

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 6-K

**REPORT OF FOREIGN ISSUER PURSUANT TO RULE 13a-16 AND 15d-16 UNDER
THE SECURITIES EXCHANGE ACT OF 1934**

For the Month of August 2012

File No. 000-54598

Stellar Biotechnologies Inc.

(Name of Registrant)

332 E. Scott Street, Port Hueneme, CA 93041

(Address of principal executive offices)

Indicate by check mark whether the Registrant files or will file annual reports under cover of Form 20-F or Form 40-F.
FORM 20-F X FORM 40-F _____

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): _____

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): _____

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this Form 6-K to be signed on its behalf by the undersigned, thereunto duly authorized.

Stellar Biotechnologies Inc.
(Registrant)

Dated: August 28, 2012

By: /s/ "Darrell Brookstein"
Darrell Brookstein
Director

Exhibits:

99.1 News Release dated August 27, 2012

Stellar Biotechnologies Meets Milestones; Issues Performance Shares

PORT HUENEME, CA. (August 27, 2012) -- Stellar Biotechnologies, Inc. ("Stellar" or the "Company") (TSX-V: KLH) (PINKSHEETS: SBOTF) (Frankfurt: RBT) announced that the Board of Directors determined that the final two, important milestones, detailed in its 2010 Filing Statement, have been met and have authorized issuance of 1,313,130 Performance Shares to non-Director employees and consultants who contributed to achievement of the goals. The Board tabled all discussion of authorization of the issuance of shares to the Directors, who are part of the Performance Share agreement until a later date.

The three milestones that have been met are:

(a) Completion of method development for commercial-scale manufacture of IMG KLH (Immunogenic Keyhole Limpet Hemocyanin) with applicable cGMP (Good Manufacturing Practice) as a pharmaceutical intermediate, evidenced by completion of three GMP lots meeting all quality and product release specifications required for stability studies and process validation.

(b) Compilation and regulatory submittal of all required Chemistry, Manufacturing, and Control (CMC) data compiled in the Common Technical Document (CTD) format and evidenced by filing as a Drug Master File (DMF) with the USFDA.

(c) Completion of preclinical toxicity and immunogenicity testing of IMG KLH and Subunit KLH in rodent and non-rodent species as evidenced by study protocols and completion reports available to support customer FDA and EMEA filings.

Stellar's President & CEO, Frank Oakes said, "We are very proud to have achieved these important milestones for our shareholders, and believe this will bring long-term value to the Company. These milestones form a strong base for the further development of potential, high-growth product offerings, and are critical to our KLH formulations that will serve a need beyond the market for KLH as a carrier for conjugate vaccines and into Stellar™ branded 'stand-alone' products for human use in therapeutics and diagnostics. We are equally proud of the consultants and employees, including our new Chief Pharmaceutical Officer, Catherine Brisson, Ph.D., and our new Chief Technology Officer, Herbert Chow, Ph.D. who worked so hard to achieve these objectives. Our Board of Directors has acted to reward them for the outstanding effort. The Board has also taken the position that it will not entertain discussion of issuance of Performance Shares for any Directors related to the shares until, in their opinion, that discussion is appropriate."

About Stellar Biotechnologies, Inc. (www.StellarBiotech.com)

Stellar Biotechnologies, Inc. (TSX-V: KLH) (PINKSHEETS: SBOTF) (Frankfurt: RBT) is the world leader in sustainable manufacture of Keyhole Limpet Hemocyanin (KLH). KLH is an important immune-stimulating protein used in wide-ranging therapeutic and diagnostic markets. Potent, yet proven safe in humans, KLH operates as both a vital component for conjugate vaccines (targeting cancer, autoimmune, and infectious diseases) as well as an antigen for measuring immune status. Stellar Biotechnologies was founded to address the growing demand for renewable, commercial-scale supplies of high-quality, GMP-grade KLH. Stellar has developed leading practices, facilities and proprietary capabilities to address this need. To receive regular updates, enter email at bottom of http://stellarbiotechnologies.com/investors/news_releases/

Contact:

Frank Oakes, President & CEO foakes@stellarbiotech.com Main +1 (805) 488-2800

There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Readers should not place undue reliance on such statements. Except in accordance with applicable securities laws, the Company expressly disclaims any obligation to update any forward-looking statements or forward-looking statements that are incorporated by reference herein. This news release does not constitute an offer to sell, or a solicitation of an offer to buy any of the Company's securities set out herein in the United States, or to, or for the benefit or account of, a U.S. Person or person in the United States. Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.