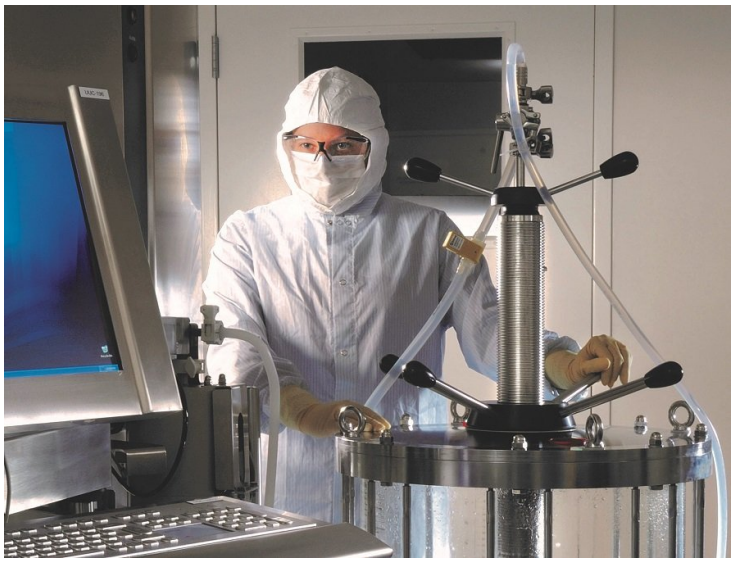
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ASIA EDITION

Merck launches VirusExpress platform to push cell and gene therapies

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Proven, scalable platform increases dose yields and reduces process development time for cell and gene therapies



Merck has bolstered its viral vector manufacturing capabilities with the launch of its VirusExpress™ Lentiviral Production Platform. This new platform helps to overcome lentiviral production challenges and can reduce process development time by approximately 40 percent, based on Merck's experience as a contract development and manufacturing organization.

Angela Myers, head of Gene Editing & Novel Modalities, Life Science, at Merck says, "We are committed to accelerating manufacturing of cell and gene therapies with the ultimate goal of getting these lifesaving treatments to patients faster. By increasing dose yields and dramatically reducing process development time, this new platform will help us reach this goal."

Using a suspension cell line rather than an adherent-based production, coupled with a chemically defined cell culture media and process with built-in scalability, Merck's VirusExpress™ Platform meets multiple market needs. In addition to accelerating process development, the suspension culture format allows each batch of virus to be larger yielding more patient doses. Additionally, suspension culture is amenable to true scale-up, while being less labor-intensive. The chemically defined medium eliminates the safety, regulatory and supply chain concerns related to animal- and human-derived materials.

Merck's VirusExpress™ Platform offers a simplified upstream workflow, making processes easier to manage, adjust and scale. Flexible licensing allows companies to manufacture vectors by using either Merck's contract manufacturing capabilities, third-party contract development and manufacturing organization or in-house development.

The Life Science business of Merck is a leading contract development and manufacturing organization combining an integrated portfolio of manufacturing solutions with proven commercialization experience. This new offering underscores Merck's continued investment in cell and gene therapies. In April 2020, the company announced a new €100 million, 140,000-square-foot manufacturing center at its Carlsbad, California, USA, location that will double the existing production capacity and support large-scale commercial manufacturing. Today, the Life Science business of Merck manufactures vectors for two of the first five FDA-approved cell and gene therapies.