







"We have assembled one of the broadest and most diverse set of cell and genetic therapy capabilities and teams, and we're well poised to deliver on the promise of these technologies for patients."

Bastiano Sanna

Executive Vice President, Chief of Cell and Genetic Therapies and VCGT Site Head



Vertex Cell and Genetic Therapies

Pioneering cutting-edge technologies to transform the lives of patients with serious diseases

Cell and genetic therapies represent two rapidly emerging therapeutic modalities with the potential to treat — and even cure — several of the diseases we're focused on at Vertex. Our team at Vertex Cell and Genetic Therapies (VCGT) has deep experience in cell-and-gene therapy sciences. Leveraging the best technologies, manufacturing capabilities and expertise with a patients-first philosophy, we're making significant progress in multiple disease areas with unmet need.

Building on our expertise and history of innovation in small molecules, we are on the leading-edge of exciting new technologies like stem cell differentiation, novel devices for immunoprotection, CRISPR/Cas9 gene editing, and novel adenoassociated virus (AAV) capsids to target the underlying cause of serious diseases. We're also investing in technologies that will aim to improve the treatment experience for patients, such as novel targeted conditioning regimens that may enhance the hematopoietic stem cell transplant process. Our cell therapy programs are revolutionizing the manufacturing processes for both autologous and allogeneic treatments that will potentially be transformative for patients. Our work in cell and genetic therapies spans multiple sites and relies on the collaboration of many different teams located across multiple locations

Our Vertex Cell and Genetic Therapies Sites Boston

Home to our global headquarters, our Fan Pier research and development (R&D) site is home to approximately 3,000 employees, with more than 400 working in research. 35% of this space is dedicated to lab and manufacturing space. Our scientists are experts in chemical biology and proteomics, structural biology and biophysics, human disease modeling, functional genomics, chemistry automation and high-throughput information. This research site is working on multiple different projects, including CRISPR gene-editing and small molecule medicines. Since the Boston site is our global headquarters, you'll also find additional teams that are crucial for our business, like patient advocacy, government affairs and business development.

Cambridge

We have a 32,000-square-foot facility in Cambridge, Massachusetts, where we focus on manufacturing clinical materials. This includes materials management, production, quality control testing, batch release and shipping operations.



Newly opened in 2022, The Leiden Center is a state-of-the-art research and clinical manufacturing site is home to about 350 employees working in research, clinical development and manufacturing for investigational cell and genetic therapies. The facility houses 57,000 square feet of leading-edge R&D lab space and 21,000 square feet of manufacturing space for each of our cell and genetic therapy disease areas. 75% of the building is dedicated to lab and research space as we work to rapidly advance our therapies.

The diversity of the therapies we are developing across Duchenne muscular dystrophy, sickle cell disease, beta thalassemia and type 1 diabetes require multiple manufacturing models. Our cell and genetic therapy programs are revolutionizing the processes to manufacture both autologous and allogeneic treatments. Along with our internal capabilities, we leverage external partnerships to secure capacity and ensure redundancy in order to reach patients around the globe.

Managing Our Environmental Footprint

We made significant efforts to build the Leiden Center to be one of Vertex's most energy efficient buildings. Minimizing the building's environmental footprint and reducing energy consumption and overall carbon emissions contribute to our goal of meeting the U.S. Green Business Council's LEED Platinum Certification for interior design and construction.

- Over **912.89** tons of construction materials were recycled and reused throughout the construction process of the building
- **50** products with Environmental Product Declarations and 15% of total products used salvaged, reused or recycled materials
- Installation of high efficiency water fixtures to achieve excellence in water efficiency at 11% higher than the level required

Providence

Our R&D site in Providence, Rhode Island joined Vertex in 2019. This 50,000-squarefoot (and growing) facility is a key partner for our type 1 diabetes program. At the intersection of biology, technology and engineering, our team has expertise in device design, tissue engineering, biomechanics, bioenergetics, process development and more. 75% of the building is dedicated to lab, manufacturing and research space for our cell and genetic therapy disease areas. Vertex plans to continue expanding Providence's clean room manufacturing capabilities with the addition of a new manufacturing line of equipment and upgraded utilities capabilities.

Warwick

Our Warwick, Rhode Island site is a 12,700-square-foot facility that serves as an extension of the Providence R&D site and focuses on design, prototyping, equipment, and process support for our programs.

Collectively, the expertise of the engineers and scientists who work at our VCGT sites, combined with top-of-the-line facilities, allows Vertex to stay at the forefront of innovation and make meaningful contributions to the field of biotechnology and the patients we are committed to serving.



