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UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

**FORM 8-K**

**CURRENT REPORT**

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (date of earliest event reported): **April 29, 2015**

**BioTime, Inc.**

(Exact name of registrant as specified in its charter)

**California**  
(State or other jurisdiction of incorporation)

**1-12830**  
(Commission File Number)

**94-3127919**  
(IRS Employer Identification No.)

**1301 Harbor Bay Parkway**  
**Alameda, California 94502**  
(Address of principal executive offices)

**(510) 521-3390**  
(Registrant's telephone number, including area code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
  - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
  - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
  - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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## Forward-Looking Statements

Any statements that are not historical fact (including, but not limited to statements that contain words such as “may,” “will,” “believes,” “plans,” “intends,” “anticipates,” “expects,” “estimates”) should also be considered to be forward-looking statements. Additional factors that could cause actual results to differ materially from the results anticipated in these forward-looking statements are contained in BioTime’s periodic reports filed with the Securities and Exchange Commission (“SEC”) under the heading “Risk Factors” and other filings that BioTime may make with the SEC. Undue reliance should not be placed on these forward-looking statements which speak only as of the date they are made, and the facts and assumptions underlying these statements may change. Except as required by law, BioTime disclaims any intent or obligation to update these forward-looking statements.

This Report and the accompanying Exhibit 99.1 shall be deemed “furnished” and not “filed” under the Securities Exchange Act of 1934, as amended.

## Section 7 - Regulation FD

### Item 7.01 - Regulation FD Disclosure

On April 29, 2015, our Chief Executive Officer Michael D. West, Ph.D. will provide an update on regenerative medicine product development underway at BioTime and its subsidiaries at the GTCbio 4th Stem Cell Product Development & Commercialization Conference in Boston, MA. Dr. West’s presentation will include the information in the slides attached to this report as Exhibit 99.1.

## Section 9 - Financial Statements and Exhibits

### Item 9.01 - Financial Statements and Exhibits.

<u>Exhibit Number</u>	<u>Description</u>
<a href="#">99.1</a>	Slide presentation

## SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

**BIOTIME, INC.**

Date: April 29, 2015

By: s/Michael D. West  
Chief Executive Officer

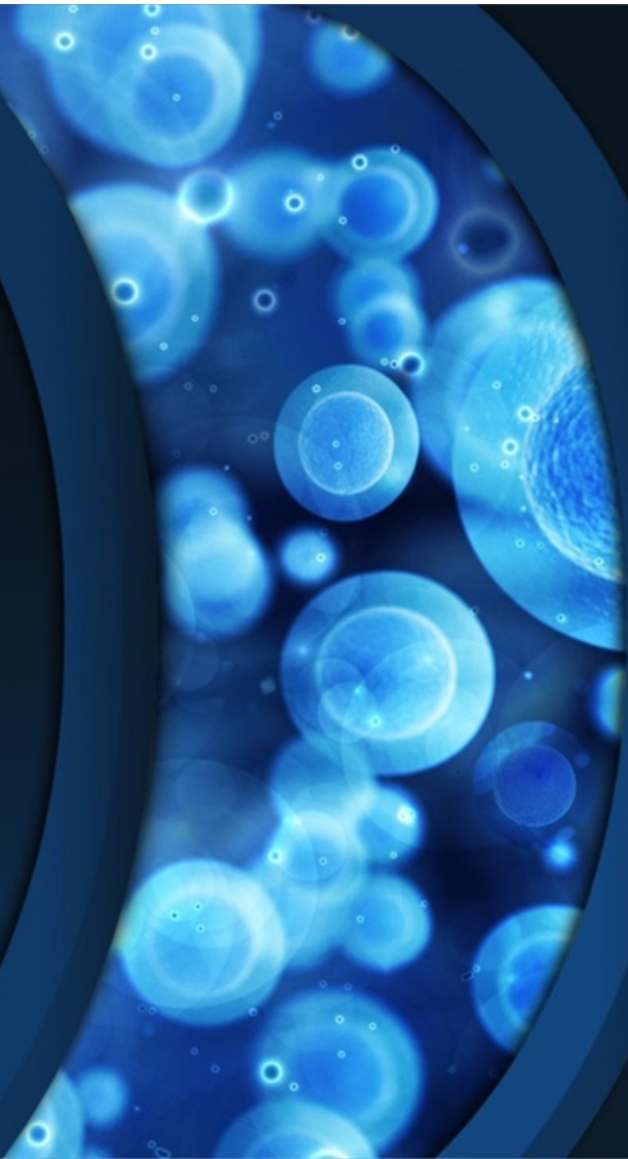
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**Novel Strategies for the Scalable Manufacture of Cellular Therapeutics from Pluripotent Stem Cells: Commercial Implications**

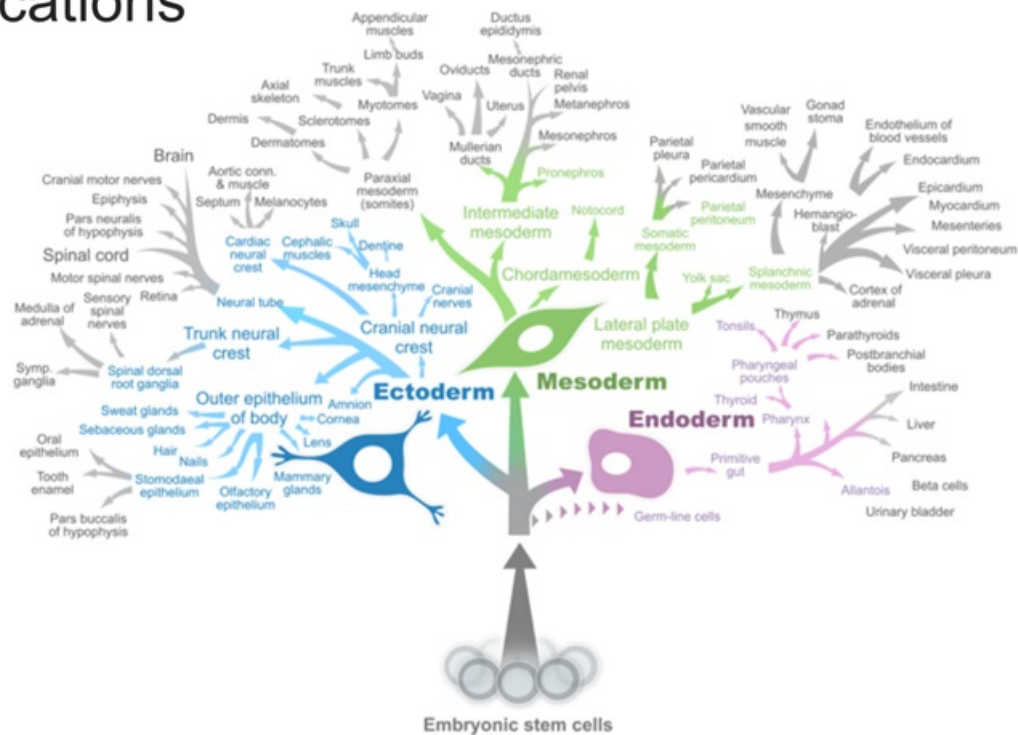
**GTCbio 4<sup>th</sup> Stem Cell Product Development & Commercialization**

April 29 2015

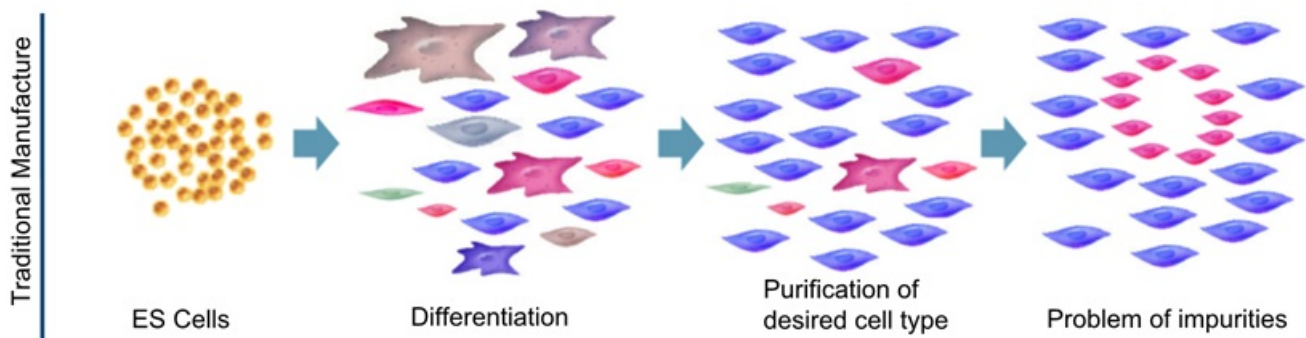


The matters discussed in this presentation include forward looking statements which are subject to various risks, uncertainties, and other factors that could cause actual results to differ materially from the results anticipated. Such risks and uncertainties include but are not limited to the success of BioTime in developing new stem cell products and technologies; results of clinical trials of BioTime products; the ability of BioTime and its licensees to obtain additional FDA and foreign regulatory approval to market BioTime products; competition from products manufactured and sold or being developed by other companies; the price of and demand for BioTime products; and the ability of BioTime 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. Forward-looking statements involve risks and uncertainties, including, without limitation, risks inherent in the development and/or commercialization of potential products, uncertainty in the results of clinical trials or regulatory approvals, need and ability to obtain future capital, and maintenance of intellectual property rights. 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 BioTime and its subsidiaries, particularly those mentioned in the cautionary statements found in BioTime's Securities and Exchange Commission filings. BioTime disclaims any intent or obligation to update these forward-looking statements.

- Scalable source of all human cell types
- Immortal substrate allowing complex genetic modifications



## *The Challenge*



## Feasible and Safe



- Five subjects received 2 mil *OPC1* cells, followed for >4 years
- Clean safety profile observed to date:
  - No serious adverse events related to surgery, *OPC1*, or immunosuppression
  - No unexpected neurological changes
  - No adverse changes on MRI
  - Monitoring through one year shows no evidence of immune responses to *OPC1*
- Potential evidence of biological activity:
  - MRI results in 4 of 5 subjects are consistent with prevention of lesion cavity formation



## Current Phase 1/2a Trial



### Indication: Complete Cervical Spinal Cord Injury

- High level of unmet medical need – no approved therapies, high level of disability & lifetime cost of care
- Clear path to market – endpoint measurements and pivotal study size established by SCOPE initiative

### Objectives: Safety and preliminary efficacy

- Establish safety of *OPC1* in cervical sensorimotor complete SCI
- Assess effects on upper extremity motor function
- Investigate effects on additional measures of neurological function

### Trial Design: Sequential cohort, dose escalation

- Dose three pts with two million AST-OPC1 cells
- After 30 days, dose five pts with 10 million AST-OPC1 cells
- After 30 days, dose five pts with 20 million AST-OPC1 cells
- Subject to FDA clearance, expansion of second and third dose cohorts
- May result in pathway to registration study



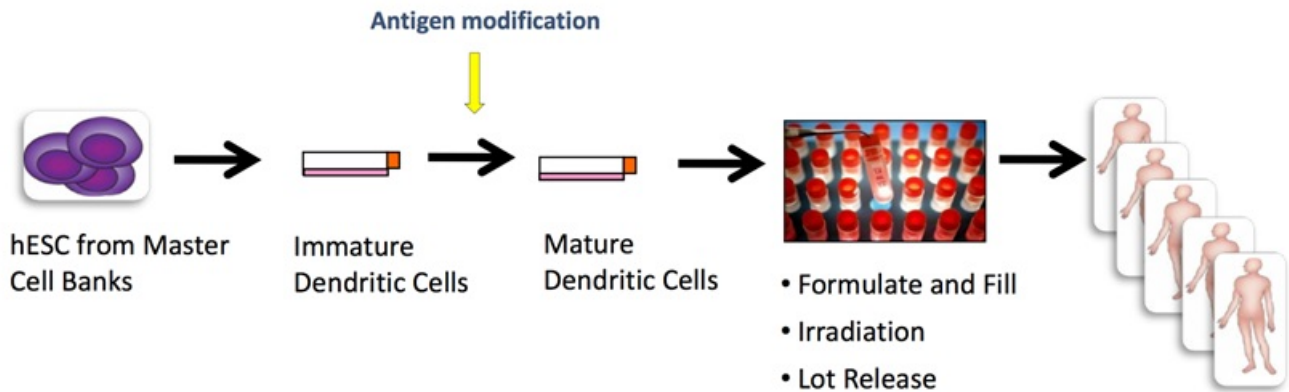
## Potential Vaccine for $\approx$ 95% Cancer Types



### VAC1 is Safe and Stimulates $\alpha$ -Telomerase Immune Responses in 2 Clinical Trials Biomarkers Improved or Stabilized

	Phase 1 Prostate Cancer Duke J. Immunol 2005, 174:3798	Phase 2 Acute Myelogenous Leukemia Multi Center Khoury ASH 2010
# Treated Patients	20	21
Tolerability	Excellent	Excellent
Patients Immunized Against hTERT	95%	55%
Laboratory & Clinical Impact	<ul style="list-style-type: none"><li>Highly Significant Increase in PSA Doubling Times</li><li>Clearance of Circulating Immune Complexes</li></ul>	<ul style="list-style-type: none"><li>Significant Increase in 12 Month DFS in High Risk Group (N=11) Compared to Published Historical Controls</li></ul>

## The VAC2 Platform



### Mechanism of Action

- Present antigen on restricted HLA
- Participate in indirect antigen presentation
- Adjuvant allogeneic effect

- Hundreds of doses
- Off-the-shelf availability
- Treat a large patient pool

## Trial Design



### Indication: Non-small Cell Lung Cancer

- Immune blockade inhibitor trials demonstrate sensitivity of lung cancer to immunotherapy
- Proof of concept for telomerase antigen in lung cancer
- High level of unmet medical need with current therapeutic regime

### Objectives: Safety and preliminary efficacy

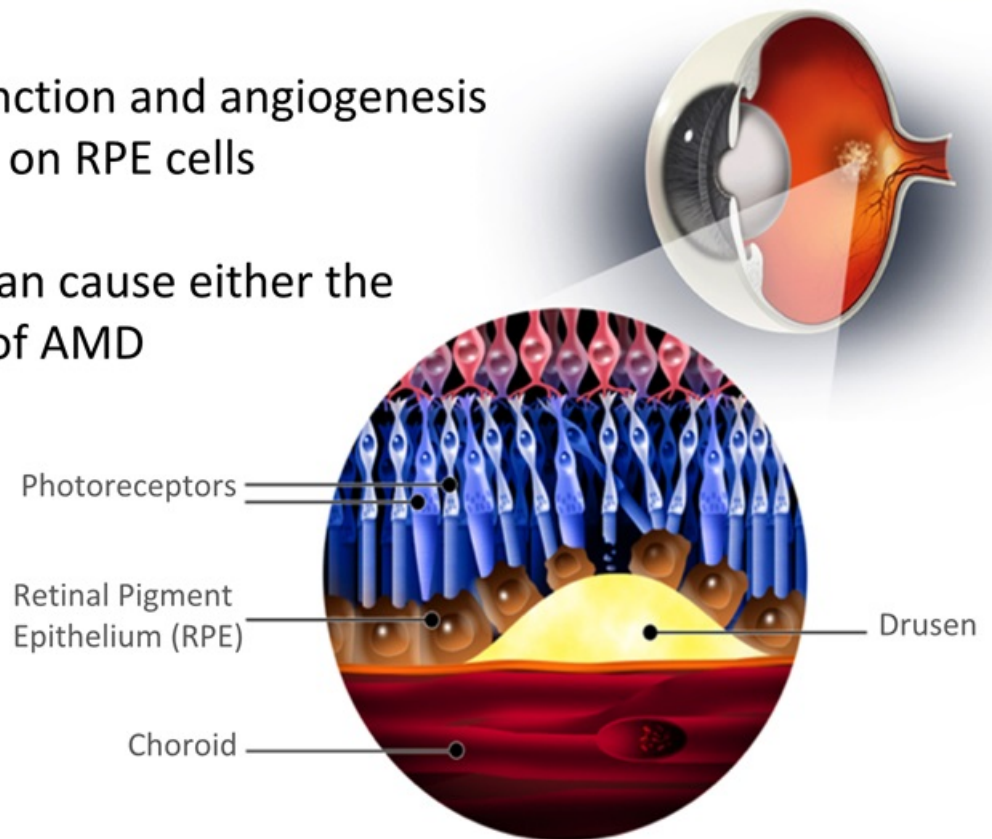
- Establish safety of *AST-VAC2* in resected and advanced disease settings
- Assess generation of anti-telomerase and anti-*VAC2* immune responses
- Investigate initial measures of clinical activity

### Trial Design:

- 5 pts w/ resected NSCLC: 6 vaccinations of 1 million *AST-VAC2* cells
- 12 pts w/ resected NSCLC: 6 vaccinations of 10 million *AST-VAC2* cells
- 12 pts w/ advanced NSCLC: 6 vaccinations of 10 million *AST-VAC2* cells

## Age-Related Macular Degeneration (AMD)

- Photoreceptor function and angiogenesis inhibition depend on RPE cells
- Loss of RPE cells can cause either the dry or wet forms of AMD



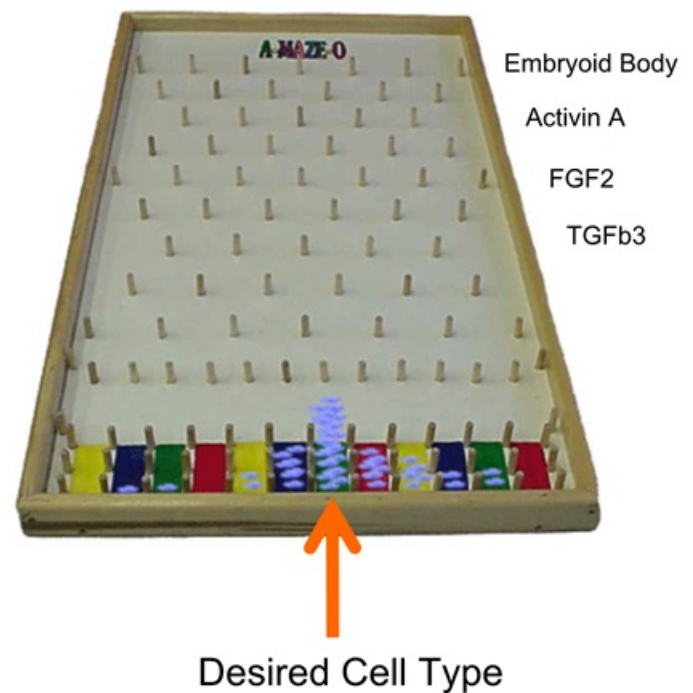
## Clinical Trial Design



- Phase I/IIa dose escalation safety and efficacy study of *OpRegen* transplanted subretinally in patients with advanced dry-form of AMD (Geographic Atrophy)
- Open label, non-randomized, sequential, single center trial
- Study Site: Hadassah University Medical Center, Jerusalem, Israel
- Dose and Administration: Single injection of 50,000-500,000 cells in saline delivered into the subretinal space.
- *Part 1*
  - Cohort 1: 3 Patients, BCVA 20/200 or less, 50,000 cells
  - Cohort 2: 3 Patients, BCVA 20/200 or less, 200,000 cells
  - Cohort 3: 3 Patients, BCVA 20/200 or less, 500,000 cells
- *Part 2*
  - Cohort 4: 6 Patients, BCVA 20/100, 500,000 cells

## *The Challenge*

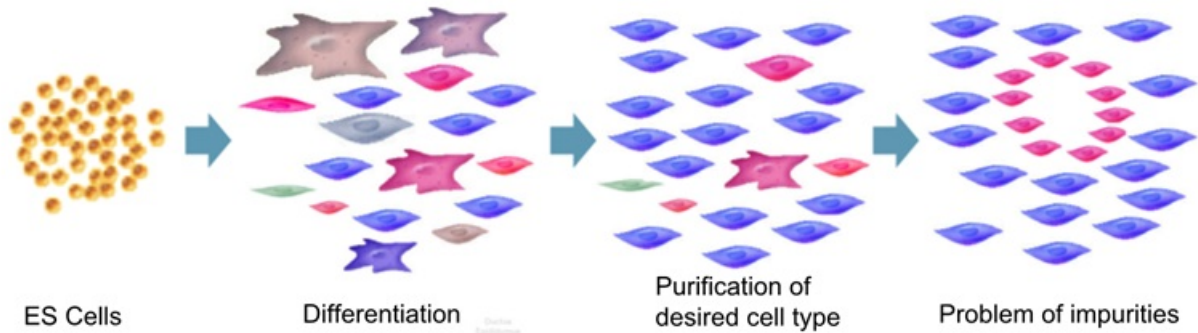
- In addition to the challenge of the >1000-fold complexity of cell types coming from ES cells, and the challenge of manufacturing pure and identified product, the highly complex fate decisions lead to a challenge of lot-to-lot variability.



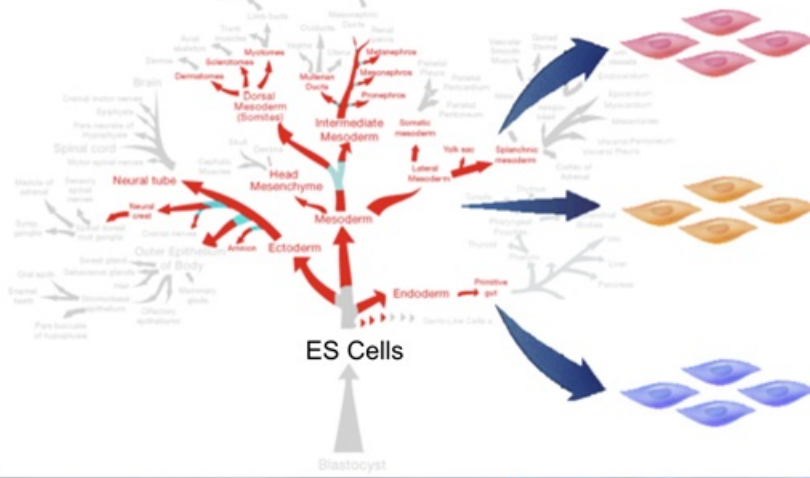
- Scalability
- Reproducibility
- Purity
- Identity

BioTime's proprietary PureStem manufacturing technology yields >200 highly purified, identified, and scalable human cell types

Traditional Manufacture

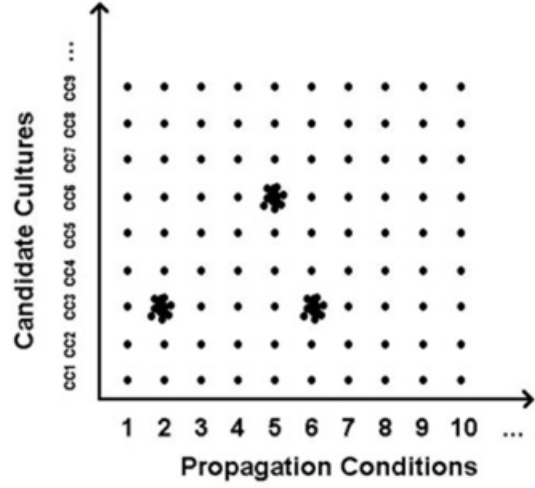
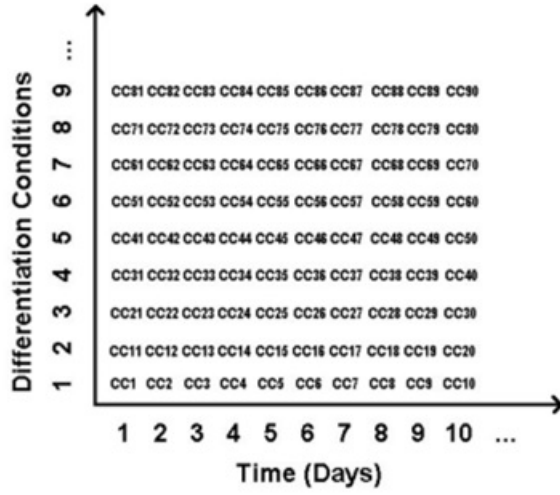


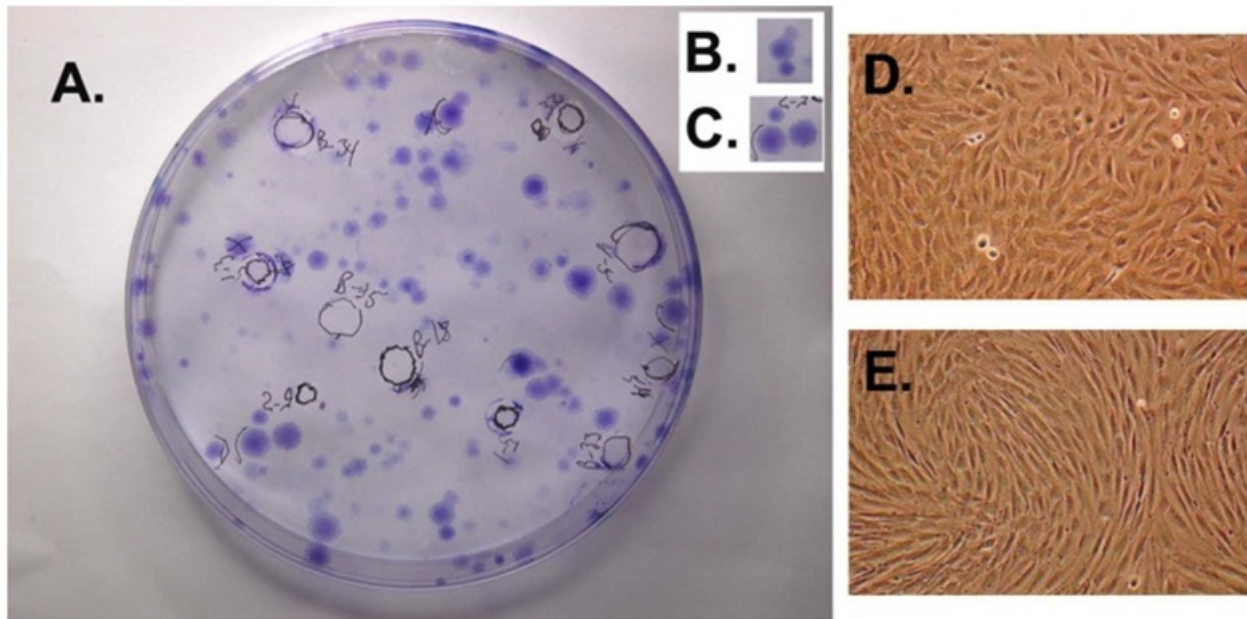
PureStem Technology



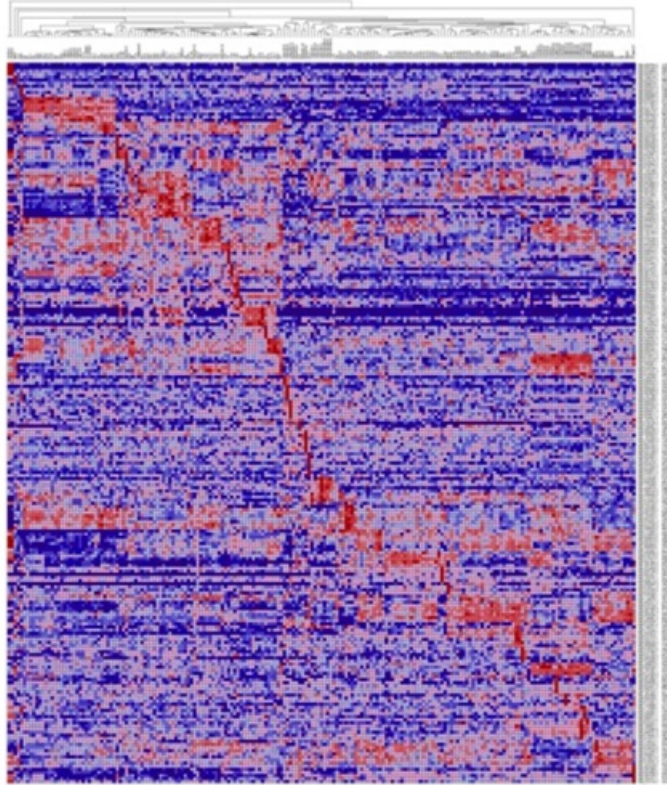
**>200-fold diversity**  
**Scalable, monoclonally purified progenitors**





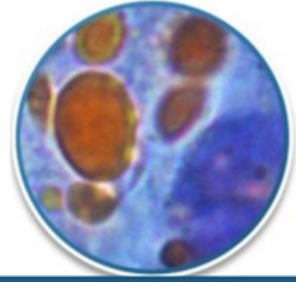
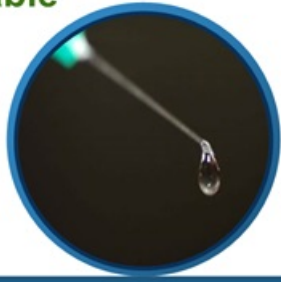


*>200 Cell Types Clonally Expandable*



# HyStem – A Critical Combination

## Injectable

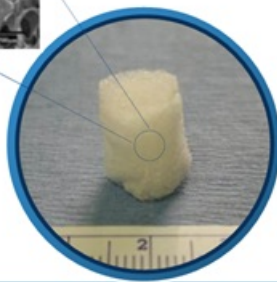
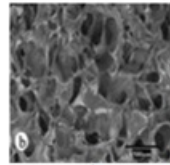


Stays as liquid  
for ~ 20 minutes

Polymerizes  
safely *in vivo*

Supports cells including  
adipocytes in 3-D

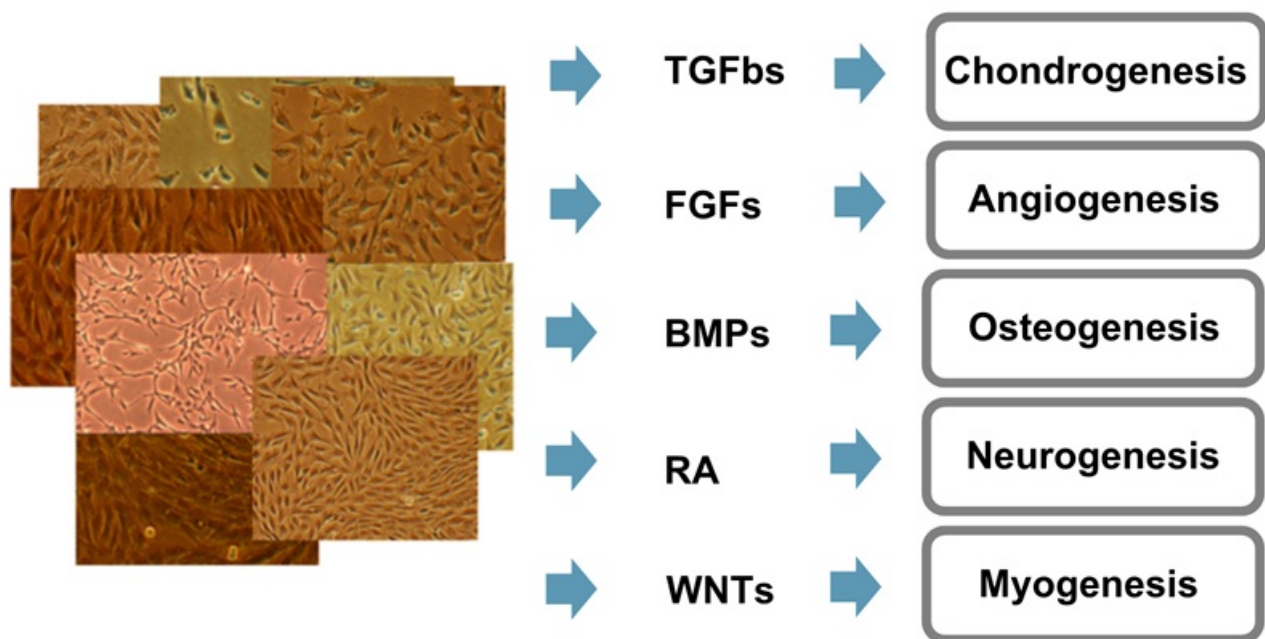
## Multiple Formulations



Durable Films

3-D Lattices

Heparin-mediated  
Slow Release

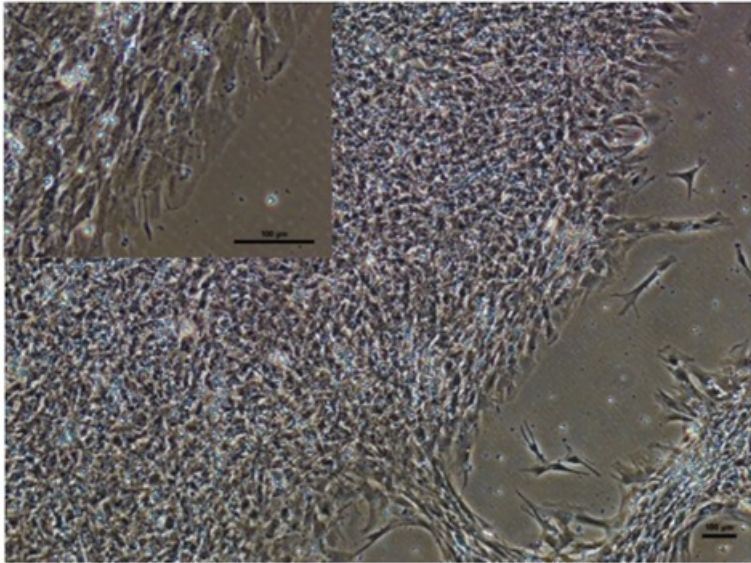


**>100 Scalable  
Clonal hEP  
Lines**

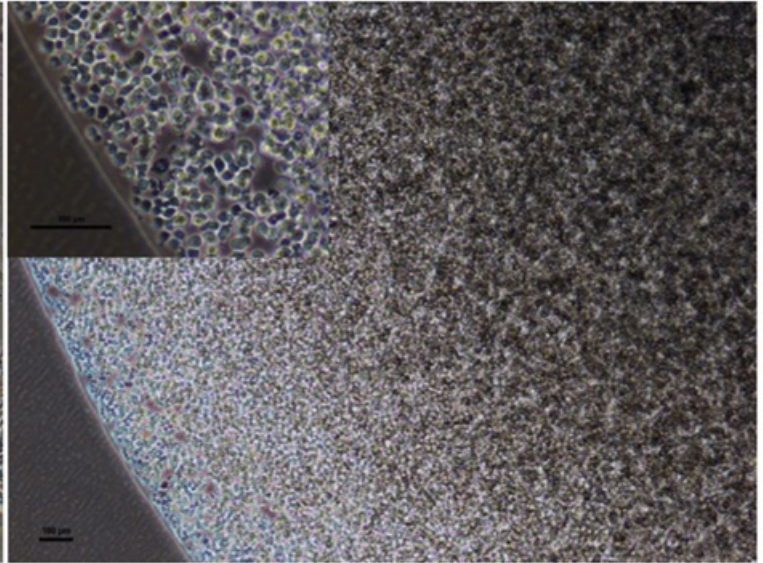
**Array of Diverse  
Differentiation  
Conditions**

**Approx 4,000  
Gene Expression  
Microarrays**

T42 in MM Culture

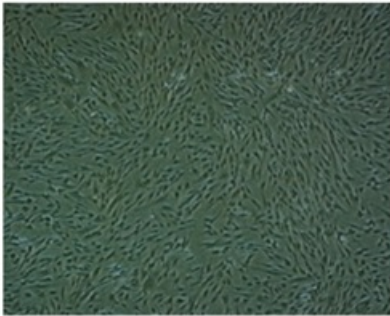


T42 in HyStem Culture

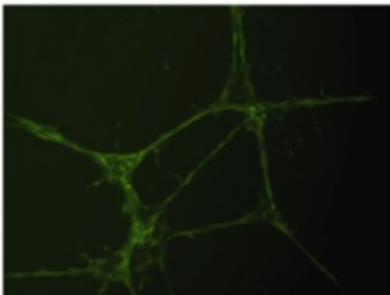


## Purified Endothelium

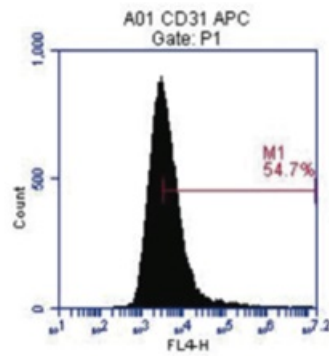
Monoclonal Endothelium



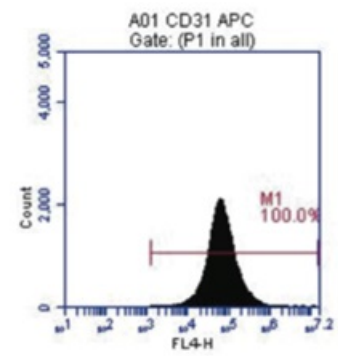
GFP Endothelium (168 hrs)



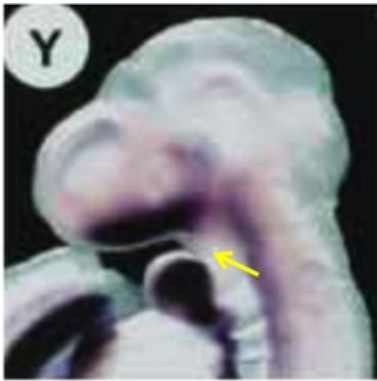
Heterogeneous



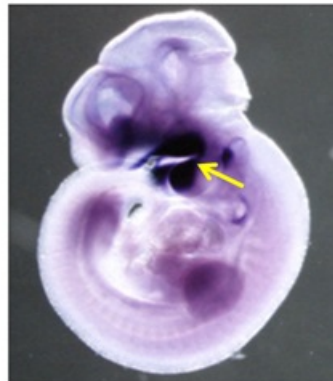
Monoclonal



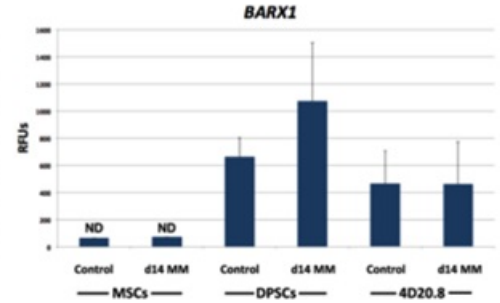
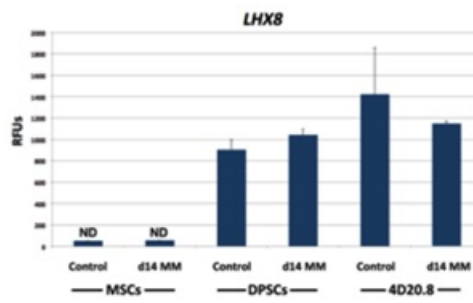
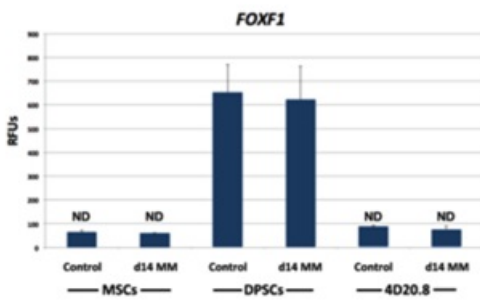
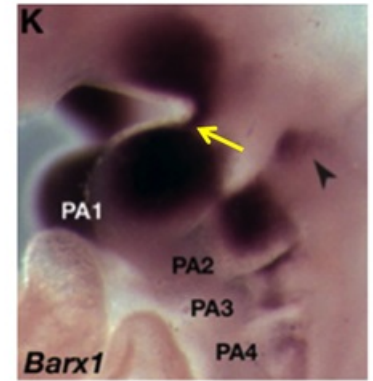
## Foxf1



## Lhx8



## Barx1



*Foxf1* *Genes & Dev.* 18: 937-951  
*Lhx8* *Science* 24:306: 2255-2257  
*Barx1* *Development* 136: 637-645



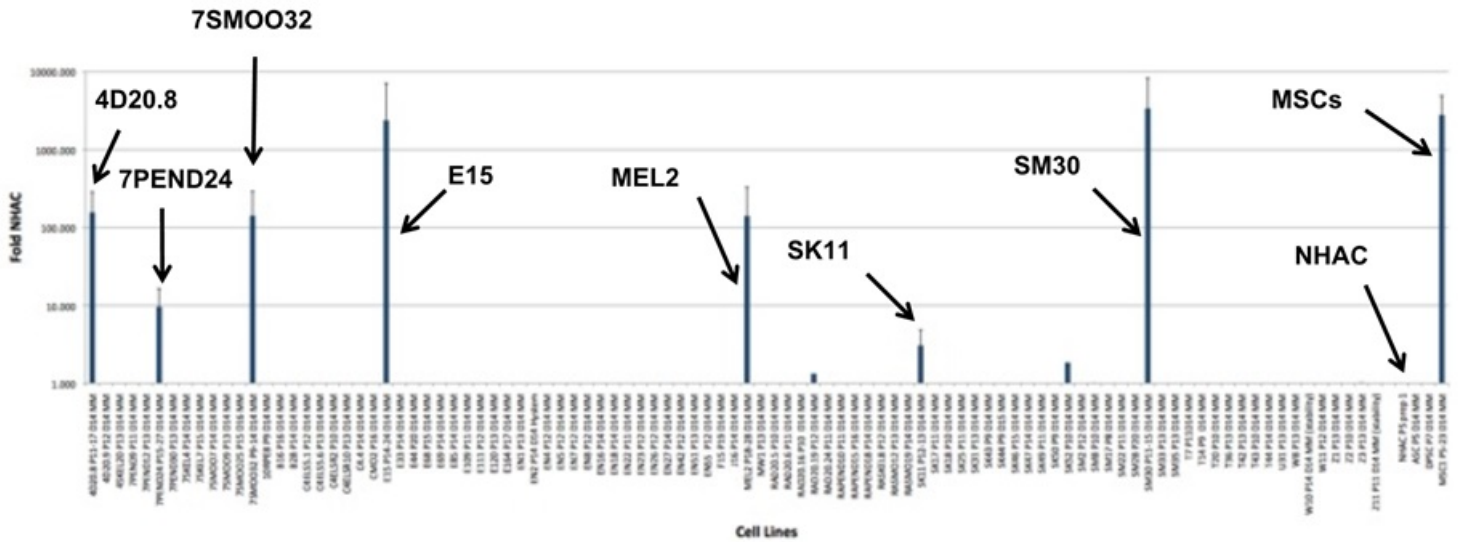
## Estimated Cell Number If Scaled Cells Presently in Inventory to Passage 30

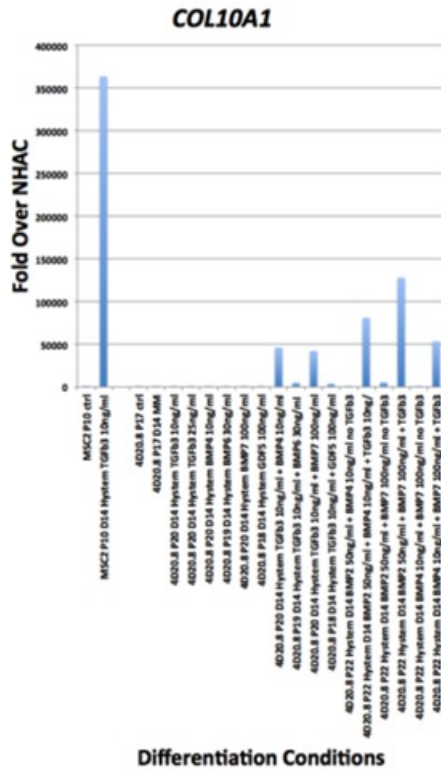
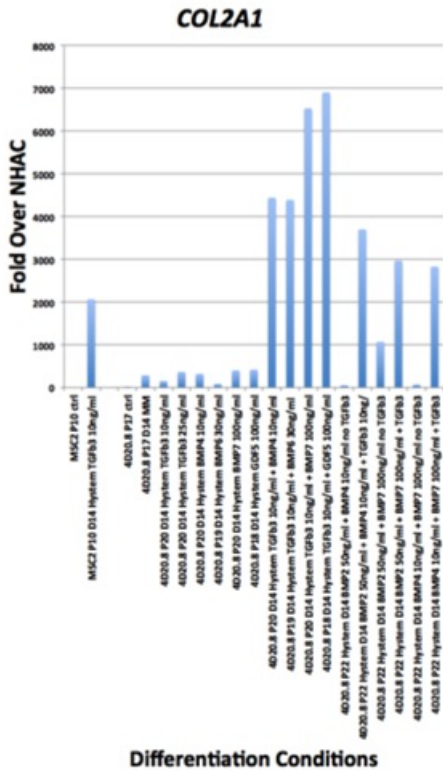
### CELL LINE

4D20.8 Example	Cell Number in Millions	Passage Number	Approximate treatments if require 100 million cells per treatment
	100	P9	1
	300	P10	3
	900	P11	9
	2700	P12	27
	8100	P13	81
	24300	P14	243
	72900	P15	729
	218700	P16	2187
	656100	P17	6561
	1968300	P18	19683
	5904900	P19	59049
	17714700	P20	177147
	53144100	P21	531441
	159432300	P22	1594323
	478296900	P23	4782969
	1434890700	P24	14348907
	4304672100	P25	43046721
	12914016300	P26	129140163
	38742048900	P27	387420489
	1.16226E+11	P28	1162261467
	3.48678E+11	P29	3486784401
	1.04604E+12	P30	10460353203

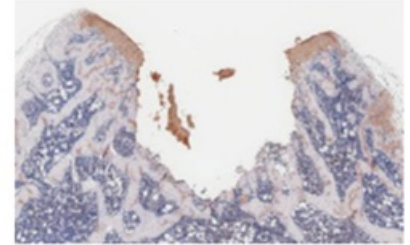
## Micromass with TGFb3 Condition

### COL2A1 qPCR

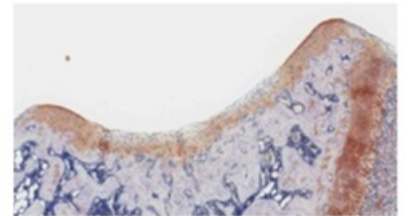




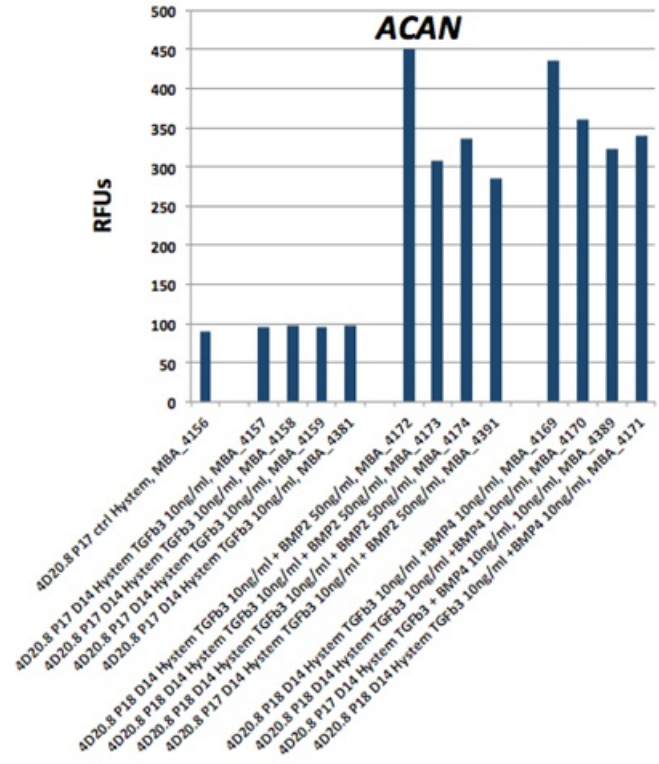
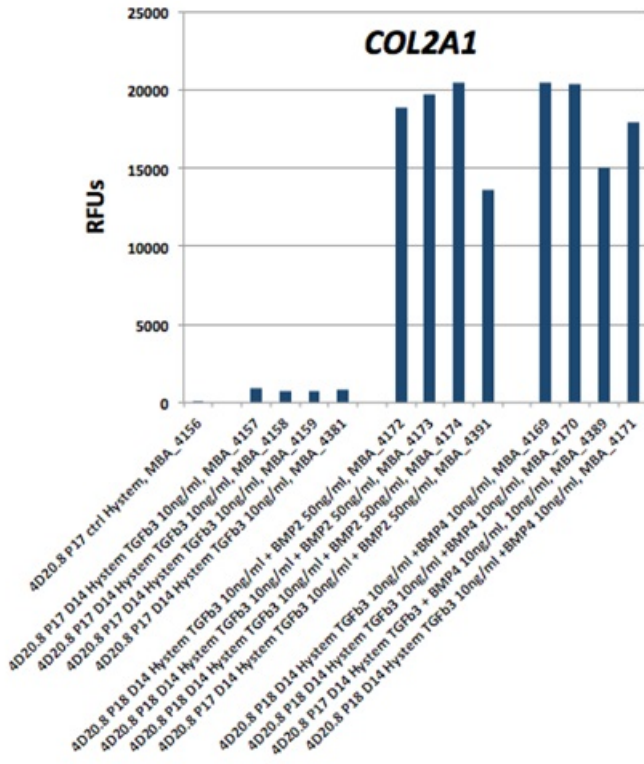
Experimentally-induced trauma



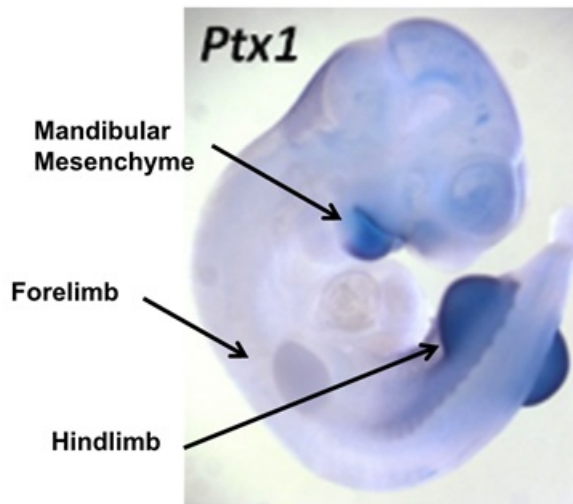
OTX-CP03



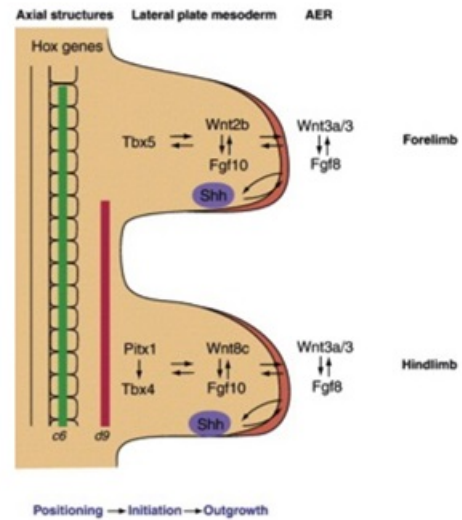
4 weeks

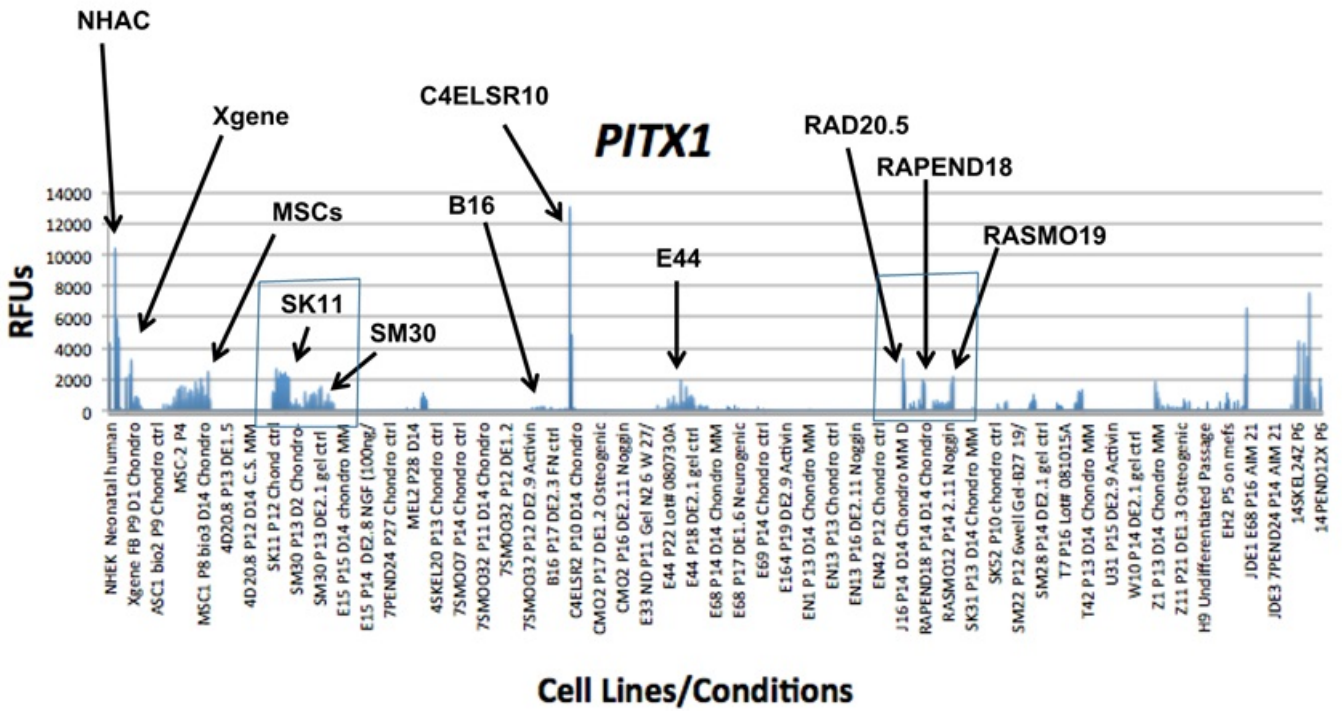


## *Distal LPM displays unique molecular markers*

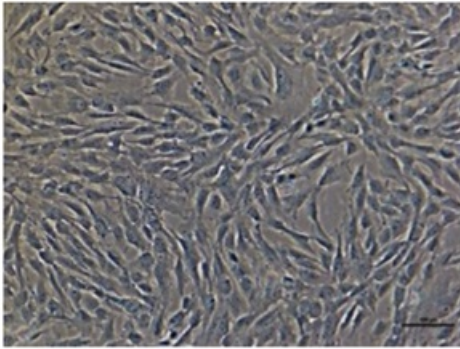


Taher L, Collette NM, Muruges D, Maxwell E, Ovcharenko I, et al. (2011) Global Gene Expression Analysis of Murine Limb Development. PLoS ONE 6(12): e28358. doi:10.1371/journal.pone.0028358

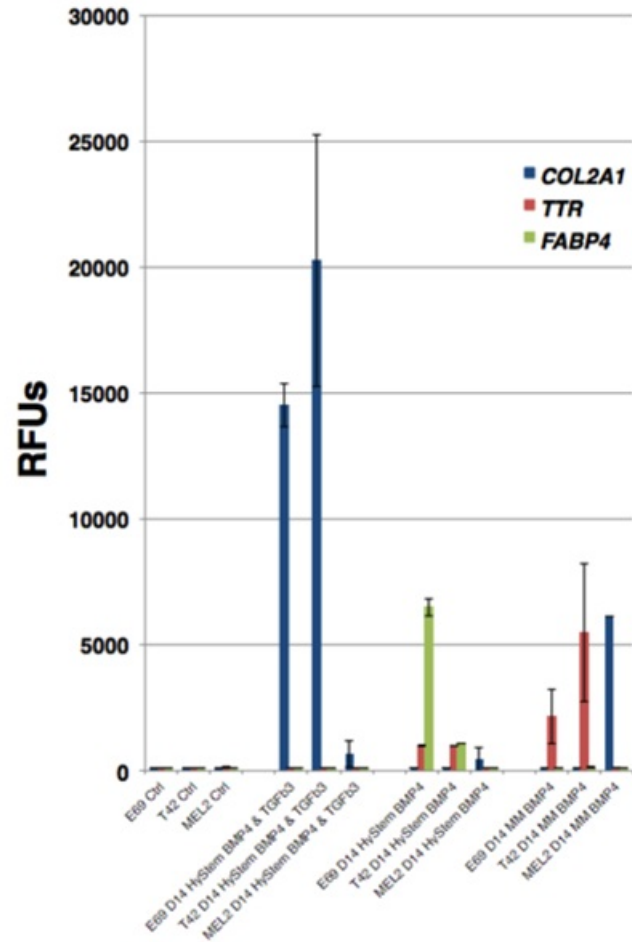
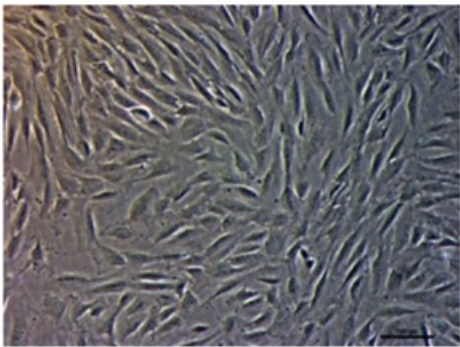




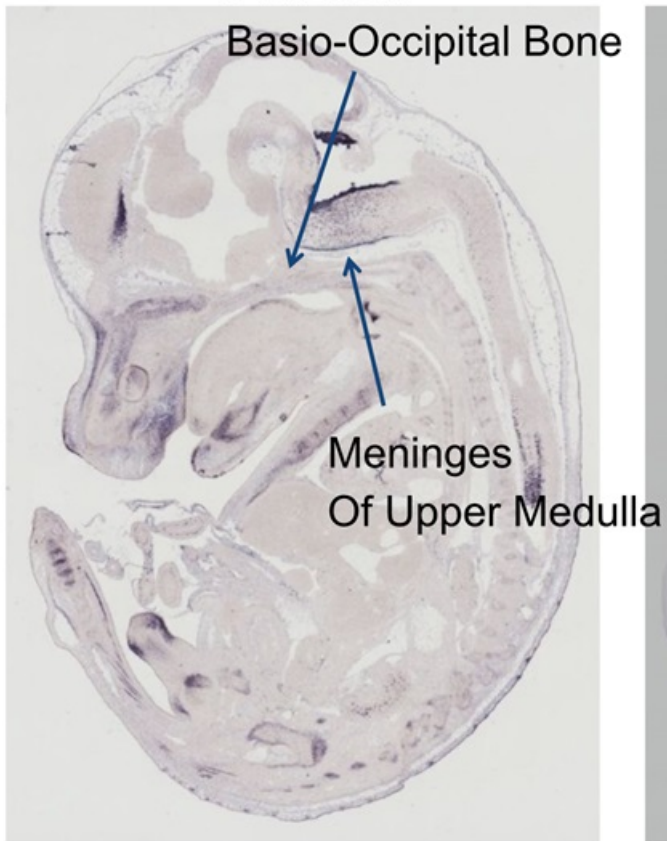
## E69



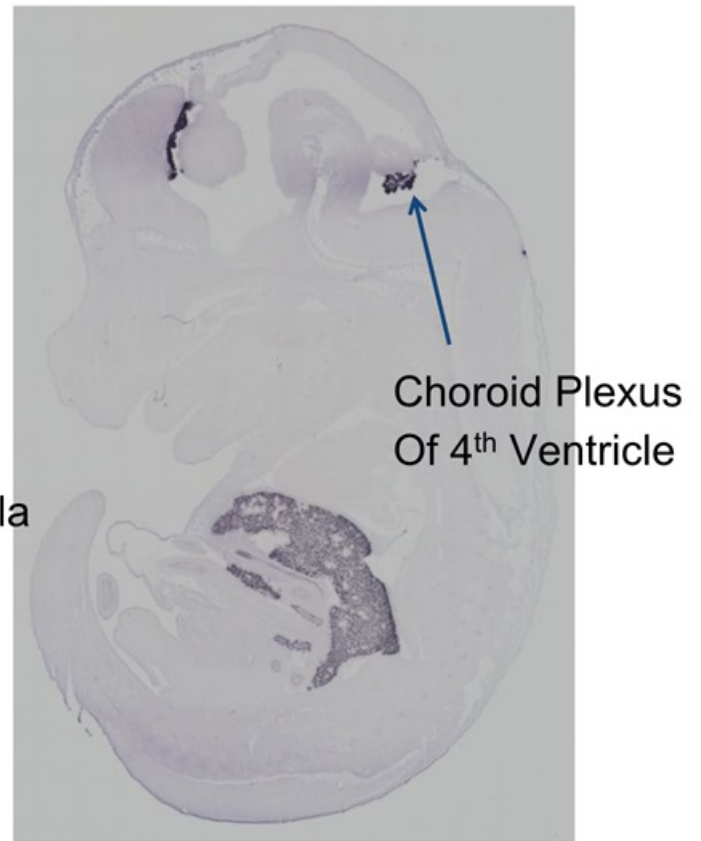
## T42



## **CYP26B1**



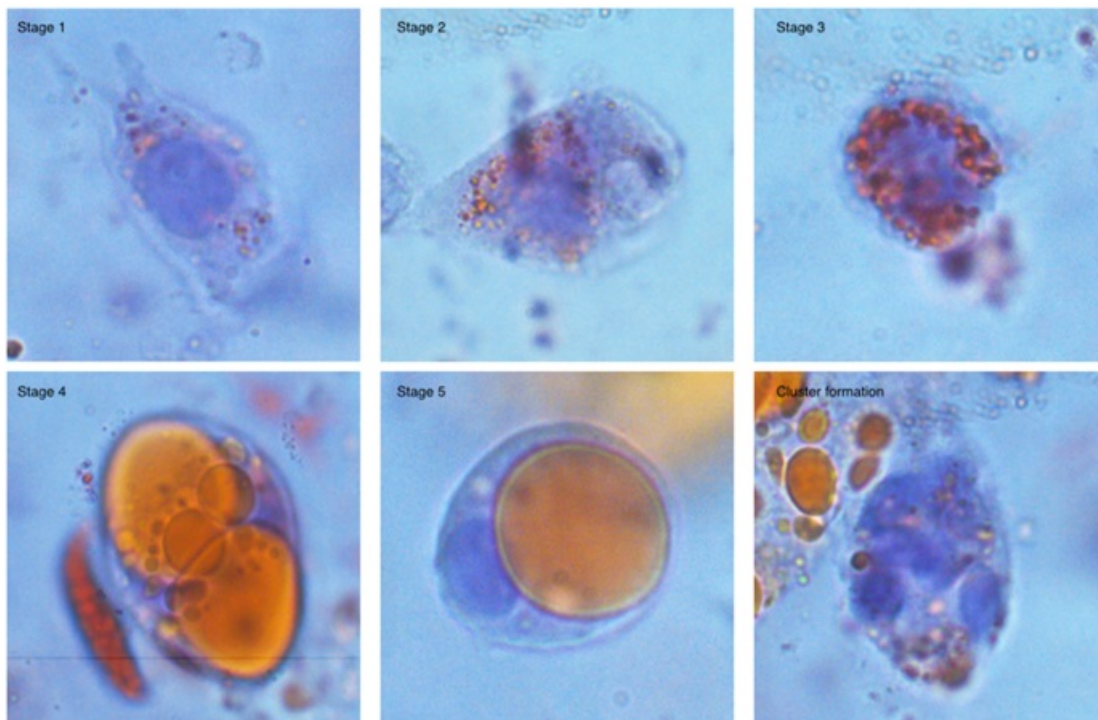
## **TTR**



*In situ* images from Genepaint.org



## Adipogenesis in *Renevia*



- *Renovia*<sup>™</sup> is an injectable matrix designed to safely produce 3-D tissue *in vivo*, keeping cells where the surgeon places them. It is expected to have numerous applications in multiple tissue types
- Pivotal trial for CE mark for use in HIV-associated lipoatrophy in combination with autologous lipotransfer now underway
- Estimated 3.5M people worldwide have HIV-related lipoatrophy
- In addition, a greater number of people have lipoatrophy due to trauma or aging
- Many other potential applications in combination with adult and ESC therapies

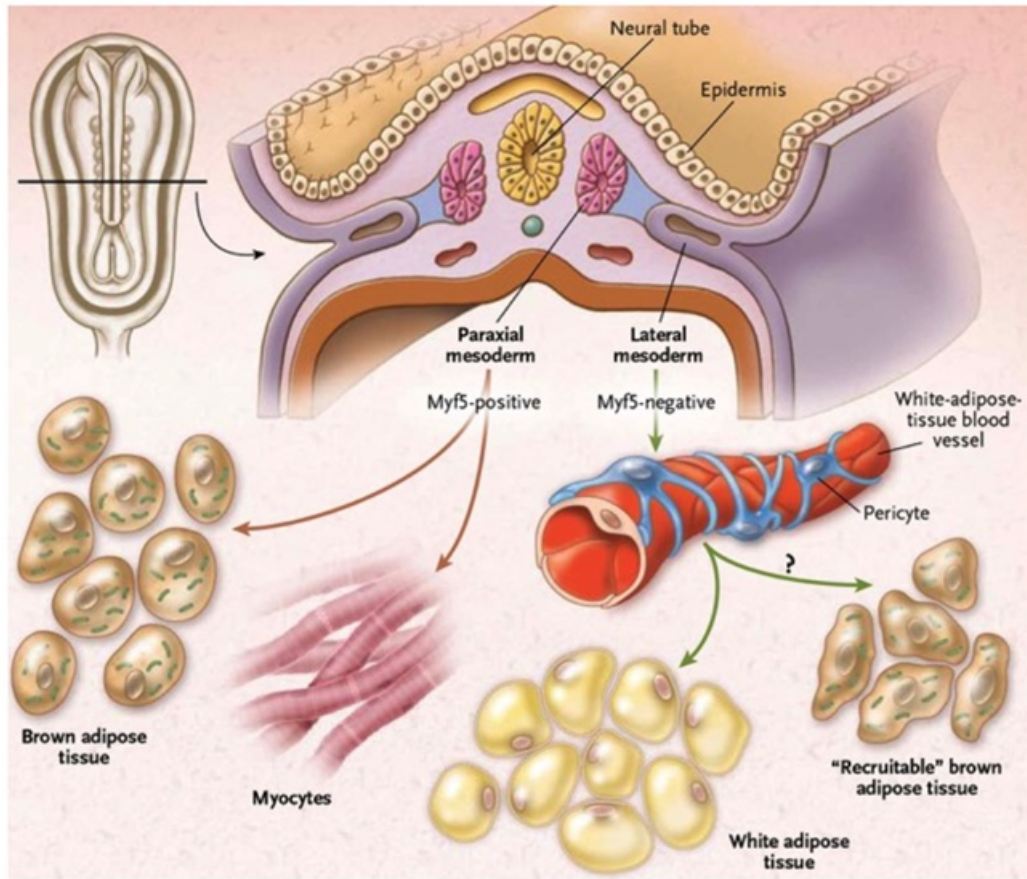


*Age-Related Lipoatrophy*

## Trial Design

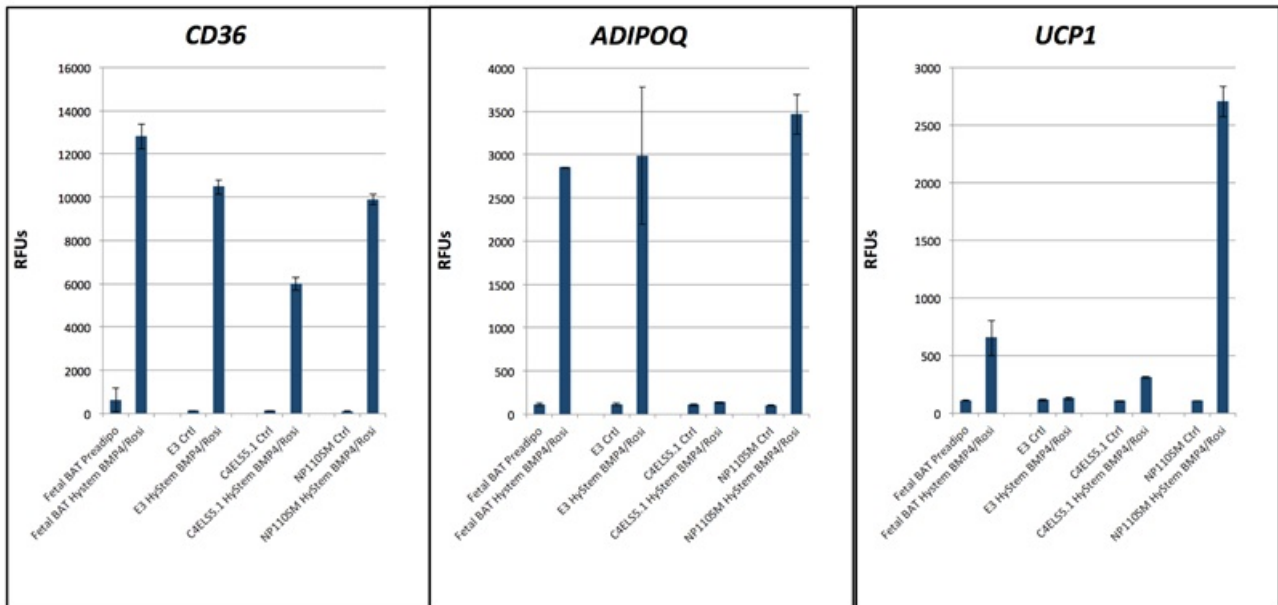
### Multicenter, randomized, controlled, single blind trial

Treated vs. delayed treatment control	25 - 92 subjects in each group with treatment effect measured at 1, 3, and 6 months
Primary Endpoint	Increase in skin thickness as measured by ultrasound at 6 months
Secondary Endpoint	Mid-face volume deficit score Global aesthetic improvement score
Sites	2 sites in Palma de Mallorca, Spain



*N Engl J Med* 2009 360;19

# Brown Adipocyte Progenitors



- Rare and potentially valuable cell types
- Scalable & reproducible product
- Purity and identity of cells
- A formulation optimizing viability & immobilization of engraftment