

Sheba Medical Center, ARC & Mana.bio Announce Partnership to Revolutionize RNA Delivery for Cancer & Autoimmune Diseases

Collaboration harnesses advanced AI to enhance personalized medicine by using RNA delivery to reprogram T cells in the fight against challenging diseases

TEL AVIV, ISRAEL, October 1, 2024 /EINPresswire.com/ -- [Sheba Medical Center](#), Israel's largest hospital and a global leader in clinical trials and medical innovation, and [ARC Innovation](#), the innovation arm of Sheba, today announced a collaborative research agreement with [Mana.bio](#) to leverage its AI/ML-based programmable RNA delivery platform. This partnership aims to bridge significant technological gaps in the delivery of RNA molecules to enhance treatment for cancer and autoimmune diseases.

The joint effort will involve utilizing Mana.bio's AI-based RNA delivery system within Sheba's state-of-the-art research laboratories to target T cells from healthy donors. The results of this study will be processed and added to enhance Mana.bio's AI prediction models, which will refine and optimize the RNA delivery mechanism via the programmable platform to improve transfection efficacy and safety profiles.

As part of this collaboration, Sheba Medical Center will contribute its extensive expertise in utilizing T cells for targeted therapies, while Mana.bio will leverage its programmable AI platform to provide specialized RNA delivery solutions. The ultimate goal is to quickly develop a highly efficient system for delivering RNA molecules directly into patients' T cells, empowering these cells to target specific diseases such as solid tumors, hematologic cancers, and potentially autoimmune disorders. This innovation could lead to more effective therapies and significantly improve patient outcomes, making a profound impact on global healthcare.

Mana.bio has already made significant strides with its innovative RNA delivery technologies, emerging as a top contender in this rapidly evolving field. The collaboration with Sheba Medical Center represents an important milestone for both organizations, merging Sheba's pioneering clinical research capabilities with Mana.bio's programmable RNA delivery platform powered by AI.

This agreement is part of Sheba's commitment to becoming one of the world's first fully-integrated AI hospitals. Through ARC, Sheba is transforming healthcare by using AI to enhance patient care, diagnostics, and treatment personalization. As a leader in AI healthtech, Sheba

collaborates with top research and academic institutions to integrate advanced AI solutions across its departments, positioning itself at the forefront of medical innovation.

For Mana.bio, this partnership with Sheba Medical Center marks a meaningful in scaling its technology and advancing its mission to unlock life-changing therapies. For Sheba, this collaboration solidifies its position as a global leader in medical research and innovation, continually pushing the boundaries in the fight against complex diseases.

Professor Eyal Zimlichman, MD, Chief Innovation and Transformation Officer at Sheba Medical Center and Founder and Director of ARC Innovation, said: "This collaboration signifies the convergence of Sheba's world-class medical innovation with Mana.bio's breakthrough AI-based RNA delivery technologies. Together, we are paving the way for the next generation of personalized medicine. By harnessing RNA's power to reprogram T cells, we have the opportunity to revolutionize treatment for cancer and autoimmune diseases, offering renewed hope to patients worldwide."

Yogev Debbi, Co-founder and CEO of Mana.bio, said: "Our team is excited to be working with Sheba Medical Center on such a novel study to push the boundaries of RNA delivery. Our AI based programmable platform enables the discovery of efficient, safe, more precise delivery formulations - providing us the opportunity to unlock the full potential of RNA therapies across a wide range of disease areas."

Dr. Gal Cafri, Immunotherapy and Genetic Engineering Group Lead at Sheba Medical Center, said, "The collaboration between my group, Dr. Yochai Wolf's group, and Mana.bio combines our advanced research specialties in T-cell biology with ARC's vision for future smart therapies. The AI-based platform from Mana.bio will help us identify potential new and effective mRNA delivery solutions for T-cells."

As this research advances, Sheba Medical Center and Mana.bio aim to quickly translate findings into clinical practice. The partnership is focused on developing RNA delivery techniques that enhance T cell responses against cancer and autoimmune diseases. By prioritizing the acceleration of clinical trials, they seek to provide effective therapies to patients, ultimately improving treatment options and health outcomes.

About ARC

ARC is powering the transformation of health. Through its continuous pipeline of innovation, ability to facilitate large-scale transformation, access to leading health organizations, and ability to drive economic growth and development, ARC equips all player-types in the ecosystem to transform global health. For more information, visit: <https://arcinnovation.org>

About Sheba Medical Center

The largest and most comprehensive medical center in the Middle East, Sheba Medical Center, Tel Hashomer is generating global impact through its medical care, research and healthcare

transformation. Sheba's City of Health boasts acute-care, rehabilitation, children's, cancer and geriatric hospitals, research and innovation hubs, medical simulation center and center for disaster response on one comprehensive campus in the center of Israel. Sheba serves as a true hospital without borders, welcoming users and healthcare professionals from all over the world and consistently providing the highest-level medical care to all in need. Sheba has been ranked a World's Best Hospital by Newsweek six years in a row (2019 – 2024). For more information, visit: <https://sheba-global.com/>

About Mana Bio

Mana.bio is a biotechnology company revolutionizing targeted RNA delivery using artificial intelligence-enabled LNP discovery and optimization. This approach accelerates research and enables reliable, tissue-specific delivery to unlock the full potential of RNA and CRISPR therapies. Mana has raised a \$19.5M seed financing co-led by Andreessen Horowitz Bio + Health, Base4 Capital, NFX and LionBird, and its technology is based on academic research from the Technion Institute of Technology. Mana.bio is pioneering the next wave of biotechnology advancement by merging AI and biological insight. For more information, visit: <https://www.mana.bio/>

Raoul Wootliff
N10S
+972546921720 ext.
[email us here](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/748028937>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2024 Newsmatics Inc. All Right Reserved.