



Merck's Corporate Venture M Ventures Arm Backs Nucleai to Advance Its First-in-class Spatial AI Biomarker in Active Clinical Enrollment

The Extension Funds Nucleai to Advance Its First-in-Class Spatial AI Biomarker in Active Clinical Enrollment

Investment Expands Deployments of AI-Powered Spatial Biomarker Technology, Strengthening Companion Diagnostics for ADCs, Bi-specifics, and Immunotherapies
M Ventures is the corporate strategic venture arm of Merck KGaA, Darmstadt, Germany

April 03, 2024 07:00 AM Eastern Daylight Time

CHICAGO--([BUSINESS WIRE](#))--Nucleai, a spatial AI biomarker company that deciphers cellular conversations and maps cellular interactions within tissue samples to predict therapeutic outcomes, has secured a \$14 million investment led by M Ventures, the corporate venture capital arm of Merck KGaA, Darmstadt, Germany, and supported by existing investors, bringing the total funding to \$60 million. The investment enables Nucleai to further deploy its AI algorithms for the prospective enrollment of patients in clinical trials – a first in the field and a significant advancement in personalized solutions tailored to the distinct needs of patients.

The funding exemplifies Nucleai's growing momentum in the life sciences industry, evidenced by collaborations with over 60 percent of the top 20 biopharma companies, venture backing from renowned investors like Section 32 and Sanofi Ventures, and now with M Ventures. The funding will accelerate the deployment of Nucleai's spatial analysis technology that transforms a static biopsy slide into a dynamic AI-guided action plan, empowering pathologists with the intelligence to anticipate and navigate complex diseases, like cancer, with unmatched precision.

By integrating AI algorithms for prospective patient enrollment in clinical trials, Nucleai is spearheading a first-in-field approach to personalized medicine. This process is crucial for enhancing the accuracy of treatment targeting and activation within the body, particularly for advanced therapeutics such as antibody-drug conjugates (ADCs) and bi-specifics. Nucleai's platform tailors therapy strategies to the intricate cellular landscape of each patient, optimizing clinical trial participant selection. This personalized approach not only improves the likelihood of successful clinical outcomes but also significantly contributes to the speed and efficiency of bringing new therapies to market.

Leveraging AI and machine learning (ML), Nucleai analyzes pathology images and spatial data at the cellular and tissue levels. The proprietary technology extracts detailed patterns and features from medical images, offering profound insights into the tumor microenvironment, cellular morphology, and spatial relationships between different cell types. These capabilities advance drug development, refine biomarker discovery, and improve the precision of therapeutic targeting, ultimately leading to more effective and personalized treatment options for patients.

Avi Veidman, CEO and Co-Founder of Nucleai, said, "M Ventures' investment boosts our ability to scale and deploy our spatial AI technology for patient enrollment in clinical trials and supports our work in the rapidly emerging areas of immunotherapies, antibody-drug conjugates, and bi-specifics. Our vision is that every next-generation therapeutic is accompanied with an AI-enabled companion diagnostic, ensuring that each patient's treatment pathway is informed and efficacious. This funding positions us to scale spatial AI, not just to intercept but anticipate the complex behavior of diseases."

Noga Yerushalmi, Investment Director at M Ventures, who is appointed to the board of Nucleai, stated, "Nucleai's technology stands out by being the first spatial AI tool used by pathologists for clinical trial patient selection that is directly connected to a drug development program, setting them apart from other companies. Nucleai's biology-driven mindset and their multimodal approach, which combines traditional pathology data with spatial biology data, allows for more accurate predictions of treatment responses, aligning perfectly with our commitment to optimise speed of new therapies to reach patients."

By moving beyond traditional pathology's analog analysis, Nucleai leverages AI to create dynamic, digital maps from biopsy samples, uncovering the complex interactions at play within tissue. This innovation marks a shift in disease diagnosis and treatment, offering an in-depth contextual view that underpins the development of novel therapeutics.

About Nucleai

Nucleai is the leading AI-powered spatial biomarker company, driving innovation at the intersection of technology and healthcare. Leveraging military intelligence-grade geospatial analytical methods, it intercepts, interprets, and analyzes complex cellular conversations and spatially oriented interactions within tissue samples, translating them into actionable insights. Nucleai's platform empowers pathologists and researchers with an AI-powered data-rich action plan, paving the way for more informed decisions in the development of bi-specifics, antibody-drug conjugates (ADCs), and immunotherapy. Nucleai's investors include Section 32, Sanofi, Vertex Ventures, M Ventures, and Debiopharm Innovation Fund. It is headquartered in Israel and Chicago. For more information, please visit www.nucleai.ai.

About M Ventures

M Ventures is the strategic, corporate venture capital arm of Merck KGaA, Darmstadt, Germany. From its headquarters in the Netherlands and offices in Germany, USA and Israel, M Ventures invests globally in transformational ideas driven by innovative entrepreneurs. Taking an active role in its portfolio companies, M Ventures teams up with management teams and co-investors to translate scientific discoveries into commercial success. M Ventures focuses on identifying and financing novel solutions to some of the most difficult challenges, through company creation and equity investments in fields that will impact the vitality and sustainability of Merck KGaA, Darmstadt, Germany's current and future businesses.

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