

CRISPR Therapeutics Achieves Historic Milestone with First CRISPR/Cas9 Therapy Approval, Advances Oncology Pipeline in H1 2024

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CASGEVY™ Gains U.S. FDA and European Approval, Expanding Access to Gene-Edited Therapies; Company Strengthens Leadership and Broadens Therapeutic Focus



Between January and June 2024, CRISPR Therapeutics solidified its position as a pioneer in gene-editing technology with a series of groundbreaking achievements, marked by the approval of its flagship therapy, CASGEVY™ (exa-cel), by both the U.S. FDA and the European Commission. This therapy, developed in collaboration with Vertex Pharmaceuticals, is the first CRISPR/Cas9-based gene-edited therapy to receive regulatory approval, making it a historic milestone in the field of gene editing.

Breakthroughs in Gene-Editing Therapy

CASGEVY™ is now available for the treatment of transfusion-dependent beta thalassemia (TDT) and severe sickle cell disease (SCD), offering a potentially curative option for over 8,000 patients in the EU and approximately 1,000 patients in the U.S. The approval of CASGEVY™ represents a significant leap forward in precision medicine, bringing the promise of gene-editing technology closer to patients in need. CRISPR Therapeutics, in partnership with Vertex, has rapidly mobilized authorized treatment centers across the U.S. and Europe, with plans to expand this network further to ensure broad patient access.

Advancing the Oncology Pipeline

Building on the success of CASGEVY™, CRISPR Therapeutics has made substantial progress in its oncology pipeline, particularly with its next-generation CAR T-cell therapies, CTX112™ and CTX131™, which target CD19 and CD70, respectively. These therapies are part of the company's broader effort to develop innovative cancer treatments that leverage the precision of CRISPR/Cas9 technology. Additionally, CRISPR Therapeutics is advancing its in vivo gene-editing programs, with promising developments in CTX310™ and CTX320™, aimed at treating cardiovascular diseases like hyperlipidemia and elevated lipoprotein(a). The company has also initiated clinical trials for CTX211™, an allogeneic stem cell product designed to address Type 1 Diabetes, further expanding its therapeutic reach.

Exploration of New Therapeutic Areas

CRISPR Therapeutics is not resting on its laurels; the company is actively exploring new therapeutic areas through preclinical programs that utilize lipid nanoparticle (LNP) delivery systems for gene editing. Among these, the company has reported encouraging results in preclinical studies targeting refractory hypertension and acute hepatic porphyria, with clinical trials expected to commence in late 2025. These initiatives reflect CRISPR Therapeutics' commitment to expanding the applications of its gene-editing platform beyond its current focus areas.

Financial Strength and Leadership Expansion

Financially, CRISPR Therapeutics remains well-positioned, ending Q2 2024 with a robust cash reserve of approximately \$2 billion. This financial stability is further bolstered by a \$280 million investment received earlier in the year, providing the company with the necessary resources to continue advancing its clinical trials and expanding its pipeline without the immediate need for additional capital.

To support its ambitious growth strategy, CRISPR Therapeutics has also strengthened its leadership team. The appointment of Dr. Naimish Patel as Chief Medical Officer and the promotion of Julianne Bruno to Chief Operating Officer are strategic moves designed to enhance the company's operational and clinical capabilities. These leadership changes are expected to drive CRISPR Therapeutics' agenda forward, focusing on long-term sustainability and continued innovation in the gene-editing space.

The first half of 2024 has been a period of remarkable progress for CRISPR Therapeutics, characterized by significant regulatory approvals, pipeline advancements, and strategic leadership enhancements. As the company continues to push the boundaries of gene-editing technology, it remains committed to transforming the treatment landscape for patients with serious diseases, reinforcing its position as a leader in the biopharmaceutical industry.