

2005 launching...

➤ **Gatuline[®] Expression**

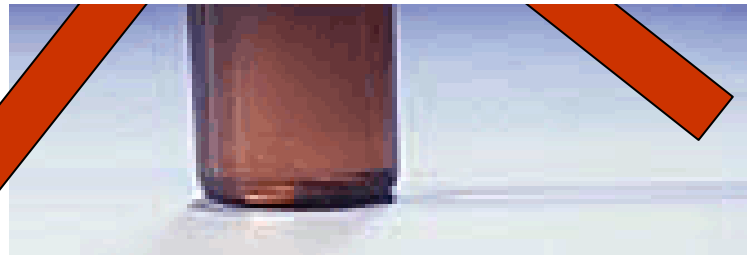
How to feel young at every age

?...

● Botox® ?

=> Injections to decrease expression wrinkles

How to feel young at every age
without radical methods ?...



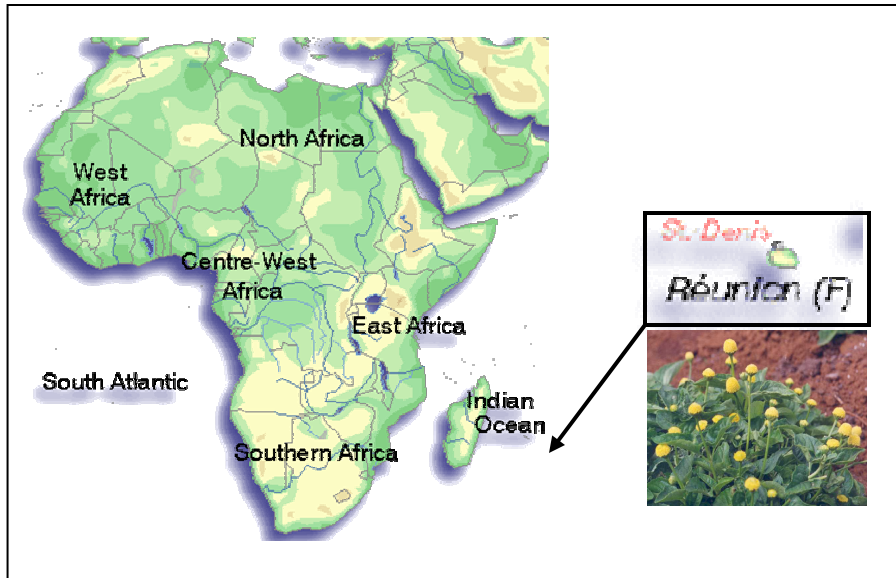
Gatuline[®] Expression



Acmella oleracea,

a safe alternative to invasive injections

Gatuline® Expression

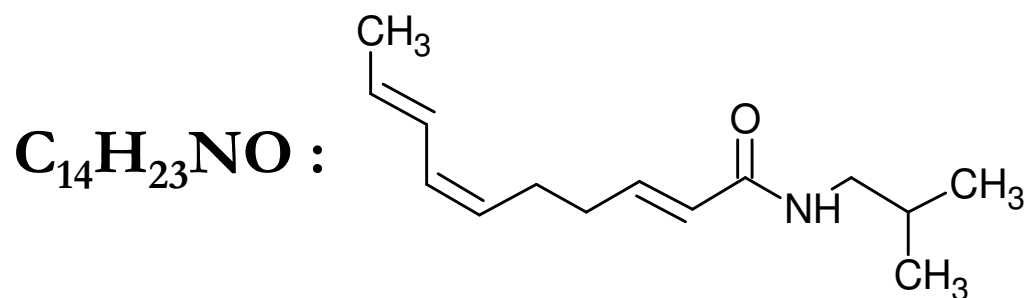


- Mafane (Para Cress) originated from an island in the Indian Ocean - *La Réunion*
- Hydro-ethanolic product
- Clear yellow to amber liquid
- Powerful relaxing agent
- No preservative
- No allergen, heavy metal, GMO, pesticide.

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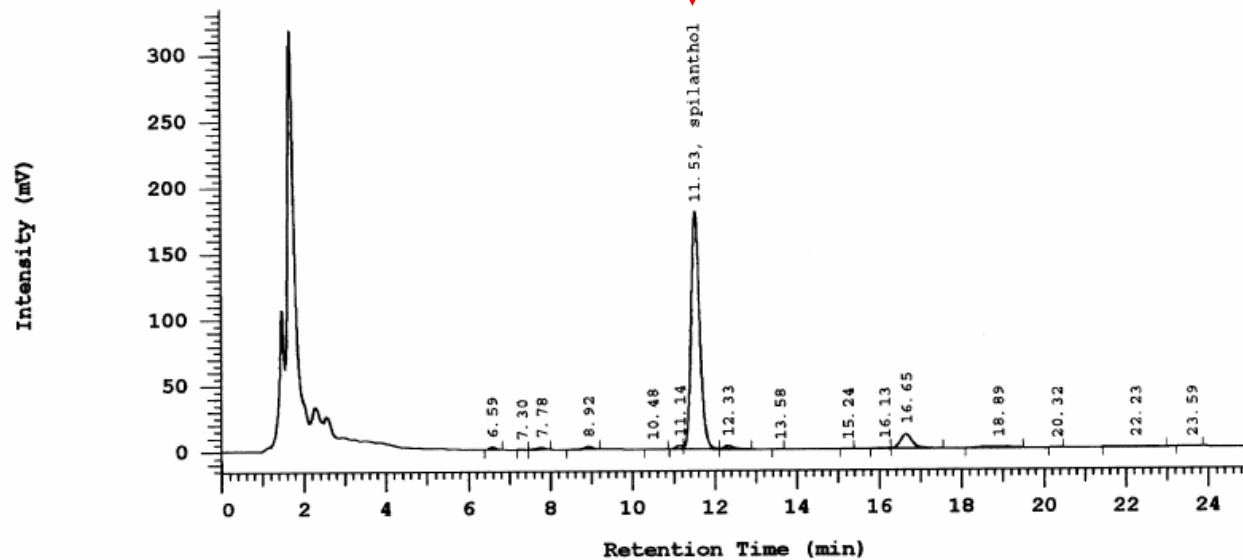


- *Acmella oleracea* extract,
- Rich in isobutylamides
- Activity and reproducibility marker
- Spilanthol or (E,Z,E)-N-2-isobutyl-2,6,8-decatrienamide :



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- Spilanthol marker :



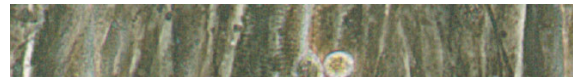
- Specifications: Spilanthol > 50 mg/l

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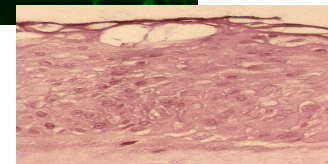
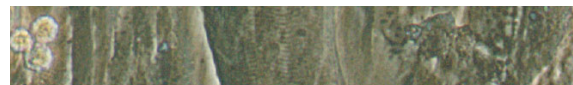
□ Substantiation

1. *In vitro* on nerve-muscle cocultures :

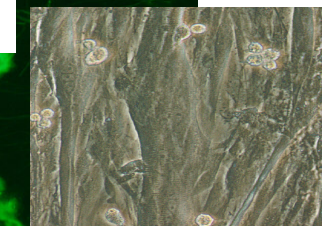
- ❖ striated muscle cells innervated by motor neurons
- ❖ spontaneous contraction frequency counting



2. *In vitro* on a reconstructed skin above a nerve-muscle coculture

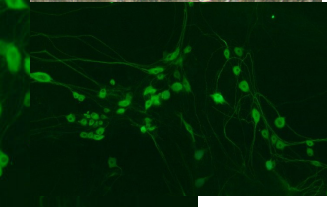
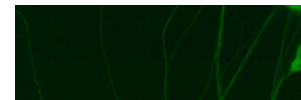


skin



muscles

3. *In vivo* on the crow's feet of 2 panels of volunteers

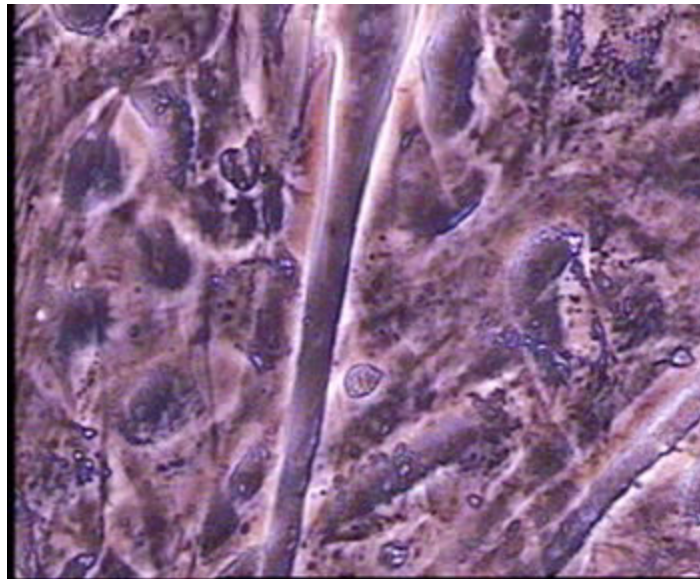


neurons

Gatuline[®] Expression

□ Substantiation

● Nerve-muscle coculture model

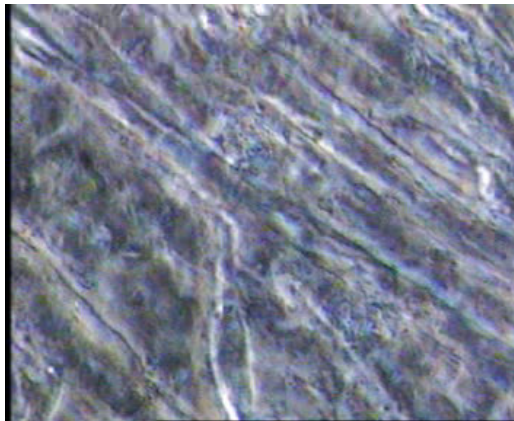


Gatuline[®] Expression

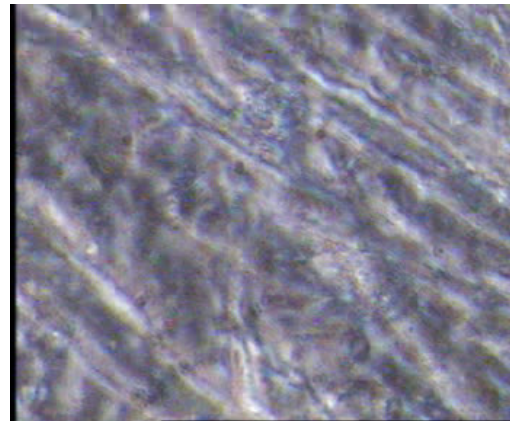
□ Substantiation results

1. On nerve-muscle cocultures

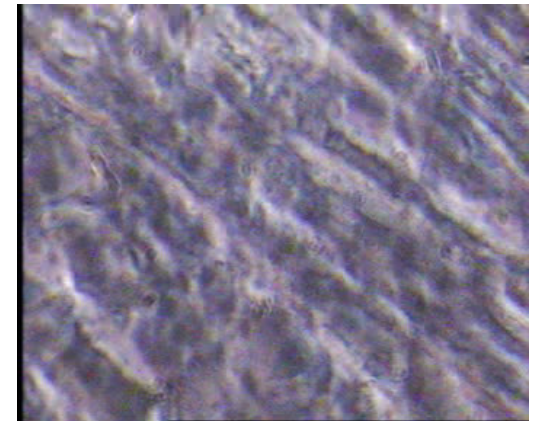
+ 0.6 % Gatuline[®] Expression



Before incubation



1h



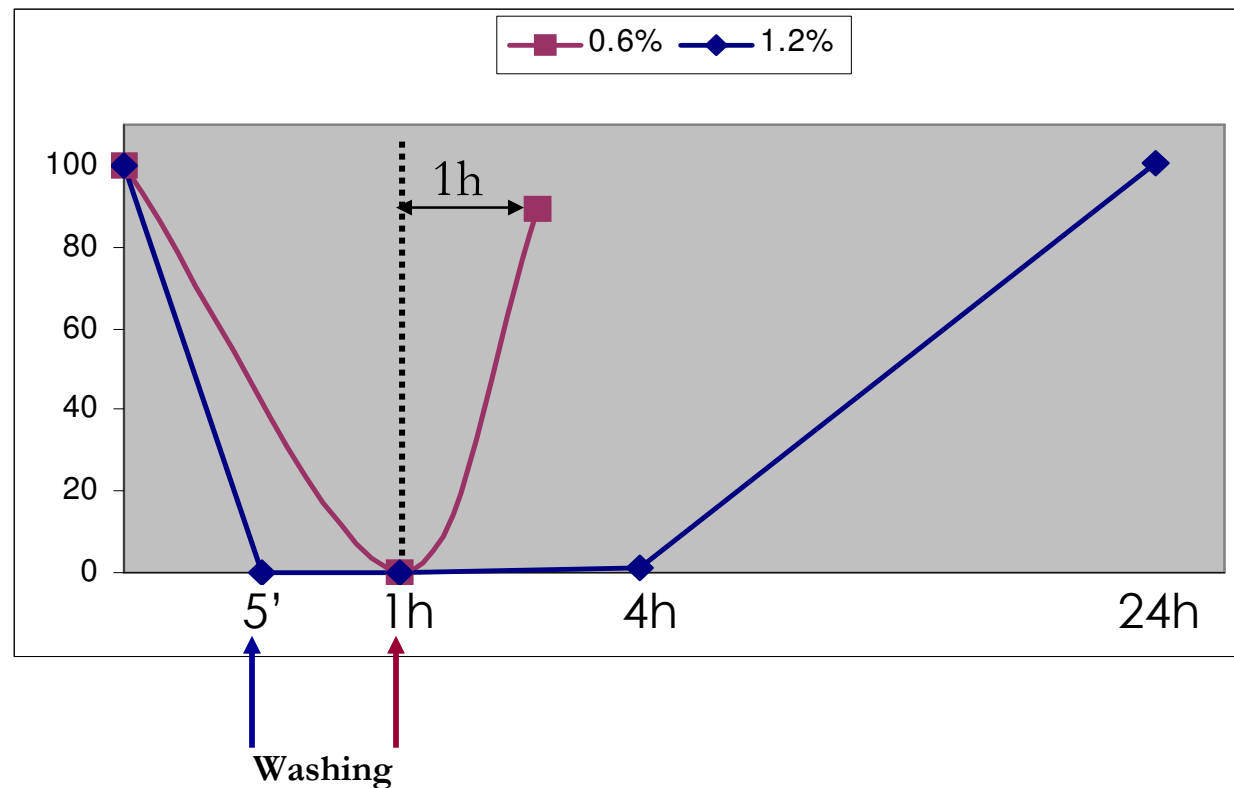
1h after washing

- Positive control: Carisoprodol 1mM

Gatuline® Expression

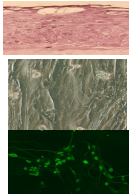
□ Substantiation results

Frequency of contractions (%/T0)



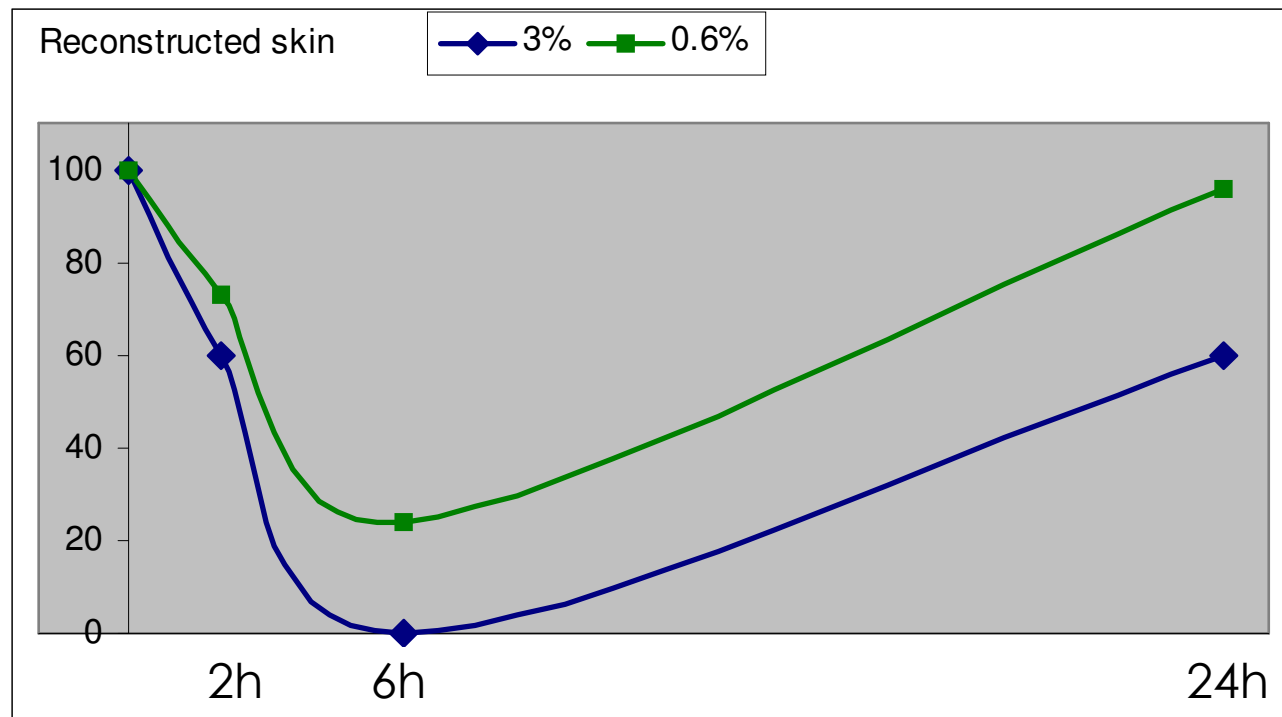
Gatuline® Expression

□ Substantiation results



2. On a reconstructed skin above a nerve-muscle coculture

Frequency of contractions (%/T0)



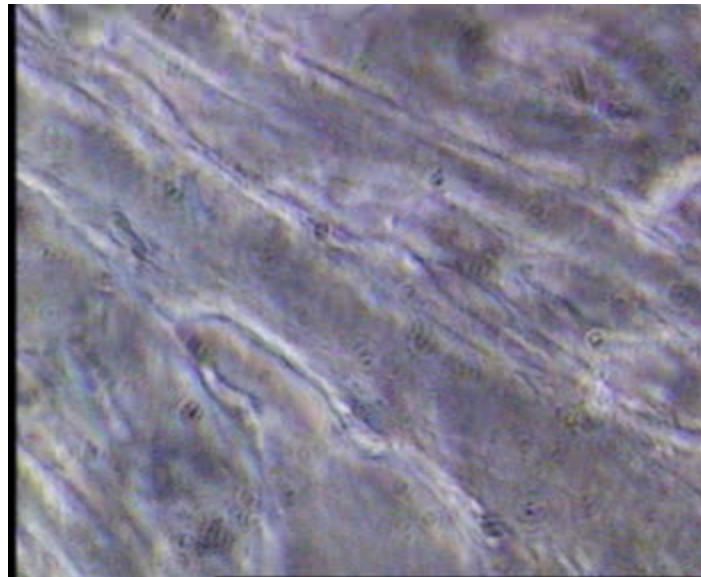
Gatuline® Expression

□ Substantiation results

2. On a reconstructed skin above a nerve-muscle coculture

Spontaneous contractions

+ 0.6 % Gatuline®
Expression



Recovery

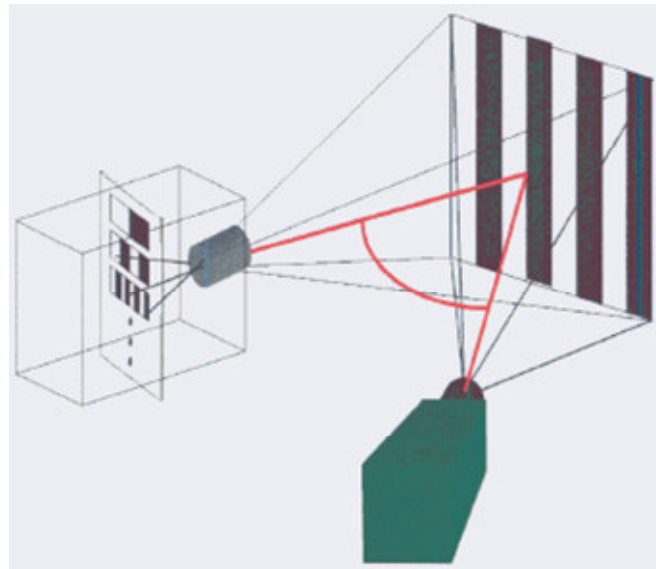
Gatuline[®] Expression

□ *In vivo* substantiation results

3. Fringes projection analysis on the crow's feet of 2 panels of volunteers

- ❖ Application half-face twice a day for 28 days
- ❖ Gatuline[®] Expression at 2% and 5% tested *versus* placebo
- ❖ Measurement of mean roughness at various times of the study

Fringes projection system

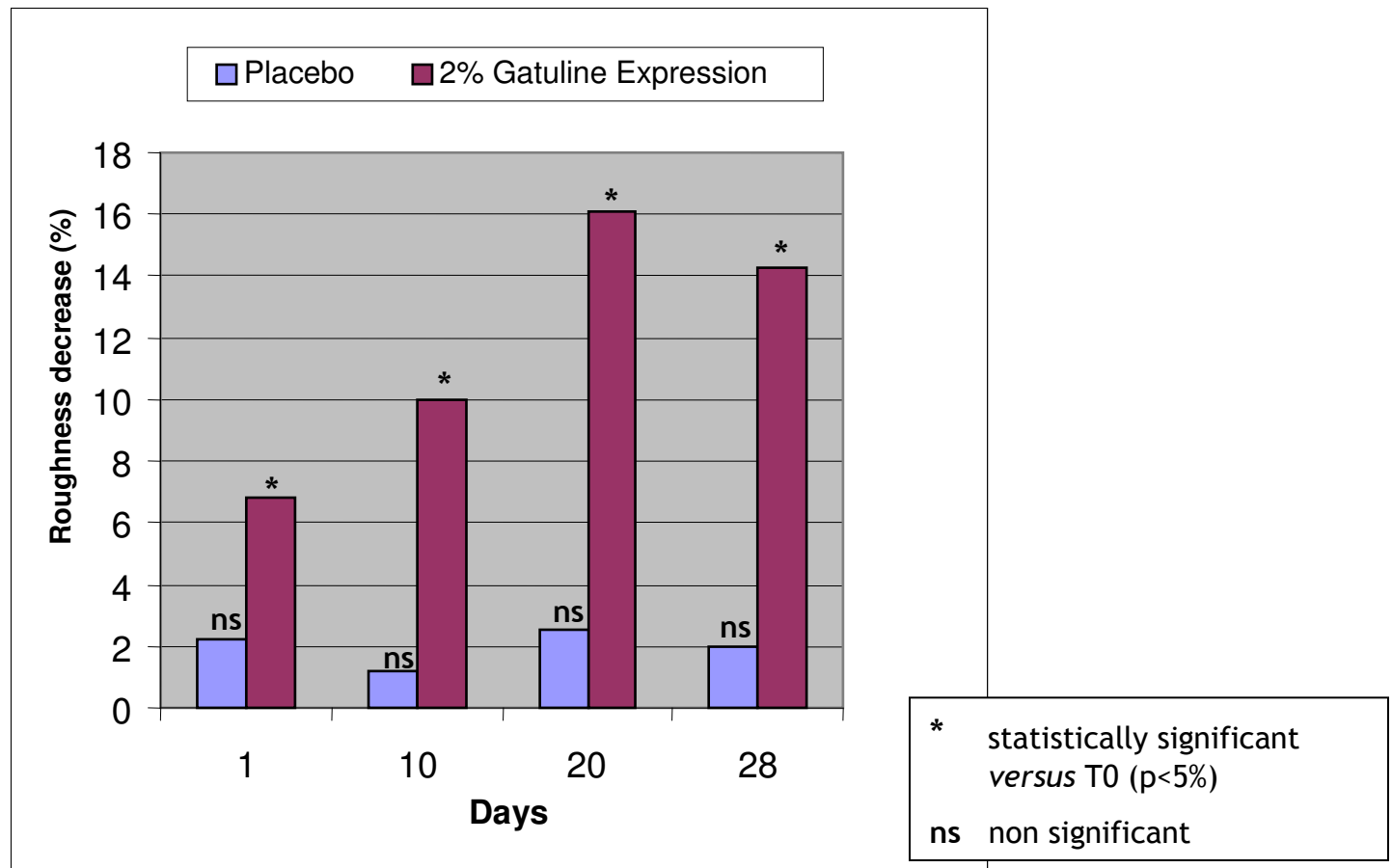


Gatuline® Expression

□ *In vivo* substantiation results

Mean roughness on 15 volunteers

1st panel:

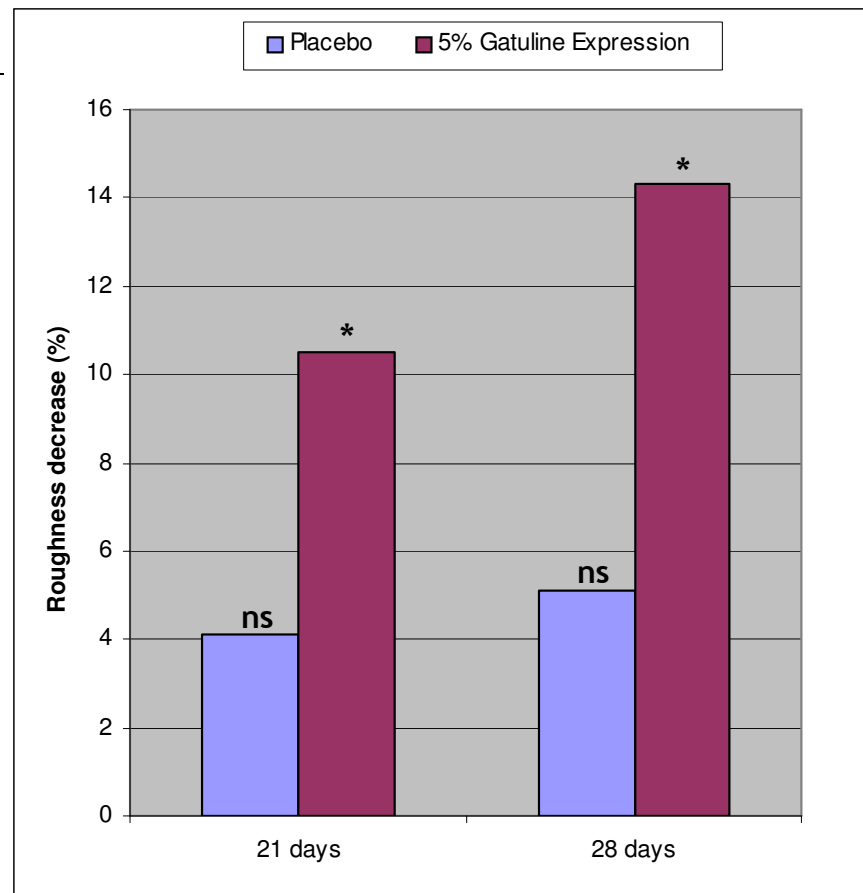


Gatuline® Expression

□ *In vivo* substantiation results

Mean roughness on 25 volunteers

2nd panel:



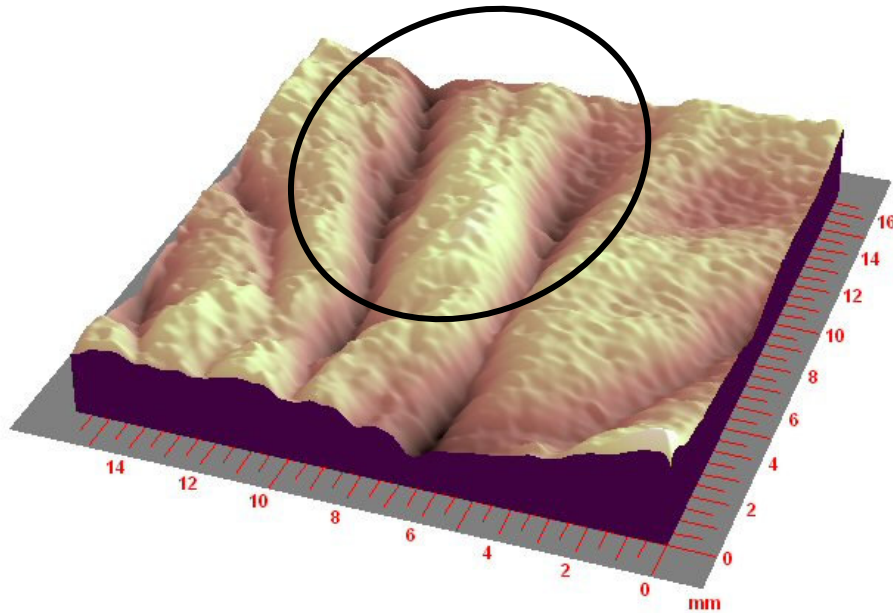
* statistically significant
versus T0 (p<5%)

ns non significant

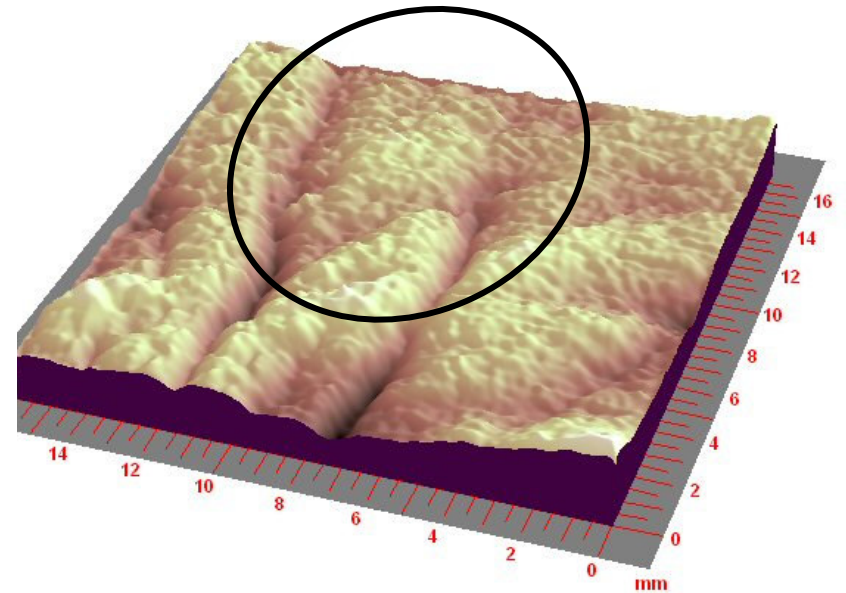
Gatuline® Expression

□ *In vivo* substantiation results

5% Gatuline® Expression



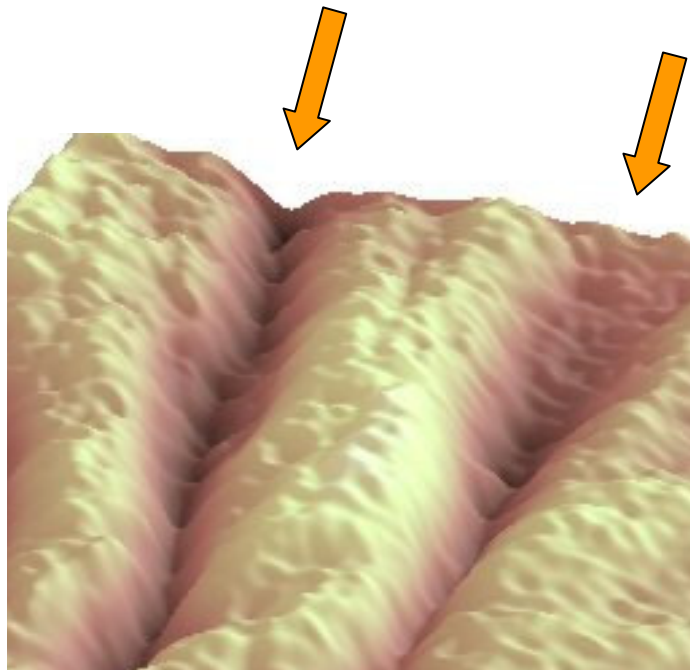
D0



D28

Gatuline[®] Expression

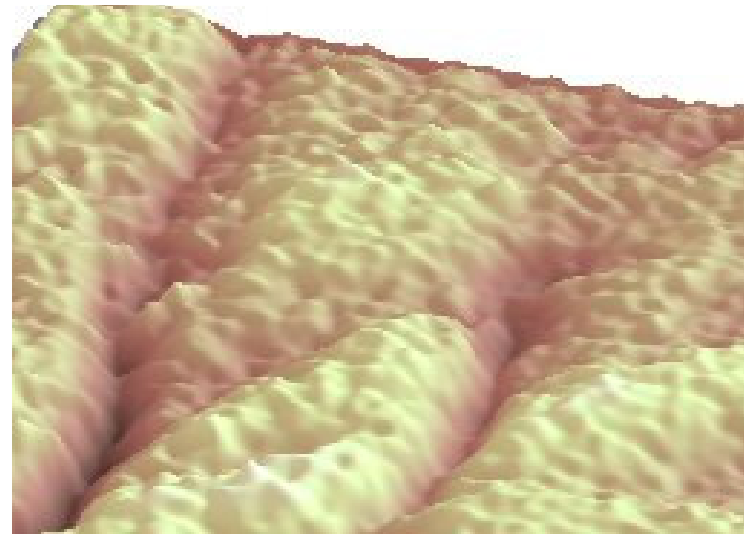
□ *In vivo* substantiation results



D0



D28



5% Gatuline[®] Expression

Gatuline® Expression

□ Substantiation summary

- Immediate and powerful activity
 - ❖ contraction inhibition with 0.6% of the extract
 - ❖ reversible function
- Bioavailability of the active remaining effective after transcutaneous penetration
- Dose response: immediate and long lasting effects enhanced with the extract's concentration
- *In vivo* confirmation of the immediate effect on wrinkles smoothing

Gatuline[®] Expression

□ Compatibilities

- Soluble in water, glycerin, Transcutol[®], propylene glycol, ethanol and sorbitol
- Compatible with anti-oxidants and preservatives
- Compatible with gelling agents
- Can be used at pH from 3 to 10

→ Easy to formulate

Gatuline® Expression

□ Conditions of use

- Added at room temperature at the end of the manufacturing process
- Suggested concentrations of use : 2 to 5%

□ Applications

- skin care products : emulsions, microemulsions, serums, gels.

□ Patent

- A patent has been filed

Gatuline[®] Expression

□ Regulatory

- Alcohol (and) Water (and) Acemella oleracea Extract
- CAS and EINECS numbers
- Japanese and Australian approval

□ Toxicological profile

- No skin irritation, sensitization, mutagenicity, phototoxicity, photosensitization
- Good tolerance for the eyes

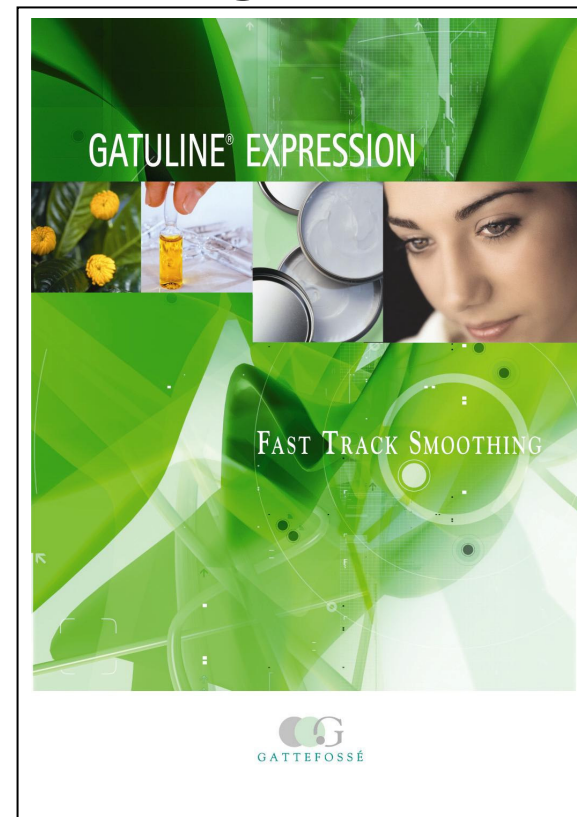
Gatuline® Expression

□ Packing

- Industrial packings : 2 plastic tin - 4 and 0.8kg
- Samples : plastic bottle 50g

□ Promotion

- Brochure
+ samples of
end-products
- In-Cosmetics
Berlin mid-April



Gatuline® Expression

- *Acmella oleracea* extract
 - Powerful tropical active
 - Muscle-relaxing mechanism of action
 - Marker of activity and reproducibility (spilanthol)
-
- Ideal for anti-age and anti-wrinkle skin care lines, particularly dedicated to expression lines smoothing.