

ADENOSILANE ●

Overview



NEW LAUNCH ! 

POSITIONINGS



FORMULATION



TECHNOLOGY INFORMATION



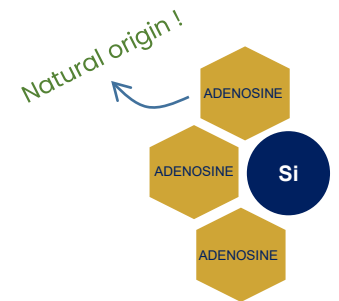
TOP 10 IFSCC
poster cancun 2021



- Home
- Technology information
- Formulation

POSITIONINGS

- Invisible pores
 - claims
 - biology
 - data
- Baby skin
 - claims
 - biology
 - data



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INVISIBLE PORES



CLAIMS



BIOLOGY



DATA

JUST PORE Y.O.U.

Small but infinitely many - around 300,000 only on the face - pores are holes that house our hair follicles. Thanks to them, the skin breathes, perspires and secretes sebum. As you get older, the elasticity of the skin decreases and the pores enlarge. Their diameter is indeed doubled between 25 and 50 years! On top of that, consumers perceive their pores to be larger than they are (especially on selfies). **The pore is the new wrinkle.** Dermatologists suggest peelings or laser sessions to superficially tighten dilated pores. EXSYMOL offers a real **anti aging solution to tighten pores from the inside** with ADENOSILANE.



ADENOSILANE **revitalizes the pore sheath** to retain its grip and prevent loosening.

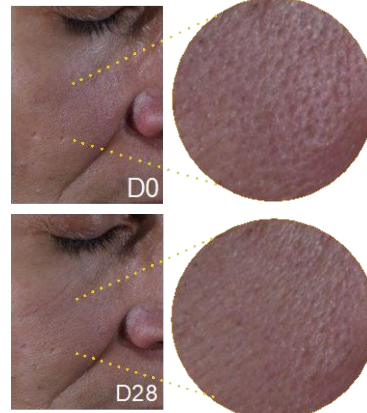


ADENOSILANE is a silanol from EXSYMOL technology: biofunctional Siliconium + Adenosine. Adenosine is obtained by biotechnology (fermentation).

MECHANISM OF ACTION

- Optimization of fibrillogenesis: **sheath reconstruction** (collagen, MMP1)
- Optimization of the fiber network around the pore: **sheath's quality** (**MAGPI**: microfibril associated glycoprotein 1)
- Rise of the available energy level: **sheath property** (ATP)
- Recovery of the pore elasticity: **resilience** (BioMeca)

COSMETIC BENEFITS



At 28 days
75% of vol. with less visible pores
70% of vol. with smaller pores

+8%
Smoothness vs placebo (D14) (AEVA - 5%)

-9,5%
Wrinkle depth for **75%** of volunteers (D14) (AEVA - 5%)

+7,73%
Firmness (D28) (Cutometer - 5%)

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Natural origin!



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CLAIMS



LEARN MORE ABOUT: 3 main types of visible pores



Y-shaped

↳ elasticity due to aging
↳ density (gravitational effect)



O-shaped

↗ sebum (hormonal reasons, oily skin type)
Dilation of pores (inflammation + acne)



U-shaped

↳ elasticity due to dehydration

The « new » wrinkle

FROM THE AGE OF 25, SKIN IS CHARACTERIZED BY:

- The appearance of dilated pores
- The appearance of fine lines
- A loss of firmness
- A rougher skin

By acting on pore sheath, ADENOSILANE improves skin firmness which leads to prevent pore dilation.

Tightens the « new » wrinkles

75% of vol. with less visible pores



Prevents pore dilation

70% of vol. with refined texture



+7,73%
Firmness
(Cutometer - 5%)

Improves skin firmness

-9,5%
Wrinkle depth for
75% of volunteers
(D14) (AEVA - 5%)



Smooths the skin

+8%
Smoothness vs placebo (D14)
(AEVA - 5%)

ADENOSILANE

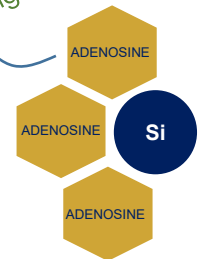


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BIOLOGY



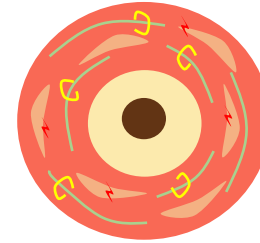
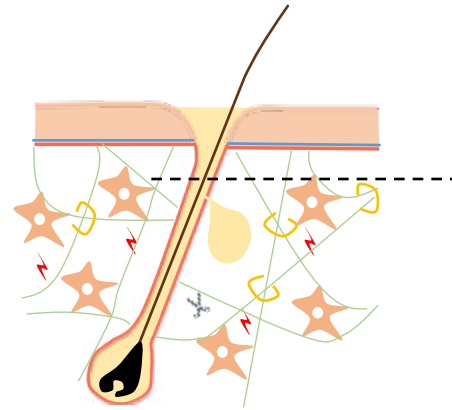
INVISIBLE PORES

LEGEND

- Fibroblasts
- Collagen fiber
- MAGPI (Microfibril-associated glycoprotein-1)
- ATP
- MMP1 (Matrix metalloproteinase-1)
- Epidermis
- Papillary dermis

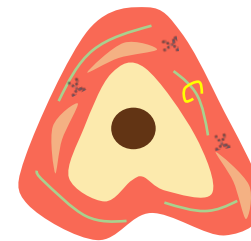
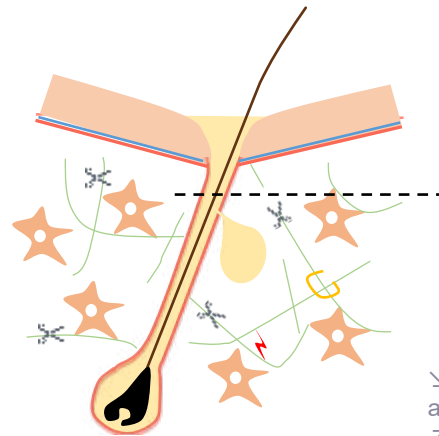
DYNAMIC PORE STRUCTURE

- Papillary dermis
- MAGPI



Optimal pore sheath
Horizontal cut
(parallel to the skin)

SAGGED PORE STRUCTURE



- ∨ collagen – papillary dermis loses its sheath around the pore
- ∧ MMP1 - Loss of dermal elasticity
- ∨ MAGPI – Loss of sheath quality
- ∨ ATP - Loss of energy for sheathing effect

ADENOSILANE

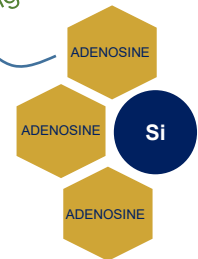


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COSMETIC BENEFITS



-9,5% Wrinkle depth (D14) (AEVA - 5%)

+8% Smoothness (D14) vs placebo (AEVA - 5%)

75% of vol. with less visible pores
70% of vol. with small pores

+7,73% Firmness (D28) (Cutometer - 5%)

1. OPTIMIZATION OF FIBRILLOGENESIS

Collagenase decrease

-52% MMP1 secretion
(ELISA 0,5% in vitro)

Fibrillogenesis increase

+45% pro collagen I
(Explant - 5% ex vivo)

2. OPTIMIZATION OF THE FIBER NETWORK



Microfibril-associated glycoprotein-1 increase around pore structure

+56% MAGP1
(Skin explant - 5%)

3. RISE OF THE AVAILABLE ENERGY LEVEL

Stimulation of cellular activation

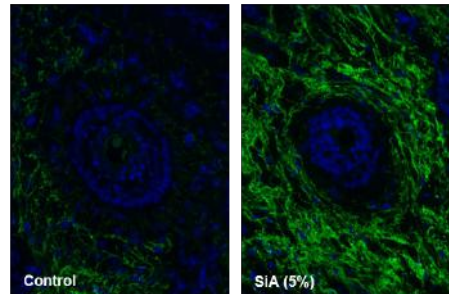
+31% ATP in 3h
(in vitro - 0,1%)

4. RECOVERY OF THE PORE ELASTICITY



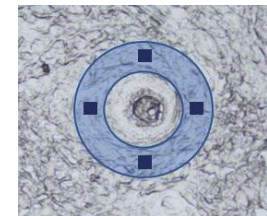
Pore tightening

+200% elastin expression (surface)
(Skin explant - 5%)

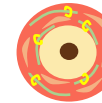


Skin Biomechanics: rigidity

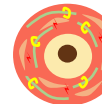
-9% Tissue rigidity (Young's modulus of the CTS: Connective Tissue Sheath - in blue)
(explant - 5%)



Sheath reconstruction



Sheath quality



Sheathing property



Resilience

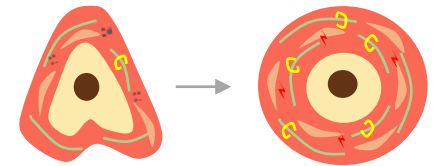
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BABY SKIN



BABY SKIN

Naturally, as you get older, the elasticity of the skin decreases, pores enlarge, fine lines and wrinkles appear. Your skin becomes rougher and can look greasy, tired and older than it is.



While photo filters were a trend for few years, new challenges such as **#nofilter** **#nomakeup** **#natural** trends are becoming even more popular. Consumers are therefore looking for solutions that **reduce skin imperfections**. Why? For not having to apply filters to your photos and matching with the image you send back to the real world.



ADENOSILANE is a solution to **keep a baby smooth skin** and show reality to the world!



ADENOSILANE recreates a favorable cellular environment for a « young-like » dermis.

ADENOSILANE is a silanol from EXSYMOL technology: biofunctional Silicium + Adenosine. Adenosine is obtained by biotechnology (fermentation).

MECHANISM OF ACTION

- Recovery of a healthy cellular environment: **reduction of inflammation** (NO, VCAMI), **collagenase decrease** (MMP1)
- Recovery of a « young-like » dermis: **fibroblasts' stimulation** (VEGF), **stimulation of the synthesis of structural fibers** (elastin, collagen, MAGPI), **fiber organization** (collagen), **optimization of the skin biomechanical properties** (viscoelasticity)

COSMETIC BENEFITS



At 28 days **75%** of vol. with less visible pores
70% of vol. with refined texture
82% of vol. with less greasy skin

+8% Smoothness vs placebo (D14) (AEVA - 5%)

-9,5% Wrinkle depth for **75%** of volunteers (D14) (AEVA - 5%)

+7,73% Firmness (D28) (Cutometer - 5%)



CLAIMS



BIOLOGY

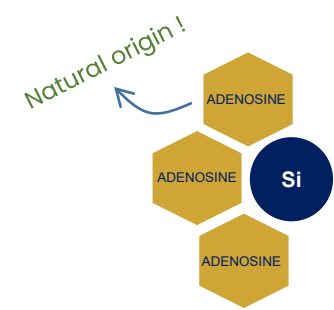


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CLAIMS



BABY SKIN

DID YOU KNOW?

3,29 billion
people use
social networks
around the
world

813 million
people on
Instagram

400 million
people use
Instagram
stories every
day

1076 selfies / sec
In the world

Nose looks **30% bigger**
With a selfie taken 30cm
from the face

→ This resulted in more requests for cosmetic surgery,
according to aesthetic surgeon Boris Pashkover

Sources: We are social/Hootsuite, Global digital Statshot 2018 Q2
Fujifilm study 2016, Study of the University of Rutgers (New Jersey)

FROM THE AGE OF 25, SKIN IS CHARACTERIZED BY:

- The appearance of dilated pores
- The appearance of fine lines
- A loss of firmness
- A rougher skin

ADENOSILANE allows the skin to keep or regain its youth by acting on the appearance of the skin: pores, texture and wrinkles.

No filter needed !

-9,5%
Wrinkle depth for
75% of volunteers
(D14) (AEVA - 5%)



Smooths the skin

+8%
Smoothness vs
placebo (D14)
(AEVA - 5%)



+7,73%
Firmness
(Cutometer - 5%)

Improves skin firmness

75% of vol. with
less visible
pores



Prevents pore dilation

70% of vol. with
refined
texture

+30%

of vol. observed an improvement
in skin's uniformity vs
placebo (D14) (Dermatologist - 5%)



Improves skin beauty and youthfulness

82%
of vol. with less
oily skin

ADENOSILANE

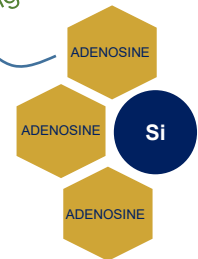


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Natural origin !



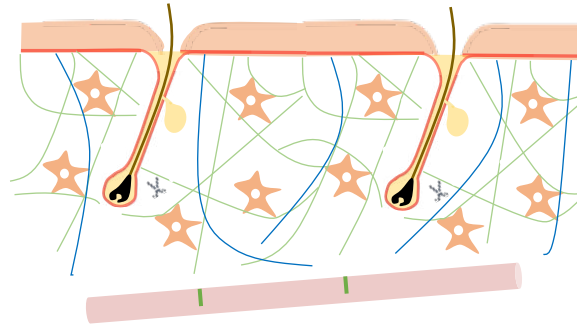
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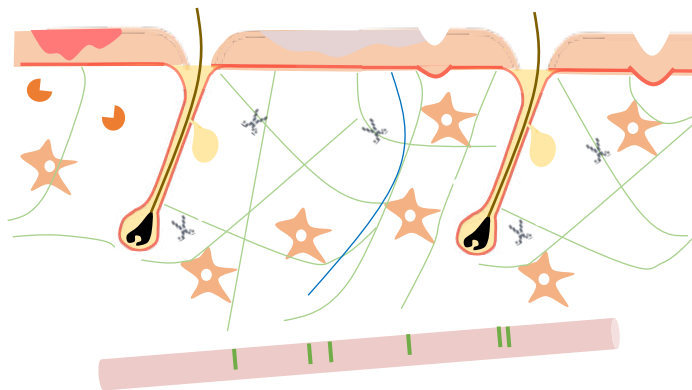
BABY SKIN

BABY SKIN



AGE
STRESSES
GENETICS
HORMONAL

STRESSED SKIN



Inflammation
 ↗ NO production
 ↗ VCAMI

Loss of dermal elasticity
 ↗ MMPI
 ↘ elastin
 ↘ collagen

LEGEND

- Fibroblasts
- Collagen fiber
- Elastin fiber
- VCAMI
- Blood vessel
- MMP1 (Matrix metalloproteinase-1)
- Macrophage (NO production)
- Dull complexion
- Epidermis
- Inflammation

ADENOSILANE

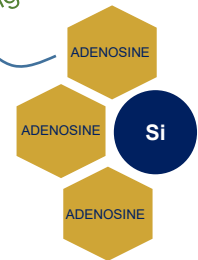


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DATA



BABY SKIN

1. RECOVERY OF A HEALTHY CELL ENVIRONMENT

Reduction of inflammation

-41% NO production (Griess reagent – 0,5% in vitro) **-18%** VCAM1 expression (ELISA - 0,5% in vitro)

Collagenase decrease

-52% MMP1 secretion (ELISA 0,5 in vitro)

2. RECOVERY OF A « YOUNG-LIKE » DERMIS

Optimizes ability for skin regeneration

+45% VEGF secretion (ELISA – 0,25% in vitro)

Stimulation of the synthesis of structural fibers

+200% elastin expression (Explant – 5% ex vivo)

+547% collagen I production (Tskin model – 5% ex vivo)

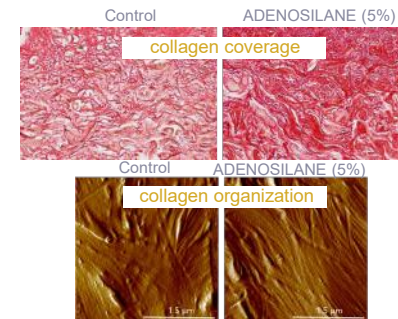
+56% MAGP1 expression (Skin explant – 5%)

Optimization of biomechanical properties

+37% viscoelasticity (Explant – 5% ex vivo)

Better fiber organization

+16% collagen I coverage (Explant – 5% ex vivo)

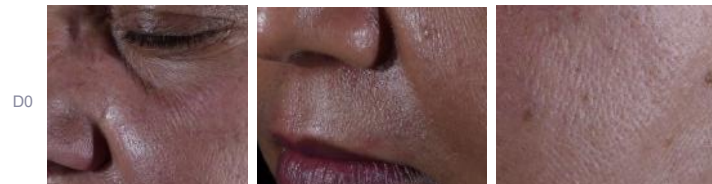


COSMETIC BENEFITS

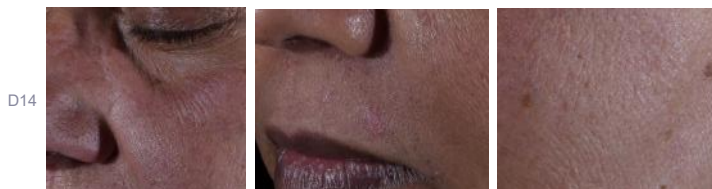
+8% Smoothness vs placebo (D14) (AEVA – 5%)

-9,5% Wrinkle depth for **75%** of volunteers (D14) (AEVA – 5%)

+30% of vol. observed an improvement in skin's uniformity vs placebo (D14) (Dermatologist – 5%)



Refined texture Less greasy Less visible pores



+7,73% Firmness (D28)

(Cutometer – 5%)



(28 days)

At 28 days
70% of vol. with refined texture
82% of vol. with less greasy skin
75% of vol. with less visible pores

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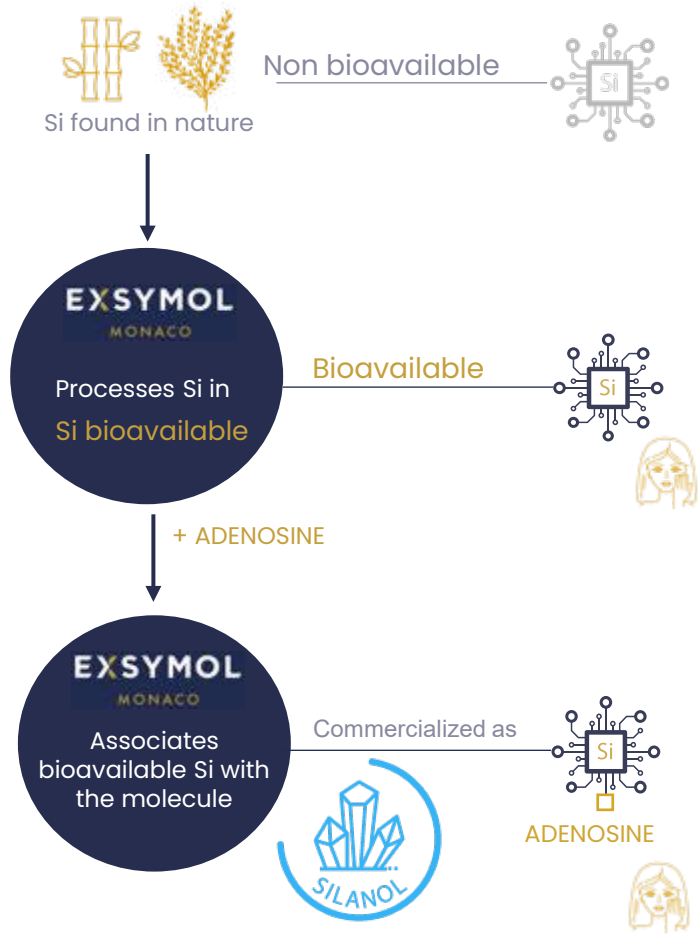
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TECHNOLOGY INFORMATIONS



Able to deliver synergy with another recognized cosmetic molecule. Stimulation of the skin's regenerative properties.



Global cosmetic benefits

WHY SILICIUM FOR SKIN?

Young skin
Naturally charged with silicon



Silicium is one of the main essential components of the skin. Silicium is the key factor of skin *natural intelligence* (N.I.).

Aged/exposed skin
Lack of silicon

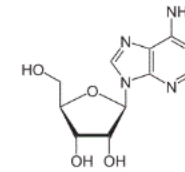


- ☑ Levels of silicon in connective tissues
→ Loss of elasticity
- ☑ Ha levels in connective tissues
→ Loss of hydration

So, recharge your skin to wake up its natural intelligence

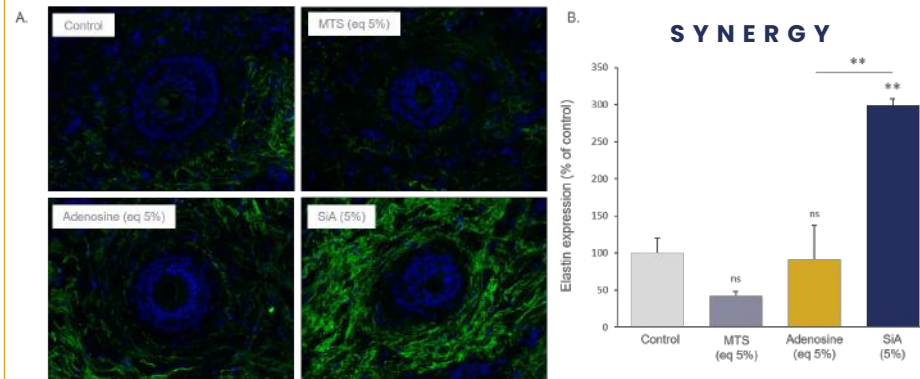
ADENOSINE

Adenosine is a natural component of the body and is used in cosmetics as an anti-aging ingredient that helps to soothe, restore and improve the appearance of aging.



Combining it with silicon significantly increases its bioavailability.

On elastin expression around the pore (*ex vivo*)



ADENOSILANE

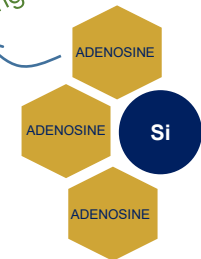


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FORMULATION



a. b. c.

- a. Packaging of the sample sent by EXSYMOL
- b. ADENOSILANE pure
- c. ADENOSILANE diluted at 5% in water

Formula to come...

CHARACTERISTICS

INCI: *SILANETRIOL (and) ADENOSINE*

Use level: 3% - 6%

pH ≈ 6

Density at 20°C ≈ 1.0

Miscibility: water, alcohol, glycol

Appearance: clear to slightly opalescent liquid,
transparent to slightly yellow

Excellent tolerance

Cold and hot processable

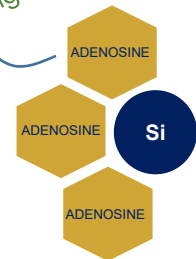
NOI = 99,7%



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Natural origin!



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THE CONTEXT



1076 selfies / sec
In the world



Nose that appears
30% larger in selfie

300 000

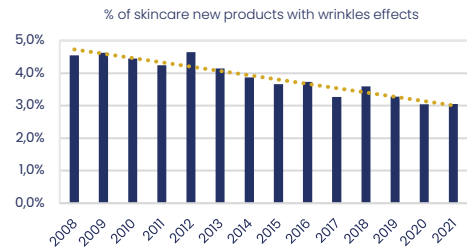
pores only on the face



Pore diameter
multiplied by 2
between 25 and 50
years

Term used in UK:
POREXIA

Wrinkles: downward trend

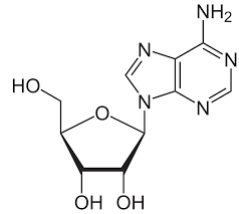


Pore: upward trend



The pore is the new wrinkle
Like an instagram filter

WHY ADENOSINE



Metabolic energizer



- Stimulates cellular energy in order to wake up the metabolism
- Role in the protection of cellular energy metabolism
- Nucleoside most often associated with the body's energy transfer processes
- Precursor of essential coenzymes, stimulates cell activation

Anti-aging



- anti-wrinkle known to fight the signs of aging
- Increases collagen production
- L'Oréal clinical study: Abella, M. L. Evaluation of anti-wrinkle efficacy of adenosine-containing products using the FOITS technique. *International journal of cosmetic science* 28.6, 447-451 (2006)
- Improves skin smoothness

Tissue protection and regeneration



- Anti-inflammatory effect
- Stimulation of angiogenesis

Oily skin



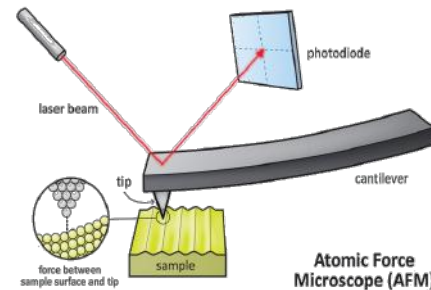
- Most noticeable improvement on pores and sebum production

INNOVATION

biomeca

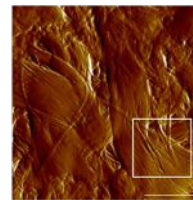
Innovative collaboration for
a special skin target : THE PORE

Original technique: Atomic force microscopy (AFM)

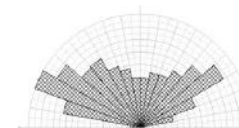


- Viscoelasticity of the tissue

- AFM imaging



- Fiber orientation



NEW LAUNCH

- The context
- Why adenosine
- Innovation

