REPLY EXHIBIT 8

Reply Exhibit 8 – Synthetic Biologics, Inc. prospectus supplement filed February 19, 2021 (excerpts)

Nejmeh v. Theriva Biologics, Inc., No. 3:26-cv-00705-ART-CSD (D. Nev.)

Source: SEC EDGAR, Accession No. 0001104659-21-025447.

Filed Pursuant to Rule 424(b)(5)
Registration Statement No. 333-224728

Prospectus Supplement
(To Prospectus dated May 15, 2018)



Up to $50,000,000 of Shares

Common Stock

We have entered into an Amended and Restated At Market Issuance Sales Agreement, dated February 9, 2021, or the sales agreement, with B. Riley Securities, Inc., or B. Riley, and A.G.P./Alliance Global Partners, or AGP and together with B. Riley, the sales agents, relating to the sale of shares of our common stock offered by this prospectus supplement and the accompanying base prospectus. In accordance with the terms of the sales agreement, under this prospectus supplement and accompanying base prospectus we may offer and sell shares of our common stock, having an aggregate offering price of up to $50,000,000 from time to time through or directly to the sales agents, with each acting as sales agent or principal. The sales agreement amended and restated the original sales agreement, dated August 5, 2016, as amended by amendment no. 1 thereto, dated May 7, 2018, by and between us and B. Riley, or the original sales agreement, to include AGP as an additional sales agent. As of the date of this prospectus supplement, we have sold an aggregate of 65,685,544 shares of our common stock (on a post 2018 split basis) having an aggregate offering price of $63,601,894 under the sales agreement and the original sales agreement with B. Riley and/or AGP as sales agent.

On February 18, 2021, the last reported sale price of our common stock on the NYSE American LLC was $0.882 per share.

Sales of our common stock, if any, under this prospectus supplement will be made by any method permitted that is deemed an "at the market offering" as defined in Rule 415 under the Securities Act of 1933, as amended (the "Securities Act"). The sales agents are not required to sell any specific amount but will act as our sales agents using commercially reasonable efforts consistent with their respective normal trading and sales practices. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

The sales agents will be entitled to compensation at a commission rate equal to up to 3.0% of the gross sales price per share sold. In connection with the sale of the common stock on our behalf, each sales agent will be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation of the sales agents will be deemed to be underwriting commissions or discounts. We have also agreed to provide indemnification and contribution to the sales agents with respect to certain liabilities, including liabilities under the Securities Act.

Investing in our common stock involves a high degree of risk. Before making an investment decision, please read the information under the heading "Risk Factors" beginning on page S-3 of this prospectus supplement and in the documents incorporated by reference into this prospectus supplement, and the accompanying base prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus supplement or the accompanying base prospectus. Any representation to the contrary is a criminal offense.

B. RILEY SECURITIES **A.G.P.**

The date of this prospectus supplement is February 19, 2021.

PROSPECTUS SUMMARY

The items in the following summary are described in more detail elsewhere in this prospectus and in the documents incorporated by reference herein. This summary provides an overview of selected information and does not contain all the information you should consider before investing in our common stock. Therefore, you should carefully read the entire prospectus, any prospectus supplement and any free writing prospectus that we have authorized for use in connection with this offering, including the "Risk Factors" section and other documents or information included or incorporated by reference in this prospectus and any prospectus supplement before making any investment decision.

Our Business

We are a late-stage clinical company focused on developing therapeutics designed to preserve the microbiome to protect and restore the health of patients. Our lead candidates poised for Phase 3 development are: (1) SYN-004 (ribaxamase) which is designed to protect the gut microbiome from the effects of certain commonly used intravenous (IV) beta-lactam antibiotics for the prevention of *C. difficile* infection (CDI), overgrowth of pathogenic organisms and the emergence of antimicrobial resistance (AMR), and (2) SYN-010 which is intended to reduce the impact of methane-producing organisms in the gut microbiome to treat an underlying cause of irritable bowel syndrome with constipation (IBS-C). Our preclinical pursuits include an oral formulation of the enzyme intestinal alkaline phosphatase (IAP) to treat both local GI disorders and systemic diseases as well as monoclonal antibody therapies for the prevention and treatment of pertussis, and novel discovery stage biotherapeutics for the treatment of phenylketonuria (PKU).

Our Product Pipeline

C- Cedars-Sinai Medical Center Collaboration
I- Intrexon Collaboration
T- The University of Texas at Austin Collaboration
M – Scientific Collaboration with Massachusetts General Hospital