AGEX THERAPEUTICS

PMWC® 2019
PRECISION MEDICINE WORLD CONFERENCE

January 21, 2019

Forward Looking Statements

The matters discussed in this presentation include forward looking statements which are subject to various risks, uncertainties, and other factors that could cause actual results to differ materially from the results anticipated. Such risks and uncertainties include but are not limited to the success of AgeX Therapeutics and its affiliates in developing new stem cell-based products and technologies; results of clinical trials of such products; the ability of AgeX and its licensees to obtain additional FDA and foreign regulatory approval to market products; competition from products manufactured and sold or being developed by other companies; the price of and demand for such products; the ability of AgeX and its subsidiaries to maintain patent and other intellectual property rights; and the ability of AgeX to raise the capital needed to finance its current and planned operations. Any statements that are not historical fact (including, but not limited to statements that contain words such as "will," "believes," "plans," "anticipates," "expects," "estimates") should also be considered to be forward-looking statements. As actual results may differ materially from the results anticipated in these forward-looking statements they should be evaluated together with the many uncertainties that affect the business of AgeX and its other subsidiaries, particularly those mentioned in the cautionary statements found in AgeX's Securities and Exchange Commission filings. AgeX disclaims any intent or obligation to update these forward-looking statements.

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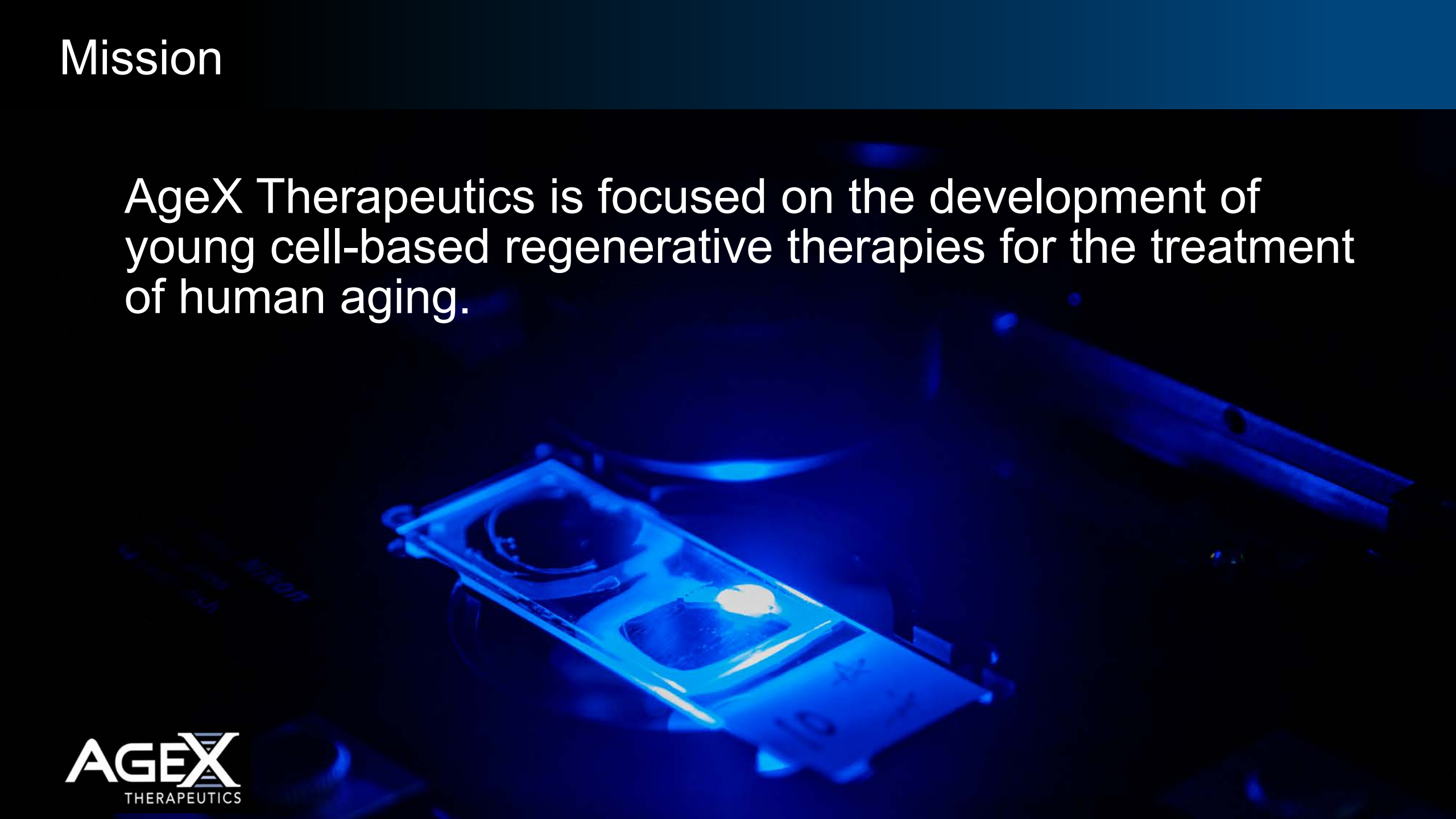
Mission

AgeX Therapeutics is focused on the development of young cell-based regenerative therapies for the treatment of human aging.



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History of the Biotechnology Revolutions

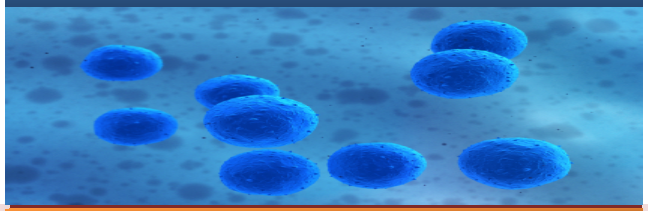
Recombinant DNA Technology

- 1974 – Gene cloning technology developed
- 1976 - Moratorium on rDNA research initiated led to established guidelines on rDNA research
- 1989 – First $B product EPO
- Today, products from the use of rDNA technology are ubiquitous
- >140 clinical trials
- Current Global Market $75 B

Monoclonal Antibodies

- 1975 - Hybridoma technology developed
- 1997- First $B Product Rituximab
- Advances in Mab Engineering
- Today, eight of the 20 best-selling biotechnology drugs in therapeutic monoclonal antibodies
- > 200 clinical trials
- Current Global Market $44 B

Regenerative Medicine



- 1998 – First Pluripotent Stem Cells isolated
- 2001 – U.S. Federal funding restriction (reversed in 2009)
- 2010 – 1st hES Clinical trial
- Future – 1st $B product

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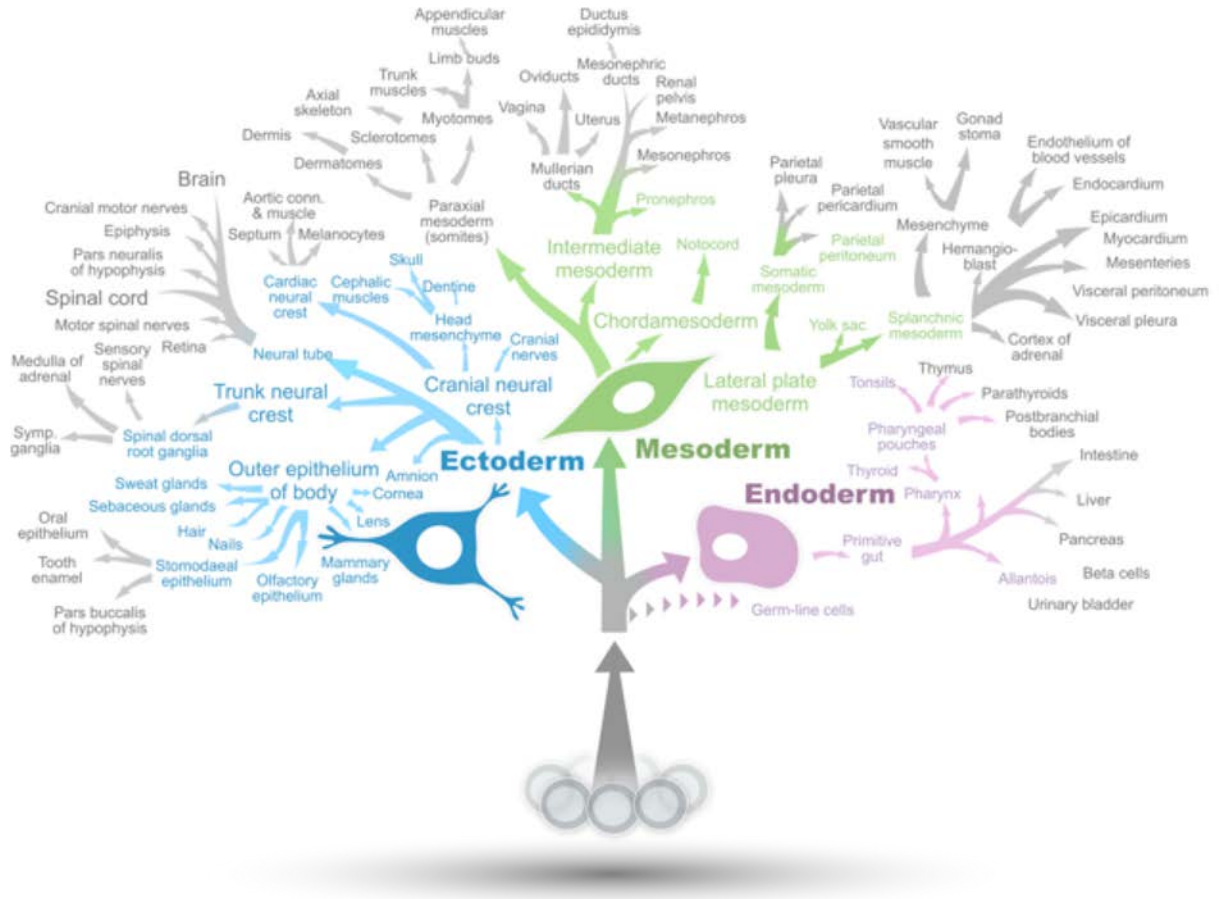
The Power of Pluripotency

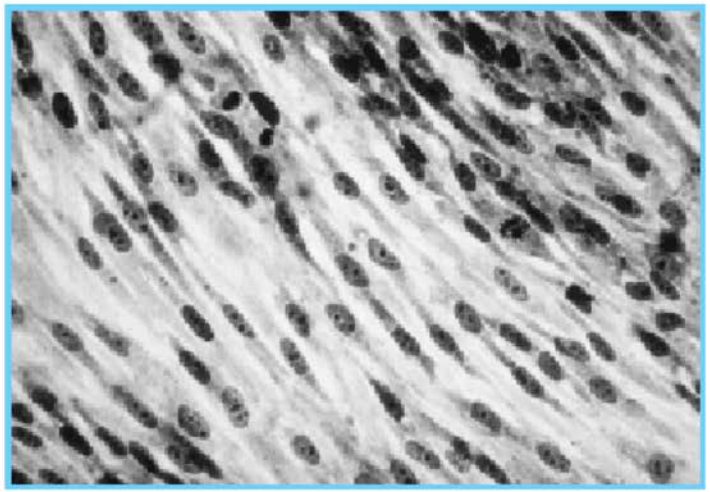
- All cellular components of the body on industrial scale
- Cells with profound regenerative capacity
- Replicative immortality



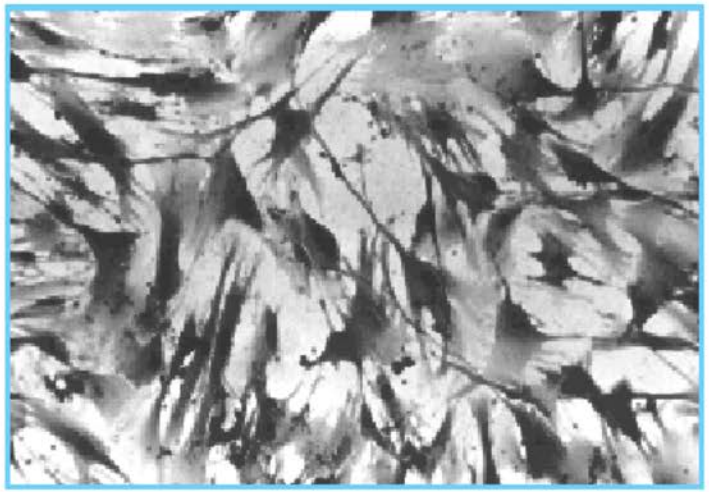
Pluripotent Stem Cells

All Human Somatic Cells are Mortal

Somatic Cells Have a Finite Lifespan



Young Fibroblasts



Senescent Fibroblasts

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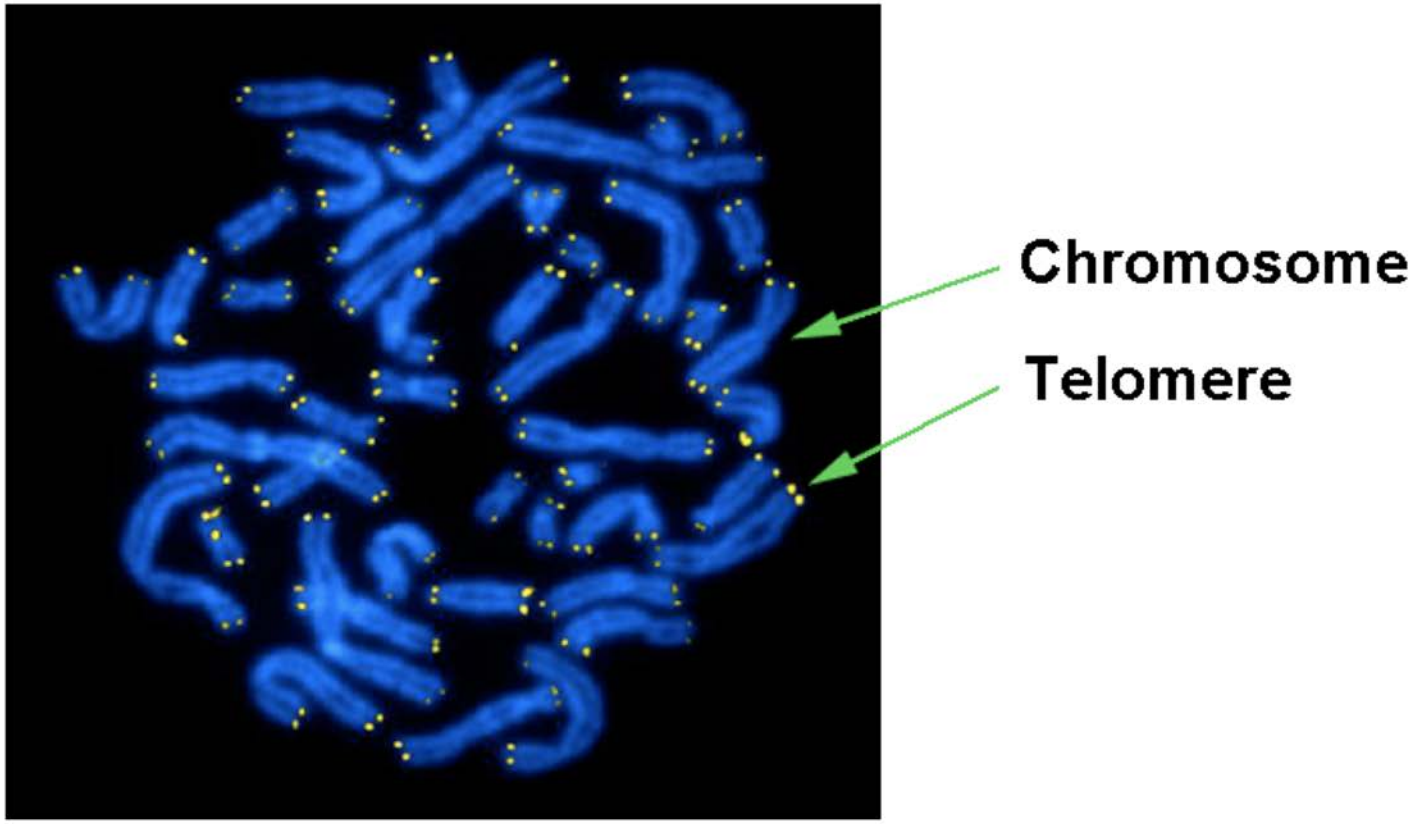
The Key to Replicative Immortality



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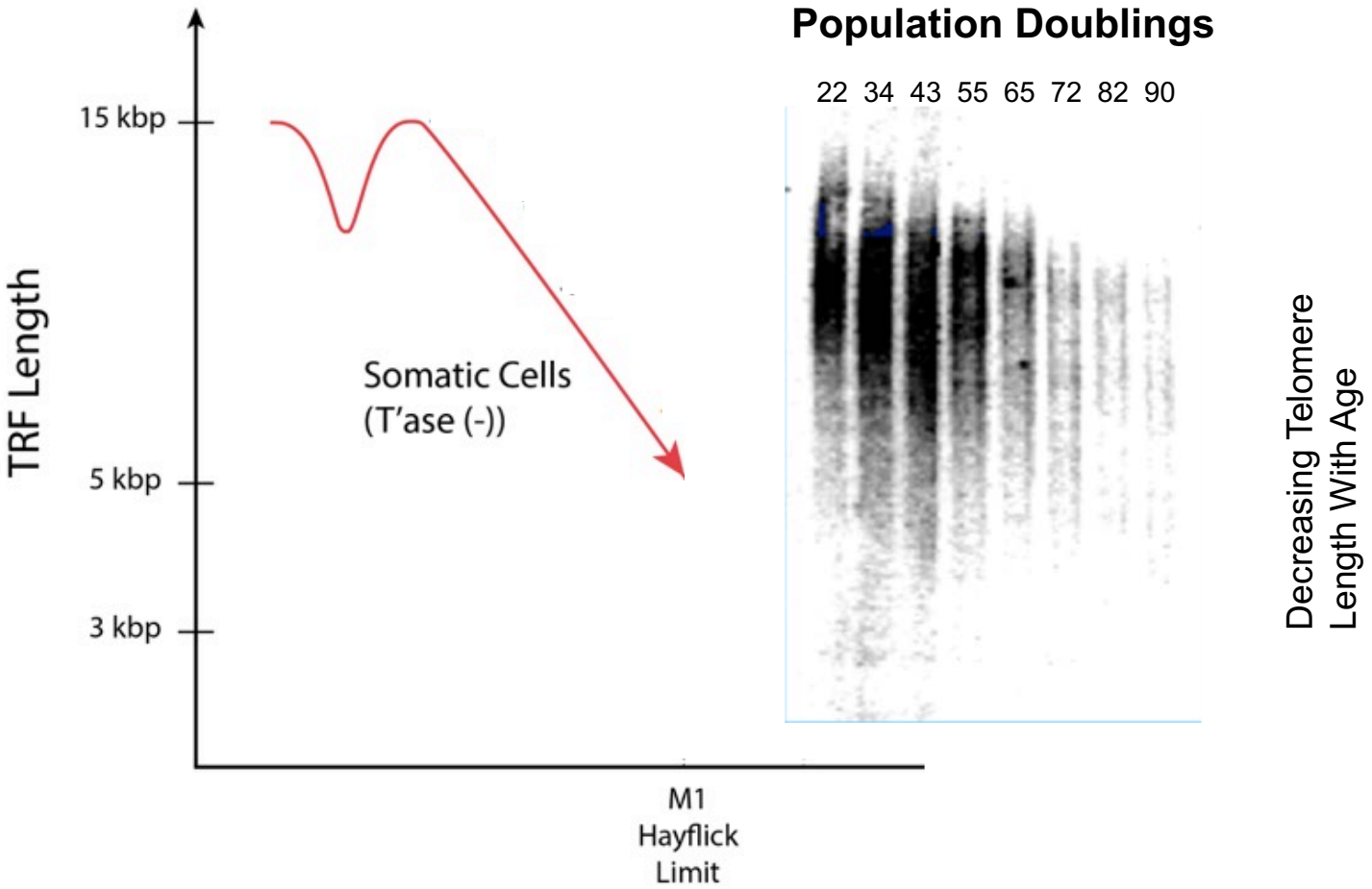
The Key to Replicative Immortality



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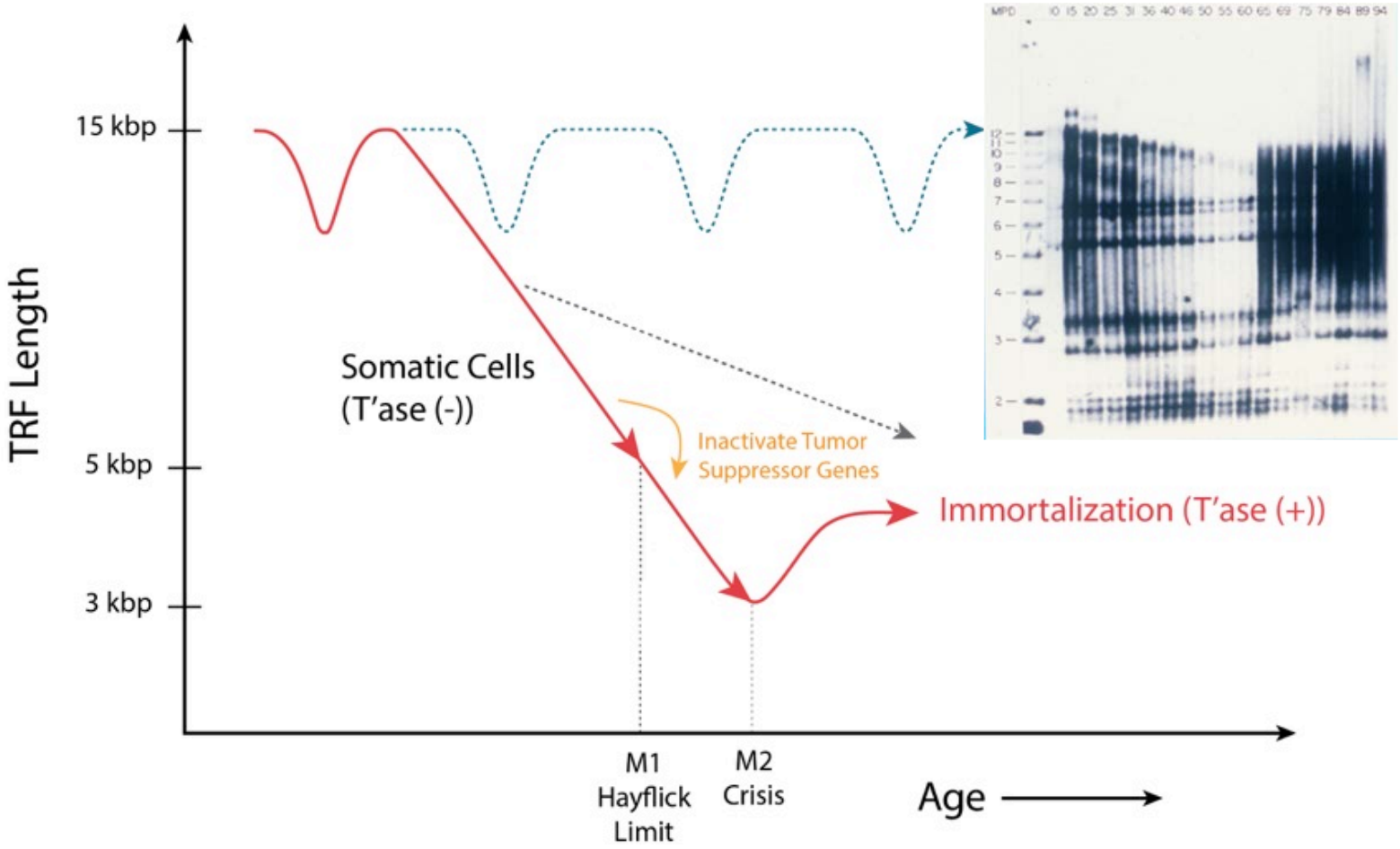

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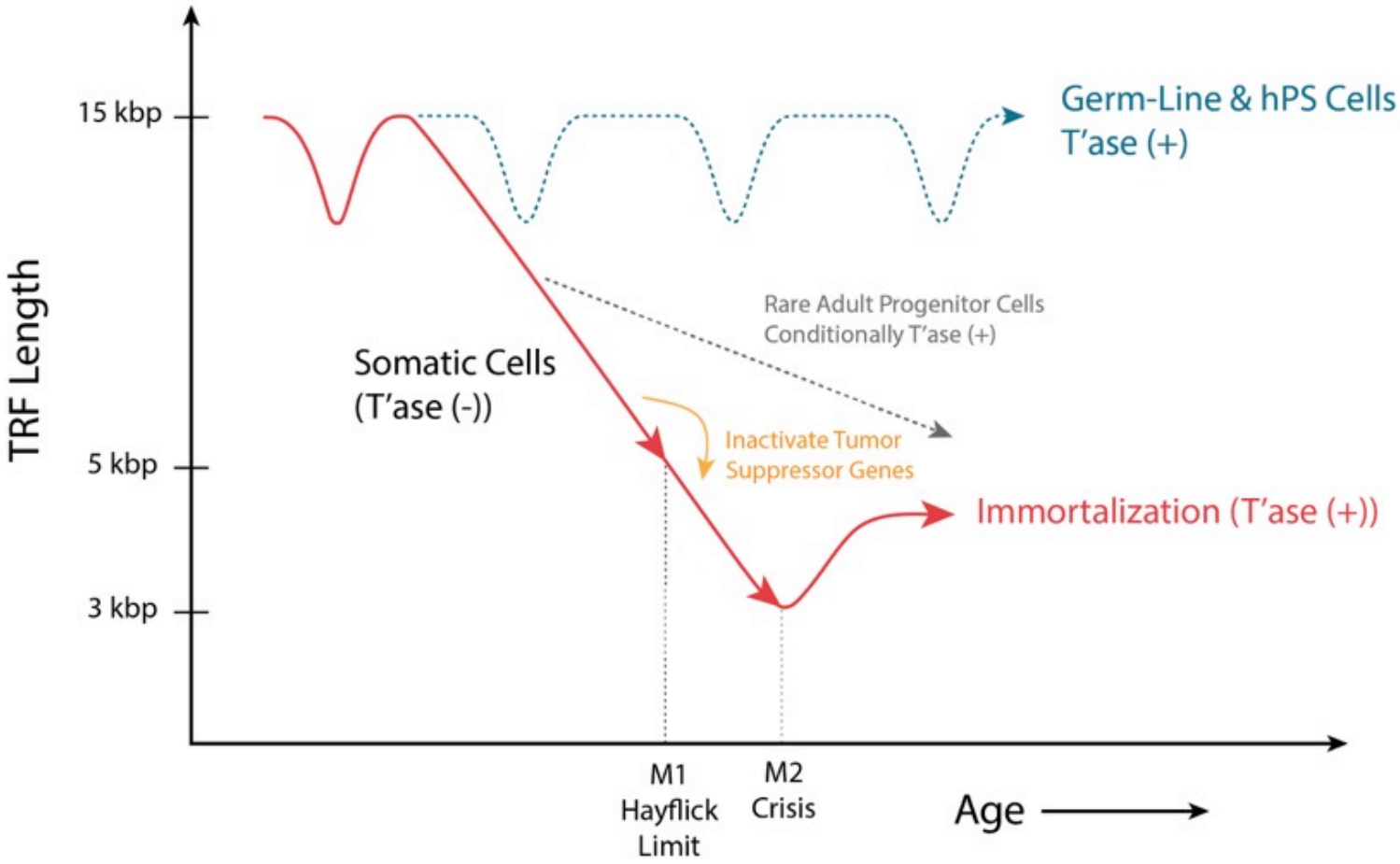
The Key to Replicative Immortality



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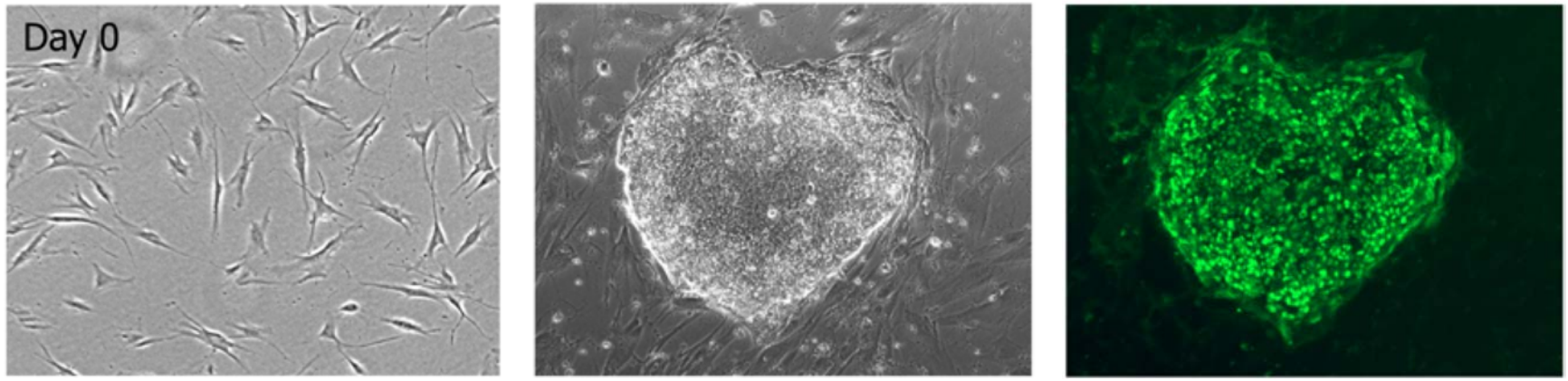
Induced Pluripotency



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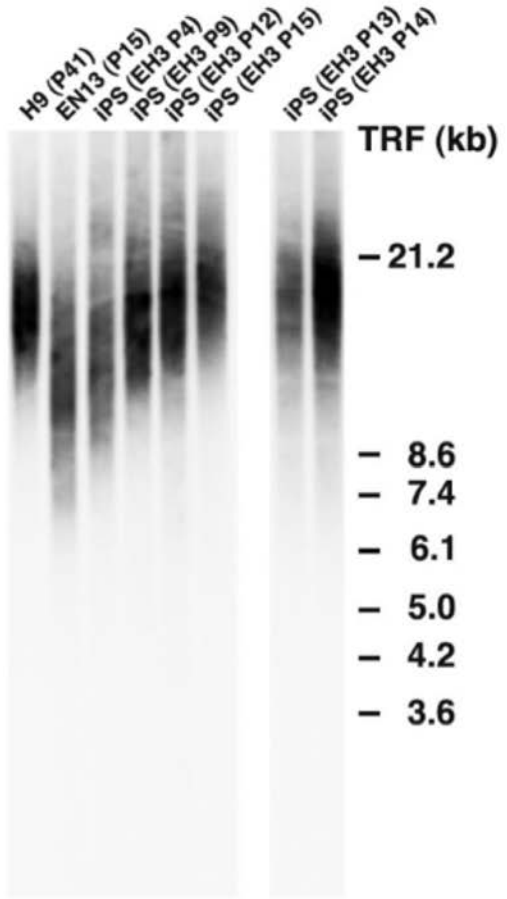
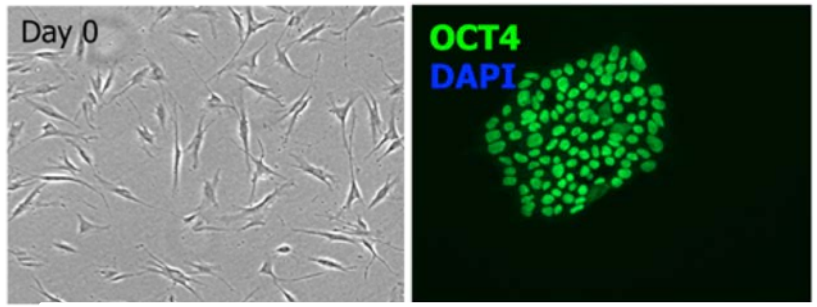
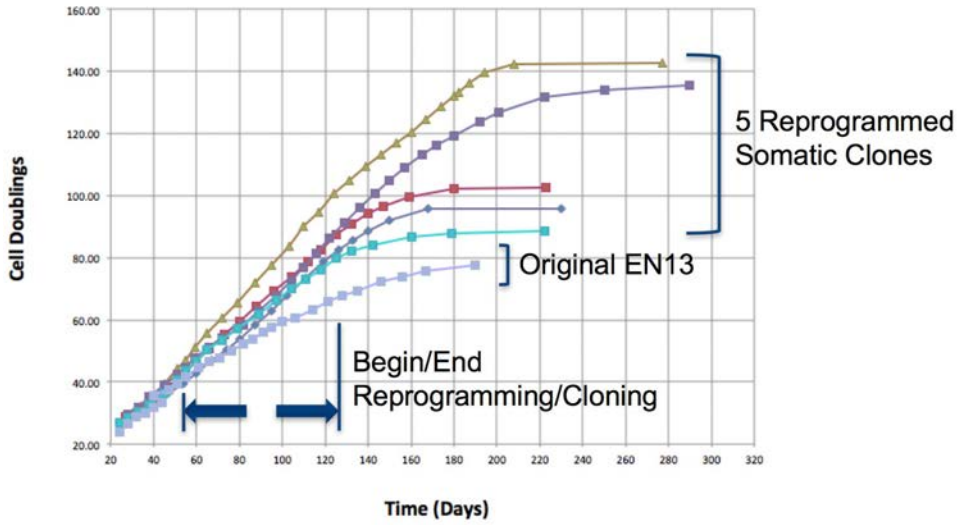
Reversing the Aging of Human Cells Back to Pluripotency



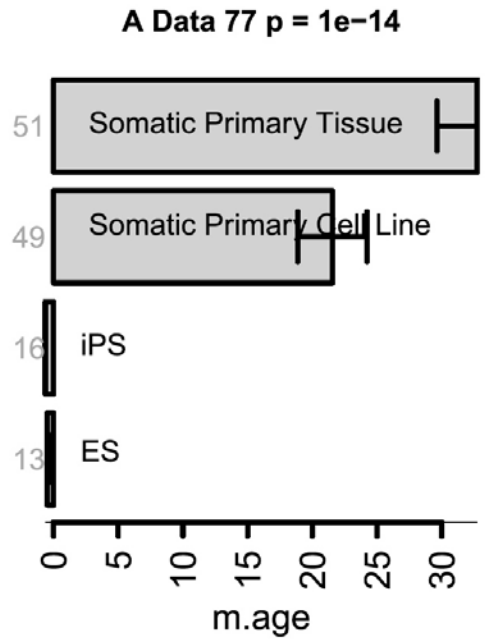
Regen Med 2010 May;5(3):345-63



Skin Fibroblasts iPS Cells



Reprogramming Methylation Age



Genome Biol. 2013;14(10):R115

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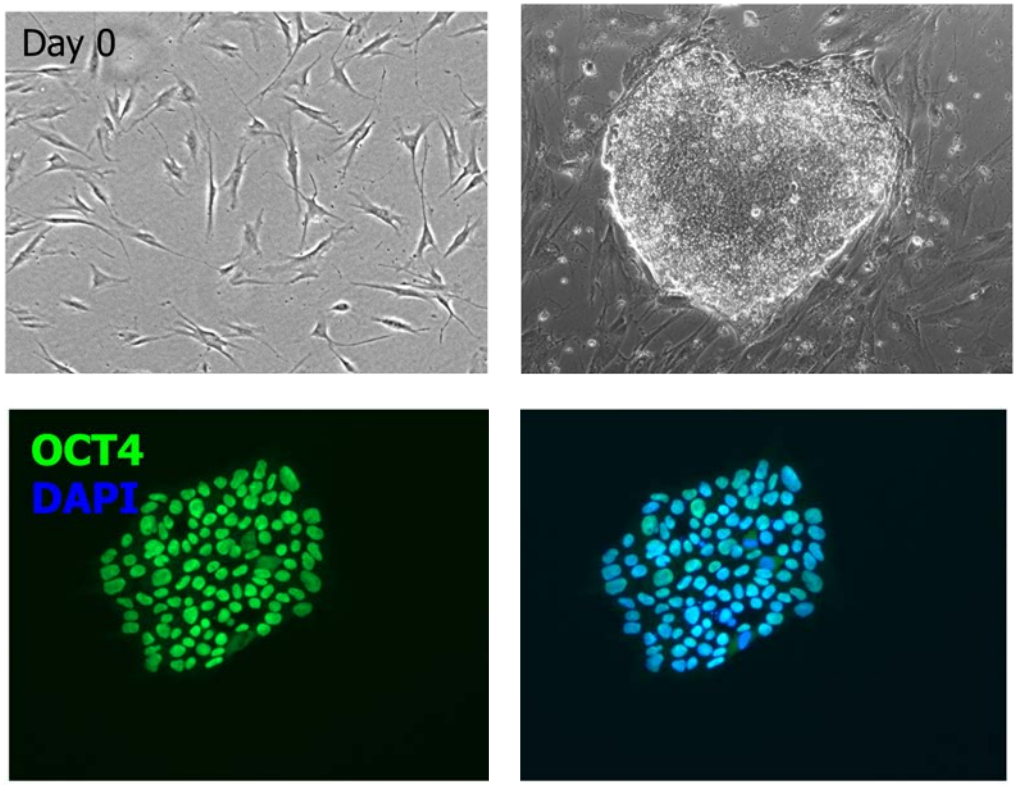
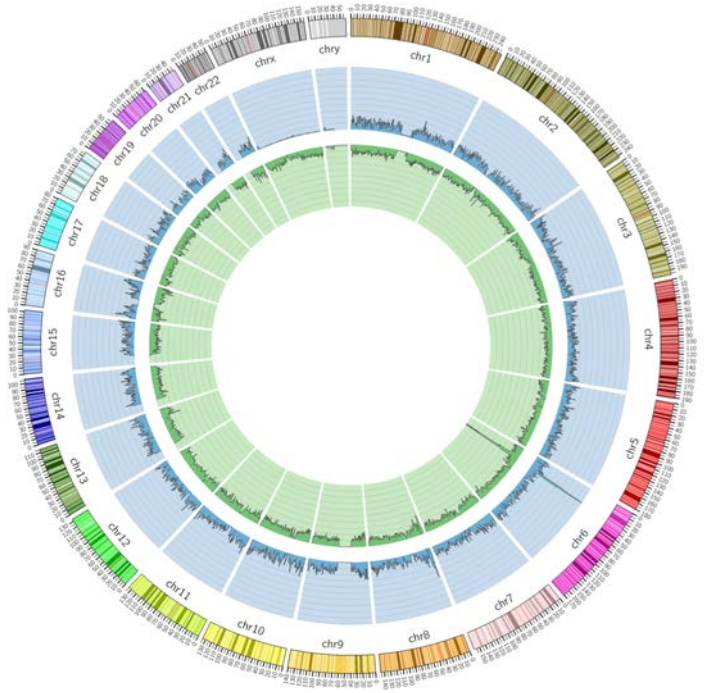
Regenomics & Precision Cell Therapy





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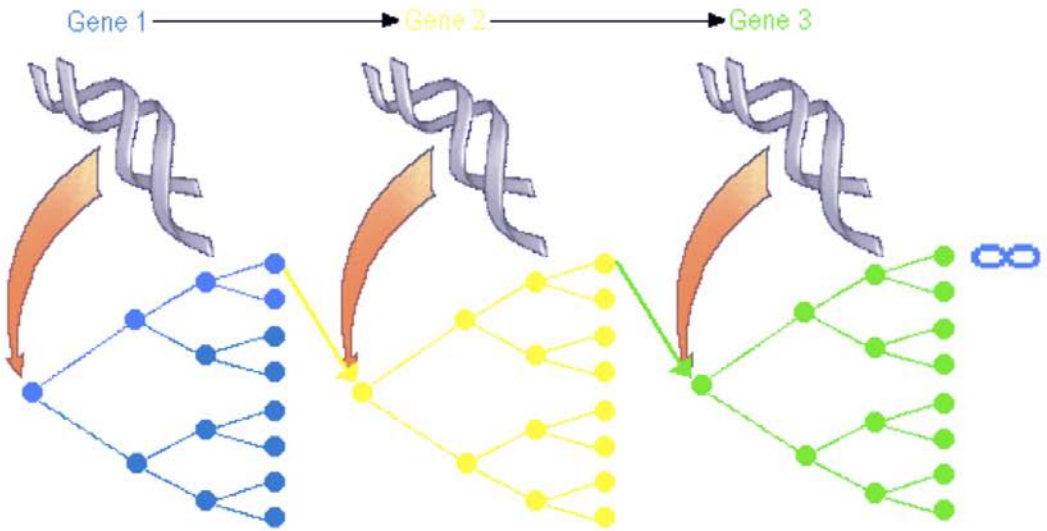
Regenomics & Precision Cell Therapy

- The immortal scalability to hES cells is due to abundant telomerase expression. They can be scaled indefinitely (with periodic clonal selection to prevent drift into aneuploidy).
- The cellular immortality allows clonal expansion from a single cell that has undergone the desired modification
- Proof of principle is the long history of mouse transgenesis using mouse ES cells.



Gene Targeting Technologies

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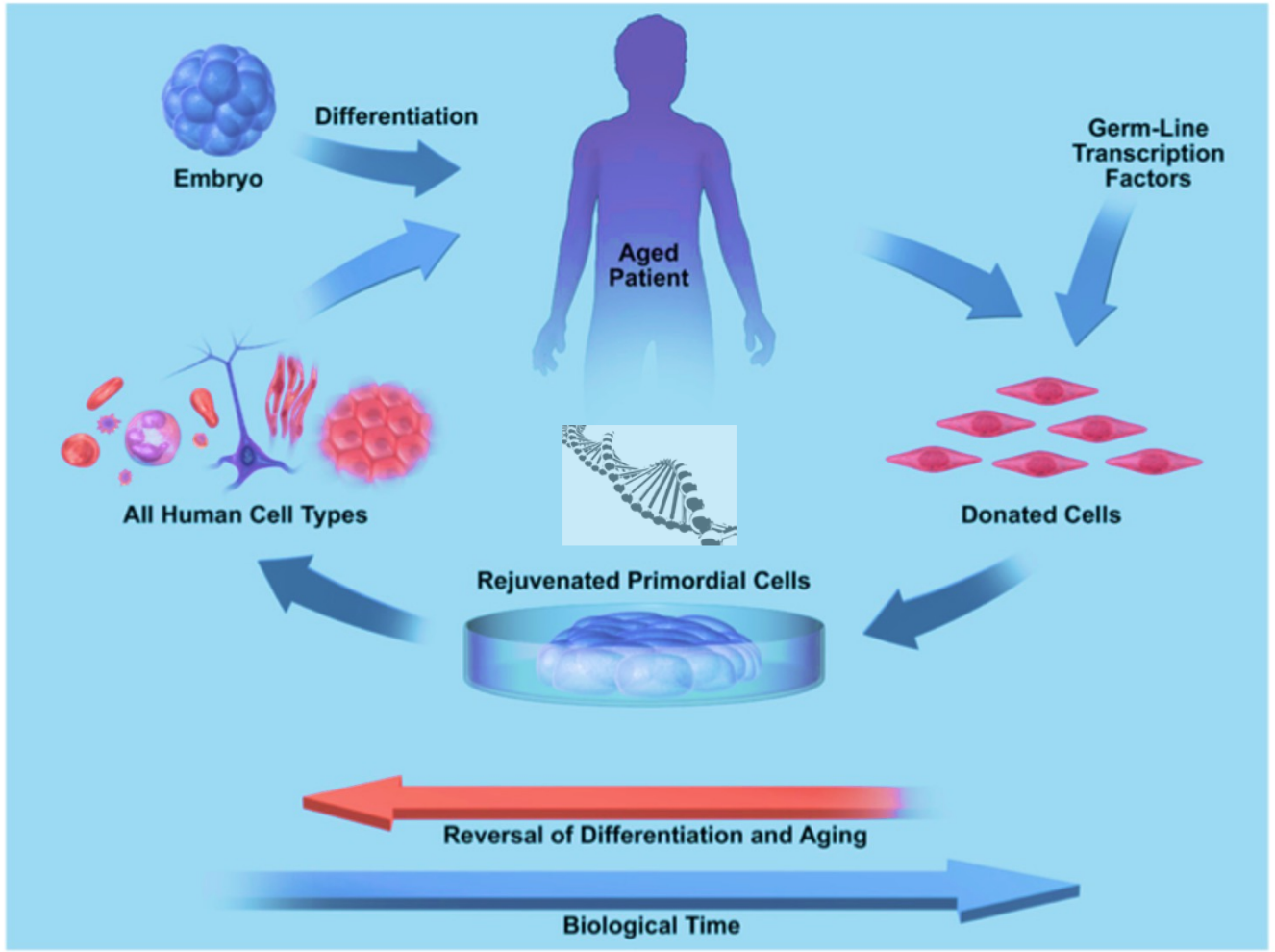
Regenomics & Precision Cell Therapy



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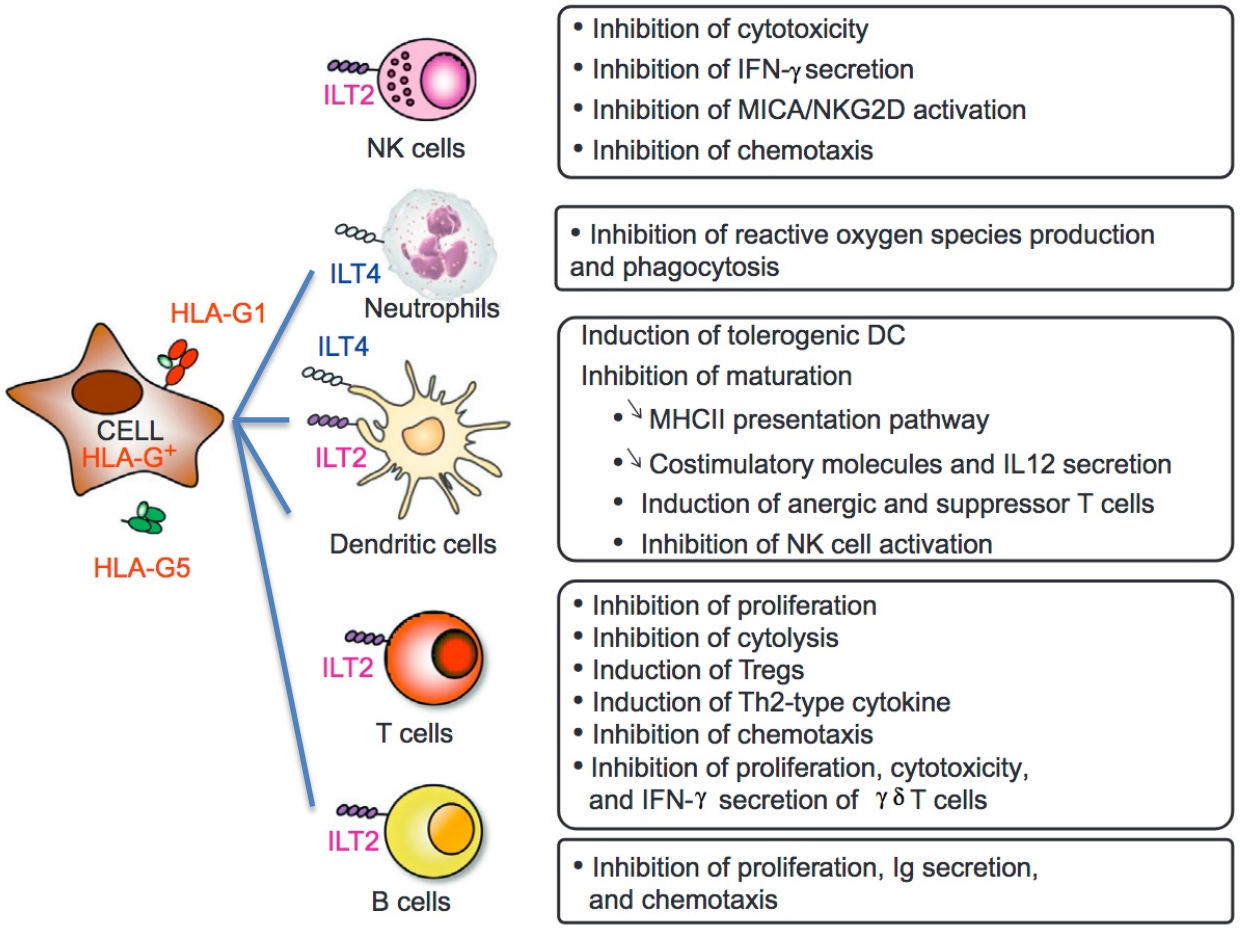
UniverCyte™: HLA-G for Allogeneic Immunotolerance

- It appears that the primary role of HLA-G is to suppress maternal immune response to pregnancies.
- Appears to disarm multiple arms of immune system



Adv. Immunol. (2015) 127:33-144

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Value of the UniverCyte Pluripotent Platform

Classical biologics off-the-shelf business model

Traditional Biologicals

Centralized Production Facility → *Distributed Frozen Inventory* → *Point Of Care*

UniverCyte-Derived Cell Therapy Products

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Numerous Products Performing Well in Trials

- Retinal Pigment Epithelial cells (OpRegen) – Age-related macular degeneration (BioTime Phase II)
- Oligodendrocyte Progenitor Cells (OPC1) – Spinal cord injury (Asterias Phase II)
- Dendritic cells (VAC2) – Cancer immunotherapy (Asterias/CRUK Phase I)

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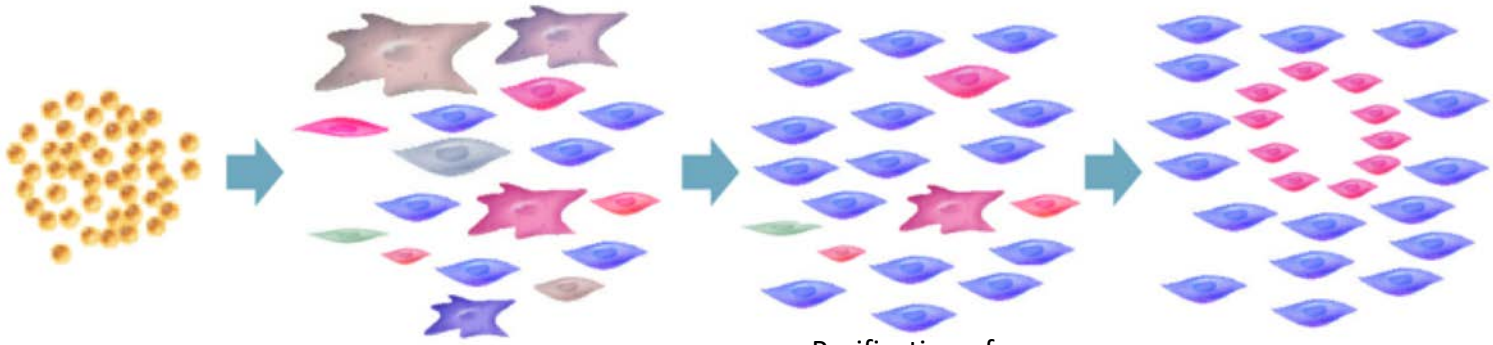
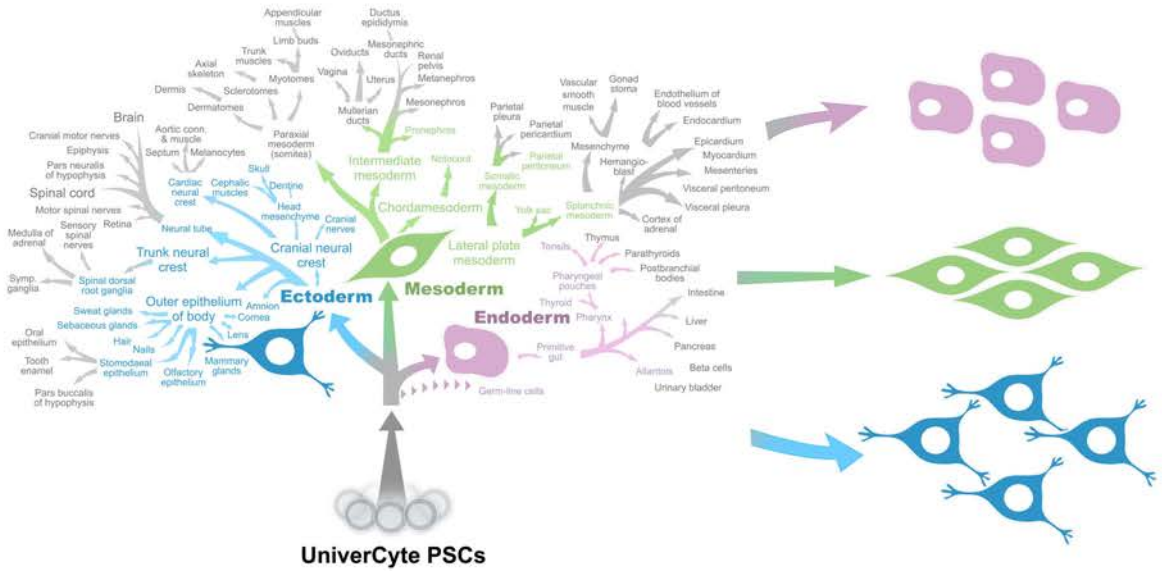
Universal *PureStem*™ Technology

Traditional Manufacture



ES Cells | Differentiation | Purification of desired cell type | Problem of impurities

PureStem Technology



UniverCyte PSCs

PureStem®

- >200-fold diversity
- Scalable, monoclonally-purified regenerative progenitor cell lines
- Off-the-shelf use

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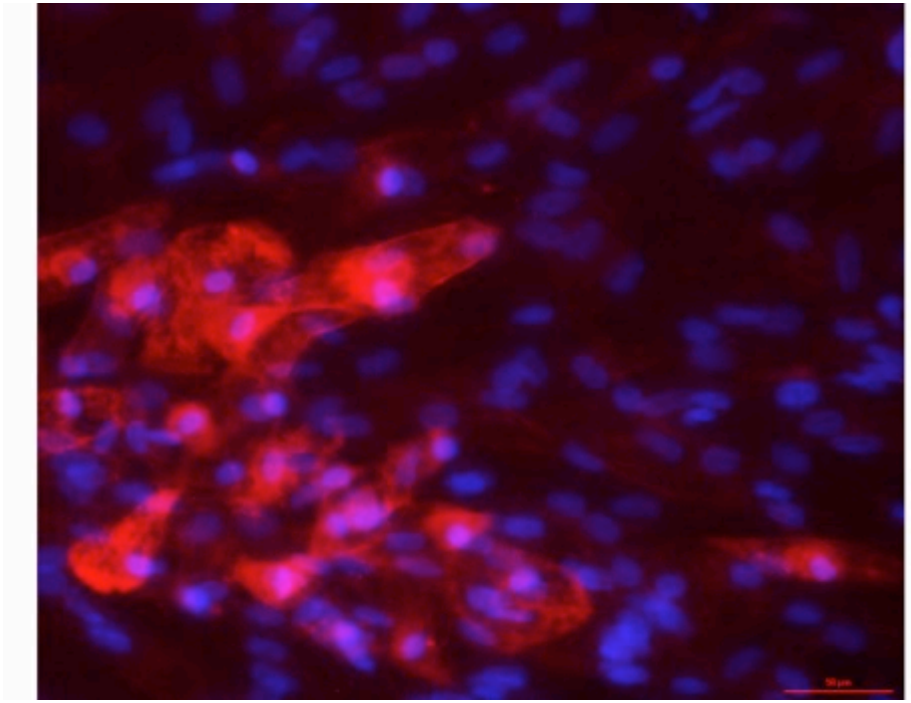
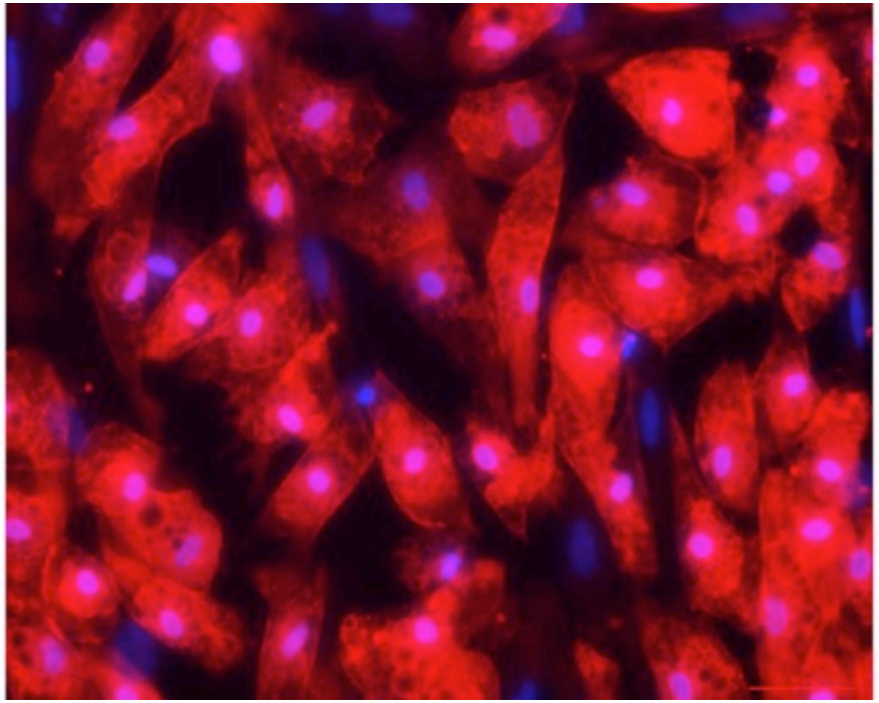
AgeX-BAT1 Properties

Stained for Brown Adipocyte Marker UCP1



Tissue-Sourced Brown Adipocytes



PureStem Brown Adipocytes

West et al. *Stem Cell Research & Therapy* (2019) 10:7

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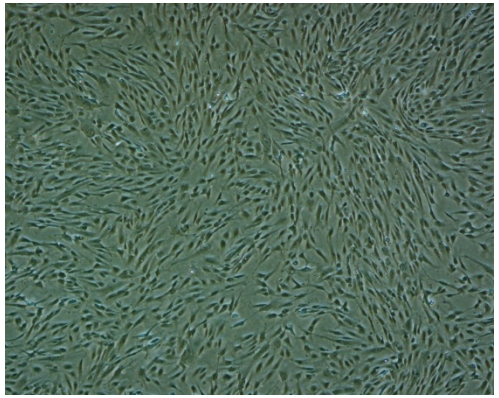
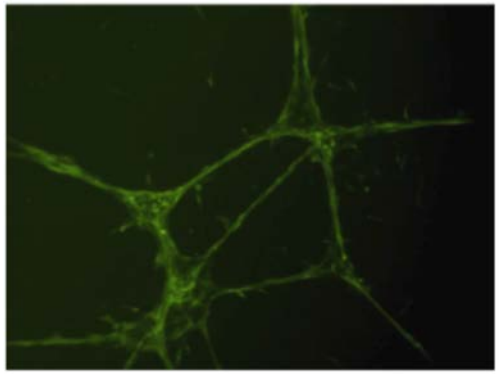
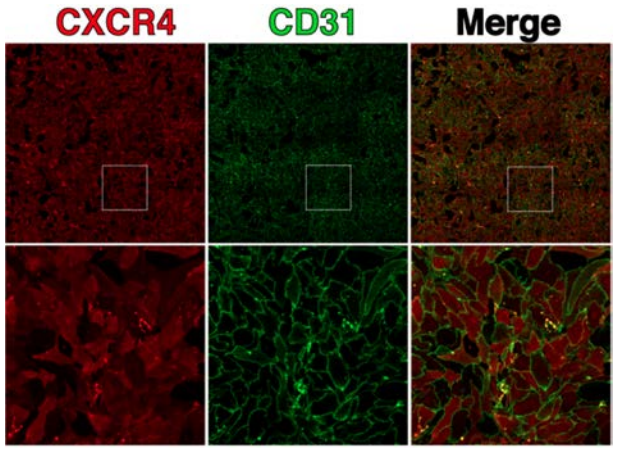
AgeX-VASC1 Purity

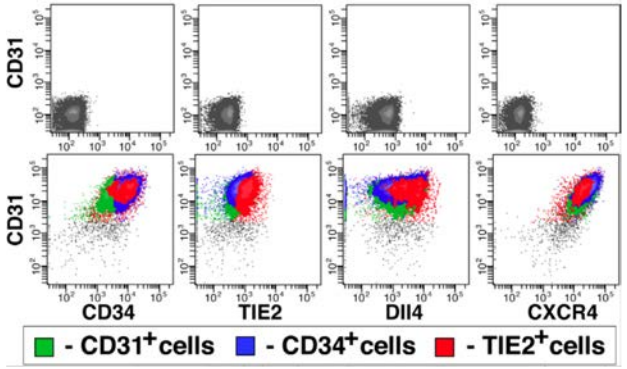
Monoclonal Endothelium

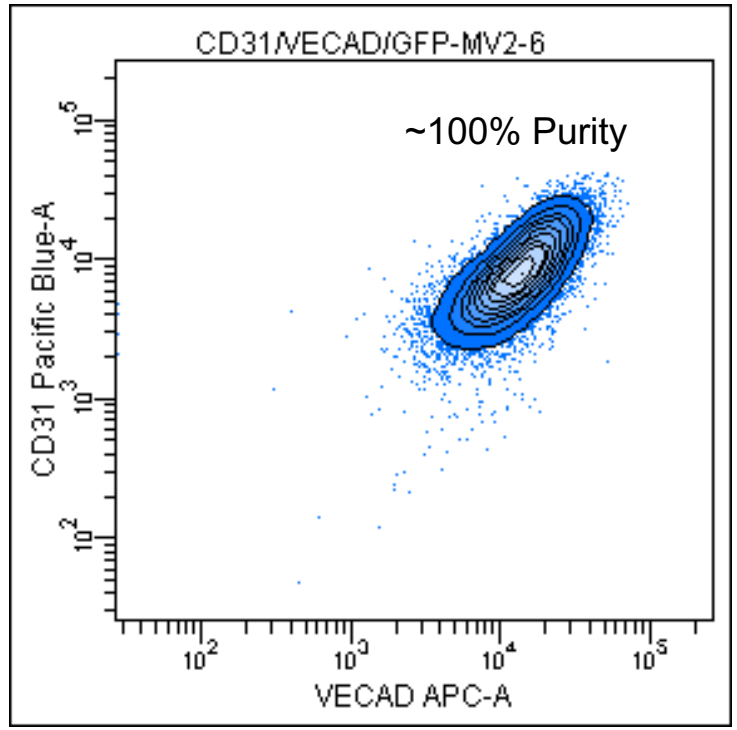


GFP Endothelium (168 hrs)

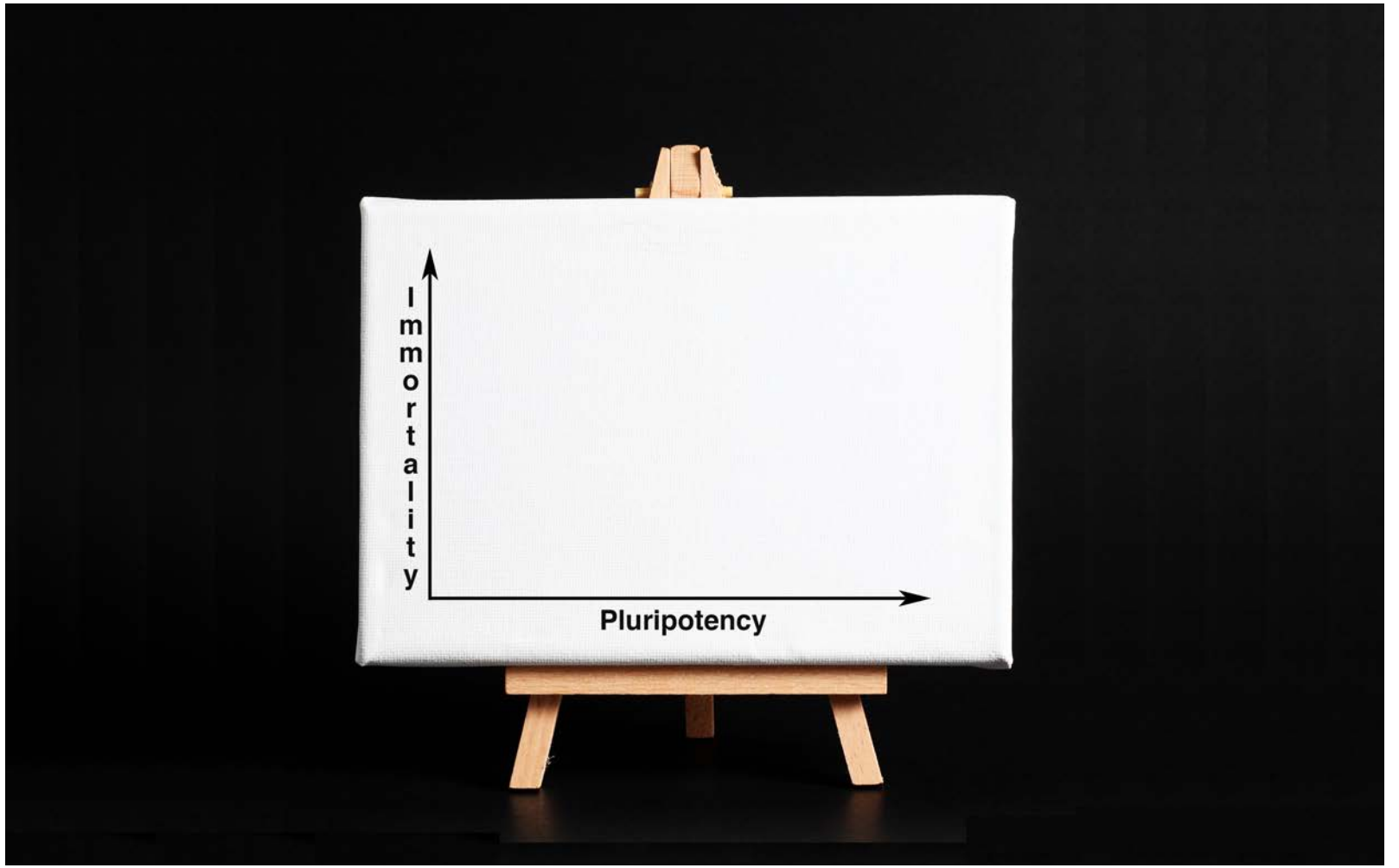








Regenomics & Precision Cell Therapy



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Regenomics & Precision Cell Therapy

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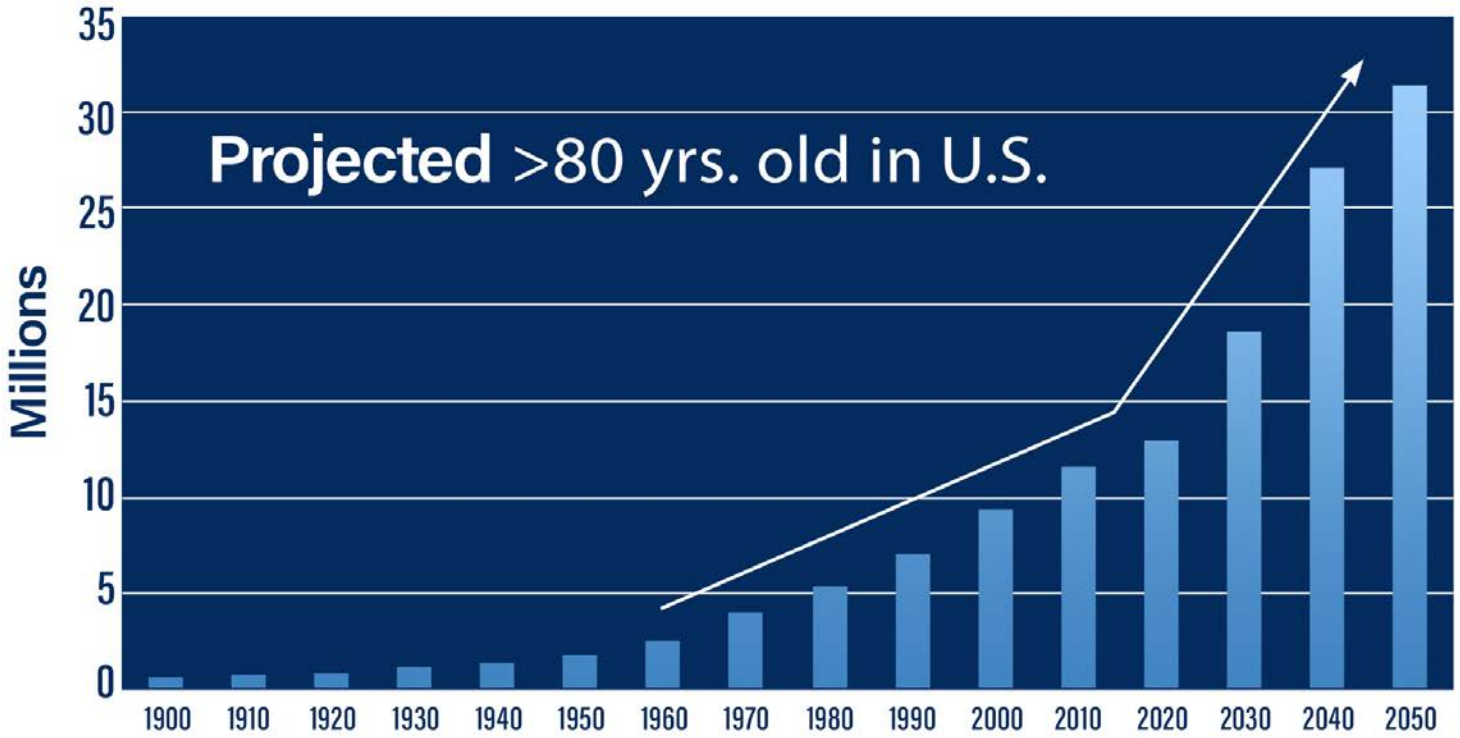
The Target Market

Aging and chronic degenerative disease



- 80% of $2.5T health care costs associated with chronic disease.
- 80% of elderly have at least one chronic disease, 68% have two or more.

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Summary

- Pluripotency affords two powerful enablers: the ability of manufacturing any human cell type as well as an immortal substrate for any number of precise genetic modifications.
- Aging is the demographic trend of our time.
- Applications in age-related degenerative disease may be among the largest and fastest-growing markets in the future of regenerative medicine.

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