



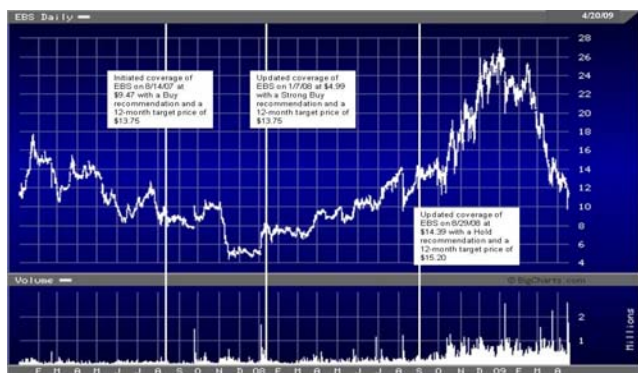
WBB Securities, LLC

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Emergent BioSolutions, Inc. (NYSE: EBS) (04/21/09)

Upgrading to Buy Rating - 12-Month Price Target \$15.60



21 - Month Price and Trading Volume

Rating Legend:

Strong Buy – Should be aggressively purchased.

Buy - Should be purchased on market weakness.

Hold - Fairly valued.

Sell - Stock should be sold on market strength.

Sell Short - Should be aggressively sold.

Speculative Buy – For aggressive accounts only.

Current Price	\$10.58		FY:Dec		2007	2008	2009
12 Month Trading Range	\$8.22 - 27.00		EPS	Q1			
Market Capitalization (Mil)	219.21			Q2			
Shares Outstanding (Mil)	30.17			Q3			
Avg. Daily Volume	739,047			Q4			
L. T. Debt (Mil)	35.94			Year	0.77A	0.68A	1.10E
Dividend/Yield	N/A						
Book Value P/S	6.61			P/E	13.74	15.56	9.62
				EPS Growth	NM	NM	62%
				FY Rev.	182.92	178.55	220.00
NASDAQ Composite	1608.21						
S&P 500	832.39						
12 Month Target Price	\$15.60						

Delay in rPA Contract is of Little Consequence to Long-Term Story

Last week, the Department of Health and Human Services (HHS) imposed a delay in the long-awaited contract for development and procurement of a Recombinant Protective Antigen (rPA)-based anthrax vaccine. Emergent Biosolutions, Inc. (EBS) and PharmAthene, Inc. (PIP), the two companies deemed within the competitive range to receive a large contract award, were asked to provide the FDA with their product development plans for review in advance of an award.

The pending contract awards are for development and procurement of 25 million doses of an rPA-based anthrax vaccine, and each could easily exceed \$500 million over 8 years. While we would expect the pending FDA review to delay any contract awards for two - five months, EBS in our opinion, remains well positioned to receive a large procurement contract. Additionally, even in the absence of any contract awards to develop an rPA vaccine, EBS should continue to benefit

from its current contract for the sale of its BioThrax® anthrax vaccine to the US government for both the active immunization of military personnel and stockpiling purposes.

We are therefore upgrading EBS to a Buy Rating with a One-Year Price Target of \$15.60.

Management

Fuad El-Hibri - Chief Executive Officer and Chairman of the Board of Directors - since June 2004 and President from March 2006 to April 2007. From May 1998 until June 2004, he was CEO and Chairman of BioPort Corporation, when it became a wholly owned subsidiary of EBS. BioPort was then renamed Emergent BioDefense Operations Lansing, Inc. Mr. El-Hibri served as chairman of Digicel Holdings, Ltd., a privately held telecommunications firm, from August 2000 to October 2006. He served as president of Digicel from August 2000 to February 2005. He also has served as Chairman of East West Resources Corporation, a venture capital and financial consulting firm, since June 1990. Mr. El-Hibri is a member of the board of trustees of American University and a member of the board of directors of the International Biomedical Research Alliance, an academic joint venture among the NIH, Oxford University and Cambridge University. He also serves as chairman and treasurer of El-Hibri Charitable Foundation. Mr. El-Hibri received a master's degree in public and private management from Yale University and a B.A. in economics from Stanford University.

Daniel J. Abdun-Nabi – President and Chief Operating Officer – Mr. Abdun-Nabi has been president since March 2007, and chief operating officer since May 2007. He served as senior vice president corporate affairs and general counsel from December 2004 to April 2007, secretary from December 2004 to January 2008, and vice president and general counsel from May 2004 to December 2004. Prior to joining the company, Mr. Abdun-Nabi served as general counsel for IGEN International, Inc., a biotechnology company, and its successor BioVeris Corporation, from September 1999 to May 2004, and as senior vice president, legal affairs, general counsel and secretary of North American Vaccine, Inc. Mr. Abdun-Nabi received an L.L.M. in taxation from Georgetown University Law Center, a J.D. from the University of San Diego School of Law and a B.A. in political science from the University of Massachusetts, Amherst.

R. Don Elsey - Senior Vice President Finance and Administration, Chief Financial Officer – Mr. Elsey has been Chief Financial Officer since March 2006, Senior VP Finance and Administration since May 2007, and Treasurer since June 2005. He previously served as VP finance. Prior to joining EBS, Mr. Elsey served as the director of finance and administration at IGEN International, Inc. and its successor BioVeris Corporation. Mr. Elsey received an M.B.A. in finance and a B.A. in economics from Michigan State University. He is a certified management accountant.

W. James Jackson, Ph.D., Senior Vice President and Chief Scientific Officer - since February 2008. Dr. Jackson served as vice president technical support from June 2007 to February 2008 and vice president commercial development from April 2005 to June 2007. Prior to joining EBS, Dr. Jackson served as president, Antex Biologics Research and Development Corporation from January 2004 to May 2005. He served as director, molecular biology for MicroCarb, Inc. from April 1994 to March 1997 and served in various research

positions at W.R. Grace & Co. from August 1987 to March 1994. Dr. Jackson has 17 patents issued in his name. He received a Ph.D. in Microbiology from the University of Georgia and a B.A. in Microbiology/Biochemistry from the University of Tennessee.

Robert G. Kramer, Sr., President & Chief Executive Officer, Emergent BioDefense Operations Lansing, Inc. – since 2004. He previously served as Chief Financial Officer, Chief Operating Officer and President of BioPort, which became Emergent BioDefense Operations. Prior to joining BioPort, Mr. Kramer held various financial management positions at Pharmacia Corp., which was acquired by Pfizer Inc. (PFE), and with subsidiaries of Northwest Industries. Mr. Kramer received an M.B.A. from Western Kentucky University and a B.S. in industrial management from Clemson University.

rPA Vaccine – a Brief History

The rPA vaccine candidate currently under development by EBS was first developed by the U.S. Department of Defense in the late 1980s. Vaxgen, Inc. subsequently licensed the development rights for this vaccine and was awarded development contracts from National Institutes of Allergy and Infectious Diseases (NIAID) in 2002 and 2003. In November 2004, Vaxgen was awarded an \$877.5 million contract for the manufacture and delivery of 75 million doses of its rPA vaccine to the Strategic National Stockpile (SNS), under the newly formed Project BioShield. Vaxgen completed one Phase II trial under this contract.

The early clinical trials to evaluate the Vaxgen rPA candidate were conducted by mixing the adjuvant, aluminum hydroxide, with the rPA protein immediately prior to injection. Results from the Phase I trial have been published¹, but we are unaware of any publication of data from the Phase II trial. The Phase II trial, which was conducted by Vaxgen in 2004-2005 was designed to determine the optimal combination of rPA and the adjuvant required to induce the most robust immune response.

The adjuvant is a necessary ingredient in most vaccines. It also is capable of catalyzing the decomposition of proteins. In early 2006, Vaxgen disclosed, for the first time, a stability problem with its rPA vaccine candidate due to an unexpected interaction between the rPA protein and the aluminum hydroxide adjuvant. In December 2006, HHS cancelled the Vaxgen rPA procurement contract due to Vaxgen's failure to meet certain contractual milestones. Vaxgen was at that point poised to begin a second Phase II trial. The FDA placed this program on clinical hold in November 2006, after determining that data submitted by Vaxgen were insufficient to assure that the product would be stable enough to resume testing. Shortly thereafter, the Vaxgen procurement contract was cancelled.

With the termination of this large contract, Vaxgen was forced to downsize significantly. However, the company claimed to be continuing development of its rPA candidate to improve stability. In May 2008, EBS acquired the rPA vaccine candidate from Vaxgen for \$2 million up front, with an additional \$8 million in milestone payments, plus royalties on future sales. EBS did not buy any of the physical assets of Vaxgen and plans to manufacture the rPA

¹ Gorse, GJ, et al. 2006. Immunogenicity and Tolerance of Ascending Doses of a Recombinant Protective Antigen (rPA102) Anthrax Vaccine: a Randomized, Double-Blinded, Controlled, Multicenter Trial. *Vaccine* 24(33-34):5950-5959

vaccine at its newly constructed plant in Lansing, MI. EBS claims to have made additional improvements to the formulation to further stabilize the vaccine.

The Wonderful World of Government Contracting

For the government to impose a delay in the contracting process at this point may appear to be a rather last-minute move. However, we believe the market is overestimating the significance of this delay, as EBS stock declined over 10% in response to the news.

We consider this delay to be more or less a non-event for EBS, and we expect two contracts to be awarded under this outstanding RFP, each in excess of \$500 million. In our opinion, by imposing a delay in granting these contract awards, HHS is “buying time” for a new Secretary of HHS to be confirmed and in office before two, large contract awards, with a combined value exceeding \$1 billion are announced. In early March 2009, President Obama nominated Kansas Governor Kathleen Sebelius as Secretary of Health and Human Services. Confirmation hearings for this appointment have yet to begin.

BioThrax Sales to the US Government will Continue

EBS currently produces BioThrax, the only FDA-approved vaccine for anthrax, which it sells to the government for the active immunization of military personnel and for stockpiling purposes. EBS recorded \$167.1 million of BioThrax sales to the U.S. government in 2008. EBS currently has supply contracts for BioThrax worth over \$400 million through 3Q 2011.

It is important to consider that the pending procurement contracts for an rPA-based anthrax vaccine require delivery of 25 million doses for delivery within 8 years. During the development portion of the contract, and until the government has access to an alternative vaccine, the government presumably will continue to source BioThrax from EBS. Based on recent sales, BioThrax sales to the U.S. government should contribute \$170 - \$200 million in revenue through roughly 2017. Even if an rPA vaccine is ultimately successful, the government may choose to continue to source BioThrax from EBS.

Valuation

EBS continues to deliver on its strategy of supplying Biothrax to the U.S. government, while simultaneously investing in the development of a portfolio of additional biodefense countermeasures and commercial vaccines. BioThrax sales continue to grow and the remaining EBS portfolio continues to progress.

In considering the possible outcomes surrounding the pending rPA contract awards, we find it difficult to come up with a realistic scenario that would be seen as negative for EBS. It is important to remember that HHS is poised to award two independent contracts for the rPA vaccine. Each company’s “fate” under these contracts will be in its own hands, and should not be affected by success or failure of the other. Should both rPA vaccines be funded and proven ultimately successful, EBS will have two FDA-approved anthrax vaccines in its arsenal, and one new competitor. Should both programs fail technically, or if neither program is funded, which we deem highly unlikely, BioThrax will continue to be the only FDA-approved anthrax vaccine.

Our revised one-year price target is based on our revised 2009E EPS estimate of \$1.10E. Using a 17 multiple, and applying a 20% discount rate we calculate a one-year price target of \$15.60. With that, we are upgrading EBS to a buy rating.

Trademarks

BioThrax® is a registered trademark of Emergent BioSolutions, Inc.

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	Percentage of Covered Securities	Percentage of Banking Clients
Buy	79%	06%
Hold	16%	0%
Sell	05%	0%

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