Executive Summary

Match the Hatch Biotechnology, Inc.

Company Profile:
Industry: Biopharmaceuticals
Founded: 12/2023
Vision: To harness the proprietary Cell-Like Emulators (CLE) technologies for first in class therapies for cancer, immune diseases, and tissue regeneration.

Contact:
Dr. Young Jik Kwon, CEO
Email: youngjik.kwon@gmail.com
Cell: (949) 394-0708

Dr. Ik Soo Kim, Co-founder
Email: jenopaul@naver.com
Cell: +82 10 3204 9362

Financing Sought:
$10M Pre-seed fund tranched over 12 months

Projected expenditures: CMC validations, pre-clinical PoC studies, and target indication refinement

Primary Competitors:

Evox Tx: Launched with $13M Series A (2016); Partnership with Boehringer Ingelheim (2017); $46.5M Series B (2018)

Aanjarium Biosci: Founded in 2016; $61M Series A (2021)

ExoCoBio: Founded in 2017; $47M Series A (2017); $27 Series B (2020)

Legal Advisors:
Corporate: Pivotal Law Firm
IP: TBD
Accounting: TBD

Mission: Match the Hatch Biotechnology, Inc., led by visionary pioneers in bioscience and engineering, clinical experts, and seasoned industry leaders, develops a best-in-class platform technology– Cell-Like Emulators (CLE). This groundbreaking technology enables exceptionally facile, scalable, tunable, versatile, and expandable healthcare solutions. Our mission is to develop innovative, disruptive therapeutics that effectively normalize molecular, gene, and cell therapies in comprehensive and synergistic manners toward efficient and safe treatments.

The Problem and Solution: The pivotal challenges in emerging therapies, such as gene therapy, CAR-T/stem cell therapy, immunotherapy, and regenerative medicine, include daunting characterization, manufacturing, and chemistry (CMC), poor quality control (QC), costs, and biosafety. The CLE technology harnesses a paradigm-shifting approach by chemically, physically blebbing desired cells to produce cell-like vesicles that fully replicate the structure and function of the parent cells. The CLE technology achieves significantly higher yield in a substantially shorter time via incredibly simpler concentration and purification processes than conventional extracellular vesicle (EV) method, resulting homogeneous, stable, and economically competitive products. Additionally, all types of cells are subject to the CLE technology with consistently high efficiency.

Business Description: Match the Hatch Biotechnology, Inc. is a pre-clinical biopharmaceutical startup with a strong, diverse patent portfolio covering methodologies and applications for developing optimal personalized therapies in oncology, immunotherapy, and regenerative medicine. “Match the Hatch” is a famous fishermen’s term for deceiving fish with bait that matches what they eat. Similarly, Match the Hatch Biotechnology, Inc. is dedicated to developing an innovative next generation therapeutic platform that precisely matches the comprehensive molecular and biological contexts of cancer cells, immune cells, and stem cells. The CLE vesicles allow us to simulate the roles of parent cells and deliver therapeutic cargos, which can be easily engineered for desired functional addition. Our value proposition is to provide cancer therapies, immunotherapies, and regenerative medicine to patients with unprecedented therapeutic index. Our business model is based on the high feasibility for flexible, expandable, and modular product development, from highly achievable early aims to high-risk, high-reward targets.

About the Company: Match the Hatch Biotechnology, Inc. was founded in December 2023 by Dr. Young Jik Kwon, a professor of engineering, biology, and pharmacy at UC Irvine and an inventor of the company’s CLE technology, and Dr. Ik Soo Kim, a seasoned entrepreneur and the current vice chairman of Pharma Research Co., Ltd. The team also includes scientific, technological, clinical, business, financial, and legal advisors in addition to R&D and administrative personnel. The company is also based on strong international collaboration between the United States and Korea.

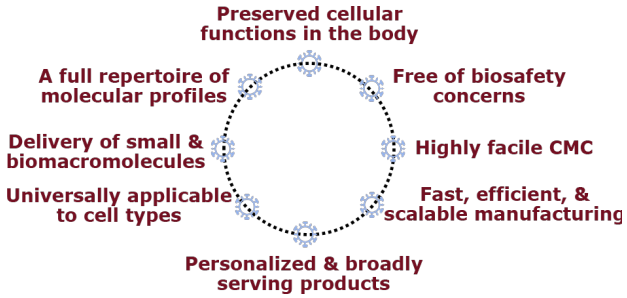
Products/Services: The company aims to immediately establish three best-in-class product lines:

- Cell-Like Emulators for Tissue Regeneration (CLETR): Mesenchymal stem cell (MSC)-like vesicles will be produced as the CMC validations target of CLE technology. The resulting MSC-like vesicles will be used for tissue regeneration and esthetic applications as early profitable products.

- Personalized cancer vaccines using Cell-Like Emulators for T Cell Activation (CLETA): Antigen-presenting cells (APCs) will be hybridized with target cells, and the resulting APC/target cells will be used to produce vesicles that are capable of precisely activating T cells for desired immune modulations, such as stimulation for cancer therapy and suppression for autoimmune disease treatment.

- Combined gene and cell therapy using Cell-Like Emulators for Biomacromolecule Delivery (CLEBD): Target biomacromolecules such as proteins, nucleic acids, and viruses are to be enclosed when their producer cells are converted to vesicles while concomitantly preserving the cells' biological functions, resulting in highly orchestrated, multi-modal therapies.

Technologies: Match the Hatch Biotechnology, Inc. develops and demonstrates innovative, disruptive, and paradigm-shifting technologies for broad therapeutic applications. The CLE technology addresses the current technological and clinical shortcomings of emerging therapies such as gene therapy, cell therapy, and regenerative medicine. The CLE vesicles possess the desired characteristics and properties as illustrated in the figure. The current IP portfolio includes approximately 10 issued and pending US and international patents.



Business Development Strategy: The CLE vesicles will be incorporated into various forms of therapeutic and esthetic products. MSC-derived CLE will be used to develop tissue regenerative medical devices and cosmetics (CLETR), which will also put steppingstones of CMC validations and optimization toward cell-free, cell therapeutics such as CLETA and CLENAD. In early stage of the company (seed round), milestones of process development and validation will be established, followed by full preparation for clinical trials in the second stage (Series A round). Forming partnership with global pharmaceutical companies is expected before Series B round, which will likely be synchronized with the company's IPO.