Filed Pursuant to Rule 433
Issuer Free Writing Prospectus Dated February 6, 2007
Relating to Preliminary Prospectus Dated January 23, 2007
Registration Statement No. 333-138894

This free writing prospectus relates only to the securities described below and should be read together with the preliminary prospectus dated January 23, 2007 relating to this offering (the "Preliminary Prospectus"), included in Amendment No. 3 to the Registration Statement on Form S-1 (File No. 333-138894) relating to these securities. The most recent Registration Statement can be accessed through the following link: http://www.sec.gov/Archives/edgar/data/1157601/000104746907000659/0001047469-07-000659-index.htm. The following information supplements and updates the information contained in the Preliminary Prospectus.

Common stock offered by us:	5,000,000 shares (excluding the underwriters' option to purchase up to 750,000 additional shares to cover over-allotments).
Common stock to be outstanding after this offering:	33,817,434 shares.
Anticipated initial public offering price per share:	$10.00 per share.
Net proceeds to Synta:	We estimate that our net proceeds from the sale of 5,000,000 shares of our common stock in this offering will be approximately $44.7 million, or approximately $51.7 million if the underwriters exercise their over-allotment option in full, assuming an initial public offering price of $10.00 per share and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.
Indications of interest from directors and entities affiliated with directors:	Our current directors Keith Gollust, Bruce Kovner and Robert Wilson and entities affiliated with these directors have indicated an interest in purchasing up to an aggregate of 1,000,000 shares of our common stock in this offering at the assumed initial public offering price of $10.00 per share. Assuming such purchase, our current executive officers and directors as a group will beneficially own 49.3% of our outstanding common stock after this offering, based on 33,817,434 shares of common stock outstanding after this offering.

	The purchase of shares by these directors or affiliated entities in the offering will reduce the public float and may adversely affect the liquidity of the trading market for our common stock from what it would have been had these shares been purchased by unaffiliated investors. Because these indications of interest are not binding agreements or commitments to purchase, these directors and entities may elect not to purchase any shares in this offering.
Use of proceeds:	The net proceeds that we will receive from the offering will be less than the estimated net proceeds set forth under the caption "Use of Proceeds" in the Preliminary Prospectus, which was based on an assumed initial offering price of $15.00 per share. As a result, we currently expect to use our net proceeds from this offering as follows: • approximately $22 to $24 million of these net proceeds to fund the continued clinical development of STA-4783, including the initiation of a pivotal Phase 3 clinical trial in metastatic melanoma in 2007 and the initiation of Phase 2 clinical trials in up to two other indications in 2007; • approximately $2 to $3 million of these net proceeds to fund the continued clinical development of apilimod, including the completion of our current Phase 2a clinical trials in rheumatoid arthritis and CVID and potentially the initiation of Phase 2b clinical trials in these indications, depending on the results of the Phase 2a trials; • approximately $10 to $12 million of these net proceeds to fund the continued research, preclinical and future clinical development of STA-9090, STA-9584 and our CRAC ion channel program; and • approximately $8 million to fund general corporate purposes, such as general and administrative expenses, capital expenditures, working capital needs, prosecution and maintenance of our intellectual property, and the potential acquisition of, or investment in, technologies, products, or companies that complement our business. We have no current understandings, commitments, or agreements with respect to any acquisition of or investment in any technologies, products or companies.

	As of the date of this prospectus, we cannot predict with certainty all of the particular uses for the proceeds from this offering, or the amounts that we will actually spend on the uses set forth above. The amounts and timing of our actual expenditures will depend upon numerous factors, including the progress of our research, development, and commercialization efforts, the progress of our clinical trials, whether or not we enter into strategic collaborations or partnerships, and our operating costs and expenditures. Accordingly, our management will have significant flexibility in applying the net proceeds of this offering. The costs and timing of drug development and regulatory approval, particularly conducting clinical trials, are highly uncertain, are subject to substantial risks, and can often change. Accordingly, we may change the allocation of use of these proceeds as a result of contingencies such as the progress and results of our clinical trials and other research and development activities, the establishment of collaborations, the results of our commercialization efforts, our manufacturing requirements and regulatory or competitive developments. In addition, assuming our current clinical programs proceed further to the next stage of clinical development, we do not expect our existing capital resources and the net proceeds from this offering to be sufficient to enable us to fund the completion of all such clinical development programs through commercial introduction. Accordingly, we expect we will need to raise additional funds. Based on our current operating plans, we expect the proceeds of this offering, together with our existing resources, to be sufficient to fund our planned operations, including our continued research and drug development, through at least mid-2008. Pending use of the proceeds from this offering as described above or otherwise, we intend to invest the net proceeds in short-term interest-bearing, investment grade securities.
As adjusted balance sheet data:	Based on an assumed initial public offering price of $10.00 per share, as of September 30, 2006, as adjusted cash, cash equivalents and marketable securities would have been approximately $103.4 million, as adjusted working capital would have been approximately $93.1 million, as adjusted total assets would have been approximately $111.0 million, as adjusted additional paid-in capital would have been approximately $320.1 million, and as adjusted total stockholders' equity would have been approximately $96.1 million.

As adjusted capitalization:	Based on an assumed initial public offering price of $10.00 per share, as of September 30, 2006, as adjusted cash, cash equivalents and marketable securities would have been approximately $103.4 million, as adjusted additional paid-in capital would have been approximately $320.1 million, as adjusted total stockholders' equity would have been approximately $96.1 million and as adjusted total capitalization would have been approximately $99.5 million.
Dilution:	Based on an assumed initial public offering price of $10.00 per share, our pro forma as adjusted net tangible book value at September 30, 2006, would be $96.1 million, or $2.84 per share. This represents an immediate increase in the pro forma net tangible book value of $1.06 per share to existing stockholders and an immediate dilution of $7.16 per share to new investors purchasing shares in this offering. Investors purchasing shares of common stock in this offering will have purchased approximately 14.8% of our outstanding common stock immediately following the completion of this offering and will have contributed approximately 16.0% of the total consideration paid for our common stock.

The issuer has filed a registration statement (including a prospectus) with the SEC for the offering to which this communication relates. Before you invest, you should read the prospectus in that registration statement and other documents the issuer has filed with the SEC for more complete information about the issuer and this offering. You may get these documents for free by visiting EDGAR on the SEC web site at www.sec.gov. Alternatively, the issuer, any underwriter or any dealer participating in the offering will arrange to send you the prospectus if you request it by contacting Bear, Stearns & Co. Inc., Prospectus Dept. toll free at (866) 803-9204 or Lehman Brothers Inc., c/o ADP Financial Services Prospectus Fulfillment by email at monicacastillo@adp.com.