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Conagen acquires production platform of therapeutic proteins

22 August 2019 | News

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US based Conagen, a vertically integrated synthetic biology company, leader in bioengineering, has acquired a fermentation-based technology for the production of therapeutically useful glycoproteins.

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In addition to a suite of more than 10 already developed therapeutic glycoproteins, the host platform will be used by Conagen for development of both novel and generic drugs.

Industrial fermentation typically employs microbes which can be cultured rapidly at the largest scales without cell disruption or losses in productivity. Characteristics of these therapeutics, which include desirable glycostructures and other post-translational modifications, have limited their commercial production to fragile mammalian cell systems at relatively small scales.

"One of the most exciting features of this host organism is its ability to express glycoproteins harboring glycostructures which promote the desired immune cell functions. This is a very unusual feature to find in a robustly fermentable microbe. It is also advantaged by its ability to tolerate the engineering required to customize these glycostructures while preserving the microbe's robustness," said Vice President of Research and Development, Casey Lippmeier

The platform will reduce costs, and the savings can be passed down to patients. This is important to the pharmaceutical industry which is under increasing pressure to reduce time and capital in developing drugs," said Oliver Yu, Ph.D., co-founder, and CEO of Conagen.

The largest category of therapeutic glycoproteins is the blockbuster monoclonal antibodies upon which the entire $100 billion immunotherapy and antibody-drug conjugate market is based.