

About Us:

Eterna Therapeutics, a publicly traded, preclinical-stage company focused on using cutting-edge gene-editing tools to deliver highly innovative, effective, and safe off-the-shelf cell therapies for the treatment of advanced solid tumors

Our core technology utilizes best-in-class approach to engineer allogenic induced pluripotent stem cells (iPSCs) to express genes of interest and to efficiently differentiate these cells into mesenchymal stem cells (iMSCs)

We seek to capitalize on the intrinsic tumor-homing ability of MSCs to slip through the tumor's defenses and to deliver potent pro-inflammatory factors directly to the tumor microenvironment (TME), thus unleashing potent anti-cancer immune responses

Currently, we are focusing on developing iPSC-derived MSCs (iMSCs) that express critical factors, such as pro-inflammatory cytokines

Vision:



At Eterna, our vision is to improve the lives of patients with difficult-to-treat diseases through our innovative, effective, and safe, but accessible cellular therapies

Mission:



Eterna is focused on developing innovative off-the-shelf cellular therapies, leveraging iPSC-derived mesenchymal stem cells (iMSCs) to target solid tumors

Eterna's Science:

MSCs: Therapeutic Potential and Current Limitations:

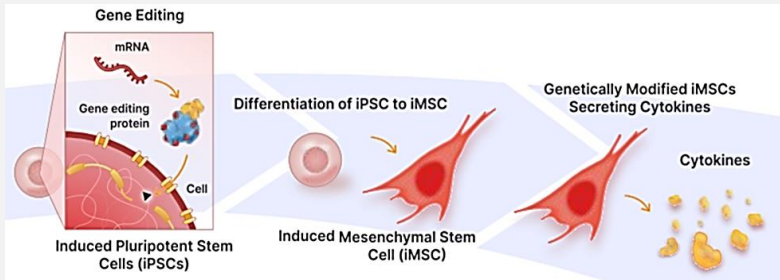
- MSCs are multipotent stromal cells capable of differentiating into various cell types like bone, muscle, and connective tissue
- MSCs secrete immunomodulatory factors, making them a promising for treating immune and inflammatory diseases ([Zhao et al., 2016](#))
- Differences in genetic background, donor age, and tissue origin (bone marrow vs. adipose tissue) contribute to MSC heterogeneity and inconsistent therapeutic outcomes ([Olmedo-Moreno et al., 2022](#); [Choudhery et al., 2022](#); [Wruck et al., 2021](#))
- MSCs exhibit batch-to-batch variability, limited proliferative capacity, and early senescence in culture, affecting the consistency of MSC-based therapies ([Olmedo-Moreno et al., 2022](#); [Choudhery et al., 2022](#); [Wruck et al., 2021](#))

Induced Pluripotent Stem Cell (iPSC)-derived MSCs (iMSCs):

- iPSC-derived MSCs (iMSCs) offer a solution to overcome the limitations of traditional MSC therapies ([Zhang et al., 2021](#); [Dupuis et al., 2021](#))
- iMSCs are generated from homogeneous, well-characterized cell lines under controlled conditions ([Zhang et al., 2021](#); [Dupuis et al., 2021](#))
- They are a stable and rejuvenated source for allogeneic therapies ([Bruschi et al., 2022](#))

Eterna's Pro inflammatory Cytokine (e.g. IL-7+IL-15) Secreting iPSC-derived MSCs (iMSCs) Therapy:

- Eterna's iMSC therapy is developed through reprogramming iPSCs using synthetic RNA molecules encoding reprogramming factors
- The company's proprietary mRNA-based platform enhances iPSC generation, enabling a scalable, off-the-shelf iMSC product. Our initial iMSC product is designed to deliver IL-7/IL-15 selectively to tumors, limiting systemic exposure and potential toxicity while significantly enhancing T-cell anti-tumor activity.



Our Pipeline:

Therapeutic Area*	Priority Indications	Candidate	Preclinical	Phase 1	Phase 2	Phase 3
Oncology	Triple Negative Breast Cancer	ERNA-101				
	Platinum-Resistant, TP53-Mutant Ovarian Cancer	ERNA-101				

*Note: Eterna is also exploring the potential of its cellular therapy in Inflammatory Diseases

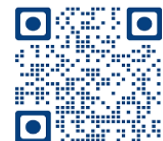
Expected Milestones & Goals:

- Investigational New Drug (IND) enabling studies/IND submission expected in ~Q4 2026
- Actively seek strategic partnerships to co-develop or out-license therapeutic assets and engage with potential collaborators to expand developmental opportunities

Our Collaborations:



Know More About Us:



Contact Us: 1035 Cambridge Street, Suite 18A, Cambridge, MA 02141; **Email:** Sanjeev.Luther@eternatx.com

“Laser Focus with Relentless Execution”