

**THE FIRST TOPICAL
SUPPLEMENT DESIGNED TO
EXTEND THE HEALTH OF THE
SKIN AND BODY**



Dr. Carolina Oliveira, CEO



**UNTIL NOW, THE CONNECTION OF SKIN TO OVERALL
HEALTH AND LONGEVITY HAS BEEN OVERLOOKED.**

**THE SKIN HAS BEEN PRIMARILY
RELATED TO AESTHETICS AND BEAUTY.**



HEALTHY SKIN, HEALTHIER BODY

Chronic
diseases*



Inflammation
("inflammaging")

Skin aging /
deterioration





THE ROOT CAUSE

ACCUMULATION OF
SENESCENT CELLS CAUSE
OR CONTRIBUTE TO:



Alzheimer's and **Parkinson's** disease

Wrinkles, sagging, skin cancer

Atherosclerosis

Cancer metastasis and recurrence

Diabetes

Chemotherapy (HAART) cardiotoxicity, fatigue

Myeloid -> lymphoid skewing

Osteoporosis

Osteoarthritis

Sarcopenia/frailty

Wound healing, tissue regeneration



SENESCENT CELLS

are “damaged” cells that promote inflammation and induce aging when accumulate in the tissues, just like bad apples in a basket.





CURRENT SOLUTIONS ARE FOCUSED ON COVERING UP OR TEMPORARILY RELIEVING THE SYMPTOMS OF AGING. THEY ARE NOT ADDRESSING AGING ITSELF

Moreover, those strategies are either invasive, non-specific, or associated with important collateral effects.



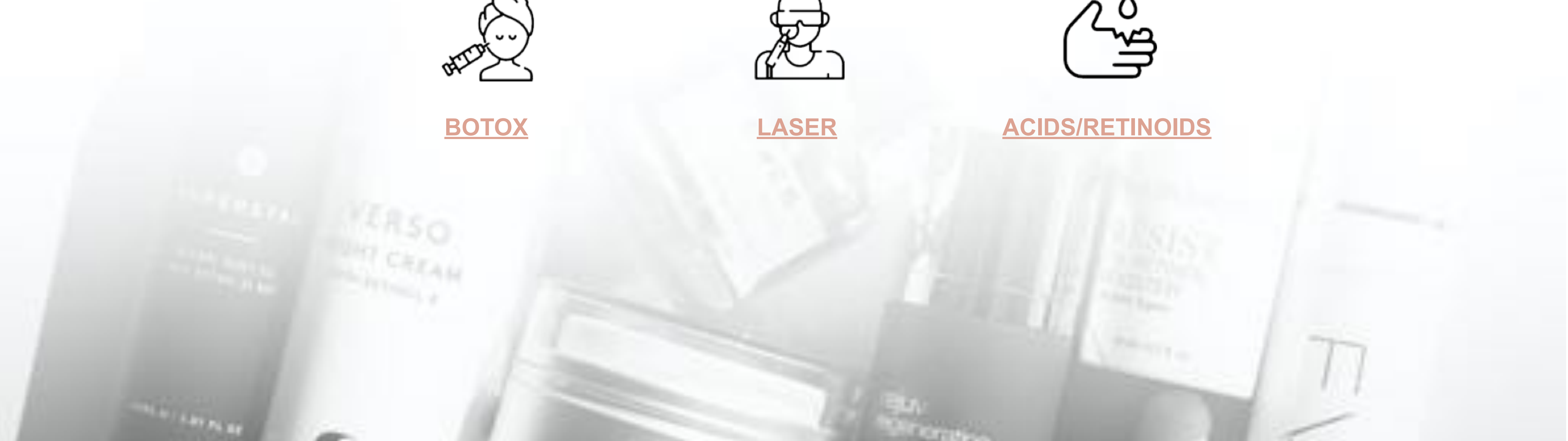
BOTOX



LASER



ACIDS/RETINOIDS





WE ARE FUNDAMENTALLY DIFFERENT

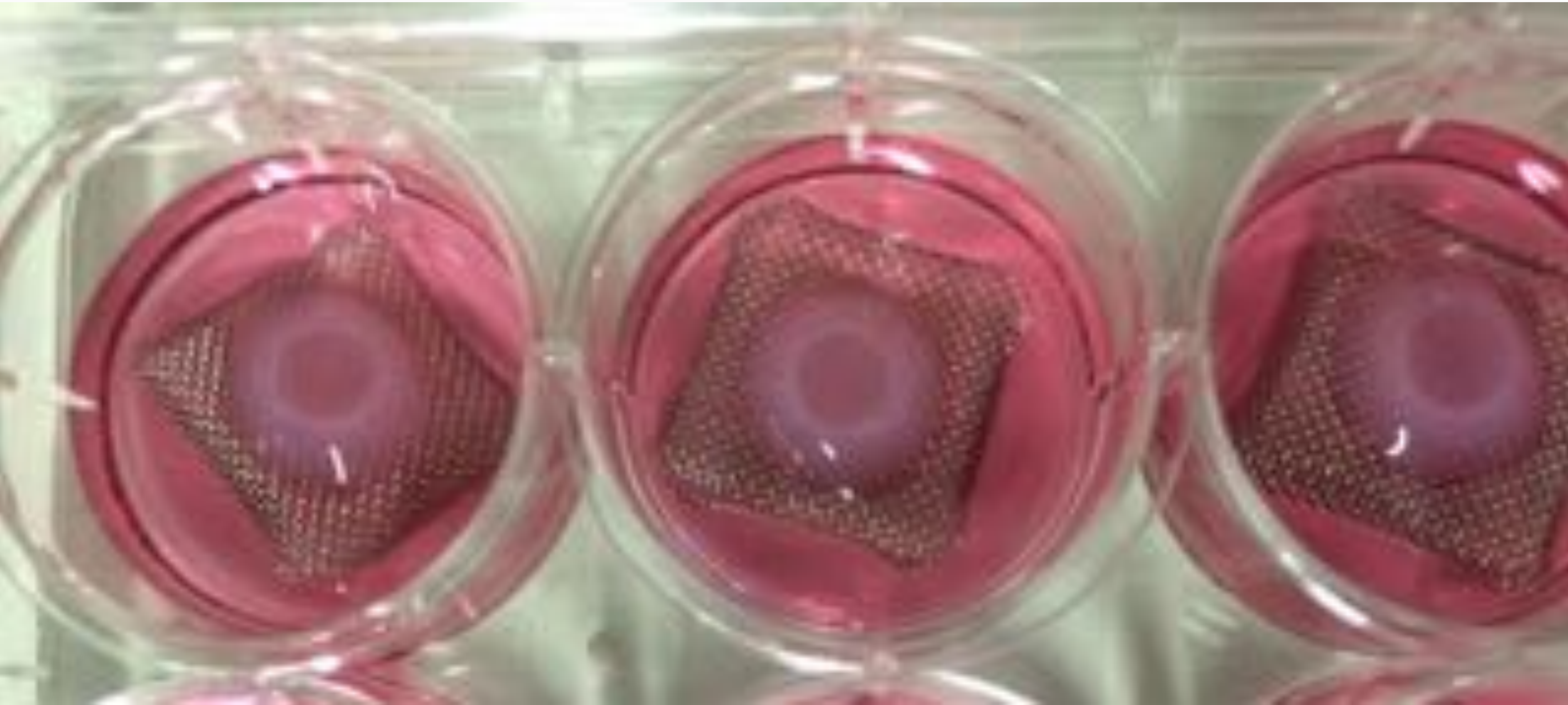


ONESKIN IS THE FIRST TO ADDRESS THE UNDERLYING CAUSE OF SKIN AGING DOWN TO THE MOLECULAR LEVEL

AS A RESULT, IT PROMOTES A HEALTHIER LOOKING AND FUNCTIONAL SKIN.

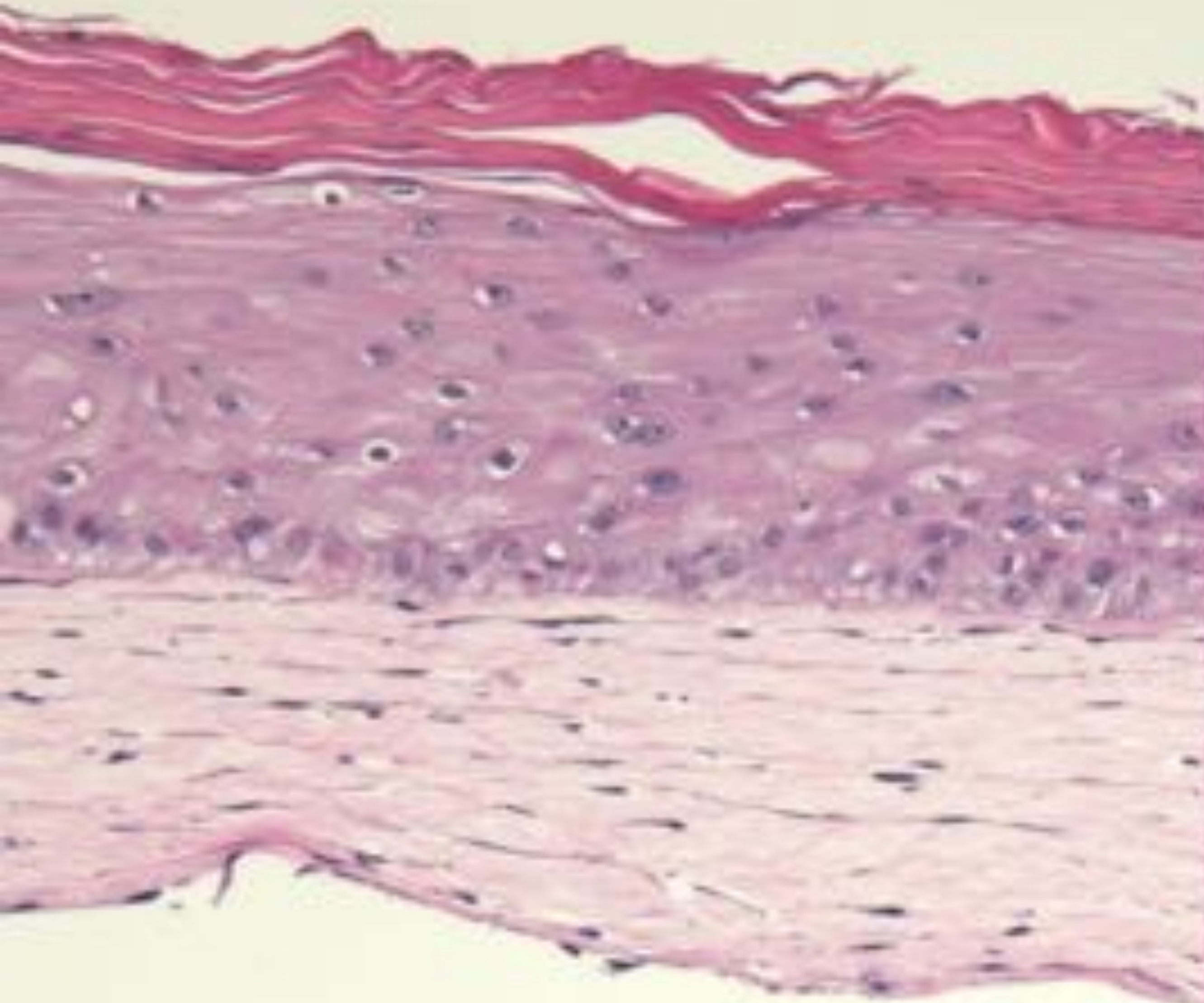


RELEVANT MODELS FOR TRANSLATIONAL SCIENCE





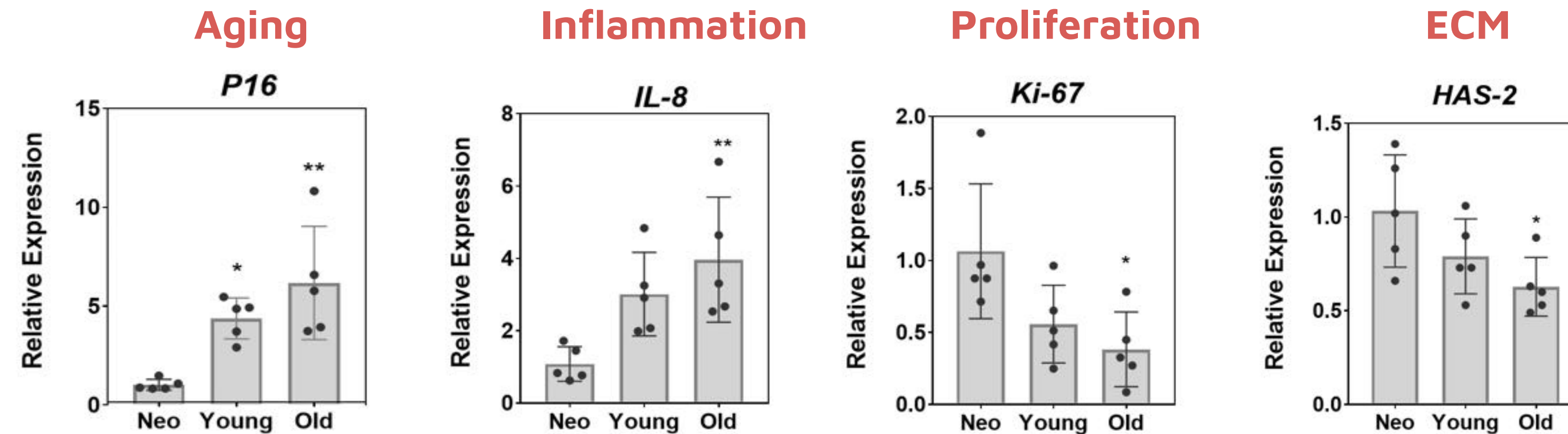
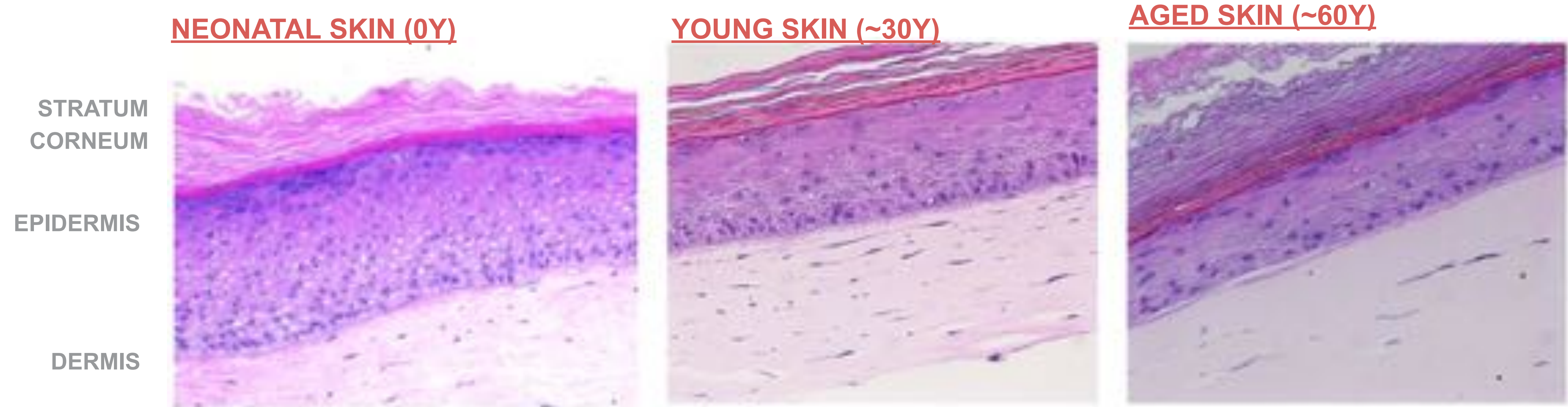
HUMAN SKIN



ONE SKIN 3D EQUIVALENTS



REPLICATING SKIN AGING IN THE LAB



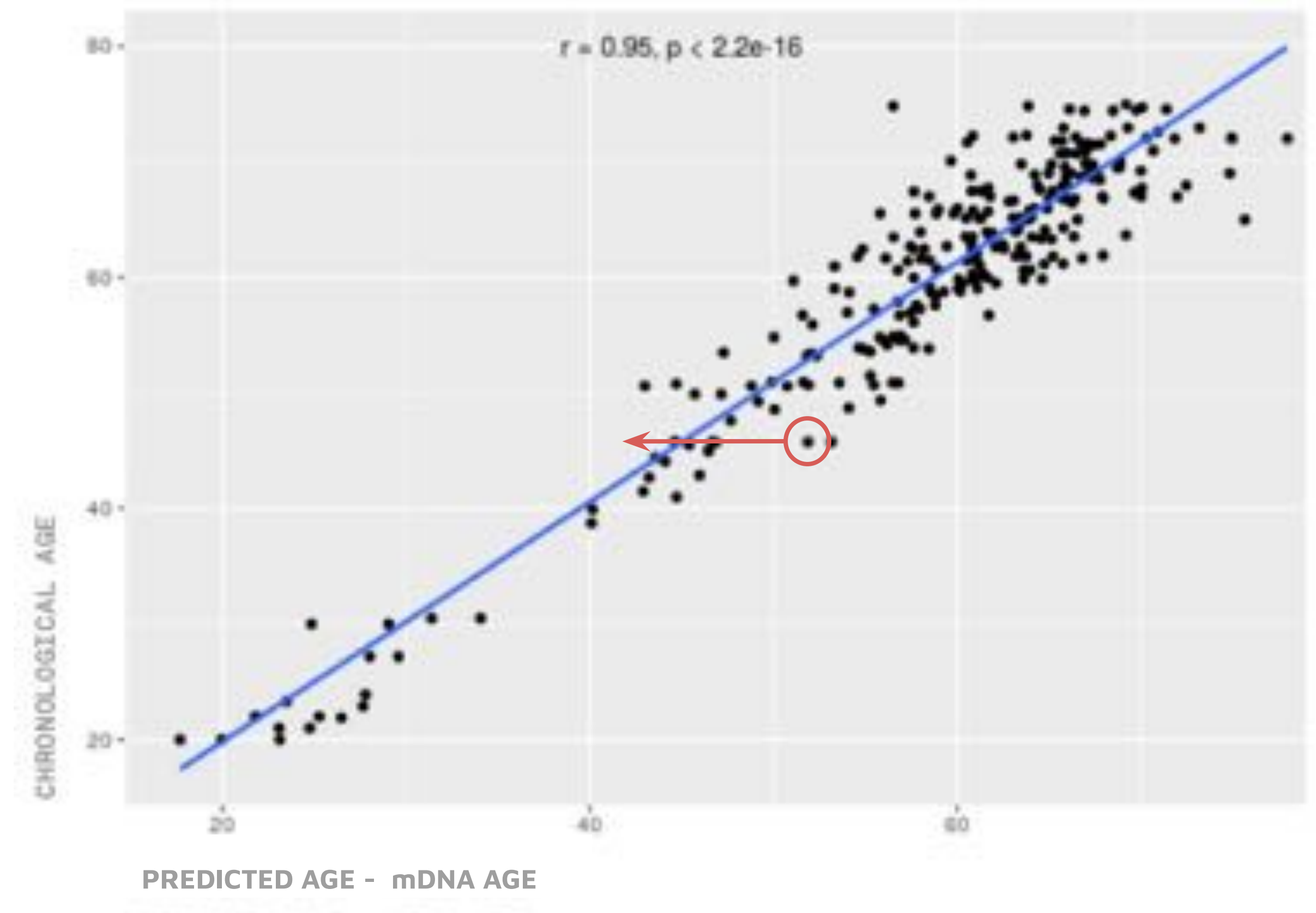


DEVELOPING AN ALGORITHM TO MEASURE BIOLOGICAL SKIN AGE

Using skin-specific epigenetic DNA markers, we developed an algorithm able to predict the molecular age of a skin tissue with high accuracy.

www.molclock.com

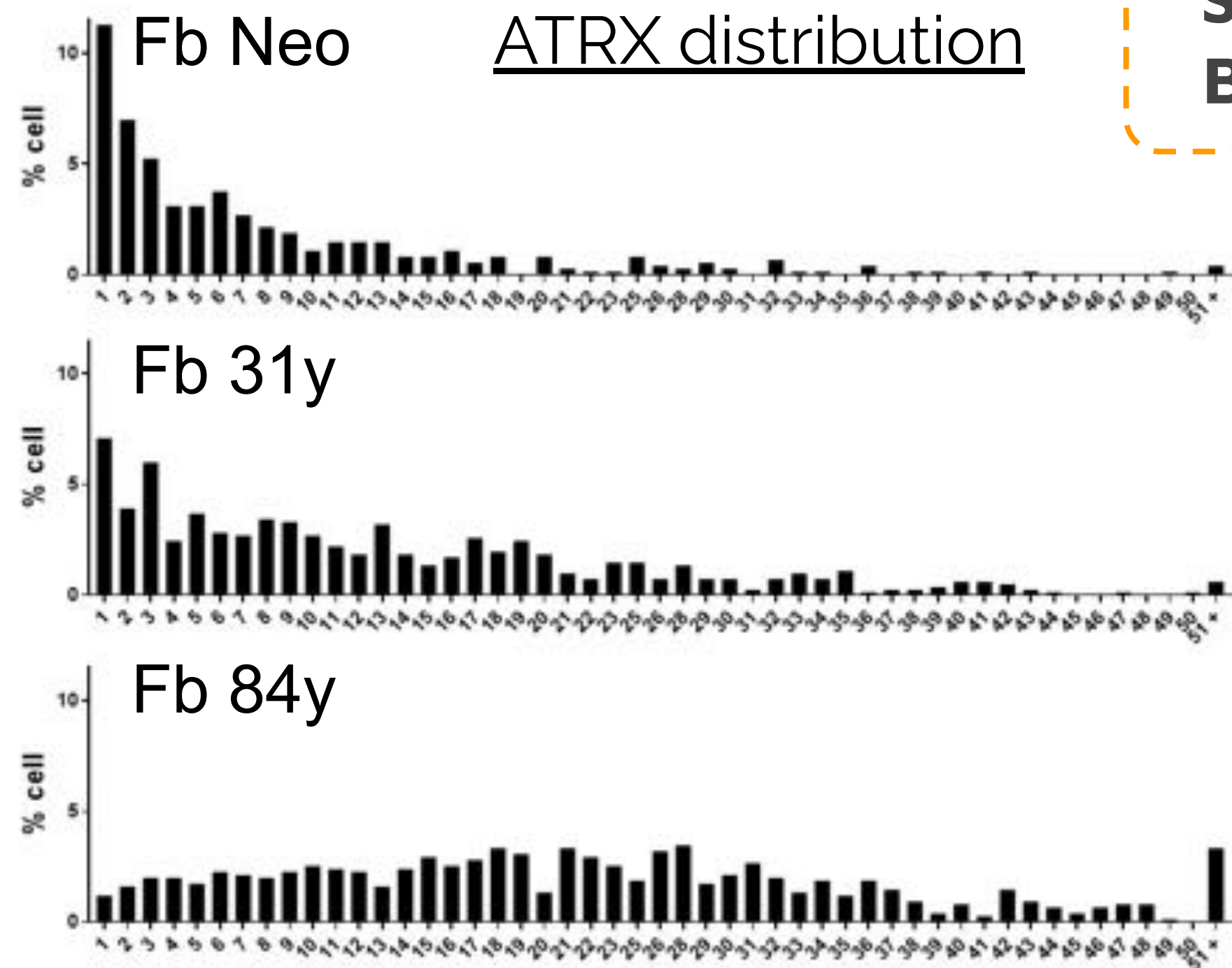
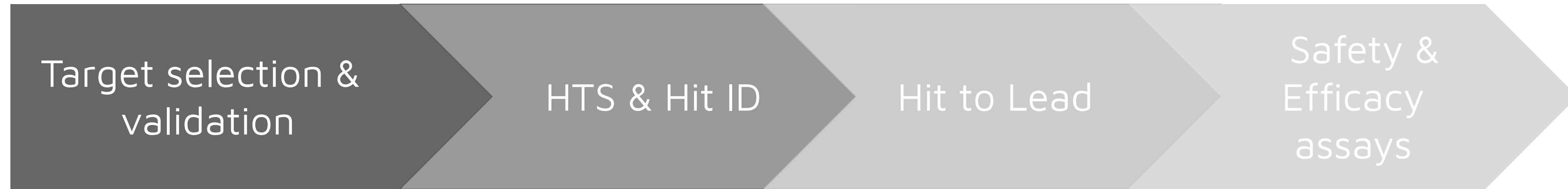
ONE SKIN | ALGORITHM



Boroni, M., Zonari, A., Reis de Oliveira, C. *et al.* [Highly accurate skin-specific methylome analysis algorithm as a platform to screen and validate therapeutics for healthy aging.](#) *Clin Epigenet* 12, 105 (2020).

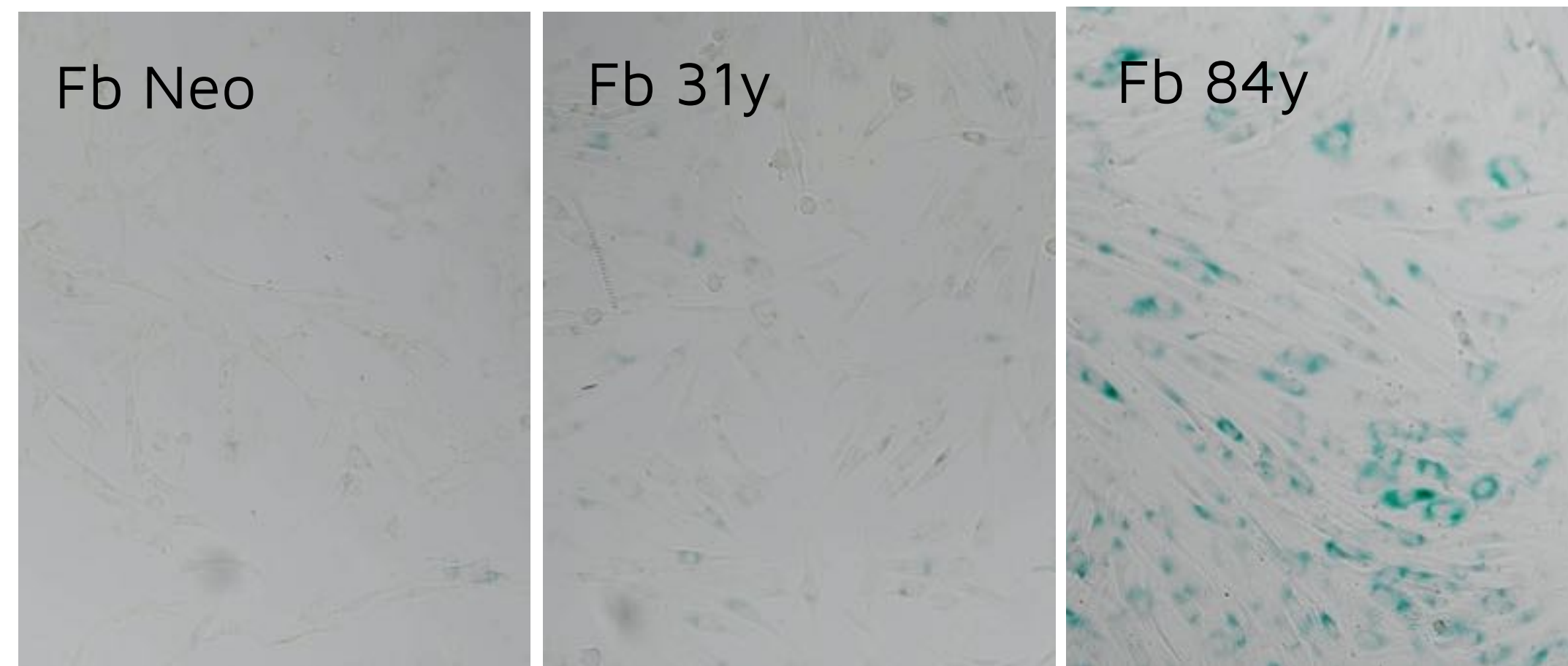


A RIGOROUS DRUG DISCOVERY PROCESS



Senescence Biomarkers

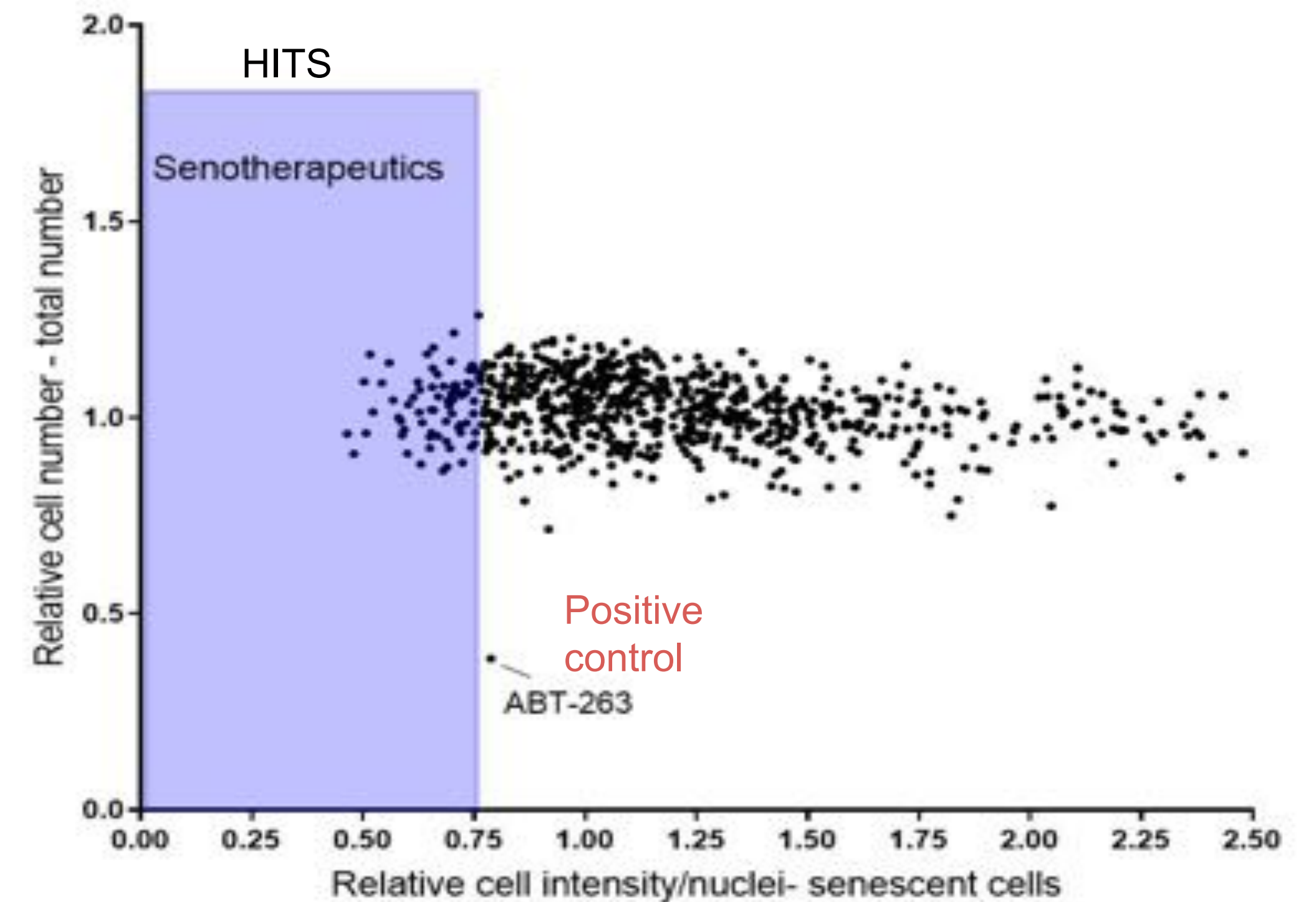
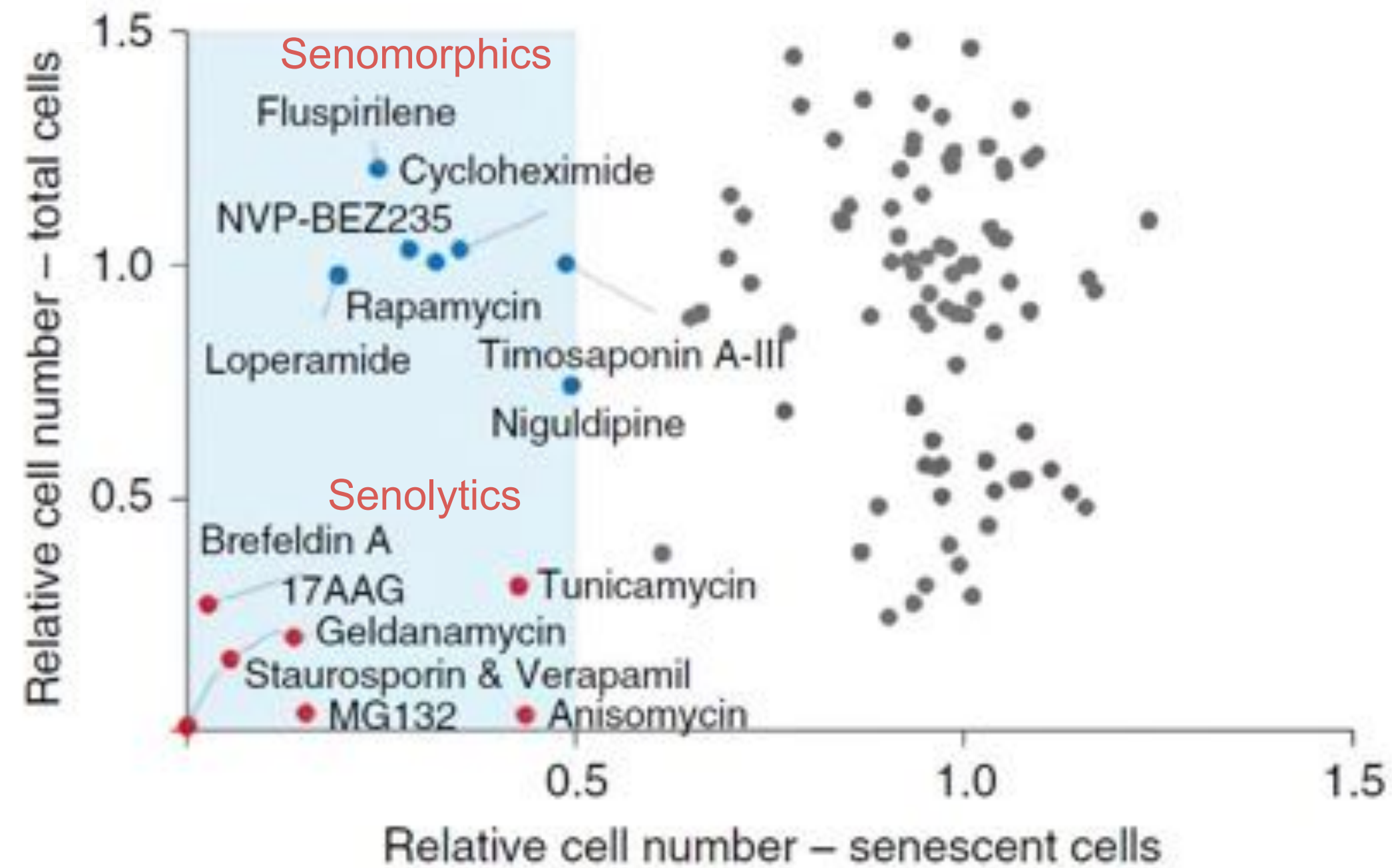
SA B-Galactosidase



Senescent cells (blue)



CELL-BASED SCREENING PLATFORM TO IDENTIFY SENOTHERAPEUTIC COMPOUNDS



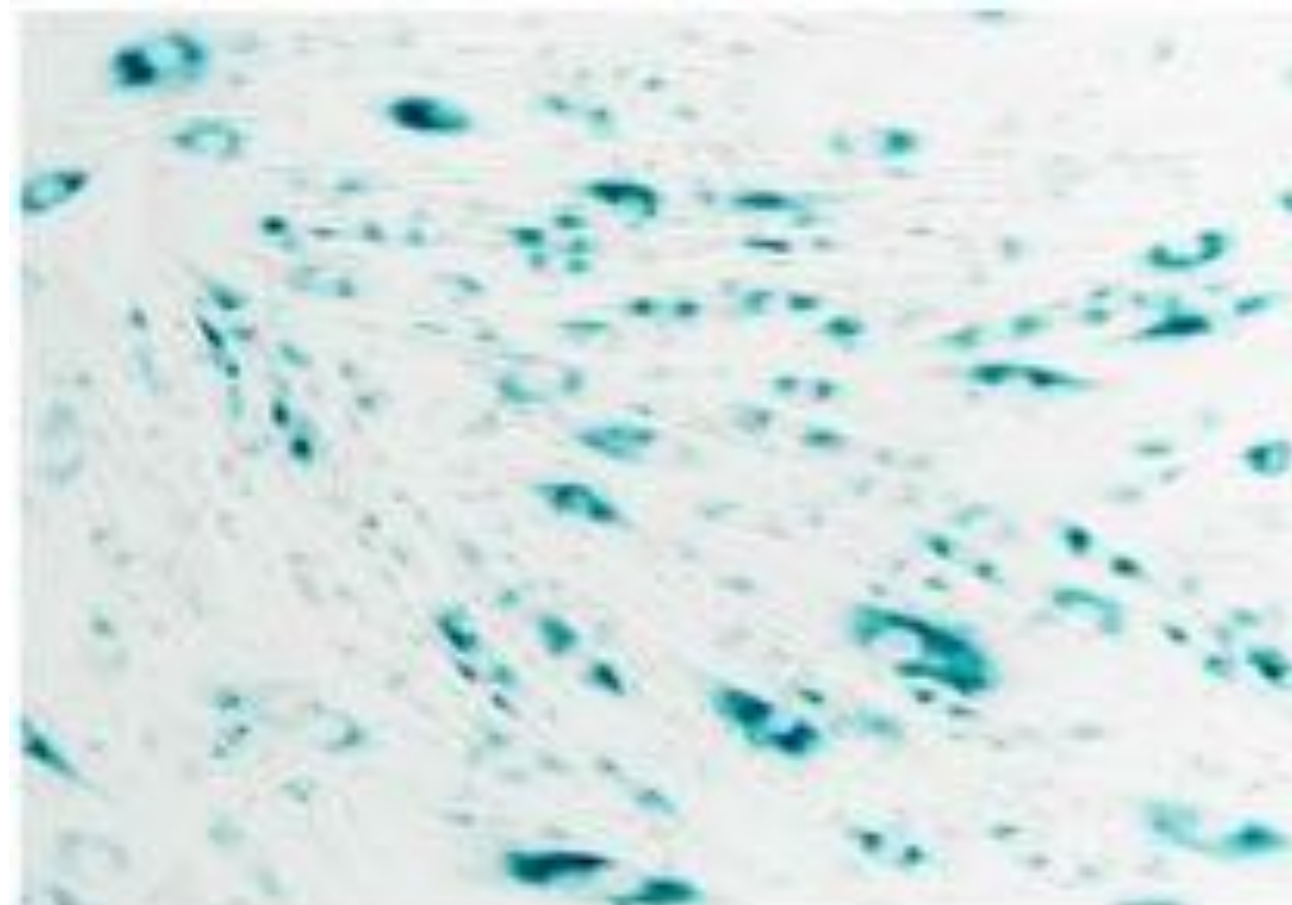
Fuhrmann-Stroissnigg et al., 2017

OneSkin Screening ~
1000 novel compounds

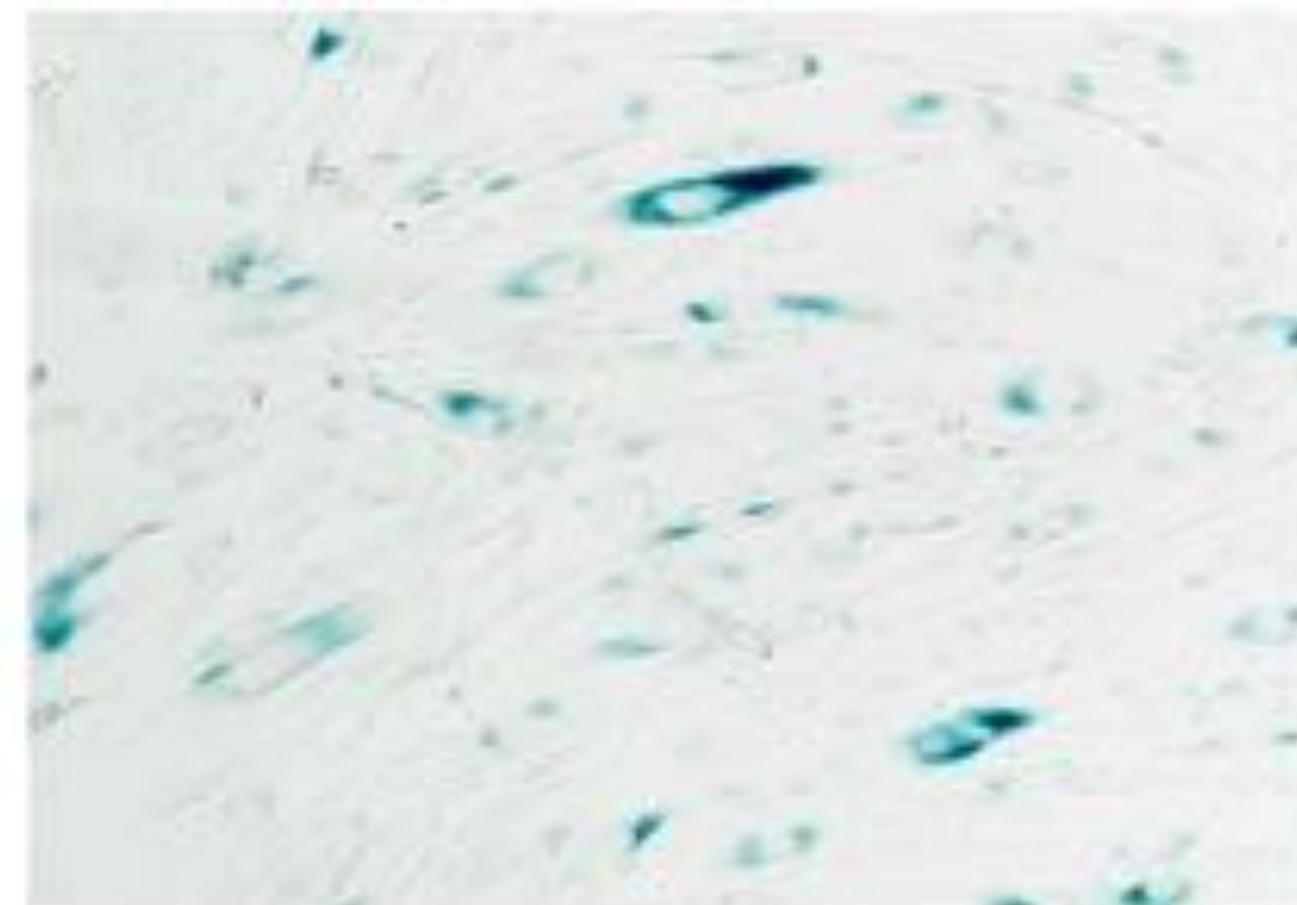


MEET OS-1: OUR LEAD COMPOUND REDUCES SENESCENT CELL BURDEN BY 25-40%

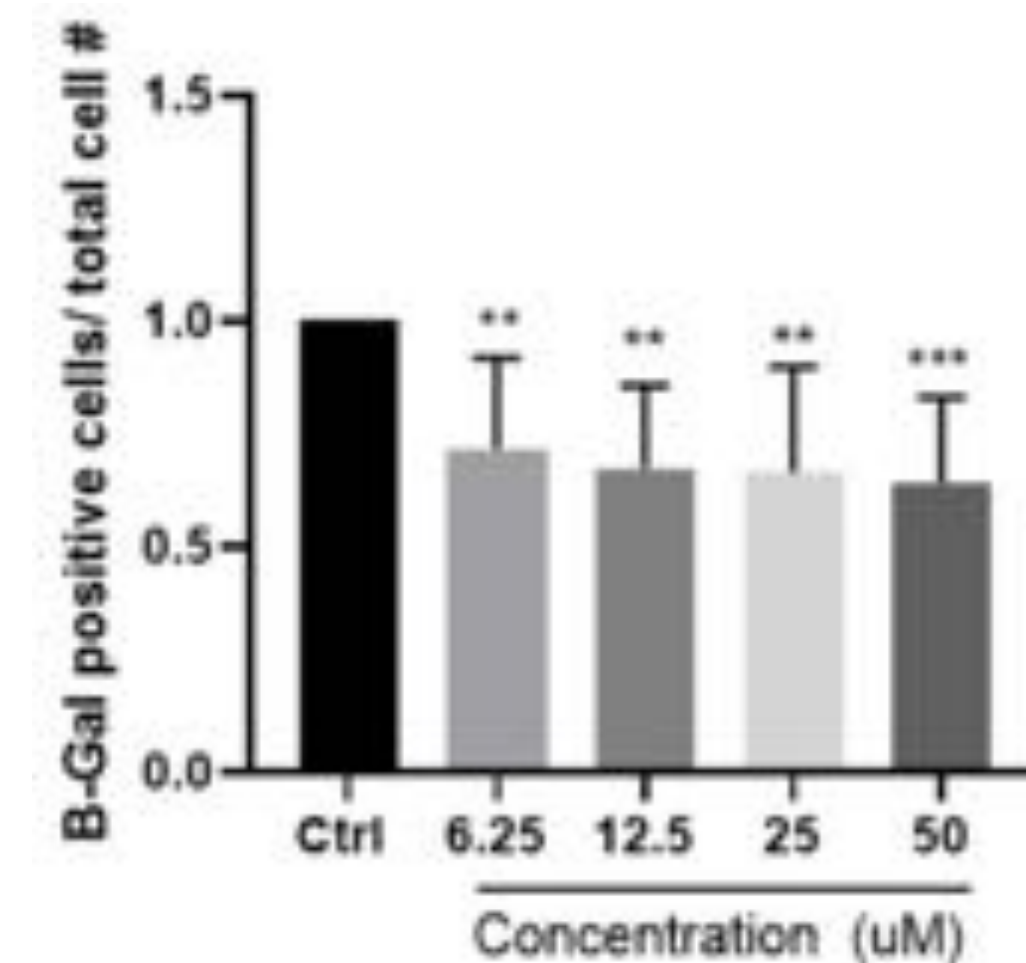
CONTROL



LEAD COMPOUND: OS-1



3 DONORS (71-90 Y.O.)

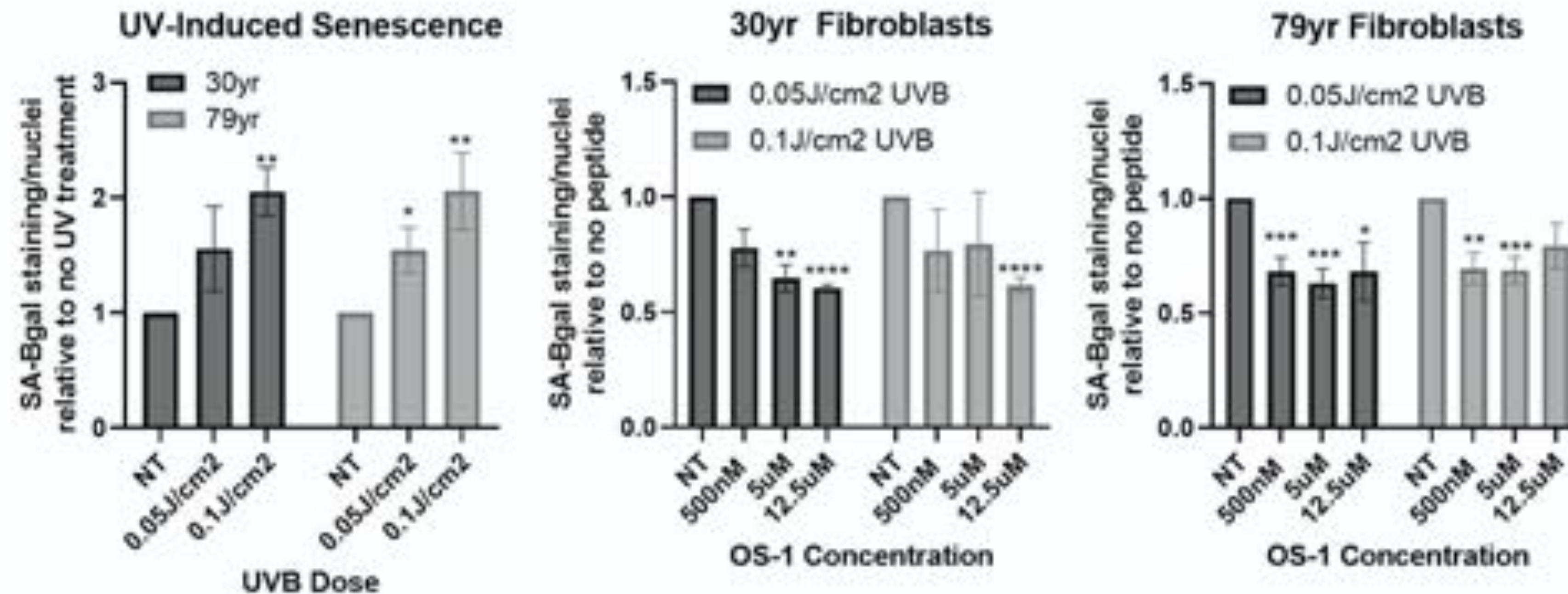


OS-1 treatment promoted a reduction of 25-40% in the number of senescent cells (blue)



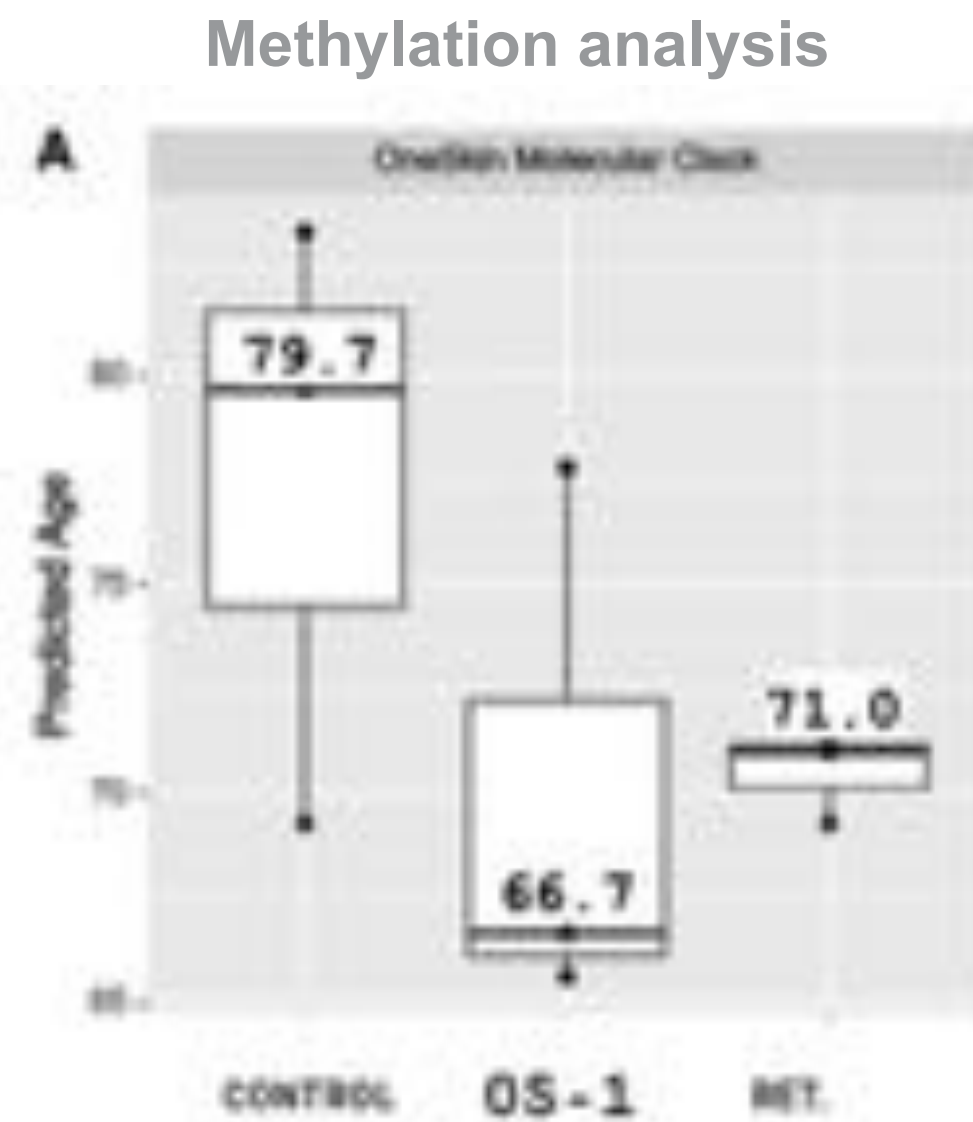
OS-1 CAN PROTECT CELLS FROM UVB INDUCED PHOTOAGING

OS-1 significantly reduced UVB-induced cellular senescence in fibroblasts

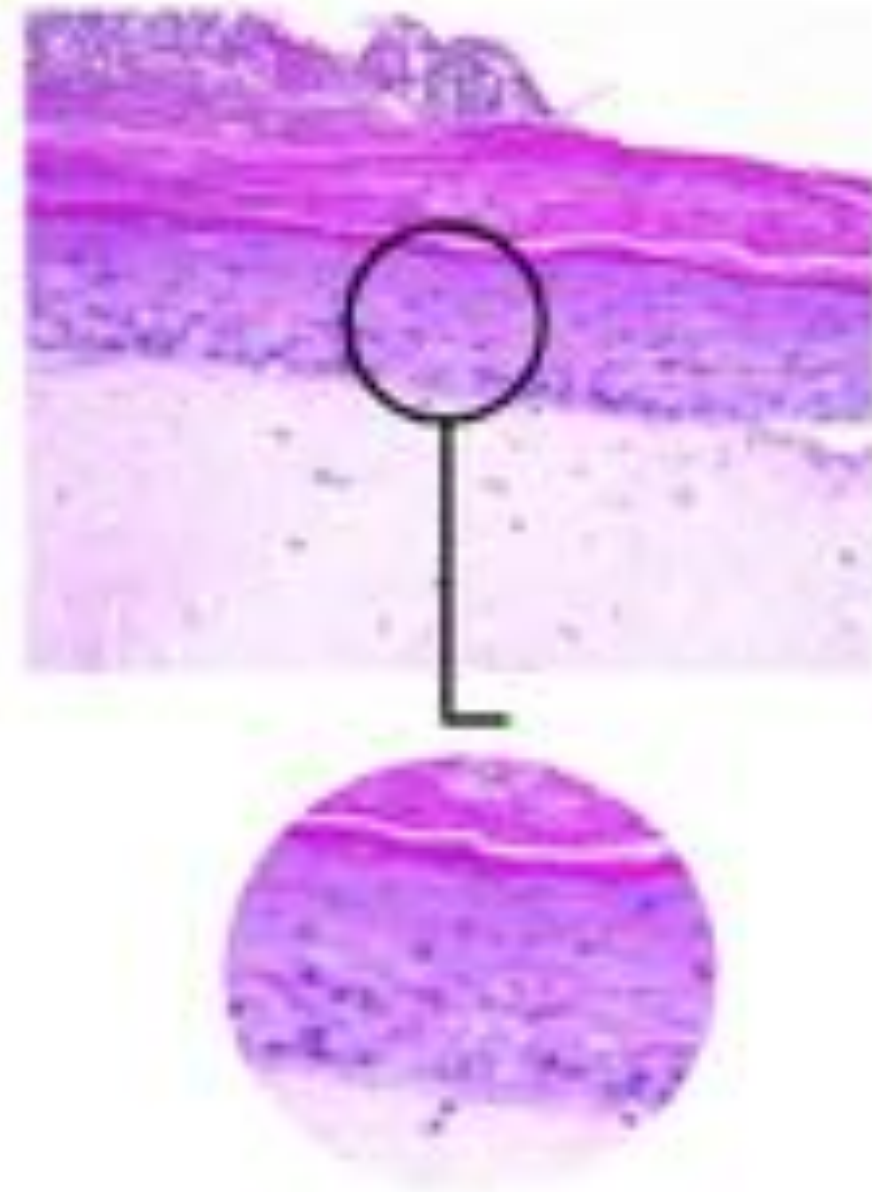




OS-1 IS THE FIRST SENOTHERAPEUTIC MOLECULE PROVEN TO REDUCE MOLECULAR AGE IN 3D SKIN



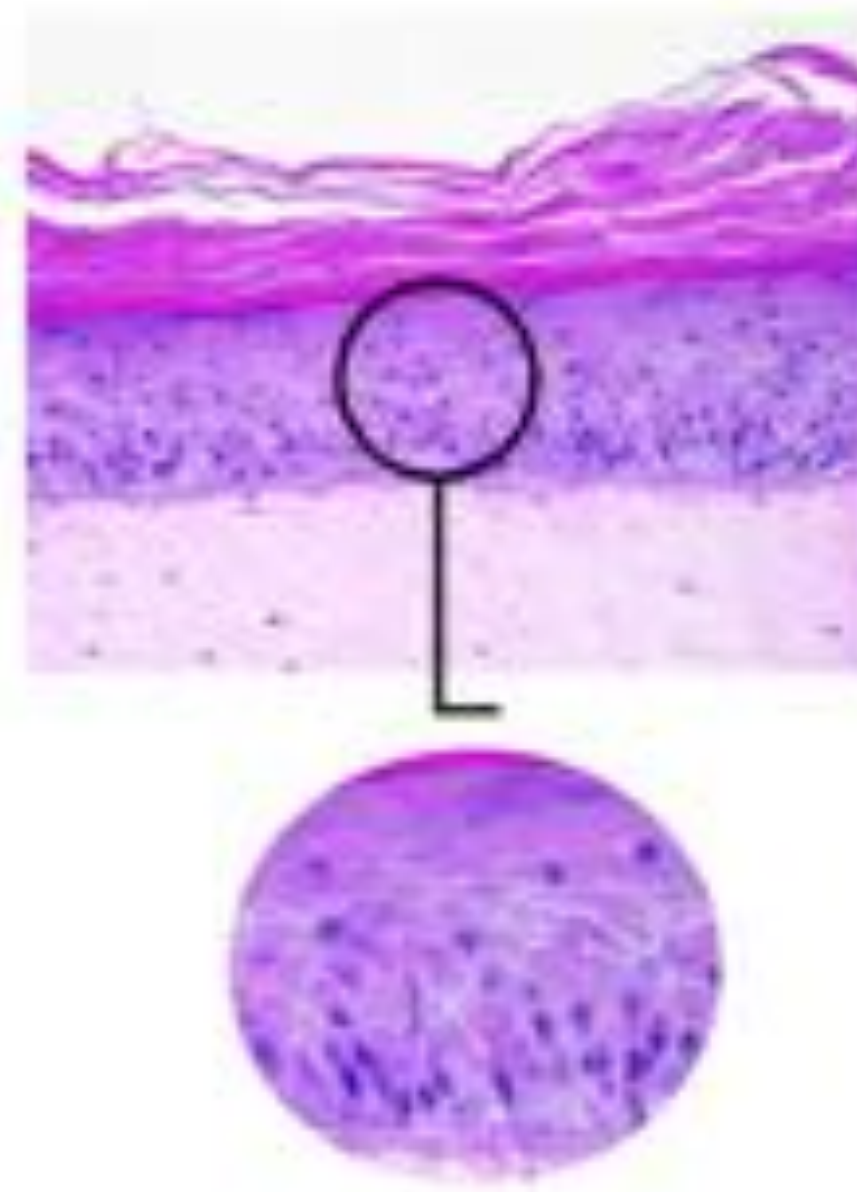
OLD SKIN



OLD = DAMAGED SKIN

(sparse and disorganized cell layer)

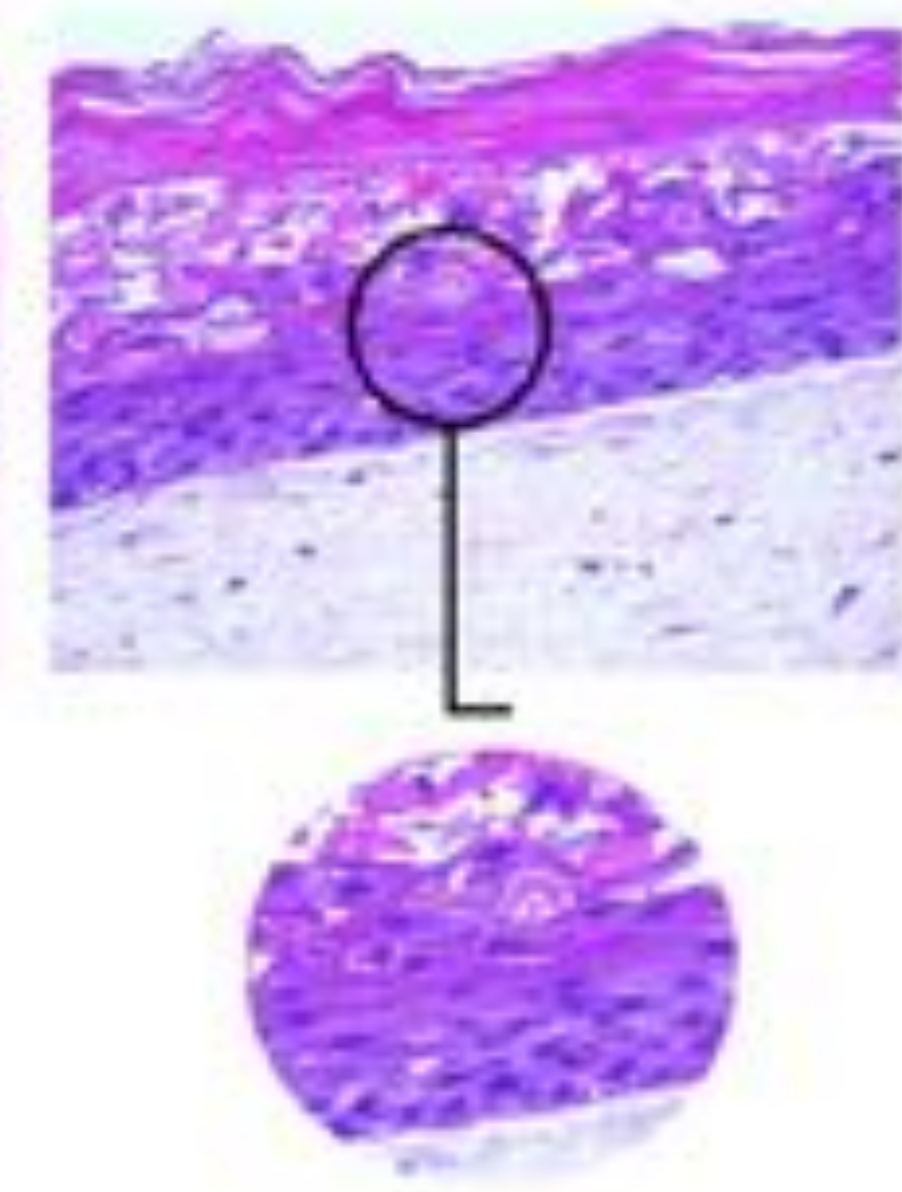
OLD SKIN + OS-1



YOUNG = HEALTHY SKIN

(dense and columnar cell layer)

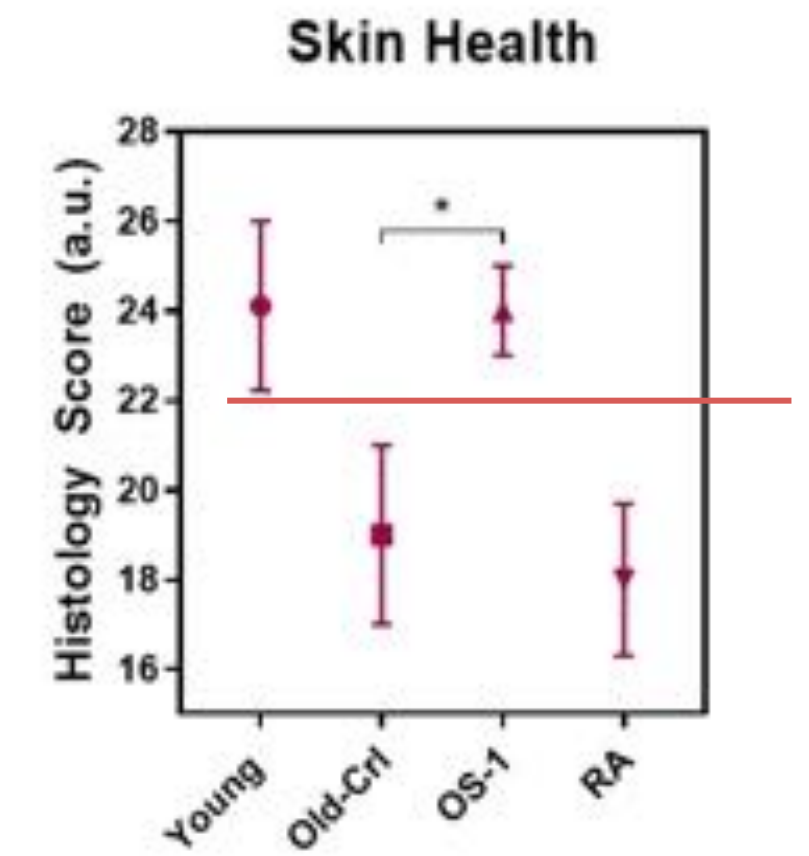
OLD SKIN + RETINOIC ACID



NEW OLD* = Retinoic Acid

PEELING EFFECT

(inflammation + cell turnover)

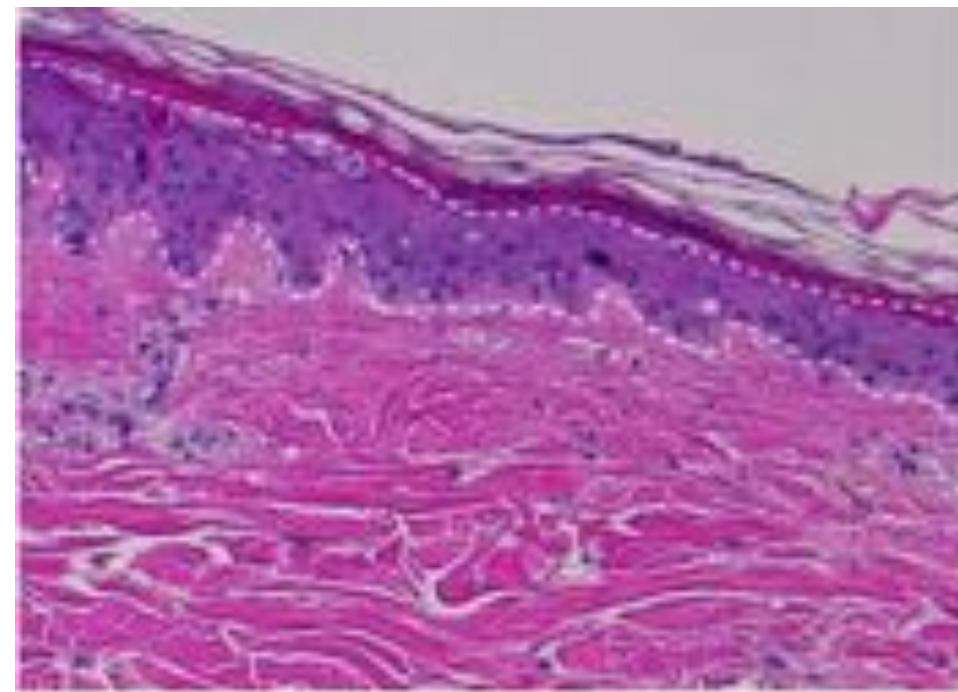


*Acids peels induce the growth of a new layer of skin that is not necessarily younger since it's not specifically eliminating the aged cells.



OS-1 TREATMENT IN SKIN BIOPSIES INCREASES EPIDERMAL THICKNESS AND REDUCES MOLECULAR AGE

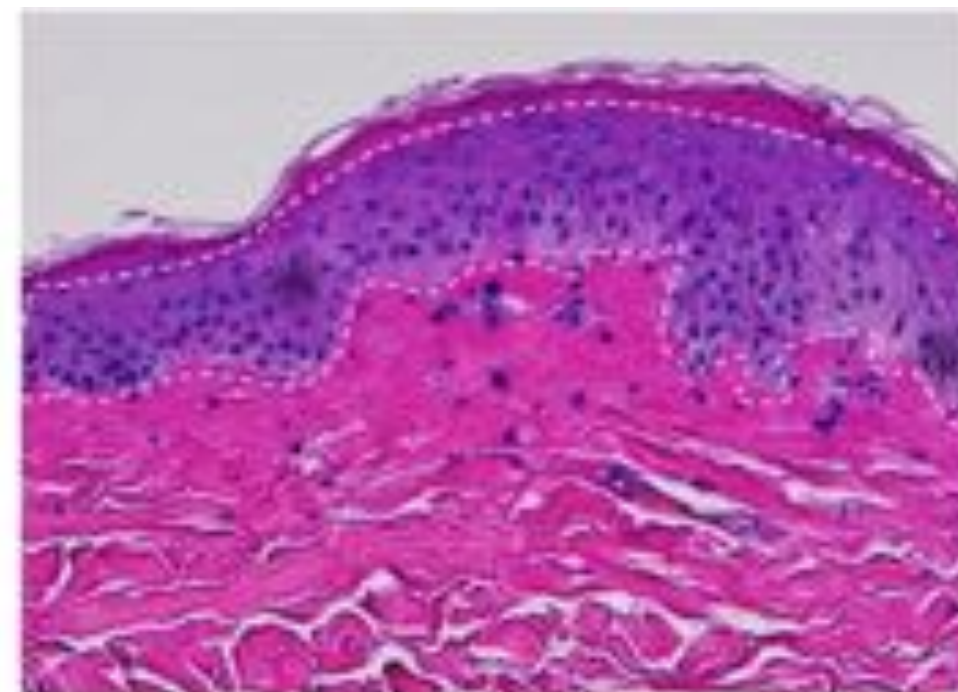
AGED SKIN



N skin (0y)



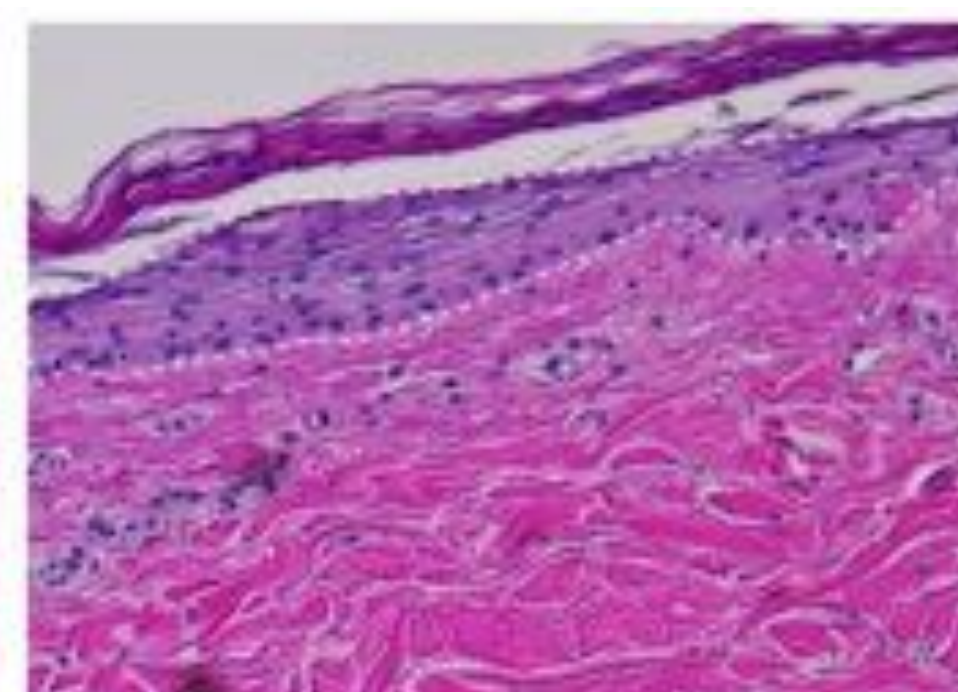
AGED SKIN + OS-1



Young skin (~30y)



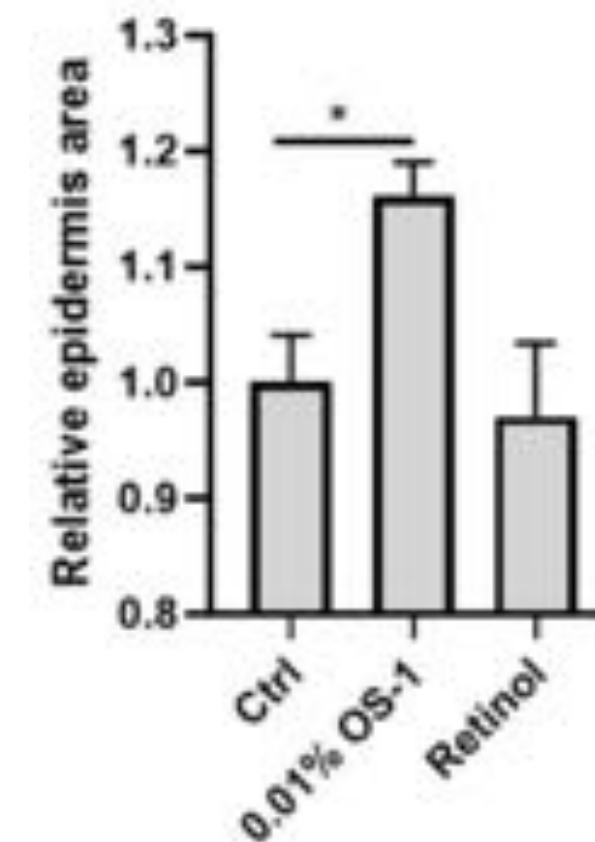
AGED SKIN + Retinol



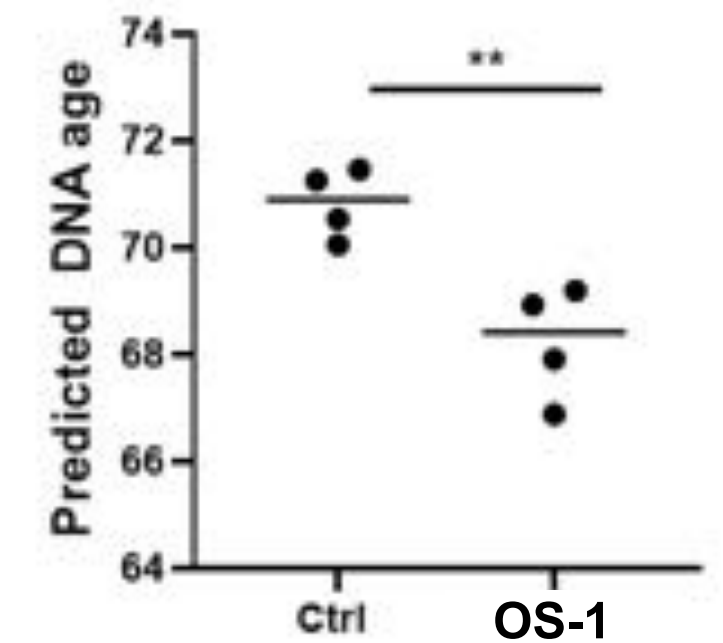
Aged skin (~60y)



3 DONORS (40 - 70 Y.O.)



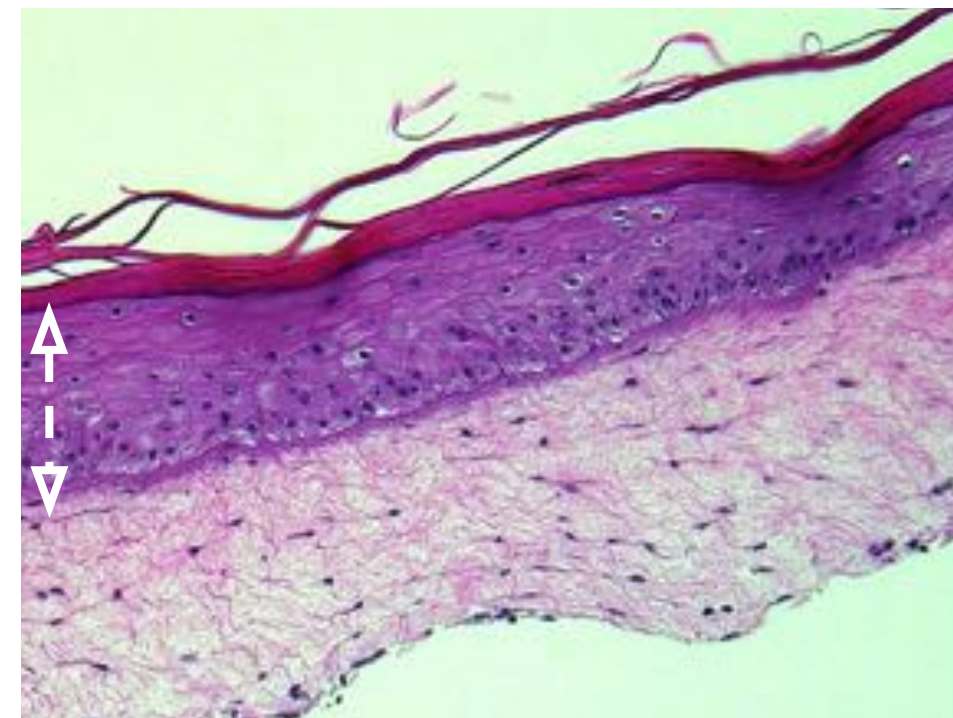
MOLECULAR AGE



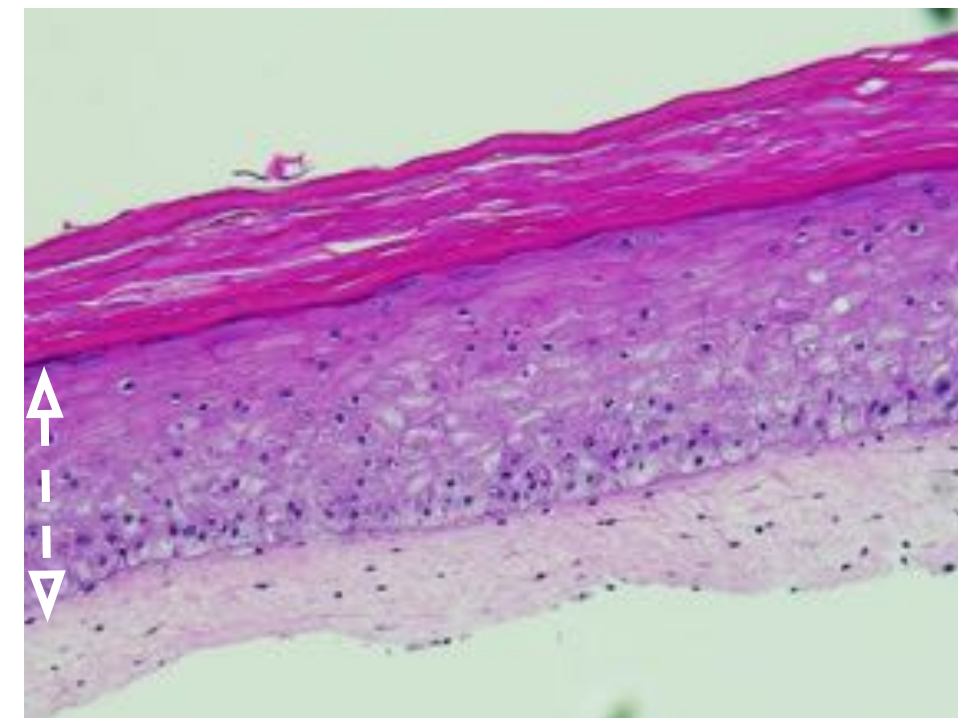


A VALUABLE ASSET TO VALIDATE PRODUCTS' EFFICACY

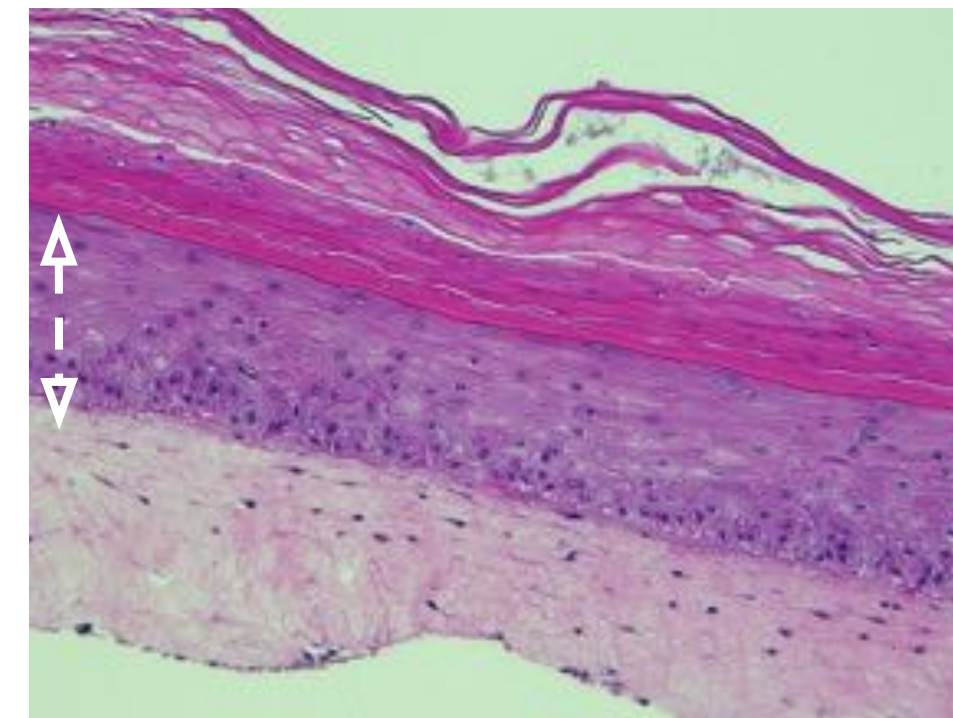
No treatment



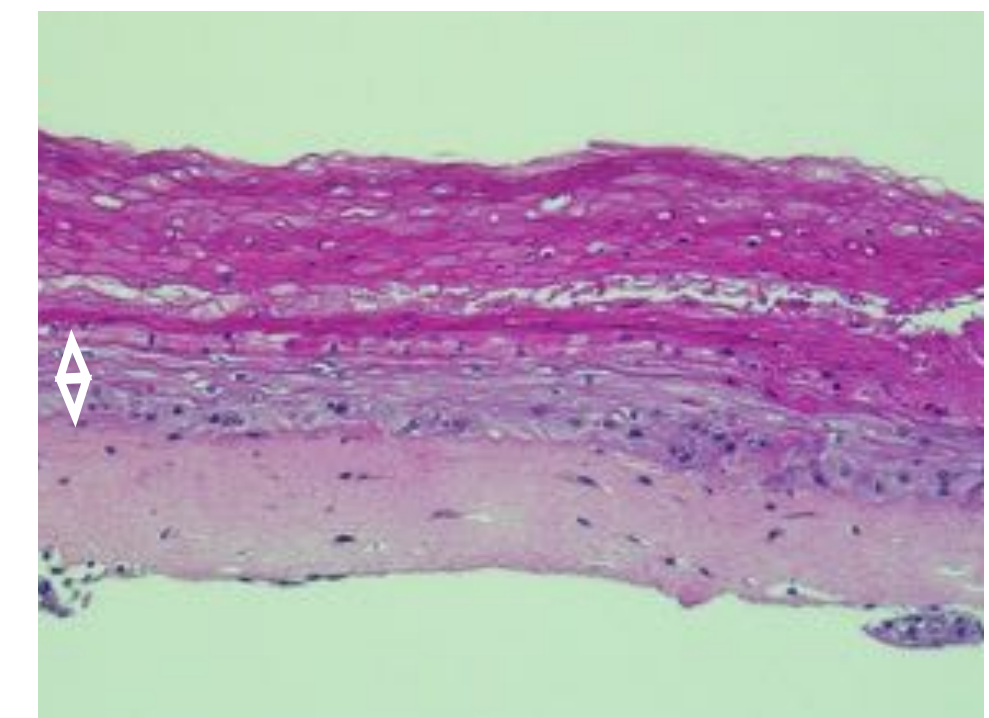
OS-1



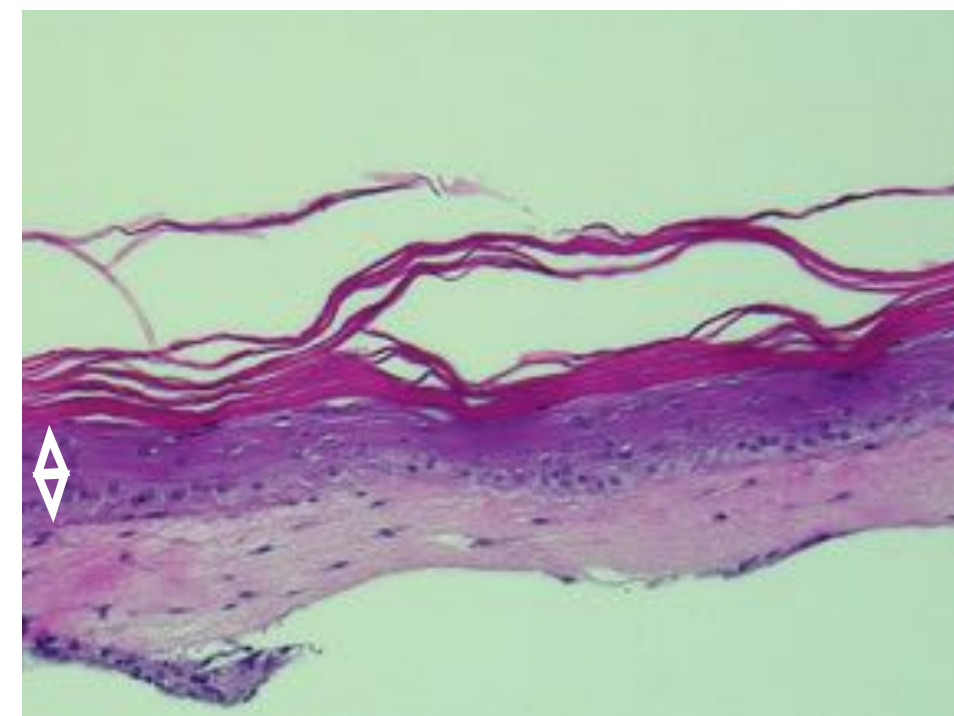
T.L.C glycolic
Drunk Elephant



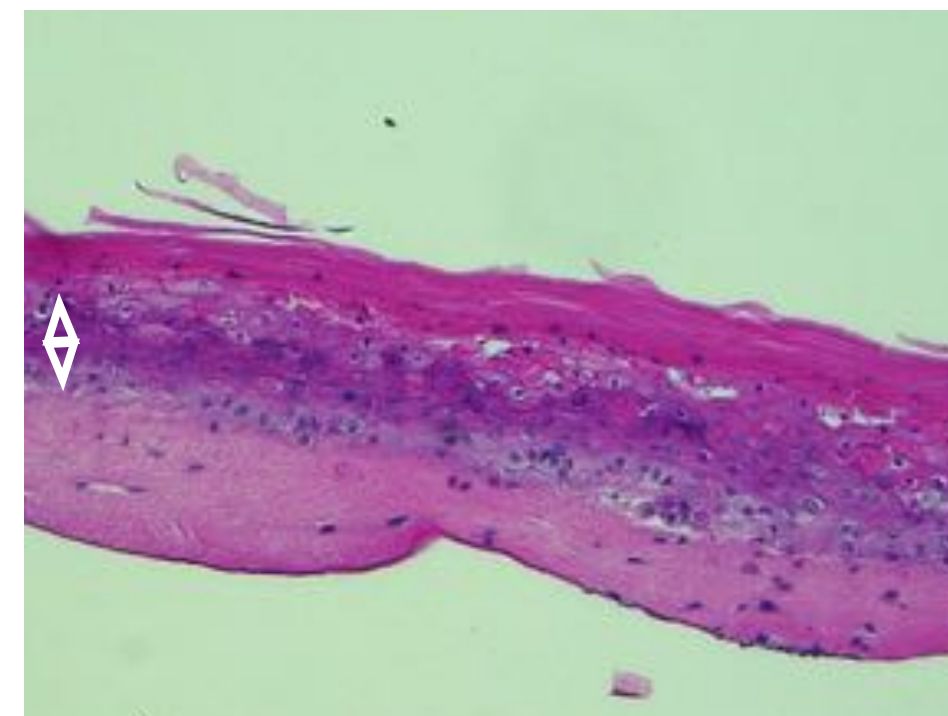
C-Firma
Drunk Elephant



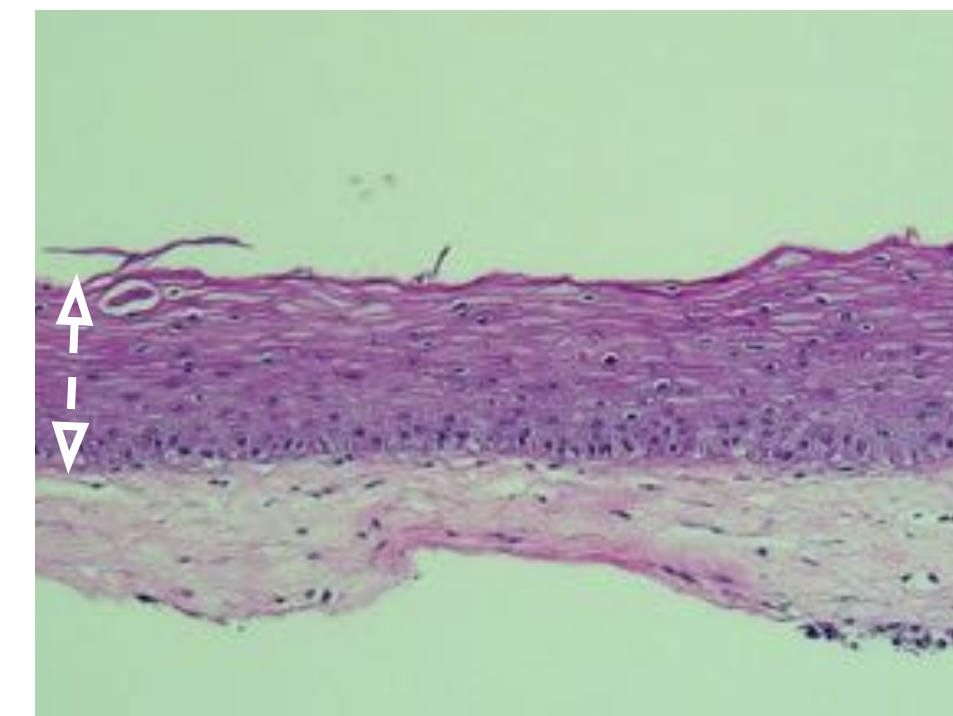
Advanced Night
Repair



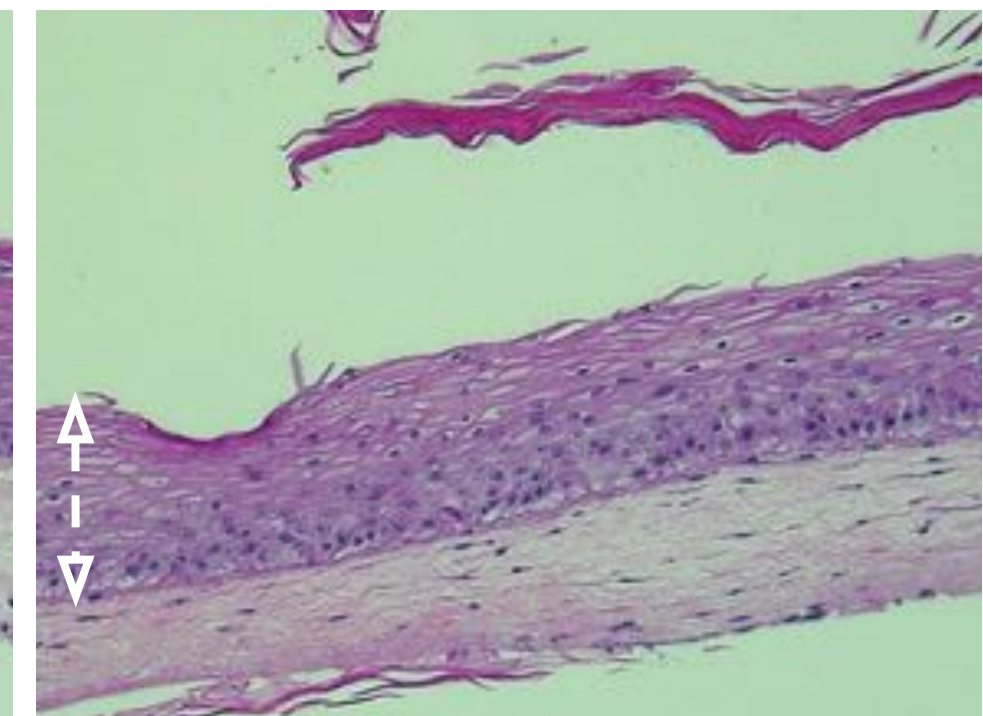
The regenerating
serum LA MER



1.0 Retinol
Obagi



Retinol
Murad



*When a product causes a decrease in the epidermal thickness (assigned by the white arrows), it indicates a toxic effect to the skin, which is related to the presence of harsh ingredients such as chemical preservatives, parabens, phthalates, etc. Safe and effective products will promote epidermal thickness and reinforce the skin barrier (the outermost layer of your epidermis).



OS-1 IS SAFE

Non-regulatory pathway, biological molecule

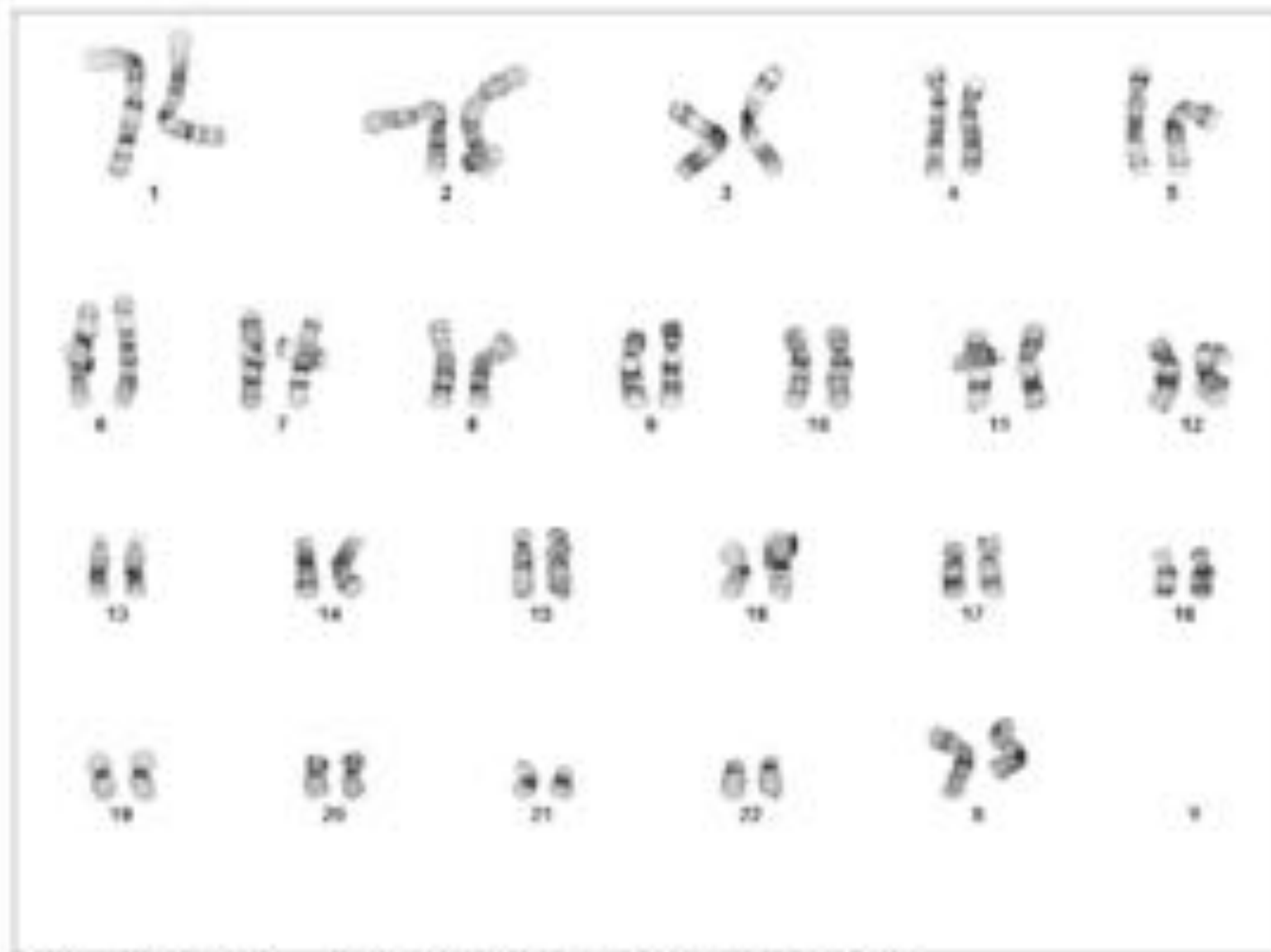
IN VITRO STUDIES

- Cell toxicity ✓
- *Mutagenesis: Ames test ✓
- *Karyotyping ✓
- *Chromosomal Aberration ✓

HUMAN STUDIES

- *RIPT (Repeat Insult Patch Testing): ✓
50 patients

Result: 46,XX



Case: CLG-34843 Slide: 34843-3_1 Cell: E21/3_cell 340

Apparently
NORMAL
Human Female
Karyotype of
OS-1 treated
fibroblasts

*The study was performed by a third party CRO following FDA guidelines for personal care topical products.

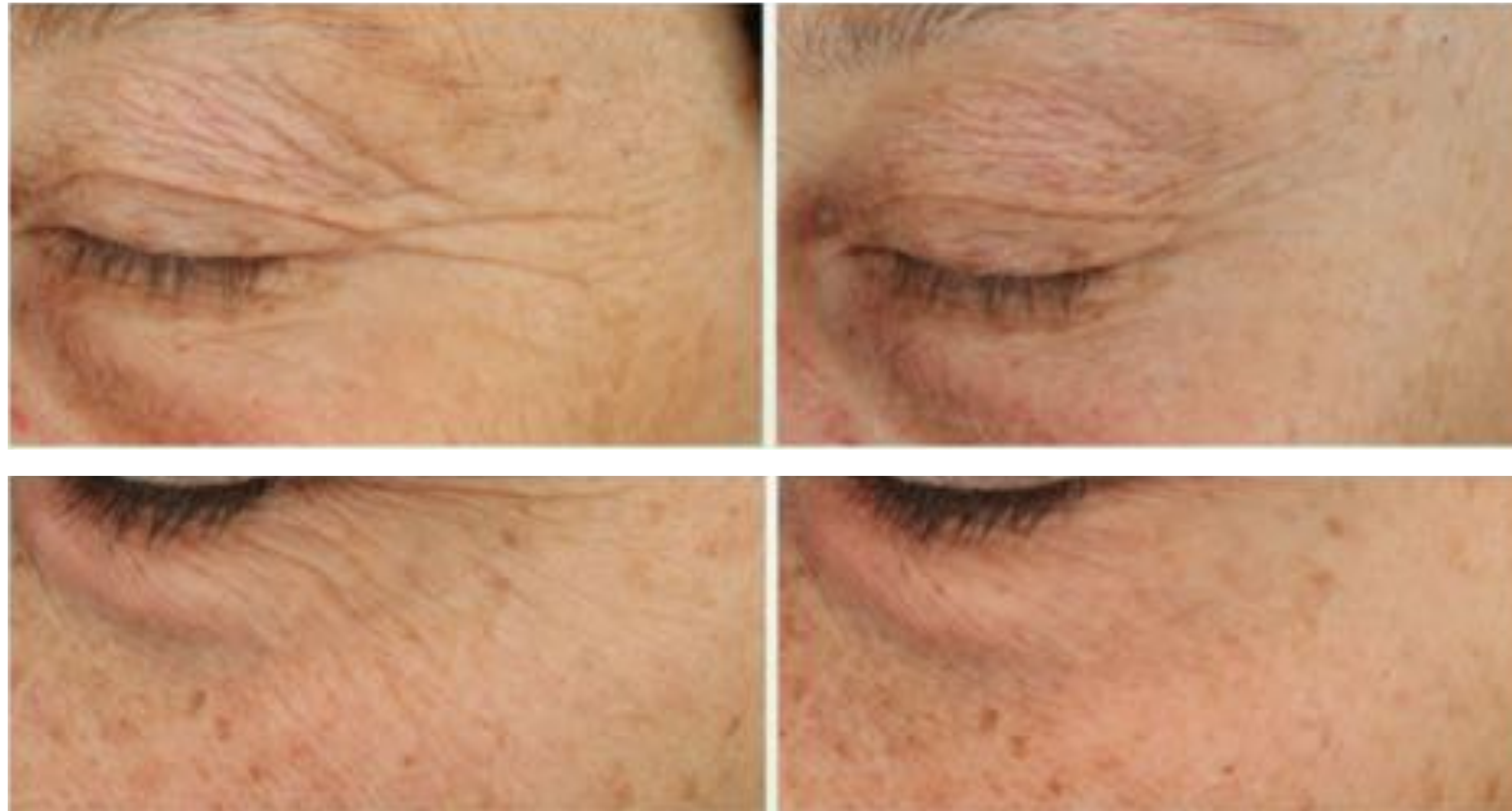


CLINICAL STUDY WITH TOPICAL OS-1:

SIGNIFICANT IMPROVEMENT IN SEVERAL PARAMETERS OF SKIN HEALTH¹

Baseline

12 weeks



Better Skin Barrier In Vivo (+15%)*

Better Skin Elasticity (90% Of Users)**

**Better Skin Evenness, Radiance,
Pores, Firmness (95.5% Of Users)****

Less Wrinkles (87% Of Users)

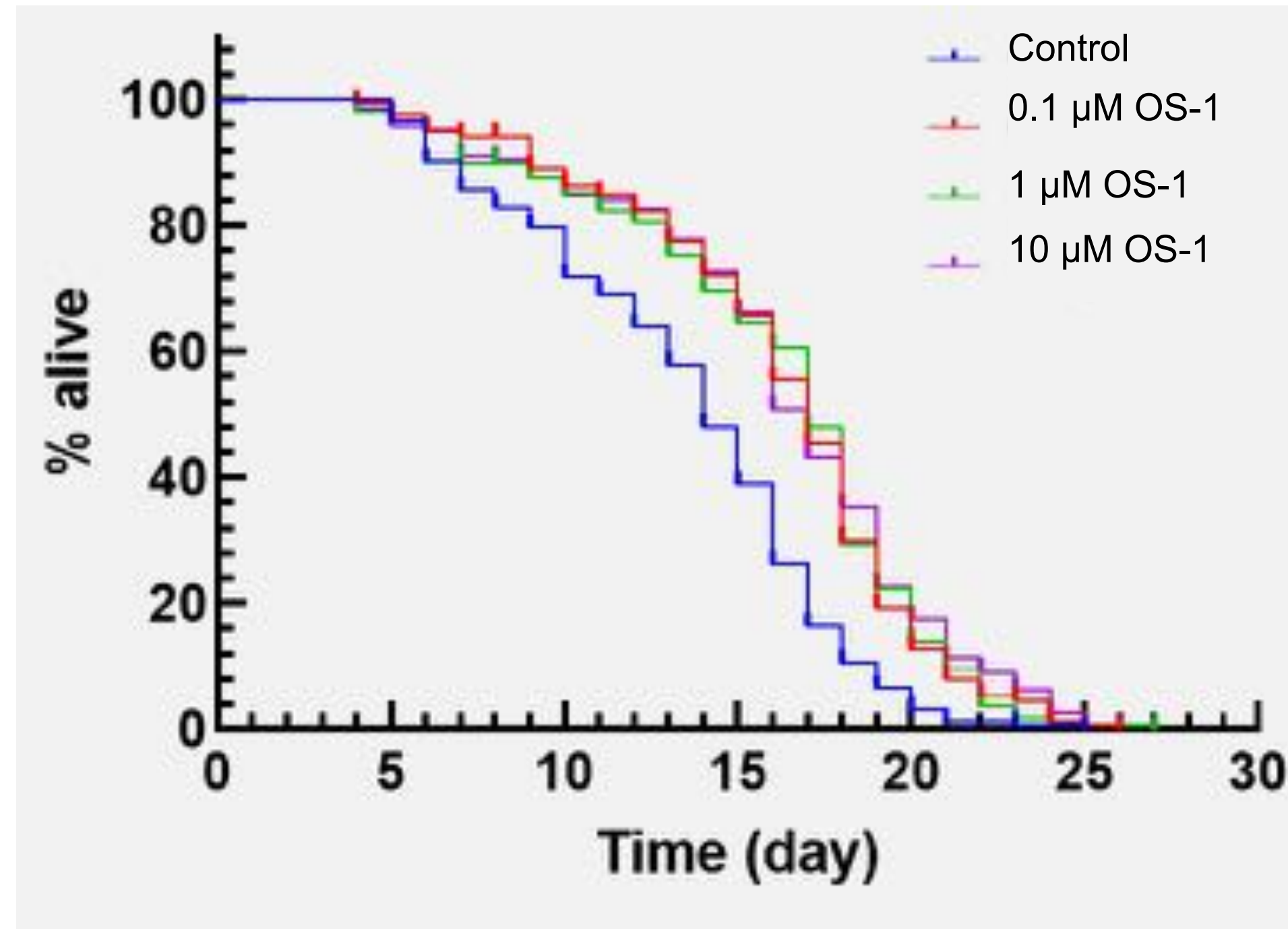
**Better Skin Smoothness and
Overall Appearance (100% Users!)**

¹ The study was performed by a third party CRO and outcomes were evaluated through expert clinical grade, instrumental analysis and consumer perception. n=22, average age= 59.5 y. Instrumental evaluation - vapometer analysis ** Double blind expert clinical grader evaluation



OS-1 APPLICATIONS BEYOND SKIN

OS-1 EXTENDED THE MEDIAN LIFESPAN OF *C. ELEGANS BY 21%****

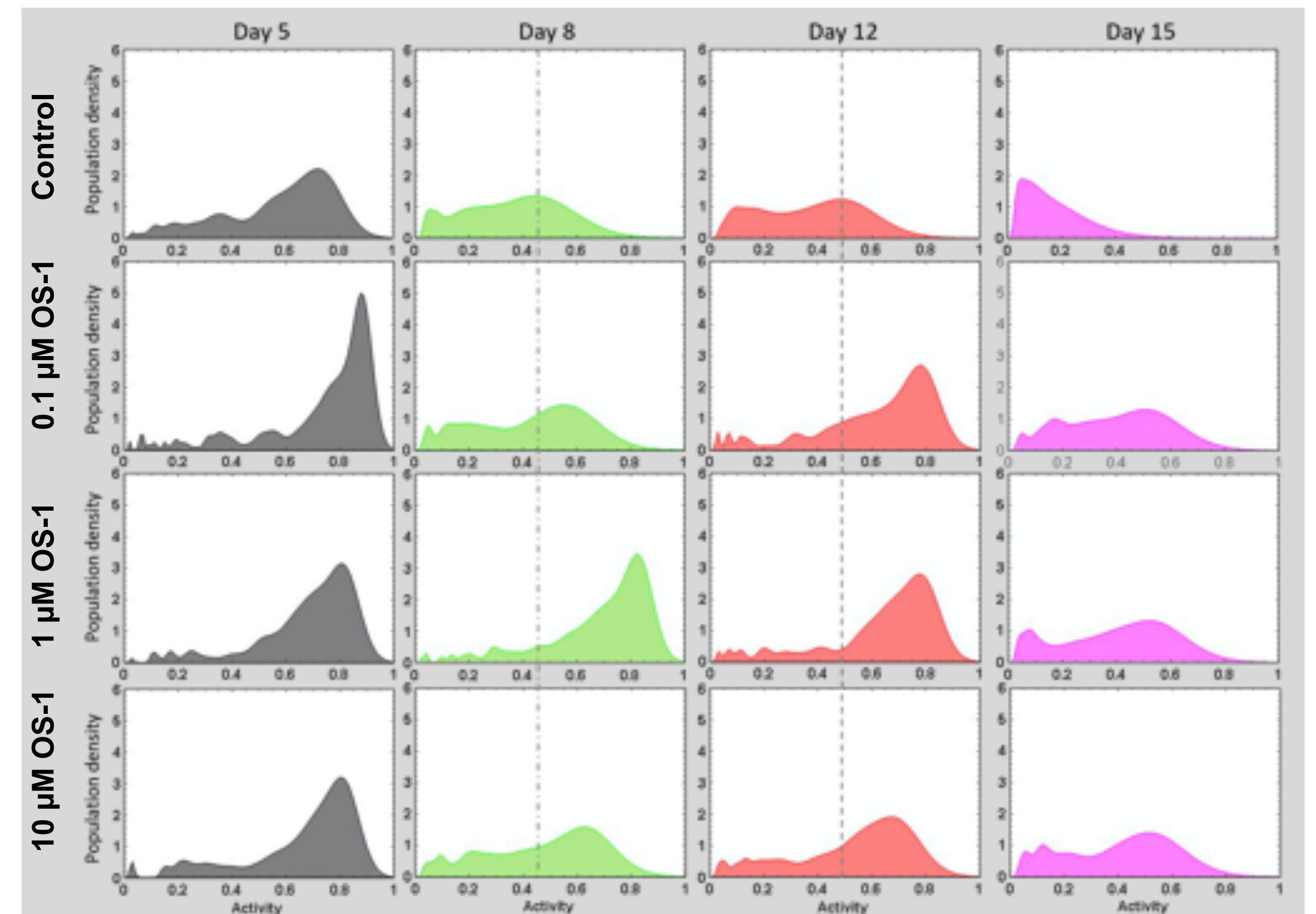


**C. elegans* is a widely utilized model organism for aging studies. Since it is a short lived organism (usually lives approximately 25 days, while mice live over 2 years), it significantly facilitates longevity studies.

** This could translate to more than a 15 year extension in humans, considering an average 70 year lifespan.

OS-1 HELPS RETAIN THE YOUTHFUL VIGOR OF WORMS

Young adults exposed to OS-1 were visibly* more active than controls, and this effect continued throughout life



ANIMAL ACTIVITY DISTRIBUTION

**C. elegans* treated with OS-1 were up to 340% more active than controls.



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UFMG



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CSO & Co-founder | UFMG, 3Bs,
Universidade de Coimbra



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Senior Designer
Beauty Date, Glowy

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ONE SKIN

OUR LIMITS WILL NOT BE SET BY OUR BIOLOGY,
BUT BY THE BOUNDARIES OF OUR IMAGINATION

Join us on our mission to extend healthspan!

Thank you!

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