Synthetic Biologics, Inc. (NYSE MKT: SYN), a developer of novel anti-infective biologic and drug candidates targeting specific pathogens that cause serious infections and diseases, announced today that it has been granted new patents in Europe and has received a notice of allowance in Australia that provide composition of matter coverage for various aspects of its *C. difficile* (*C. diff*) program. The Company’s extensive *C. diff* patent estate now includes over 25 U.S. and international patents.

Synthetic Biologics is in preclinical development of SYN-004, a novel second generation oral enzyme drug candidate, for co-administration with commonly used intravenous (IV) antibiotics intended to protect the gastrointestinal microflora (microbiome) from the effects of IV antibiotics for the prevention of *C. diff* infections. *C. diff* infections are a leading cause of hospital acquired infections that generally occur secondary to treatment with IV antibiotics, which are administered to approximately 14.4 million patients in the United States annually.

The recent European patents EP1451292 and EP2038411 were validated in 16 major European nations and provide composition of matter coverage for strains that allow production of Synthetic Biologics' proprietary oral enzymes and potential further candidate oral enzymes, respectively. In addition, allowed Australian Patent Application 2011257092 contains claims to compositions and methods of using the Company’s lead *C. diff* candidate, SYN-004.

"These new patents expand Synthetic Biologics’ *C. diff* patent portfolio and strengthen the Company's intellectual property position around our novel biologic candidate, SYN-004. Synthetic Biologics is developing SYN-004 to neutralize IV antibiotics in the gut, and is intended to protect and maintain the balance of bacterial flora in the GI tract, thereby preventing *C. diff* infection," said Jeffrey Riley, Chief Executive Officer of Synthetic Biologics. "The granting of these patents is another key development in Synthetic Biologics' plan to initiate Phase Ia and Ib *C. diff* clinical trials during the second half of 2014."
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 treatment to reduce the impact of methane producing organisms on constipation-predominant irritable bowel syndrome (C-IBS), an oral biologic to protect the gastrointestinal microflora from the effects of IV antibiotics for the prevention of Clostridium difficile (C. difficile) infection, 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](http://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 the size of the market, the expected benefits of the drug candidate and Synthetic Biologics' intended clinical development plan. 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 the ability to successfully develop the drug candidate, the ability to receive regulatory required approval 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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