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Singapore: Catalent Pharma Solutions, and Zumutor Biologics Inc., has announced a successful research study, combining Catalent's proprietary GPEX technology and Zumutor's fucose knockout platform, to create new and more efficacious antibodies.

Headquartered in Somerset, N.J, USA, Catalent is the leading global provider of advanced delivery technologies and development solutions for drugs, biologics and consumer health products.

Zumutor Biologics Inc is a pre-clinical stage biologics discovery and development company, headquartered in Woburn, MA with Research & Development facility in Bangalore, India.

The GPEX technology platform creates stable, high-yielding mammalian cell lines for even the most difficult to express proteins. The advantages of applying GPEX technology span from early feasibility studies and clinical manufacturing, to commercial scale production.

Working in partnership, Catalent and Zumutor have created a fucose knockout GPEX cell line expressing high levels of an anti-HER2 antibody. The resulting modification completely removes fucose from the antibody, resulting in greatly enhanced Antibody Dependent Cellular Cytotoxicity (ADCC) without impacting production levels. The study was conducted in Zumutor's research and development facility in Asia.

Kavitha Iyer, Chief Operating Officer of Zumutor, said, "Zumutor's fucose knockout technology enables us to create new and more efficacious antibodies. The inherent stability of GPEX cell lines makes these modifications possible and allows GPEX

cell lines to be modified quickly, to produce a more potent antibody. Our partners have the potential to leverage this improved technology in therapeutic antibody product development, and generate a new regime of drug products engineered toward patient benefits."

"GPEX technology was designed to offer our partners advantages over conventional cell line engineering systems, including increased flexibility and higher, more stable yields," added Mike Riley, Vice President & General Manager of Catalent Biologics. "The use of GPEX technology, in combination with Zumutor's afucosylation platform, has shown exciting results, and has the potential to be applied to other antibodies that could benefit from ADCC enhancement as part of their development programs."