NEW VIRAL AND NON-VIRAL PLATFORMS FOR T-CELL ENGINEERING

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FDA approval of the first Chimeric Antigen Receptor T cell (CAR-T) therapy offers cancer patients more promise than ever for curative effects. However, many technical challenges in T cell gene delivery still remain in order for this therapy to become a standard of care practice. In this webinar, we will highlight the different viral and non-viral delivery approaches used in T cell engineering for cell and gene therapy applications including:

- New solution for small-to-large scale serum-free, suspension lentiviral production – LV-MAX™ Lentiviral Production System
  - Platform development process using Design of Experiment (DOE) methodologies
  - High-throughput to large scale bioreactor protocols
  - Cost benefits of this system over current methods

- Novel gene editing tools for primary T cells
  - New potent gene editing tools to increase knock-in and knock-out efficiency
  - Addressing non-viral delivery barriers through protocol optimization

Learning Objectives:
- Current industry trends and challenges of cell and gene therapy manufacturing
- Benefits of innovative new upstream technologies for virus generation in suspension