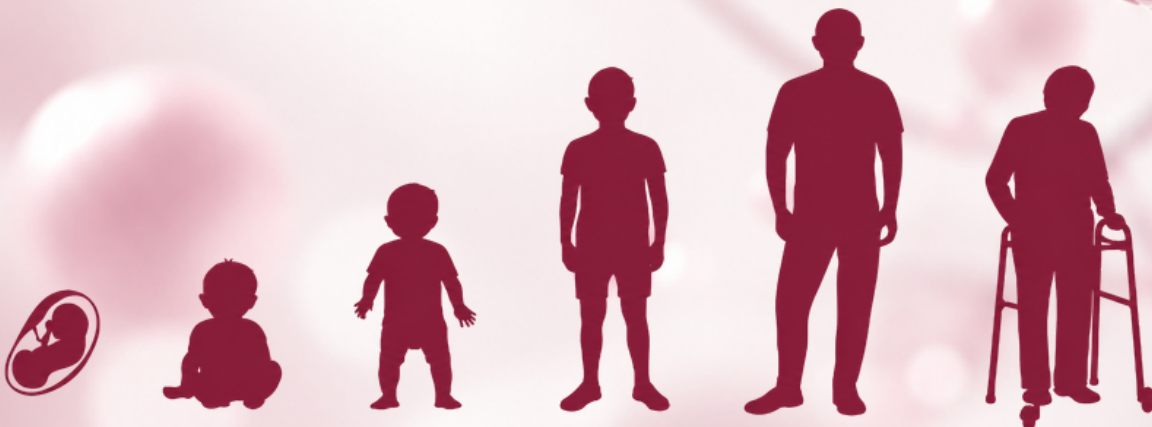


HALLMARKS OF AGING

A framework for organizing the
complexity of aging.



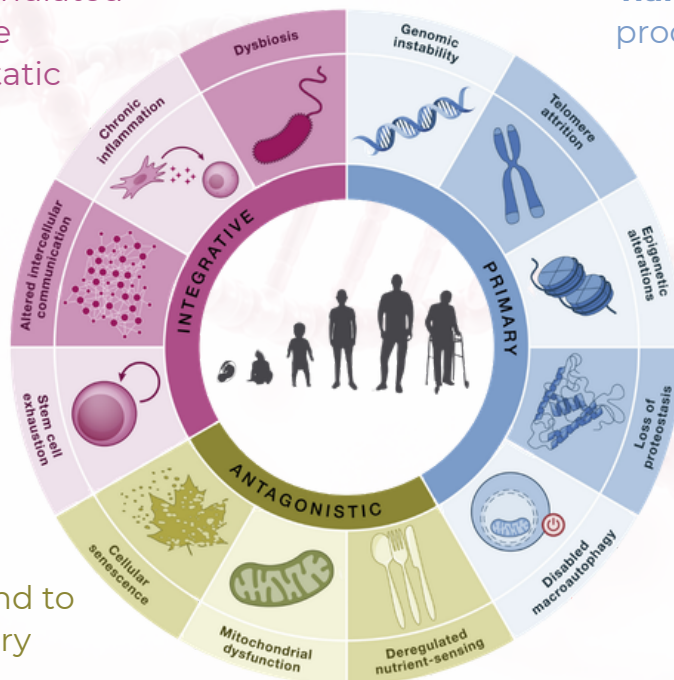
The **Hallmarks of Aging** emerged as a conceptual framework to identify the main **molecular and cellular mechanisms associated with aging**.

Although described individually, they are not independent mechanisms, but rather **closely interconnected processes**.



The **integrative hallmarks** emerge when accumulated damage exceeds the capacity of homeostatic mechanisms.

The **primary hallmarks** represent processes associated with the accumulation of cellular damage.



The **antagonistic hallmarks** correspond to initially compensatory responses that may become detrimental when sustained over time.

PRIMARY HALLMARKS

- **Genomic instability:** accumulated DNA damage.
- **Telomere attrition:** cellular senescence and instability.
- **Epigenetic alterations:** dysregulation of gene expression.
- **Loss of proteostasis:** accumulation of damaged proteins.
- **Disabled macroautophagy:** reduced cellular recycling.



ANTAGONISTIC HALLMARKS

- **Deregulated nutrient sensing:** altered mTOR, IGF-1 and sirtuin pathways; reduced skin renewal.
- **Mitochondrial dysfunction:** lower energy efficiency, ↑ ROS, oxidative stress and inflammation.
- **Cellular senescence:** accumulation of senescent cells and release of pro-inflammatory SASP factors.



INTEGRATIVE HALLMARKS

- **Stem cell exhaustion:** reduced skin regeneration.
- **Altered intercellular communication:** loss of homeostasis.
- **Chronic inflammation:** tissue damage and accelerated aging.
- **Altered microbiome:** impaired barrier balance and immune function.



DRAGON´S BLOOD

Targets 10 of the 12 hallmarks of aging

Extract obtained from the latex of *Croton lechleri*

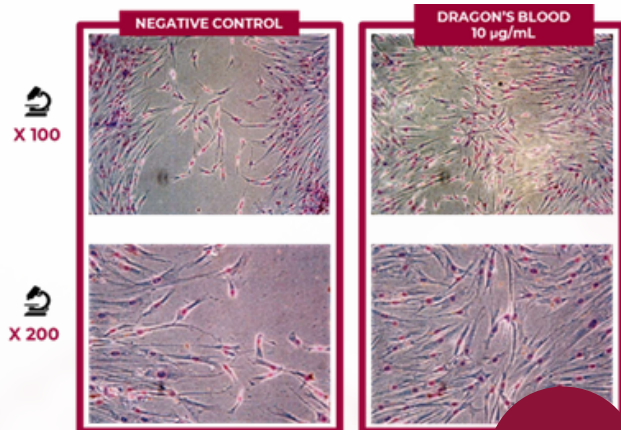
- Epigenetic activity
- Powerful regenerative activity
- Anti-inflammaging action
- Improves skin barrier function and hydration



COSMOS
APPROVED



IH-786/2.1/M/42



Migration of human dermal fibroblasts after 48 h.

+86%

REGENERATION

CYANAGE

Targets 4 of the 12 hallmarks of aging

Postbiotic obtained by biofermentation with *Lactobacillus plantarum*

- Promotes skin longevity
- Protects against telomere shortening
- Reduces wrinkles and improves firmness and elasticity
- Microbiome-friendly active ingredient



IH-786/2.1/M/42



VOLUMEN
ARRUGAS

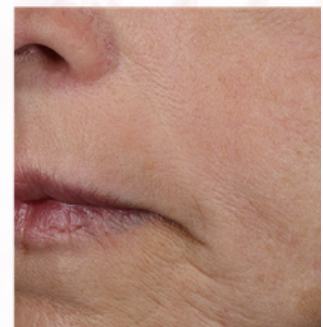
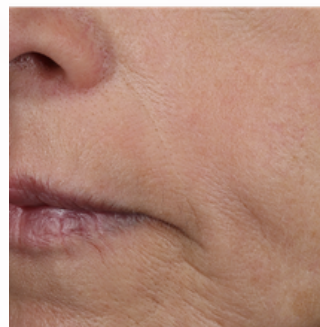
RECuento
ARRUGAS

-19,8%

-14,2%

D0

D28



LUMINOUS WELL-AGING CREAM PROT.83/26

A well-aging facial cream that helps revitalize the skin and improve the appearance of visible signs of aging. It features a light, silky cream texture, nourishing yet fast-absorbing, ideal for daily facial care.

PHASE	RAW MATERIALS	INCI	%
1	WATER	AQUA	68,76
	DERMOSOFT OMP	METHYLPROPANEDIOL, CAPRYLYL GLYCOL, PHENYLPROPANOL	3,00
	GLYCERIN	GLYCERIN	3,00
2	SIMULGEL EG	SODIUM ACRYLATE/SODIUM ACRYLOYLDIMETHYL TAURATE COPOLYMER, ISOHEXADECANE, POLYSORBATE 80, AQUA	3,00
3	MYRITOL 318	CAPRYLIC/CAPRIC TRIGLYCERIDE	4,00
	DC 200/350	DIMETHICONE	5,00
	SUNFLOWER OIL	HELIANTHUS ANNUUS SEED OIL	5,00
	BIOXAN T70C	TOCOPHEROL, GLYCINE SOJA OIL	0,20
4	CYANAGE	LACTOBACILLUS FERMENT LYSATE, SODIUM BENZOATE, POTASSIUM SORBATE	3,00
	COBIOPHYTONIC GL	GLYCERIN, AQUA, HESPERIDIN METHYL CHALCONE, MALVA SYLVESTRIS FLOWER EXTRACT, AESCULUS HIPPOCASTANUM SEED EXTRACT, HAMAMELIS VIRGINIANA LEAF EXTRACT, RUSCUS ACULEATUS ROOT EXTRACT, ARNICA MONTANA FLOWER EXTRACT	5,00
5	PARFUM CLEAR DROPS	PARFUM	0,04
TOTAL			100,00

Note: It is the formulator's duty to ensure the stability of the given formulation by performing the necessary tests.

MANUFACTURING PROCESS

1. Add phase 1 and homogenise.
2. Add phase 2 to phase 1 and mix with turbine.
3. Add phase 3 to phase 1+2.
4. Add phase 4 to phase 1+2+3.
5. Add phase 5 on top of phase 1+2+3+4.

EPIGENETIC SERUM

PROT. 272/25

Serum enriched with DRAGON´S BLOOD that helps to **reduce redness, calm irritation, and strengthen the skin's natural barrier**. Combined with COBIODEFENDER EMR, it reduces the skin biological alterations, resulted from the **exposure to EMR**.

PHASE	RAW MATERIALS	INCI	%
1	WATER	AQUA (WATER)	66,20
	DERMOSOFT OMP	METHYLPROPANEDIOL, CAPRYLYL GLYCOL, PHENYLPROPANOL	3,00
	PROPILENE GLYCOL	PROPILENE GLYCOL	12,00
2	GLYCERIN	GLYCERIN	2,00
	SATIAXANE CX91	XANTHAN GUM	0,50
3	LYSOFIX LIQUID	GLYCERIN,, GLYCINE SOJA SEED EXTRACT	4,00
4	CETIOL CC	DICAPRYLYL CARBONATE	5,00
	PHYTOSQUALENO	SQUALANE	1,00
	BIOXAN T70C	TOCOPHEROL, GLYCINE SOJA OIL	0,20
5	DRAGON´S BLOOD	PROPANEDIOL, AQUA, CROTON LECHLERI RESIN EXTRACT	3,00
6	COBIODEFENDER EMR	AQUA, CLYCERIN, GLYCOGEN, PHENOXYETHANOL	3,00
7	PARFUM	PARFUM	0,10
TOTAL			100,00

Note: It is the formulator's responsibility to ensure the stability of the provided formulation by carrying out the necessary tests.

MANUFACTURING PROCESS

1. Add phase 1 and homogenize.
2. Premix phase 2, add to 1, and homogenize.
3. Heat phase 1+2 to 75°C and add phase 3. Homogenize with turbine.
4. Add phase 4 to 1+2+3 and homogenize with turbine.
5. Cool down to <40°C and add phase 5 and 6.
6. Add phase 7 and homogenize.