the scientific founder may have had against the Company. Pursuant to this agreement, the Company is paying the scientific founder $500,000, payable in $25,000 installments quarterly for five years. The full amount of the obligation was charged to research and development expense in 2005.

The Company paid its scientific founder and a member of the board consulting fees of approximately $25,000 per month in January and February 2007 pursuant to a consulting agreement dated April 18, 2005. In March 2007, the Company amended the consulting agreement to reduce the fee from $25,000 to $10,000 per month. Total consulting fees paid in 2007, 2006 and 2005 were approximately $150,000, $300,000 and $300,000, respectively.

(12) Retirement Plan

In 2003, the Company implemented a 401(k) retirement plan (the Synta 401(k) Plan) in which substantially all of its permanent employees are eligible to participate. Participants may contribute a percentage of their annual compensation to the plan, subject to statutory limitations. The Company may declare discretionary matching contributions to the Synta 401(k) Plan.

In April 2006, the Company began matching participants' contributions up to 50% of the first 6% of the employee's salary. The match is subject to a three-year equally graded vesting schedule and any forfeitures will be applied to reduce the Company's contributions. Company contributions for the years ended December 31, 2007 and 2006 were approximately $411,000 and$236,000, respectively, subject to forfeitures.

(13) Research Grant Contracts

In 2003, the Company was awarded a $500,000 government contract with DARPA to perform research services associated with performance enhancement. Through December 31, 2006, the Company had recognized approximately $43,000 of research grant revenue for services performed under the terms of the contract, which expired in September 2004, and had recorded deferred revenue of approximately $457,000, which represented advance payments received under this contract. The advance payments were deposited in a separate non-interest-bearing account and were recorded as restricted cash as of December 31, 2006. In 2007, the Company returned the unused funds to DARPA.

(14) Initial Public Offering Costs

During 2005 and 2004, the Company incurred $2,389,000 of costs in connection with its planned initial public offering of common stock, of which $1,084,000 was deferred at December 31, 2004. Following the Company's filing of its Registration Statement on Form S-1 with the Securities and Exchange Commission in 2005, the Company determined that it would not complete the planned offering and withdrew its filing. The Company did not reactivate and complete its offering within 90 days of the withdrawal of the filing and, accordingly, these costs were expensed in 2005.

(15) Quarterly Financial Data (unaudited)

The following tables present a summary of quarterly results of operations for 2007 and 2006:

	Three Months Ended			
	March 31, 2007	June 30, 2007	September 30, 2007	December 31, 2007
	(in thousands, except per share data)			
Net loss attributable to common stockholders	$ (74,940)	$ (16,741)	$ (14,875)	$ (15,524)
Basic and diluted net loss attributable to common stockholders per share	$ (2.61)	$ (0.50)	$ (0.44)	$ (0.46)
Basic and diluted weighted average number of common shares outstanding	28,767,605	33,658,536	33,661,613	33,708,862

	Three Months Ended			
	March 31, 2006	June 30, 2006	September 30, 2006	December 31, 2006
	(in thousands, except per share data)			
Net loss attributable to common stockholders	$ (16,211)	$ (14,891)	$ (14,733)	$ (13,294)
Basic and diluted net loss attributable to common stockholders per share	$ (0.73)	$ (0.67)	$ (0.66)	$ (0.60)
Basic and diluted weighted average number of common shares outstanding	22,219,025	22,224,772	22,226,964	22,230,033

QuickLinks

Exhibit 10.4

NON-QUALIFIED STOCK OPTION AGREEMENT NO. 2006-03

75,000 SHARES OF COMMON STOCK, $.0001 PAR VALUE PER SHARE

SYNTA PHARMACEUTICALS CORP.

February 27, 2008

As of February 27, 2008 (the "Grant Date"), Synta Pharmaceuticals Corp. (the "Company"), a Delaware corporation, grants to Keith R. Gollust (the "Non-Employee Director") the right and option (the "Option") to purchase up to 75,000 shares of the Common Stock, $.0001 par value per share, of the Company (the "Shares") at a purchase price of $10.843 per share (the "Purchase Price") and on the terms and subject to the conditions set forth in the Company's 2006 Stock Plan (the "Plan"), United States securities and tax laws and this Agreement.

This Agreement, which includes the terms and conditions attached hereto, does not set forth all of the terms and conditions of the Plan, which is hereby incorporated into and made a part of this Agreement by reference. Any terms used and not defined herein have the same meanings as in the Plan. The Non-Employee Director acknowledges that he or she has received a copy of the Plan from the Company and has carefully read the terms and conditions of the Plan and the attached terms and conditions which make up a part of this Agreement.

SYNTA PHARMACEUTICALS CORP.

By: /s/ SAFI BAHCALL
Safi Bahcall
President and CEO

1. GRANT OF OPTION.

The Company hereby grants to the Non-Employee Director, as of the Grant Date, the right and option to purchase all or any part of the aggregate number of Shares set forth on the signed cover page of this Agreement, on the terms and conditions and subject to all the limitations set forth herein, under United States securities and tax laws, and in the Plan, which is incorporated herein by reference. The Non-Employee Director acknowledges receipt of a copy of the Plan.

2. PURCHASE PRICE.

The purchase price of the Shares covered by the Option shall be the Purchase Price set forth on the cover page of this Agreement, subject to adjustment, as provided in the Plan, in the event of a stock split, reverse stock split or other events affecting the holders of Shares. Payment shall be made in accordance with Section 9 of the Plan.

3. EXERCISABILITY OF OPTION.

The Option granted hereby is fully vested as of the Grant Date.

4. TERM OF OPTION.

The Option shall terminate on May 27, 2014, but shall be subject to earlier termination as provided in Section 23 and Section 24 of the Plan.

5. METHOD OF EXERCISING OPTION.

Subject to the terms and conditions of this Agreement, the Option may be exercised by written notice to the Company or its designee, in substantially the form of Exhibit A attached hereto. Such notice shall state the number of Shares with respect to which the Option is being exercised and shall be signed by the person exercising the Option. Payment of the purchase price for such Shares shall be made in accordance with Section 9 of the Plan. The Company shall deliver such Shares as soon as practicable after the notice shall be received, provided, however, that the Company may delay issuance of such Shares until completion of any action or obtaining of any consent, which the Company deems necessary under any applicable law (including, without limitation, state securities or "blue sky" laws). The Shares as to which the Option shall have been so exercised shall be registered in the Company's share register in the name of the person so exercising the Option (or, if the Option shall be exercised by the Non-Employee Director and if the Non-Employee Director shall so request in the notice exercising the Option, shall be registered in the Company's share register in the name of the Non-Employee Director and another person jointly, with right of survivorship) and shall be delivered as provided above to or upon the written order of the person exercising the Option. In the event the Option shall be exercised, pursuant to Section 4 hereof, by any person other than the Non-Employee Director, such notice shall be accompanied by appropriate proof of the right of such person to exercise the Option. All Shares that shall be purchased upon the exercise of the Option as provided herein shall be fully paid and nonassessable.

6. PARTIAL EXERCISE.

Exercise of this Option to the extent above stated may be made in part at any time and from time to time within the above limits, except that no fractional share shall be issued pursuant to this Option.

7. NON-ASSIGNABILITY.

The Option shall not be transferable by the Non-Employee Director otherwise than by will or by the laws of descent and distribution or pursuant to a qualified domestic relations order as defined by the Code or Title I of the Employee Retirement Income Security Act or the rules thereunder. However, the Non-Employee Director, with the approval of the Administrator, may transfer the Option for no consideration. Except as provided in the previous sentence, the Option shall be exercisable, during the Non-Employee Director 's lifetime, only by the Non-Employee Director (or, in the event of legal incapacity or incompetency, by the Non-Employee Director's guardian or representative) and shall not be assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and shall not be subject to execution, attachment or similar process. Any attempted transfer, assignment, pledge, hypothecation or other disposition of the Option or of any rights granted hereunder contrary to the provisions of this Section 7, or the levy of any attachment or similar process upon the Option shall be null and void.

8. NO RIGHTS AS STOCKHOLDER UNTIL EXERCISE.

The Non-Employee Director shall have no rights as a stockholder with respect to Shares subject to this Agreement until registration of the Shares in the Company's share register in the name of the Non-Employee Director. Except as is expressly provided in the Plan with respect to certain changes in the capitalization of the Company, no adjustment shall be made for dividends or similar rights for which the record date is prior to the date of such registration.

9. ADJUSTMENTS.

The Plan contains provisions covering the treatment of Options in a number of contingencies such as stock splits and mergers. Provisions in the Plan for adjustment with respect to stock subject to Options and the related provisions with respect to successors to the business of the Company are hereby made applicable hereunder and are incorporated herein by reference.

10. TAXES.

The Non-Employee Director acknowledges that upon exercise of the Option the Non-Employee Director will be deemed to have taxable income measured by the difference between the then fair market value of the Shares received upon exercise and the price paid for such Shares pursuant to this Agreement. The Non-Employee Director acknowledges that any income or other taxes due from him or her with respect to this Option or the Shares issuable pursuant to this Option shall be the Non-Employee Director's responsibility.

The Non-Employee Director agrees that the Company may withhold from the Non-Employee Director's remuneration, if any, the minimum statutory amount of federal, state and local withholding taxes attributable to such amount that is considered compensation includable in such person's gross income. At the Company's discretion, the amount required to be withheld may be withheld in cash from such remuneration, or in kind from the Shares otherwise deliverable to the Non-Employee Director on exercise of the Option. The Non-Employee Director further agrees that, if the Company does not withhold an amount from the Non-Employee Director's remuneration sufficient to satisfy the Company's income tax withholding obligation, the Non-Employee Director will reimburse the Company on demand, in cash, for the amount under-withheld.

11. PURCHASE FOR INVESTMENT.

Unless the offering and sale of the Shares to be issued upon the particular exercise of the Option shall have been effectively registered under the Securities Act of 1933, as now in force or hereafter amended (the "1933 Act"), the Company shall be under no obligation to issue the Shares covered by such exercise unless and until the following conditions have been fulfilled:

(a) The person(s) who exercise the Option shall warrant to the Company, at the time of such exercise, that such person(s) are acquiring such Shares for their own respective accounts, for investment, and not with a view to, or for sale in connection with, the distribution of any such Shares, in which event the person(s) acquiring such Shares shall be bound by the provisions of the following legend which shall be endorsed upon the certificate(s) evidencing the Shares issued pursuant to such exercise:

> "The shares represented by this certificate have been taken for investment and they may not be sold or otherwise transferred by any person, including a pledgee, unless (1) either (a) a Registration Statement with respect to such shares shall be effective under the Securities Act of 1933, as amended, or (b) the Company shall have received an opinion of counsel satisfactory to it that an exemption from registration under such Act is then available, and (2) there shall have been compliance with all applicable state securities laws"; and

(b) If the Company so requires, the Company shall have received an opinion of its counsel that the Shares may be issued upon such particular exercise in compliance with the 1933 Act without registration thereunder. Without limiting the generality of the foregoing, the Company may delay issuance of the Shares until completion of any action or obtaining of any consent, which the Company deems necessary under any applicable law (including without limitation state securities or "blue sky" laws).

12. RESTRICTIONS ON TRANSFER OF SHARES.

12.1 The Shares acquired by the Non-Employee Director pursuant to the exercise of the Option granted hereby shall not be transferred by the Non-Employee Director except as permitted herein.

12.2 If, in connection with a registration statement filed by the Company pursuant to the 1933 Act, the Company or its underwriter so requests, the Non-Employee Director will agree not to sell any Shares for a period not to exceed 210 days following the effectiveness of such registration.

12.3 The Non-Employee Director acknowledges and agrees that neither the Company, its shareholders nor its directors and officers, has any duty or obligation to disclose to the Non-Employee Director any material information regarding the business of the Company or affecting the value of the Shares before, at the time of, or following a termination of service of the Non-Employee Director by the Company, including, without limitation, any information concerning plans for the Company to make a public offering of its securities or to be acquired by or merged with or into another firm or entity.

13. NO OBLIGATION TO MAINTAIN RELATIONSHIP.

The Company is not by the Plan or this Option obligated to continue the Non-Employee Director as a director of the Company or of an Affiliate. The Non-Employee Director acknowledges: (i) that the Plan is discretionary in nature and may be suspended or terminated by the Company at any time; (ii) that the grant of the Option is a one-time benefit which does not create any contractual or other right to receive future grants of options, or benefits in lieu of options; (iii) that all determinations with respect to

any such future grants, including, but not limited to, the times when options shall be granted, the number of shares subject to each option, the option price, and the time or times when each option shall be exercisable, will be at the sole discretion of the Company; (iv) that the Non-Employee Director's participation in the Plan is voluntary; (v) that the value of the Option is an extraordinary item of compensation; and (vi) that the Option is not part of normal or expected compensation for purposes of calculating any severance, resignation, redundancy, end of service payments, bonuses, long-service awards, pension or retirement benefits or similar payments.

14. NOTICES.

Any notices required or permitted by the terms of this Agreement or the Plan shall be given by recognized courier service, facsimile, registered or certified mail, return receipt requested, addressed as follows:

If to the Company:

Synta Pharmaceuticals Corp.
45 Hartwell Avenue
Lexington, MA 02421
Attention: Stock Plan Administrator

If to the Non-Employee Director, the Non-Employee Director's Company email address or the mailing address previously provided to the Company, or to such other address or addresses of which notice in the same manner has previously been given. Any such n otice shall be deemed to have been given upon the earlier of receipt, one business day following delivery to a recognized courier service or three business days following mailing by registered or certified mail.

15. GOVERNING LAW.

This Agreement shall be construed and enforced in accordance with the law of the State of Delaware, without giving effect to the conflict of law principles thereof. For the purpose of litigating any dispute that arises under this Agreement, the parties hereby consent to exclusive jurisdiction in the Commonwealth of Massachusetts and agree that such litigation shall be conducted in the courts of Middlesex County, Massachusetts or the federal courts of the United States for the District of Massachusetts.

16. BENEFIT OF AGREEMENT.

Subject to the provisions of the Plan and the other provisions hereof, this Agreement shall be for the benefit of and shall be binding upon the heirs, executors, administrators, successors and assigns of the parties hereto.

17. ENTIRE AGREEMENT.

This Agreement, together with the Plan, embodies the entire agreement and understanding between the parties hereto with respect to the subject matter hereof and supersedes all prior oral or written agreements and understandings relating to the subject matter hereof including, but not limited to, that certain Non-Qualified Stock Option Agreement by and between the Company and the Non-Employee Director dated May 27, 2004, as amended on December 13, 2007. No statement, representation, warranty, covenant or agreement not expressly set forth in this Agreement shall affect or be used to interpret, change or restrict, the express terms and provisions of this Agreement, provided, however, in any event, this Agreement shall be subject to and governed by the Plan.

18. MODIFICATIONS AND AMENDMENTS.

The terms and provisions of this Agreement may be modified or amended as provided in the Plan.

19. WAIVERS AND CONSENTS.

Except as provided in the Plan, the terms and provisions of this Agreement may be waived, or consent for the departure therefrom granted, only by written document executed by the party entitled to the benefits of such terms or provisions. No such waiver or consent shall be deemed to be or shall constitute a waiver or consent with respect to any other terms or provisions of this Agreement, whether or not similar. Each such waiver or consent shall be effective only in the specific instance and for the purpose for which it was given, and shall not constitute a continuing waiver or consent.

20. DATA PRIVACY.

By entering into this Agreement, the Non-Employee Director: (i) authorizes the Company and each Affiliate, and any agent of the Company or any Affiliate administering the Plan or providing Plan recordkeeping services, to disclose to the Company or any of its Affiliates such information and data as the Company or any such Affiliate shall request in order to facilitate the grant of options and the administration of the Plan; (ii) waives any data privacy rights he or she may have with respect to such information; and (iii) authorizes the Company and each Affiliate to store and transmit such information in electronic form.

Exhibit A

NOTICE OF EXERCISE OF NON-QUALIFIED STOCK OPTION

TO: Synta Pharmaceuticals Corp.

Ladies and Gentlemen:

I hereby exercise my Non-Qualified Stock Option to purchase shares (the "Shares") of the common stock, $.0001 par value, of Synta Pharmaceuticals Corp. (the "Company"), at the exercise price of $ per share, pursuant to and subject to the terms of that certain Non-Qualified Stock Option Agreement between the undersigned and the Company dated , 200 .

I understand the nature of the investment I am making and the financial risks thereof. I am aware that it is my responsibility to have consulted with competent tax and legal advisors about the relevant national, state and local income tax and securities laws affecting the exercise of the Option and the purchase and subsequent sale of the Shares.

I am paying the option exercise price for the Shares as follows:

_____

Please issue the Shares (check one):

☐ to me; or

☐ to me and , as joint tenants with right of survivorship,

at the following address: _____
_____
_____

My mailing address for shareholder communications, if different from the address listed above, is:

_____
_____
_____

Very truly yours,

_____
Non-Employee Director (signature)

_____
Print Name

_____
Date

_____
Social Security Number

Exhibit 10.6.1

125 Hartwell Avenue
Lexington, Massachusetts 02421
(the "Building")

SEVENTH AMENDMENT
November 26, 2007

EXISTING LEASE DATA

LANDLORD:	125 Hartwell Trust, under a declaration of trust dated February 20, 1980 and filed with the Middlesex South Registry District of the Land Court as Document No. 600788, as amended
TENANT:	Synta Pharmaceuticals Corp., a Delaware corporation, successor-by-assignment to EMD Pharmaceuticals, Inc.
PREMISES:	Collectively, (i) approximately 19,810 square feet of Premises Rentable Area on the second (2nd) floor of the Building, consisting of approximately 10,980 square feet of Premises Rentable Area under the original Lease shown as the "Premises" on Exhibit 3 thereto, plus approximately 8,830 square feet of Premises Rentable Area added by the First Amendment referred to below shown as the "RFO Premises" on said Exhibit 3, and (ii) approximately 2,670 square feet of Premises Rentable Area on the first (1st) floor of the Building, substantially as shown cross-hatched on Exhibit A attached to the Fifth Amendment referred to below
LEASE EXECUTION DATE:	October 26, 1992
TERMINATION DATE:	January 31, 2008
PREVIOUS LEASE AMENDMENTS:	First Amendment dated as of January 31, 1993 Second Amendment dated October 1, 1997 Third Amendment dated November 1, 2002 Assignment and Assumption of Lease and Consent of and Release by Landlord and Fourth Amendment to Lease dated as of July 9, 2004 (the "Assignment/Fourth Amendment") Fifth Amendment dated October 22, 2004 Sixth Amendment dated August 1, 2005

WHEREAS, Tenant, by notice to Landlord dated April 30, 2007, has exercised its option to extend the Term of the above-described lease, as previously amended (the "Lease"), for the first of the three (3) successive additional terms provided in Paragraph 1 of the Sixth Amendment to the Lease; and

WHEREAS, Landlord and Tenant desire to confirm the terms and conditions applicable to the demise of the Premises for such additional term.

NOW THEREFORE, the parties hereby agree that the Lease is hereby amended by this Seventh Amendment (this "Amendment") as follows (capitalized terms used herein without definition shall have the meanings ascribed to them in the Lease):

1. EXTENSION OF TERM

The Term of the Lease is hereby extended for an additional term commencing as of February 1, 2008 and expiring as of November 30, 2011. The demise of the Premises for such additional term shall be upon and governed by the terms and conditions of the Lease (as hereby amended) in effect immediately prior to the commencement of such additional term, except as follows or as otherwise provided in this Amendment:

A. The Basic Rent payable by Tenant during such additional term shall be the sum of (x) the Basic Rent payable by Tenant in respect of the Premises as of January 31, 2008, plus (y) the aggregate amounts payable by Tenant under the Lease on account of Building Expenses (i.e., the Building Expense Escalation Charge) in respect of calendar years 2005, 2006 and 2007, less the portion(s), if any, of any such amounts that have been previously included in the Basic Rent set forth in the foregoing clause (x) [by way of clarification, and notwithstanding anything to the contrary contained in the Lease, the aggregate Building Expense Escalation Charges payable in respect of each calendar year (once finally determined) are included in the Basic Rent payable for the subsequent calendar year and the Building Expense Base, for purposes of determining the Building Expense Escalation Charges payable in respect of such subsequent calendar year, is changed to the prior calendar year's Building Expenses].

B. The Building Expense Base in respect of such additional term shall be the amount of Building Expenses for calendar year 2007 (accordingly, Tenant's obligation to pay Building Expense Escalation Charges in respect of such additional term shall commence to accrue as of February 1, 2008).

C. There shall be no Building Expense Cap during or in respect of such additional term.

D. Tenant shall have the right to continue to use the Included Property and the Assignor's Improvements (as defined in Paragraphs 11 and 12, respectively, of the

Assignment/Fourth Amendment) during such additional term in accordance with and subject to the terms and provisions of Paragraphs 11 and 12 of the Assignment/Fourth Amendment, except that (even if Tenant shall use such Included Property and Assignor's Improvements) Tenant shall have no obligation to pay the Monthly Improvements Rent in respect of such additional term.

E. Landlord shall have no obligation to reconstruct or renovate the Premises for Tenant's occupancy during such additional term or to provide any allowance or contribution with respect thereto.

2. BROKER

Each party (the "indemnifying party") represents and warrants to the other party that it has not dealt with any broker or agent in connection with this Amendment. The indemnifying party shall indemnify and hold the other party (and such other party's trustees, beneficiaries, agents and employees) harmless of and from all claims that may be made by any person against such other party (or its trustees, beneficiaries, agents or employees) for brokerage or other compensation in the nature of brokerage with respect to this Amendment on account or arising out of the indemnifying party's dealings with such person. Landlord shall pay the commission owed to Richards Barry Joyce & Partners in connection with this Amendment pursuant to a separate agreement between Landlord and such party.

3. MISCELLANEOUS

As amended by this Amendment, the Lease is hereby ratified, approved and confirmed in all respects and Landlord and Tenant each hereby acknowledge and confirm that, to the best of its respective knowledge, neither the Landlord nor the Tenant is in default of any term or condition of the Lease. In the event of a conflict between the Lease and this Amendment, the terms of this Amendment shall govern.

WHEREFORE, the parties have hereunto set their hands and seals as of the date first above written.

LANDLORD:	TENANT:
	SYNTA PHARMACEUTICALS CORP.
/s/ STEVEN COLANGELO	By: /s/ KEITH EHRLICH
Steven Colangelo, signing as Trustee of 125 Hartwell Trust and not individually and without recourse against the Trustee personally or his assets	Name: Keith Ehrlich Title: CFO Hereunto Duly Authorized

Exhibit 10.7.1

FIRST AMENDMENT TO LEASE

FIRST AMENDMENT TO LEASE dated as of this 7th day of September, 2007 by and between MORTIMER B. ZUCKERMAN AND EDWARD H. LINDE, Trustees of 91 Hartwell Avenue Trust under Declaration of Trust dated September 28, 1981 filed with the Middlesex South Registry as Document No. 616455 as amended by instruments dated December 10, 1984 and April 17, 1991 respectively filed with said Registry District as Document Nos. 675674 and 844541 but not individually ("Landlord") and SYNTA PHARMACEUTICALS, INC., a Delaware corporation ("Tenant").

RECITALS

A. Landlord and Tenant are parties to that certain Lease Agreement dated as of January 13, 2005 (the "Lease"), in connection with certain premises located at 91 Hartwell Avenue, Lexington, Massachusetts (the "Building"), consisting of 13,764 square feet of rentable floor area on the second (2 nd) floor and 8,068 square feet of rentable floor area on the third (3 rd) floor collectively (the "Rentable Floor Area of the Premises" in the Building (referred to in the Lease as the "Premises" or "Tenant's Space").

B. Landlord and Tenant now desire to extend the Term of the Lease for one (1) period of eighteen (18) months upon all of the same terms and conditions set forth in the Lease except for those terms and conditions amended herein (the "First Amendment").

C. Capitalized terms used herein and not otherwise defined herein shall have the meaning set forth in the Lease.

AGREEMENT

NOW THEREFORE, in consideration of the mutual promises and covenants contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant hereby agree as follows:

1. The current Term of the Lease is scheduled to expire on February 29, 2008. Landlord and Tenant agree that the Lease is hereby extended for one (1) period of eighteen (18) months commencing on March 1, 2008 and expiring on August 31, 2009 ("First Extended Term") unless sooner terminated or extended in accordance with the provisions of the Lease and this First Amendment.

2. Landlord and Tenant acknowledge and agree that the extension option contained in both the Reference Data Sheet and Section 2.4.1 of the Lease shall be deleted in its entirety, and Tenant shall have no further option to extend the Lease Term upon the expiration of the First Extended Term, except as provided in Section 4 below.

3. (A) For the period prior to the First Extended Term, Annual Fixed Rent for the Premises shall continue to be payable as set forth in the Lease.

(B) During the First Extended Term, Annual Fixed Rent shall be paid by Tenant at the annual rate of $502,136.00 (being the product of (i) $23.00 and (ii) the Rentable Floor Area of the Premises (being 21,832 square feet)).

4. (A) For the purposes of computing Tenant's payments for Landlord's Operating Expenses, pursuant to Section 2.6 of the Lease, for the portion of the Lease Term on and after March 1, 2008, the definition of "Base Operating Expenses" contained in Section 2.6 of the Lease shall be deleted in its entirety and replaced with the following:

BASE OPERATING EXPENSES:	Landlord's Operating Expenses (as hereinafter defined in Section 2.6) for calendar year 2008, being January 1, 2008 through December 31,2008.

For the portion of the Lease Term prior to March 1, 2008, such definition shall remain unchanged.

(B) For the purposes of computing Tenant's payments for Landlord's Tax Expenses, pursuant to Section 2.7 of the Lease, for the portion of the Lease Term on and after March 1, 2008 the definition of "Base Taxes" contained in Section 2.7 of the Lease shall be deleted in its entirety and replaced with the following:

BASE TAXES:	Landlord's Tax Expenses (as hereinafter defined in Section 2.7) for fiscal tax year 2008, being July 1, 2007 through June 30, 2008.

For the portion of the Lease Term prior to March 1, 2008, such definition shall remain unchanged for such purposes.

5. (A) Tenant shall have the right to extend the Lease Term upon all the same terms, conditions, covenants and agreements contained in the Lease and this First Amendment for one (1) period of fourteen (14) months commencing on September 1, 2009 and expiring on November 30, 2011, ("Second Extended Term") on the conditions, which conditions Landlord may waive by written notice to Tenant, that at the time of exercise of the Second Extended Term (i) there exists no Event of Default, (ii) the Lease is still in full force and effect, and (iii) Tenant has neither assigned the Lease nor sublet any portion of the Premises. Notwithstanding anything contained herein to the contrary, Landlord has no obligation to make any additional payment to Tenant with respect to any construction allowance or the like or to perform any work to the Premises as a result of Tenant exercising its Second Extended Term option.

(B) If Tenant desires to exercise its right to the Second Extended Term, then Tenant shall give written notice to Landlord, not earlier than November 30, 2008 nor later than

February 28, 2009. Upon the giving of such written notice, the Lease shall be extended for the Second Extended Term without the necessity for the execution of any additional documents; and in such event all references herein to the Lease, the Term of the Lease shall be construed as referring to the Lease Term, as so extended, unless the context clearly otherwise requires.

(C) For the Second Extended Term, Annual Fixed Rent shall be paid by Tenant at the annual rate of $529,426.00 (being the product of (i) $24.25 and (ii) the Rentable Floor Area of the Premises (being 21,832 square feet)) and Base Operating Expenses and Base Taxes shall be calculated in accordance with Section 4 (B) contained herein.

6. (A) Tenant warrants and represents that Tenant has not dealt with any broker in connection with the consummation of this First Amendment except for Richard Barry Joyce & Partners (the "Broker"); and in the event any claim is made against Landlord relative to dealings by Tenant with brokers other than the Broker, Tenant shall defend the claim against Landlord with counsel of Tenant's selection first approved by Landlord (which approval will not be unreasonably withheld) and save harmless and indemnify Landlord on account of loss, cost or damage which may arise by reason of such claim.

(B) Landlord warrants and represents that Landlord has not dealt with any broker in connection with the consummation of this First Amendment except for the Broker; and in the event any claim is made against Tenant relative to dealings by Landlord with brokers other than the Broker, Landlord shall defend the claim against Tenant with counsel of Landlord's selection and save harmless and indemnify Tenant on account of loss, cost or damage which may arise by reason of such claim.

7. As an inducement to Landlord to enter into this First Amendment, Tenant hereby represents and warrants that: (i) Tenant is not, nor is it owned or controlled directly or indirectly by, any person, group, entity or nation named on any list issued by the Office of Foreign Assets Control of the United States Department of the Treasury ("OFAC") pursuant to Executive Order 13224 or any similar list or any law, order, rule or regulation or any Executive Order of the President of the United States as a terrorist, "Specially Designated National and Blocked Person" or other banned or blocked person (any such person, group, entity or nation being hereinafter referred to as a "Prohibited Person"); (ii) Tenant is not (nor is it owned, controlled, directly or indirectly, by any person, group, entity or nation which is) acting directly or indirectly for or on behalf of any Prohibited Person; and (iii) from and after the effective date of the above-referenced Executive Order, Tenant (and any person, group, or entity which Tenant controls, directly or indirectly) has not conducted nor will conduct business nor has engaged nor will engage in any transaction or dealing with any Prohibited Person in violation of the U.S. Patriot Act or any OFAC rule or regulation, including without limitation any assignment of the Lease or any subletting of all or any portion of the Premises or the making or receiving of any contribution of funds, goods or services to or for the benefit of a Prohibited Person in violation of the U.S. Patriot Act or any OFAC rule or regulation. In connection with the foregoing, it is expressly understood and agreed that (x) any breach by Tenant of the foregoing representations and warranties shall be deemed an immediate Event of Default by Tenant under Section 7.1 of the Lease (without the benefit of notice or grace) and shall be covered by the indemnity provisions of

Section 5.7 of the Lease, and (y) the representations and warranties contained in this subsection shall be continuing in nature and shall survive the expiration or earlier termination of the Lease.

8. Except as herein amended the Lease shall remain unchanged and in full force and effect. All references to the "Lease" shall be deemed to be references to the Lease as herein amended.

EXECUTED as a sealed instrument as of the date and year first above written.

WITNESS:

/s/ ILLEGIBLE

LANDLORD:

91 HARTWELL AVENUETRUST

By: Boston Properties Limited Partnership,
its sole beneficiary

By: Boston Properties, Inc.,
its general partner

By: /s/ DAVID C. PROVOST
Name: David C. Provost
Title: Senior Vice President Boston Properties

WITNESS:

TENANT:

SYNTA PHARMACEUTICALS, INC.

By: /s/ KEITH EHRLICH
Name: Keith Ehrlich
Title: Vice President
(Hereto duly authorized)

By: /s/ KEITH EHRLICH
Name: Keith Ehrlich
Title: Treasurer

Exhibit 10.9.1

GE Commercial Finance
Healthcare Financial Services
Life Science Finance
83 Wooster Heights Road, 5th Floor
Danbury, CT 06810
203-205-5216 / FAX: 203-205-2183

June 28, 2007

CONFIDENTIAL CAPITAL (QUASI) LEASE PROPOSAL FOR:

Synta Pharmaceuticals Corp.

Submitted By: William B. Stickle

Mr. Keith Ehrlich
Chief Financial Officer
Synta Pharmaceuticals Corp.
45 Hartwell Avenue
Lexington, MA 02421

Dear Mr. Ehrlich:

General Electric Capital Corporation ("GE Capital") has reviewed the information provided by you in connection with the requested financing for Synta Pharmaceuticals Corp (referred to as "Synta Pharmaceuticals" or the "Company"). Based on the review to date and subject to the timely receipt of a signed copy of this proposal letter as indicated below, GE Capital is pleased to consider arranging and providing a lease financing up to a maximum aggregate exposure to GE Capital of $6,000,000 (the "Financing") as outlined in the attached Term Sheet incorporated herein by reference, subject to the general terms and conditions in this proposal letter and the Term Sheet.

GE Capital is one of the largest and most diversified financial services companies in the world with assets exceeding $300 billion and operations in over 45 countries. We have been actively providing equipment financing for Life Science companies for over a decade and it is our privilege to be a financial partner to hundreds of Life Science companies.

This proposal letter, including the attached Term Sheet (together, the "Proposal"), is being provided to the Company on a confidential basis and is merely an indication of interest regarding the Financing transaction on the general terms and conditions outlined below and should not be construed as a commitment. GE Capital may change the terms of this Proposal or cease future consideration of the Financing at any time in its sole discretion. The attached Term Sheet summarizes only the principal terms and conditions under which the proposed Financing will be considered and does not purport to set forth all of the terms and conditions applicable to such Financing, which terms and conditions will be fully contained in the final documentation.

The Company may not use this Proposal to solicit other offers or to modify, renegotiate or otherwise improve the terms and conditions of any other offer heretofore or hereafter received by the Company but is not restricted from making any disclosure or dissemination of the United States federal income tax structure or aspects of the transactions contemplated by this proposal or any documents executed pursuant to this Proposal. Further, each of GE Capital and the Company acknowledges that it has no proprietary rights to any United States federal income tax elements or structure of this Proposal. In addition, the Company shall not, except as required by law, use the name of, or refer to GE Capital, in any correspondence, discussions, advertisement, press release or disclosure made in connection with the Financing without the prior written consent of GE Capital.

By signing below, the Company acknowledges the terms and conditions of this Proposal and agrees to pay to GE Capital a Good Faith Deposit of $20,000 ("Deposit"). Upon receipt of the executed Proposal and accompanying Deposit, GE Capital shall commence the investment and credit approval process. Upon acceptance by GE Capital the Good Faith Deposit will be

applied as follows: (i) $10,000 earned by GE Capital as a non-recurring upfront fee, and (ii) the remainder to the initial payment(s) with any unutilized Deposit remaining at the end of the Anticipated Funding Period to be retained by GE Capital as a non-utilization fee. In the event the funded transaction materially differs from the terms of this Proposal, the documentation charge may be adjusted to correspond with GE Capital's actual out-of-pocket expenses. The Deposit is not refundable except in the event that the transaction represented by this Proposal and any amendment to it is not approved by GE Capital. In such case, GE Capital shall promptly return the Deposit (less the cost of credit verification and investigation and any out of pocket expenses incurred such as appraisal fees, legal fees, etc.). Before funding can take place, all proper documentation of title and UCC releases from other lenders shall be in place and approved by GE Capital. We thank you for your consideration and look forward to working with you toward completing this transaction.

By signing this Proposal Letter, regardless of whether the Financing is approved or closes, the Company agrees to pay upon demand to GE Capital all fees and expenses (including but not limited to all costs and fees of external legal counsel, environmental consultants, appraisers, inspectors, auditors and other consultants and advisors selected by GEHFS, due diligence reports, UCC, tax and judgment lien search and filing costs, escrow costs (if applicable), recording and transfer fees and taxes, title charges and survey costs and the allocated cost of internal legal counsel) incurred in connection with this Proposal Letter and the Financing (and the negotiation, documentation and closing thereof).

I would appreciate the opportunity to discuss this proposal with you at your earliest convenience. Please do not hesitate to contact me at 203-205-5216 if you have any questions or if I may be of further assistance.

Sincerely,

/s/ William B. Stickle
William B. Stickle

PROPOSAL ACCEPTED BY:

Synta Pharmaceuticals Corp.

Name: /s/ Keith Ehrlich
Title: CFO
Date: 6/29/07
Federal Tax ID#: 04-3508648
Email Address: kehrlich@syntapharma.com

Contact Name for Inspection: Jerry Di Cecca
Phone #: 781-541-7268

	Term Sheet
Transaction:	Capital Lease (Quasi)
Lessee:	Synta Pharmaceuticals Corp.
Lessor:	General Electric Capital Corporation its affiliates or its assignee ("GE Capital")
Lease Line Amount:	Up to an aggregate exposure to GE Capital of $6,000,000.
Lease Term and Payment:	Laboratory/Manufacturing equipment: 48 payments per month in advance at 2.566600% per thousand dollars cost of Equipment (the "Payment Factor"), plus applicable taxes for each lease schedule. All other equipment: 36 payments per month in advance at 3.248560% per thousand dollars cost of Equipment (the "Payment Factor"), plus applicable taxes for each lease schedule.
Anticipated Funding Period:	June 2007 through June 2008.
Line Mechanics:	Equipment with invoice dates older than 90 days will be subject to appropriate discount. Amortization begins on the start date, which is the first day of the month following the funding date. Interim rent will be charged for any period between the funding date and the start date.
Collateral:	A fully perfected first priority security interest in various Equipment, as detailed in the attached Addendum A. All Equipment must be acceptable to GE Capital and located at Company owned or leased facilities within the continental United Sates. All collateral shall be free and clear of all liens, claims and encumbrances.
End of Lease Purchase Option:	At the end of the scheduled term, the Lessee may purchase the leased equipment for $1.00.
Other Conditions:	All other terms and conditions that presently exist shall continue to apply.

GENERAL TERMS AND CONDITIONS

Our proposal contains the following provisions and the Lease Payment Factor we propose are specifically based upon these provisions and our assumptions.

1. Purchase of Equipment: Lessee would submit its order for the equipment to the vendor. Lessor would take an assignment of Lessee's purchase order. Such assignment would be conditioned upon the leasing of the Equipment by Lessee from Lessor. Lessee understands that any Equipment delivered after the Last Delivery Date would not be covered by this proposal.

2. Net Lease: The proposed lease would be a net lease. Without limiting the generality of the foregoing, Lessee would be responsible for all expenses, maintenance, insurance and taxes relating to the purchase, lease, possession and use of the Equipment.

3. Maintenance and Insurance: Lessee would bear all risk of loss or damage to the Equipment. Lessee would be responsible to keep the Equipment insured with companies acceptable to Lessor and for such amounts required by Lessor, including, but not limited to, insurance for damage to or loss of the Equipment and liability coverage. All such insurance policies must be satisfactory to Lessor.

4. Warranties: Lessor would lease the Equipment to Lessee on an AS IS BASIS. However, Lessor would assign to Lessee all warranties, guarantees and services provided by the manufacturer or vendor (to the extent that they are assignable).

5. Documentation and Transactional Costs: Standard GE CAPITAL Master Lease and Lease Schedule for this type of equipment ("Lease Documents"). Any changes to the Lease Documents must be approved by GE CAPITAL legal counsel. Lessee will be responsible for all costs associated with the transaction including any appraisal costs, legal fees and inspection expenses.

6. Indexing: The Payment Factor and corresponding Lease payments are based on the Federal Reserve's 3 and 4 year Treasury Constant Maturities Rate (H.15/ "Treasury Rate") as of 06/26/2007 currently 4.95 and 4.97 respectively, and will be adjusted effective as of the date of funding of any Financing to reflect any increases in the Treasury Rate.

7. Electronic Payment System: GE Capital's standard payment collection method is through an electronic payment system. An enrollment form will be provided with the Lease Documents.

8. Confidentiality: This proposal letter is being provided to the Company on a confidential basis. Except as required by law, neither this proposal nor its contents may be disclosed, except to individuals who are the Company's officers, employees or advisors who have a need to know of such matters and then only on the condition that such matters remain confidential. In addition, none of such persons shall, except as required by law, use the

name of, or refer to GE Capital, in any correspondence, discussions, advertisement, press release or disclosure made in connection with the Financing without the prior written consent of GE Capital.

9. Expiration: This proposal will expire 06/30/2007, if not accepted prior to that date.

10. Other Conditions: GE Capital's agreement to fund the proposed transaction remains subject to and would be preceded by completion of a legal and business due diligence, as well as collateral and credit review and analysis, all with results satisfactory to GE Capital and the closing of an initial funding under such transaction would be conditioned upon the prior execution and delivery of final Lease Documents and satisfaction of all conditions precedent acceptable to GE Capital and its counsel and no material adverse change in the business condition or prospects of the Company ("Material Adverse Change"). For transactions that contemplate more than one funding, GE Capital's obligation to make each such subsequent funding would be subject to confirmation that no default has occurred and is continuing under the Lease Documents, that all representations and warranties of the Company in the Lease Documents continue to be true and correct and that no Material Adverse Change has occurred since the prior funding. If a commitment were to be given it would be subject to and preceded by a completion of a legal and business due diligence, as well as collateral and credit review and analysis, all with results satisfactory to GE Capital and the closing of any Financing would be conditioned upon the prior execution and delivery of final legal documentation and all conditions precedent acceptable to GE Capital and its counsel and confirmation that no Material Adverse Change has occurred since the issuance of such commitment.

Addendum A — Expected Equipment Composition

Equipment Class	Concentration Requirement
Laboratory & scientific equipment:	Minimum of 72.5%
Lab and office furniture, office equipment, computers, networking equipment, & similar:	Maximum of 20.0%
Soft costs (leaseholds, software, tax, freight & similar):	Maximum of 7.5%
Total	100%

Exhibit 10.19.1

[SYNTA LETTERHEAD]

AMENDMENT TO CONSULTING AGREEMENT

THIS AMENDMENT ("Amendment") is made as of March 23, 2007 (the "Effective Date") by and between **Synta Pharmaceuticals Corp.**, a Delaware corporation with a principal place of business at 45 Hartwell Avenue, Lexington, MA 02421 ("Synta") and **Lan Bo Chen, Ph.D.** ("Consultant") with a principal place of business at 184 East Emerson Rd., Lexington, MA 02420.

Synta entered into a Consulting Agreement with Consultant, dated as of April 18, 2005 ("Agreement"). The parties hereby agree to amend the Agreement as follows:

- The Consulting Fee set forth in Section 3(a) shall be revised to replace the fee of Twenty-Five Thousand Dollars per month with a fee of Ten Thousand Dollars ($10,000.00) per month. This new fee shall be effective beginning with the payment for Consulting Services rendered during the month of March, 2007.

In all other respects, the terms of the Agreement shall remain unmodified and in full force and effect. All capitalized terms used in this Amendment shall have the same meaning as set forth in the Agreement.

The parties have indicated their acceptance of the terms of this Amendment by the signatures set forth below. Each individual signing on behalf of a corporate entity hereby personally represents and warrants his or her legal authority to legally bind that entity.

SYNTA PHARMACEUTICALS CORP.	**LAN BO CHEN, PH.D.**
By /s/ SAFI R. BAHCALL	/s/ LAN BO CHEN
Safi R. Bahcall, Ph.D.	
President and Chief Executive Officer	

Exhibit 10.23

BONUS ARRANGEMENTS OF NAMED EXECUTIVE OFFICERS

On July 17, 2007, the Compensation Committee of the Board of Directors (the "Compensation Committee") of Synta Pharmaceuticals Corp. (the "Company") approved a cash bonus plan applicable to all of the Company's employees. Pursuant to this plan, the Company's Named Executive Officers may be eligible to receive the following bonuses for service during a fiscal year:

Named Executive Officer	Bonus Target (As a % of Base Salary)
Safi R. Bahcall, Ph.D. President and Chief Executive Officer	50%
Keith S. Ehrlich, C.P.A. Vice President, Finance and Administration, Chief Financial Officer	30%
Martin D. Williams Senior Vice President, Commercial and Business Development, Chief Business Officer	40%
Eric W. Jacobson, M.D. Senior Vice President, Clinical Research and Regulatory Affairs, Chief Medical Officer	40%
Keizo Koya, Ph.D. Senior Vice President, Drug Development	40%

Pursuant to the plan, the overall size of the cash bonus pool is to be set by the Company's Board of Directors each year, based on their assessment of the Company's performance relating to corporate goals established by the Board. In January 2007, the Board established goals for the year ending December 31, 2007 relating to advancement of the Company's pipeline of drug candidates, completion of a partnership and completion of the Company's initial public offering (which was completed in February 2007).

Payment of a cash bonus under the plan is conditioned on the executive remaining employed by the Company at the time the award is actually made. Historically, the Company has made its annual performance awards and adjustments in March. In addition, the Compensation Committee retains the discretion to award more or less than the target percentages in the approved plan on a case-by-case basis.

QuickLinks

Exhibit 10.24

Execution Copy

COLLABORATIVE DEVELOPMENT,

COMMERCIALIZATION AND LICENSE AGREEMENT

BY AND BETWEEN

SYNTA PHARMACEUTICALS CORP.

and

SMITHKLINE BEECHAM CORPORATION

(d/b/a GLAXOSMITHKLINE)

October 8, 2007

Portions of this Exhibit were omitted and have been filed separately with the Secretary of the Commission pursuant to the Company's application requesting confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934.

TABLE OF CONTENTS

Portions of this Exhibit were omitted and have been filed separately with the Secretary of the Commission pursuant to the Company's application requesting confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934.

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List of Exhibits and Schedules

Portions of this Exhibit were omitted and have been filed separately with the Secretary of the Commission pursuant to the Company's application requesting confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934.

COLLABORATIVE DEVELOPMENT, COMMERCIALIZATION AND LICENSE AGREEMENT

This COLLABORATIVE DEVELOPMENT, COMMERCIALIZATION AND LICENSE AGREEMENT (this "Agreement") is entered into as of October 8, 2007 (the "Execution Date") and effective as of the Effective Date (as defined below), by and between Synta Pharmaceuticals Corp., a Delaware corporation with offices at 45 Hartwell Avenue, Lexington, Massachusetts 02421 ("SYNTA"), and SmithKline Beecham Corporation (doing business as GlaxoSmithKline), a Pennsylvania corporation with offices at One Franklin Plaza, Philadelphia, Pennsylvania 19101 ("GSK"). Each of GSK and SYNTA is sometimes referred to individually herein as a "Party" and collectively as the "Parties."

WHEREAS, SYNTA has developed and Controls certain Patent Rights and Technology related to Collaboration Compounds (as such terms are defined below); and

WHEREAS, GSK has expertise in pharmaceutical research, development and commercialization; and

WHEREAS, the Parties desire to enter into a collaboration for the purpose of developing and commercializing products containing a Collaboration Compound.

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants contained herein, and for other good and valuable consideration, the Parties hereto agree as follows:

1. DEFINITIONS

Whenever used in this Agreement with an initial capital letter, the following terms shall have the meanings specified below.

1.1 "**Acceptance**" means, with respect to a Drug Approval Application filed for a Product, (a) in the United States, the receipt of written notice from the FDA in accordance with 21 CFR 314.101(a)(2) that such Drug Approval Application is officially "filed", (b) in the European Union, receipt by GSK of written notice of acceptance by the EMEA of such Drug Approval Application for filing under the centralized European procedure in accordance with any feedback received from European Regulatory Authorities; provided, that if the centralized filing procedure is not used, then Acceptance shall be determined upon the acceptance of such Drug Approval Application by the applicable Regulatory Authority in a Major European Country, and (c) in Japan, receipt by GSK of written notice of acceptance of filing of such Drug Approval Application from the Japanese Ministry of Health, Labour and Welfare ("MHLW").

1.2 "**Adverse Event**" means any unfavorable and unintended change in the structure (signs), function (symptoms), or chemistry (laboratory data), of the body temporally associated with the use of a Product , whether or not considered related to the use of the Product. Changes resulting from normal growth and development which do not vary significantly in frequency or severity from expected levels are not to be considered adverse experiences.

1.3 "**Affiliate**" means, with respect to any Person, any other Person that, directly or indirectly, controls, or is controlled by, or is under common control with, such Person. For purposes of this definition, "control" means (a) the direct or indirect ownership of more than fifty percent (50%) of the shares of stock entitled to vote for the election of directors in the case of a corporation, or more than fifty percent (50%) of the equity interests in the case of any other type of legal entity, or with respect to either of the foregoing, such lesser maximum percentage permitted in those jurisdictions where majority ownership by foreign entities is prohibited, (b) status as a general partner in any partnership, or (c) any other arrangement whereby a Person controls or has the right to control the board of directors of a corporation or equivalent governing body of an entity other than a corporation.

1.4 "**Aggregate Equity Purchase Price**" means (a) with respect to the Initial Equity Purchase Obligation set forth in Section 6.2.1, Twenty Five Million Dollars (US $25,000,000) and (b) with respect to the Subsequent Equity Purchase Right set forth in Section 6.2.2, Twenty Million Dollars (US $20,000,000).

1.5 "**Annual Net Sales**" means, with respect to any Calendar Year, the aggregate amount of the Net Sales for such Calendar Year.

1.6 "**API**" means the active pharmaceutical ingredient known as STA-4783 and/or any other Collaboration Compound Developed and Commercialized under this Agreement.

1.7 "**Applicable Laws**" means any national, supra-national, federal, state or local laws, treaties, statutes, ordinances, rules and regulations, including any rules, regulations, guidance or guidelines having the binding effect of law, or requirements of Regulatory Authorities, national securities exchanges or securities listing organizations, government authorities, courts, tribunals, agencies other than Regulatory Authorities, legislative bodies and commissions that are in effect from time to time during the Term and applicable to a particular activity hereunder.

1.8 "**Applicable Premium**" means a premium equal to [***] percent ([***]%).

1.9 "**Average Closing Price**" means the average of the closing prices of SYNTA Common Stock on The NASDAQ Global Market (or, if SYNTA Common Stock is not listed on the NASDAQ Global Market, the principal exchange or interdealer quotation system on which the SYNTA Common Stock is listed) for the [***] ([***]) [***]to the [***] that gives rise to the Initial Equity Purchase Obligation or the Subsequent Equity Purchase Right, as the case may be.

1.10 "**Branding**" means all matters relating to branding of any Product, including without limitation, any trademarks, brand names, product logos, branding colors, trade dress, positioning and key messages to be incorporated in promotional materials used for any Product.

1.11 "**Business Day**" means any day other than a Saturday or Sunday on which banking institutions in both New York, New York and London, England are open for business.

1.12 "**Calendar Quarter**" means the period beginning on the Effective Date and ending on the last day of the calendar quarter in which the Effective Date falls, and thereafter

Portions of this Exhibit were omitted and have been filed separately with the Secretary of the Commission pursuant to the Company's application requesting confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934.

each successive period of three (3) consecutive calendar months ending on March 31, June 30, September 30 or December 31.

1.13 "**Calendar Year**" means the period beginning on the Effective Date and ending on December 31 of the calendar year in which the Effective Date falls, and thereafter each successive period of twelve (12) months commencing on January 1 and ending on December 31.

1.14 "**Challenge**" means any challenge to the validity or enforceability of any of the SYNTA Patent Rights, including (except as provided below) by (a) filing a declaratory judgment action in which any of the SYNTA Patent Rights is alleged to be invalid or unenforceable; (b) citing prior art pursuant to 35 U.S.C. §301, filing a request for re-examination of any of the SYNTA Patent Rights pursuant to 35 U.S.C. §302 and/or §311, or provoking or becoming a party to an interference with an application for any of the SYNTA Patent Rights pursuant to 35 U.S.C. §135; or (c) filing or commencing any re-examination, opposition, cancellation, nullity or similar proceedings against any of the SYNTA Patent Rights in any country; provided, that "Challenge" shall not include filing requests for re-examination of SYNTA Patent Rights or re-issue of SYNTA Patent Rights to the extent that JPC agrees that such actions are in the best interest of the applicable SYNTA Patent Rights.

1.15 "**Change of Control**" means a transaction or series of related transactions with a Pharmaceutical Company that results in (a) the holders of outstanding voting securities of SYNTA immediately prior to such transaction ceasing to represent at least fifty percent (50%) of the combined outstanding voting power of the surviving entity immediately after such transaction; (b) such Pharmaceutical Company becoming the beneficial owner of fifty percent (50%) or more of the combined voting power of the outstanding securities of SYNTA; or (c) a sale or other disposition to such Pharmaceutical Company of all or substantially all of SYNTA's assets or business. As used herein, "Pharmaceutical Company" means any Person that, together with its Affiliates, has annual worldwide gross sales of pharmaceutical products of at least [***] dollars ($[***]).

1.16 "**Class 1 Covered Compound**" means any compound that is covered by a [***] claim of the Class 1 Patent.

1.17 **"Class 1 Patent"** means the [***]

1.18 "**Class 2 Covered Compound**" means any compound that (a) is covered by a [***] claim of the Class 2 Patent and (b) achieves its [***]. As of the Effective Date, all compounds covered by claims of the Class 2 Patent are Class 2 Covered Compounds and shall remain Class 2 Covered Compounds until such time as SYNTA can demonstrate to GSK's reasonable satisfaction that a compound covered by a claim of the Class 2 Patent achieves its [***].

1.19 "**Class 2 Patent**" means [***].

1.20 "**Clinical Trial**" means a clinical study of a Product involving the administration of Product to subjects or patients for any Indication, and includes any Phase 1 Clinical Trial, Phase 2 Clinical Trial (including Phase 2a Clinical Trials and Phase 2b Clinical Trials), Phase 3

Portions of this Exhibit were omitted and have been filed separately with the Secretary of the Commission pursuant to the Company's application requesting confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934.

Clinical Trial, Optional Phase 4 Clinical Trial, Required Phase 4 Clinical Trial or Collaborative Research Trial, as applicable.

1.21 "**Collaboration**" means the alliance of SYNTA and GSK established pursuant to this Agreement for the purposes of Developing and Commercializing Products in the Territory.

1.22 "**Collaboration Compound**" means, collectively (a) STA-4783; (b) any [***] of STA-4783; (c) any [***] of STA-4783; and (d) any other [***] STA-4783 and/or any of their [***]. For purposes of this definition, the term "Collaboration Compound" shall include all [***] not otherwise described in Section 1.22(a)-(d) above only to the extent the Parties agree to conduct Development of such [***] under this Agreement as set forth in Section 8.4.4. As used herein, an "[***]" of a compound is a [***].

1.23 **"Collaborative Research Trial" or "CRT"** means an investigator-initiated pre-registrational or post-registrational Clinical Trial of the Product in human patients that is not **mandated by a Regulatory Authority** and is conducted for a purpose other than to support an application to obtain Commercialization Regulatory Approval for the use of a Product in a specified Indication in a country. For purposes of clarity, a CRT may also be known as an Investigator-Sponsored Trial or an Investigator-Sponsored Study.

1.24 "**Commercially Reasonable Efforts**" means, with respect to activities of a Party in the Development, Manufacturing, Commercialization, or conduct of SYNTA Co-Commercialization Activities or GSK Co-Commercialization Activities, as the case may be, with respect to a particular Product, the [***] and [***] (or, if a[***] in that [***] for other [***], by [***] and/or[***] that are [***] to such [***]) in the [***]or [***] taking into account all relevant factors including, as applicable and without limitation, [***]relative to [***] in the [***] and extent of [***] (including [***] and likelihood of [***], and [***]. For purposes of clarity, Commercially Reasonable Efforts shall be determined on a [***] basis for a particular Product, and it is anticipated that the [***].

1.25 "**Commercialization**" or "**Commercialize**" means any and all activities directed to the offering for sale or sale of a Product, both before and after Commercialization Regulatory Approval has been obtained, including activities related to marketing, promotion, distributing, Manufacturing commercial supplies (other than Manufacturing Development or Manufacturing for use in Development), importing, selling and offering to sell Product and/or conducting Optional Phase 4 Clinical Trials with respect to any Indication with respect to which Commercialization Regulatory Approval has been received or for a use that is subject of a CRT, and interacting with Regulatory Authorities regarding the foregoing. When used as a verb, "to Commercialize" and "Commercializing" means to engage in Commercialization and "Commercialized" has a corresponding meaning.

1.26 **"Commercialization Regulatory Approval**" means, with respect to any Product, the Regulatory Approval required by Applicable Laws to sell such Product for use for an Indication in a country or region in the Territory, as well as, whether or not required by Applicable Laws for the sale of the Product, pricing approvals and government reimbursement approvals at a level reasonably acceptable to GSK (in the Royalty-Bearing Territory) or to the

Parties (in the Co-Commercialization Territory). For purposes of clarity, "Commercialization Regulatory Approval" means (a) in the United States, final approval of an NDA or sNDA permitting marketing of the applicable Product in interstate commerce in the United States; (b) in the European Union, marketing authorization for the applicable Product granted either by a Regulatory Authority in any Major European Country or by the EMEA pursuant to Council Directive 2001/83/EC, as amended, or Council Regulation 2309/93/EEC, as amended, together with pricing approval and government reimbursement approval at a level reasonably acceptable to GSK for the applicable Product granted by a Regulatory Authority in any Major European Country; and (c) in Japan, final approval of an application submitted to the MHLW and the publication of a New Drug Approval Information Package permitting marketing of the applicable Product in Japan, together with pricing approval and government reimbursement approval at a level reasonably acceptable to GSK, as any of the foregoing may be amended from time to time. Pricing and reimbursement in a particular country are conclusively deemed to have been accepted by GSK with respect to a Product if GSK makes a First Commercial Sale of such Product in such country.

1.27 **"Completion"** means, with respect to the [***], the date on which all material data reasonably expected to be derived therefrom has been generated and the final study report with respect thereto has been finalized.

1.28 "**Confidential Information**" means (a) with respect to SYNTA, (i) all tangible embodiments of SYNTA Technology and (ii) all other information and Technology that is disclosed or provided by or on behalf of SYNTA to GSK or to any of GSK's employees, consultants, Affiliates or Sublicensees; (b) with respect to GSK, (i) all tangible embodiments of GSK Technology and (ii) all other information and Technology that is disclosed or provided by or on behalf of GSK to SYNTA or to any of SYNTA's employees, consultants, Affiliates or sublicensees; and (c) with respect to each Party, all tangible embodiments of Joint Technology; provided, that, none of the foregoing shall be Confidential Information if: (A) as of the date of disclosure, it is known to the receiving Party or its Affiliates as demonstrated by contemporaneous credible written documentation, other than by virtue of a prior confidential disclosure to such receiving Party; (B) as of the date of disclosure it is in the public domain, or it subsequently enters the public domain through no fault of the receiving Party; (C) it is obtained by the receiving Party from a Third Party having a lawful right to make such disclosure free from any obligation of confidentiality to the disclosing Party; or (D) it is independently developed by or for the receiving Party without reference to or use of any Confidential Information of the disclosing Party as demonstrated by contemporaneous credible written documentation. Unless excluded from Confidential Information pursuant to the proviso at the end of the preceding sentence, any scientific, technical, manufacturing or financial information of a Party that is disclosed at any meeting of the JSC, the JDC, the JCC or the JPC shall constitute Confidential Information of the disclosing Party.

1.29 "**Control**" or "**Controlled**" means with respect to Technology or Patent Rights, the possession by a Party of the right to grant a license or sublicense to such Technology or Patent Rights, or to supply tangible embodiments of Technology as provided herein, without incurring further obligations, or violating the terms of any agreement or arrangement with any Third Party and without violating any Applicable Laws.

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1.30 "**Co-Commercialization Territory**" means the U.S. Territory if SYNTA has not exercised its Commercialization Opt-Out Right.

1.31 "**Co-Commercialized Product**" means a Product for which the Parties are conducting SYNTA Co-Commercialization Activities and GSK Co-Commercialization Activities, as the case may be, in the Co-Commercialization Territory.

1.32 "**Development**" or "**Develop**" means, with respect to each Product, (a) all non-clinical, preclinical and clinical activities designed to progress the development of Product with the objective of obtaining Regulatory Approval of such Product in accordance with this Agreement up to and including the obtaining of Commercialization Regulatory Approval of such Product, including without limitation, toxicology, pharmacology and other discovery and preclinical efforts, all activities relating to Manufacturing Development, Clinical Trials (including Required Phase 4 Clinical Trials), statistical analysis and all activities relating to obtaining Commercialization Regulatory Approval. When used as a verb, "Developing" means to engage in Development and "Developed" has a corresponding meaning. For purposes of clarity, Develop and Development shall not include the conduct of Optional Phase 4 Clinical Trials or Collaborative Research Trials.

1.33 "**Development Costs**" means the reasonable out-of-pocket costs and internal costs incurred by a Party (or for its account by an Affiliate or a Third Party) after the Effective Date that are consistent with the respective Development activities of such Party in the applicable Global Development Plan and budget and are directly attributable to the Development of a Product and determined in accordance with Schedule 7 attached hereto. For purposes of this definition (a) [***] means the actual amounts paid to a [***] for specific external Development activities applicable to a Product, including, without limitation all [***] required for and other costs associated with, any [***] and all expenses (including [***]) related to the [***] applicable to a Product as provided in [***] until Commercialization Regulatory Approval is obtained; (b) internal costs means the applicable FTE Rate multiplied by the number of FTE hours utilized in the relevant period on activities directly relating to Development in accordance with the Global Development Plan; and (c) the reasonable out-of-pocket and internal costs shall include the cost of [***] for use in the activities described in clause (a) or (b).

1.34 "**Development Program**" means, with respect to each Product, the Development activities (including the Manufacturing Development activities) to be conducted by the Parties during the Term with respect to such Product as set forth in the Global Development Plan.

1.35 "**Drug Approval Application**" means, with respect to each Product in a particular country or region, an application for Commercialization Regulatory Approval for such Product in such country or region, including without limitation: (a) an NDA, sNDA, MAA or JNDA; (b) a counterpart of the foregoing in any country or region in the Territory; and (c) all supplements and amendments to any of the foregoing.

1.36 **"DMF"** means a Drug Master File maintained with the FDA or its equivalent maintained with a Regulatory Authority in other countries within the Territory.

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1.37 "**Effective Date**" means the date of satisfaction of the HSR Conditions with respect to the transactions contemplated by this Agreement, or if the Parties determine that an HSR Filing is not required, then the Execution Date.

1.38 **"EMEA"** means the European Medicines Agency or any successor agency or authority thereto.

1.39 "**Execution Date**" means the date set forth in the Preamble.

1.40 "**FDA**" means the United States Food and Drug Administration or any successor agency or authority thereto.

1.41 "**FDCA**" means the United States Federal Food, Drug, and Cosmetic Act, as amended.

1.42 "**First Commercial Sale**" means, with respect to a Product in a country in the Territory, the first sale, transfer or disposition for value to an end user of such Product in such country; provided, that, the following shall not constitute a First Commercial Sale: (a) any sale to an Affiliate or Sublicensee unless the Affiliate or Sublicensee is the last entity in the distribution chain of the Product, (b) any use of a Product in Clinical Trials, pre-clinical studies or other research or development activities, or disposal or transfer of Products for a bona fide charitable purpose, (c) compassionate use, (d) so called "treatment IND sales" and "named patient sales," and (e) use under the ATU system in France and/or the International Pharmi system in Europe.

1.43 "**Force Majeure**" means any occurrence beyond the reasonable control of a Party that (a) prevents or substantially interferes with the performance by such Party of any of its obligations hereunder and (b) occurs by reason of any act of God, flood, fire, explosion, earthquake, strike, lockout, labor dispute, casualty or accident, or war, revolution, civil commotion, act of terrorism, blockage or embargo, or any injunction, law, order, proclamation, regulation, ordinance, demand or requirement of any government or of any subdivision, authority or representative of any such government.

1.44 "**FTE**" means one [***] hours of work devoted to or in direct support of Development or Commercialization of Products in accordance with a Global Development Plan or Product Co-Commercialization Plan that is carried out by one or more employees or contract personnel of a Party (other than [***]), measured in accordance with such Party's normal time allocation practices from time to time and subject to audit by the other Party in accordance with Section 3.5.3(b) and Schedule 6. In no event shall an individual account for more than one FTE year in any Calendar Year.

1.45 "**FTE Cost**" means, for any period, the FTE Rate multiplied by the number of FTEs in such period.

1.46 "**FTE Rate**" means a rate of [***] dollars ($[***]) per FTE per annum for FTEs engaged in Development activities. The FTE Rate shall be adjusted annually, commencing on [***], by the percentage movement in the Consumer Price Index for all Urban Consumers for the

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immediately preceding Calendar Year, as published by the U.S. Department of Labor, Bureau of Statistics.

1.47 "**GAAP**" means United States generally accepted accounting principles, consistently applied.

1.48 "**Global Development Plan**" means, with respect to each Product, the written plan for, and budget applicable to, the Development activities to be conducted for such Product, as such written plan may be amended, modified or updated in accordance with Section 3.1.2. For purposes of clarity, it is the expectation of the Parties that the initial Global Development Plan shall describe the Development activities to be conducted for the three (3) year period commencing as of the Effective Date and continuing until [***] and shall be reviewed and updated by the JSC (and JDC with respect to the U.S. Territory) not less than once each Calendar Year.

1.49 "**GLP**" means the then current Good Laboratory Practice Standards promulgated or endorsed by the FDA or in the case of foreign jurisdictions, comparable regulatory standards promulgated or endorsed by the applicable Regulatory Authority, including those procedures expressed in or contemplated by any Regulatory Filings.

1.50 "**GMP**" means current Good Manufacturing Practices that apply to the Manufacture of API and clinical or commercial supply of Product, including, without limitation, the United States regulations set forth under Title 21 of the United States Code of Federal Regulations, parts 210 and 211, as may be amended from time-to-time, as well as all applicable guidance published from time-to-time by the FDA and the International Conference on Harmonisation Guidelines ICHQ7A Good Manufacturing Practice Guidance for API and/or the principles and guidelines of Good Manufacturing Practices for Medicinal Products as defined with EC Directive 2003/94/EC and associated EC Guide to Good Manufacturing Practice.

1.51 "**GSK Co-Commercialization Activities**" means (a) with respect to the Co-Commercialized Product for the Indication of [***], the following activities as deemed necessary by the JCC: (i) interactions with [***]; (ii) [***] activities, including relevant [***] groups; (iii) the conduct of [***]; (iv) interacting with and promoting Products to [***]; (v) interacting with and promoting Products to [***]and [***]; (vi) the conduct of operational activities with respect to Co-Commercialized Products, including without limitation [***] management, management of [***], [***] management (for both [***]) and [***], [***] programs, [***], [***], the maintenance of [***] centers, [***] resource centers and [***] programs, administration matters, [***], [***], sales [***], [***] management and [***] management; (vii) [***]; and (viii) [***] with SYNTA [***] [***] activities and (ix) taking a role in defining the [***], [***] and [***] of the Product; and (b) with respect to the Co-Commercialized Product for any Indication other than [***], [***]; provided, that the activities set forth under Sections 1.51(a)(i), (a)(iii), (a)(iv), (a)(vi), (a)(vii) and (a)(ix) shall [***] GSK's responsibility for [***] Products in [***] Indications, subject to Section 8 of Schedule 6.

1.52 "**GSK Decision**" means any [***] decision that is not a [***] (other than as provided in Section 2.1.5) with respect to (a) the Development and/or Commercialization of a

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Product for [***]; (b) all [***] matters with respect to the Commercialization of any Co-Commercialized Product for any [***] Territory, including matters related to Sections 2.3.4(f), (h), (j) and (n)-(r); (c) all [***] of the Product; (d) all [***] matters in the [***] Territory relating to [***] other than [***] and other than the activities described in Section 3.1.3(b); provided, that the foregoing shall become GSK Decisions at such time as the Commercialization Regulatory Approval for the Product for the Indication of [***] is transferred to GSK in accordance with the Regulatory Filings Transfer Plan; and provided, further that all decisions related to the [***] portions of the Drug Approval Application for the Product for the Indication of [***] shall be GSK Decisions as of the Effective Date; (e) enforcement and defense of the [***]; (f) [***]; and (g) [***] of a [***] as described in Section 8.4.4 if [***] or if the Parties are unable to [***]; provided, that any GSK Decision cannot (i) commit SYNTA to perform any activity that conflicts with GSK Internal Policies (or decisions of the GSK Global Clinical Safety Board) or Applicable Laws; (ii) conflict with an approved Global Development Plan (as it relates to Development in the U.S. Territory) or Product Co-Commercialization Plan; or (iii) be detrimental to the global Branding applicable to a Product.

1.53 "**GSK Development Activities**" means the Development activities specified to be conducted by GSK in any Global Development Plan.

1.54 "**GSK Development Cost-Sharing Percentage**" means [***] percent ([***]%).

1.55 "**GSK Internal Policies**" means the internal policies and procedures of GSK applicable to the Development and/or Commercialization of Products which shall be disclosed by GSK to SYNTA, and updated by GSK, pursuant to Section 12.4.1.

1.56 "**GSK Operating Income (Loss) Sharing Percentage**" means, for all Co-Commercialized Products in each Calendar Year (a) [***] percent ([***]%) of the Operating Income (Loss) for the first $[***] million of Net Sales in the Co-Commercialization Territory in a Calendar Year and (ii) [***] percent ([***]%) of the Operating Income (Loss) for all additional Net Sales in the Co-Commercialization Territory during such Calendar Year. The GSK Operating Income (Loss) Sharing Percentage shall be calculated pursuant to Section 5 of Schedule 4, based on the weighted average percentage of either forecasted or actual (as relevant) total Net Sales in the Co-Commercialization Territory in each Calendar Year above and below $[***] million. For example, if Net Sales in a Calendar Year in the Co-Commercialization Territory are $[***] million, then the GSK Operating Income (Loss) Percentage for that Calendar Year would be [***]% ([***]) since [***] or [***] of the Net Sales are below $[***] million and [***] or [***] of the Net Sales are above $[***] million. For clarity, in any Calendar Year in which there are no Net Sales (including Calendar Years prior to the Calendar Year in which the First Commercial Sale occurs) in the Co-Commercialization Territory, but there are Commercialization Expenses, the GSK Operating Income (Loss) Percentage applicable to the resulting Operating Income (Loss) will be [***] percent ([***]%).

1.57 **"GSK Product Commercialization Plan**" means, with respect to each Product, the written plan outlining material activities with respect to the Commercialization of such Product by GSK in the Major Market Countries in the Royalty-Bearing Territory.

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1.58 "**GSK Patent Rights**" means any Patent Rights Controlled by GSK in the Territory during the Term that cover any aspect of the manufacture, use, sale, offer for sale or importation of a Collaboration Compound or Product, including without limitation any Patent Rights that claim GSK Technology.

1.59 "**GSK Technology**" means any Technology, including Program Technology other than Joint Technology, Controlled by GSK in the Territory during the Term that is necessary or useful for the Development, Manufacture, use or sale of any Collaboration Compound or Product.

1.60 "**Hatch-Waxman Act**" means the Drug Price Competition and Patent Term Restoration Act of 1984, as amended.

1.61 "**HSR Act**" means the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended.

1.62 "**IND**" means (a) an Investigational New Drug Application as defined in the FDCA and regulations promulgated thereunder or any successor application or procedure required to initiate clinical testing of a Product in humans in the United States; (b) a counterpart of an Investigational New Drug Application that is required in any other country or region in the Territory before beginning clinical testing of a Product in humans in such country or region; and (c) all supplements and amendments to any of the foregoing.

1.63 "**Indication**" means any human disease or condition which can be treated, prevented, cured or the progression of which can be delayed. For purposes of the payment of milestones pursuant to Section 6.4.1, with respect to SYNTA's Development Opt-Out Right (except as provided in Section 3.1.3(d)) and with respect to the definition of New Indication, the [***] for a Product for a particular Indication, for example, the [***] of the use of a Product from treating [***] to use as [***] treatment for [***] and/or the approval of a Product as a [***] therapy after being approved as a [***] therapy for treatment of the same disease or condition shall not be deemed to be separate Indications.

1.64 "**Initial Equity Purchase Obligation Date**" means the [***] of (a) the date of determination by the JDC that the Ongoing Clinical Trial has achieved its [***], or (b) the date of determination by the JDC to file for Regulatory Approval in the U.S. Territory for STA-4783 for metastatic melanoma despite not meeting the [***] in the Ongoing[***]Clinical Trial. For purposes of this definition, the date of determination shall mean the date of any meeting at which the applicable decision is made by the JDC pursuant to Section 2.2.3(b) (or if such decision was a Disputed Matter, then the date on which the applicable decision was finally decided).

1.65 "**Initiation**" means, with respect to a Clinical Trial, the first date that a subject or patient is dosed in such Clinical Trial.

1.66 "**JNDA**" means a new drug application submitted to the MHLW to obtain Commercialization Regulatory Approval for the marketing of a Product in Japan.

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1.67 "**Joint Commercialization Committee**" or "**JCC**" means the committee comprised of SYNTA and GSK representatives established pursuant to Section 2.3.

1.68 "**Joint Development Committee**" or "**JDC**" means the committee composed of SYNTA and GSK representatives established pursuant to Section 2.2.

1.69 **"Joint Patent Committee"** or **"JPC"** means the committee composed of SYNTA and GSK representatives established pursuant to Section 2.5.

1.70 "**Joint Patent Rights**" means Patent Rights that contain one or more claims that cover Joint Technology.

1.71 "**Joint Steering Committee**" or "**JSC**" means the committee composed of SYNTA and GSK representatives established pursuant to Section 2.1.

1.72 "**Joint Technology**" means any Program Technology that is jointly conceived or reduced to practice by one or more employees of or consultants to GSK and one or more employees of or consultants to SYNTA.

1.73 "**Knowledge**" or "**Known**" means, with respect to SYNTA, the actual knowledge of the chief executive officer or any executive officer (as defined for purposes of Section 14 of the Securities Exchange Act of 1934, as amended) of SYNTA.

1.74 "**MAA**" means a Marketing Authorization Application submitted to the EMEA to obtain European Commission approval for the marketing of a Product in the European Union, or any successor application or procedure required to sell a Product in the European Union .

1.75 "**Major Indication**" means each of [***].

1.76 "**Major European Country**" means each of the [***].

1.77 "**Major Market Country**" means each of the [***].

1.78 "**Manufacture**" or "**Manufacturing**" or "**Manufactured**" means all operations involved in the manufacture, receipt, incoming inspections, storage and handling of materials, and the manufacture, processing, purification, packaging, labeling, warehousing, quality control testing (including in-process release and stability testing), shipping and release of API or Product.

1.79 "**Manufacturing Cost**" means with respect to any Product Manufactured by or on behalf of GSK, GSK's costs of Manufacturing such Product, which shall be the sum of the following components: (a) direct costs, including manufacturing [***] directly used in Manufacturing such Product by GSK or its Affiliates and allocated [***] of the manufacturing department; (b) [***] of non-manufacturing departments (such as quality and regulatory) attributable to such Product; (c) an allocation of [***] used in Manufacture of Product; (d) [***] and other charges incurred by GSK for outsourcing the Manufacture of the Product and the cost of [***] manufacturers, and of [***] of the outsourced items, and (e) any other [***] out-of-

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pocket costs borne by GSK for the [***] of such Product. In the event that GSK elects to Manufacture Product at a Manufacturing facility owned and operated by GSK, then the costs set forth in clauses (a), (b) and (c) above shall be pro-rated based on capacity utilized by GSK in the Manufacture of such Product, as the case may be, or any intermediate thereof at such facility as compared to the capacity used to Manufacture any other product or intermediate. For purposes of clarity (i) the basis for all allocations under this Section shall be included in any invoice for Manufacturing Costs and (ii) all allocations under this Section shall be based on space occupied or head-count or other activity-based method.

1.80 "**Manufacturing Development**" means, with respect to API or Product, all activities related to the optimization of a commercial-grade Manufacturing process for the Manufacture of API or Product including, without limitation, test method development and stability testing, formulation development, validation, productivity, trouble shooting and next generation formulation, process development, Manufacturing scale-up, development-stage Manufacturing, and quality assurance/quality control development.

1.81 "**Minor Indication**" means any Indication that is not a Major Indication.

1.82 "**NDA**" means a New Drug Application, as defined in the FDCA and regulations promulgated thereunder or any successor application or procedure required to sell a Product in the United States.

1.83 "**Net Sales**" means the gross amount billed or invoiced by GSK or any of its Affiliates or Sublicensees (each, a "Seller") to Third Parties throughout the Territory for sales or other dispositions or transfers for value of Products less (a) allowances for normal and customary [***] actually allowed and taken, (b) [***] paid by the Seller, (c) [***] (regardless of the method for paying for such [***]), [***] pursuant to agreements (including, without limitation, [***] agreements) or government regulations, to the extent actually allowed, (d) [***] paid by the Seller in relation to the Product and any other equivalent [***] imposed upon the importation, use or sale of the Product, (e) [***] to customers on account of retrospective price reductions affecting the Product, (f) the actual amount of any [***] and (g) any other [***] items actually deducted from gross invoiced sales amounts as reported by GSK in its financial statements that are allocable to the sale or disposition for value of Products in accordance with the International Financial Reporting Standards ("IFRS"), applied on a consistent basis. This definition of Net Sales may be updated from time to time by GSK to reflect changes reasonably required by (i) the adoption by GSK of accounting standards other than IFRS, due to GSK's merger with another entity, or as required by Applicable Laws, or (ii) IFRS to the extent GSK is utilizing IFRS as its accounting standard, from time to time; provided, that, GSK shall promptly provide SYNTA with written notice of any such updates. In addition, Net Sales are subject to the following:

(A) If the Seller or any of its Affiliates effects a sale, disposition or transfer of a Product to a customer in a particular country other than on customary commercial terms or as part of a package of products and services, the Net Sales of such Product to such customer shall be deemed to be "the fair market value" of such Product. For purposes of this subsection (i), "fair market value" means the value that would have been derived had such Product been sold as a separate product to another customer in the country concerned on customary commercial terms.

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(B) In the case of pharmacy incentive programs, hospital performance incentive program chargebacks, similar programs or discounts on products, all discounts and the like shall be allocated among products on the basis on which such discounts and the like were actually granted or, if such basis cannot be determined, in proportion to the respective list prices of such products.

(C) For purposes of clarity, (I) use of any Product in Clinical Trials, pre-clinical studies or other research or development activities, or disposal or transfer of Products for a bona fide charitable purpose shall not give rise to any Net Sales and (II) use of any Product in an early access program shall not give rise to any deemed sale for purposes of this definition unless the Seller bills such program for such Product at a price that exceeds [***] percent ([***]%) of the Seller's Manufacturing Cost to supply such Product.

1.84 "**Operating Income (Loss)**" has the meaning set forth on Schedule 4 attached hereto.

1.85 "**Ongoing Clinical Trial**" means the [***] which is contained in the initial Global Development Plan.

1.86 "**Optional Phase 4 Clinical Trial**" means a post-registrational Clinical Trial of the Product in human patients other than a registration trial or a trial mandated by a Regulatory Authority, that is not required as a condition to, or for the maintenance of, a Commercialization Regulatory Approval for the use of a Product in a specified Indication in a country.

1.87 "**Patent Rights**" means the rights and interests in and to issued patents and pending patent applications (which, for purposes of this Agreement, include certificates of invention, applications for certificates of invention and priority rights) in any country or region, including all provisional applications, substitutions, continuations, continuations-in-part, divisions, renewals, all letters patent granted thereon, and all reissues, re-examinations and extensions thereof, and all foreign counterparts of any of the foregoing.

1.88 "**Permitted Transactions**" means any agreement by and between a Party and (a) any Third Party pursuant to which such Third Party conducts [***] permitted pursuant to Section 8.2.1(a) of this Agreement or (b) any [***], which agreement provides for the [***] under such agreement.

1.89 "**Per Share Purchase Price**" means the sum of (a) the Average Closing Price plus (b) the Applicable Premium times the Average Closing Price.

1.90 "**Person**" means an individual, sole proprietorship, partnership, limited partnership, limited liability partnership, corporation, limited liability company, business trust, joint stock company, trust, incorporated association, joint venture or similar entity or organization, including a government or political subdivision, department or agency of a government.

1.91 "**Pharmacovigilance Agreement**" means the safety data exchange agreement relating to the activities contemplated under this Agreement which the Parties will use their

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Commercially Reasonable Efforts to agree and enter into within [***] ([***]) days of the Effective Date of this Agreement.

1.92 "**Phase 1 Clinical Trial**" means a Clinical Trial in any country, the principal purpose of which is a preliminary determination of safety in healthy individuals or patients that would satisfy the requirements of 21 CFR 312.21(a), or an equivalent clinical study required by a Regulatory Authority in a jurisdiction outside of the United States.

1.93 "**Phase 2 Clinical Trial**" means a Clinical Trial conducted in any country that is intended to explore a variety of doses, dose response and duration of effect to generate initial evidence of clinical safety and activity in a target patient population, that would satisfy the requirements of 21 CFR 312.21(b), or an equivalent clinical study required by a Regulatory Authority in a jurisdiction outside of the United States.

1.94 **"Phase 2a Clinical Trial"** means, as to a particular Product for any New Indication, the portion of a Phase 2 Clinical Trial which contains a sufficient number of subjects to generate sufficient data (if successful) to commence a Phase 2b or a Phase 3 Clinical Trial of such Product for such New Indication.

1.95 **"Phase 2b Clinical Trial"** means, as to a particular Product for any New Indication, the portion of a Phase 2 Clinical Trial which contains a sufficient number of subjects to generate sufficient data (if successful) to either (i) commence a Phase 3 Clinical Trial of such Product for such New Indication or (ii) file a Drug Approval Application for such Product for such New Indication.

1.96 "**Phase 3 Clinical Trial**" means a Clinical Trial in any country performed after preliminary evidence of efficacy has been obtained, which if successful, provides sufficient evidence of the safety and efficacy of a product to support a Commercialization Regulatory Approval, and that would satisfy the requirements of 21 CFR 312.21(c), or an equivalent clinical study required by Regulatory Authority in a jurisdiction outside of the United States.

1.97 "**Pricing**" means the determination of Product pricing at all levels, including the Product list price (also referred to as Wholesale Acquisition Cost) and the net price in which the Product is offered to various purchasers and payers (private sector and government entities).

1.98 "**Product**" means any pharmaceutical or medicinal item, substance, formulation or dosage for sale by prescription, over-the-counter, or any other method, which is comprised of or contains a Collaboration Compound (whether or not such Collaboration Compound is the sole active ingredient). For purposes of clarity, Product includes Co-Commercialized Products and Royalty-Bearing Products.

1.99 "**Product Co-Commercialization Plan**" means, with respect to a Co-Commercialization Product, the written plan for the commercialization (including the GSK Co-Commercialization Activities and SYNTA Co-Commercialization Activities) of such Product in the Co-Commercialization Territory (including, without limitation, expected Manufacturing requirements and a detailed [***], budget and proposed timelines), as such plan may be amended or updated. Each Product Co-Commercialization Plan shall include, without limitation, (a)

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demographics and market dynamics, market [***], a marketing plan (including advertising, detailing forecasts, [***] pertaining to [***] and sales forecasts); (b) the specific Commercialization objectives, projected milestones, resource allocation requirements and activities to be performed over such period (including, without limitation, all anticipated Clinical Trials); (c) the Party responsible for such activities; (d) an expected non-binding timeline for such activities, including the estimated launch date(s); (e) a non-binding sales and expense forecast (including at least [***] ([***]) years of estimated sales and expenses); (f) Manufacturing plans and the expected product profile; (g) a " **Commercialization Budget**" including a budget of the expenses expected to be incurred in performing all activities therein contained, as well as any Third Parties proposed to be utilized and, to the extent applicable, any proposed Third Party arrangements; and (h) the expected Regulatory Filings to be required and prepared, and the expected timetable for making such Regulatory Filings. Each Product Co-Commercialization Plan, and each amendment, modification or update to each Product Co-Commercialization Plan, shall be prepared by, or at the direction of, the JCC, and approved by the JSC at such time as the JSC may from time to time direct and in any event, on or prior to the initiation of Commercialization activities with respect to the Product.

1.100 "**Product Trademark**" means any trademark or trade name, whether or not registered, or any trademark application or renewal, extension or modification thereof, in the Territory, or any trade dress and packaging applied to or used with any Product together with all goodwill associated therewith.

1.101 "**Program Technology**" means any Technology relating to a Collaboration Compound (including, without limitation, any new and useful process, synthesis, formulation, delivery, method of manufacture or composition of matter) that is conceived and first reduced to practice by either Party or jointly by both Parties in the conduct of the Collaboration.

1.102 "**Promotional Efforts**" means with respect to a Co-Commercialized Product, an interactive, personal, live, contact of a Representative within the Co-Commercialization Territory with a medical professional with prescribing authority, an individual who is part of the applicable treatment team for an Indication or other individuals or entities that have a significant impact or influence on prescribing decisions, in an effort to influence physician prescribing preferences of such Co-Commercialized Product for its approved uses within the Co-Commercialization Territory.

1.103 "**Proof of Concept Clinical Trial**" means a Phase 2b Clinical Trial that is designed to determine whether a Collaboration Compound satisfies the Proof of Concept Criteria for a specific Indication. A Proof of Concept Clinical Trial shall be designed to be in keeping with industry practices in terms of number of participants, number of sites, duration of the study, number of arms in the study and total anticipated cost of the study.

1.104 "**Proof of Concept Criteria**" means the criteria that will be determined by the JDC and used to determine if a Collaboration Compound demonstrates a [***] in treating a specific Indication in a Proof of Concept Clinical Trial. Proof of Concept Criteria may also include certain non-clinical studies and assessments as the JDC may determine are appropriate.

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1.105 "**Regulatory Approval**" means, with respect to any country or region in the Territory, any approval, product and establishment license, registration or authorization of any Regulatory Authority required for the Manufacture, use, storage, importation, exportation, transport or distribution of a Product in such country or region, excluding price and reimbursement approval.

1.106 "**Regulatory Authority**" means any national, supra-national, regional, state or local regulatory agency, department, bureau, commission, council or other governmental entity with authority over the distribution, importation, exportation, Manufacture, production, use, storage, transport, clinical testing, pricing or sale of a Product, including without limitation, the FDA, EMEA, European Commission and the MHLW.

1.107 "**Regulatory Filings**" means, collectively: (a) all INDs, NDAs, MAAs, JNDAs, BLAs, establishment license applications, DMFs, applications for designation as an "Orphan Product(s)" under the Orphan Drug Act, for "Fast Track" status under Section 506 of the FDCA (21 U.S.C. § 356) or for a Special Protocol Assessment under Section 505(b)(4)(B) and (C) of the FDCA (21 U.S.C. § 355(b)(4)(B)) and all other similar filings (including, without limitation, counterparts of any of the foregoing or Scientific Advice in any country or region in the Territory); and (b) all supplements and amendments to any of the foregoing.

1.108 "**Required Phase 4 Clinical Trial"** means a post-registrational Clinical Trial of Products in human patients that is required as a condition to, or for the maintenance of, a Commercialization Regulatory Approval for the use of Product in a specified Indication in a country.

1.109 "**ROW Territory**" means all of the countries and territories of the world other than the U.S. Territory.

1.110 "**Royalty-Bearing Product**" means any Product that is sold by GSK in the Royalty-Bearing Territory.

1.111 "**Royalty-Bearing Territory**" means (a) the ROW Territory and (b) the U.S. Territory in the event that SYNTA exercises the Commercialization Opt-Out Right with respect to a Product or otherwise loses the right to conduct SYNTA Co-Commercialization Activities with respect to a Product under this Agreement.

1.112 "**Royalty Term**" means with respect to each Royalty-Bearing Product in each country in the Royalty-Bearing Territory, the period beginning on the date of First Commercial Sale of such Royalty-Bearing Product in such country and ending on the later to occur of (a) the expiration of the last to expire Valid Claim of the SYNTA Patent Rights or Joint Patent Rights in such country that covers the composition of matter, sale, import or use of the Collaboration Compound contained in such Royalty-Bearing Product, and (b) [***] years from the date of the First Commercial Sale of such Royalty-Bearing Product in such country.

1.113 "**Share Purchase Number**" means (a) with respect to the Initial Equity Purchase Obligation, the number of shares of SYNTA Common Stock as shall equal Twenty Five Million Dollars (US $25,000,000) divided by the Per Share Purchase Price and (b) with respect to the

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Subsequent Equity Purchase Right, the number of shares of SYNTA Common Stock as shall equal Twenty Million Dollars (US $20,000,000) divided by the Per Share Purchase Price.

1.114 "**sNDA**" means a Supplemental New Drug Application, as defined in the FDCA and applicable regulations promulgated thereunder.

1.115 "**STA-4783**" means the compound Controlled by SYNTA and described more fully on Schedule 1 attached hereto.

1.116 "**Sublicensee**" means any Third Party to which a Party grants a sublicense in accordance with Section 8.2.

1.117 "**Subsequent Equity Purchase Right Date**" means the date on which written notification of Regulatory Approval for an NDA or MAA is first received in one of either the United States, the European Union or two Major European Countries for the first to occur of either (a) the second Indication for a Product or (b) the first Indication for the second Product.

1.118 "**SYNTA Co-Commercialization Activities**" means, (i) with respect to the Co-Commercialized Product for the Indication of metastatic melanoma, the following activities as deemed necessary by the JCC: (a) the lead role in the conduct of interactions with [***]; (b) the lead role in interacting with [***] organizations and the [***]; (c) the lead role in defining the market [***], [***] management and [***] of the Product to be presented to the JCC; (d) establishing and maintaining relationships with [***] groups; (e) the responsibility for coordinating Optional Phase 4 Clinical Trials and Collaborative Research Trials; (f) fielding a Medical Science Liaisons (MSL) group; and (g) sponsoring and/or co-sponsoring with GSK [***] activities and (ii) with respect to the Co-Commercialized Product for any Indication other than metastatic melanoma, such [***].

1.119 "**SYNTA Decision**" means any decision that is not a [***] with respect to [***] matters relating to the Development or Commercialization of any Co-Commercialized Product for any Indication in the Co-Commercialization Territory, including matters related to Sections 2.3.4(e) and (g), but excluding decisions relating to the [***] portion of the Drug Approval Application for the Product for the Indication of [***] in the U.S. Territory; provided, that any SYNTA Decision cannot (a) result in an increase of more than [***] percent ([***]%) in any annual budget applicable to a Product; (b) commit GSK to perform any activity that conflicts with GSK Internal Policies (or decisions of the GSK Global Clinical Safety Board) or Applicable Laws; (c) conflict with an approved Global Development Plan or Product Co-Commercialization Plan; or (d) be detrimental to the global Branding applicable to a Product.

1.120 "**SYNTA Development Activities**" means the Development activities specified to be conducted by SYNTA in any Global Development Plan.

1.121 "**SYNTA Development Cost-Sharing Percentage**" means [***] percent ([***]%).

1.122 "**SYNTA Operating Income (Loss) Sharing Percentage**" means, with respect to each Co-Commercialized Product, the result, expressed as a percentage, obtained by subtracting

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the GSK Operating Income (Loss) Percentage applicable to that Co-Commercialized Product from one hundred percent (100%).

1.123 "**SYNTA Patent Rights**" means any Patent Rights Controlled by SYNTA in the Territory during the Term that cover any aspect of the manufacture, use, sale, offer for sale or importation of a Collaboration Compound or Product, including without limitation any Patent Rights that claim SYNTA Technology. The SYNTA Patent Rights existing as of the Execution Date include, without limitation, the Patent Rights listed on Schedule 2 attached hereto, and shall, unless otherwise determined by the JPC, be updated by SYNTA not less than [***]; provided, that such updates will be provided not less than [***] following the First Commercial Sale of a Product.

1.124 "**SYNTA Technology**" means any Technology, including Program Technology other than Joint Technology, Controlled by SYNTA in the Territory during the Term that is necessary or useful for purposes of the Development, Manufacture, use or sale of any Collaboration Compound or Product.

1.125 "**Technology**" means, collectively, inventions, discoveries, improvements, trade secrets, tangible chemical, biological or physical materials and proprietary methods, whether or not patentable, including without limitation: (a) methods of Manufacture or use of, and structural and functional information pertaining to, chemical compounds and (b) compositions of matter, data, formulations, processes, techniques, know-how and results (including any negative results).

1.126 **"Technology Transfer"** means the provision by one Party of technical assistance, manufacturing and analytical know-how, and material specifications to enable the transfer of Technology necessary for the other Party or its contract manufacturers to commence Manufacture of commercial supply requirements of API and Product to meet the relevant specifications, applicable legal and regulatory requirements in accordance with mutually agreed transfer protocols and acceptance criteria.

1.127 "**Territory**" means all countries and territories of the world.

1.128 "**Third Party**" means a Person other than GSK and SYNTA and their respective Affiliates and Sublicensees.

1.129 **"Third Party Agreements"** means the (a) [***] and SYNTA, dated [***] and (b) the [***] and SYNTA, dated [***].

1.130 "**Third Party Data Provider**" means IMS Health and/or any other Third Party approved by the JSC that performs market analyses and provides sales data for the biotechnology or pharmaceutical industry.

1.131 "**Unanimous Decision**" means (a) any SYNTA Decision that would result in an increase of more than [***] percent ([***]%) in any annual Development or Commercialization budget applicable to a Product; (b) a GSK Decision or SYNTA Decision that would (i) commit either Party to perform any activity that conflicts with the GSK Internal Policies (including without limitation decisions of the GSK Global Clinical Safety Board) or Applicable Laws; (ii)

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conflict with an approved Global Development Plan (as it relates to Development in the U.S. Territory) or Product Co-Commercialization Plan; or (iii) be detrimental to the global Branding applicable to a Product; (c) any dispute with respect to the negotiation and execution by the Parties of the Co-Commercialization Agreement pursuant to Section 5.1.1(b); and (d) any decision with respect to any of the following matters: (i) [***] for Products in the U.S. Territory, (ii) [***] of a [***] [***] as described in Section 8.4.4 except as set forth in Section 1.52(g), (iii) decisions pertaining to Section 2.2.4(i), Sections 2.3.4(a)-(b), Section 2.3.4(c) except as it pertains to the matters under Section 2.3.4(f) which are GSK Decisions, Section 2.3.4(d), Section 2.3.4(i) and Section 2.3.4(s)-(t), (iv) approval of the initial [***], (v) the conduct of [***], [***] or [***], (vi) the conduct of the [***] proposed by SYNTA and the protocol design for the [***], (vii) the conduct of the [***] proposed by SYNTA, the protocol design for each [***] proposed by SYNTA, the protocol design for the [***], (ix) any decision to progress [***] as set forth in Sections 3.1.3(b)-(c), (x) the conduct of Development in a [***] pursuant to Section 3.1.3(c), the protocol design for each new [***] and (xi) decisions regarding the prosecution, maintenance and filing of [***] derived from the initial utility application from which the Class 1 Patent and the Class 2 Patent were derived, and (xii) a determination that the [***] of STA-4783 has been identified. For clarity, in the event that the Parties do not unanimously agree to progress Development into Phase 3, then GSK shall be permitted to continue on its own subject to Section 3.1.3(d), or terminate such Development.

1.132 "**U.S. Territory**" means the fifty states of the United States of America and the District of Columbia.

1.133 "**Valid Claim**" means any claim of a pending patent application (only if the claim at issue has been pending for less than [***] years from the date of the first official action) or an issued unexpired patent that (a) has not been finally (i) cancelled, (ii) withdrawn, (iii) abandoned or (iv) rejected by any administrative agency or other body of competent jurisdiction, (b) has not been permanently revoked, held invalid, or declared unpatentable or unenforceable in a decision of a court or other body of competent jurisdiction that is unappealable or unappealed within the time allowed for appeal, (c) has not been rendered unenforceable through terminal disclaimer or otherwise, and (d) is not lost through an interference proceeding that is unappealable or unappealed within the time allowed for appeal.

Additional Definitions. In addition, each of the following definitions shall have the respective meanings set forth in the section of this Agreement indicated below:

Definition	Section
AAA	14.1
Abandoning Party	10.1.4
Action	10.2.1(a)(ii)
Agreement	Preamble
Alliance Manager	2.4
Annual Estimate	Schedule 4
Applicable Reversion Royalty Rate	11.3.1(b)
Appointing Party	2.7

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Definition	Section
Arbitration Matter	14.1
Assuming Party	10.1.4
Audited Party	Schedule 4
Auditing Party	Schedule 4
Change of Control Notice	14.10
Claims	13.1
Co-Commercialization Agreement	5.1.1(b)
Co-Commercialization Net Sales	Schedule 4
Combination Product	6.5.1(c)(iii)
Commercialization Activities Transition Notice	Schedule 6
Commercialization Opt-Out Date	5.1.1(c)
Commercialization Opt-Out Right	5.1.1(c)
Commercialization Transition Plan	Schedule 6
Competing Drug	6.5.1(c)(iv)
Co-Commercialization Trademarks	10.3.1
Cost Audited Party	3.6.2(b)
Cost Auditing Party	3.6.2(b)
Development Opt-Out Notice	3.1.3(d)
Development Opt-Out Right	3.1.3(d)
Disputed Matter	2.1.5
Estimate	Schedule 4
Estimated Loss	Schedule 4
Estimated Operating Income Payment	Schedule 4
Execution Date	Preamble
GSK	Preamble
GSK Indemnitees	13.2
GSK Manufacturing Know-How	11.3.1(d)
GSK's Brand	10.3.4
HSR Conditions	14.15.2
HSR Filing	14.15.1
Indemnified Party	13.3
Indemnifying Party	13.3
Infringement	10.2.1(a)(i)
Initial Co-Commercialization Period	Schedule 4
Initial Equity Purchase Obligation	6.2.1
Initial Product Co-Commercialization Plan	5.3(a)
Losses	13.1
MHLW	1.1
MTD	3.1.3(b)
MTD Study	3.1.3(b)
Negotiation Period	5.1.1(b)
New Indication	3.1.3(b)
New Phase 2a Clinical Trial	3.1.3(b)
New Phase 2b Clinical Trial	3.1.3(b)

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Definition	Section
non-Appointing Party	2.7
Operating Income Payments	Schedule 4
Opt-Out Indication	3.1.3(d)
Other Products	6.5.1(c)(ii)
Party/Parties	Preamble
Phase 2a Success Criteria	3.1.3(b)(i)
Phase 2b Success Criteria	3.1.3(b)(ii)
Publication Committee	7.3
Recipient Party	3.5.1
Region	11.2.1(a)(ii)
Regulatory Filings Transfer Plan	4.1
Representative	Schedule 6
Reverted Royalty-Bearing Product	11.3.1(b)
Stock Purchase Agreement	6.2.1
Subsequent Equity Purchase Right	6.2.2
SYNTA	Preamble
SYNTA Common Stock	6.2.1
SYNTA Indemnitees	13.1
SYNTA's Brand	10.3.4
Term	11.1
Transferring Party	3.5.1
True-Up Operating Income Payment	Schedule 4
Valid Safety Issue	11.2.1(a)(iii)

2. ADMINISTRATION OF THE COLLABORATION

2.1 **Joint Steering Committee.**

2.1.1 **Establishment.** As soon as practicable but in any event within [***] Business Days after the Effective Date, SYNTA and GSK shall establish the JSC. The JSC shall have and perform the responsibilities set forth in Section 2.1.4.

2.1.2 **Membership.** Each of SYNTA and GSK shall designate in writing an equal number (not less than [***]) of representatives to the JSC, who shall be senior level personnel. For the one (1) year period beginning on the establishment of the JSC, a SYNTA representative to the JSC shall serve as the chairperson of the JSC. For each subsequent one-year period, representatives of the Parties shall alternate as the chairperson of the JSC. Each Party shall have the right at any time to substitute individuals, on a permanent or temporary basis, for any of its previously designated representatives to the JSC by giving written notice to the other Party.

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2.1.3 **Meetings.**

(a) Schedule of Meetings; Agenda. The first meeting of the JSC shall take place within [***] days of the Effective Date. Thereafter, the JSC shall meet on a [***] basis, or more or less frequently as agreed, taking into account, without limitation, the planning needs of the Development Program and the Commercialization of Products and the responsibilities of the JSC. Special meetings of the JSC may be convened by either Party upon not less than [***] days (or, if such meeting is proposed to be conducted by teleconference, upon not less than [***] days) written notice to the other members; provided, that notice of any such special meeting may be waived at any time if mutually agreed by the Parties. Regular and special meetings of the JSC may be held in person or by teleconference or videoconference; provided, that, meetings held in person shall alternate between the respective offices of the Parties in Lexington, Massachusetts and Philadelphia, Pennsylvania or at other locations mutually agreeable to the JSC members. The Alliance Manager from the opposing Party to the chairperson shall be the designated secretary at meetings of the JSC and shall be responsible for preparing and circulating to each JSC member an agenda for each JSC meeting not later than [***] prior to such meeting.

(b) Quorum; Voting; Decisions. At each JSC meeting, (i) the presence in person of at least [***] designated by each Party shall constitute a quorum and (ii) the representatives of a Party shall have [***] on all matters before the JSC at such meeting. All decisions of the JSC shall be made by [***] vote. Alternatively, the JSC may act by written consent signed by at least [***] designated by each Party. Whenever any action by the JSC is called for hereunder during a time period in which the JSC is not scheduled to meet, the chairperson shall cause the JSC to take the action in the requested time period by calling a special meeting or by circulating a written consent. Representatives of each Party or of its Affiliates who are not members of the JSC (including, without limitation, members of the JPC, financial representatives and Alliance Managers) may attend JSC meetings as non-voting observers as appropriate for the agenda.

(c) Minutes. The designated secretary shall keep minutes of all meetings that record all decisions and all actions recommended or taken in reasonable detail. Drafts of the minutes shall be prepared and circulated to the members of the JSC within a reasonable time after the meeting, not to exceed [***] Business Days. Each member of the JSC shall have the opportunity to provide comments on the draft minutes. Final minutes of each meeting shall be approved as the first order of business at the subsequent JSC meeting.

(d) Expenses. SYNTA and GSK shall each bear all expenses of their respective JSC representatives related to their participation on the JSC and attendance at JSC meetings and shall not be Development Costs or Commercialization Expenses for purposes of this Agreement.

2.1.4 **Responsibilities.** The JSC shall be responsible for overseeing the conduct and progress of the global Development Program, and specifically the Development and Commercialization of Products in the U.S. Territory. In addition, the JSC will receive updates from GSK with respect to Development and Commercialization of Products in the ROW

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Territory; provided that such updates are meant to be informational only and not subject to the JSC's approval. Without limiting the generality of the foregoing, the JSC shall have the following responsibilities:

(a) overseeing the activities and performance by each of the JDC and the JCC of its respective responsibilities;

(b) reviewing the GSK Internal Policies applicable to the Development and/or Commercialization activities being conducted under the Agreement, as in effect on the Effective Date and as updated by GSK from time to time;

(c) reviewing data, reports or other information submitted to it by the JDC or the JCC from time to time;

(d) reviewing on a [***] basis updates of material activities conducted by or on behalf of GSK with respect to the Development and Commercialization of Products in each Major Market Country in the ROW Territory;

(e) reviewing and approving each Global Development Plan and budget, the Product Co-Commercialization Plan and Commercialization Budget and the Regulatory Filings Transfer Plan;

(f) resolving all JDC or JCC matters that are in dispute; and

(g) making such other decisions as may be delegated to the JSC pursuant to this Agreement or by mutual written agreement of the Parties during the Term.

2.1.5 **Dispute Resolution**. The JSC members shall use reasonable efforts to reach agreement on any and all matters. If, despite such reasonable efforts, agreement on a particular matter cannot be reached by the JSC within [***] days after the JSC first meets to consider such matter or such later date as may be mutually acceptable to the Parties (each such matter, a "Disputed Matter"), then the JSC shall refer such Disputed Matter to the Chairman, Research & Development or Chief Operational Officer, Pharmaceuticals (or their respective designees), for GSK and the Chief Executive Officer (or his designee) for SYNTA who shall promptly initiate discussions in good faith to resolve such Disputed Matter. If the Disputed Matter is not resolved by the aforementioned senior executives within [***] days of the date the Disputed Matter is first referred to the senior executives for resolution, then (a) if the Disputed Matter involves a SYNTA Decision, the Chief Executive Officer of SYNTA shall have the right to make the final decision on such Disputed Matter, but shall only exercise such right in good faith after full consideration of the positions of both Parties and shall not be submitted to arbitration for resolution pursuant to Section 14.1; (b) if the Disputed Matter involves a GSK Decision, the Chairman, Research & Development or Chief Operational Officer, Pharmaceuticals (or their respective designees), of GSK (as appropriate) shall have the right to make the final decision on such Disputed Matter, but shall only exercise such right in good faith after full consideration of the positions of both Parties and shall not be submitted to arbitration for resolution pursuant to Section 14.1; (c) if the Disputed Matter involves a Unanimous Decision , such Disputed Matter must be resolved promptly by consensus of the JSC or the

foregoing officers and shall not be submitted to arbitration for resolution pursuant to Section 14.1; and (d) if the Disputed Matter involves any other matter, such Disputed Matter shall be submitted to arbitration for resolution pursuant to Section 14.1. If a Unanimous Decision set forth in Section 1.131(d)(ii) (subject to Section 1.52(g)) or Section 1.131(d)(ix) cannot be resolved by the JSC or the officers as described in Section 2.1.5(c) within [***] days of referral thereto, then such Unanimous Decisions will be finally decided by GSK. Notwithstanding the foregoing, where, as a result of Disputed Matters that have been decided pursuant to Section 2.1.5(a) or (b), the Party who was not responsible for making such decision reasonably believes the other Party's decision would result in a material breach of this Agreement, then, the non-deciding Party may, after providing the deciding Party with written notice describing such reasonable belief, provide the deciding Party with a notice of breach pursuant to Section 11.2.2 or seek a declaratory judgment that such decision would result in a breach of this Agreement.

2.2 **Joint Development Committee.**

2.2.1 **Establishment; Term.** As soon as practicable but in any event within [***] Business Days after the Effective Date, SYNTA and GSK shall establish the JDC. The JDC shall have and perform the responsibilities set forth in Section 2.2.4. Unless otherwise agreed by the Parties, the term for the JDC shall commence on the date it is established by the Parties and continue until the JSC determines to discontinue the JDC as a result of the completion of all Development activities for Products.

2.2.2 **Membership.** Each of SYNTA and GSK shall designate in writing an equal number (not less than [***]) of representatives to the JDC. For a one (1) year period beginning on the establishment of the JDC, a SYNTA representative to the JSC shall serve as the chairperson of the JDC. For each subsequent one-year period, representatives of the Parties shall alternate as the chairperson of the JDC . Each Party shall have the right at any time to substitute individuals, on a permanent or temporary basis, for any of its previously designated representatives to the JDC by giving written notice to the other Party.

2.2.3 **Meetings.**

(a) Schedule of Meetings; Agenda. The first meeting of the JDC shall take place within [***] days of the Effective Date. Thereafter, the JDC shall meet on a [***] basis, or more or less frequently as agreed, taking into account, without limitation, the planning needs of the Development Program and the responsibilities of the JDC. Special meetings of the JDC may be convened by either Party upon not less than [***] days (or, if such meeting is proposed to be conducted by teleconference, upon not less than [***] days) written notice to the other members; provided, that notice of any such special meeting may be waived at any time if mutually agreed by the Parties. Regular and special meetings of the JDC may be held in person or by teleconference or videoconference; provided, that, meetings held in person shall alternate between the respective offices of the Parties in Lexington, Massachusetts and Philadelphia, Pennsylvania or at other locations mutually agreeable to the JDC members. A designated secretary from the opposing Party to the chairperson shall be responsible for preparing and circulating to each JDC member an agenda for each JDC meeting not later than [***] prior to such meeting.

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(b) Quorum; Voting; Decisions. At each JDC meeting, (i) the presence in person of at least [***] designated by each Party shall constitute a quorum and (ii) the representatives of a Party shall have [***] on all matters before the JDC at such meeting. All decisions of the JDC, shall be made by [***] vote. Alternatively, the JDC may act by written consent signed by at least [***] designated by each Party. Whenever any action by the JDC is called for hereunder during a time period in which the JDC is not scheduled to meet, the chairperson shall cause the JDC to take the action in the requested time period by calling a special meeting or by circulating a written consent. Representatives of each Party or of its Affiliates who are not members of the JDC (including, without limitation, members of the JPC, financial representatives and Alliance Managers) may attend JDC meetings as non-voting observers. In the event that the JDC is unable to resolve any matter before it, such matter shall be resolved in accordance with Section 2.2.5.

(c) Minutes. The designated secretary shall keep minutes of all meetings that record all decisions and all actions recommended or taken in reasonable detail. Drafts of the minutes shall be prepared and circulated to the members of the JDC within a reasonable time after the meeting, not to exceed [***] Business Days. Each member of the JDC shall have the opportunity to provide comments on the draft minutes. Final minutes of each meeting shall be approved as the first order of business at the subsequent JDC meeting.

(d) Expenses. SYNTA and GSK shall each bear all expenses of their respective JDC representatives related to their participation on the JDC and attendance at JDC meetings and such expenses shall not be Development Costs or Commercialization Expenses for purposes of this Agreement.

2.2.4 **Responsibilities.** The JDC shall be responsible for overseeing the conduct and progress of the Development Program and the Development of Products in the U.S. Territory. For purposes of clarity, where this Agreement provides for the JDC to have oversight over any Development applicable to the U.S. Territory, but not conducted in the U.S. Territory, such oversight shall be solely limited to the conduct of the Ongoing Clinical Trial or any other Clinical Trial in the ROW Territory intended to support registration in the U.S. Territory. The JDC shall have the following responsibilities:

(a) preparing, or directing the preparation by the Parties of, that portion of each Global Development Plan applicable to the Development of Products in the U.S. Territory, including the budget with respect thereto;

(b) preparing, or directing the preparation by the Parties of, each amendment to any Global Development Plan for the Development of Products applicable to the U.S. Territory or the budget with respect thereto;

(c) monitoring the progress of the Development Program under each Global Development Plan for the Development of Products applicable to the U.S. Territory and of each Party's activities thereunder;

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(d) providing a forum for consensual decision making with respect to the Development of Products applicable to the U.S. Territory;

(e) reviewing and circulating to the Parties data, reports or other information submitted by either Party with respect to work conducted under the Development Program;

(f) overseeing the conduct of Clinical Trials for the Development of Products applicable to the U.S. Territory, including without limitation the conduct of the Ongoing Clinical Trial;

(g) allocating responsibility between the Parties for the Development of Products, including responsibility for the conduct of Clinical Trials for [***], assigning activities and tasks and allocating FTEs between the Parties;

(h) reviewing and [***] any material agreement entered into by a Party with a Third Party pursuant to Section 8.2.1 related to Development (except for [***]) applicable to the U.S. Territory;

(i) in conjunction with the JCC, approving the overall strategy for publications and presentations in support of Products in the U.S. Territory as determined by the Publication Committee;

(j) making such other decisions as may be delegated to the JDC pursuant to this Agreement or by the JSC or by mutual written agreement of the Parties during the Term;

(k) establishing [***] applicable to Development of the Products in the U.S. Territory as described in Section 3.1.3(c);

(l) in conjunction with the JCC, reviewing and approving any proposals for [***] of existing Co-Commercialized Products, including, without limitation, [***] and [***];

(m) reconciling issues between the Parties with respect to the Parties' respective share of Development Costs with respect to Products;

(n) subject to Sections 12.4.1 and 12.5.2, reviewing adherence of the Development of Product applicable to the U.S. Territory to GSK Internal Policies;

(o) designing (i) the protocol for the [***] Study, (ii) the protocols for the [***](s), and (iii) the protocol for the [***];

(p) establishing the [***] thereof;

(q) discussing the program for [***] conducted by SYNTA to [***] of STA-4783 as described in Section [***] and reviewing the results thereof;

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(r) establishing any sub-committees or teams as deemed necessary; and

(s) resolving any other disputes raised to the JDC.

2.2.5 **Dispute Resolution**. The JDC members shall use reasonable efforts to reach agreement on any and all matters. In the event that, despite such reasonable efforts, agreement on a particular matter cannot be reached by the JDC within [***] days after the JDC first meets to consider such matter, then the matter shall be referred to the JSC for resolution pursuant to Section 2.1.5.

2.3 **Joint Commercialization Committee.**

2.3.1 **Establishment; Term.** As soon as practicable but in any event within [***] Business Days of the Effective Date, SYNTA and GSK shall establish the JCC. The JCC shall have and perform the responsibilities set forth in Section 2.3.4. Unless otherwise agreed by the Parties, the term for the JCC shall commence at such time as the JSC determines and continue for so long as SYNTA Co-Commercialization Activities and GSK Co-Commercialization Activities are being conducted with respect to a Co-Commercialized Product under the terms of a Co-Commercialization Agreement.

2.3.2 **Membership.** Each of SYNTA and GSK shall designate in writing an equal number (not less than [***]) of representatives to the JCC. For a one (1) year period beginning on the establishment of the JCC, a SYNTA representative to the JSC shall serve as the chairperson of the JCC. For each subsequent one-year period, representatives of the Parties shall alternate as the chairperson of the JCC . Each Party shall have the right at any time to substitute individuals, on a permanent or temporary basis, for any of its previously designated representatives to the JCC by giving written notice to the other Party.

2.3.3 **Meetings.**

(a) Schedule of Meetings; Agenda. The first meeting of the JCC shall take place within [***] days after the establishment of the JCC. The JCC shall meet on a quarterly basis, or more or less frequently as agreed, taking into account, without limitation, the planning needs for the conduct of SYNTA Co-Commercialization Activities and GSK Co-Commercialization Activities for Co-Commercialized Products and the responsibilities of the JCC. Special meetings of the JCC may be convened by any member upon not less than [***] days (or, if such meeting is proposed to be conducted by teleconference, upon [***] days) written notice to the other members; provided, that notice of any such special meeting may be waived at any time if mutually agreed by the Parties. Regular and special meetings of the JCC may be held in person or by teleconference or videoconference; provided, that, meetings held in person shall alternate between the respective offices of the Parties in Lexington, Massachusetts and Philadelphia, Pennsylvania or at other locations mutually agreeable to the JCC members. A designated secretary from the opposing Party to the chairperson shall be responsible for preparing and circulating to each JCC member an agenda for each JCC meeting not later than [***] week prior to such meeting.

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(b) Quorum; Voting; Decisions. At each JCC meeting, (i) the presence in person of at least [***] designated by each Party shall constitute a quorum and (ii) the representatives of a Party shall have [***] on all matters before the JCC at such meeting. All decisions of the JCC, shall be made by [***] vote. Alternatively, the JCC may act by written consent signed by at least [***] designated by each Party. Whenever any action by the JCC is called for hereunder during a time period in which the JCC is not scheduled to meet, the chairperson shall cause the JCC to take the action in the requested time period by calling a special meeting or by circulating a written consent. Representatives of each Party or of its Affiliates who are not members of the JCC (including, without limitation, members of the JPC, financial representatives and Alliance Managers) may attend JCC meetings as non-voting observers upon advance written notice. In the event that the JCC is unable to resolve any matter before it, such matter shall be resolved in accordance with Section 2.3.5.

(c) Minutes. The designated secretary shall keep minutes of all meetings that record all decisions and all actions recommended or taken in reasonable detail. Drafts of the minutes shall be prepared and circulated to the members of the JCC within a reasonable time after the meeting, not to exceed [***] Business Days. Each member of the JCC shall have the opportunity to provide comments on the draft minutes. Final minutes of each meeting shall be approved as the first order of business at the subsequent JCC meeting.

(d) Expenses. SYNTA and GSK shall each bear all expenses of their respective JCC representatives related to their participation on the JCC and attendance at JCC meetings and such expenses shall not be Development Costs or Commercialization Expenses for purposes of this Agreement.

2.3.4 **Responsibilities.** The JCC shall be responsible for overseeing the conduct and progress of the SYNTA Co-Commercialization Activities and GSK Co-Commercialization Activities for each Co-Commercialized Product in the Co-Commercialization Territory. Without limiting the generality of the foregoing, the JCC shall have the following responsibilities:

(a) preparing, or directing the preparation by the Parties of, each Product Co-Commercialization Plan for Co-Commercialized Products in the Co-Commercialization Territory, including the budgets with respect thereto;

(b) preparing, or directing the preparation by the Parties of, each amendment to any Product Co-Commercialization Plan for Co-Commercialized Products in the Co-Commercialization Territory or the related budget with respect thereto;

(c) reviewing and approving [***] matters for Co-Commercialized Products in the Co-Commercialization Territory;

(d) reviewing and approving [***] matters for Co-Commercialized Products in the Co-Commercialization Territory, including Co-Commercialization Trademarks;

(e) reviewing and approving [***] of Co-Commercialized Products in the Co-Commercialization Territory, including [***];

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(f) reviewing and approving [***], including [***] for Co-Commercialized Products in the Co-Commercialization Territory;

(g) determining the appropriate use of [***] in support of the Co-Commercialized Products;

(h) determining the format and quantities of promotional sales, marketing and educational materials for the Co-Commercialized Products;

(i) in conjunction with the JDC, reviewing and approving any proposals for [***] of existing Co-Commercialized Products, including, without limitation, [***] after First Commercial Sale and [***];

(j) agreeing upon the design and implementation of all Co-Commercialized Product [***] activities;

(k) monitoring the progress of Commercialization of Co-Commercialized Products in the Co-Commercialization Territory under each Product Co-Commercialization Plan and of each Party's activities thereunder;

(l) reviewing and circulating to the Parties data, reports or other information submitted by either Party with respect to the Commercialization of Co-Commercialized Products in the Co-Commercialization Territory;

(m) reconciling issues between the Parties with respect to the Parties' respective share of Operating Income (Loss) with respect to Co-Commercialized Products in the Co-Commercialization Territory;

(n) preparing or directing the preparation by the Parties of short-term and long-term sales forecasts for Co-Commercialized Products;

(o) determining appropriate targets for sales force staffing and territory mapping purposes, determining the appropriate level for, and allocation of Promotional Efforts to, each Party and coordinating the conduct of Promotional Efforts and sales training of both Parties with respect to Co-Commercialized Products;

(p) overseeing all recalls, market withdrawals and any other corrective actions agreed to by the Parties related to Co-Commercialized Products;

(q) receiving and providing to the Parties sales reports pertaining to Co-Commercialized Products;

(r) subject to Sections 12.4.1 and 12.5.2, monitoring compliance of marketing activities throughout the U.S. Territory with Applicable Laws and GSK Internal Policies, and the corporate governance codes and policies of SYNTA to the extent they do not conflict with GSK Internal Policies and Applicable Laws;

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(s) reviewing and approving the Commercialization Transition Plan;

(t) in conjunction with the JDC, approving the overall strategy for [***] in support of Products in the U.S. Territory as determined by the Publication Committee;

(u) making such other decisions as may be delegated to the JCC pursuant to this Agreement or by the JSC or by mutual written agreement of the Parties during the Term;

(v) establishing any subcommittees or teams as deemed necessary; and

(w) resolving any other disputes raised to the JCC.

2.3.5 **Dispute Resolution**. The JCC members shall use reasonable efforts to reach agreement on any and all matters. In the event that, despite such reasonable efforts, agreement on a particular matter cannot be reached by the JCC within [***] days after the JCC first meets to consider such matter, then the matter shall be referred to the JSC for resolution pursuant to Section 2.1.5.

2.4 **Alliance Managers.** Each Party shall appoint, within [***] Business Days after the Effective Date, a person who shall oversee interactions between the Parties for all matters related to the Development and Commercialization of Products between meetings of the JSC, the JDC, and the JCC (each, an "Alliance Manager"). The Alliance Managers shall attend all meetings of the JSC and shall have the right to attend all meetings of the JDC, the JCC, and the JPC as the case may be, as non-voting participants at such meetings. Each Party may replace its Alliance Manager at any time or may designate different Alliance Managers with respect to Development and Commercialization, respectively, by notice in writing to the other Party.

2.5 **Joint Patent Committee.**

2.5.1 **Establishment; Term.** As soon as practicable but in any event within [***] ([***]) Business Days after the Effective Date, SYNTA and GSK shall establish the JPC. The JPC shall have and perform the responsibilities set forth in Section 2.5.4. Unless otherwise agreed by the Parties, the term for the JPC shall commence at such time as the JSC determines and continue for the Term.

2.5.2 **Membership.** Each of SYNTA and GSK shall designate in writing an equal number (not less than [***]) of representatives to the JPC. For a one (1) year period beginning on the establishment of the JPC, a SYNTA representative to the JSC shall serve as the chairperson of the JPC. For each subsequent one-year period, representatives of the Parties shall alternate as the chairperson of the JPC . Each Party shall have the right at any time to substitute individuals, on a permanent or temporary basis, for any of its previously designated representatives to the JPC by giving written notice to the other Party.

2.5.3 **Meetings.**

(a) Schedule of Meetings; Agenda. The JPC shall meet as needed, taking into account, without limitation, the planning needs for protecting Patent Rights and

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Technology and the responsibilities of the JPC. Special meetings of the JPC may be convened by any member upon not less than [***] days (or, if such meeting is proposed to be conducted by teleconference, upon [***] days) written notice to the other members; provided, that notice of any such special meeting may be waived at any time, if mutually agreed by the Parties. Regular and special meetings of the JPC may be held in person or by teleconference or videoconference; provided, that, meetings held in person shall alternate between the respective offices of the Parties in Lexington, Massachusetts and Philadelphia, Pennsylvania or at other locations mutually agreeable to the JPC members. The chairperson shall be responsible for preparing and circulating to each JPC member an agenda for each JPC meeting not later than one (1) week prior to such meeting.

(b) Quorum; Voting; Decisions. At each JPC meeting, (i) the presence in person of at least [***] designated by each Party shall constitute a quorum and (ii) the representatives of a Party shall have [***] on all matters before the JPC at such meeting. All decisions of the JPC, shall be made by [***] vote. Alternatively, the JPC may act by written consent signed by at least [***] designated by each Party. Whenever any action by the JPC is called for hereunder during a time period in which the JPC is not scheduled to meet, the chairperson shall cause the JPC to take the action in the requested time period by calling a special meeting or by circulating a written consent. Representatives of each Party or of its Affiliates who are not members of the JPC (including, without limitation, the Alliance Managers) may attend JPC meetings as non-voting observers. In the event that the JPC is unable to resolve any matter before it, such matter shall be resolved in accordance with Section 2.5.5.

(c) Minutes. If the JPC deems it necessary to take minutes at the meeting of the JPC, then the chairperson shall designate a secretary at each meeting of the JPC and such designated secretary shall keep minutes of its meetings that record all decisions and all actions recommended or taken in reasonable detail. Drafts of the minutes shall be prepared and circulated to the members of the JPC within a reasonable time after the meeting, not to

exceed [***] Business Days. Each member of the JPC shall have the opportunity to provide comments on the draft minutes. Final minutes of each meeting, if taken at such meeting, shall be approved as the first order of business at the subsequent JPC meeting.

(d) Expenses. SYNTA and GSK shall each bear all expenses of their respective JPC representatives related to their participation on the JPC and attendance at JPC meetings and such expenses shall not be Development Costs and Commercialization Expenses for purposes of this Agreement.

2.5.4 **Responsibilities.** Subject to Article 10, the JPC shall be responsible for developing a strategy to protect Program Technology and to develop and coordinate strategy with respect to the if, filing, maintenance, prosecution, enforcement and defense of SYNTA Patent Rights, Joint Patent Rights and GSK Patent Rights.

2.5.5 **Dispute Resolution**. The JPC members shall use reasonable efforts to reach agreement on any and all matters. In the event that, despite such reasonable efforts, agreement on a particular matter cannot be reached by the JPC within [***] days after the JPC first meets to consider such matter, then the matter shall be decided by the Party who has responsibility for such matter in accordance with Articles 9 and 10 of this Agreement.

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Notwithstanding the foregoing, disputes related to (a) the [***] of the Class 1 and Class 2 Patents, or (b) the enforcement and defense of (i) the SYNTA Patent Rights derived from the [***] from which the [***] were derived, (ii) any of the [***] with respect to the Products and (iii) [***] shall be [***] selected by the JPC and, unless otherwise agreed by the Parties, [***] was not at any time during the past [***] prior to such dispute, [***] for either of the Parties, and if such [***] for either Party in the previous [***] years, such Party will inform the other of the nature of such [***]. Any final decision regarding (a) above will be a [***] based upon such [***], and any final decision regarding (b) above will be a [***] based upon such [***].

2.6 **Interests of the Parties, Limitations of Powers**. All decisions made and all actions taken by the JSC, the JDC, the JCC, the JPC, the Publication Committee or the officers of the Parties pursuant to Section 2.1.5 shall be made or taken with due interest of both Parties considered in good faith. The JSC, the JDC, the JCC, the JPC, the Publication Committee, the Alliance Managers and any other committees established pursuant to this Agreement or as determined by the foregoing committees, will have only such powers as are specifically delegated to it in this Agreement, and will have no power to amend this Agreement or waive a Party's rights or obligations under this Agreement.

2.7 **Appointment Not an Obligation; No Breach**. The appointment of members of the JSC, JDC, JCC, the JPC, the Publication Committee and Alliance Managers is a right of each Party and not an obligation and shall not be a "deliverable" as defined in EITF Issue No. 00-21. Each Party shall be free to determine not to appoint members to the JSC, JDC, JCC, JPC, Publication Committee and not to appoint an Alliance Manager. If a Party (the "non-Appointing Party") does not appoint members of the JSC, JDC, JCC, JPC, Publication Committee or an Alliance Manager, it shall not be a breach of this Agreement, nor shall any consideration be required to be returned, and the other Party (the "Appointing Party") shall have the votes and the decision-making power of the non-Appointing Party unless and until such members are appointed by the non-Appointing Party.

3. DEVELOPMENT OF PRODUCTS

3.1 **Implementation of Development Program.**

3.1.1 **Objectives of the Development Program.** The objectives of the Development Program shall be the Development of Products in order to obtain Commercialization Regulatory Approval of Products in the Territory pursuant to the Global Development Plan.

3.1.2 **Preparation of Global Development Plan.** A high level initial Global Development Plan for the period commencing on the Effective Date and continuing until [***] has been prepared and agreed upon by the Parties and shall be developed further by the JDC after the Effective Date. In addition to the Ongoing Clinical Trial and certain other studies to be conducted by SYNTA, the initial Global Development Plan may also include material studies to be performed by GSK for the ROW Territory. The inclusion of these studies shall be for informational and planning purposes only to permit the JDC to assist in global Development, but the design and conduct of such studies shall not be subject to JDC approval. On [***] basis, or

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more frequently as agreed by the Parties, the JDC shall review and update the Global Development Plan with respect to Development of any Products applicable to the U.S. Territory. The JDC may make amendments to the Global Development Plan as it applies to Development in the U.S. Territory as necessary for the day-to-day management of such Development, taking into consideration technical, scientific and commercial factors that may affect the course of Development; provided, that any such amendments will be materially aligned with the goals of the initial Global Development Plan unless mutually agreed by the Parties. During the Term, the Parties may agree to conduct further Development of the Products not covered in the initial Global Development Plan as more fully described below in Section 3.1.3(b)-(c), and in such case, the Parties will prepare additional Global Development Plans for such Development at the direction of the JDC and submit such Global Development Plans to the JDC for approval (with respect to Development in the U.S. Territory) as provided in Section 2.2.4(a) at least [***] days before the meeting at which it will be considered; provided, that the Parties shall manage the preparation of each such Global Development Plan in a manner designed to accommodate the Parties' internal annual planning cycles, and shall obtain JDC approval no later than [***] 30 of each Calendar Year unless otherwise agreed by the Parties. Each Global Development Plan shall: (a) set forth (i) the Development objectives, including pre-clinical studies, Clinical Trials and other activities, priorities, timelines, budget and resources for the Calendar Years covered by such Global Development Plan with reasonable specificity, (ii) which activities are SYNTA Development Activities and/or GSK Development Activities and (iii) with respect to such Development Activities, the number of FTEs to be allocated to perform such activities and the corresponding FTE Cost; and (b) be consistent with the other terms of this Agreement and it is the expectation of the Parties that all Development in the Co-Commercialization Territory shall be a joint responsibility of the Parties and that SYNTA shall conduct a portion of the Development activities under the Global Development Plan.

3.1.3 **Responsibility for Development of Products.**

(a) Global Development Plans. SYNTA shall be responsible for the conduct of the SYNTA Development Activities set forth in the Global Development Plans, which, with respect to the initial Global Development Plan includes the conduct of the Ongoing Clinical Trial and all Development to be undertaken pursuant to Section 3.1.3(b). GSK shall be responsible for the conduct of the GSK Development Activities set forth in the Global Development Plans which shall include the Development of Products for all Indications in the ROW Territory. The JDC shall allocate activities to each Party for the Development of Products for each New Indication in the U.S. Territory (with the understanding that Development for the U.S. Territory may include conducting some activities in countries outside of the U.S. Territory, which activities shall be considered to be Development related to the U.S. Territory), except as may be covered in the initial Global Development Plan. Each Party shall have the right to engage Third Party contractors to perform some of its Development Activities in connection with the Development of Products hereunder, subject to the execution by each such Third Party contractor of an agreement containing provisions with respect to confidentiality and assignment of Technology that are consistent with, and comparable in scope to, Articles 9 and 10 of this Agreement.

Portions of this Exhibit were omitted and have been filed separately with the Secretary of the Commission pursuant to the Company's application requesting confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934.

(b) Additional SYNTA Development Work Prior to [***] Prior to the [***] of the [***], SYNTA shall commence the conduct of the following, as more fully described below: (A) one Phase 1 Clinical Trial designed to [***] STA-4783 (the "[***] Study"), (B) one (1) [***], and at SYNTA's sole election one (1) or more additional [***]"), (C) one (1) [***], which the Parties have agreed shall be [***], and (D) [***] undertaken to [***] of STA-4783. SYNTA shall be solely responsible for all [***] associated with the conduct of the foregoing activities until completion of such activities. "New Indication" shall mean an Indication other than metastatic melanoma.

(i) SYNTA shall provide the JDC with written notice specifying a proposal for the conduct of each of the [***] Study and the [***] If the JDC approves such proposals, then the JDC shall design the protocols for the [***] Study and the [***](s), and shall establish the criteria that must be achieved in each [***] to progress Development of the Product into [***]"). Upon achievement of the [***] in a [***] with respect to a particular Product, progression of all further Development of such Product in a [***] shall be determined by the JDC. The Parties shall be responsible for Development Costs associated with Development in such [***] in accordance with Section 3.6.1. For clarity, the [***] referenced in the foregoing sentence is not the [***] described in Section 3.1.3(b)(ii). Notwithstanding the foregoing, the decision of the JDC to progress Development of a Product upon achievement of the [***] may be deferred, [***], until [***]

(ii) SYNTA shall provide the JDC with written notice specifying a proposal for the conduct of the [***]. If the JDC approves such proposal, then the JDC shall design the protocol for the [***] and shall establish criteria that must be achieved in such [***] to progress Development of the Product into [***] Upon achievement of the [***] in such New [***] with respect to a particular Product in a New Indication, progression of Development in a [***] in such New Indication shall be determined by the JDC. The Parties shall be responsible for Development Costs associated with Development in such Phase 3 Clinical Trial in accordance with Section 3.6.1. Notwithstanding the foregoing, the decision of the JDC to progress Development of a Product upon achievement of the [***] may be deferred, [***], until [***] .

(iii) SYNTA shall be responsible for the [***] STA-4783.

(c) Additional Development Work After [***] either Party may identify New Indications that it wishes to pursue with respect to Development of Products, and shall provide the JDC with written notice specifying such New Indication and a proposal and budget for the Development of the Product in the New Indication through Proof of Concept. If the JDC approves such Development, then the JDC shall design the protocol for the Proof of Concept Clinical Trial, and shall establish Proof of Concept Criteria that must be achieved in such Proof of Concept Clinical Trial to progress Development of the Product into a Phase 3 Clinical Trial. Upon achievement of the Proof of Concept Criteria in such Proof of Concept Clinical Trial in such New Indication, progression of Development in a Phase 3 Clinical Trial in such New Indication shall be determined by the JDC. The Parties shall be responsible for Development Costs associated with Development in such New Indication through Completion of the applicable Proof of Concept Clinical Trial and any further Phase 3 Clinical Trials if SYNTA

does not exercise its Development Opt-Out Right with respect to such Phase 3 Clinical Trials, in accordance with Section 3.6.1. For the avoidance of doubt, if there is not a Unanimous Decision to conduct Development under this Section 3.1.3(c), then [***] shall have the final say on whether or not to conduct such Development and may either prohibit further Development in a New Indication or conduct Development in a New Indication under this Section 3.1.3(c) without SYNTA's participation, and in the latter case, the provisions of Section 3.1.3(d) shall apply.

(d) SYNTA Opt-Out of Development on New Indication-by-New Indication Basis. With respect to any New Indication under Development, SYNTA shall have the right (the "Development Opt-Out Right"), on a New Indication-by-New Indication basis, to opt not to participate in such Development commencing with the applicable [***] for such New Indication. SYNTA shall exercise its Development Opt-Out Right upon written notice to GSK (the "Development Opt-Out Notice") which shall be delivered to GSK no later than [***] days after the final proposal and budget prepared by the JDC for such Phase 3 Clinical Trial in a particular New Indication is delivered to SYNTA (which shall be at least [***] days prior to the proposed date of Initiation of such [***]), and such Development Opt-Out Right shall become effective immediately upon receipt of the Development Opt-Out Notice by GSK. If SYNTA exercises its Development Opt-Out Right for a New Indication (each, an "Opt-Out Indication"), then from and after the effective date of the Development Opt-Out Right (i) SYNTA shall have no further right to conduct any Development of any Product in the Opt-Out Indication anywhere in the Territory (unless GSK permits otherwise in its sole discretion or unless such Development relates to the [***] Study, the [***] described in Section 3.1.3(b)), and GSK shall be solely responsible for any such Development in its sole discretion, (ii) SYNTA shall have no further right to conduct any SYNTA Co-Commercialization Activities for any Product in the Opt-Out Indication anywhere in the Territory (unless GSK permits otherwise in its sole discretion), (iii) GSK shall have all decision-making authority for all Development and Commercialization matters in the Opt-Out Indication, including matters that would otherwise be SYNTA Decisions or Unanimous Decisions for all Products in the Opt-Out Indication, including those Products for which SYNTA participated in Development and bore its share of Development Costs as set forth in Section 3.6.1 related thereto, (iv) all decisions related to the Commercialization matters set forth in Sections 2.3.4(a)-(d) for all Products in all Indications shall be GSK Decisions, and any SYNTA Decisions with respect to Development of Products in all Indications shall become Unanimous Decisions, (v) with respect to Products in Indications for which SYNTA participated in Development in a [***] and bore its share of Development Costs as set forth in Section 3.6.1 related thereto, SYNTA shall have no further right to conduct SYNTA Co-Commercialization Activities except that SYNTA may continue to detail such Products to group purchasing organizations, the Veterans Administration/Department of Defense, hospitals and oncology clinics as otherwise provided in this Agreement and any additional activities as GSK may decide [***], it being acknowledged that the Parties will work in good faith to reasonably allocate activities between the Parties to minimize the impact on the Product; (vi) the JDC and JCC shall be terminated unless SYNTA is conducting the SYNTA Co-Commercialization Activities described in Section 3.1.3(d)(v) with respect to an Indication other than the Opt-Out Indication or is conducting Development of Products in an Indication other than the Opt-Out Indication, (vii) GSK shall keep the JSC periodically informed of Development and Commercialization of Products in the Territory in the Opt-Out Indication if the JDC or JCC is terminated, (viii) GSK shall be entitled to recoup the Development Costs that SYNTA would otherwise have borne

pursuant to Section 3.6.1(b) for Development of Products in the Opt-Out Indication by adjusting the milestones payable under Section 6.4.1(a) as set forth below, so long as such milestones have not been paid previously (and, if all such Development Costs are not recovered by the following adjustments to milestone payments, or where all milestones have been paid previously, GSK shall be entitled to deduct the remaining amount from Operating Income (Loss) or royalties otherwise payable under this Agreement, by retaining up to [***] percent ([***]%) of Operating Income (Loss) or royalties due to SYNTA on a [***] basis): (A) GSK's obligation to pay milestones for both [***] for any Product for the Opt-Out Indication and [***] for any Product for the Opt-Out Indication shall be reduced by [***] percent ([***]%), (B) GSK's obligation to pay any milestone for [***] for any Product for the Opt-Out Indication shall be reduced by [***] percent ([***]%), and (ix) with respect to all Products under Development in or being Commercialized for the Opt-Out Indication: (A) the SYNTA Development Cost-Sharing Percentage shall be [***] percent ([***]%), (B) the GSK Development Cost-Sharing Percentage shall be [***] percent ([***]%) and (C) if SYNTA has not borne the SYNTA Development Cost Sharing Percentage for at least [***] of the aggregate Development Costs for all New Indications and metastatic melanoma under Development in [***] (or that are being Commercialized), then the GSK Operating Income (Loss) Percentage shall be [***] percent ([***]%) and the SYNTA Operating Income (Loss) Sharing Percentage shall be [***] percent ([***]%) (and shall not be subject to further adjustment pursuant to Section 1.56) except that, as additional New Indications enter [***], if SYNTA bears the SYNTA Development Cost Sharing Percentage for more than [***] of the aggregate Development Costs for all New Indications and metastatic melanoma under Development in [***] (or that are being Commercialized), then the GSK Operating Income (Loss) Percentage shall be calculated in accordance with Section 1.56 and the SYNTA Operating Income (Loss) Sharing Percentage shall be calculated in accordance with Section 1.122. For the avoidance of doubt, the determination of the GSK Operating Income (Loss) Sharing Percentage and SYNTA Operating Income (Loss) Sharing Percentage as set forth in Section 3.1.3(d)(ix)(C) is intended to adjust from [***] to [***] depending upon SYNTA's share of aggregate Development Costs at such time.

(e) Metastatic Melanoma Development Opt-Out. If, after Completion of the Ongoing Clinical Trial, the JDC (or GSK) wishes to conduct further Development in the Indication of metastatic melanoma, then any further Development will not be considered to be Development in a New Indication. Notwithstanding the foregoing, SYNTA may exercise its Development Opt-Out Right described in Section 3.1.3(d) with respect to any additional Development in metastatic melanoma, and the provisions of Section 3.1.3(d) shall apply, except that SYNTA shall continue to have the right to conduct SYNTA Co-Commercialization Activities for the Product in the Indication of metastatic melanoma that was Developed and/or launched in such Indication prior to SYNTA's exercise of the Development Opt-Out Right as set forth in this Section 3.1.3(e).

3.2 **Development Diligence and Compliance.** Each Party shall (a) use Commercially Reasonable Efforts during the Term to Develop Products, (b) conduct its Development Activities with respect to the Products as set forth in the Global Development Plans and (c) commit such resources (including employees, consultants, contractors, facilities, equipment and materials) as it deems necessary to conduct such Development Activities. Each Party shall perform its obligations under each Global Development Plan in good scientific

manner and in compliance in all material respects with all Applicable Laws and with all applicable GSK Internal Policies. For purposes of clarity, with respect to each activity performed under a Global Development Plan that will or would reasonably be expected to be submitted to a Regulatory Authority in support of a Regulatory Filing or Drug Approval Application, the Party performing such activity shall comply in all material respects with GLPs, GMPs or Good Clinical Practices (or, if and as appropriate under the circumstances, International Conference on Harmonization (ICH) guidance or other comparable regulation and guidance of any Regulatory Authority in any country or region in the Territory).

3.3 **Development Program Reports.** The Parties shall keep the JDC regularly informed of the progress of its efforts to Develop Products in the U.S. Territory and GSK shall keep the JSC regularly informed of the progress of its efforts to Develop Products in the ROW Territory. Without limiting the generality of the foregoing, each Party shall, on at least a [***] basis, provide the JDC with reports in reasonable detail regarding the status of all material [***] studies and activities (including [***] and [***] studies), [***] and other activities conducted under the Development Program in the U.S. Territory, together with all [***] and results generated in each such [***] study, activity and/or [***] and such additional information that it has in its possession as may be reasonably requested from time to time by the JDC.

3.4 **Right of Access; Cooperation.** Each Party shall cooperate in the performance of the Development Program, and, subject to the terms of this Agreement and any confidentiality obligations to Third Parties, promptly provide the other Party (at such Party's reasonable request) with access to all Technology, material and relevant data, results and information produced in connection with the conduct of such Party's Development Activities as set forth in the applicable Development Plan in its original format, without translation where possible, as necessary to perform its obligations and exercise of its rights under this Agreement, free of charge. The Parties shall permit each other to have the right to [***] Regulatory Filings, Drug Approval Applications, Regulatory Approvals and Commercialization Regulatory Approvals for the purpose of obtaining Commercialization Regulatory Approvals for the Product in the Territory. The scope, timing and procedure for transfer of all other tangible embodiments of Program Technology reasonably necessary or useful for the Parties to perform their obligations hereunder or to Develop and Commercialize any Product, which is not existing on the Effective Date, shall be further defined by the Parties from time to time, as needed.

3.5 **Supply of Proprietary Materials; Technology Transfer.**

3.5.1 **Proprietary Materials.** From time to time during the Term, either Party (the "Transferring Party") may supply the other Party (the "Recipient Party") with proprietary materials of the Transferring Party for use in the Development Program. In connection therewith, each Recipient Party hereby agrees that (a) it shall not use such proprietary materials for any purpose other than exercising its rights or performing its obligations hereunder and in accordance with the Development Plan; (b) it shall use such proprietary materials only in compliance with all Applicable Laws; (c) it shall not transfer any such proprietary materials to any Third Party without the prior written consent of the Transferring Party, except for (i) the transfer of Products for use in Clinical Trials or (ii) in a Permitted Transaction or as otherwise expressly permitted hereby; (d) the Recipient Party shall not acquire any right, title or interest in

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or to such proprietary materials as a result of such supply by the Transferring Party; and (e) upon the expiration or termination of the Development Program, the Recipient Party shall, if and as instructed by the Transferring Party, either destroy or return any such proprietary materials that are not the subject of the grant of a continuing license hereunder.

3.5.2 **Technology Transfer.** Promptly after the Effective Date, SYNTA shall effect a Technology Transfer to GSK in such a manner to enable GSK to manage and conduct all activities related to (a) commercial supply of API and Product after the Effective Date, and (b) clinical supply of API and Product after Commercialization Regulatory Approval is obtained by SYNTA for the Product in the metastatic melanoma Indication. To the extent necessary, the Parties will enter into appropriate clinical trial supply agreements for supply of API for Development of the Product.

3.6 **Development Cost-Sharing; Reconciliation**.

3.6.1 **Development Cost-Sharing.** The Parties agree to cooperate to identify and implement opportunities that could reasonably improve the value of the Collaboration for both Parties, including opportunities to reduce the costs through the use of GSK's preferred supply arrangements and GSK's procurement expertise.

(a) SYNTA Responsibility. SYNTA shall be [***] responsible for funding [***] percent ([***]%) of all Development Costs associated with the [***], the [***] Study, the one or more New [***] and the [***] described in Section 3.1.3(b).

(b) Shared Costs. For all other Development for which SYNTA has not exercised its Development Opt-Out Right, (i) SYNTA shall be responsible for funding the SYNTA Development Cost-Sharing Percentage of all Development Costs applicable thereto and (ii) GSK shall be responsible for funding the GSK Cost-Sharing Percentage of all Development Costs applicable thereto.

3.6.2 **Reconciliation of Development Costs.**

(a) Reports; Reconciliation Payments. With respect to Development Costs incurred by the Parties in accordance with Section 3.6.1(b), within [***] days following the end of each [***] during the Term, each of SYNTA and GSK shall submit to the JDC a written report setting forth in reasonable detail all Development Costs incurred by each such Party over such [***] applicable to the conduct of the Development Program. Within [***] days following the receipt by the JDC of such written reports, the JDC shall prepare and submit to each Party a written report setting forth in reasonable detail (i) the calculation of all such Development Costs incurred by both Parties over such [***] and any deviations from the applicable budget and (ii) the calculation of the net amount owed by GSK to SYNTA or by SYNTA to GSK in order to ensure the appropriate sharing of such Development Costs in accordance with Section 3.6.1(b). The Party that is due for reimbursement of Development Costs in the preceding [***] shall invoice the other Party. Such payments by one Party to reimburse the other Party's expenditures for Development Costs for the purposes of cost sharing under this Agreement shall be paid within [***] Business Days following receipt of the invoice.

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In the event that the Parties disagree with the reported costs and any over/underspend, approval shall be required by the JSC following receipt of the report by the JSC. A decision by the JSC shall be required within [***] Business Days following receipt of the reports. Where the JSC does not so agree with the reported costs or over/underspend, any such unapproved spend shall be borne solely by the Party incurring them. If the total budget for the Ongoing Clinical Trial as set out in the initial Global Development Plan is exceeded, then such overage shall be allocated in accordance with Sections 1.54 and 1.121. If GSK incurs any Development Costs associated with the Ongoing Clinical Trial, then any payments due to GSK by SYNTA shall be paid after Completion of the Ongoing Clinical Trial and within [***] Business Days after receipt of an invoice therefor.

(b) Records; Audit Rights. Each Party shall keep and maintain for [***] years complete and accurate records of all Development Costs incurred in the Development of Products in sufficient detail to allow confirmation of same by an independent certified public accountant. Each Party (the "Cost Auditing Party") shall have the right for a period of [***] after such Development Costs are incurred, to appoint at its expense an independent certified public accountant reasonably acceptable to the other Party (the "Cost Audited Party") to audit the relevant records of the Cost Audited Party or its Affiliates to verify that the amount of Development Costs incurred have been correctly determined. The Cost Audited Party or its Affiliates shall each make its records available for audit by the independent certified public accountant during regular business hours at such place or places where such records are customarily kept, upon [***] days written notice from the Cost Auditing Party. Such audit right shall not be exercised by a Cost Auditing Party more than [***] in any Calendar Year and no twelve (12) month period may be audited more than [***]. The independent certified public accountant will only disclose the results (any sums either over/under paid) of such audit to the Cost Auditing Party and no other details. In the event there was an error in the amount of such Development Costs reported by the Cost Audited Party hereunder, (a) if the effect of the error resulted in an underpayment, the Cost Audited Party shall promptly, on receipt of an invoice, make payment to the Cost Auditing Party of the underpayment amount and (b) if the effect of the error resulted in an overpayment, the Cost Auditing Party shall promptly on receipt of an invoice make payment to the Cost Audited Party of the overpayment amount. The Cost Auditing Party shall bear the full cost of such audit unless such audit discloses an error by the Cost Audited Party of at least [***] percent ([***]%) of the aggregate amount of the Development Costs in any Calendar Year subject to such audit, in which case the Cost Audited Party shall reimburse the Cost Auditing Party for all costs incurred by the Cost Auditing Party in connection with such audit.

4. REGULATORY

4.1 **Responsibility for Regulatory Filings.** SYNTA shall be responsible for preparing and filing Regulatory Filings and Drug Approval Applications for the Product in the U.S. Territory for metastatic melanoma in its own name and shall initially own Regulatory Approvals and Commercialization Regulatory Approvals issuing therefrom, and GSK shall be responsible for preparing and filing all Regulatory Filings and Drug Approval Applications for Products in the ROW Territory in its own name and shall be the owner of all Regulatory Approvals and Commercialization Regulatory Approvals issuing therefrom. As soon as possible

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after the Effective Date, the Parties shall prepare and submit to the JSC for its approval a transition plan (the "Regulatory Filings Transfer Plan") pursuant to which SYNTA will transfer to GSK ownership of (a) all Regulatory Filings, Drug Approval Applications, Regulatory Approvals and Commercialization Regulatory Approvals owned by SYNTA on the Effective Date that are applicable to Products in the ROW Territory or applicable to the conduct of the Ongoing Clinical Trial at sites in the ROW Territory, as soon as possible and (b) all Regulatory Approvals and Commercialization Regulatory Approvals applicable to the Product in the U.S. Territory issued to SYNTA during the Term, as soon as possible after issuance thereof. For clarity, transfer of ownership from SYNTA to GSK of Regulatory Filings and Drug Approval Applications in the U.S. Territory for the Product for metastatic melanoma shall not occur prior to receipt of Regulatory Approval for metastatic melanoma in the U.S. Territory. If deemed necessary by GSK that a separate IND should be opened, GSK shall be allowed to open such IND with right of reference to the original IND application held by SYNTA. Upon receipt of the first Commercialization Regulatory Approval, the JSC shall have the responsibility of deciding if and when the original IND is transferred from SYNTA to GSK. The Parties acknowledge that SYNTA will be conducting Development of the Product in the ROW Territory to support U.S. registration of the Product under certain circumstances, and as a result, SYNTA shall work with GSK to ensure a consistent global regulatory strategy.

4.2 **Review and Preparation of Regulatory Filings; Regulatory Meetings Prior to Completion of Regulatory Filings Transfer Plan .**

4.2.1 **GSK Review of SYNTA Filings.** SYNTA shall use reasonable efforts to provide GSK with at least [***] days' advance notice (or, if [***] days is not possible, then the maximum amount of notice possible) of any meeting with the FDA or EMEA or other Regulatory Authority in the U.S. Territory or the European Union regarding a Drug Approval Application relating to, or Regulatory Approval or Commercialization Regulatory Approval for, the Product for which it is responsible prior to transfer to GSK in accordance with the Regulatory Filings Transfer Plan and GSK may provide advice to SYNTA with respect to such meeting and elect to send one person to participate as an observer (at GSK's sole cost and expense) in such meeting. In addition, subject to any Third Party confidentiality obligations, SYNTA shall (a) provide GSK with drafts of each material Regulatory Filing or other material document including 15 day alert reports and material correspondence pertaining to a Product and prepared for submission to the FDA or other Regulatory Authority sufficiently in advance of submission so that GSK may review and comment on the substance of such Regulatory Filing or other document or correspondence in accordance with the mutually agreed timeframe ; provided that if GSK does not respond within such timeframe to a 15 day alert report SYNTA shall be free to submit such report; and (b) promptly provide GSK with copies of any document or other correspondence received from the FDA or other Regulatory Authority pertaining to any Product. SYNTA shall also provide cover letters of routine Regulatory Filings and GSK may request to receive copies of attachments to such Regulatory Filings. SYNTA shall consider all comments of GSK in good faith, taking into account the best interests of the Development and/or Commercialization of the Product on a global basis.

4.2.2 **SYNTA Review of GSK Filings.** GSK shall use reasonable efforts to provide SYNTA with at least [***] days' advance notice (or, if [***] days is not possible, then

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the maximum amount of notice possible) of any meeting with the FDA or other Regulatory Authority in the U.S. Territory regarding a Drug Approval Application relating to, or Regulatory Approval or Commercialization Regulatory Approval for, the Product for which it is responsible and/or any meeting with any Regulatory Authority in the ROW Territory with which SYNTA has filed a Regulatory Filing for the Product until such Regulatory Filing is transferred to GSK pursuant to Section 4.1 and SYNTA may provide advice to GSK with respect to such meeting and elect to send one person to participate as an observer (at SYNTA's sole cost and expense) in such meeting. Without limiting the foregoing, subject to any Third Party confidentiality obligations, GSK shall (a) provide SYNTA with drafts of each Regulatory Filing or other material document and material correspondence pertaining to a Product and prepared for submission to the FDA or other Regulatory Authority in the ROW Territory sufficiently in advance of submission so that SYNTA may review and comment on the substance of such Regulatory Filing or other document or correspondence in accordance with the mutually agreed timeframe and (b) promptly provide SYNTA with copies of any document or other correspondence received from the FDA or other Regulatory Authority in the ROW Territory pertaining to any Product. GSK shall also provide cover letters of routine Regulatory Filings and SYNTA may request to receive copies of attachments to such Regulatory Filings. GSK shall consider all comments of SYNTA in good faith, taking into account the best interests of the Development and/or Commercialization of the Product on a global basis.

4.3 **Review and Preparation of Regulatory Filings; Regulatory Meetings After Completion of Regulatory Filings Transfer Plan .** GSK shall keep SYNTA reasonably and regularly informed of the status of the preparation of all material Regulatory Filings or Drug Approval Applications or other document or correspondence pertaining to a Product and prepared for submission to Regulatory Authorities in the ROW Territory, and the issuance of Regulatory Approvals and Commercialization Regulatory Approvals obtained by GSK for Products in the ROW Territory. GSK shall consider all comments of SYNTA in good faith, taking into account the best interests of the Development and/or Commercialization of the Product on a global basis.

5. COMMERCIALIZATION OF PRODUCT

5.1 **Responsibility for Commercialization of Products .**

5.1.1 Co-Commercialization Territory; Co-Commercialization Agreement; Opt-Out Right .

(a) SYNTA and GSK shall be responsible for conduct of the SYNTA Co-Commercialization Activities and the GSK Co-Commercialization Activities, respectively, for the Co-Commercialized Product in the Co-Commercialization Territory, subject to SYNTA's right to opt-out of Commercialization in the Co-Commercialization Territory as described below. It is anticipated that, with respect to the Co-Commercialization Territory with respect to Co-Commercialized Products approved in the metastatic melanoma Indication (i) SYNTA shall conduct the SYNTA Co-Commercialization Activities, (ii) GSK shall conduct the GSK Co-Commercialization Activities and shall book all sales of Co-Commercialized Product, (iii) the Parties shall discuss in good faith the allocation of Commercialization Activities for Indications

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other than metastatic melanoma with respect to Co-Commercialized Products, and (iv) all such Commercialization Activities shall be performed in accordance with the Product Co-Commercialization Plan and the Co-Commercialization Agreement (as defined below), under the direction of the JCC.

(b) Within [***] days of the expiration of the Commercialization Opt-Out Date, t he Parties shall (i) commence the preparation of a co-commercialization agreement (the "Co-Commercialization Agreement") which shall (A) set forth the terms applicable to the conduct of the SYNTA Co-Commercialization Activities and the GSK Co-Commercialization Activities for such Product in the Co-Commercialization Territory; (B) conform in all material respects with the terms and conditions set forth in Schedule 6 attached; and (C) include such additional provisions as are usual and customary for inclusion in a co-commercialization agreement between companies in the pharmaceutical and biotechnology industries of comparable sizes to the respective Parties; and (ii) negotiate and execute the Co-Commercialization Agreement within [***] days (the "Negotiation Period"). For purposes of clarity, any additional terms negotiated by the Parties for inclusion in the Co-Commercialization Agreement shall supplement and shall not materially expand, limit or change the terms set forth on Schedule 6. If the Parties fail to execute and deliver the Co-Commercialization Agreement within the Negotiation Period, the Parties shall use reasonable efforts to complete such negotiations and to execute and deliver the Co-Commercialization Agreement as soon as possible and shall each produce a list of issues on which they have failed to reach agreement and submit its list to the JSC to be resolved in accordance with Section 2.1.5.

(c) SYNTA may opt to not engage in the SYNTA Co-Commercialization Activities as described above with GSK (the "Commercialization Opt-Out Right") by delivering written notice to GSK, on a Collaboration Compound-by-Collaboration Compound basis, at any time on or before [***] (the "Commercialization Opt-Out Date"). If SYNTA exercises its Commercialization Opt-Out Right with respect to a Collaboration Compound, then the provisions of Section 5.2 will apply to all Products containing such Collaboration Compound. Notwithstanding the foregoing, SYNTA's Commercialization Opt-Out Right may be exercised with respect to an [***] of a Product (or alternatively, an [***] of a Product) containing STA-4783 without also exercising the Commercialization Opt-Out Right for an [***] of a Product (or alternatively, an [***] of a Product) containing STA-4783, and may exercise its Commercialization Opt-Out Right for both [***] of a Product containing STA-4783.

5.1.2 Royalty-Bearing Territory. GSK shall have the sole right and responsibility for (a) all aspects of the Commercialization of Products for all Indications in the Royalty-Bearing Territory in accordance with the applicable GSK Product Commercialization Plan, including without limitation the sole responsibility for booking sales of Product and for Manufacturing all Product for use in the Royalty-Bearing Territory, (b) the conduct of all pre-marketing, marketing, Branding, promotion, sales, distribution, import and export activities (including securing reimbursement, sales and marketing and conducting any post-marketing trials or post-marketing safety surveillance or maintaining databases) applicable to the Commercialization of Products for all Indications in the Royalty-Bearing Territory, and (c) all of the activities described in Section 5.1.2(a) and (b) in the U.S. Territory for any Product for which SYNTA exercises its Commercialization Opt-Out Right as described in Sections 5.1.1(c) and

5.2, pursuant to the applicable GSK Product Commercialization Plan. Notwithstanding the foregoing, SYNTA shall have the right to import Product from, and export Product to, the Royalty-Bearing Territory to the extent necessary to conduct the Ongoing Clinical Trial and any other Clinical Trial for which it is responsible.

5.2 **Exercise of Commercialization Opt-Out Right.** If SYNTA exercises its Commercialization Opt-Out Right as described in Section 5.1.1(c) with respect to a particular Collaboration Compound by the Commercialization Opt-Out Date, (a) SYNTA shall have no further obligation under this Agreement to fund any Commercialization Expenses incurred with respect to the Commercialization of any Product containing such Collaboration Compound on and after the Commercialization Opt-Out Date; (b) GSK shall be [***] responsible for funding [***] percent ([***]%) of the Commercialization Expenses incurred with respect to the Products containing such Collaboration Compound in the Territory; (c) the JCC shall be terminated as soon as practicable thereafter unless SYNTA is conducting SYNTA Co-Commercialization Activities for another Co-Commercialized Product with GSK; (d) GSK shall provide SYNTA with [***] updates and reports with respect to its Commercialization activities in the U.S. Territory with respect to Products containing such Collaboration Compound in accordance with Section 5.6; (e) the Products for which SYNTA exercised its Commercialization Opt-Out Right shall be deemed to be Royalty-Bearing Products for purposes of this Agreement on and after the Commercialization Opt-Out Date; (f) the amount of any agreed external program expenses set forth in the applicable Commercialization Budget incurred by SYNTA with respect to pre-marketing activities from the Effective Date shall be added to the payment to SYNTA from GSK for achievement of the applicable [***] milestone, as set forth in Section 6.4.1(a), so long as GSK determines that it is commercially reasonable to launch such Products; (g) SYNTA will, in lieu of receiving any portion of the Operating Income Payments with respect to such Products, receive the royalty payments on Net Sales of such Products that occur in the U.S. Territory after the Commercialization Opt-Out Date at the rates set forth in Section 6.5.1(b); and (h) GSK shall have all decision-making authority for all Commercialization matters with respect to such Products, including matters that would otherwise be SYNTA Decisions or Unanimous Decisions in all Indications.

5.3 **Commercialization Plans.**

(a) Product Co-Commercialization Plan. The Product Co-Commercialization Plans shall be prepared and updated by [***] of each [***] by, or at the direction of, the JCC, and approved by the JSC at such time as the JSC may from time to time direct and in any event, on or prior to the initiation of Commercialization activities with respect to the Product. Notwithstanding the foregoing, the initial Product Co-Commercialization Plan shall be prepared within [***] days after the Effective Date and shall cover at least the first [***] years of Commercialization activities with respect to STA-4783 for the treatment of metastatic melanoma, as well as a Commercialization Budget for such [***] years (the plan and budget collectively referred to as "Initial Product Co-Commercialization Plan"). The Product Co-Commercialization Plan shall be updated and approved at such times as the JCC may determine, not less than annually.

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(b) GSK Product Commercialization Plan. Not later than [***] of each [***], GSK will provide SYNTA with a review and update of the GSK Product Commercialization Plan applicable to the following [***] and will give good faith consideration to SYNTA's comments on such GSK Product Commercialization Plan. The first GSK Product Commercialization Plan shall be provided to SYNTA not later than [***], 2008. GSK will review the GSK Product Commercialization Plan with SYNTA at one or more meetings of the JSC and will provide SYNTA with annual updates of its progress with respect to such GSK Product Commercialization Plan via the JSC. GSK shall ensure that the GSK Product Commercialization Plan is not inconsistent with the strategy agreed to by the Parties in the Product Co-Commercialization Plan for the Co-Commercialization Territory.

5.4 **Commercialization Diligence and Compliance.** Each Party shall (a) use Commercially Reasonable Efforts during the Term to Commercialize Products and conduct GSK Co-Commercialization Activities or SYNTA Co-Commercialization Activities, as the case may be, (b) conduct the activities as set forth in the applicable GSK Product Commercialization Plan and/or the Co-Commercialization Agreement, and (c) commit such resources (including employees, consultants, allowed contractors, facilities, equipment and materials) as it deems necessary to conduct the activities described above. Each Party shall perform its obligations under each Product Co-Commercialization Plan and Co-Commercialization Agreement, and GSK shall perform its obligations under each GSK Product Commercialization Plan in compliance in all material respects with all Applicable Laws and with all applicable GSK Internal Policies.

5.5 **Cooperation.** SYNTA and GSK shall cooperate in the performance of any Product Co-Commercialization Plan and the Co-Commercialization Agreement, subject to the terms of this Agreement and any confidentiality obligations to Third Parties, and shall exchange such data, information and materials as is reasonably necessary for the other Party to perform its obligations under any Product Co-Commercialization Plan and the Co-Commercialization Agreement.

5.6 **Commercialization Reports.** Each Party shall keep the JCC regularly informed of the conduct of the SYNTA Co-Commercialization Activities and GSK Co-Commercialization Activities, as applicable, for Co-Commercialized Products in the Co-Commercialization Territory through periodic updates to the JCC. Without limiting the generality of the foregoing, each Party shall provide the JCC with [***] written updates, which shall (a) summarize such Party's conduct of SYNTA Co-Commercialization Activities and GSK Co-Commercialization Activities, as applicable, for Co-Commercialized Products in the Co-Commercialization Territory, (b) identify the Regulatory Filings and Drug Approval Applications with respect to such Co-Commercialized Product that such Party or any of its Affiliates have filed, sought or obtained in the prior [***] month period or reasonably expect to make, seek or attempt to obtain in the following [***] month period in the Co-Commercialization Territory, and (c) summarize all Optional Phase 4 Clinical Trial data generated by such Party with respect to such Co-Commercialized Product in the Co-Commercialization Territory. GSK shall keep SYNTA regularly informed of the progress of its efforts to Commercialize Products in the Royalty-Bearing Territory through [***] updates to the JSC.

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5.7 **Pharmacovigilance; Adverse Event Reports.** Within [***] days of the Effective Date, the Parties will enter into the Pharmacovigilance Agreement, setting forth guidelines and procedures for the receipt, investigation, recording, review, communication, reporting and exchange between the Parties of adverse event reports (which, for purposes of information exchange between the Parties, shall include Adverse Events, as well as claims of lack of efficacy), technical complaints and any other information concerning the safety of the Product. Notwithstanding the foregoing, it is contemplated that SYNTA shall maintain a unified worldwide Adverse Event database for the Product, and be primarily responsible for reporting Adverse Events to the applicable Regulatory Authorities until such time as the Regulatory Filings, Drug Approval Applications, Regulatory Approvals and Commercialization Regulatory Approvals for the U.S. Territory are transferred to GSK pursuant to the Regulatory Filings Transfer Plan and this Agreement, and thereafter, GSK shall maintain the unified worldwide Adverse Event database for the Product, unless otherwise agreed by the Parties. Costs associated with designing, maintaining and installing the system supporting such database shall not be included in Development Costs and shall be the responsibility of SYNTA.

5.8 **Labeling.** All product labels and Promotional Materials for Co-Commercialized Products shall include, in equal prominence, the names and logos of both SYNTA and GSK to the extent feasible under Applicable Laws. GSK agrees that, to the extent feasible under Applicable Laws and to the extent such statements are accurate at the time of the sale of the Product, product labels for Co-Commercialized Product will identify SYNTA as conducting Promotional Efforts for such Co-Commercialized Product with GSK. The JCC shall have the responsibility of deciding whether changes in the particular appearance in labeling of packaging and containers of Co-Commercialized Products or in the product information is required.

6. PAYMENTS

6.1 **Up-front Fee.** As partial consideration for the licenses granted to GSK by SYNTA under the terms of this Agreement, GSK will pay to SYNTA a non-refundable, non-creditable up-front fee equal to eighty million dollars (US $80,000,000) within [***] Business Days of the Effective Date, and upon receipt of an invoice from SYNTA, payable by wire transfer of immediately available funds in accordance with wire transfer instructions of SYNTA that shall be provided in writing to GSK prior to the Effective Date.

6.2 **Equity Purchases.**

6.2.1 Initial Equity Purchase Obligation. In partial consideration of the rights granted by SYNTA to GSK hereunder, on the Initial Equity Purchase Obligation Date, GSK shall have the [***] (the "Initial Equity Purchase Obligation") to purchase from SYNTA, provided, that SYNTA may opt to [***] to GSK in its [***], a number of shares of Common Stock, $.0001 par value per share, of SYNTA ("SYNTA Common Stock"), as shall equal the applicable Share Purchase Number for the Aggregate Equity Purchase Price, pursuant to the terms and subject to the conditions set forth in a stock purchase agreement substantially in the form attached hereto as Exhibit A (the "Stock Purchase Agreement"). Notwithstanding the foregoing, in no event shall (a) the aggregate number of shares of SYNTA Common Stock

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issuable under this Section 6.2.1 exceed [***]% of the total outstanding shares of SYNTA Common Stock or voting power of SYNTA immediately prior to the execution of the Stock Purchase Agreement or (b) GSK, individually or as part of a group, beneficially own, or obtain the right to acquire, more than [***]% of the total outstanding shares of SYNTA Common Stock or voting power of SYNTA immediately after the issuance of SYNTA Common Stock under this Section 6.2.1; in the case of (b), the Share Purchase Number and the Aggregate Equity Purchase Price shall be reduced so that GSK's ownership percentage of outstanding shares of SYNTA Common Stock does not exceed [***]%.

6.2.2 Subsequent Equity Purchase Right. In partial consideration of the rights granted by SYNTA to GSK hereunder, on the Subsequent Equity Purchase Right Date, GSK shall have the [***] (the "Subsequent Equity Purchase Right"), which it may opt to [***] in its [***], to purchase from SYNTA, provided, that SYNTA may opt to [***] to GSK in its [***], a number of shares of SYNTA Common Stock as shall equal the applicable Share Purchase Number for the Aggregate Equity Purchase Price, pursuant to the terms and subject to the conditions set forth in the Stock Purchase Agreement. Notwithstanding the foregoing, in no event shall (a) the aggregate number of shares of SYNTA Common Stock issuable under this Section 6.2.2, when taken together with the aggregate number of shares of SYNTA Common Stock issued under Section 6.2.1, exceed [***]% of the total outstanding shares of SYNTA Common Stock or voting power of SYNTA immediately prior to the execution of the Stock Purchase Agreement or (b) GSK, individually or as part of a group, beneficially own, or obtain the right to acquire, more than [***]% of the total outstanding shares of SYNTA Common Stock or voting power of SYNTA immediately after the issuance of SYNTA Common Stock under this Section 6.2.2; in the case of (b), the Share Purchase Number and the Aggregate Equity Purchase Price shall be reduced so that GSK's ownership percentage of outstanding shares of SYNTA Common Stock does not exceed [***]%.

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Indication Based Milestone Events	First Minor Indication ($ Million)	Second Minor Indication ($ Million)	First Major Indication ($ Million)	Second Major Indication ($ Million)
[***] for [***] in the[***] of [***] as[***] in [***]	[***]	[***]	[***]	[***]
[***] of the [***]for a [***]	[***]	[***]	[***]	[***]
The earlier of (a) the [***]by the [***] that the [***], or (b) the[***] by the [***] to [***] in the [***]for [***] for [***] in the [***]	[***]	[***]	[***]	[***]
[***] for a [***] in the [***]	[***]	[***]	[***]	[***]
[***] for a [***] in the [***] for a [***] or any [***] if [***]not [***]	[***]	[***]	[***]	[***]
[***] for a [***] in [***]	[***]	[***]	[***]	[***]
[***] in the [***]for a [***]	[***]	[***]	[***]	[***]
[***] in the [***]or [***] for a[***]	[***]	[***]	[***]	[***]
[***] in [***] for a [***]	[***]	[***]	[***]	[***]
Total	**[***]**	**[***]**	**[***]**	**[***]**

6.3 **Operating Income Payments.** If the Parties are conducting SYNTA Co-Commercialization Activities and GSK Co-Commercialization Activities, as applicable, for a Co-Commercialization Product in the Co-Commercialization Territory, then the Parties will share Operating Income pursuant to the terms set forth in Schedule 4 hereto; provided, that if SYNTA exercises its Commercialization Opt-Out Right pursuant to Section 5.1.1(c), the provisions of Section 5.2 shall apply.

6.4 **Milestone Payments.**

6.4.1 **Milestones.**

(a) Development and Regulatory Milestones. As partial consideration for the licenses granted to GSK by SYNTA under the terms of this Agreement, GSK shall make the following non-refundable, non-creditable (except as provided in Section 6.4.2(d) and Section 3.1.3(d)) payments to SYNTA:

Other Milestone Events	Milestone Payment ($ Millions)
First [***] of the following [***] events to occur: the [***]by the [***] that [***] the [***] for [***] the [***] the[***] in the [***]	[***] for each event, for a total of [***]
[***] of [***]	[***]
[***] of [***] in a [***]	[***]
[***] by the [***] that the [***] the [***]	[***]

[***] of [***] of [***] and [***]	[***]
Total	**[***]**

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(b) Sales Milestones. In addition to the milestone payments contemplated by Section 6.4.1(a), GSK shall make the following non-refundable payments to SYNTA:

Milestone Event		Milestone Payment
[***] of [***] in the [***] in a [***] of [***]	$	[***]
[***] of [***] in the [***] in a [***] of [***]	$	[***]
[***] of [***] in the [***] in a [***] of [***]	$	[***]
[***] of [***] in the [***] in a [***] of [***]	$	[***]
[***] of [***] in the [***] in a [***] of [***]	$	[***]
[***] of [***] in the [***] in a [***] of [***]	$	[***]

6.4.2 **Notice and Payment of Milestones**.

(a) Notice of Milestone Events. Either Party shall provide the other Party with prompt written notice upon each occurrence of a milestone event set forth in Section 6.4.1, but in no event will such notice be given to such other Party later than [***] Business Days after the notifying Party becomes aware of the achievement of any milestone. The milestones will be paid within [***] Business Days of the date on which GSK receives an invoice from SYNTA with respect to such milestone. If, notwithstanding the fact that GSK has not given SYNTA notice of the achievement of a milestone, SYNTA believes any such milestone event has occurred, it shall so notify GSK in writing and shall provide to GSK data, documentation or other information that supports its belief. Any dispute under this Section 6.4.2 that relates to whether or not a milestone event has occurred shall first be referred to the JSC to be resolved in accordance with Section 2.1.5.

(b) Skipped Milestones. If, at the time any given milestone payment set forth in Section 6.4.1 is due and one or more preceding milestone payments for antecedent milestone events have not been paid, then such unpaid antecedent milestone payments shall be paid at such time as well. For example, if a milestone payment is made for the [***] of an [***]

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to a [***] for the second Major Indication but no [***] [***] with [***] to that [***] for the second Major Indication, the milestone payment associated with the [***] of the [***] for a [***] for that [***] will be paid concurrently with the milestone payment for the [***] of an [***] for the second Major Indication.

(c) Changes to Status of [***] Indications. If a Product that is approved for a [***] Indication achieves Annual Net Sales in such [***] Indication in the Territory of at least [***] dollars ($[***]), GSK shall pay the difference between the total milestones paid for such [***] Indication and the milestones payable for a [***] for a [***] within [***] Business Days of the date on which GSK receives an invoice from SYNTA (after notification from GSK that such sales threshold has been met), so long as the milestones payable for [***] set forth in Section 6.4.1(a) have not been paid with respect to the [***]. If some, but not all milestone payments have been made for either one or both [***], this payment will reflect the difference between the [***] for a [***] and the [***] for the [***] ([***] Milestones [***] [***]). By way of illustration, if [***] for the [***] Minor Indication [***] for a Product approved for the Indication of [***], [***] for the [***] Minor Indication [***] for a Product approved for the Indication of [***], [***] for the [***] for a [***] for the [***], and [***] for the [***], then on achievement of [***] of the [***] for the [***] of at least [***] dollars ($[***]), then a payment of $[***] shall be due to SYNTA, representing the difference between the [***] of $[***] for a Product approved for a [***] and [***] of $[***] for a Product approved for a Minor Indication and already paid to SYNTA for the [***] in [***]. For the avoidance of doubt, if [***] for the [***] [***] prior to the [***] for the [***] achieving [***] of [***] dollars ($[***]), then the [***] described in the foregoing example [***].

(d) Single Milestone Payments. For purposes of clarity, GSK shall make a milestone payment corresponding to each of the foregoing milestone events [***] under Section 6.4.1, [***] of the [***] for such Product or the [***] for which such Product is Developed or Commercialized. For example, in the event that a [***] for an Indication for a Product and Development of such Product for such Indication is subsequently terminated, such [***] shall be [***] for a [***]for the [***] or for the [***] for [***] of whether such [***] is a [***] or [***].

(e) [***] Clinical Trials. The payment by GSK of a milestone for the achievement of the [***] Criteria in either the [***] Trial as set forth above shall only be paid to the extent that SYNTA [***] associated with such [***] Trials.

6.5 **Payment of Royalties; Royalty Rates; Accounting and Records.**

6.5.1 **Payment of Royalties.**

(a) Royalties Applicable in ROW Territory.

(i) Subject to the adjustments, if any, on a country-by-country and Royalty-Bearing Product-by-Royalty-Bearing Product basis set forth in Section 6.5.1(c) below, GSK shall pay SYNTA a royalty on Annual Net Sales of all Royalty-Bearing Products in the Royalty-Bearing Territory in each Calendar Year (or partial Calendar Year) for the Royalty Term applicable to each Royalty-Bearing Product in each country, at the following rates:

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Annual Net Sales Increment on All Products in ROW Territory	Royalty Rate (%)
Up to and including $[***]	[***]%
Above $[***], and up to and including $[***]	[***]%
Above $[***]	[***]%

(ii) The following hypothetical example illustrates the calculation of royalties under Section 6.5.1(a)(i): if, in any Calendar Year during the Term, Annual Net Sales of a Royalty-Bearing Product in the Royalty-Bearing Territory are $[***], the applicable royalty would be $[***], [***]% of Net Sales for Net Sales up to $[***], and [***]% of Net Sales for Net Sales of $[***]. The following hypothetical example illustrates a further calculation of royalties under Section 6.5.1(a)(i): if, in any Calendar Year during the Term, Annual Net Sales of two (2) Royalty-Bearing Products in the Royalty-Bearing Territory are $[***] and $[***] respectively, thereby totaling $[***] for all Products, the applicable royalty would be $[***], [***]% of Net Sales for Net Sales up to $[***], and [***]% of Net Sales for Net Sales of $[***]

(b) Royalties Applicable in U.S. Territory.

(i) If SYNTA exercises its Commercialization Opt-Out Right with respect to a Product on or before the Commercialization Opt-Out Date, (A) such Product shall thereafter be a Royalty-Bearing Product for purposes of this Agreement; and (B) subject to the adjustments, if any, on a Royalty-Bearing Product-by-Royalty-Bearing Product basis set forth in Section 6.5.1(c) below, GSK shall pay SYNTA a royalty based on Annual Net Sales of all such Royalty-Bearing Products in each Calendar Year (or partial Calendar Year) for the Royalty Term (which commences upon the First Commercial Sale of such Royalty-Bearing Product in the U.S. Territory after the Commercialization Opt-Out Date) applicable to such Royalty-Bearing Product in the U.S. Territory, at the following rates:

Annual Net Sales Increment on All Products in U.S. Territory	Royalty Rate (%)
Up to and including $[***]	[***]%
Above $[***], and up to and including $[***]	[***]%
Above $[***]	[***]%

(c) Adjustments to Royalties.

(i) No Patent Coverage; Joint Patent Coverage. Notwithstanding anything to the contrary in Section 6.5.1(a) or (b), if any Royalty-Bearing Product is sold in a country and is not covered by a Valid Claim that is included in SYNTA Patent Rights in such country, or is only covered by a Valid Claim that is included in Joint Patent

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Rights, then the royalty rates in such country shall be reduced by [***] percent ([***]%) of the rates set forth in Section 6.5.1(a) and/or (b) above, continuing until the last day of the applicable Royalty Term with respect to such Royalty-Bearing Product. If the royalty rate on a Royalty-Bearing Product is reduced in a country under this Section 6.5.1(c)(i) and is subsequently covered by a Valid Claim under the SYNTA Patent Rights in such country, the full royalty rates otherwise applicable under Section 6.5.1(a) or (b), as the case may be, shall be reinstated for so long as such Valid Claim covers the Royalty-Bearing Product during the remainder of the applicable Royalty Term. In addition, if a particular Royalty-Bearing Product is covered by a Valid Claim of a pending patent application included in the SYNTA Patent Rights or Joint Patent Rights, but is not covered by a Valid Claim of an issued patent included in the SYNTA Patent Rights or Joint Patent Rights at the time of the First Commercial Sale of such Royalty-Bearing Product in a particular country, then the royalty rates for such Royalty-Bearing Product in such country shall be reduced by [***] percent ([***]%) of the royalty rates set forth in Section 6.5.1(a) and/or 6.5.1(b) (as adjusted in this Section 6.5.1(c)(i) with respect to coverage by Valid Claims of Joint Patent Rights only) for the applicable Royalty Term; provided, that any such pending application shall no longer qualify under this Section 6.5.1(c)(i) if it has been finally withdrawn, abandoned or rejected by any administrative agency or other body of competent jurisdiction from which no appeal can be taken, or (ii) it is pending for more than [***] years from the date of the first official action. The payments representing the remaining [***] percent ([***]%) that would otherwise have been payable to SYNTA if the pending patent application was an issued patent included within the SYNTA Patent Rights or Joint Patent Rights shall be deposited into a Third Party escrow account to be maintained by GSK on behalf of SYNTA. Upon the issuance of a patent based upon the pending patent application described above with a Valid Claim covering the Royalty-Bearing Product in such country, prior to expiration of the applicable Royalty Term for such Royalty-Bearing Product, the remaining [***] percent ([***]%), plus interest accrued to such escrow account, shall be promptly paid to SYNTA. If a patent does not issue from such pending patent application during the applicable Royalty Term, then GSK shall retain all such amounts paid into escrow, plus interest accrued to such escrow account. In addition, if, and for so long as Competing Products are sold in the applicable country as described in Section 6.5.1(c)(iv) or reductions in royalty payments are taken in accordance with Section 6.5.1(c)(v) with respect to such Royalty-Bearing Product in such country, then GSK shall apply the applicable reduction on the escrowed portion and the applicable reduction on the non-escrowed portion such that, together, the escrowed portion and the non-escrowed portion of royalties represent the appropriate overall reduction as set forth in Section 6.5.1(c)(iv) and Section 6.5.1(c)(v), subject to the limitation set forth in Section 6.5.1(c)(vi).

(ii) Acknowledgment. The Parties hereby acknowledge and agree that royalties that are payable for a Royalty-Bearing Product for which no Patent Rights exist shall be in consideration of (A) SYNTA's expertise and know-how concerning its development of the SYNTA Technology and its other development activities conducted prior to the Effective Date; (B) the performance by SYNTA of the [***]; (C) the disclosure by SYNTA to GSK of results obtained in the Development Program; (D) the licenses granted to GSK hereunder with respect to SYNTA Technology and Joint Technology that are not within the claims of any Patent Rights Controlled by SYNTA; (E) the restrictions on SYNTA in Section 8.4.1; (G) the "head start" afforded to GSK by each of the foregoing; and (H) SYNTA's conduct of [***] of [***] in the [***].

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(iii) Combination Products. In the event that a Royalty-Bearing Product is sold as part of a Combination Product, where "Combination Product" means any unified dose (e.g. not a kit of two separate and distinct drug dosage forms) of a pharmaceutical product which is comprised of Royalty-Bearing Product and one or more other compound(s) and/or ingredients having independent therapeutic effect (collectively the "Other Products"), Net Sales of Royalty-Bearing Product, for the purposes of determining royalty payments, shall be determined by multiplying the Net Sales of the Combination Product by the fraction, [***] where A is the weighted average sale price of the Royalty-Bearing Product when sold separately in finished form, and B is the weighted average sale price of the Other Products when sold separately in finished form, in each case in the country of sale of the Combination Product. In the event that no such separate sales are made of either the Royalty-Bearing Product or the Other Products, the reasonably estimated commercial value thereof will be used instead of the sale price. For purposes of this Section 6.5.1(c)(iii), (A) "weighted average sale price" and "reasonably estimated commercial value," as the case may be, for a Royalty-Bearing Product and Other Products shall be calculated once at the commencement of each Calendar Year and such amount shall be used during all applicable royalty reporting periods for the entire following Calendar Year, (B) the weighted average sale price shall be calculated by dividing the Net Sales in the ten countries with the highest Net Sales or such other countries as collectively comprise [***] percent ([***]%) or more of Net Sales by the units of active ingredient sold during the twelve (12) months (or the number of months sold in a partial Calendar Year) of the preceding Calendar Year for the respective Product or Other Products, and (C) "reasonably estimated commercial value" shall be determined by agreement of the Parties using criteria to be mutually agreed upon by the Parties; provided, that if the Parties do not agree, such dispute shall be resolved in accordance with Section 2.1.5 hereof. For purposes of clarity, in the first Calendar Year of sale, a forecasted weighted average sale price will be used for the Royalty-Bearing Product and Other Products, if applicable, and any over or under payment due to a difference between forecasted and actual weighted average sale prices will be paid or credited in the first royalty payment of the following Calendar Year.

(iv) Competing Drugs. In the event that one or more Third Parties sell a Competing Drug (as defined below) in any country in which a Royalty-Bearing Product is then being sold by GSK, then, (A) during any Calendar Quarter in which sales of the Competing Drug by such Third Parties are equal to or greater than [***] percent ([***]%) but less than [***] percent ([***]%) of aggregate unit sales of Royalty-Bearing Products and Competing Drugs in such country (as measured by prescriptions or other similar information available from a Third Party Data Provider and applicable to such country) the applicable royalties in effect with respect to such Royalty-Bearing Product in such country as specified in Section 6.5.1(a) or (b) or 6.5.1(c)(i) shall be reduced by [***] percent ([***]%) and (B) during any Calendar Quarter in which sales of the Competing Drug by such Third Parties are equal to or greater than [***] percent ([***]%) of aggregate unit sales of Royalty-Bearing Products and Competing Drugs in such country (as measured by

prescriptions or other similar information available from a Third Party Data Provider and applicable to such country) the applicable royalties in effect with respect to such Royalty-Bearing Product in such country as specified in Section 6.5.1(a) or (b) or 6.5.1(c)(i) shall be reduced by [***] percent ([***]%). Notwithstanding the foregoing, (I) GSK's obligation to pay royalties at [***] percent ([***]%) of the applicable royalty rates shall be reinstated on the first day of the Calendar Quarter

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immediately following the Calendar Quarter in which sales of such Competing Drugs account for less than [***] percent ([***]%) but more than [***] percent ([***]%) of aggregate unit sales of Royalty-Bearing Products and Competing Drugs in such country and (II) GSK's obligation to pay royalties at the full royalty rates shall be reinstated on the first day of the Calendar Quarter immediately following the Calendar Quarter in which sales of such Competing Drugs account for [***] percent ([***]%) or less of aggregate unit sales of Royalty-Bearing Products and Competing Drugs in such country. For purposes of this Section 6.5.1(c)(iv), a "Competing Drug" means [***]. For purposes of this Section 6.5.1(c)(iv), the amount of royalties owing to SYNTA under Sections 6.5.1(a)(i), 6.5.1(b)(i) or 6.5.1(c)(i) for Annual Net Sales of any Royalty-Bearing Product in a given country (prior to any [***]% adjustment provided for herein) shall be deemed to be that amount which would be owed if Annual Net Sales of such Royalty-Bearing Product in such country subject to each of the royalty rates under Sections 6.5.1(a)(i), 6.5.1(b)(i) or 6.5.1(c)(i) were proportional to Net Sales of such Royalty-Bearing Product in all countries subject to royalties under Sections 6.5.1(a)(i), 6.5.1(b)(i) or Section 6.5.1(c)(i), whichever is applicable. For purposes of clarity, an example of the application of the preceding sentence is as follows: If sales in a Calendar Year in the United Kingdom are $[***] and no Competing Drug is sold in the United Kingdom and sales in a Calendar Year in Germany are $[***] and sales of a Competing Drug in Germany are greater than [***] percent ([***]%) of aggregate unit sales of Royalty-Bearing Products and Competing Drugs in Germany, the royalties will be $[***], calculated as follows: ($[***] x [***]% + [***] x [***]%) + ($[***] x [***]% + [***] x [***]%) = $[***].

(v) Third Party Royalties. The amount of royalties payable to SYNTA under Section 6.5.1(a), Section 6.5.1(b) and/or Section 6.5.1(c)(i), in each case, for any Royalty-Bearing Product in any country, shall be reduced by [***] percent ([***]%) of the amount of royalties incurred by GSK or any of its Affiliates or Sublicensees to any Third Party in consideration for the license of Patent Rights that are required for the commercial success of the Royalty-Bearing Product (i.e. there is no reasonable commercially viable alternative to the license of such Patent Rights, or such Patent Rights are not merely useful for the commercial success of the Royalty-Bearing Product) in such country and if, at the time of sale of the Royalty-Bearing Product, such Patent Rights would be infringed by the sale of the Royalty-Bearing Product in such country in the absence of such a license; provided, that royalties payable to SYNTA with respect to sales in any country shall not be reduced by greater than [***] percent ([***]%) of the royalty rates set forth in Sections 6.5.1(a), 6.5.1(b) or 6.5.1(c), as the case may be. For purposes of clarity, an example of the application of the preceding sentence is as follows: If sales in a Calendar Year in countries in the ROW Territory without royalty owed to Third Parties are $[***] and sales in countries in the ROW Territory with a [***] percent ([***]%) royalty owed to Third Parties are $[***], the royalties will be $[***], calculated as follows: ($[***] x [***]% + [***] x [***]%) + ($[***] x [***]% + [***] x [***]%) = $[***]. Notwithstanding the foregoing, any royalties (or any other payments) to be paid to Third Parties under the Third Party Agreements shall be the sole responsibility of SYNTA.

(vi) Limit on Royalty Reductions. Notwithstanding anything to the contrary in Section 6.5.1(c), in no event shall the royalties owed under Section 6.5.1(a)(i) or Section 6.5.1(b)(i) with respect to a Royalty-Bearing Product in a country, as adjusted pursuant to Sections 6.5.1(c)(i) and 6.5.1(c)(iii), be reduced by operation of Section 6.5.1(c)(v), together

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with Section 6.5.1(c)(iv), by more than [***] percent ([***]%). For clarity, if the royalty on a particular Royalty-Bearing Product in a given country was payable at [***]%, [***]% and [***]% under Section 6.5.1(a)(i), then the royalty rate in such country for such Royalty-Bearing Product could not be reduced below [***]%, [***]% and [***]%, pursuant to the aggregate application of both Sections 6.5.1(c)(iv) and 6.5.1(c)(v). For further clarity, if the royalty on a particular Royalty-Bearing Product in a given country was payable at [***]%, [***]% and [***]% under Section 6.5.1(a)(i) as adjusted by Section 6.5.1(c)(i), then the royalty rate in such country for such Royalty-Bearing Product could not be reduced below [***]%, [***]% and [***]%, pursuant to the aggregate application of both Sections 6.5.1(c)(iv) and 6.5.1(c)(v).

6.6 **Payment Dates and Reports.** Royalty payments shall be made by GSK within [***] days after the end of each Calendar Quarter, commencing with the Calendar Quarter in which the First Commercial Sale of a Royalty-Bearing Product occurs. GSK shall also provide, at the same time each such payment is made, a report showing: (a) the [***] of each Royalty-Bearing Product by type of Royalty-Bearing Product and country in the Territory; (b) the [***] for Royalty Bearing Product in each country in the Territory after applying any reductions set forth above; and (c) a calculation of the amount of royalty due to SYNTA.

6.7 **Records; Audit Rights.** GSK, its Affiliates and Sublicensees shall keep and maintain for [***] years from the date of each payment of royalties hereunder complete and accurate records of gross sales and Net Sales by GSK, its Affiliates and Sublicensees of each Royalty-Bearing Product, in sufficient detail to allow royalties to be determined accurately by an independent certified public accountant. SYNTA shall have the right for a period of [***] years after receiving any such payment to appoint at its expense an independent certified public accountant reasonably acceptable to GSK to audit the relevant records of GSK and its Affiliates and Sublicensees to verify that the amount of such payment was correctly determined. GSK, its Affiliates and Sublicensees shall each make its records available for audit by the independent certified public accountant during regular business hours at such place or places where such records are customarily kept (for clarity these records may be kept at local business sites and not centrally in one location), upon [***] days written notice from SYNTA. Such audit right shall not be exercised by SYNTA more than once in any Calendar Year or more than [***] with respect to sales of a particular Royalty-Bearing Product in a twelve (12) month period. The independent certified public accountant will only disclose the results (any sums either over/under paid) of such audit to SYNTA and no other details. All records made available for audit shall be Confidential Information of GSK. In the event there was an underpayment by GSK or overpayment to SYNTA hereunder, then the relevant Party shall promptly (but in any event no later than [***] days after GSK's receipt of the report so concluding) make payment to the other Party of any amount due. SYNTA shall bear the full cost of such audit unless such audit discloses an underreporting by GSK of at least [***] percent ([***]%) of the aggregate amount of royalties payable in any Calendar Year, in which case GSK shall reimburse SYNTA for all costs incurred by SYNTA in connection with such audit.

6.8 **Overdue Payments.** All royalty payments not made within the time period set forth in Section 6.6, including underpayments discovered during an audit, and all milestone payments not made within the time period specified in Section 6.4.2(a), shall bear interest at a rate of [***] percent ([***]%) per month from the due date until paid in full or, if less, the

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maximum interest rate permitted by Applicable Laws. Any such overdue royalty or milestone payment shall, when made, be accompanied by, and credited first to, all interest so accrued. Such interest will not accrue on payments that are the subject of a Disputed Matter or if delay in payment is outside the reasonable control of the paying Party.

6.9 **Payments; Withholding Tax.**

6.9.1 **Payments in U.S. Dollars.** All payments made by a Party under this Article 6 shall be made by wire transfer in U.S. Dollars in accordance with instructions given in writing from time to time by the other Party.

6.9.2 **Withholding Taxes.** Any taxes, levies or other duties paid or required to be withheld or deducted under the appropriate Applicable Laws by one of the Parties on account of monies payable to the other Party under this Agreement shall be deducted from the amount of monies otherwise payable to the other Party under this Agreement. The withholding Party shall secure and send to the other Party within a reasonable period of time, proof of any such taxes, levies or other duties paid or required to be withheld by the withholding Party for the benefit of the other Party. The Parties shall cooperate reasonably with each other to ensure that any amounts required to be withheld by either Party are reduced in an amount to the fullest extent permitted by Applicable Laws. Any interest, penalties or other charges imposed by a governmental authority as a result of a failure by the withholding party to pay such taxes, levies or other duties shall be the responsibility of the withholding party. The other Party will give the withholding Party any information necessary to determine such taxes, levies or other duties. No deduction shall be made, or a reduced amount shall be deducted, if the other Party furnishes a document from the appropriate governmental authorities to the withholding Party certifying that the payments are exempt from such taxes, levies or other duties or subject to reduced tax rates, according to the applicable convention for the avoidance of double taxation.

6.10 **Foreign Currency Exchange**. All payments to be made by GSK to SYNTA under this Agreement shall be made in United States dollars and may be paid by check made to the order of SYNTA or bank wire transfer in immediately available funds to such bank account in the United States as may be designated in writing by SYNTA from time to time. If, in any Calendar Quarter, Net Sales are made in any currency other than United States Dollars, such Net Sales shall be converted into United States Dollars as follows:

(A/B), where

A = foreign "Net Sales" (as defined above) in such Calendar Quarter expressed in such foreign currency; and

B = foreign exchange conversion rate, expressed in local currency of the foreign country per United States Dollar. The rate of exchange to be used in computing the amount of currency equivalent in United States Dollars owed to SYNTA under this Agreement will be made in accordance with GSK's policy for foreign exchange. GSK will use the average exchange rates as calculated and utilized by GSK's group reporting system and published accounts. The current GSK policy uses spot exchange rates sourced from

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Reuters/Bloomberg and if changed, GSK will notify SYNTA of the revised method in advance of it being applied.

6.11 **Invoices.** All invoices provided to GSK hereunder should include the payee's bank details and SYNTA's contact name for issue resolution, and be sent to Corporate Accounting and Licensing at GSK. Additional details regarding the method of sending invoices to GSK, contact names and addresses will be provided to SYNTA by GSK promptly after the Execution Date.

7. TREATMENT OF CONFIDENTIAL INFORMATION; PUBLICITY.

7.1 Confidentiality.

7.1.1 **Confidentiality Obligations.** SYNTA and GSK each recognizes that the other Party's Confidential Information constitutes highly valuable assets of such other Party. SYNTA and GSK each agrees that, subject to Sections 7.1.2 and 9.3, (i) it will not disclose, and will cause its Affiliates and Sublicensees not to disclose, any Confidential Information of the other Party and (ii) it will not use, and will cause its Affiliates and Sublicensees not to use, any Confidential Information of the other Party except as expressly permitted hereunder; provided, that, such obligations shall apply during the Term and for an additional [***] years thereafter.

7.1.2 **Limited Disclosure.** SYNTA and GSK each agrees that disclosure of its Confidential Information may be made by the other Party to any employee, consultant or Affiliate of such other Party or Third Party subcontractor engaged by a Party pursuant to Section 8.2.1 to enable such other Party to exercise its rights or to carry out its responsibilities under this Agreement; provided, that, any such disclosure or transfer shall only be made to such employees, consultants, Affiliates or Third Party subcontractors who are bound by written obligations of confidentiality as described in Section 7.1.3. In addition, SYNTA and GSK each agrees that the other Party may disclose its Confidential Information, pursuant to written obligations of confidentiality as described in Section 7.1.3, (a) to its licensees as expressly permitted pursuant to Section 8.2 hereof, (b) on a need-to-know basis to such other Party's legal and financial advisors, (c) as reasonably necessary in connection with an actual or potential (i) permitted sublicense of such other Party's rights hereunder, (ii) debt or equity financing of such other Party or (iii) merger, acquisition, consolidation, share exchange or other similar transaction involving such Party and any Third Party and (d) to any Third Party that is or may be engaged by a Party to perform services in connection with the Development Program, the SYNTA Co-Commercialization Activities, the GSK Co-Commercialization Activities or the Commercialization of Products as necessary to enable such Third Party to perform such services. In addition, each Party agrees that the other Party may disclose such Party's Confidential Information (A) as reasonably necessary to file, prosecute or maintain Patent Rights, or to file, prosecute or defend litigation related to Patent Rights, in accordance with this Agreement; or (B) as required by Applicable Laws (which shall be determined by the disclosing Party in its reasonable discretion); provided, that, in the case of any disclosure under this clause (B), the disclosing Party shall (1) if practicable, provide the other Party with reasonable advance notice of and an opportunity to comment on any such required disclosure and (2) if requested by the other Party, cooperate in all reasonable respects with the other Party's efforts to obtain

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confidential treatment or a protective order with respect to any such disclosure, at the other Party's expense.

7.1.3 **Employees and Consultants.** SYNTA and GSK each hereby represents that all of its employees and consultants, and all of the employees and consultants of its Affiliates, who have access to Confidential Information of the other Party are or will be bound, prior to their participation or access, by written obligations to maintain such Confidential Information in confidence. Each Party agrees to use, and to cause its Affiliates to use, reasonable efforts to enforce such obligations and to prohibit its employees and consultants from using such information except as expressly permitted hereunder. Each Party will be liable to the other for any disclosure or misuse by its employees of Confidential Information of the other Party.

7.2 **Publicity.** Notwithstanding anything to the contrary in Section 7.1, the Parties, upon the execution of this Agreement, shall jointly issue a press release with respect to this Agreement in the form attached hereto as Schedule 5, and either Party may make subsequent public disclosures of the contents of such press release without further approval of the other Party. After issuance of such press release, except as required by Applicable Laws (including those relating to disclosure of material information to investors), neither Party shall issue a press or news release or make any similar public announcement (it being understood that publication in scientific journals, presentation at scientific conferences and meetings and the like are intended to be covered by Section 7.3 and not subject to this Section 7.2) related to the Development Program without the prior written consent of the other Party, and shall provide such other Party with a copy of the proposed press or news release or similar public announcement for review in advance; provided, that notwithstanding the foregoing, either Party shall be expressly permitted to publicly announce the presentation of data pursuant to Section 7.3 with respect to Collaboration Compounds at any scientific or medical meeting or conference, the Initiation or completion of any Clinical Trial with respect to a Collaboration Compound, the occurrence of any milestone event and, if determined by SYNTA to be material to SYNTA, the amount of any milestone payment under Section 6.4.1 and any other event that such Party reasonably believes is material to it and the other Party shall not unreasonably withhold, condition or delay its consent to any such request to make such public announcement by the other Party.

7.3 **Publications and Presentations.** The Parties acknowledge that scientific and medical publications and presentations will be made in a manner consistent with (a) Third Party agreements in effect as of the Effective Date and (b) subject to subsection (a), GSK Internal Policies, but must be strictly monitored to prevent any adverse effect from premature publication or dissemination of results of the activities hereunder. The Parties will form a publication committee (the "Publication Committee") as soon as reasonably practicable after the Effective Date, with representation from patent counsel as deemed necessary, which shall work together on publication strategy with the JDC and JCC to coordinate strategy with respect to the U.S. Territory, with coordination by GSK of strategy on a ROW Territory basis, and shall establish rules and procedures for scientific and medical publications and presentations relating to the Development and Commercialization activities conducted under the Collaboration. Such rules and procedures will include requirements for reasonable advance notice and expeditious review

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of proposed publications and presentations, both before and after Commercialization Regulatory Approval is obtained. Except for disclosures permitted pursuant to Section 7.2, the rules and procedures to be developed by the Publication Committee will require that (i) either Party, its employees or consultants wishing to make a publication shall deliver to the other Party a copy of the proposed written publication or an outline of an oral disclosure in advance of submission for publication or presentation in accordance with the timelines set forth in GSK Internal Policies or applicable Third Party agreements in effect as of the Effective Date, (ii) the reviewing Party shall have the right to require a delay in submission for publication or presentation in accordance with the timelines set forth in GSK Internal Policies or applicable Third Party agreements in effect as of the Effective Date in order to enable patent applications protecting each Party's rights in such information to be filed, and (iii) each Party shall have the right to prohibit disclosure of any of its Confidential Information in any such proposed publication or presentation. In any permitted publication or presentation by a Party, the other Party's contribution shall be duly recognized, and co-ownership shall be determined in accordance with GSK Internal Policies. In negotiating agreements with Third Parties, each Party shall use Commercially Reasonable Efforts to obtain the agreement of such Third Party to the timelines for review and delay of submission as set forth in GSK Internal Policies.

7.4 **Permitted Publications**. GSK shall be permitted, to the extent required by Applicable Laws and/or the GSK Internal Policies, to publish summaries of the results of all Clinical Trials conducted by either Party on GSK's Clinical Trial Register. Either Party shall be permitted to include in a public disclosure or in a scientific or medical publication or presentation, any information which has previously been approved by the Parties for public disclosure or included in a public disclosure or scientific or medical publication that has been approved pursuant to Section 7.2 or reviewed pursuant to Section 7.3 or published or publicly disclosed by the other Party that, in any case, does not materially alter the message of the previous disclosure.

8. LICENSE GRANTS; EXCLUSIVITY; STANDSTILL AGREEMENT

8.1 **Licenses.**

8.1.1 **SYNTA License Grants.** Subject to the other terms of this Agreement, SYNTA hereby grants to GSK, during the Term, an exclusive (subject to SYNTA's retention of certain rights as set forth below) royalty-bearing, worldwide license or sublicense (with respect to SYNTA Technology and SYNTA Patent Rights licensed by third parties to SYNTA), with the right to grant sublicenses solely as provided in Section 8.2, under SYNTA Technology, SYNTA Patent Rights and SYNTA's interest in Joint Patent Rights and Joint Technology to make, have made, use, sell, offer for sale and import Products in the Territory. Notwithstanding the foregoing, SYNTA shall retain the right under SYNTA Technology and SYNTA Patent Rights to conduct SYNTA Development Activities as part of the Development Program and SYNTA Co-Commercialization Activities for Co-Commercialized Products in the Co-Commercialization Territory. For clarity, the retention of rights by SYNTA described in the foregoing sentence shall terminate on a [***] basis (a) with respect to SYNTA Development Activities if SYNTA exercises its Development Opt-Out Right in accordance with Section 3.1.3(d) and/or (b) with respect to conduct of the SYNTA Co-Commercialization Activities for Co-Commercialized

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Products if SYNTA exercises its Commercialization Opt-Out Right as set forth in Section 5.1.1(c).

8.1.2 **GSK License Grants.** Subject to the other terms of this Agreement, GSK hereby grants to SYNTA, during the Term, an exclusive (except as to GSK), royalty-free license, with the right to grant sublicenses solely as provided in Section 8.2.1, under GSK Technology, GSK Patent Rights and GSK's interest in Joint Technology and Joint Patent Rights for the sole purpose of conducting SYNTA Development Activities as part of the Development Program in the U.S. Territory and to conduct SYNTA Co-Commercialization Activities for Co-Commercialized Products in the Co-Commercialization Territory.

8.1.3 **Sublicenses Under Third Party Agreements.** If the JPC determines that a sublicense to the Technology and Patent Rights licensed to SYNTA under either or both of the Third Party Agreements is desirable for the Development or Commercialization of Products hereunder, GSK shall so notify SYNTA in writing, whereupon the Patent Rights and Technology under the applicable Third Party Agreements specified in such notice shall become SYNTA Patent Rights and SYNTA Technology hereunder. In such event, SYNTA shall be responsible for any and all milestone and royalty payments due to the licensors under the Third Party Agreements. For clarity, the Patent Rights and Technology licensed to SYNTA under the Third Party Agreements shall not be included in the licenses granted to GSK hereunder unless and until GSK provides the foregoing written notice to SYNTA.

8.2 **Right to Sublicense.**

8.2.1 **Development.** Notwithstanding anything contained herein to the contrary, either Party shall have the right to grant sublicenses under the license granted to it under Sections 8.1.1 and 8.1.2, respectively, solely to Third Party subcontractors engaged by such Party to perform designated functions related to the conduct of SYNTA Development Activities or GSK Development Activities, as the case may be, under the Development Program or to Affiliates; provided, that (a) such Party [***] to each material sublicense grant, such approval [***]; (b) such Party shall remain responsible for the satisfactory accomplishment of such work in accordance with the terms and conditions of this Agreement; and (c) each such Third Party subcontractor shall enter into a written agreement containing such provisions as are normal and customary for similar types of agreements. For the avoidance of doubt, GSK shall not be required to obtain approval of the JDC with respect to sublicenses granted to its Affiliates, or sub-contracting out its Manufacturing activities in the Territory.

8.2.2 **Commercialization.** GSK shall have the right to grant sublicenses to Sublicensees under the license granted to it under Section 8.1.1 with respect to Royalty-Bearing Products for sale in the Royalty-Bearing Territory; provided, that, (a) to the extent any such sublicense is with respect to [***] except that GSK may utilize a contract sales organization in the Royalty-Bearing Territory and in the Co-Commercialization Territory if both GSK and SYNTA are unable to provide their respective requirements of Representatives necessary to conduct the GSK Co-Commercialization Activities or SYNTA Co-Commercialization Activities, as the case may be, in its discretion upon prior notice to SYNTA; (b) it shall be a condition of any such sublicense that such Sublicensee agrees to be bound by all terms of this Agreement

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applicable to the Commercialization of Royalty-Bearing Products in the Royalty-Bearing Territory (including, without limitation, Article 7); (c) GSK shall provide written notice to SYNTA of any such proposed sublicense at least [***] days prior to such execution and provide material terms or redacted copies, at GSK's option, to SYNTA of each such sublicense within [***] days of its execution; (d) if GSK grants a sublicense to a Sublicensee, GSK shall be deemed to have guaranteed that such Sublicensee will fulfill all of GSK's obligations under this Agreement applicable to the subject matter of such sublicense; (e) GSK shall not be relieved of its obligations pursuant to this Agreement as a result of such sublicense. For the avoidance of doubt, GSK shall not be required to obtain approval of SYNTA with respect to sublicenses granted to its Affiliates, or sub-contracting out its Manufacturing activities in the Territory.

8.3 **No Other Rights.** GSK shall have no rights to use or otherwise exploit SYNTA Technology or SYNTA Patent Rights, and SYNTA shall have no rights to use or otherwise exploit GSK Technology or GSK Patent Rights, in each case, except as expressly set forth herein.

8.4 **Exclusivity.**

8.4.1 **SYNTA.** During the Term of this Agreement, SYNTA shall not, and shall cause each of its Affiliates to not, conduct any activity, either on its own, or with, for the benefit of, or sponsored by any Third Party, that is designed to develop or commercialize, or grant any license or other rights to any Third Party to utilize any Technology or Patent Rights Controlled by SYNTA or GSK, or any of their Affiliates for the express purpose of developing or commercializing any [***] or [***] except hereunder in the Development Program, or the Development or Commercialization of Products and in connection with the conduct of any Permitted Transactions.

8.4.2 **GSK.** During the Term of this Agreement, GSK shall not, and shall cause each of its Affiliates to not, conduct any activity, either on its own, or with, for the benefit of, or sponsored by any Third Party, that is designed to develop or commercialize, or grant any license or other rights to any Third Party to utilize any Technology or Patent Rights Controlled by GSK or SYNTA or any of their Affiliates for the express purpose of developing or commercializing any [***] or [***] except hereunder in the Development Program or the Development or Commercialization of Products and in connection with the conduct of any Permitted Transactions.

8.4.3 **Permitted Transactions**. If either Party enters into an agreement for a Permitted Transaction, all Technology and Patent Rights granted to such Party under the Permitted Transaction shall be included without further action in the licenses granted to the other Party by Section 8.1.1 or 8.1.2.

8.4.4 **Exceptions to Exclusivity**. Notwithstanding Sections 8.4.1 through 8.4.3, and subject to Sections 1.131(d)(ii) and 1.52(g), the Parties agree that GSK shall have the exclusive right, but not the obligation, to Develop pursuant to this Agreement, [***] or [***] that are not, as of the Effective Date, [***]. At any time during the Term of the Agreement, GSK may inform the JDC of its interest in Developing a [***] or a [***], and may request from

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SYNTA all material data and other relevant information Controlled by SYNTA reasonably required for GSK to make a determination to Develop such [***] or [***], which SYNTA will promptly provide to GSK. GSK shall have [***] days to review such data and information and inform the JDC of its intention to progress Development of such [***] or [***] following the approval of same by the JDC. If the Parties agree to conduct such Development on such [***] or [***], then such [***] or [***] will thereafter be deemed a [***] for purposes of this Agreement, including for purposes of all payment provisions in this Agreement, the provisions of Sections 8.4.1 through 8.4.3 shall not apply to such [***] or [***] and the license grants to GSK under Section 8.1.1 and SYNTA under Section 8.1.2 shall automatically be expanded to include Patent Rights and Technology Controlled by SYNTA and/or GSK related to the making, having made, using, selling, offering for sale and importing such [***] or [***], including the [***] or [***], as applicable.

8.5 **Standstill Agreement.**

(a) Standstill Obligation. Except as permitted by Section 8.5(b) or Section 8.5(c), during the [***] ([***]) years after the Effective Date of this Agreement, without the prior written consent of the Board of Directors of SYNTA, GSK and its Affiliates will not (and will not assist or encourage others to) directly or indirectly in any manner: (i) acquire, announce an intention to acquire, or agree to acquire, directly or indirectly, alone or in concert with others, by purchase, gift or otherwise, any direct or indirect beneficial ownership (within the meaning of Rule 13d-3 under the Exchange Act) or interest in any securities or direct or indirect rights, warrants or options to acquire, or securities convertible into or exchangeable for, any securities of SYNTA; (ii) make, or in any way participate in, directly or indirectly, alone or in concert with others, any "solicitation" of "proxies" to vote (as such terms are used in the proxy rules of the SEC promulgated pursuant to Section 14 of the Exchange Act) any securities of SYNTA with respect to any business combination, restructuring, recapitalization or similar transaction; (iii) form, join or in any way participate in a "group" within the meaning of Section 13(d)(3) of the Exchange Act with respect to any voting securities of SYNTA; (iv) acquire, announce an intention to acquire, or agree to acquire, directly or indirectly, alone or in concert with others, by purchase, exchange or otherwise, (v) any of the assets, tangible or intangible, of SYNTA or (vi) direct or indirect rights, warrants or options to acquire any assets of SYNTA, other than in the ordinary course of business; (vii) enter into any arrangement or understanding with others to do any of the actions restricted or prohibited under clauses (i), (ii), (iii) or (iv) of this Section 8.5(a); or (viii) otherwise act in concert with others, to seek to offer to SYNTA or any of its stockholders any business combination, restructuring, recapitalization or similar transaction to or with SYNTA.

(b) The provisions of Section 8.5(a) shall not apply (i) in the event that SYNTA announces publicly that it is seeking, or considering seeking, purchasers for SYNTA or that it is otherwise exploring, or considering exploring, strategic options, (ii) upon the commencement by a Third Party of a tender or exchange offer for more than fifty percent (50%) of the voting power of the outstanding voting securities of SYNTA, and (iii) if SYNTA publicly announces a transaction, or an intention to effect any transaction, which would result in (A) the sale by SYNTA or one or more of its subsidiaries to a Third Party of assets representing more than fifty percent (50%) of the consolidated earning power or assets of SYNTA and its

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subsidiaries, (B) the common shareholders of SYNTA immediately prior to such transaction owning less than fifty percent (50%) of the outstanding common stock of the acquiring entity or, in the case of a merger transaction, the surviving corporation (or, if the surviving corporation is a subsidiary of a parent company, the parent company) or (C) a Third Party acquiring beneficial ownership of more than [***] percent ([***]%) of the outstanding common stock of SYNTA. For purposes of clarity, the foregoing provisions shall prohibit GSK from acquiring shares of SYNTA Common Stock pursuant to a public tender offer for all outstanding SYNTA Common Stock in consideration for cash unless one of the exceptions in the preceding sentence applies.

(c) Nothing in Section 8.5(a) or otherwise in the Agreement shall prevent GSK or its Affiliates (or in the case of Section 8.5(c)(iv) their employees) from (i) making an offer to SYNTA to acquire SYNTA's rights to Collaboration Compounds and/or Products, (ii) purchasing the shares of Common Stock as contemplated by this Agreement or the Stock Purchase Agreement, (iii) acquiring securities of SYNTA issued in connection with distributions, stock splits or recapitalizations and the like, (iv) purchasing securities of SYNTA for (A) a pension plan established for the benefit of employees of GSK or its Affiliates, (B) any employee benefit plan of GSK or its Affiliates, (C) any stock portfolios not controlled by GSK or any of its Affiliates that invest in SYNTA among other companies, or (D) any account of an officer, director or employee of GSK or its Affiliates in such individual's personal capacity, or (v) acquiring securities of another biotechnology, pharmaceutical or consumer healthcare company that beneficially owns any of the securities of SYNTA, provided that any securities of SYNTA so acquired shall be subject to the provisions of Section 8.5(a).

(d) The provisions of this Section 8.5 shall terminate immediately upon a Change of Control of SYNTA that occurs during the first [***] years after the Effective Date.

9. INTELLECTUAL PROPERTY RIGHTS

9.1 **SYNTA Intellectual Property Rights.** SYNTA shall have sole and exclusive ownership of all right, title and interest, or exclusive license to, on a worldwide basis in and to any and all SYNTA Technology and SYNTA Patent Rights.

9.2 **GSK Intellectual Property Rights.** GSK shall have sole and exclusive ownership of all right, title and interest on a worldwide basis in and to any and all GSK Technology and GSK Patent Rights.

9.3 **Joint Technology Rights.** GSK and SYNTA shall jointly own all Joint Technology and Joint Patent Rights. Notwithstanding anything to the contrary contained herein or under Applicable Laws, the Parties hereby agree that either Party may use or license or sublicense to Affiliates or Third Parties all or any portion of its interest in Joint Technology, Joint Patent Rights or jointly owned Confidential Information for any purpose other than the discovery, development, manufacture, use, sale or importation of Class 1 Covered Compounds or Class 2 Covered Compounds, subject to Section 8.4.4, without the prior written consent of the other Party, without restriction and without the obligation to provide compensation to the other Party.

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9.4 **Inventorship.** The JPC shall initially determine inventorship of Program Technology under U.S. patent law. In case of a dispute at the JPC over inventorship and, as a result, whether any particular Technology is SYNTA Technology, GSK Technology or Joint Technology, such dispute shall be resolved according to U.S. patent law by patent counsel selected by the JPC and, unless otherwise agreed by the Parties, who (and whose firm) is not at the time of the dispute, and was not at any time during the past [***] ([***]) year prior to such dispute, performing services for either of the Parties, and if such patent counsel (and firm) have performed services for either Party in the previous [***] ([***]) years, such Party will inform the other of the nature of such services. Expenses of such patent counsel shall be shared equally by the Parties.

10. FILING, PROSECUTION AND MAINTENANCE OF PATENT RIGHTS

10.1 **Patent Filing, Prosecution and Maintenance.**

10.1.1 **SYNTA Prosecution Rights.** Subject to Section 10.1.3, SYNTA, acting through patent counsel or agents of its choice, shall be solely responsible for the preparation, filing, prosecution and maintenance of the SYNTA Patent Rights and Joint Patent Rights. GSK shall cooperate with and assist SYNTA in all reasonable respects, in connection with SYNTA's preparation, filing, prosecution (including review and comments regarding responses to office actions and/or official actions from worldwide patent offices) and maintenance of SYNTA Patent Rights and Joint Patent Rights. The costs and expenses incurred by SYNTA in connection with the preparation, filing, prosecution and maintenance of SYNTA Patent Rights and Joint Patent Rights with respect to a Product shall be Development Costs until Commercialization Regulatory Approval is obtained with respect to such Product, thereafter such costs will be borne [***] by [***] in the Royalty-Bearing Territory (if the Product covered by such SYNTA Patent Rights or Joint Patent Rights is a Royalty-Bearing Product in the Royalty-Bearing Territory) and shall be [***] if the Product covered by such SYNTA Patent Rights or Joint Patent Rights is a Co-Commercialized Product in the Co-Commercialization Territory.

10.1.2 **GSK Prosecution Rights.** GSK, acting through patent counsel or agents of its choice, shall be responsible for the preparation, filing, prosecution and maintenance of all GSK Patent Rights. At GSK's request, subject to Section 10.1.3, SYNTA shall cooperate with and assist GSK in all reasonable respects, in connection with GSK's preparation, filing, prosecution and maintenance of GSK Patent Rights. The costs and expenses incurred

by GSK in connection with the preparation, filing, prosecution and maintenance of GSK Patent Rights with respect to a Product shall be Development Costs until Commercialization Regulatory Approval is obtained with respect to such Product, thereafter such costs will be borne [***] by [***] in the Royalty-Bearing Territory (if the Product covered by such GSK Patent Rights is a Royalty-Bearing Product in the Royalty-Bearing Territory) and shall be [***] if the Product covered by such GSK Patent Rights is a Co-Commercialized Product in the Co-Commercialization Territory.

10.1.3 **Information and Cooperation.** Each filing Party shall (a) promptly notify the other Party, through the JPC, of any Program Technology and the JPC shall discuss the filing of any patent application with respect thereto; (b) regularly provide the other Party with copies of all patent applications filed hereunder for any Program Technology and other material

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submissions and correspondence with the patent offices, in sufficient time to allow for review and comment by the other Party; provided, that SYNTA shall consider in good faith all comments of GSK with respect to the SYNTA Patent Rights and shall include all of GSK's comments with respect to the [***] and [***] unless otherwise agreed by the JPC; (c) provide the other Party and its patent counsel with an opportunity to consult with the Party and its patent counsel regarding the filing and contents of any such application, amendment, submission or response, and the advice and suggestions of the other Party and its patent counsel shall be taken into consideration in good faith by such Party and its patent counsel in connection with such filing; and (d) execute any documents that may be necessary to perfect the filing Party's rights in and to any Program Technology and, in the event that the filing Party is unable for any reason to secure the signature of the other Party to any lawful and necessary document required to perfect its rights in and to any such Program Technology, the other Party hereby designates the filing Party as its agent, and hereby grants to the filing Party a power of attorney with full power of substitution, which power of attorney shall be deemed coupled with an interest, for the sole purpose of effecting the foregoing. Each filing Party shall pursue in good faith all reasonable claims requested by the other Party in the prosecution of any Patent Rights under this Section 10.1.

10.1.4 **Abandonment.** If either Party decides to cease prosecution or to allow to lapse any of the Patent Rights covering any Product, such Party (the "Abandoning Party") shall inform the other Party (the "Assuming Party") of such decision promptly and, in any event, so as to provide the Assuming Party a reasonable amount of time to meet any applicable deadline to establish or preserve such Patent Rights in such country or region. The Assuming Party shall have the right to assume responsibility for continuing the prosecution of such Patent Rights in such country or region and paying any required fees to maintain such Patent Rights in such country or region or defending such Patent Rights, all at the Assuming Party's sole expense, through patent counsel or agents of its choice. The Assuming Party shall not become an assignee of any such Patent Rights as a result of its assumption of any such responsibility. Upon transfer of the Abandoning Party's responsibility for filing, prosecuting and maintaining any of the Patent Rights to the Assuming Party under this Section 10.1.4, the Abandoning Party shall promptly deliver to the Assuming Party copies of all necessary files related to the Patent Rights with respect to which responsibility has been transferred and shall take all actions and execute all documents reasonably necessary for the Assuming Party to assume such filing, prosecution and maintenance.

10.2 **Legal Actions.**

10.2.1 **Third Party Infringement.**

(a) In General.

(i) Notice. In the event either Party becomes aware of (A) any suspected infringement or misappropriation of any SYNTA Patent Rights, Joint Patent Rights, GSK Patent Rights or Program Technology through the Development or Commercialization of a Collaboration Compound or Product or (B) the submission by any Third Party of an abbreviated NDA under the Hatch-Waxman Act for a product comprising a Collaboration Compound (each, an "Infringement"), that Party shall promptly notify the other Party and provide it with all details

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of such Infringement of which it is aware. The JPC shall promptly meet to discuss the Infringement and strategy for enforcement.

(ii) GSK Right to Enforce. Unless otherwise determined by the JSC as part of its consideration of an overall intellectual property strategy for Patent Rights or Program Technology involving Products, GSK shall have the first right, but not the obligation, to address such Infringement in the Territory by taking reasonable steps, which may include the institution of legal proceedings or other action (an "Action"), and to compromise or settle such Action; provided, that: (A) GSK shall keep SYNTA fully informed about such Action and SYNTA shall provide all reasonable cooperation to GSK in connection with such Action; (B) GSK shall not take any position with respect to, or compromise or settle, such Action in any way that is reasonably likely to directly and adversely affect the scope, validity or enforceability of the SYNTA Patent Rights, Joint Patent Rights, SYNTA Technology or Joint Technology without the prior consent of SYNTA, which consent shall not be unreasonably withheld; and (C) if GSK does not intend to prosecute or defend an Action, or ceases to diligently pursue such an Action, it shall promptly inform SYNTA in such a manner that such Action will not be prejudiced and Section 10.2.1(a)(iii) shall apply.

(iii) SYNTA Right to Enforce. If (A) GSK informs SYNTA that it does not intend to prosecute an Action in respect of Joint Patent Rights, SYNTA Patent Rights, Joint Program Technology or SYNTA Technology, (B) within [***] days after notice of Infringement GSK has not commenced any such Action, or (C) if GSK thereafter ceases diligently to pursue such Action and only if GSK has not informed SYNTA that it is not proceeding on the opinion of competent counsel in accordance with Section 2.5.5 (and where GSK is relying on such opinion, GSK will have a discussion with SYNTA concerning such opinion to the extent legally permitted to do so), then SYNTA shall have the right, at its own expense, upon notice to GSK to take appropriate action to address such Infringement, including by initiating its own Action or taking over prosecution of any Action initiated by GSK. In such event, SYNTA shall keep GSK fully informed about such Action and shall consult with GSK before taking any major steps during the conduct of such Action. GSK shall provide all reasonable cooperation to SYNTA in connection with such Action. SYNTA shall not take any position with respect to, or compromise or settle, such Action in any way that is reasonably likely to directly and adversely affect the scope, validity or enforceability of the Joint Patent Rights or Joint Technology without GSK's prior written consent, which consent shall not be unreasonably withheld.

(b) Right to Representation. Each Party shall have the right to participate and be represented by counsel that it selects, in any Action instituted under Section 10.2.1(a)(ii) or (iii) by the other Party. If a Party with the right to initiate an Action under Section 10.2.1(a) to eliminate an Infringement lacks standing to do so and the other Party has standing to initiate such Action, then the Party with the right to initiate an Action under Section 10.2.1(a) may name the other Party as plaintiff in such Action or may require the Party with standing to initiate such Action at the expense of the other Party; provided, that if GSK has informed SYNTA that it would not proceed with such Action on the opinion of competent counsel, SYNTA may not require GSK to initiate such Action.

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(c) Cooperation. In any Action instituted under this Section 10.2.1, the Parties shall cooperate with and assist each other in all reasonable respects. Upon the reasonable request of the Party instituting such Action, the other Party shall join such Action and shall be represented using counsel of its own choice, at the requesting Party's expense; provided, that if GSK has informed SYNTA that it would not proceed with such Action on the opinion of competent counsel, SYNTA may not require GSK to join such Action.

(d) Allocation of Proceeds.

(i) Co-Commercialized Products. Any amounts recovered by either Party pursuant to Actions under Section 10.2.1(a)(ii) or (iii) with respect to any Infringement through the Development or Commercialization of a Product or Collaboration Compound in the Co-Commercialization Territory prior to the exercise by SYNTA of its Commercialization Opt-Out Right, whether by settlement or judgment, shall be allocated in the following order: (A) first, to reimburse GSK and SYNTA for their reasonable out-of-pocket expenses in making such recovery (which amounts shall be allocated pro rata if insufficient to cover the totality of such expenses); and (B) then, to GSK and SYNTA [***] as the [***] and [***].

(ii) Royalty-Bearing Products. Any amounts recovered by either Party pursuant to Actions under Sections 10.2.1(a)(ii) or (iii) with respect to any Infringement through the Development or Commercialization of a Product or Collaboration Compound in the ROW Territory or in the U.S. Territory on and after the date of exercise by SYNTA of its Commercialization Opt-Out Right, whether by settlement or judgment, shall be allocated in the following order: (A) first, to reimburse GSK and SYNTA for their reasonable out-of-pocket expenses in making such recovery (which amounts shall be allocated pro rata if insufficient to cover the totality of such expenses); and (B) then, to GSK and SYNTA [***] as [***] on [***] of the [***] by the [***] to [***] to [***] in respect of such [***], in each case as determined by the JSC in good faith.

10.2.2 **Orange Book; Patent Registry.** After completion of the activities contemplated by the Regulatory Filings Transfer Plan, GSK will have sole decision-making authority with respect to the determination of whether or not to submit SYNTA Patent Rights, Joint Patent Rights or GSK Patent Rights to the applicable regulatory authorities for listing in the "Orange Book" as required under the Hatch-Waxman Act. In furtherance of this responsibility, SYNTA will permit GSK, within [***] days after the Effective Date, to audit the SYNTA Patent Rights to ensure that such SYNTA Patent Rights satisfy GSK's internal standards for determining, among other things, validity of such SYNTA Patent Rights and lack of fraud on any patent offices in the Territory. In addition to the foregoing, GSK shall have sole decision-making authority with respect to Patent Rights to be listed on the Canadian Patent Registry.

10.2.3 **Defense of Claims**. In the event that any action, suit or proceeding is brought against either Party or an Affiliate or Sublicensee of either Party alleging the infringement of the Technology or Patent Rights of a Third Party by the Development or Commercialization, including, without limitation, the Manufacture, use or sale, of any Product or Collaboration Compound, such Party shall notify the other Party within [***] days of the earlier

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of (a) receipt of service of process in such action, suit or proceeding, or (b) the date such Party becomes aware that such action, suit or proceeding has been instituted and the JPC shall meet as soon as possible to discuss the overall strategy for defense of such matter. GSK shall have the right, but not the obligation, to defend such action, suit or proceeding in the Territory. SYNTA or its Affiliates or Sublicensees shall have the right to separate counsel at its or their own expense in any such action, suit or proceeding, and the Parties shall cooperate with each other in all reasonable respects in any such action, suit or proceeding. If SYNTA has not exercised its Commercialization Opt-Out Right, all such expenses with respect to any such action, suit or proceeding in the Co-Commercialization Territory shall be Commercialization Expenses and all such expenses in the U.S. Territory if SYNTA exercises its Commercialization Opt-Out Right and the ROW Territory shall be borne solely by GSK. Each Party shall promptly furnish the other Party with a copy of each communication relating to the alleged infringement that is received by such Party including all documents filed in any litigation. In no event shall either Party settle or otherwise resolve any such action, suit or proceeding brought against the other Party or any of its Affiliates or Sublicensees without the other Party's prior written consent.

10.3 **Trademarks, Logos, Etc.**

10.3.1 **Determination of Trademarks, Logos, Etc.** The Product Trademark(s), trade dress, logos, slogans, designs and copyrights used on and in connection with the Co-Commercialized Products under which each Co-Commercialized Product shall be marketed in the Co-Commercialization Territory (such Product Trademarks hereinafter referred to as the "Co-Commercialization Trademarks") shall be developed by the Parties and reviewed and approved by the JCC. GSK shall be responsible for developing and selecting all other Product Trademarks applicable to Royalty-Bearing Products in the Territory. To the extent possible, the same Product Trademark(s) will be used throughout the Territory. GSK shall own all trade dress, logos, slogans, designs and copyrights described above.

10.3.2 **Registration, Maintenance, Enforcement and Defense.** GSK shall be responsible for the registration of the Product Trademark(s) to be used with Royalty-Bearing Products in the Royalty-Bearing Territory and the Co-Commercialization Trademarks, and shall be the exclusive owner of all Product Trademarks, including the Co-Commercialization Trademarks throughout the Territory, and any domain names incorporating such Product Trademarks, and all goodwill associated therewith. GSK shall take all such actions as are required to continue and maintain in full force and effect and enforce and defend all Product Trademarks and registrations thereof, including the Co-Commercialization Trademarks, against infringement and misappropriation in the Territory, and shall be solely responsible for all expenses incurred in connection therewith, which shall be Commercialization Expenses to the extent they relate to a Co-Commercialization Trademark. The Parties shall conduct the Promotional Efforts for each Co-Commercialized Product in the Co-Commercialization Territory exclusively under the Co-Commercialization Trademarks. GSK shall consult with SYNTA with respect to material matters relating to the Co-Commercialization Trademarks, including any misappropriation or infringement thereof, and consider SYNTA's input in good faith and shall provide SYNTA with updates on material issues associated with Product Trademarks in the Territory as reasonably requested by SYNTA, but not more frequently than annually.

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10.3.3 **Use of Trademark.** In primary and secondary packages and labels and all marketing and promotional literature relating to Products, SYNTA shall be presented and described as the Party from whom GSK licensed the Product and, to the extent practicable, the SYNTA name and logo shall appear in the same in size and prominence as the GSK name and logo on all Product primary and secondary packages and labels and all marketing and promotional literature used in the Territory, unless prohibited by Applicable Laws.

10.3.4 **Licenses.** SYNTA shall grant to GSK **the non-exclusive, royalty-free** right to use the SYNTA name and corporate logo ("SYNTA's Brand") in the Territory solely for the purpose of GSK's Commercialization of the Product in accordance with the terms of this Agreement and GSK shall grant to SYNTA (a) an exclusive (except as to GSK), royalty-free license to use Co-Commercialization Trademark(s) in the Co-Commercialization Territory and (b) the non-exclusive, royalty-free right to use the GSK name and corporate logo ("GSK's Brand") in the Co-Commercialization Territory in each case solely for the conduct of SYNTA Co-Commercialization Activities for the Co-Commercialized Product so long as SYNTA does not exercise its Commercialization Opt-Out Right. Except as provided herein, neither Party shall have any rights in or to the other Party's name or corporate logo or the goodwill pertaining thereto. SYNTA hereby acknowledges GSK's exclusive right, title and interest in and to GSK's Product Trademark(s), including the Co-Commercialization Trademarks and GSK's Brand and agrees that neither it nor its Affiliates will at any time do, or cause to be done, any act or thing contesting or in any way intending to impair the validity of and/or GSK's exclusive right, title and interest in and to GSK's Product Trademark(s) and GSK's Brand. SYNTA shall not in any manner represent that it owns the Product Trademarks, including the Co-Commercialization Trademarks or GSK's Brand, and SYNTA hereby acknowledges that use of the Co-Commercialization Trademarks and GSK's Brand shall not create any rights, title or interest in or to the same in SYNTA's favor, but that all such use shall inure to the benefit of GSK. GSK hereby acknowledges SYNTA's exclusive right, title and interest in and to SYNTA's Brand and agrees that neither it nor its Affiliates will at any time do, or cause to be done, any act or thing contesting or in any way intending to impair the validity of and/or SYNTA's exclusive right, title and interest in and to SYNTA's Brand. GSK shall not in any manner represent that it owns the SYNTA Brand, and GSK hereby acknowledges that use of SYNTA's Brand shall not create any rights, title or interest in or to the same in GSK's favor, but that all such use shall inure to the benefit of SYNTA.

11. TERM AND TERMINATION

11.1 **Term.** This Agreement shall commence on the Effective Date and shall continue in full force and effect, unless otherwise terminated pursuant to Section 11.2, (a) in the U.S. Territory, if SYNTA has not exercised its Commercialization Opt-Out Right with respect to a Co-Commercialized Product, for as long as such Co-Commercialized Product is being sold by either Party in the Co-Commercialization Territory and, if SYNTA has exercised its Commercialization Opt-Out Right with respect to a Product, until the expiration of the applicable Royalty Term with respect to such Product and (b) in the ROW Territory, until the expiration of all applicable Royalty Terms with respect to Royalty-Bearing Products (the "Term"). Upon the

expiration of this Agreement as set forth in this Section 11.1, the license rights granted to GSK hereunder shall be converted to perpetual and fully paid-up licenses.

11.2 **Termination.** Subject to Section 14.1(d), this Agreement may be terminated by either Party as follows:

11.2.1 **Unilateral Right to Terminate Agreement.**

(a) GSK Rights to Terminate.

(i) Termination of Agreement. GSK shall have the right to terminate this Agreement in its entirety at any time after the Effective Date by providing [***] prior written notice to SYNTA at any time prior to the date of First Commercial Sale of a Product and [***] prior written notice at any time on and after the date of First Commercial Sale of a Product. Upon delivery of termination notice by GSK, GSK shall not be obligated to initiate any new Clinical Trials or non-clinical studies, make any further filings for Regulatory Approval or Commercialization Regulatory Approval, or launch the Product in any further countries in order to meet its obligations to use Commercially Reasonable Efforts with respect to the Collaboration Compounds and Products pursuant to the terms of this Agreement as of the date on which GSK delivered its termination notice as set forth above.

(ii) Termination in Selected Regions. In the event that GSK reasonably determines, in its sole discretion, that the Commercialization of all Products in a Region is not commercially viable or feasible, it shall provide [***] written notice to SYNTA at any time prior to the date of First Commercial Sale and [***] written notice at any time on and after the date of First Commercial Sale, which shall set forth in reasonable detail its written justification for, and supporting evidence with respect to, such determination. For purposes of this Section 11.2.1(a)(ii), "Region" shall mean either (A) [***], (B) [***], or (C) the [***] if GSK opts not to Commercialize a Product in at least [***] of the [***].

(iii) Termination for Safety Reasons. GSK may terminate this Agreement immediately upon written notice following the withdrawal of Product from any market as a result of bona fide concerns that the Product is unsafe for administration to humans (a "Valid Safety Issue"). For the avoidance of doubt, the [***] notice period applicable to termination under Sections 11.2.1(a)(i) and (ii) shall not apply in the case of termination for a Valid Safety Issue.

(b) SYNTA Right to Terminate. Except to the extent the following is unenforceable under the Applicable Laws of a particular jurisdiction where a patent application within the SYNTA Patent Rights is pending or a patent within the SYNTA Patent Rights is issued, SYNTA may terminate this Agreement immediately upon written notice to GSK in the event that GSK or any of its Affiliates or Sublicensees Challenges any SYNTA Patent Right or assists a Third Party in initiating a Challenge of any SYNTA Patent Right.

11.2.2 **Termination for Breach.** Except as set forth herein, either Party may terminate this Agreement, effective immediately upon written notice to the other Party for a material breach by the other Party of any term of this Agreement that remains uncured [***]

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days ([***] days in the event that the breach is a failure of a Party to make any payment required hereunder) after the non-breaching Party first gives written notice to the other Party of such breach (providing detail regarding such breach) and its intent to terminate this Agreement if such breach is not cured; provided, that (a) the [***] day cure period may be extended for a period not to exceed [***] days if the JSC unanimously determines that the breaching party is in the process of attempting in good faith to cure such breach and (b) in the event the breaching Party disputes in good faith the existence of the breach, including a payment breach, the obligation of such Party to cure shall be stayed pending resolution of such dispute.

11.2.3 **Termination for Insolvency.** In the event that either Party makes an assignment for the benefit of creditors, appoints or suffers appointment of a receiver or trustee over all or substantially all of its property, files a petition under any bankruptcy or insolvency act or has any such petition filed against it which is not discharged within [***] days of the filing thereof, then the other Party may terminate this Agreement effective immediately upon written notice to such Party. In connection therewith, all rights and licenses granted under this Agreement are, and shall be deemed to be, for purposes of Section 365(n) of the United States Bankruptcy Code, licenses of rights to "intellectual property" as defined under Section 101(56) of the United States Bankruptcy Code.

11.3 **Consequences of Termination of Agreement.** In the event of the termination of this Agreement pursuant to Section 11.2, the following provisions shall apply, as applicable.

11.3.1 **Termination by SYNTA under 11.2.1(b), 11.2.2 or 11.2.3 or by GSK under Section 11.2.1(a)(i).** If this Agreement is terminated by GSK pursuant to Section 11.2.1(a)(i) or by SYNTA pursuant to Section 11.2.1(b), 11.2.2 or 11.2.3:

(a) All licenses and rights granted to GSK under this Agreement shall immediately terminate and SYNTA shall no longer be subject to any obligations under Section 8.4.1.

(b) SYNTA shall have an exclusive, perpetual license, with the right to sublicense, under the GSK Patent Rights, GSK Technology, Product Trademarks other than Product Trademarks incorporating the GSK Brand, and GSK's rights to Joint Patent Rights and Joint Technology directly related to, and used by GSK with respect to the Development and/or Commercialization of, any Product as of the effective date of termination, solely for the purpose of making, using, selling, offering for sale and importing such Product throughout the Territory; provided, that if this Agreement is terminated by GSK pursuant to Section 11.2.1(a)(i) or by SYNTA pursuant to Section 11.2.2 or 11.2.3, (i) SYNTA will pay GSK a royalty based on Annual Net Sales of any such Product that is being actively Developed and/or Commercialized by GSK as of the effective date of such termination (each, a "Reverted Royalty-Bearing Product"), commencing on the date of First Commercial Sale of such Product by SYNTA and ending upon the last day of the applicable Royalty Term for such Reverted Royalty-Bearing Product, at a rate equal to the Applicable Reversion Royalty Rate, and (ii) the remaining terms of Sections 6.5.1(c), 6.6, 6.7, 6.8, 6.9 and 6.10 shall apply *mutatis mutandis* to each such Reverted Royalty-Bearing Product. For purposes of this Section 11.3.1(b), the term "Applicable Reversion Royalty Rate" means, on a country-by-country basis, (a) if this Agreement is terminated by GSK pursuant to Section 11.2.1(a)(i), (i) [***] percent ([***]% if, as of the

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effective date of termination, there has not been a Drug Approval Application filed for such Reverted Royalty-Bearing Product; (ii) [***] percent ([***]%) if, as of the effective date of termination, there has been a Drug Approval Application filed for such Reverted Royalty-Bearing Product; and (iii) [***] percent ([***]%) if, as of the effective date of termination, a Commercialization Regulatory Approval has been received for such Reverted Royalty-Bearing Product or the First Commercial Sale of such Reverted Royalty-Bearing Product has occurred; and (b) if this Agreement is terminated by SYNTA pursuant to Section 11.2.2 or 11.2.3, on a country-by-country basis (i) [***] percent ([***]%) if, as of the effective date of termination, there has not been a Drug Approval Application filed for such Reverted Royalty-Bearing Product; (ii) [***] percent ([***]%) if, as of the effective date of termination, there has been a Drug Approval Application filed for such Reverted Royalty-Bearing Product; and (iii) [***] percent ([***]%) if, as of the effective date of termination, a Commercialization Regulatory Approval has been received for such Reverted Royalty-Bearing Product or the First Commercial Sale of such Reverted Royalty-Bearing Product has occurred.

(c) Each Party shall promptly return all Confidential Information of the other Party that is not subject to a continuing license hereunder; provided, that, each Party may retain one copy of the Confidential Information of the other Party in its archives solely for the purpose of establishing the contents thereof and ensuring compliance with its obligations hereunder.

(d) Upon request of SYNTA, which shall be provided to GSK within [***] days of the date on which the applicable Party delivers its termination notice, GSK shall promptly, and in any event within [***] days after SYNTA's request (which request may specify any or all of the actions in clauses (i) through (x)): (i) transfer to SYNTA all of its right, title and interest in all Regulatory Filings, Drug Approval Applications and Regulatory Approvals then in its name applicable to Products, if any; (ii) notify the applicable Regulatory Authorities and take any other action reasonably necessary to effect such transfer; (iii) provide SYNTA with copies of all material correspondence between GSK and such Regulatory Authorities relating to such Regulatory Filings, Drug Approval Applications and Regulatory Approvals; (iv) unless expressly prohibited by any Regulatory Authority, transfer sponsorship and control to SYNTA of all Clinical Trials of Products being conducted as of the effective date of termination and continue to conduct such trials after the effective date of termination to enable such transfer to be completed without interruption of any such trial for such mutually agreed reasonable period of time, at [***]; (v) cooperate with SYNTA, cause its Affiliates to cooperate with SYNTA and use Commercially Reasonable Efforts to require any Third Party with which GSK has an agreement with respect to the conduct of Clinical Trials for Products or the Manufacture of Products (including, without limitation, agreements with contract manufacturing organizations, contract research organizations, clinical sites and investigators), to cooperate with SYNTA in order to accomplish the transfer to SYNTA of similar rights as held by GSK under its agreements with such Third Parties; (vi) provide SYNTA, at the [***], with all supplies of Collaboration Compounds and Products in the possession of GSK or any Affiliate or contractor of GSK; (vii) provide SYNTA with copies of all material reports and material data generated or obtained by GSK or its Affiliates, subject to any confidentiality obligations to Third Parties, pursuant to this Agreement that relate to any Product that have not previously been provided to SYNTA; and (viii) grant to SYNTA the right to use and disclose in connection with the Development and Commercialization of Products all GSK Confidential Information Controlled by GSK that is

necessary for, and relates directly to, the Development and Commercialization of Products as such Products were being Developed or Commercialized hereunder as of the effective date of termination of this Agreement and agree that all such GSK Confidential Information shall be subject to clause (i) of the second sentence of Section 7.1.1 as if it were SYNTA Confidential Information but shall not be subject to clause (ii) of the second sentence of Section 7.1.1, (ix) if GSK has Manufactured, is Manufacturing or is having manufactured such Product or any intermediate of such Product as of the date of termination, (A) transfer copies of all documents and materials Controlled by GSK and embodying GSK Technology and/or GSK Patent Rights that are at the time of such termination being used by GSK or its Third Party manufacturers to Manufacture a Collaboration Compound or P roduct, including but not limited to all suppliers, analytical methods, quality standards, specifications, commercial API formula, process chemistry, Manufacturing process descriptions, process flows, cycle times, process parameters, process equipment type and sizes, cleaning methods, commercial API samples, master safety data sheets, and stability reports (the "GSK Manufacturing Know-How") solely to enable the Manufacture of a Collaboration Compound or Product by SYNTA, its Affiliates or any Third Party manufacturer of SYNTA; (B) promptly make available to SYNTA or any such Third Party manufacturer a reasonable number of appropriately trained personnel to provide, [***], on a mutually convenient timetable, technical assistance in the transfer of GSK Manufacturing Know-How to SYNTA; (C) cooperate with SYNTA, cause its Affiliates to cooperate with SYNTA and use Commercially Reasonable Efforts to require its Third Party manufacturers of a Collaboration Compound or Product to cooperate with SYNTA in order to accomplish the transfer to SYNTA of similar rights as held by GSK under its Third Party manufacturer agreements; and (D) solely in the event that such Third Party manufacturers do not agree to such transfer of rights to SYNTA referred to in 11.3.1(d)(ix)(C), or GSK is Manufacturing Product or API and/or intermediate in its own facilities at the effective date of termination, supply SYNTA with its requirements of such Product or intermediate for up to [***] months following such termination at a transfer price equal to the Manufacturing Cost plus [***] percent ([***]%) for the supply of such Product or intermediate; and (x) enter into negotiations with SYNTA and agree upon and implement a plan for the orderly transition of Development and Commercialization from GSK to SYNTA in a manner consistent with Applicable Laws and standards of ethical conduct of human Clinical Trials and will seek to replace all GSK personnel engaged in any Development or Commercialization activities, in each case, as promptly as practicable.

(e) If GSK delivers notice of termination pursuant to Section 11.2.1(a)(i), or SYNTA delivers notice of termination pursuant to Section 11.2.2, in either case prior to Completion of the Ongoing Clinical Trial, then during the period commencing on the date of such notice and continuing until the Completion of the Ongoing Clinical Trial, GSK shall be required to observe its obligations hereunder regarding certain milestones and other payments, as described in this Section 11.3.1(e):

(i) GSK shall make [***] equivalent to the [***] for the following [***] to the extent they have not been [***] previously: (A) [***] for [***] in the [***] of [***] as [***] in [***], (B) [***] of [***], (C) [***] of [***] in a [***], and (D) [***] of [***] of [***] and [***].

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(ii) If the total budget for the Ongoing Clinical Trial as set forth in the initial Global Development Plan (which the Parties acknowledge is $[***] as of the Execution Date) is exceeded, then GSK shall pay its share of the overage in accordance with Section 1.54; provided, that GSK shall not be required to pay for any overage due to any changes to the Ongoing Clinical Trial as SYNTA may request or deem necessary after the date on which GSK delivered its termination notice.

(iii) GSK shall make any True-Up Operating Income Payment as described in Section 5 of Schedule 4 based on Commercialization Expenses incurred through Completion of the Ongoing Clinical Trial to the extent applicable.

11.3.2 **Termination by GSK.** If this Agreement is terminated by GSK pursuant to Section 11.2.2 or 11.2.3:

(a) All licenses granted by SYNTA to GSK pursuant to Section 8.1.1 (including any additional licenses required to Manufacture API), shall survive the termination in each case subject to GSK's continued payment of certain milestones related to the Ongoing Clinical Trial (as further described below) and royalty payments under and in accordance with this Agreement with respect thereto.

(b) SYNTA shall grant to GSK the right to use and disclose in connection with the Development and Commercialization of Products all SYNTA Confidential Information Controlled by SYNTA that is necessary for, and relates directly to, the Development and Commercialization of Products as such Products were being Developed or Commercialized hereunder as of the effective date of termination of this Agreement and the Parties agree that all such SYNTA Confidential Information shall be subject to clause (i) of the second sentence of Section 7.1.1 as if it were GSK Confidential Information but shall not be subject to clause (ii) of the second sentence of Section 7.1.1.

(c) All licenses granted by GSK to SYNTA pursuant to Section 8.1.2 shall terminate, and in the case of termination by GSK pursuant to Section 11.2.2, SYNTA shall continue to be subject to the obligations set forth in Section 8.4.1 for [***] following such termination.

(d) SYNTA's rights to conduct SYNTA Co-Commercialization Activities for the Co-Commercialized Product under Section 5.1.1(a) and/or under any Co-Commercialization Agreement shall terminate and all Co-Commercialized Products shall thereafter become Royalty-Bearing Products.

(e) Each Party shall promptly return all Confidential Information of the other Party that is not subject to a continuing license hereunder; provided, that, each Party may retain one copy of the Confidential Information of the other Party in its archives solely for the purpose of establishing the contents thereof and ensuring compliance with its obligations hereunder.

(f) If GSK delivers notice of termination pursuant to either Section 11.2.2 or 11.2.3 prior to Completion of the Ongoing Clinical Trial, then during the period

commencing on the date of such notice and continuing until the Completion of the Ongoing Clinical Trial, GSK shall be required to observe its obligations hereunder regarding certain milestones and other payments, as described in this Section 11.3.2(f):

(i) GSK shall make a [***] equivalent to an appropriate [***] of the following [***] to the ext ent they have not been [***] previously, such [***] to be negotiated by the Parties in good faith: (A) [***] for [***] in the [***] of [***] as [***] in [***], (B) [***] of [***], (C) [***] of [***] in a [***], and (D) [***] of [***] of [***] and [***].

(ii) If the total budget for the Ongoing Clinical Trial as set forth in the initial Global Development Plan (which the Parties acknowledge is $[***] as of the Execution Date) is exceeded, then GSK shall pay its share of the overage in accordance with Section 1.54; provided, that GSK shall not be required to pay for any overage due to any changes to the Ongoing Clinical Trial as SYNTA may request or deem necessary after the date on which GSK delivered its termination notice.

(iii) GSK shall make any True-Up Operating Income Payment as described in Section 5 of Schedule 4 based on Commercialization Expenses incurred through Completion of the Ongoing Clinical Trial to the extent applicable.

11.3.3 **Termination by GSK of Selected Regions.** If GSK terminates its rights and obligations under this Agreement with respect to all Products in a Region as described in Section 11.2.1(a)(ii), then such Region shall, without any further action of either Party, be removed from the Territory for purposes of all such Products. In such event: (a) the licenses granted to GSK under Article 8 to Commercialize such Products in the Region shall immediately terminate; (b) the licenses granted to SYNTA under Article 8 to Commercialize such Products in the Region shall continue and survive; provided, that, (i) such license shall thereafter be exclusive (even as to GSK) as to the Products that are the subject of the termination, and shall include the right to grant sublicenses; (ii) SYNTA will pay GSK a royalty based on Annual Net Sales of any Reverted Royalty-Bearing Products that are being Developed and/or Commercialized by GSK in such Region as of the effective date of such termination commencing on the First Commercial Sale by SYNTA and ending upon the last day of the applicable Royalty Terms for such Reverted Royalty-Bearing Products, at a rate equal to the Applicable Reversion Royalty Rate and (iii) the remaining terms of Sections 6.5.1(c), 6.6, 6.7, 6.8, 6.9 and 6.10 shall apply *mutatis mutandis* to each such Reverted Royalty-Bearing Product; (c) upon request of SYNTA (which request may specify any or all of the actions in clauses (i) through (iv) below), GSK shall promptly, and in any event within [***] days after SYNTA's request, which shall be made within the applicable notice period prior to the effective date of termination: (i) provide SYNTA with a right of access, a right of reference, and a right to use and incorporate all data, results and information in all Regulatory Filings and Regulatory Approvals then in its name applicable to the Commercialization of such Products in any such Region and all material aspects of Confidential Information Controlled by it as of the date such Region is removed from the Territory relating to such Regulatory Filings and Regulatory Approvals for SYNTA to use to seek Regulatory Approvals in such Region; (ii) provide SYNTA with copies of all correspondence between GSK and such Regulatory Authorities relating to such Regulatory Filings and Regulatory Approvals; (iii) assign to SYNTA all agreements between GSK and any

Third Party with respect to the conduct of Clinical Trials for such Products in the Region, including, without limitation, agreements or contracts with contract research organizations, clinical sites and investigators, unless expressly prohibited by any such agreement; and (iv) provide SYNTA with copies of all reports and data obtained by GSK or its Affiliates pursuant to this Agreement that relate to the Commercialization of such Products in any such Region; (v) if GSK has Manufactured, is Manufacturing or is having Manufactured such Products or any intermediate of such Products as of the date such Region is removed from the Territory, upon the request of SYNTA, GSK shall supply SYNTA with its requirements of such Products or intermediate for up to [***] months following such removal at a transfer price equal to GSK's Manufacturing Cost plus [***] percent ([***]%) for the supply of such Products or intermediate and thereafter at commercially reasonable terms to be negotiated in good faith between the Parties and (vi) GSK shall transition the GSK Co-Commercialization Activities to SYNTA, if applicable; provided, that SYNTA agrees that certain GSK Co-Commercialization Activities must be transitioned [***] as follows: (A) [***] of the Products must be transitioned with management of [***], [***] (for both [***] and [***]) and [***], and (B) market [***] must be transitioned with [***] and [***]; provided, that if GSK is [***] the Products or providing any other GSK Co-Commercialization Activities as of the date of termination notice, then GSK may, at SYNTA's request and for a period not to exceed [***] months from the effective date of termination, continue such [***] activities or such other GSK Co-Commercialization Activities at cost. For purposes of this Section 11.3.3, the term "Applicable Reversion Royalty Rate" means, on a country-by-country basis (1) [***] percent ([***]%) if, as of the effective date of termination, there has not been a Drug Approval Application filed for a particular Reverted Royalty-Bearing Product in such country in the terminated Region; (2) [***] percent ([***]%) if, as of the effective date of termination, there has been a Drug Approval Application filed for a particular Reverted Royalty-Bearing Product in such country in the terminated Region; and (3) [***] percent ([***]%) if, as of the effective date of termination, a Commercialization Regulatory Approval has been received for a particular Reverted Royalty-Bearing Product or the First Commercial Sale of such Reverted Royalty-Bearing Product has occurred, in either case, in such country in the terminated Region.

11.4 **Surviving Provisions.** Termination or expiration of this Agreement for any reason shall be without prejudice to:

(a) Survival of rights specifically stated in this Agreement to survive;

(b) The rights and obligations of the Parties provided in Sections 3.6.2(b), 6.7, 6.8, 6.9, 6.10, 7.1, 8.3, 10.1.1, 10.1.3 (with respect to Joint Patent Rights only), and Articles 1, 9, 11, 13 (except for 13.4) and 14 (including all other Sections or Articles referenced in any such Section or Article), all of which shall survive such termination except as provided in this Article 11; and

(c) any other rights or remedies provided at law or equity which either Party may otherwise have.

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12. REPRESENTATIONS, WARRANTIES AND COVENANTS

12.1 **Mutual Representations and Warranties.** SYNTA and GSK each represents and warrants to the other, as of the Execution Date, as follows:

12.1.1 **Organization.** It is a corporation duly organized, validly existing and in good standing under the laws of the jurisdiction of its organization, and has all requisite power and authority, corporate or otherwise, to execute, deliver and perform this Agreement.

12.1.2 **Authorization.** The execution and delivery of this Agreement and the performance by it of the transactions contemplated hereby have been duly authorized by all necessary corporate action and will not violate (a) such Party's certificate of incorporation or bylaws, (b) any agreement, instrument or contractual obligation to which such Party is bound in any material respect, (c) any requirement of any Applicable Laws, or (d) any order, writ, judgment, injunction, decree, determination or award of any court or governmental agency presently in effect applicable to such Party.

12.1.3 **Binding Agreement.** This Agreement is a legal, valid and binding obligation of such Party enforceable against it in accordance with its terms and conditions.

12.1.4 **No Inconsistent Obligation.** It is not under any obligation, contractual or otherwise, to any Person that conflicts with or is inconsistent in any respect with the terms of this Agreement or that would impede the diligent and complete fulfillment of its obligations hereunder.

12.2 **Additional Representations of SYNTA.** SYNTA further represents and warrants to GSK, as of the Execution Date, as follows:

12.2.1 **Validity of Patent Rights.** All SYNTA Patent Rights listed on Schedule 2 are existing and, to SYNTA's Knowledge, no issued patents which are part of SYNTA Patent Rights listed on Schedule 2 are invalid or unenforceable. All SYNTA Patent Rights that (a) contain one or more claims that cover any Collaboration Compound or Product (including its Manufacture or its formulation or a method of its delivery or of its use); (b) are necessary for GSK to exercise the licenses granted to it pursuant to Section 8.1.1, and (c) are existing on the Execution Date are listed on Schedule 2. The patent applications included in the SYNTA Patent Rights have been duly filed.

12.2.2 **No Litigation.** There are no claims, judgment or settlements against SYNTA pending, or to SYNTA's Knowledge, threatened, that invalidate or seek to invalidate the SYNTA Patent Rights. There is no litigation pending against SYNTA or any Affiliate of SYNTA that alleges that any of SYNTA's activities relating to the Collaboration Compounds or Products have violated, or by Developing the Collaboration Compounds or Products would violate, any of the intellectual property rights of any Third Party (nor has it received any written communication threatening such litigation). To SYNTA's Knowledge, no litigation has been threatened against SYNTA or any Affiliate of SYNTA which alleges that any of its activities relating to the Collaboration Compounds or Products have violated, or by Developing the

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Collaboration Compounds or Products would violate, any of the intellectual property rights of any Third Party.

12.2.3 **No Assignment**. SYNTA has not previously assigned, transferred, conveyed or otherwise encumbered its right, title and interest in the SYNTA Patent Rights and SYNTA Technology in manner inconsistent with the terms hereof.

12.2.4 **Ownership.** SYNTA is the sole and exclusive owner of, or solely Controls, the SYNTA Patent Rights, and no other person, corporate or other private entity, or governmental entity or subdivision thereof, has or shall have any claim of ownership with respect to the SYNTA Patent Rights. SYNTA has the right to grant the license granted to GSK on the terms set forth herein.

12.2.5 **Assignment of Rights.** SYNTA has obtained the assignment of all interests and all rights of any and all Third Parties (including but not limited to employees) involved in the creation of the SYNTA Technology on behalf of SYNTA, and SYNTA has taken reasonable measures to protect the confidentiality of the SYNTA Technology to the extent that a failure to do so would have a material adverse effect on GSK's ability to Develop and Commercialize Products as contemplated by this Agreement.

12.2.6 **No Misappropriation.** To SYNTA's Knowledge, there is no use, infringement or misappropriation of the SYNTA Technology in derogation of the rights granted to GSK in this Agreement.

12.2.7 **No Investigations.** To SYNTA's Knowledge, there are no investigations, inquiries, actions or other proceedings pending before any Regulatory Authority or other government agency with respect to the Collaboration Compounds or the Products. SYNTA has not received written notice threatening any such investigation, inquiry, action or other proceeding.

12.2.8 **Compliance with Applicable Laws.** The Development, testing, Manufacture, labeling, storage, and distribution of the Collaboration Compounds and Products have been conducted by SYNTA and its Affiliates and, to SYNTA's Knowledge, its Third Party contractors, in compliance in all material respects with all Applicable Laws, including with respect to investigational use, Good Clinical Practices, GLPs, GMPs, record keeping, security and filing of reports; and neither SYNTA nor its Affiliates, and to SYNTA's Knowledge, its Third Party contractors, have received any notice in writing which have led SYNTA to believe that any of the regulatory submissions relating to the Collaboration Compounds or Products are not currently in good standing with the FDA.

12.2.9 **No Breach.** SYNTA has disclosed in writing to GSK all licenses granted to SYNTA by Third Parties with respect to SYNTA Patent Rights and SYNTA Technology and SYNTA is not in breach or default under any such agreement and has not received from any licensor any notice of breach or default.

12.2.10 **All Material Data.** SYNTA has made available to GSK for its review a complete and accurate record of all material information and data relating to the results of all

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material pre-clinical studies and Clinical Trials of Collaboration Compounds or Products conducted by or on behalf of SYNTA, and all such information and data is complete and accurate in all material respects.

12.2.11 **[***].** The Patent Rights and Technology covered by the [***] are not required to Manufacture or use a Product comprising a Collaboration Compound as contemplated by this Agreement.

12.3 **Additional Representation of GSK.** GSK hereby further represents and warrants to SYNTA as of the Execution Date that it has not used any SYNTA Confidential Information or other information provided to GSK by SYNTA to file or prosecute any patent application covering STA-4783 or the Manufacture or use thereof at any time prior to the Execution Date.

12.4 **Covenants of GSK.**

12.4.1 **Internal Policies.** GSK shall provide to SYNTA a current copy of the GSK Internal Policies applicable to the Development and Commercialization activities ongoing under this Agreement at such time and shall promptly provide SYNTA with updates to such GSK Internal Policies to the extent any material changes are made that affect SYNTA's obligations under this Agreement. GSK shall be responsible for its employees' adherence to GSK Internal Policies applicable to the Development and Commercialization of Products under this Agreement.

12.4.2 **Patent Application.** GSK hereby covenants that it shall not, during the Term of this Agreement, file or prosecute any patent application covering STA-4783 or the Manufacture or use thereof except as provided in this Agreement.

12.5 **Covenants of SYNTA.**

12.5.1 **Third Party Agreements.** SYNTA shall (a) notify GSK as soon as reasonably practicable if it intends to terminate a Third Party Agreement, and the JPC shall promptly discuss and agree on such termination, and (b) at GSK's written request, grant a sublicense under any Third Party Agreement to GSK.

12.5.2 **Adherence to GSK Policies.** SYNTA shall be responsible for its employees' adherence to GSK Internal Policies applicable the Development and Commercialization of Products under this Agreement as provided to SYNTA under Section 12.4.1.

13. INDEMNIFICATION; INSURANCE

13.1 **Indemnification of SYNTA by GSK.** GSK shall indemnify, defend and hold harmless SYNTA, its Affiliates, their respective directors, officers, employees and agents, and their respective successors, heirs and assigns (collectively, the "SYNTA Indemnitees"), against all liabilities, damages, losses and expenses (including, without limitation, reasonable attorneys' fees and expenses of litigation) (collectively, "Losses") incurred by or imposed upon the SYNTA Indemnitees, or any of them, as a direct result of claims, suits, actions, demands or judgments of

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Third Parties, including, without limitation, personal injury and product liability claims (collectively, "Claims"), arising out of the Manufacture, use or sale by GSK or any of its Affiliates, Sublicensees, distributors or agents of any Product, except with respect to any Claim or Losses that result from a breach of this Agreement (including without limitation any representation or warranty made pursuant to Section 12) by, or the gross negligence or willful misconduct of, SYNTA.

13.2 **Indemnification of GSK by SYNTA.** SYNTA shall indemnify, defend and hold harmless GSK, its Affiliates, their respective directors, officers, employees and agents, and their respective successors, heirs and assigns (collectively, the "GSK Indemnitees"), against all Losses incurred by or imposed upon the GSK Indemnitees, or any of them, as a direct result of Claims arising out of the Manufacture, use or sale by SYNTA or any of its Affiliates, Sublicensees, distributors or agents of any Product, except with respect to any Claim or Losses that result from a breach of this Agreement (including without limitation any representation or warranty made pursuant to Article 12) by, or the gross negligence or willful misconduct of, GSK.

13.3 **Conditions to Indemnification.** A Person seeking recovery under this Article 13 (the "Indemnified Party") in respect of a Claim shall give prompt notice of such Claim to the Party from which indemnification is sought (the "Indemnifying Party"); provided, that, the Indemnifying Party is not contesting its obligation under this Article 13, shall permit the Indemnifying Party to control any litigation relating to such Claim and the disposition of such Claim; provided, that, the Indemnifying Party shall (a) act reasonably and in good faith with respect to all matters relating to the settlement or disposition of such Claim as the settlement or disposition relates to such Indemnified Party and (b) not settle or otherwise resolve such claim without the prior written consent of such Indemnified Party (which consent shall not be unreasonably withheld, conditioned or delayed). Each Indemnified Party shall cooperate with the Indemnifying Party in its defense of any such Claim in all reasonable respects and shall have the right to be present in person or through counsel at all legal proceedings with respect to such Claim.

13.4 **Insurance.** Not later than thirty (30) days before the date on which GSK or any Affiliate or Sublicensee of GSK, or SYNTA or any Affiliate or Sublicensee of SYNTA shall, on a commercial basis, make, use, or sell any Products, and at all times thereafter until the expiration of all applicable statutes of limitation pertaining to any such Manufacture, marketing, possession, use, sale of other disposition of any Products, GSK will, at its expense, and SYNTA will, at its expense, with respect to Co-Commercialized Products, obtain and maintain in full force and effect, comprehensive general liability insurance, including product liability insurance and clinical trial insurance with a minimum coverage of $[***] per occurrence and $[***] annual aggregate. Such insurance shall name the other Party as an additional insured and shall provide for at least [***] days' notice to the other Party of any cancellation or termination. Notwithstanding the foregoing, GSK may elect to self-insure with respect to any insurance coverage it is required to obtain hereunder as part of a comprehensive self-insurance program adopted by GSK.

13.5 **Warranty Disclaimer.** EXCEPT AS OTHERWISE EXPRESSLY PROVIDED IN THIS AGREEMENT, NEITHER PARTY MAKES ANY WARRANTY WITH RESPECT TO ANY TECHNOLOGY, GOODS, SERVICES, RIGHTS OR OTHER SUBJECT MATTER

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OF THIS AGREEMENT AND EACH PARTY HEREBY DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.

13.6 **No Warranty of Success.** Nothing contained in this Agreement shall be construed as a warranty, either express or implied, on the part of either Party that (a) the Development Program will yield a Product or otherwise be successful or meet its goals, time lines or budgets, or (b) the outcome of the Development Program will be commercially exploitable in any respect.

13.7 **Limited Liability.** NOTWITHSTANDING ANYTHING TO THE CONTRARY IN THIS AGREEMENT, NEITHER PARTY SHALL BE LIABLE TO THE OTHER PARTY OR ANY OF ITS AFFILIATES FOR (A) ANY SPECIAL, PUNITIVE, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOST REVENUES, OR (B) COST OF PROCUREMENT OF SUBSTITUTE GOODS, TECHNOLOGY OR SERVICES, WHETHER UNDER ANY CONTRACT, WARRANTY, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE THEORY; PROVIDED, THAT THIS LIMITATION WILL NOT LIMIT THE INDEMNIFICATION OBLIGATION OF A PARTY UNDER THE PROVISIONS OF ARTICLE 13 FOR SUCH DAMAGES CLAIMED BY A THIRD PARTY.

14. MISCELLANEOUS

14.1 **Arbitration.** In the event of any dispute, difference or question arising between the Parties in connection with this Agreement, the construction thereof, or the rights, duties or liabilities of either Party hereunder (each, an "Arbitration Matter"), the arbitration proceeding shall be conducted in accordance with the Commercial Arbitration Rules and Supplementary Procedures for Large Complex Disputes of the American Arbitration Association (the "AAA") and otherwise as follows:

(a) The arbitration shall be conducted by either a single arbitrator or a panel of three (3) persons who are experienced in the biotechnology or pharmaceutical business; provided, that the Parties shall agree in advance as to the number of arbitrators and hereby agree that a panel of three (3) arbitrators shall be used if the Arbitration Matter is sufficiently complex such that the best resolution is more likely to be achieved with a group of experts, but that in general, the Parties shall work to reduce the time and cost associated with each Arbitration Matter by using a single arbitrator where appropriate. The Parties shall cooperate to attempt to select the arbitrators by agreement within [***] days of the initiation of arbitration. If agreement cannot be reached with such [***] days, then that AAA will submit a list of [***] qualified arbitrators from which each Party shall strike unacceptable entries; provided that each Party shall not strike more than [***] percent ([***]%) of the names without cause, and rank the remaining names. The AAA shall appoint the arbitrators with the highest combined ranking(s). If these procedures fail to result in selection of the required number of arbitrators, the AAA shall appoint the arbitrator(s), allowing each side challenges for cause. The place of arbitration shall be [***] and all proceedings and communications shall be in English.

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(b) Either Party may apply to the arbitrators for interim injunctive relief until the arbitration decision is rendered or the Arbitration Matter is otherwise resolved. Either Party also may, without waiving any right or remedy under this Agreement, seek from any court having jurisdiction any injunctive or provisional relief necessary to protect the rights or property of that Party pending resolution of the Arbitration Matter pursuant to this Section 14.1. The arbitrators shall have no authority to award punitive or any other type of damages not measured by a Party's compensatory damages. Each Party shall bear its own costs and expenses and attorneys' fees, and the Party that does not prevail in the arbitration proceeding shall pay the arbitrators' fees and any administrative fees of arbitration.

(c) Except to the extent necessary to confirm an award or decision or as may be required by Applicable Laws, neither a Party nor an arbitrator may disclose the existence, content, or results of an arbitration without the prior written consent of both Parties. In no event shall arbitration be initiated after the date when commencement of a legal or equitable proceeding based on the Arbitration Matter would be barred by the applicable [***] statute of limitations.

(d) The Parties agree that, in the event of an Arbitration Matter involving the alleged breach of this Agreement (including, without limitation, whether a Party has satisfied its diligence obligations hereunder), neither Party may terminate this Agreement until resolution of the Arbitration Matter pursuant to this Section 14.1, and any time period for cure will only commence after such resolution.

(e) The Parties hereby agree that any disputed performance or suspended performance pending the resolution of an Arbitration Matter that the arbitrators determine to be required to be performed by a Party must be completed within a reasonable time period following the final decision of the arbitrators.

(f) The Parties hereby agree that any monetary payment to be made by a Party pursuant to a decision of the arbitrators shall be made in United States dollars, free of any tax or other deduction.

(g) The Parties further agree that the decision of the arbitrators shall be the sole, exclusive and binding remedy between them regarding determination of Arbitration Matters presented.

14.2 **Notices.** All notices and communications shall be in writing and delivered personally or by internationally-recognized overnight express courier providing evidence of delivery or mailed via certified mail, return receipt requested, addressed as follows, or to such other address as may be designated from time to time:

If to GSK:

GlaxoSmithKline
Greenford Road
Greenford
Middlesex
UB6 0HE
United Kingdom

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Attention: Vice President,
Worldwide Business Development - Transactions
Tel.: [***]
Fax: [***]

With a copy to:

GlaxoSmithKline
2301 Renaissance Boulevard
Mailcode RN0220
King of Prussia, PA 19406-2772
Attention: Vice President and Associate General Counsel,
Business Development Transactions
Tel.: [***]
Fax: [***]

If to SYNTA:

Synta Pharmaceuticals Corp .
45 Hartwell Ave.
Lexington, MA 02421
Attention: Martin D. Williams, Chief
Business Officer
Tel: [***]
Fax: [***]

With copies to:

Synta Pharmaceuticals Corp.
45 Hartwell Ave.
Lexington, MA 02421
Attention: General Counsel
Tel: [***]
Fax: [***]

Mintz, Levin, Cohn, Ferris, Glovsky
and Popeo, P.C.
One Financial Center
Boston, Massachusetts 02111
Attention: Jeffrey M. Wiesen, Esq.
Tel: [***]
Fax: [***]

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In addition, all notices to the JSC, JDC, JPC or JCC shall be sent to each Party's designated members of such committees at such Party's address stated above or to such other address as such Party may designate by written notice given in accordance with this Section 14.2.

Except as otherwise expressly provided in this Agreement or mutually agreed in writing, any notice, communication or document (excluding payment) required to be given or made shall be deemed given or made and effective upon actual receipt or, if earlier, (a) [***] Business Days after deposit with an internationally-recognized overnight express courier with charges prepaid, or (b) [***] Business Days after mailed by certified, registered or regular mail, postage prepaid, in each case addressed to a Party at its address stated above or to such other address as such Party may designate by written notice given in accordance with this Section 14.2.

14.3 **Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the State of New York (U.S.A.), without regard to the application of principles of conflicts of law. Notwithstanding the foregoing, with respect to any dispute relating to the determination of scope, validity or enforceability of any Patent Rights, the Parties consent to the exclusive jurisdiction of the courts of the country the Applicable Laws of which cause that Patent Right to come into being and where such courts have jurisdiction, the dispute shall be determined according to the laws of that country.

14.4 **Binding Effect.** This Agreement shall be binding upon and inure to the benefit of the Parties and their respective legal representatives, successors and permitted assigns.

14.5 **Headings.** Section and subsection headings are inserted for convenience of reference only and do not form a part of this Agreement.

14.6 **Counterparts.** This Agreement may be executed simultaneously in two or more counterparts, each of which shall be deemed an original and both of which, together, shall constitute a single agreement.

14.7 **Amendment; Waiver.** This Agreement may be amended, modified, superseded or canceled, and any of the terms of this Agreement may be waived, only by a written instrument executed by each Party or, in the case of waiver, by the Party or Parties waiving compliance. The delay or failure of either Party at any time or times to require performance of any provisions shall in no manner affect the rights at a later time to enforce the same. No waiver by either Party of any condition or of the breach of any term contained in this Agreement, whether by conduct, or otherwise, in any one or more instances, shall be deemed to be, or considered as, a further or continuing waiver of any such condition or of the breach of such term or any other term of this Agreement.

14.8 **No Third Party Beneficiaries.** Except as set forth in Sections 13.1 and 13.2, no Third Party (including, without limitation, employees of either Party) shall have or acquire any rights by reason of this Agreement.

14.9 **Purposes and Scope.** The Parties hereto understand and agree that this Collaboration is limited to the activities, rights and obligations as set forth in this Agreement and the Stock Purchase Agreement, and as agreed by the Parties pursuant to a written document

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executed by the Parties specifically referencing this Agreement. Nothing in this Agreement shall be construed (a) to create or imply a general partnership between the Parties, (b) to make either Party the agent of the other for any purpose, (c) to alter, amend, supersede or vitiate any other arrangements between the Parties with respect to any subject matters not covered hereunder, (d) to give either Party the right to bind the other, (e) to create any duties or obligations between the Parties except as expressly set forth herein, or (f) to grant any direct or implied licenses or any other right other than as expressly set forth herein.

14.10 **Assignment and Successors.** Neither this Agreement nor any obligation of a Party hereunder may be assigned by either Party without the consent of the other which shall not be unreasonably withheld, except that each Party may assign this Agreement and the rights, obligations and interests of such Party, (a) in whole or in part, to any of its Affiliates, or (b) in whole, but not in part, to any purchaser of all of its assets or all of its assets to which this Agreement relates or shares representing a majority of its common stock voting rights or to any successor corporation resulting from any merger, consolidation, share exchange or other similar transaction. Notwithstanding the foregoing, if SYNTA enters into an agreement that results or, if the transaction contemplated thereby is completed, would result, in a Change of Control, SYNTA shall provide GSK with prompt written notice describing such Change of Control in reasonable detail (the "Change of Control Notice"). The Change of Control Notice shall be provided by SYNTA prior to execution of such agreement, if permitted under Applicable Laws and not prohibited by the terms of any agreement between SYNTA and any Third Party; provided, that SYNTA will use reasonable efforts to exclude any such prohibition in such agreement with a Third Party, and otherwise as soon as practicable thereafter and, in any event, not later than promptly following the consummation of the transaction contemplated by such agreement. Within [***] days after such Change of Control Notice is provided by SYNTA, GSK shall have the right to provide written notice to SYNTA, in its sole discretion, terminating SYNTA's rights to participate in the Co-Commercialization activities as described below. If GSK should fail to give such notice to SYNTA within such [***] day period, GSK shall have no further rights under this Section 14.10 as a result of the Change of Control described in the Change of Control Notice and the terms of this Agreement shall continue in full force and effect following such Change of Control. If GSK gives such notice to SYNTA within such [***] day period and a Change of Control is consummated, the following shall apply: (i) SYNTA shall have no further right to conduct any Development of any Product in any Indication anywhere in the Territory and GSK shall be solely responsible for any such Development in its sole discretion, (ii) SYNTA shall have no further right to conduct SYNTA Co-Commercialization Activities for any Co-Commercialized Product in any Indication anywhere in the Territory, and any on-going SYNTA Co-Commercialization Activities shall be transitioned to GSK in an orderly manner that does not result in a negative impact to sales of the Product, or availability of Product to patients, (iii) unless otherwise designated by SYNTA in writing within [***] days of its receipt of such notice from GSK, all Co-Commercialized Products shall remain as Co-Commercialized Products solely for purposes of Section 6.3 and the Parties shall continue to share Operating Income as calculated in accordance with Schedule 4, with respect thereto pursuant to Section 6.3, (iv) GSK shall have all decision-making authority for all further Development and Commercialization and all other matters, including matters that would otherwise be SYNTA Decisions or Unanimous Decisions in all Indications including metastatic melanoma, (iv) the JDC and JCC shall be terminated as soon as practicable, (v) if the Product is

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in Development at the time of the Change of Control, the Parties would continue to share Development Costs as set forth in Section 3.6.1, and (vi) GSK shall keep SYNTA periodically informed of material updates with respect to Development and Commercialization of Products.

14.11 **Force Majeure.** Neither GSK nor SYNTA shall be liable for failure of or delay in performing obligations set forth in this Agreement, and neither shall be deemed in breach of its obligations, if such failure or delay is due to a Force Majeure. In event of such Force Majeure, the Party affected shall use reasonable efforts to cure or overcome the same and resume performance of its obligations hereunder.

14.12 **Interpretation.** The Parties hereto acknowledge and agree that: (a) each Party and its counsel reviewed and negotiated the terms and provisions of this Agreement and have contributed to its revision; (b) the rule of construction to the effect that any ambiguities are resolved against the drafting Party shall not be employed in the interpretation of this Agreement; and (c) the terms and provisions of this Agreement shall be construed fairly as to each Party and not in a favor of or against either Party, regardless of which Party was generally responsible for the preparation of this Agreement. In addition, (a) unless a context otherwise requires, wherever used, the singular shall include the plural, the plural the singular, the use of any gender shall be applicable to all genders, the word "or" is used in the inclusive sense (and/or) and the word "including" is used without limitation and means "including without limitation " and (b) whenever a defined term itself contains another defined term, the definition of this compounded defined term shall govern in the case of any ambiguity or conflict between the defined terms.

14.13 **Integration; Severability.** Except as agreed by the Parties pursuant to a written document executed by the Parties specifically referencing this Agreement, this Agreement, and the Stock Purchase Agreement set forth the entire agreement with respect to the subject matter hereof and thereof and supersede all other agreements and understandings between the Parties with respect to such subject matter. If any provision of this Agreement is or becomes invalid or is ruled invalid by any court of competent jurisdiction or is deemed unenforceable, it is the intention of the Parties that the remainder of this Agreement shall not be affected.

14.14 **Further Assurances.** Each of SYNTA and GSK agrees to duly execute and deliver, or cause to be duly executed and delivered, such further instruments and do and cause to be done such further acts and things, including, without limitation, the filing of such additional assignments, agreements, documents and instruments, as the other Party may at any time and from time to time reasonably request in connection with this Agreement or to carry out more effectively the provisions and purposes of, or to better assure and confirm unto such other Party its rights and remedies under, this Agreement.

14.15 **HSR Filing.**

14.15.1 **Responsibilities of the Parties.** If required by Applicable Law, each of SYNTA and GSK shall, within ten (10) days after the Execution Date, file with the United States Federal Trade Commission and the Antitrust Division of the United States Department of Justice, any notification and report form required of it in the reasonable opinion of both Parties under the HSR Act with respect to the transactions contemplated hereby (an "HSR Filing"). The Parties

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will cooperate with one another to the extent necessary in the preparation of any such HSR Filing. Each Party will be responsible for its own costs and expenses, and GSK shall be responsible for all filing fees associated with any HSR Filing. Notwithstanding the foregoing, n either Party shall be required to divest products or assets or materially change its business if doing so is a condition of the transactions contemplated by this Agreement.

14.15.2 **Effective Date.** If the Parties determine that an HSR Filing is required, then the Effective Date shall not occur until such time as the waiting period under the HSR Act shall have expired or earlier been terminated; provided, that, (a) no injunction (whether temporary, preliminary or permanent) prohibiting consummation of the transactions contemplated by this Agreement or any material portion hereof shall be in effect; and (b) no requirements or conditions shall have been imposed in connection therewith that are not otherwise reasonably satisfactory to the Parties (collectively, the "HSR Conditions"). This Section 14.15 shall bind the Parties upon the Execution Date but the remaining provisions of this Agreement shall not become effective until the Effective Date. If the Effective Date does not occur on or prior to [***] months from the Execution Date, either Party may terminate this Agreement on not less than [***] days' written notice.

[Remainder of page intentionally left blank.]

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IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized representatives.

SYNTA PHARMACEUTICALS CORP.

By: /s/ SAFI R. BAHCALL
Name: Safi R. Bahcall
Title: President and Chief Executive Officer

SMITHKLINE BEECHAM CORPORATION
(d/b/a GlaxoSmithKline)

By: /s/ [***]
Name: [***]
Title: Vice President & Secretary

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EXHIBIT A

FORM OF STOCK PURCHASE AGREEMENT

STOCK PURCHASE AGREEMENT

by and between

SYNTA PHARMACEUTICALS CORP.

and

SMITHKLINE BEECHAM CORPORATION

(d/b/a GLAXOSMITHKLINE)

Dated as of [ ]

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STOCK PURCHASE AGREEMENT

THIS STOCK PURCHASE AGREEMENT dated as of [ ] (the "Agreement") is made by and between Synta Pharmaceuticals Corp., a Delaware corporation (the "Company"), and SmithKline Beecham Corporation (doing business as GlaxoSmithKline), a Pennsylvania corporation (the "Purchaser").

WHEREAS, the Company desires to issue and sell to the Purchaser, and the Purchaser desires to purchase, shares of the Company's common stock, par value $.0001 per share ("Common Stock"), as provided in Section [4.2.1/4.2.2] of that certain Collaborative Development and Commercialization Agreement between the Company and the Purchaser dated October 5, 2007;

NOW, THEREFORE, in consideration of the premises and mutual agreements set forth herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby mutually acknowledged, and intending to be legally bound hereby, the parties hereto agree as follows:

SECTION 1
Definitions

1.1 For purposes of this Agreement, the following terms shall have the meanings set forth below:

(a) **"Act"** shall mean the Securities Act of 1933, as amended, or any similar federal statute and the rules, regulations and policies of the Commission thereunder, all as the same shall be in effect at the time.

(b) **"Affiliate"** shall mean an individual, trust, business trust, joint venture, partnership, corporation, limited liability company, association or any other entity which (directly or indirectly) is controlled by, controls or is under common control with the Company or the Purchaser, as the case may be. For the purposes of this definition, the term "control" (including, with correlative meanings, the term "controlled by" and "under common control with") as used with respect to the Company or the Purchaser, as the case may be, means the possession of the power to direct or cause the direction of the management and policies of an entity, through the ownership of the outstanding voting securities or by contract or otherwise.

(c) **"By-laws"** shall mean the Restated By-Laws of the Company, as amended from time to time.

(d) **"Certificate of Incorporation"** shall mean the Company's Restated Certificate of Incorporation on file with the Secretary of State of the State of Delaware, as amended from time to time.

(e) **"Closing"** and **"Closing Date"** shall have the meanings specified in Section 2.2 hereof.

Portions of this Exhibit were omitted and have been filed separately with the Secretary of the Commission pursuant to the Company's application requesting confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934.

(f) **"Commission"** shall mean the Securities and Exchange Commission or any other federal agency at the time administering the Act.

(g) **"Common Stock"** shall have the meaning specified in the recitals.

(h) **"Exchange Act"** shall have the meaning specified in Section 3.8(a) hereof.

(i) **"Purchase Price"** shall have the meaning specified in Section 2.1 hereof.

(j) **"SEC Documents"** shall mean each report, registration statement and definitive proxy statement filed by the Company with the Commission since [INSERT DATE THAT IS ONE YEAR BEFORE DATE OF THIS AGREEMENT], and all amendments or supplements thereto.

(k) **"Shares"** shall have the meaning specified in Section 2.1 hereof.

1.2 Certain other words and phrases are defined or described elsewhere in this Agreement (and the Exhibits and Schedules hereto, if any).

1.3 Wherever used in this Agreement:

(l) the words **"include"** or **"including"** shall be construed as also incorporating "but not limited to" and "without limitation";

(m) the word **"day"** means a calendar day unless specified otherwise; and

(n) the word **"law"** (or **"laws"**) means any statute, ordinance, regulation or code.

1.4 Unless specified to the contrary, references to Articles, Sections Schedules and/or Exhibits mean the particular Article, Section, Schedule or Exhibit in or to this Agreement.

1.5 References to this Agreement shall include this Agreement as varied or modified from time to time by the parties.

1.6 Unless the context requires otherwise, words in the singular number include the plural and vice versa.

1.7 All Schedules and Exhibits hereto are hereby incorporated herein and made a part hereof.

SECTION 2
Authorization, Purchase and Sale of the Shares

2.1 Purchase and Sale of the Shares. At the Closing (as defined in Section 2.2 hereof), and subject to the terms and conditions hereof and in reliance upon the representations,

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warranties and agreements contained herein, the Company shall issue and sell to the Purchaser and the Purchaser shall purchase from the Company [ ] shares of Common Stock (the **"Shares"**) at a purchase price of $[ ] per share for a total purchase price of $[ ] (the **"Purchase Price"**).

2.2 Closing. The purchase and sale of the Shares being purchased by the Purchaser shall take place at the offices of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., One Financial Center, Boston, MA 02111, at 10:00 a.m., local time, on [ ], or at such other location, date and time as may be agreed upon among the Purchaser and the Company (such closing being called the **"Closing"** and such date and time being called the **"Closing Date"**). At the Closing, the Company shall issue and deliver to the Purchaser a certificate in definitive form, registered in the name of the Purchaser, representing the Shares being purchased by the Purchaser at the Closing. As payment in full for the Shares being purchased by it under this Agreement, and against delivery of the certificate therefor as aforesaid, on the Closing Date, the Purchaser shall transfer such amount to the account of the Company by wire transfer of immediately available funds to the bank account designated by the Company in writing to the Purchaser at least two business days before the Closing Date.

SECTION 3
Representations and Warranties and Certain Covenants of the Company

Except as set forth in the SEC Documents or in any disclosure schedules delivered herewith (which shall be numbered to correspond with the sections of this Section 3), the Company hereby represents and warrants to and covenants to the Purchaser as follows:

3.1 Organization, Qualifications and Corporate Power. The Company is a corporation duly incorporated, validly existing and in good standing under the laws of the State of Delaware and the Company is duly licensed or qualified to transact business as a foreign corporation and is in good standing in each jurisdiction in which the nature of the business transacted by it or the character of the properties owned or leased by it requires such licensing or qualification, except where failure to qualify would not have a material adverse effect on the business or financial condition of the Company. The Company has the corporate power and authority to own and hold its properties and to carry on its business as now conducted, to execute, deliver and perform this Agreement and any other agreements, documents or instruments contemplated hereby to which it is a party, to issue, sell and deliver the Shares.

3.2 Authorization of Agreements, Etc.

(a) The execution and delivery by the Company of this Agreement, the performance by the Company of its obligations hereunder, and the issuance, sale and delivery of the Shares have been duly authorized by all requisite corporate action and will not violate any provision of law, any order of any court or other agency of government specifically naming the Company, the Certificate of Incorporation, or the By-laws or any material provision of any indenture, agreement or other instrument to which the Company is a party or by which it or its assets are bound, or conflict with, result in a breach of or constitute (with due notice or lapse of

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time or both) a default under any such indenture, agreement or other instrument, which violation, conflict or default could have a material adverse effect on the Company, or result in the creation or imposition of any material lien, charge, restriction, claim or encumbrance upon any of the properties or assets of the Company.

(b) The Shares have been duly authorized and the Shares, when issued in accordance with this Agreement, will be validly issued, fully paid and nonassessable and free of all liens, charges, restrictions, claims and encumbrances imposed by or through the Company. None of the issuance, sale or delivery of the Shares is subject to any preemptive right of stockholders of the Company or to any right of first refusal or other right in favor of any person which has not been waived.

3.3 Validity. This Agreement has been duly executed and delivered by the Company. This Agreement constitutes the legal, valid and binding obligations of the Company, enforceable in accordance with its terms subject to bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting the rights of creditors and to general principles of equity.

3.4 Consents. All consents, approvals, orders, or authorizations of, or registrations, qualifications, designations, declarations, or filings with any federal or state governmental authority, any party to a contract to which the Company or its assets are bound or any other third party on the part of the Company required in connection with the consummation of the transactions contemplated by this Agreement shall have been obtained prior to, and be effective as of, the Closing (other than such filings under the "blue sky" law of any state governmental authority and any federal securities law filings that may be made after the Closing, which such filings shall be timely made).

3.5 Subsidiaries. The Company has no subsidiaries other than as disclosed in the SEC Documents.

3.6 Capitalization. The authorized and outstanding shares of capital stock and options, warrants and other rights to purchase capital stock of the Company is as set forth in the latest periodic report that comprises a part of the SEC Documents. All issued and outstanding shares of the Company's capital stock have been duly authorized and validly issued, are fully paid and nonassessable, and were issued in compliance with all applicable state and federal laws concerning the issuance of securities.

3.7 Litigation. There is no (i) action, suit, claim, proceeding or investigation pending or, to the best of the Company's knowledge, threatened against the Company, at law or in equity, or before or by any federal, state, municipal or other governmental department, commission, board, bureau, agency or instrumentality, domestic or foreign, (ii) arbitration proceeding relating to the Company pending under collective bargaining agreements or otherwise or (iii) governmental inquiry pending or, to the best of the Company's knowledge, threatened against the Company (including without limitation any inquiry as to the qualification of the Company to hold or receive any license or permit), and to the best of the Company's knowledge there is no basis for any of the foregoing.

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3.8 SEC Documents and Financial Statements.

(a) As of their respective dates, the SEC Documents (i) were prepared in accordance with the requirements of the Act or the Securities Exchange Act of 1934, as amended (the **"Exchange Act"**), as the case may be, and the rules and regulations of the Commission thereunder applicable to such SEC Documents, and (ii) did not at the time they were filed (or if amended or superseded by a filing prior to the date of this Agreement, then on the date of such filing) contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. [The certifications and statements required by (A) Rule 13a-14 under the Exchange Act and (B) 18 U.S.C. §1350 (Section 906 of the Sarbanes-Oxley Act) relating to the SEC Documents are accurate and complete and comply as to form and content with all applicable legal requirements.]

(b) The financial statements (including any related notes) of the Company and its consolidated subsidiaries contained in the SEC Documents: (i) complied as to form in all material respects with the published rules and regulations of the Commission applicable thereto; (ii) were prepared in accordance with United States generally accepted accounting principles applied on a consistent basis throughout the periods covered (except as may be indicated in the notes to such financial statements or, in the case of unaudited statements, as permitted by Form 10-Q of the Commission and except that unaudited financial statements may not contain footnotes and are subject to normal and recurring year-end audit adjustments which will not, individually or in the aggregate, be material in amount), and (iii) fairly presented the consolidated financial position of the Company and its consolidated subsidiaries as of the respective dates thereof and the consolidated results of operations and cash flows of the Company and its consolidated subsidiaries for the periods covered thereby.

3.9 Taxes. The Company has accurately prepared in all material respects and timely filed all federal, state, county and local tax returns required to be filed by it, and the Company has paid all taxes required to be paid by it pursuant to such returns as well as all other taxes, assessments and governmental charges which have become due or payable, including, without limitation all taxes which the Company is obligated to withhold from amounts owing to employees, creditors and third parties. All such taxes with respect to which the Company has become obligated pursuant to elections made by the Company in accordance with generally accepted practice have been paid and adequate reserves have been established for all taxes accrued but not payable.

3.10 Intellectual Property. The Company owns or possesses adequate licenses or other rights to use all patents, patent applications, trademarks, trademark applications, service marks, service mark applications, trade names, copyrights, manufacturing processes, formulae, trade secrets, customer lists and know how (collectively, **"Intellectual Property"**) necessary to the conduct of its business as conducted consistent with the description of the Company's business as set forth in the SEC Documents. Without diminishing the representation set forth in the preceding sentence, the Company further represents that it has taken commercially reasonable steps to ensure that all right, title and interest in any Intellectual Property which has been

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developed by key employees or founders of the Company in their capacity as either employees or consultants to the Company which is necessary for the conduct of the Company's business as conducted has been unconditionally assigned to the Company.

3.11 Brokers. The Company has no contract, arrangement or understanding with any broker, finder or similar agent with respect to the transactions contemplated by this Agreement.

3.12 Insurance. The Company will use its commercially reasonable efforts to maintain insurance with financially sound and reputable insurance companies or associations, in such amounts and covering such risks as are adequate and customary for the type and scope of its properties and business as currently conducted and as planned to be conducted in the foreseeable future.

3.13 Offering Valid. Assuming the accuracy of the representations and warranties of Purchaser contained in Section 4 hereof, the offer, sale and issuance of the Shares will be exempt from the registration requirements of the Act, and will have been registered or qualified (or are exempt from registration and qualification) under the registration, permit or qualification requirements of all applicable state securities laws.

SECTION 4
Representations and Warranties of Purchaser

The Purchaser represents and warrants to the Company as follows:

4.1 Experience. The Purchaser: (a) is an "accredited investor" within the definition of Regulation D promulgated under the Act; (b) is experienced in evaluating and in investing in developing biotechnology companies such as the Company and can afford a loss of its entire investment; and/or (c) has a pre-existing personal or business relationship with the Company and/or certain of its officers, directors or controlling persons of a nature and duration that enable it to be aware of the character, business acumen and financial circumstance of such persons.

4.2 Investment. The Purchaser is acquiring the Shares for investment for its own account and not with the view to, or for resale in connection with, any distribution thereof. It understands that the Shares have not been registered under the Act by reason of specified exemptions form the registration provisions of the Act.

4.3 Rule 144. The Purchaser acknowledges that the Shares must be held indefinitely unless they are subsequently registered under the Act or an exemption from such registration is available. It has been advised or is aware of the provisions of Rule 144 promulgated under the Act, which permit limited release of shares purchased in a private placement subject to the satisfaction of certain conditions, and is aware that such Rule may not become available for resale of the Shares.

4.4 Access to Data. The Purchaser has had an opportunity to discuss the Company's business, management and financial affairs with the Company's management and has had the opportunity to review the Company's facilities.

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4.5 Brokers. The Purchaser has no contract, arrangement or understanding with any broker, finder or similar agent with respect to the transactions contemplated by this Agreement.

4.6 Foreign Purchaser. The Purchaser hereby represents that it is satisfied as to the full observance of the laws of its jurisdiction in connection with any purchase of the Shares or any use of this Agreement, including (i) the legal requirements of its jurisdiction for the purchase of the Shares, (ii) any foreign exchange restrictions applicable to such purchase, (iii) any governmental or other consents that may need to be obtained, and (iv) the income tax and other tax consequences, if any, which may be relevant to the purchase, holding, redemption, sale, or transfer of the Shares. The Purchaser's purchase of, and its continued beneficial ownership of, the Shares will not violate any applicable securities or other laws of its jurisdiction.

4.7 Authorization. The Purchaser has full power and authority to enter into and to perform this Agreement in accordance with its terms. All action (corporate or otherwise) on the part of the Purchaser necessary for the authorization, execution, delivery and performance by the Purchaser of this Agreement and the consummation of the transactions contemplated herein has been taken. This Agreement is valid and binding obligation of the Purchaser, enforceable in accordance with its terms, subject to bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting the rights of creditors and to general principles of equity.

SECTION 5
Other Agreements of the Parties

5.1 Transfer Restrictions.

(a) The Purchaser covenants that the Shares will only be disposed of pursuant to an effective registration statement under, and in compliance with the requirements of, the Act or pursuant to an available exemption from the registration requirements of the Act, and in compliance with any applicable state securities laws. In connection with any transfer of the Shares other than pursuant to an effective registration statement or to the Company, the Company may require the Purchaser to provide to the Company an opinion of counsel selected by the Purchaser, the form and substance of which opinion shall be reasonably satisfactory to the Company, to the effect that such transfer does not require registration under the Act. Notwithstanding the foregoing, the Company hereby consents to and agrees to register on the books of the Company and with its transfer agent, without any such legal opinion, except to the extent that the transfer agent requests such legal opinion, any transfer of the Shares by the Purchaser to an Affiliate of the Purchaser, provided, that the transferee certifies to the Company that it is an "accredited investor" within the definition of Regulation D promulgated under the Act and, provided, further, that such Affiliate does not request any removal of any existing legends on any certificate evidencing the Shares.

(b) The Purchaser agrees to the imprinting of the following legend on any certificate evidencing any of the Shares:

"THESE SECURITIES HAVE NOT BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES

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COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR ANY APPLICABLE STATE SECURITIES LAWS AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN COMPLIANCE WITH APPLICABLE STATE SECURITIES LAWS OR BLUE SKY LAWS."

Certificates evidencing the Shares shall not be required to contain such legend or any other legend (i) while a registration statement covering the resale of the Shares is effective under the Act, (ii) following any sale of such Shares pursuant to Rule 144, (iii) the Shares are eligible for sale under Rule 144(k), or (iv) if legend is not required under applicable requirements of the Act (including controlling judicial interpretations and pronouncements issued by the Staff of the Commission).

5.2 Furnishing of Information. Until the date that the Purchaser may sell all of the Shares under Rule 144(k) of the Act (or any successor provision), the Company covenants to use its commercially reasonable efforts to timely file (or obtain extensions in respect thereof and file within the applicable grace period) all reports required to be filed by the Company after the date hereof pursuant to the Exchange Act. Until the date that the Purchaser may sell all of the Shares under Rule 144(k) of the Act (or any successor provision), the Company further covenants that it will take such further action as the Purchaser may reasonably request to make available the information specified in paragraph (c) of Rule 144.

5.3 Integration. The Company shall not, and shall use its commercially reasonably efforts to ensure that no Affiliate of the Company shall, sell, offer for sale or solicit offers to buy or otherwise negotiate in respect of any security (as defined in Section 2 of the Act) that would be integrated with the offer or sale of the Shares in a manner that would require the registration under the Act of the sale of the Shares to the Purchaser or that would be integrated with the offer or sale of the Shares for purposes of the rules and regulations of The NASDAQ Global Market (of, if the Common Stock is not listed on The NASDAQ Global Market, the principal exchange or interdealer quotation system on which the Common Stock is listed).

SECTION 6
Purchaser's Conditions to Closing

The Purchaser's obligation to purchase Shares at the Closing is subject to the fulfillment to its satisfaction on or prior to the Closing Date of each of the following conditions:

6.1 Representations and Warranties. The representations and warranties contained in Section 3 shall be true, complete and correct on and as of the Closing Date with the same effect as though such representations and warranties had been made on and as of such date.

Portions of this Exhibit were omitted and have been filed separately with the Secretary of the Commission pursuant to the Company's application requesting confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934.

6.2 Performance. The Company shall have performed and complied with all covenants, agreements and conditions contained herein required to be performed or complied with by it prior to or at the Closing Date.

6.3 Legal Investment. At the time of the Closing, the purchase of the Shares shall be legally permitted by all laws and regulations to which the Purchaser and the Company are subject.

6.4 Proceedings and Documents. All corporate and other proceedings in connection with the transactions contemplated hereby and all documents and instruments incident to such transactions shall be reasonably satisfactory in form and substance to the Purchaser and its counsel. Prior to the Closing, the Company shall have obtained all consents or waivers, if any, necessary to execute and deliver this Agreement, issue the Shares and to carry out the transactions contemplated hereby and thereby, and all such consents and waivers shall be in full force and effect.

6.5 Qualifications. All other authorizations, approvals or permits if any, of any governmental authority or regulatory body of the United States or any state that are required prior to and in connection with the lawful issuance and sale of the Shares pursuant to this Agreement shall be effective on and as of the Closing Date.

SECTION 7
Company's Conditions to Closing

The Company's obligation to sell the Shares at the Closing is subject to the fulfillment on or prior to the Closing Date of each of the following conditions:

7.1 Representations and Warranties. The representations and warranties made by the Purchaser pursuant to Section 4 hereof shall be true and correct when made and shall be true and correct on the Closing Date.

7.2 Performance. The Purchaser shall have performed and complied with all covenants, agreements and conditions contained herein required to be performed or complied with by it prior to or at the Closing Date.

7.3 Legal Investment. At the time of the Closing, the purchase of the Shares shall be legally permitted by all laws and regulations to which the Purchaser and the Company are subject.

7.4 Payment of Purchase Price. The Purchaser shall have delivered to the Company a wire transfer of immediately available funds to the account of the Company in the full amount of the Purchase Price.

Portions of this Exhibit were omitted and have been filed separately with the Secretary of the Commission pursuant to the Company's application requesting confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934.

SECTION 8
Miscellaneous

8.1 Governing Law. This Agreement shall be governed in all respects by the laws of the State of Delaware without giving effect to principles of conflicts of law thereunder.

8.2 Survival. The representations, warranties, covenants and agreements made herein shall survive the closing of the transactions contemplated hereby. All statements as to factual matters contained in any certificate or other instrument delivered by or on behalf of the Company pursuant hereto in connection with the transactions contemplated hereby shall be deemed to be representations and warranties by the Company hereunder solely as of the date of such certificate or instrument.

8.3 Successors and Assigns. Except as otherwise expressly provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, assigns, heirs, executors and administrators of the parties hereto. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement. Subject to the terms of this Agreement, no party hereby may assign its rights or obligations hereunder (whether by operation of law or otherwise, including by merger, asset sale, sale of stock or otherwise) without the prior written consent of the other parties hereto.

8.4 Entire Agreement; Amendment and Waiver. This Agreement (including the Schedules and Exhibits hereto, if any) and the other documents delivered pursuant hereto constitute the full and entire understanding and agreement between the parties with regard to the subjects hereof and thereof. Neither this Agreement nor any term hereof may be amended, modified, waived or terminated, except by a written instrument signed by the Company and the Purchaser.

8.5 Notices. Unless otherwise provided, all notices, requests, consents and other communications hereunder shall be in writing, shall be addressed to the receiving party's address set forth below or to such other address as a party may designate by notice hereunder, and shall be either (i) delivered by hand, (ii) made by telecopy, facsimile transmission or other electronic transmission, (iii) sent by overnight courier, or (iv) sent by registered or certified mail, return receipt requested, postage prepaid.

If to the Company:

Synta Pharmaceuticals Corp.
45 Hartwell Ave.
Lexington, MA 02421
Attention: Martin D. Williams, Chief Business Officer
Tel: [***]
Fax: [***]

Portions of this Exhibit were omitted and have been filed separately with the Secretary of the Commission pursuant to the Company's application requesting confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934.

With copies to:

Synta Pharmaceuticals Corp.
45 Hartwell Ave.
Lexington, MA 02421
Attention: General Counsel
Tel: [***]
Fax: [***]

Mintz, Levin, Cohn, Ferris, Glovsky
and Popeo, P.C.
One Financial Center
Boston, Massachusetts 02111
Attention: Jeffrey M. Wiesen, Esq.
Tel: [***]
Fax: [***]

If to the Purchaser: :

GlaxoSmithKline
Greenford Road
Greenford
Middlesex
UB6 0HE
United Kingdom
Attention: Vice President,
Worldwide Business Development - Transactions
Tel.: [***]
Fax: [***]

With a copy to: :

GlaxoSmithKline
2301 Renaissance Boulevard
Mailcode RN0220
King of Prussia, PA 19406-2772
Attention: Vice President and Associate General Counsel, Business Development Transactions
Tel.: [***]
Fax: [***]

or, in any such case, at such other address or addresses as shall have been furnished in writing by such party to the others.

Portions of this Exhibit were omitted and have been filed separately with the Secretary of the Commission pursuant to the Company's application requesting confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934.

All notices, requests, consents and other communications hereunder shall be deemed to have been given either (i) if by hand, at the time of the delivery thereof to the receiving party at the address of such party set forth above, (ii) if made by telecopy, facsimile transmission or other electronic transmission, at the time that receipt thereof has been acknowledged by electronic confirmation or otherwise, (iii) if sent by overnight courier, on the next business day following the day such notice is delivered to the courier service, or (iv) if sent by registered or certified mail, on the fifth business day following the day such mailing is made.

8.6 Delays or Omissions. No delay or omission to exercise any right, power or remedy accruing to any holder of any shares upon any breach or default of the Company under this Agreement shall impair any such right, power or remedy of such holder nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or in any similar breach or default occurring thereafter; nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of any holder or any breach or default under this Agreement, or any waiver on the part of any holder of any provisions or conditions of this Agreement must be made in writing and shall be effective only to the extent specifically set forth in such writing. All remedies, either under this Agreement or by law or otherwise afforded to any holder, shall be cumulative and not alternative.

8.7 Severability. If one or more provisions of this Agreement are held to be unenforceable under applicable law, such provision shall be excluded from this Agreement and the balance of the Agreement shall be interpreted as if such provision were so excluded and shall be enforceable in accordance with its terms.

8.8 Interpretation. The parties hereby acknowledge and agree that: (i) each party and its counsel reviewed and negotiated the terms and provisions of this Agreement and have contributed to its revision; (ii) the rule of construction to the effect that any ambiguities are resolved against the drafting party shall not be employed in the interpretation of this Agreement; and (iii) the terms and provisions of this Agreement shall be construed fairly as to all parties hereto and not in a favor of or against any party, regardless of which party was generally responsible for the preparation of this Agreement.

8.9 Further Assurances. From and after the date of this Agreement, the Company and the Purchaser shall execute and deliver such instruments, documents or other writings as may be reasonably necessary or desirable to confirm and carry out and to effectuate fully the intent and purposes of this Agreement.

8.10 Headings. The headings and subheadings used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

8.11 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. One or more counterparts of this Agreement may be delivered electronically with the intention that they shall each have the same effect as an original counterpart hereof.

Portions of this Exhibit were omitted and have been filed separately with the Secretary of the Commission pursuant to the Company's application requesting confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934.

[Remainder of Page Intentionally Left Blank]

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IN WITNESS WHEREOF, the parties have duly executed this Stock Purchase Agreement as of the date first above written.

COMPANY:

SYNTA PHARMACEUTICALS CORP.

By: _____
Name: _____
Title: _____

PURCHASER:

SMITHKLINE BEECHAM CORPORATION
(d/b/a GLAXOSMITHKLINE)

By: _____
Name: _____
Title: _____

Portions of this Exhibit were omitted and have been filed separately with the Secretary of the Commission pursuant to the Company's application requesting confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934.

SCHEDULE 1

DESCRIPTION OF STA-4783

CHEMICAL NAME [***],

STRUCTURAL FORMULA

[***]

MOLECULAR FORMULA	[***]
MOLECULAR WEIGHT	[***]
SYNTA CODE DESIGNATION	STA-4783
CAS REGISTRY NUMBER	[***]

Portions of this Exhibit were omitted and have been filed separately with the Secretary of the Commission pursuant to the Company's application requesting confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934.

SCHEDULE 2

SYNTA PATENT RIGHTS

Country	Application No.	Patent No.	Grant Date	Status	Filing Date	Title	European Activations
[***]	[***]	[***]	[***]	[***]	[***]	[***]	
[***]	[***]			[***]	[***]	[***]	
[***]	[***]	[***]	[***]	[***]	[***]	[***]	
[***]	[***]			[***]	[***]	[***]	
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]			[***]	[***]	[***]	
[***]	[***]			[***]	[***]	[***]	
[***]	[***]			[***]	[***]	[***]	
[***]	[***]			[***]	[***]	[***]	
[***]	[***]	[***]	[***]	[***]	[***]	[***]	
[***]	[***]	[***]	[***]	[***]	[***]	[***]	
[***]	[***]			[***]	[***]	[***]	
[***]	[***]			[***]	[***]	[***]	
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SCHEDULE 3

RESERVED

Portions of this Exhibit were omitted and have been filed separately with the Secretary of the Commission pursuant to the Company's application requesting confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934.

SCHEDULE 4

CALCULATION AND MECHANICS FOR PAYMENT OF OPERATING INCOME (LOSS) FOR THE CO-COMMERCIALIZATION TERRITORY

"**Advertising**" means the advertising and promotion of the Co-Commercialized Products in the Co-Commercialization Territory through any means, including, without limitation, (i) television and radio advertisements; (ii) advertisements appearing in journals, newspapers, magazines, the internet or other media; (iii) seminars and conventions; (iv) packaging design; (v) professional education programs; (vi) visual aids and other selling materials; (vii) hospital formulary committee presentations; and (vii) presentations to state and other governmental formulary committees; provided, however, that Advertising shall exclude Promotional Efforts and General Public Relations. With regard to advertising and promotion that include products other than Co-Commercialized Products, the JCC shall determine the percentage of such advertising and promotion that will be deemed Advertising for the purposes of this Agreement.

"**Commercialization Expense**" means the sum of (a) [***]; (b) any reasonable internal and out-of-pocket costs, expenses and fees incurred in prosecuting, maintaining, enforcing and defending the [***] covering a Co-Commercialized Product in the Co-Commercialization Territory after receipt of Commercialization Regulatory Approval; (c) [***]; (d) [***], and (e) any other out-of-pocket cost or expense expressly stated to be a Commercialization Expense in this Agreement or under the Product Co-Commercialization Plan. Where an item of Commercialization Expense has applicability to both the Co-Commercialization Territory and the Royalty-Bearing Territory, it will be allocated by the JCC in good faith.

"**Cost of Goods**" means Manufacturing Costs attributable to the Manufacture of a Co-Commercialized Product (including the cost of API) for sale in the Co-Commercialization Territory and/or the cost of purchase of a Co-Commercialized Product for sale in the Co-Commercialization Territory.

"**Promotional Efforts**" has the meaning provided in Section 1.

"**Distribution Fees**" means a distribution fee equal to [***] percent ([***]%) of Net Sales in consideration of GSK's performance of the physical distribution of the Product in the Co-Commercialization Territory.

"**General Public Relations**" means any public relations activity (including a press release or image piece) which (i) promotes generally the business of a company or deals in a general manner with the activities of such company in a general pharmaceutical market; and (ii) mentions in an incidental manner the fact that such company or its Affiliates markets or sells one or more of the Co-Commercialized Products or provides other incidental information concerning one or more of the Co-Commercialized Products. Announcements related to this Agreement or that concern primarily the relationship of either Party to each other are not General Public Relations and must be agreed upon by both Parties in writing prior to release.

Portions of this Exhibit were omitted and have been filed separately with the Secretary of the Commission pursuant to the Company's application requesting confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934.

"**License Fees**" means all upfront payments, milestone payments, license fees, royalties or other payments, payable to any Third Party by either Party under any Third Party license agreement related to the Manufacture or sale of a Co-Commercialized Product to the extent such payments are attributable to sale of a Co-Commercialized Product in the Co-Commercialization Territory. With respect to milestone or other payments (but not royalties, which are calculated on a country-by-country basis) made pursuant to any Third Party license agreement which confers rights attributable to products other than Co-Commercialized Products or sales of Products in the ROW Territory, then only an equitable portion of any amounts payable under it shall be allocated to Co-Commercialized Products as License Fees, as determined by the Parties in good faith. Notwithstanding the foregoing, upfront payments, milestone payments, license fees, royalties or other payments made pursuant to the Third Party Agreements will not be included in this definition of License Fees.

"**Net Sales**" has the meaning provided in Section 1.

"**Operating Income (Loss)**" means, with respect to a Co-Commercialized Product, Net Sales in the Co-Commercialization Territory minus the sum of (a) Cost of Goods of such Co-Commercialized Product and (b) Commercialization Expense applicable to the Co-Commercialized Product, in each case, incurred in a given Calendar Quarter for that Co-Commercialized Product.

"**Product Trademark**" has the meaning provided in Section 1.

"**Representative**" means an FTE employed by either Party who engages in Promotional Efforts, and is trained by SYNTA or GSK.

"**Sales and Marketing Expense**" means all reasonable out-of-pocket costs including, without limitation, costs of outsourcing any of the following functions (as agreed upon by the JCC, but it is understood that SYNTA shall not outsource Representatives and medical science liaisons) and all internal costs on an allocated FTE basis at an agreed upon FTE rate for those individuals dedicated or allocated to the Co-Commercialized Product incurred by the Parties that are directly attributable to the following functions for the sale, promotion and marketing of a Co-Commercialized Product in the Co-Commercialization Territory: (a) [***] on such Co-Commercialized Product, (b) [***] of Co-Commercialized Products (including, without limitation, [***] targeted specifically at Products, [***] for the development of promotional materials and printing of promotional materials), (c) [***] materials for the Co-Commercialized Products (d) [***] accounts, (e) [***], (f) [***] in the Co-Commercialization Territory for Co-Commercialized Products (including, without limitation, [***] costs for any Co-Commercialized Product utilized in such [***] programs), (l) [***] costs applicable to a Co-Commercialized Product. For the avoidance of doubt, "Sales and Marketing Expense" shall include that percentage of the agreed upon FTE rate proportionate to the amount of Promotional Effort a particular Representative contributes solely to the Co-Commercialized Product. For example, if the equivalent of [***] percent ([***]%) of each Representative of either Party's field force conducts SYNTA Co-Commercialization Activities or GSK Co-Commercialization Activities, as the case may be, for the Co-Commercialized Product, then only [***] percent ([***]%) of the FTE rate applicable to each such Representative shall be a Sales and Marketing Expense. Sales

and Marketing Expense shall not include any General Public Relations or any other activities that promote the business of a Party as a whole without specifically referencing any Co-Commercialized Product.

In calculating the Operating Income (Loss) the following principles shall apply:

1. There shall be no double counting of any costs or expenses or of any revenues, and to the extent a cost or expense has been included in one category or sub-category, it shall not be included in another; similarly, to the extent any revenue has been taken into account in one category or sub-category it shall not be taken into account in another.

2. When allocating costs and expenses under this Agreement, each Party shall utilize the same policies and principles as it utilizes consistently within its group and business units when making internal cost allocations, as previously discussed and agreed with the JCC.

3. To the extent an item of income or revenue is received by a Party or a cost or expense is incurred by a Party, and is necessary and specifically and directly identifiable, attributable and allocable to the Commercialization of Co-Commercialized Product and is not otherwise accounted for in the calculation of Operating Income, such Party shall credit such income or revenue and shall be permitted to charge such cost or expense to the Operating Income upon approval of the JCC.

4. All costs and expenses shall be determined, and all calculations shall be made, in accordance with [***], as applicable.

5. **Operating Income Payments.**

(a) In General. GSK shall pay to SYNTA the SYNTA Operating Income (Loss) Sharing Percentage of the Operating Income (Loss) attributable to each Co-Commercialized Product in the Co-Commercialization Territory or SYNTA shall pay to GSK the SYNTA Operating Income (Loss) Sharing Percentage of the Operating Loss attributable to each Co-Commercialized Product in the Co-Commercialization Territory for as long as the Parties are conducting SYNTA Co-Commercialization Activities and GSK Co-Commercialization Activities, as the case may be, for such Co-Commercialized Product in the Co-Commercialization Territory (such payments, the "Operating Income Payments") as described in this Section 5. For purposes of clarity, it is acknowledged that Commercialization Expenses will be incurred prior to Commercialization Regulatory Approval of any Co-Commercialized Product, and that such Commercialization Expenses will result in an Operating Loss which will be borne by the Parties as set forth in this Schedule 4.

(b) Within [***] Business Days after the end of each [***] SYNTA shall submit to GSK a report setting forth in reasonable detail its estimated Operating Expenses with respect to each Co-Commercialized Product attributable to such [***].

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(c) Within [***] Business Days following the end of each [***], GSK shall submit a report setting forth in reasonable detail the calculation of the amount of estimated Operating Income Payments payable to SYNTA or Loss payable by SYNTA, determined by calculating the SYNTA Operating Income (Loss) Sharing Percentage and GSK Operating Income (Loss) Percentage of Operating Income (Loss) for that Co-Commercialized Product, attributable to such [***]. Each Party shall pay any Operating Income Payments payable to the other Party within [***] days of receipt of the report described in this Subsection 5(c).

(d) Within [***] Business Days following the end of each [***], each of SYNTA and GSK shall submit to the JSC and the other Party the actual Commercialization Expenses incurred by it with respect to, as well as for GSK, the actual Net Sales of, Co-Commercialized Products in the Co-Commercialization Territory, over that [***]. Within [***] days following the receipt by GSK of SYNTA's written report, GSK shall prepare and submit to SYNTA and the JSC a written report setting forth in reasonable detail (A) the calculation of all such actual Commercialization Expenses incurred by each Party and, with respect to GSK, the Net Sales received by GSK over such [***] and (B) the calculation of the amount of Operating Income Payments payable to SYNTA or Loss payable by SYNTA in accordance with the SYNTA Operating Income (Loss) Sharing Percentage and GSK Operating Income (Loss) Percentage for that Co-Commercialized Product, determined on the basis of the difference between the Estimated Operating Income Payments paid in accordance with Section 5(c) and the actual Commercialization Expenses incurred and Net Sales received by both Parties over such [***] (the "True-Up Operating Income Payment"). The amount of the True-Up Operating Income Payments payable by either Party shall be paid within [***] days of receipt of the report described in this Section 5(d).

(e) All payments not made within the time period set forth above in Section 5, including material underpayments discovered during an audit, shall bear interest at a rate of [***] percent ([***]%) per month from the due date until paid in full or, if less, the maximum interest rate permitted by Applicable Laws. Such interest will not accrue on payments that are the subject of a Disputed Matter or delay in payment is outside the paying Party's reasonable control.

By way of illustration, the following chart shows a calculation of monies due under this mechanism (numbers represent millions of dollars):

	Total Product P&L	**GSK P&L**	**SYNTA P&L**
Net Sales	[***]	[***]	[***]
Cost of Goods	[***]	[***]	[***]
Commercialization Expenses:			
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
Operating Income	**[***]**	**[***]**	**[***]**
Share of Operating Income (Loss) Due		[***]	[***]
Payment to SYNTA		**[***]**	**[***]**
Net Amount Retained/Received		**[***]**	**[***]**

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6. **Audit Rights.** Each Party shall keep and maintain for [***] years complete and accurate records of all Commercialization Expenses incurred in connection with the Co-Commercialized Products and of Net Sales of Co-Commercialized Products ("Co-Commercialization Net Sales") in the Co-Commercialization Territory in sufficient detail to allow confirmation of same by an independent certified public accountant. Each Party (the "Auditing Party") shall have the right for a period of [***] years after such Commercialization Expenses and Co-Commercialization Net Sales are reconciled in accordance with the applicable section of the Co-Commercialization Agreement, to appoint at its expense an independent certified public accountant reasonably acceptable to the other Party (the "Audited Party") to audit the relevant records of the Audited Party and its Affiliates to verify that the amount of such Commercialization Expenses and Co-Commercialization Net Sales are correctly determined. The Audited Party or its Affiliates shall each make its records available for audit by the independent certified public accountant during regular business hours at such place or places where such records are customarily kept, upon [***] days written notice from the Auditing Party. Such audit right shall not be exercised by an Auditing Party more than [***] in any Calendar Year and no twelve (12) month period may be audited more than [***]. The independent certified public accountant will only disclose the results (any sums either over/under paid) of such audit to the Auditing Party and no other details. In the event there was an error in the amount of such Commercialization Expenses and Co-Commercialization Net Sales reported by the Audited Party hereunder, (a) if the effect of the error resulted in an underpayment, the Audited Party shall promptly, on receipt of an invoice, make payment to the Auditing Party of the underpayment amount and (b) if the effect of the error resulted in an overpayment, the Auditing Party shall promptly on receipt of an invoice make payment to the Audited Party of the overpayment amount. The Auditing Party shall bear the full cost of such audit unless such audit discloses an error by the Audited Party of at least [***] percent ([***]%) of the aggregate amount of the Operating Income (Loss) in any Calendar Year subject to such audit, in which case the Audited Party shall reimburse the Auditing Party for all costs incurred by the Auditing Party in connection with such audit.

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SCHEDULE 5

FORM OF PRESS RELEASE

GSK and Synta Pharmaceuticals Announce Development and Commercialization Collaboration for STA-4783 in Oncology

LONDON, UK and LEXINGTON, MA — October 10, 2007 — GlaxoSmithKline (GSK) (LSE: GSK; NYSE: GSK) and Synta Pharmaceuticals Corp. (NASDAQ: SNTA) today announced the execution of a global collaboration agreement for the joint development and commercialization of STA-4783, a first-in-class, small-molecule, oxidative stress inducer that is entering Phase 3 clinical development for the treatment of metastatic melanoma.

Under the terms of the agreement, the companies will share responsibility for development and commercialization of STA-4783 in the U.S. and GSK will have exclusive responsibility for development and commercialization of STA-4783 outside the U.S. Synta will receive an upfront cash payment of $80 million. Synta will also be eligible to receive potential milestone payments of up to $135 million for events leading to approval of STA-4783 in metastatic melanoma, further development and regulatory milestones of up to $450 million across various indications and up to $300 million in potential commercial milestone payments based on achieving certain net sales thresholds. Synta will continue to fund all development for metastatic melanoma in the US and the companies will share responsibility and costs for development of STA-4783 in other indications. Synta and GSK will jointly commercialize STA-4783 in the U.S. with Synta receiving a tiered profit share based on levels of annual net sales. The parties will share development costs outside of the US and Synta will receive double-digit tiered royalties on net sales. In addition, GSK may, subject to Synta's agreement, purchase, up to $45 million of Synta's common stock upon the future achievement of specified development and regulatory milestones.

The agreement is subject to antitrust clearance by the U.S. government under the Hart-Scott-Rodino Act. Common stock purchases may be subject to approval of Synta's shareholders if required under the rules and regulations of The NASDAQ Stock Market.

"GSK is an established global leader in the pharmaceutical industry with a strong commitment to oncology as a franchise," said Safi Bahcall, Ph.D., President and Chief Executive Officer, Synta. "GSK and Synta have a shared vision for the development and commercialization of STA-4783 in a range of potential indications, beginning with metastatic melanoma where a phase 2b study with STA-4783 in combination with paclitaxel has shown doubling of progression free survival

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compared to paclitaxel alone. We are confident that this agreement will allow STA-4783 to achieve its full potential as a novel therapeutic option for treating cancer."

"This agreement confirms GSK's growing status as a world leader in the development of new oncology medicines for use in the treatment, prevention and supportive care of cancer patients. It further strengthens our late stage oncology pipeline, which currently includes ten Phase 3 programs, and also demonstrates our commitment to identifying compounds that have the potential to deliver real benefit to patients," said Moncef Slaoui, Chairman R&D, GSK. "The data we have seen from the Phase 2 trials conducted by Synta have given us confidence in the potential of STA-4783 as a novel means of treating metastatic melanoma, a disease for which there is high unmet medical need."

"We are pleased to establish this alliance with GSK, a company with a long history of success in launching and marketing important and innovative new drugs," said Martin Williams, Senior Vice President and Chief Business Officer, Synta. "GSK shares our enthusiasm and commitment to developing this first-in-class compound. Together we expect to bring STA-4783 more quickly to more patients and to build a U.S. sales and marketing organization at Synta in collaboration with a world leader."

Conference Call
[details to be added]

About STA-4783
STA-4783 is a novel, injectable, investigational drug candidate that kills cancer cells by elevating oxidative stress levels beyond a breaking point, triggering programmed cell death. In preclinical models STA-4783 showed potent killing of a broad range of cancer cell types at high doses, and an ability to strongly enhance the efficacy of certain chemotherapy agents, with minimal additional toxicity, at moderate doses.

In a recent 21-center, double-blind, randomized, controlled Phase 2b clinical trial in 81 patients with metastatic melanoma, STA-4783 in combination with paclitaxel met the primary endpoint - doubling the median time patients survived without their disease progressing - compared to paclitaxel alone ($p=0.035$). STA-4783 is now entering a pivotal, confirmatory Phase 3 clinical trial in metastatic melanoma. Phase 2 trials in other indications, and in combination with other agents, are planned. STA-4783 has received Fast Track designation from the FDA for development in metastatic melanoma.

About Metastatic Melanoma
Melanoma, the most deadly form of skin cancer, arises from melanocytes, the pigment-producing cells of the skin. According to the American Cancer Society, melanoma accounts for approximately five percent of all skin cancers but causes about 75% of all skin cancer-related deaths. An estimated 60,000 people will be diagnosed and nearly 8,200 people will die from melanoma this year in the U.S. alone. If diagnosed and surgically removed while localized in the outermost skin layer, melanoma is potentially curable; however, for patients with metastatic disease the prognosis is poor, with limited available treatments and an expected survival of only six to nine months.

The incidence of melanoma has increased more rapidly than any other cancer during the past ten years. The FDA has not approved a novel, small molecule drug for the treatment of metastatic melanoma in over 30 years.

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About Oxidative Stress and Apoptosis
Oxidative stress in cells is the presence of elevated levels of reactive oxygen species (ROS) such as oxygen radicals and hydrogen peroxide. ROS can be generated by many stimuli, including ordinary cell metabolism, exposure to heat or radiation, or attack by bacteria or viruses. Normal cells have a strong anti-oxidant capacity that regulates the levels of ROS. Cancer cells, however, typically operate at a much higher level of oxidative stress than normal cells and have a greatly diminished anti-oxidant capacity. This diminished capacity to clear ROS leaves them vulnerable to further increases in oxidative stress. When ROS levels exceed a critical threshold, continued survival of the cell becomes unsustainable and programmed cell death (apoptosis) is initiated.

In a series of in vitro and in vivo experiments, STA-4783 has been shown to rapidly cause a dramatic increase in the level of ROS inside cancer cells and induce apoptosis. At similar doses and exposure, STA-4783 has little to no impact on non-cancer cells.

Elevated oxidative stress induces apoptosis through the mitochondrial pathway. In addition to potent induction of oxidative stress and apoptosis in cancer cells as a single agent, STA-4783 has been shown to enhance the activity of other anti-cancer agents that act through the mitochondrial pathway. These include commonly used chemotherapies such as paclitaxel and docetaxel.

Oxidative stress induction represents a novel anti-cancer strategy — a novel way of differentiating, and selectively killing, cancer cells vs. normal cells.

About GSK
GlaxoSmithKline, one of the world's leading research-based pharmaceutical and healthcare companies, is committed to improving the quality of human life by enabling people to do more, feel better and live longer. For information about GSK visit the company website at www.GSK.com

About Synta Pharmaceuticals
Synta Pharmaceuticals Corp. is a biopharmaceutical company focused on discovering, developing, and commercializing small molecule drugs to extend and enhance the lives of patients with severe medical conditions, including cancer and chronic inflammatory diseases. Synta has a unique chemical compound library, an integrated discovery engine, and a diverse pipeline of clinical- and preclinical-stage drug candidates with distinct mechanisms of action and novel chemical structures. All Synta drug candidates were discovered and developed internally. For more information, please see www.Syntapharma.com.

Synta Safe Harbor Statement
This media release contains forward-looking statements including statements relating to the potential value of payments that may be received pursuant to the agreement with GSK, the potential equity investments by GSK, and the anticipated progress and development of STA-4783, including the timing of clinical trials. Such forward-looking statements can be identified by the use of forward-looking terminology such as "will", "would", "should", "expects", "anticipates", "intends", "plans", "believes", "may", "estimates", "predicts", "projects", or similar expressions intended to identify forward-looking statements. Such statements, reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties

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that could cause actual results to differ materially from those expressed or implied by such forward-looking statements, including those described under "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2006 as filed with the Securities and Exchange Commission. Synta undertakes no obligation to publicly update forward-looking statements, whether because of new information, future events or otherwise, except as required by law.

GSK Safe Harbor Statement

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Contacts Synta:
Synta Pharmaceuticals Corp. Synta PR Agency

Contacts GSK:
GSK

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SCHEDULE 6

MATERIAL TERMS TO BE INCLUDED IN
CO-COMMERCIALIZATION AGREEMENT

The Co-Commercialization Agreement to be negotiated by the Parties shall contain the following material terms. Capitalized terms used in this Schedule 6 and not otherwise defined have the meanings given to them in the Agreement.

1. Co-Commercialization Rights.

(a) SYNTA and GSK hereby acknowledge and agree that the overall objectives of conducting SYNTA Co-Commercialization Activities and GSK Co-Commercialization Activities in the Co-Commercialization Territory are to reach a broad customer audience, ensure consistency of the marketing message for Co-Commercialized Products, and maximize the commercial opportunity for the Co-Commercialized Products. All Promotional Efforts shall be conducted in such markets as the JCC reasonably considers to be appropriate to maximize the success of such Co-Commercialized Product based on objective, quantifiable information and market research data with the objectives of allocating to each of SYNTA and GSK target audience and accounts from which each such Party will have the opportunity to maximize Net Sales.

(b) Until the first to occur of: (i) [***] Calendar Years after [***] in the [***] of [***]; (ii) achievement of [***] in the [***] of at least [***] dollars ($[***]); (iii) in [***], the [***] of a [***] in the [***]; or, (iv) [***], the [***] by [***] of a [***] with the [***] as a [***] (the "Initial Co-Commercialization Period"), GSK shall be responsible for promoting such Co-Commercialized Product to [***] in the Co-Commercialization Territory and SYNTA shall be responsible for promoting such Co-Commercialized Product to [***], unless otherwise agreed between the Parties. After such Initial Co-Commercialization Period, SYNTA may provide up to [***] percent ([***]%) of the promotional effort, with GSK providing the balance. As these responsibilities are split, the objective of the Parties will be to ensure there is clarity in accountability (for example, SYNTA may take responsibility for [***] or GSK may take responsibility for [***]). The allocation of promotional effort between the Parties for [***] Indications shall be determined by the JCC, depending upon the Indications that have obtained Commercialization Regulatory Approval. Neither Party shall engage a Third Party to perform activities with respect to its promotional responsibilities unless the other Party has already declined to assume such extra effort and obtain reimbursement therefor. Notwithstanding the foregoing, if GSK launches more than [***] other [***] products in the same [***] month period during which the [***] of a Co-Commercialized Product in the [***] occurs, then, [***], SYNTA may be permitted to provide further Promotional Efforts for certain target audiences.

(c) SYNTA and GSK shall use a coordinated sales force to conduct Promotional Efforts for each Co-Commercialized Product. In connection therewith, neither Party will, without the other Party's prior written consent, [***] for a Co-Commercialized Product if [***] is [***] that is [***] to be [***] with the [***] of the Co-Commercialized

Portions of this Exhibit were omitted and have been filed separately with the Secretary of the Commission pursuant to the Company's application requesting confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934.

Product. For clarity, the Parties acknowledge that a [***] of the [***] as a Co-Commercialized Product may be [***] by the [***] of its [***] or [***]. SYNTA and GSK hereby agree that each Party shall be responsible for ensuring that its Representatives conduct Promotional Efforts with respect to Co-Commercialized Products in a manner consistent with the Product Co-Commercialization Plan and/or the decisions of the JCC. Notwithstanding the foregoing, in performing their respective Promotional Efforts hereunder, each of the Parties agrees to (i) [***] with an [***] for the [***] and [***] as described in the Product Co-Commercialization Plan and (ii) [***] its [***] and [***] for its [***]. All SYNTA Representatives will have been recruited by SYNTA [***], and all GSK representatives will have been recruited by GSK [***].

2. Commercialization Efforts. Each Party shall use Commercially Reasonable Efforts to execute its obligations under each Product Co-Commercialization Plan, consistent with the applicable Commercialization Budget and in accordance with all Applicable Laws, and to cooperate diligently with each other in carrying out such Product Co-Commercialization Plan.

3. Product Co-Commercialization Plan and Commercialization Budget .

(a) Preparation of Annual Plan and Budget . The Parties will jointly prepare the Product Co-Commercialization Plan for each Co-Commercialized Product for all cancer Indications for the Co-Commercialization Territory. Each such Product Co-Commercialization Plan shall be reviewed and approved by the JCC; provided, that, each such Product Co-Commercialization Plan shall be consistent with the Party's rights under the Agreement. Each Product Co-Commercialization Plan and Commercialization Budget shall be submitted to the JCC for review and approval by a date to be established by the JCC, taking into account GSK's and SYNTA's annual budget planning calendars, but no later than [***] of each Calendar Year. It is contemplated that each Product Co-Commercialization Plan and Commercialization Budget will become more comprehensive as the Commercialization of the applicable Co-Commercialized Product evolves.

(b) Changes to Plans/Budgets. Any significant change in a Product Co-Commercialization Plan or Commercialization Budget during the course of the year will be communicated promptly to the JCC. In addition, the Parties will jointly provide an update on each Product Co-Commercialization Plan and Commercialization Budget for all Indications to the JCC no less frequently than semi-annually.

4. Control Over Advertising and Promotional Efforts .

(a) The JCC shall determine which Party shall be responsible for the creation, preparation, production and reproduction of all promotional materials, pursuant to procedures and timelines to be mutually agreed upon, consistent with the Product Co-Commercialization Plan.

(b) Neither Party shall engage in any Advertising or use any label, package, literature or other written material (other than [***]) in connection with a Co-Commercialized Product in the Co-Commercialization Territory, unless the specific form and content thereof is approved by the JCC.

Portions of this Exhibit were omitted and have been filed separately with the Secretary of the Commission pursuant to the Company's application requesting confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934.

(c) General Public Relations on the part of either Party need not be [***] by the [***], but all representations and statements pertaining to Co-Commercialized Products that appear in [***] of SYNTA or GSK and include subject matter not previously approved by the JCC shall be subject to the approval of the JCC.

(d) All Advertising and Promotional Efforts undertaken by either Party hereto shall be undertaken in good faith with a view towards maximizing the sales of the applicable Co-Commercialized Product.

(e) Except with the prior written consent of the other Party, neither Party shall use the name of the other Party or any Affiliate of the other Party in Advertising, Promotional Efforts or General Public Relations except in materials approved by the JCC.

(f) [***] recommendations will be developed by the JCC and approved by the JSC. GSK shall have the sole responsibility for conducting all billing and collections for Co-Commercialized Products.

(g) GSK shall have sole responsibility for arranging for the [***] and [***] of Co-Commercialized Products.

(h) Each Party shall [***] certify to the other Party that its field force (including persons responsible for managing the field force) is properly trained with respect to both Product information and compliance with Applicable Laws.

5. Sales Efforts in the Co-Commercialization Territory.

(a) As part of each Product Co-Commercialization Plan for the Co-Commercialization Territory, the JCC shall determine the targeted level of sales of the applicable Co-Commercialized Product for the Commercialization target audience for the Calendar Year covered by such Product Co-Commercialization Plan.

(b) The Product Co-Commercialization Plan shall include the total number of Representatives and the allocation between the Parties of such Representatives required to provide Promotional Efforts to the defined target audience. The Co-Commercialized Product shall be included in each Party's respective sales incentive bonus program for the corresponding Representatives, with specified links to sales performance.

6. Training Program. GSK shall (a) develop a training program for the promotion of all Co-Commercialized Products and (b) train all Representatives of both Parties to be used for the conduct of Promotional Efforts for Co-Commercialized Products in the Co-Commercialization Territory prior to commencement of Promotional Efforts. The Parties [***] on an [***] to [***] and all such [***] at a [***] that is [***]. [***] either Party may [***] to [***] unless such [***] the training program described in this Section 6. Except as provided herein, it is agreed that for the Product specific training, the internal costs and the out-of-pocket costs of such training programs (including, without limitation, the out-of-pocket costs of the development, production, printing of such training materials, excluding travel and expenses for Representatives) shall be included as a Commercialization Expense under this Agreement.

Portions of this Exhibit were omitted and have been filed separately with the Secretary of the Commission pursuant to the Company's application requesting confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934.

7. Co-Commercialization Mechanism.

(a) Sales. All sales of Co-Commercialized Products in the Co-Commercialization Territory shall be booked by GSK. If, during the term of the Co-Commercialization Agreement, SYNTA receives orders from customers for a Co-Commercialized Product, it shall refer such orders to GSK.

(b) Processing of Orders for Co-Commercialized Products.

(i) All orders for Co-Commercialized Products received by SYNTA during the term of the Co-Commercialization Agreement shall be executed by GSK in a reasonably timely manner consistent with the general practices applied by it in executing orders for other pharmaceutical products sold by it or its Affiliates.

(ii) The Parties shall comply with all Applicable Laws in selling any Co-Commercialized Products.

8. Transition of Certain Activities. At any time after the [***] anniversary of the date of [***] of a Product and the receipt by SYNTA of [***] in the U.S. Territory of a product [***], SYNTA may request, by providing not less than [***] days' written notice (the "Commercialization Activities Transition Notice"), that GSK transition to SYNTA certain GSK Co-Commercialization Activities; provided, that SYNTA agrees that certain GSK Co-Commercialization Activities must be transitioned in bundles as follows: (a) [***] to [***] for [***] of the [***], then [***] must also [***] for [***] of [***] (for both [***]) and [***], (b) [***] to [***] for [***], then [***] must also [***] for [***] and (c) [***] to [***] for [***], then [***] must [***] with [***] to [***]. As soon as practicable, but in any event on or before [***] days from the date of the Commercialization Activities Transition Notice, the Parties shall prepare and submit to the JCC for its review and approval a mutually acceptable transition plan (the "Commercialization Transition Plan") which shall describe with reasonable specificity the steps to be followed, and the timelines applicable to, the transitioning of such GSK Co-Commercialization Activities in order to transition such activities to SYNTA as promptly as possible. Notwithstanding the foregoing, any transition of GSK Co-Commercialization Activities (i) shall be [***] to [***] to [***], that [***] is able to [***] in a [***] of the same, (ii) shall not [***] in any [***] in the [***] of the [***] and (iii) shall not be [***] to the [***], including [***]. In no event will GSK transfer responsibility to SYNTA for sales force training, sales information and [***]. Notwithstanding anything in this Section 8, if SYNTA exercises its Development Opt-Out Right with respect to any Indication at any time, then this Section 8 shall have no further force and effect and there shall be no transition to SYNTA of any GSK Co-Commercialization Activities hereunder with respect to any Product and/or any Indication.

10. Sales Information Integration. The Parties will strive to establish a transparent and compatible sales reporting system for Co-Commercialized Products to facilitate call planning and Representatives activities, and all costs related to such integration shall be Commercialization Expenses; provided, that this [***] to the [***] of such a [***].

Portions of this Exhibit were omitted and have been filed separately with the Secretary of the Commission pursuant to the Company's application requesting confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934.

11. Product Recalls. In the event that any Regulatory Authority issues or requests a recall or takes similar action in connection with a Co-Commercialized Product, or in the event a Party reasonably believes that an event, incident or circumstance has occurred that may result in the need for a recall, market withdrawal or other corrective action regarding a Co-Commercialized Product, such Party shall promptly advise the designated officer of the other Party thereof by telephone or facsimile and GSK shall be responsible for such recall, market withdrawal or other corrective action; provided, that all expenses incurred in connection with any such recall, market withdrawal or corrective action (including, without limitation, expenses for notification, destruction and return of the affected Product and any refund to customers of amounts paid for such Co-Commercialized Product) shall be a Commercialization Expense.

12. Miscellaneous. Other customary terms, including confidentiality, indemnification and termination.

Portions of this Exhibit were omitted and have been filed separately with the Secretary of the Commission pursuant to the Company's application requesting confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934.

SCHEDULE 7

PRINCIPLES USED FOR
DETERMINING DEVELOPMENT COSTS

In calculating Development Costs, the following principles shall apply:

1. There shall be no double counting of any costs or expenses, and to the extent a cost or expense has been included in one category or sub-category, it shall not be included in another; similarly, to the extent any revenue has been taken into account in one category or sub-category, it shall not be taken into account in another.

2. When allocating costs and expenses under this Agreement, each Party shall utilize the same policies and principles as it utilizes consistently within its group and business units when making internal cost allocations, as previously discussed and agreed with the JDC.

3. All costs and expenses shall be determined, and all calculations shall be made, in accordance with GAAP or IFRS, as applicable.

Portions of this Exhibit were omitted and have been filed separately with the Secretary of the Commission pursuant to the Company's application requesting confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934.

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors
Synta Pharmaceuticals Corp.

We consent to the incorporation by reference in the registration statement 333-141903 on Form S-8 of Synta Pharmaceuticals Corp. with respect to the consolidated balance sheets of Synta Pharmaceuticals Corp. as of December 31, 2007 and 2006, and the related consolidated statements of operations, stockholders' equity (deficit) and comprehensive loss, and cash flows for each of the years in the three-year period ended December 31, 2007, which report appears in the December 31, 2007 annual report on Form 10-K of Synta Pharmaceuticals Corp.

Our report includes a paragraph that states that the Company adopted Statement of Financial Accounting Standard (SFAS) No.123R, *Share-Based Payment*, effective January 1, 2006.

/s/ KPMG LLP

Boston, Massachusetts
March 19, 2008

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Exhibit 31.1

CERTIFICATIONS UNDER SECTION 302

I, Safi R. Bahcall, Ph.D., certify that:

1. I have reviewed this Annual Report on Form 10-K of Synta Pharmaceuticals Corp.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: March 20, 2008

/s/ SAFI R. BAHCALL, PH.D.

Safi R. Bahcall, Ph.D.
President and Chief Executive Officer
(principal executive officer)

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Exhibit 31.2

CERTIFICATIONS UNDER SECTION 302

I, Keith S. Ehrlich, certify that:

1. I have reviewed this Annual Report on Form 10-K of Synta Pharmaceuticals Corp.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: March 20, 2008

/s/ KEITH S. EHRLICH, C.P.A.

Keith S. Ehrlich, C.P.A.
Vice President, Finance and Administration,
Chief Financial Officer
(principal accounting and financial officer)

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Exhibit 32.1

CERTIFICATIONS UNDER SECTION 906

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code), each of the undersigned officers of Synta Pharmaceuticals Corp., a Delaware corporation (the "Company"), does hereby certify, to such officer's knowledge, that:

The Annual Report on Form 10-K for the year ended December 31, 2007 (the "Form 10-K") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and the information contained in the Form 10-K fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: March 20, 2008

/s/ SAFI R. BAHCALL, PH.D.

Safi R. Bahcall, Ph.D.
President and Chief Executive Officer
(principal executive officer)

Dated: March 20, 2008

/s/ KEITH S. EHRLICH, C.P.A.

Keith S. Ehrlich, C.P.A.
Vice President, Finance and Administration, Chief Financial Officer
(principal accounting and financial officer)

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

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