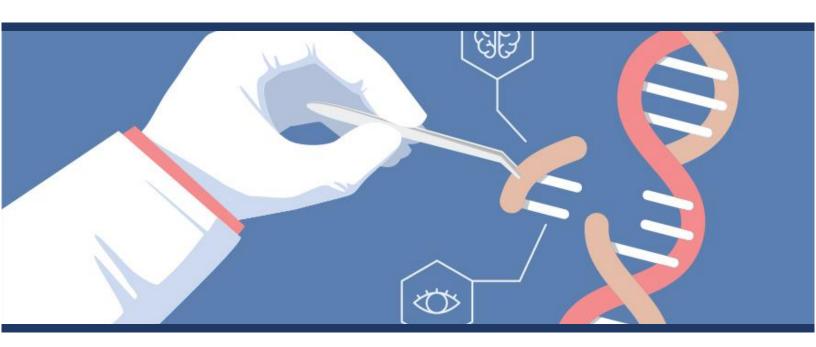


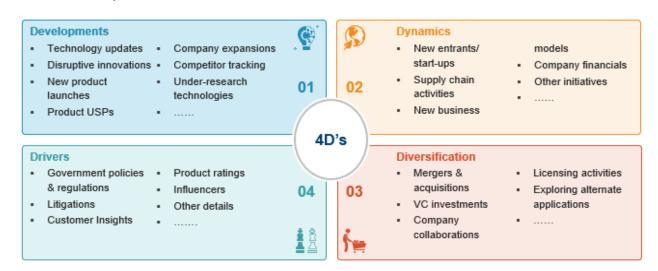
INTELLOTRACKER

CRISPR in HEALTHCARE

April 2023



ARANCA'S QUARTERLY SECTORIAL UPDATE ACROSS FOUR DIMENSIONS....





	DEVELOPMENTS	
Technology/ Innovations	BENSON @ HILL UtahStateUniversity.	US and German researchers publish study revealing new enzymatic capability of CRISPR systems, expanding potential applications beyond gene editing to include cancer therapeutics, microbial community shaping, and enhanced gene editing through counterselection. Source: News Medical Lifesciences
New Product Launch	Caldevron	Aldevron launched Eureca-V Nuclease, the wild-type MAD7 CRISPR Type-V nuclease, licensed from Inscripta and expands the toolkit of available CRISPR nucleases for therapeutic, diagnostic, and agricultural workflows. Source: Company News
Technology/ Innovations	(Aix-Marselle	Aix-Marseille University virologists find evidence that Pandoravirus neocaledonia evolved from smaller viruses, using CRISPR/Cas9 gene editing to study its evolutionary history. The findings, published in Nature Communications, shed light on the origins of giant viruses. Source: Scientific Literature
Technology/ Innovations	CR SPR B TS	CrisprBits creates OmiCrisp, a CRISPR-based test to identify SARS-CoV2 and distinguish between Omicron and non-Omicron variants, with collaboration from C-CAMP-InDx initiative supported by the Indian Department of Biotechnology. Source: Economic Times
Technology/ Innovations	新州大学 zhenazioù awvereny	Zhengzhou University researchers have developed an easy-to-use method that uses CRISPR gene editing to detect small levels of cancer-related microRNAs (miRNAs) in exosomes in plasma and efficiently differentiate between malignant and benign samples. Source: Scientific Literature
Technology/ Innovations	Sherlock	Sherlock Biosciences receives US patent for Cas12 enzyme, solidifying its position as the leading CRISPR-based diagnostics provider in the US. Obtains exclusive rights from Tolo Biotech and additional IP from the Broad Institute, establishing a strong intellectual property position. Source: Company News
Technology/ Innovations	NOON INSTITUTE NO Integration Current Plansarch at MIT UMass Chan Metercal schools Metercal schools Metercal schools	Researchers from USA have developed a new lipid nanoparticle with potential to deliver gene editing tools to cells in the lung. This marks a promising step in developing new, inhalable therapies for lung diseases such as cystic fibrosis. Source: University News

	DYNAMICS		
Strategic Update	editas	Editas Medicine announces strategic update, refocusing R&D on hemoglobinopathies and in vivo discovery, leading to a 20% reduction in headcount to extend cash runway until 2025, prioritizing programs with high chances of technical, regulatory, and commercial success.	
		Source: Company News	
Other Initiatives	∛SYNTHEGO	Synthego Corp introduces CRISPR Development Partners, an ecosystem of service partners including Arctoris, BrainXell, Curia, PhenoVista, and Pluristyx, offering a streamlined workflow for CRISPR-based drug development, from editing to downstream services, to accelerate the process.	
		Source: Company News	
	Diversification		
Licensing Activities	editas	Editas Medicine signs definitive agreement with Shoreline Biosciences, granting licenses for SLEEK and AsCas12a gene editing technologies and transferring preclinical gene-edited iPSC-derived natural killer cell (iNK) programs and manufacturing technologies.	
	SHORELINE	Source: Company News	
Mergers & Acquisition	Sherlock	Sherlock Biosciences acquires Sense Biodetection, bolstering its go-to-market strategy with Veros™ rapid molecular test platform and manufacturing capabilities for accessible and accurate diagnostics.	
	BIOSCIENCES U	Source: Company News	
VC Investment	CR SPR B TS	Pre-seed funding for CrisprBits has been secured from the US-based VJ Group for \$250,000. The funding will be used towards product development, team expansion and for research and development.	
	VJTechnologies 🗸	Source: BioSpectrum India	
Company Collaboration	elevatebia	Moderna and Life Edit Therapeutics form strategic collaboration to develop in vivo mRNA gene editing therapies. The partnership combines Life Edit's gene editing technologies with Moderna's mRNA platform to target specific therapeutic goals.	
		Source: Company News	
Licensing Activities	VERTEX CRISPR	Vertex Pharmaceuticals and CRISPR Therapeutics sign non-exclusive licensing agreement for CRISPR/Cas9 gene editing technology, facilitating the advancement of Vertex's hypoimmune cell therapies for type 1 diabetes (T1D).	
		Source: Company News	



	DRIVERS	
Consumer Insights	THE ROYAL SOCIETY NATIO NAI ACADEMIES Thy Academy of Madical Sciences UNESCO	Victoria Gray told the Third International Summit on Human Genome Editing about the gene modification treatment she's received for sickle cell disease. Source: Chemistry World
Regulatory Approval	Intelia THERAPEUTICS	Intellia Therapeutics announced the U.K. Medicines and Healthcare products Regulatory Agency (MHRA) has awarded the Innovation Passport for NTLA-2002, an in vivo genome editing candidate being developed for the treatment of hereditary angioedema (HAE). Source: Company News
Regulatory Approval	VERTEX CRISPR	EMA grants approval to Vertex and CRISPR Therapeutics' gene-edited therapy exagamglogene autotemcel (exa-cel), previously known as CTX001™, an autologous, ex vivo CRISPR/Cas9 gene-edited treatment. Source: Thalassemia International Federation
Regulatory Approval	V <u>ERTE</u> X	Vertex Pharmaceuticals announced that the U.S.FDA has approved the Investigational New Drug Application (IND) for VX-264, a fully differentiated pancreatic islet cell therapy encapsulated in a Vertex-developed immunoprotective device with the potential to treat type 1 diabetes (T1D). Source: Company News
Regulatory Approval	Intelia THERAPEUTICS	Intellia Therapeutics announced that the U.S. Food and Drug Administration (FDA) granted Regenerative Medicine Advanced Therapy (RMAT) designation to NTLA-2002 for the treatment of hereditary angioedema (HAE). Source: Company News

SOLUTION PORTFOLIO – TECHNOLOGY RESEARCH & ADVISORY

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IP Strategy	Technology Intelligence	Growth & Strategy	
How best can we proactively manage and monetise our technical knowhow / intellectual property?	How best can we keep abreast of technology trends, competitor activity and headwinds / tailwinds in our domain?	Which technologies do we invest in? How do we ensure quick wins? Speed to market?	
 IP Portfolio Analysis 	 Competitor Benchmarking 	 R&D Strategy Roadmaps 	
■ IP Monetisation	 Tech / IP Landscapes 	 Technology Scouting 	
■ IP Valuation	 Technology Watch 	 Open Innovation 	
Prior Art Searches	 Market Analysis / Trends 	 Product Development 	
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