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Synthetic Biologics' Academic Collaborator to Present Novel Monoclonal Antibody Combination for Treatment of Whooping Cough (Pertussis) at 54th ICAAC

-- SYN-005 Program Targeting Pertussis Toxin to be Highlighted in Oral Presentation --

ROCKVILLE, Md., Aug. 12, 2014 /PRNewswire/ -- [Synthetic Biologics, Inc.](#) (NYSE MKT: SYN), a biotechnology company developing novel anti-infective biologic and drug programs targeting specific pathogens that cause serious infections and diseases, announced today that its SYN-005 for the treatment of Pertussis will be highlighted at the 54th Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC), September 5-9, in Washington D.C.



Synthetic Biologics' academic collaborator, Jennifer Maynard, Ph.D., of The University of Texas at Austin's McKetta Department of Chemical Engineering will present Synthetic Biologics' SYN-005 monoclonal antibody (mAb) combination for the treatment of Pertussis in an oral presentation scheduled for Sunday, September 7, at 9:45am Eastern Time in Room 209A as part of the "Neonatal Infections and the Case for Maternal Immunization" session.

Title: Rational Design of Antibody Cocktails to Treat Disease Caused by Bordetellae

Authors: M. Kaleko¹, A. Nguyen², E. Wagner², J. Laber², L. Goodfield³, W. Smallridge³, E. T. Harvill³, R. F. Wolf⁴, J. C. Papin⁴, J. A. Maynard²

"We are pleased to have Dr. Maynard showcase the research supporting the clinical development of SYN-005 amongst esteemed academic peers, and the infectious disease field's foremost leaders at ICAAC, a conference with high academic standards and commitment to providing an overview of the state of infection control and prevention on a

global scale," stated Jeffrey Riley, Chief Executive Officer of Synthetic Biologics. "This scientific presentation is timely, as we continue to advance our innovative Pertussis program toward clinical-stage development in early 2015."

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About Synthetic Biologics, Inc.

Synthetic Biologics, Inc. (NYSE MKT: SYN) is a biotechnology company focused on the development of novel anti-infective biologic and drug candidates targeting specific pathogens that cause serious infections and diseases. The Company is developing an oral biologic to protect the gastrointestinal microflora from the effects of IV antibiotics for the prevention of *Clostridium difficile* (*C. difficile*) infection, an oral treatment to reduce the impact of methane producing organisms on constipation-predominant irritable bowel syndrome (C-IBS), a series of monoclonal antibodies for the treatment of Pertussis and *Acinetobacter* infections, and a biologic targeted at the prevention and treatment of a root cause of a subset of IBS. In addition, the Company is developing an oral estriol drug for the treatment of relapsing-remitting multiple sclerosis (MS) and cognitive dysfunction in MS. For more information, please visit Synthetic Biologics' website at www.syntheticbiologics.com.

This release includes forward-looking statements on Synthetic Biologics' current expectations and projections about future events. In some cases forward-looking statements can be identified by terminology such as "may," "should," "potential," "continue," "expects," "anticipates," "intends," "plans," "believes," "estimates," and similar expressions. These statements are based upon current beliefs, expectations and assumptions and are subject to a number of risks and uncertainties, many of which are difficult to predict and include statements regarding Synthetic Biologics' continued advancement of its Pertussis program toward clinical-stage development. The forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from those set forth or implied by any forward-looking statements. Important factors that could cause actual results to differ materially from those reflected in Synthetic Biologics' forward-looking statements include, among others, the additional clinical studies and results not meeting expectations and other factors described in Synthetic Biologics' report on Form 10-K for the year ended December 31, 2013 and any other filings with the SEC. The information in this release is provided only as of the date of this release, and Synthetic Biologics undertakes no obligation to update any forward-looking statements contained in this release on account of new information, future events, or otherwise, except as required by law.

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