

SPINCONTROL PRESENTATION

2023

Clinical Research Organization specialized in the evaluation of the efficacy and the tolerance of any product with cosmetic, aesthetic or well-being claims.

Behind Eurofins Spincontrol



Global Expertise, Personal Touch



Global expertise

- **Tailor-made protocols**, from standard to innovative methods
- **In-house image analysis**
- **Emotion test**
- Quality system based on 2 quality standards:
 - Compliant with **ISO 9001** standard since 2005
 - Studies conducted in the “*spirit of the GCP*”
- **Marketing & regulatory monitoring**

Key figures



Efficacy tests & Techniques



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Our clinical studies can be performed according to different protocols



Consumer approach

Targeted consumers will be asked to evaluate the product at home and to fill out a questionnaire at the end of the study.



Technical approach

This approach is based on the use of instrumentations which allow quantitative and/or illustrative results
(3D technologies, AEVA system (Eotech), image analysis, Infra-red camera, Dynaskin and all the other standard techniques (sebumeter, ballistometer, corneometer...)).



Clinical approach

(by dermatologists or ophthalmologists or general practitioners)
This approach is performed under the supervision of a specialist who will evaluate the efficacy of the product.



Sensorial approach

(by trained experts)
This method is based on the senses (sight and touch). Three regularly trained experts will grade parameters such as firmness, wrinkles, dimples or softness...



Emotional approach

Emotions influence our behavior and perception of the product. We draw-up tailor-made protocols according to three components *(subjective, behavior and visceral)* which are then interpreted by a Neuropsychologist.

with or without a tolerance test

A close-up photograph of a woman with blonde hair, smiling broadly and showing her teeth. She is wearing a white, fluffy bathrobe and has her hand resting against her cheek. The background is a soft, out-of-focus grey.

CONSUMER TESTS

Perception of your product



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The consumer test provides essential information on the perception of your product.

- Spinconso: department of Spincontrol, dedicated to consumer tests.
- 30 years of experience
- Complete supervision of the studies: *up-front reflections, choice of the protocol, preparation and implementation on fieldwork, analysis of data and elaboration of recommendations*
- Regular update of the database of panelists
- Follow-up on the panelists reliability
- Fast setting-up of studies and delivery of results

Consumer tests



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BENCHMARK, BLIND OR BRAND STUDIES

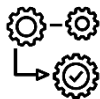
according to 2 options:



- Questionnaires filling process at home
- Questionnaires filling process at Spincontrol' under supervision

Little extra:
Emotional approach

BENEFITS OF CONSUMER TEST



PRACTICALITY



ADAPTABILITY



PROFITABILITY

PANEL CHARACTERISTICS



- People from **all over France**: 8,000 panelists with over 300 details (including cosmetic habits, purchasing sectors, purchased brands etc...)
- People from **Tours and its suburbs**: 7,000 panelists with more than 300 details

Image processing and analysis



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SPIN'
ANALYSIS

A department dedicated to image processing and analysis!

In the world of cosmetics, digital image analysis mainly consists in **proving the product efficacy, thanks to essential information assimilated in the smallest details of an image.** It also allows to :



OBTAIN IMAGES UNDER
STANDARDIZED
CONDITIONS



IDENTIFY AND QUANTIFY
VARIATIONS IN SKIN
AND HAIR PARAMETERS



ILLUSTRATE
COSMETIC BENEFITS



CREATE
MARKETING SUPPORT

The interest is to work on standardized photos, generally taken in a laboratory with high-performance tools, which can be taken:

- In **cross-polarization**, i.e. with suppression of the light on the skin surface;
- In **parallel polarization**, i.e. with all the specular light;
- In **diffuse light**, i.e. with a homogenization of the light on the skin surface.

OBJECTIVE: TO ASSIST YOU IN PROCESSING YOUR IMAGES ON ANY TYPE OF CLAIMS.

Anti dark circles - Anti dark spot - Anti rosacea - Anti sebum effect - Anti wrinkle - Complexion homogeneity - Complexion radiance - Lifting - Matifying effect - Skin texture - Tanning effect - Whitening effect - etc



FACE CLAIMS

FRINGE PROJECTION

AEVA & DERMATOP SYSTEMS

- Anti wrinkles
3D topography: in vivo or on replicas
- Retexturizing & plumping effect
(overall roughness of the face by “radius of curvature” approach)
- Volume of the hollow cheeks
- Anti sagging effect

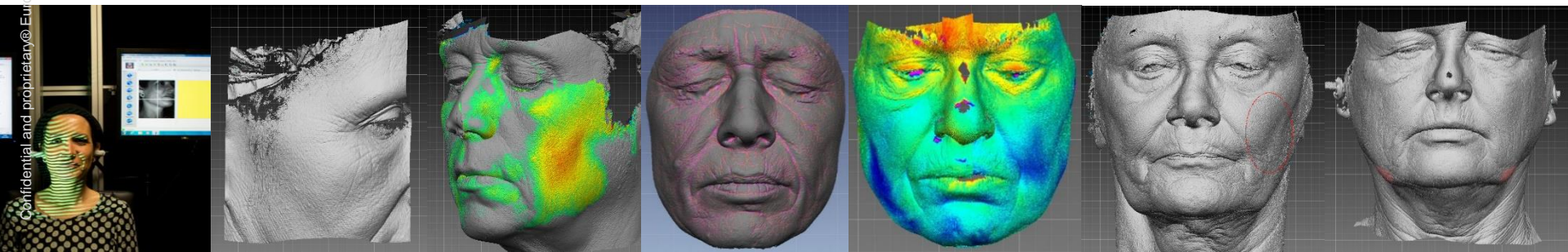
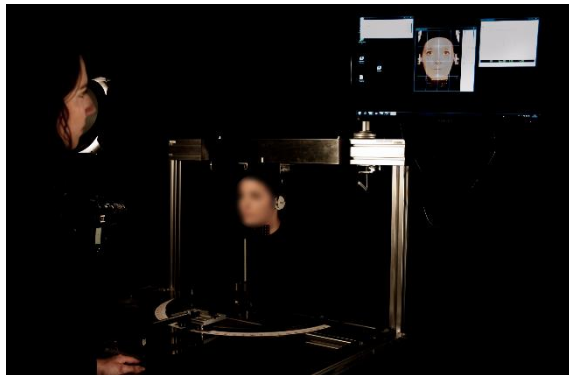


IMAGE ANALYSIS

Global 2D topography



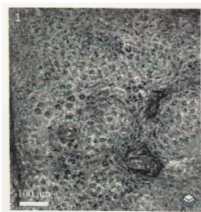
*Analysis of skin
topography*

CLINICAL ASSESSMENT

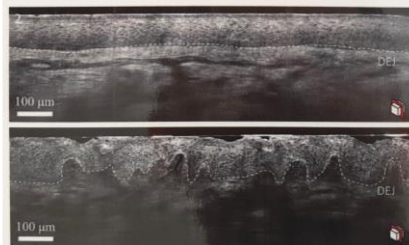
grading by trained experts in vivo or on photos



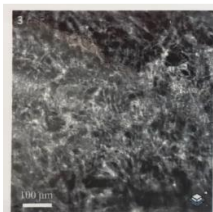
LC-OCT



*Epidermis
thickness*

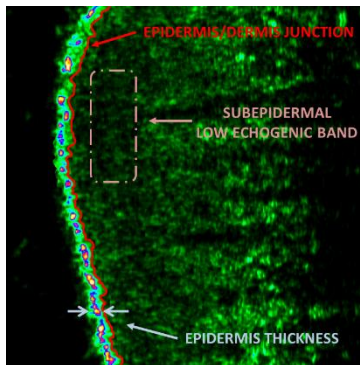


*Collagen
network*



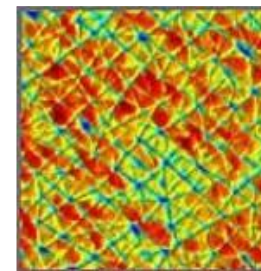
ULTRASOUND IMAGING

skin thickness & homogeneity measurement

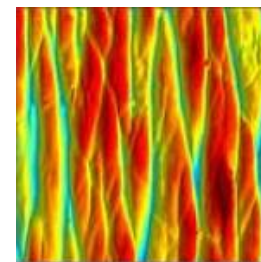


SKIN MICRO RELIEF

3D Microscopy



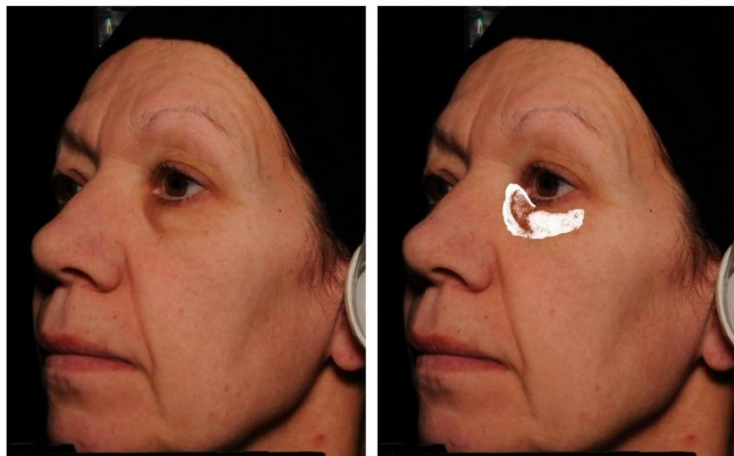
<30 years old



>70 years old

IMAGE ANALYSIS

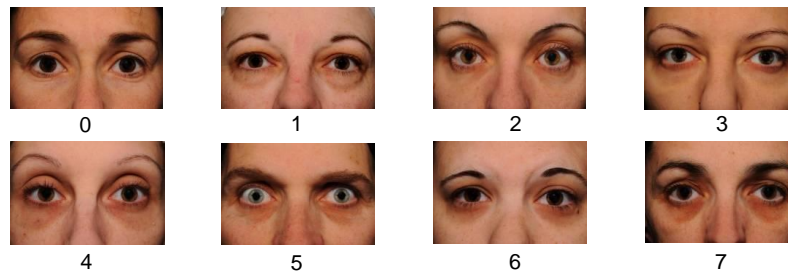
Analysis of the color intensity (due to eye-bags) or vascular or melanin component.



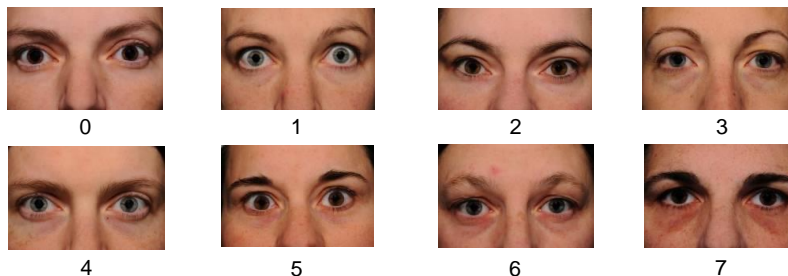
CLINICAL EVALUATION

on photos

Scale of dark-circles (**brown**) on a Caucasian skin



Scale of dark-circles (**violet-red**) on a Caucasian skin



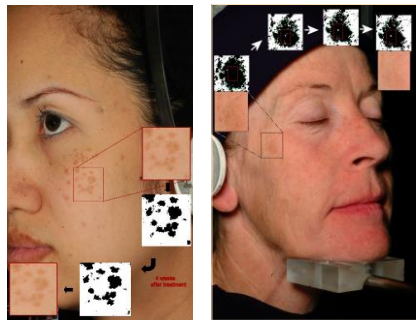
Anti dark spots



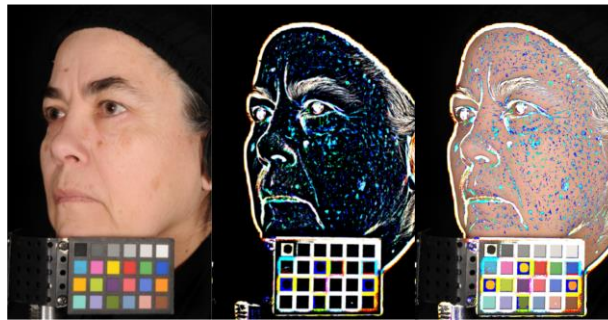
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IMAGE ANALYSIS

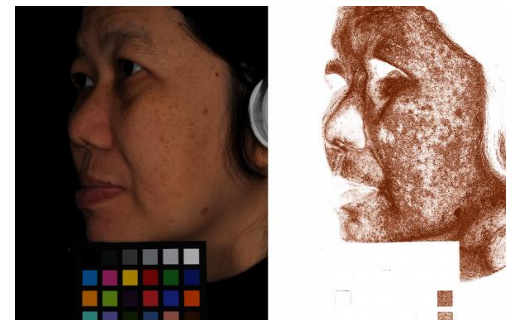
*Colorimetric and morphological analyses
of selected dark spots*



Analysis of skin pigmentation homogeneity



Intensity of melanin component



BIOCHEMICAL DOSAGES

Skin surface samples in polluted cities (Mumbai, Bangkok or Jakarta).

2 possible dosages:

- Levels of elements as heavy metals: V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Pb, As, Si et Ti
- Lipids alteration assessment



Anti-oily skin effect

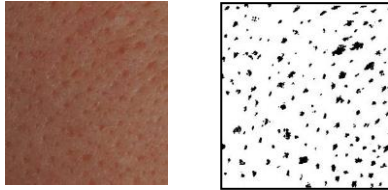


Global Expertise, Personal Touch

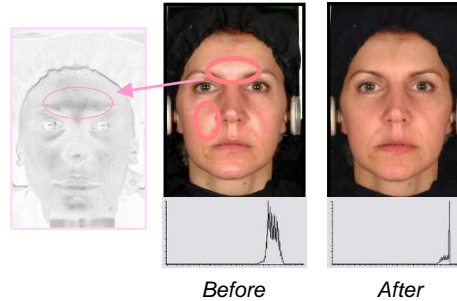
IMAGE ANALYSIS

Measured parameters from C-Cube images:

- Number of visible pores
- Total area of the pores
- Average diameter of the pores

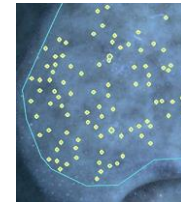


Matifying effect



Anti-sebum effect

Focused on porphyrins by Visia-CR®



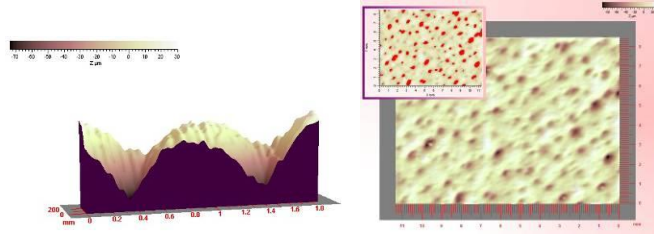
Anti-oily skin effect



Global Expertise, Personal Touch

FRINGE PROJECTION

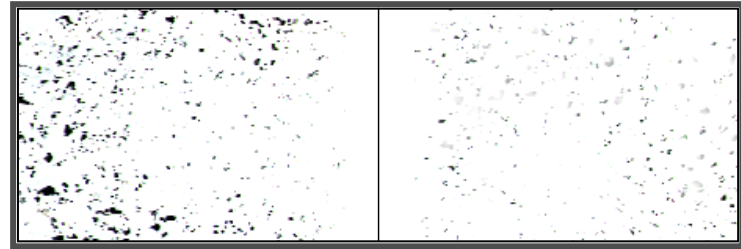
Diameter of the pores on replicas



SEBUTAPE / SEBUMETER

Anti-sebum effect

Before treatment



After treatment



Immediate rate of grease
measurement

Cell renewal



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CHROMAMETER

After applying DHA patch

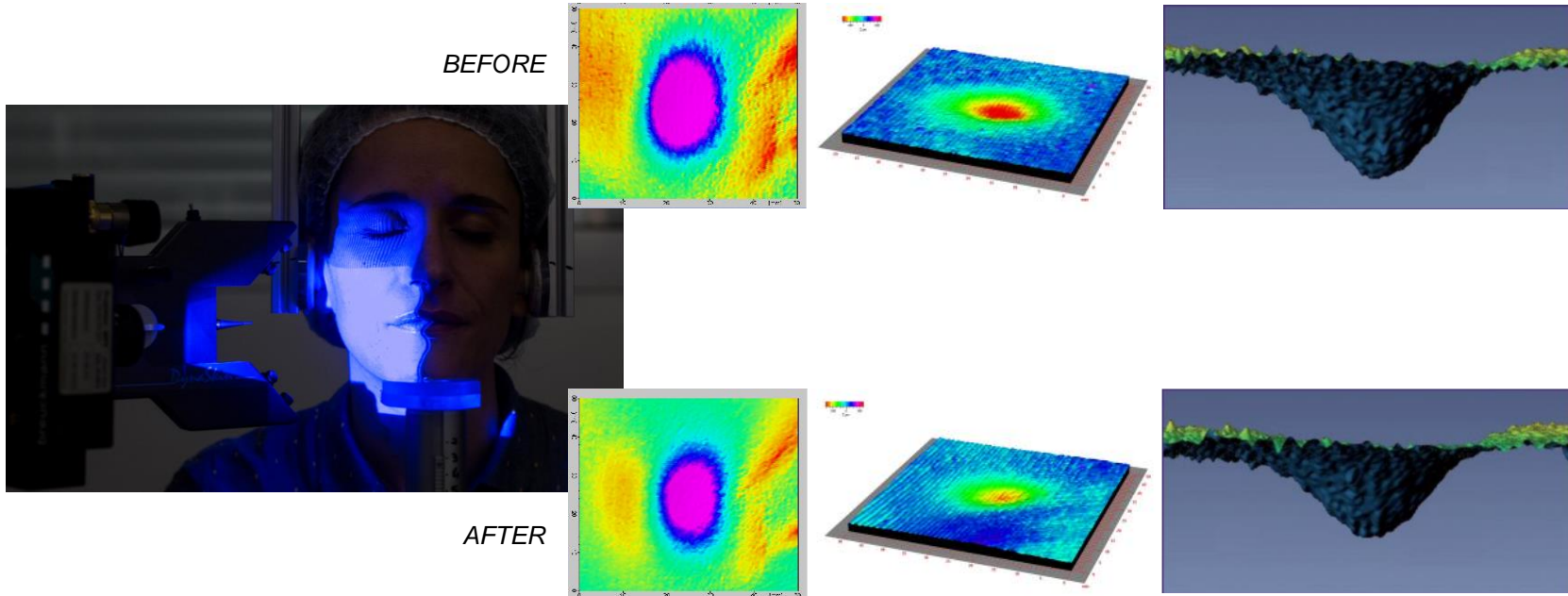


Firmness - Elasticity



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DYNASKIN



... and also **CUTOMETER** and **CLINICAL EVALUATION**

« Healthy skin »

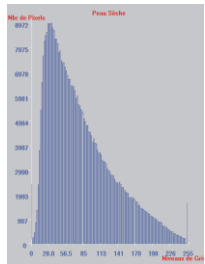
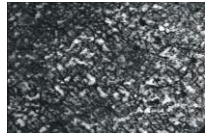
MICROBIAL IDENTIFICATION

Microbiome-friendly

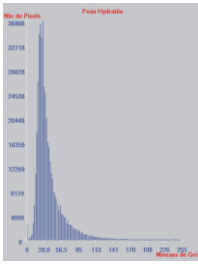
- qPCR analysis
- Metagenomic analysis



D'SQUAME

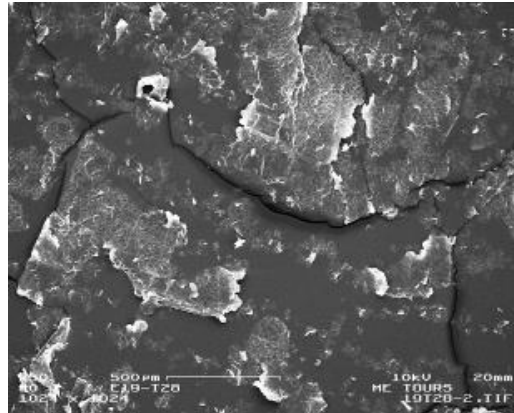


*Dry
skin*



*Hydrated
skin*

ELECTRONIC MICROSCOPY

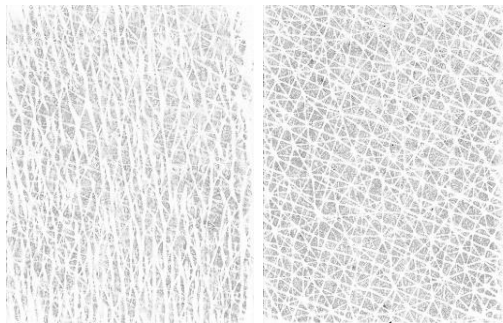


C-CUBE

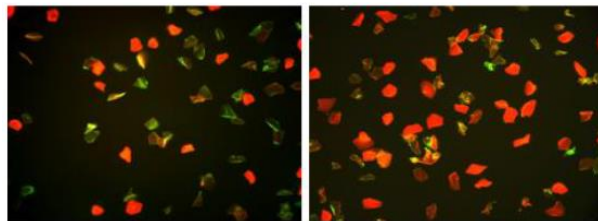


... and also **CORNEOMETRY**, **NANOVAPOMETER** and **MOISTUREMETER**

MOISTUREMAP®



CORNEOCYTE MATURITY IDENTIFICATION



Dry

Normal

DISCOMFORT SIGNS

BY FACIAL EXPRESSIONS

AU 4 : Brow lowering

AU 43 : Closing eyes

AU 6 : Cheek raising

AU 12 : Pulling at corner lip

AU 7 : Tightening of eyelids

AU 9 : Wrinkling of nose

AU 10 : Raising of upper lip

AU 25 : Parting lips



➡ Index of tightness feelings

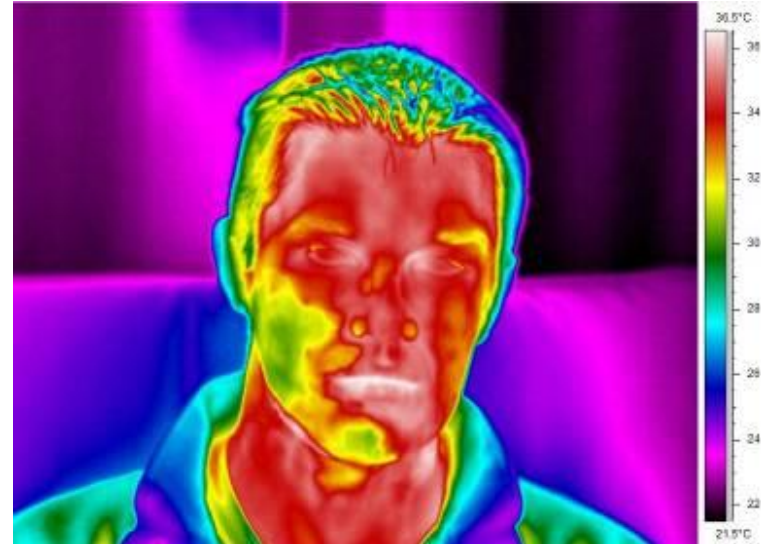
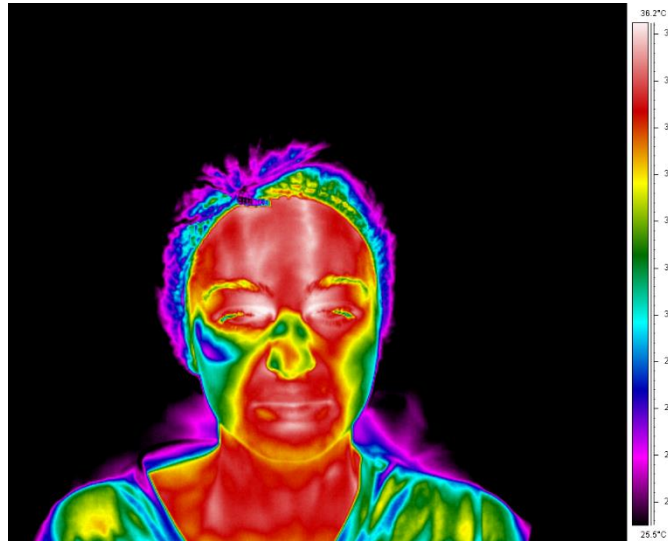
Refreshing effect



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INFRARED THERMAL CAMERA

Split-face study, application of a roll-on with a refreshing effect



Split-face study, application of a refreshing after-shave product

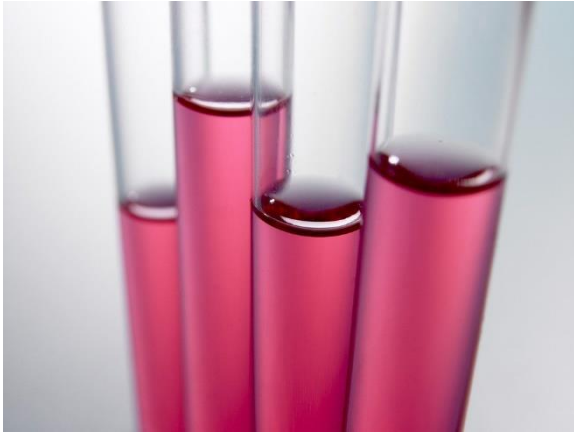
Soothing – Sensitive skin



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BIOCHEMICAL DOSAGES

Skin surface samples : Interleukins



GALVANIC SKIN RESPONSE

Emotional test

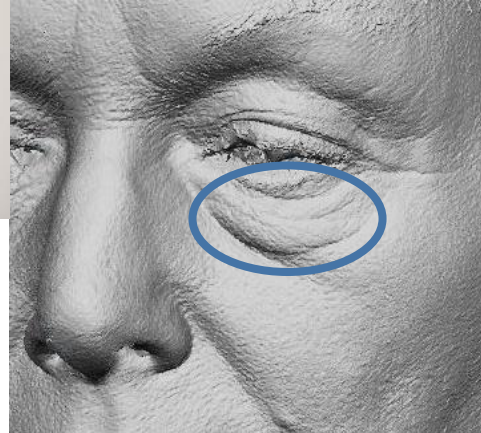
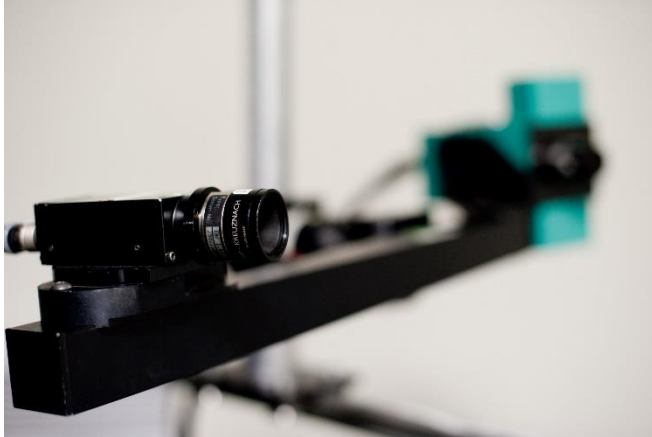


Under-eye puffiness



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FRINGE PROJECTION



Whitening & Tanning effect

IMAGE ANALYSIS

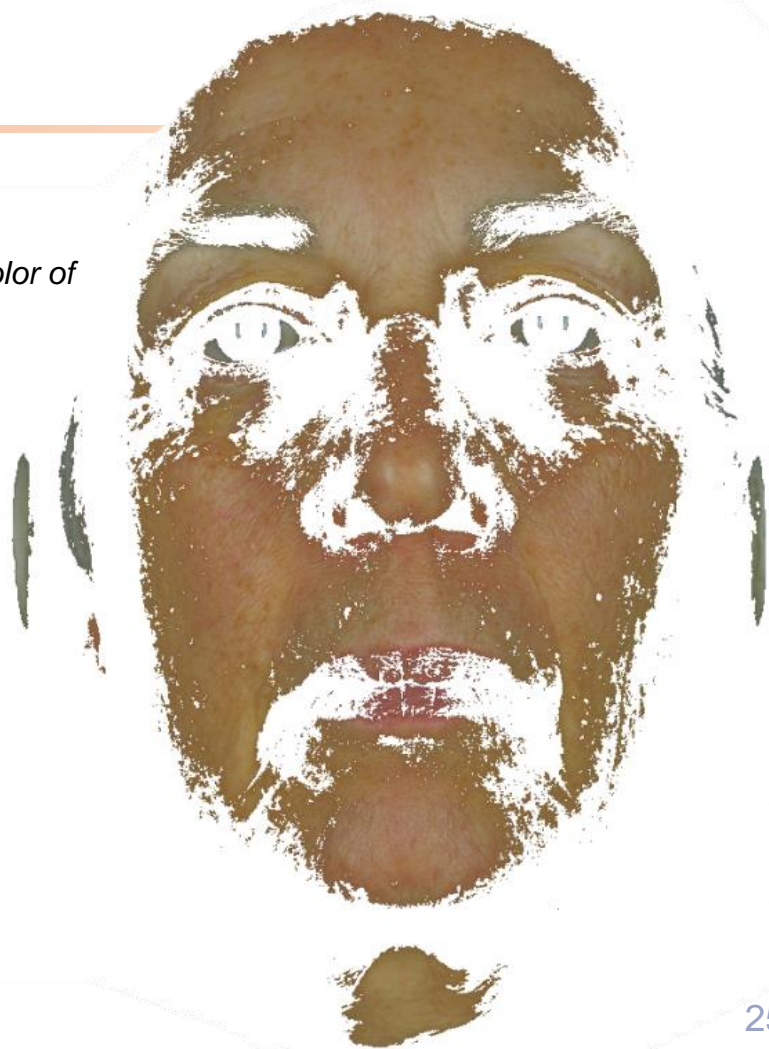
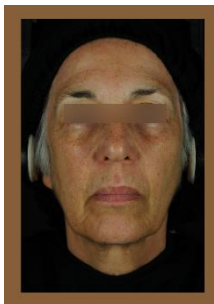
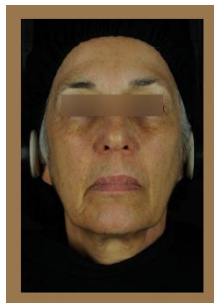
Caucasian skins
for a **tanning effect**



Asian skins
for a **whitening effect**



Charasteristic color of
skin tone



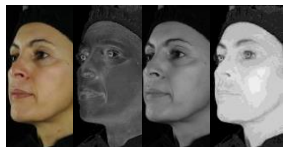
Focus on complexion



Global Expertise, Personal Touch

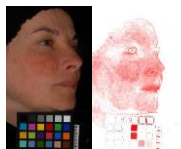
IMAGE ANALYSIS

Complexion radiance - Radiance mapping



Anti rosacea – Analysis of the red component

By Visioface® or Visia-CR® and also SIAscope & mexameter



Skin Texture - Analysis of skin texture roughness

By Visioface® or Visia-CR®



CLBT METHOD

Complexion radiance

Calculation of a **C.L.B.T index** based on

- Colours,
- Luminosity,
- Brightness,
- Transparency of the skin.



Focus on complexion



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SENSORIAL METROLOGY

Healthy glow effect

Measured parameters

- Colours of the skin: *Pink-red, olive, tan (beige, apricot-coloured, blond colour and brown colour)*
- Physical characteristics: *luminosity, homogeneity of the skin and strain on the skin*



Setting of the sensory metrology room



Structured scale of the Good complexion colours – Spincontrol



Analogical scales for “luminosity”, “homogeneity” and “strain” evaluation

Focus on beard

HAIR TUNE (Sound analysis)

Softness

XPOLAR®

Damaged - Structural analysis (Keratin) by polarimetric scanner



BODY CLAIMS

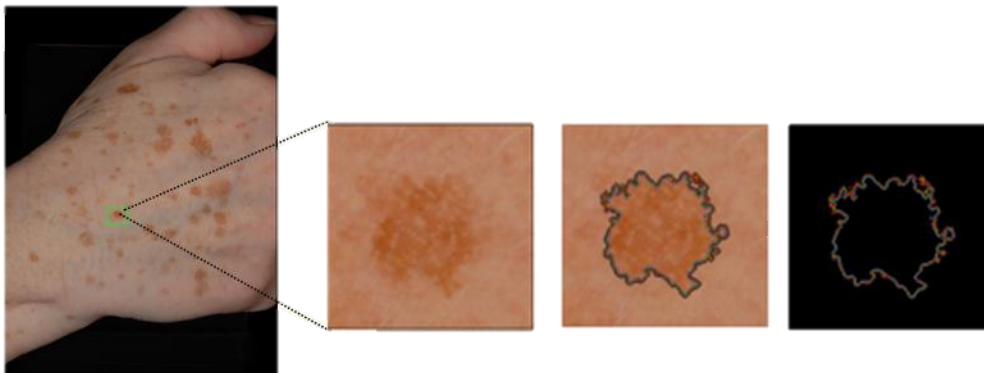


IMAGE ANALYSIS

by Visioface®, Visioscan or C-Cube

Calculated parameters :

- Colour of spots
- Colour of skin
- Sharpness of the contours
- Total area of the spots (mm²)



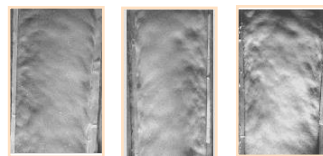
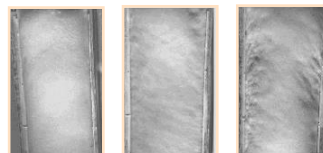
Anti-dimples



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PROFILOMETRY 2D

Roughness of the dimples



*Roughness parameters
or clinical evaluation*

CLINICAL ASSESSMENT

Grading of the dimples

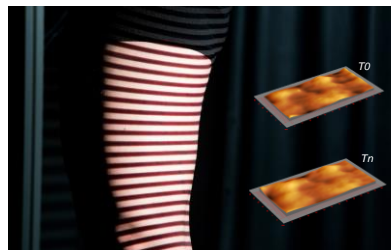


With pinching

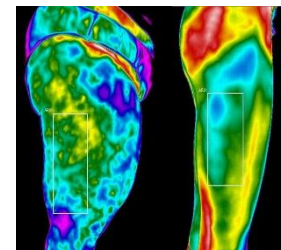
FRINGE PROJECTION

Roughness of the dimples

THERMAL CAMERA



3D topography



*Heterogeneity
of temperature*

*Uniformity of
temperature*

Firmness & elasticity



TORQUEMETER

CUTOMETER

DYNASKIN

CLINICAL ASSESSMENT



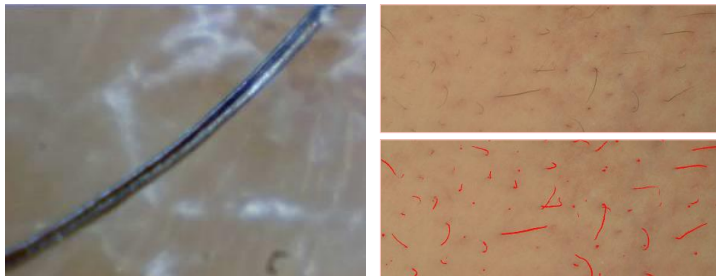
Hairs removal effect



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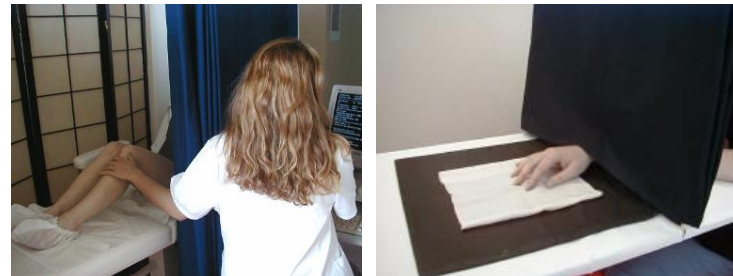
IMAGE ANALYSIS

length & density measurements



SENSORIAL METROLOGY

softness of the skin



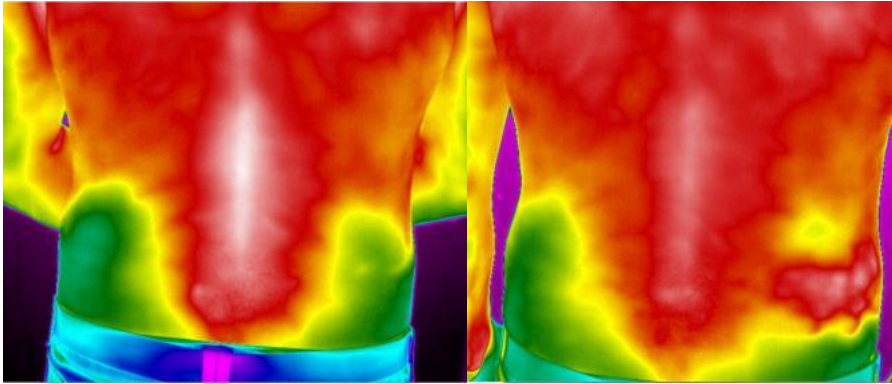
Heating & refreshing effects



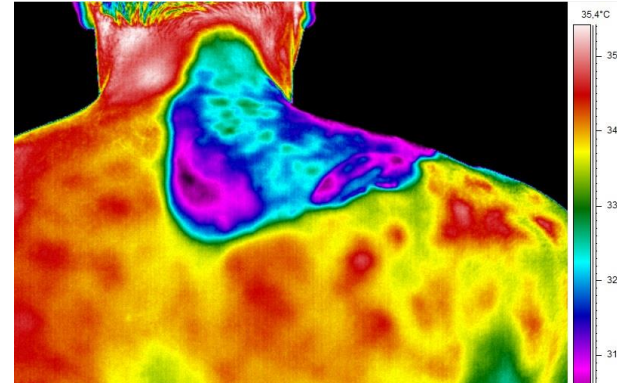
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THERMAL CAMERA

Heating effect

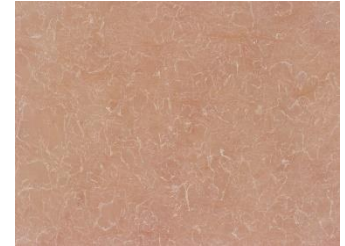


Refreshing effect



Normal

Hydrated skin



35

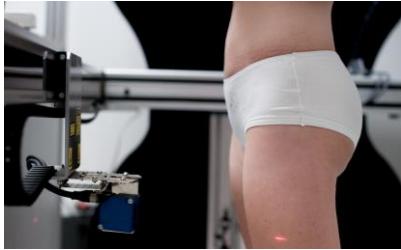
Slimming



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LASER CENTIMETRY

Without contact



ULTRASOUND IMAGING

measurement of the adipose tissue thickness (on the thighs or the abdomen)

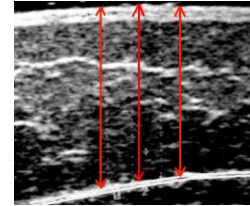
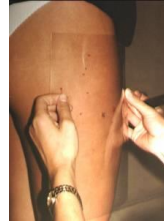


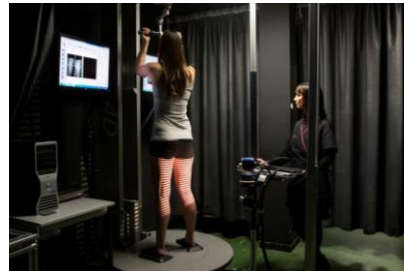
IMAGE ANALYSIS

Silhouette: area of thighs, arms & lower abdomen



FRINGE PROJECTION

*Abdominal slimming , « love handles » and thighs
Volume of buttocks & saddlebags*



Soothing effect



Global Expertise, Personal Touch

IMAGE ANALYSIS

haemoglobin component analysis

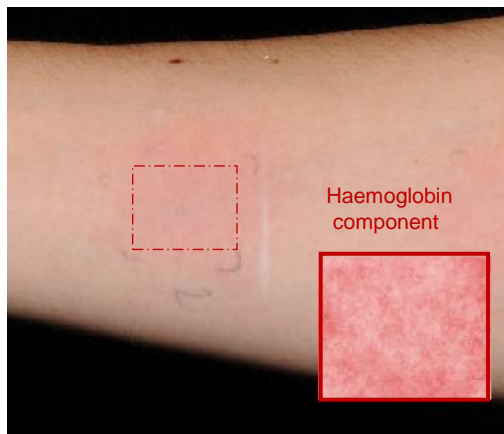
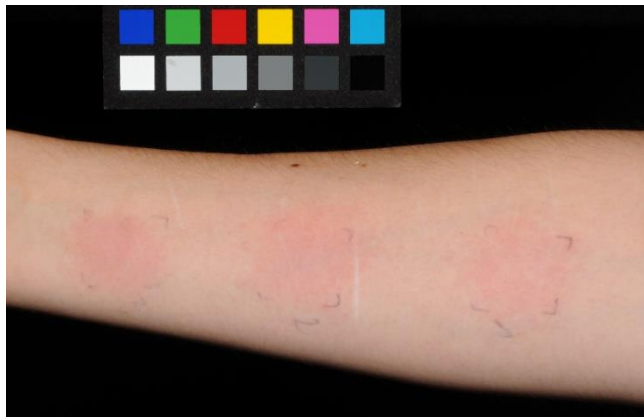
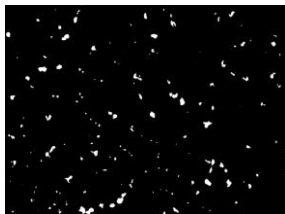


IMAGE ANALYSIS

- Anti-salt traces
- Anti-sticky sand
- Anti-sun cream traces



*Salt traces analysis
without product*

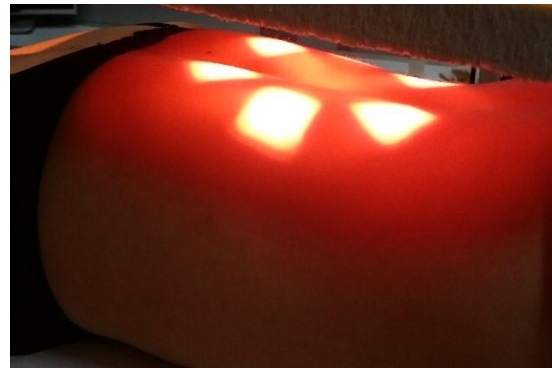


*Salt traces analysis
with product*

THERMAL CAMERA

on the area of irradiation

Infra-red protection



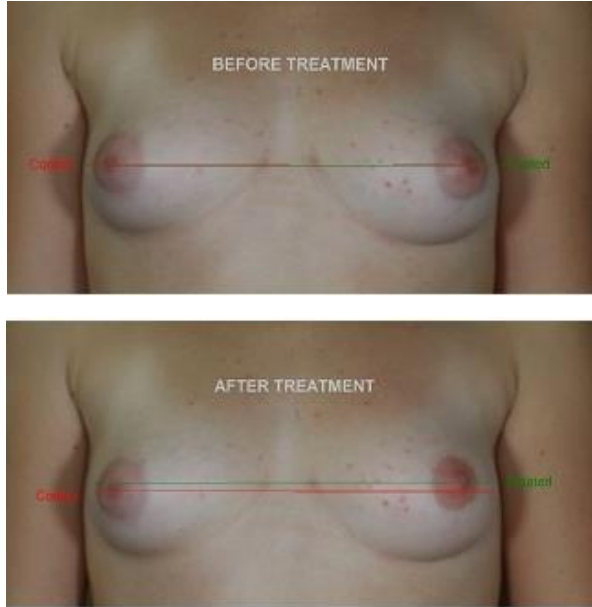
Tensing & Uplifting effect of the bust



Global Expertise, Personal Touch

IMAGE ANALYSIS

uplifting effect



FRINGE PROJECTION

volumizing & uplifting effect

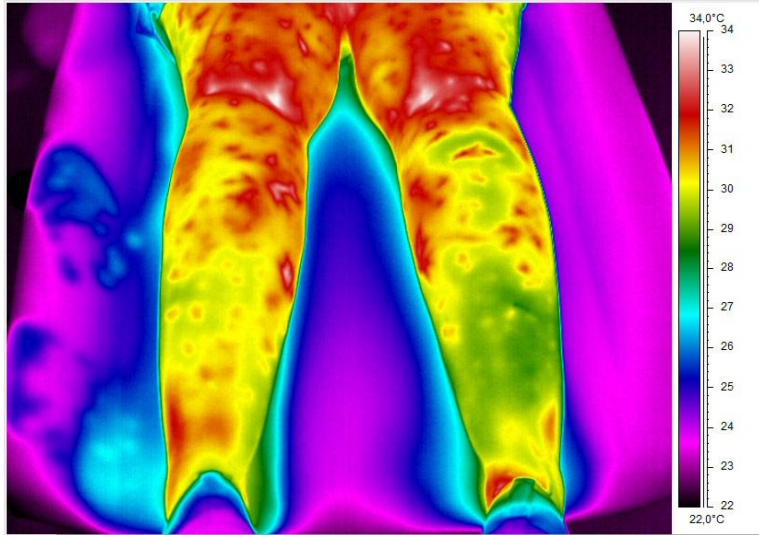


Tired legs

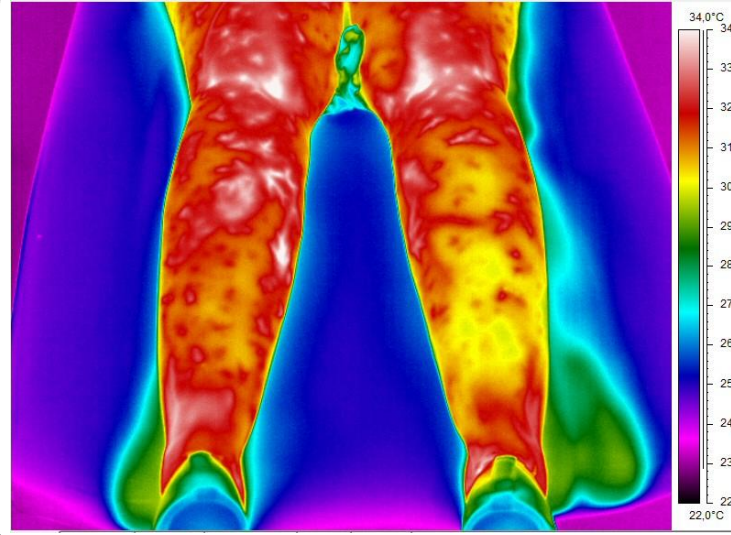


Global Expertise, Personal Touch

THERMAL CAMERA



T_0



$T + 28 \text{ days}$

« Healthy skin »



Personal Touch

MICROBIAL IDENTIFICATION

- C. acnes, Staph. aureus, Staph. epidermidis,...
- Metagenomic analysis



« Antiperspirant »

DOSAGES OF ODORANT SUBSTANCES

- Standard sweating
- Emotional sweating / Social stress



HAIR CLAIMS



Anti-breakage and split ends



Global Expertise, Personal Touch

SPIN SPLIT HAIR

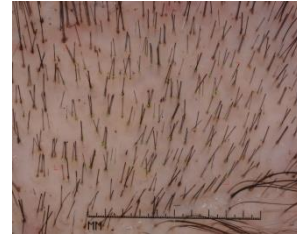
on natural hair tresses (Caucasian or Asian)



PHOTOTRICHOGRAM



Tn



Tn +48h

IMAGE ANALYSIS

Controlled environment box (humidity & heat)



Anti grey hair



Global Expertise, Personal Touch

IMAGE ANALYSIS

Covering effect

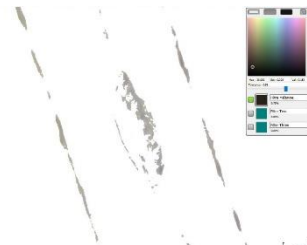
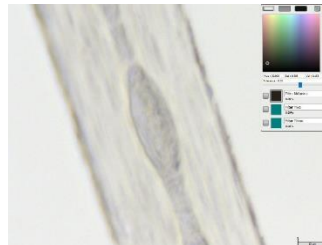


Anti Canities



POLARIMETRIC SCANNER

Melanin quantification



BIOCHEMICAL DOSAGES

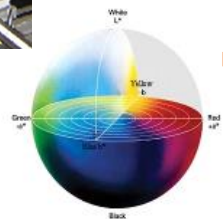
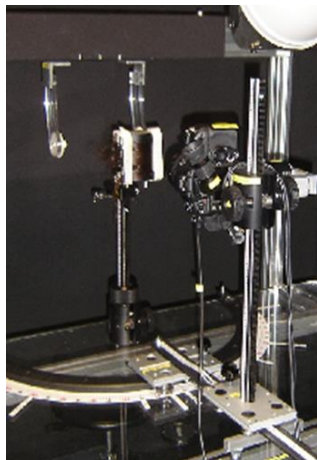
Hair or scalp samples in polluted cities (Mumbai, Bangkok or Jakarta).

Possible dosages:

- Hair: levels of elements as heavy metals
- Hair: Lipids peroxydation (MDA)
- Hair: cysteine oxydation
- Scalp: squalene peroxydation

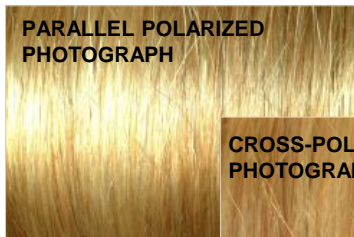


IMAGE ANALYSIS

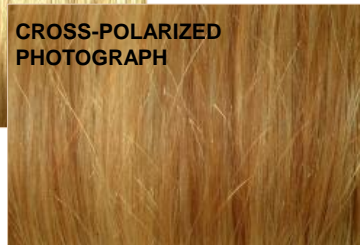


$E\Delta$

PARALLEL POLARIZED
PHOTOGRAPH



CROSS-POLARIZED
PHOTOGRAPH



CROSS-POLARIZED
PHOTOGRAPH

COLORED HAIR



Combing effect



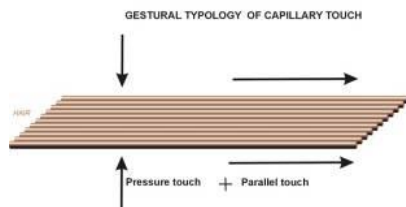
Global Expertise, Personal Touch

HAIR TUNE



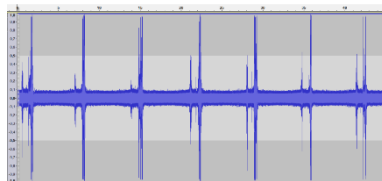
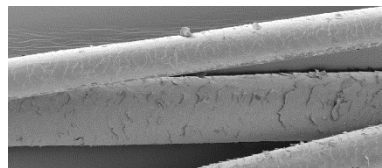
SENSORIAL METROLOGY

Expert panels – hair surface evaluation

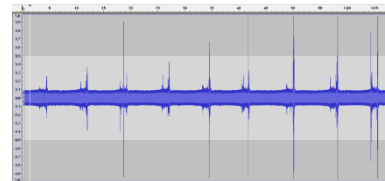
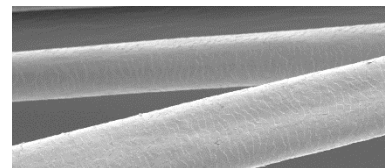


HAIR TUNE

the sound of hair



Dry hair



Treated hair

Eco-responsible cosmetics



Globelife Personal Touch

BIOCHEMICAL DOSAGES

- Rinse water collection
- Rinse speed



Growth speed



Global Expertise, Personal Touch

CENTIMETER MEASUREMENT



T0



Tn

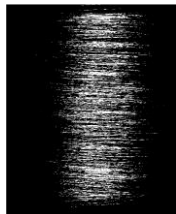
Hair sheen



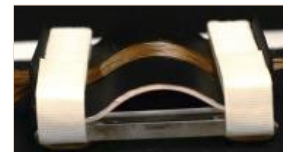
Global Expertise, Personal Touch

IMAGE ANALYSIS

Specific protocol of damage/dull hair



EXPERTS GRADING



No sheen

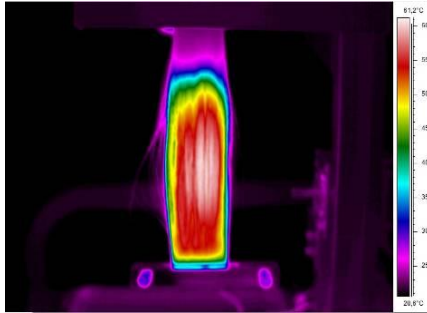
Maximum sheen

Heat protection effect

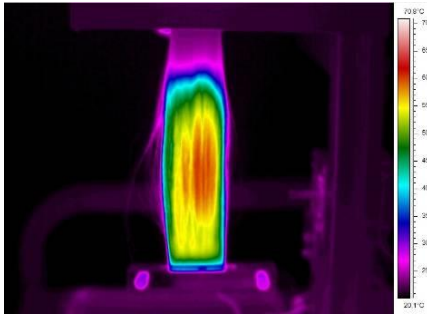


Global Expertise, Personal Touch

THERMAL CAMERA



Before treatment



After treatment



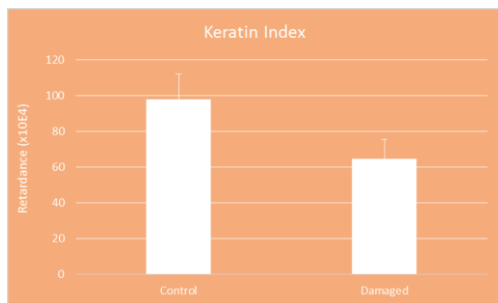
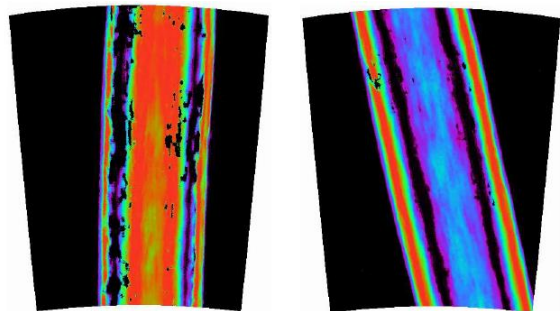
Keratin quantification



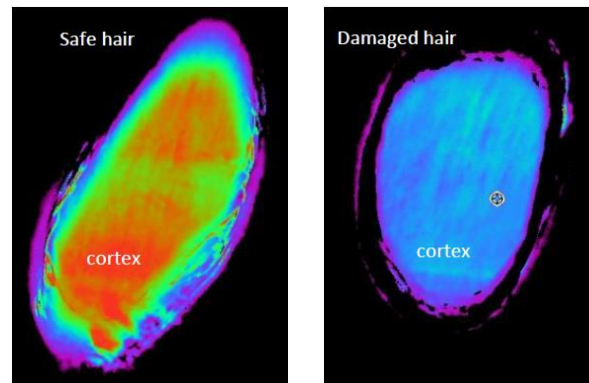
Global Expertise, Personal Touch

CONFOCAL MICROSCOPY

POLARIMETRIC SCANNER: XPolar®



Images obtained using the **K-INDEX** analysis of the hair structure

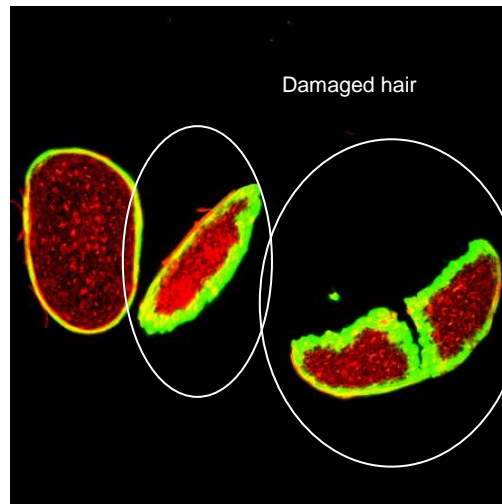
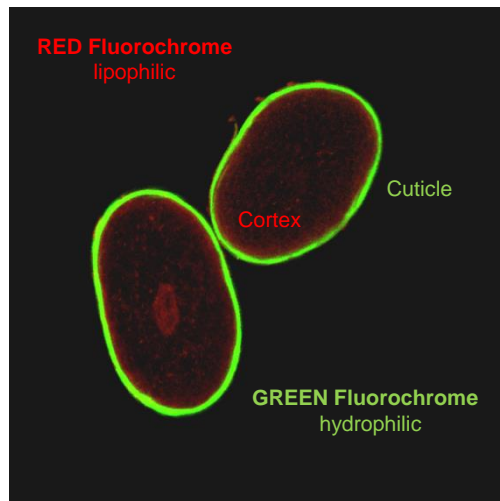


Cross section view of the hair



CONFOCAL MICROSCOPY

Specific protocol of damage/dull hair



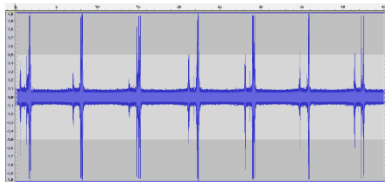
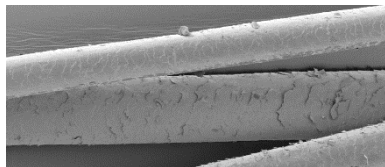
Salt-Chlorine-Sand Protection



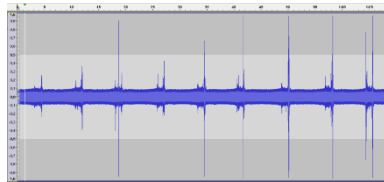
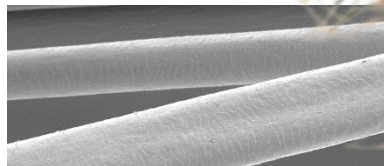
Global Expertise, Personal Touch

HAIR TUNE

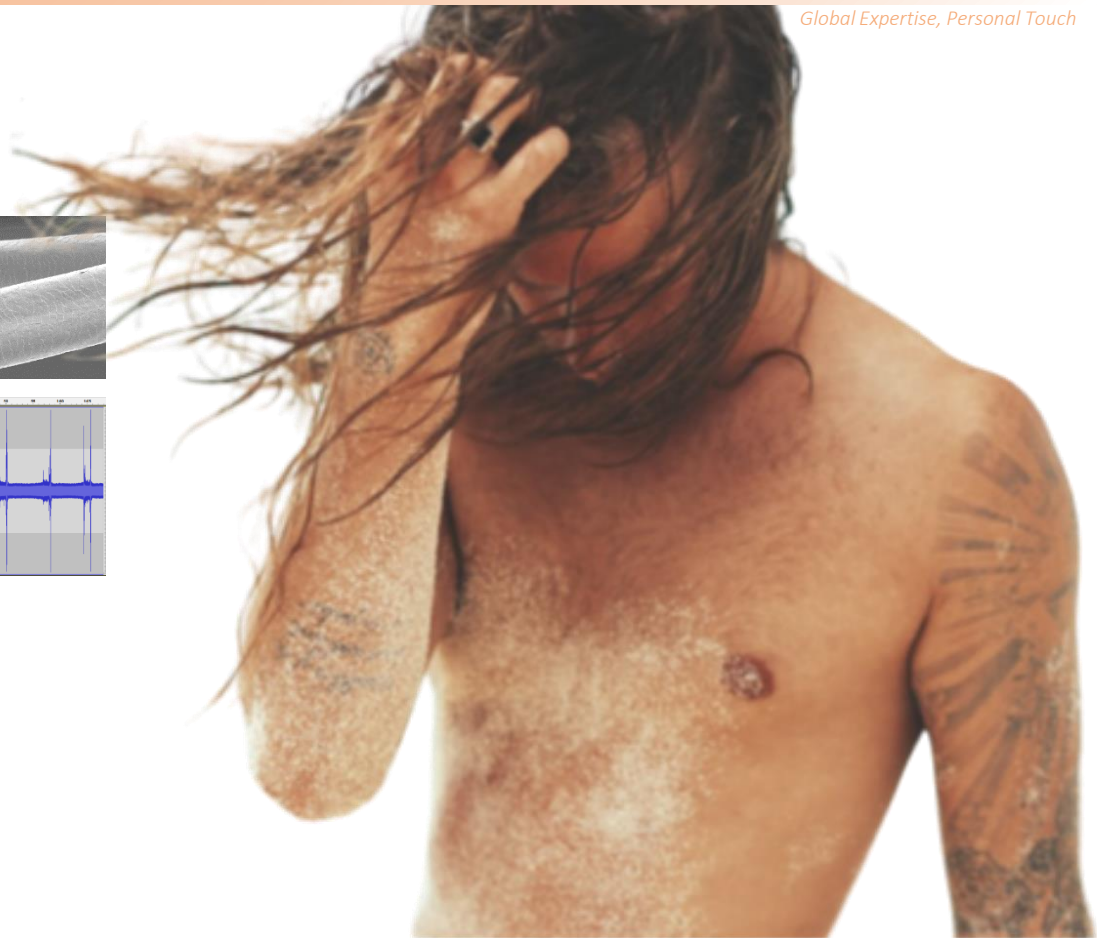
the sound of hair



Dry hair



Treated hair



Scalp integrity



Global Expertise, Personal Touch

Anti-sebum effect

SEBUMETER



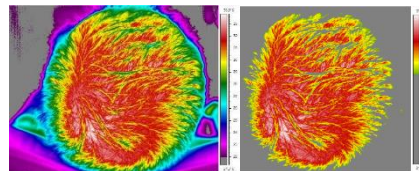
Anti-dandruff effect

EXPERT / DERMATOLOGICAL EVALUATION

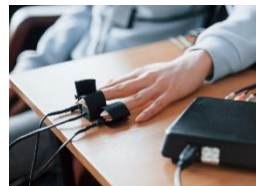


Soothing effect

THERMAL CAMERA



GALVANIC SKIN RESPONSE



IMPLICIT TEST



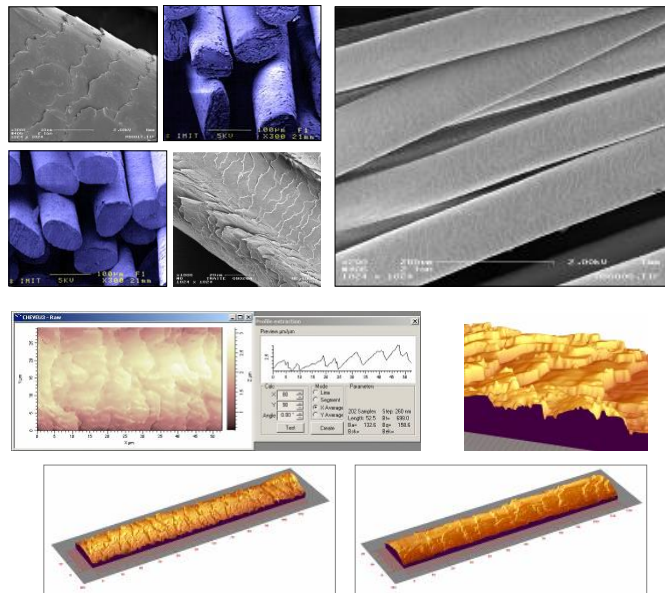
and **SELF PERCEPTION QUESTIONNAIRE & PSYCHOMETRIC QUESTIONNAIRES**

Smoothing effect

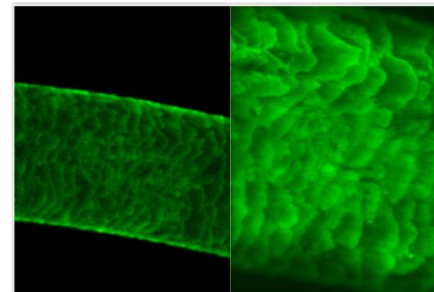


Global Expertise, Personal Touch

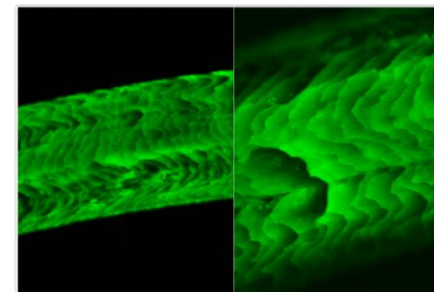
ELECTRONIC & INTERFEROMETRIC MICROSCOPY



X-FLUO



NORMAL HAIR



DAMAGED HAIR

Styling / Fixation effect



Global Expertise, Personal Touch

IMAGE ANALYSIS



Thickening



Global Expertise, Personal Touch

LED IMAGE ANALYSIS...

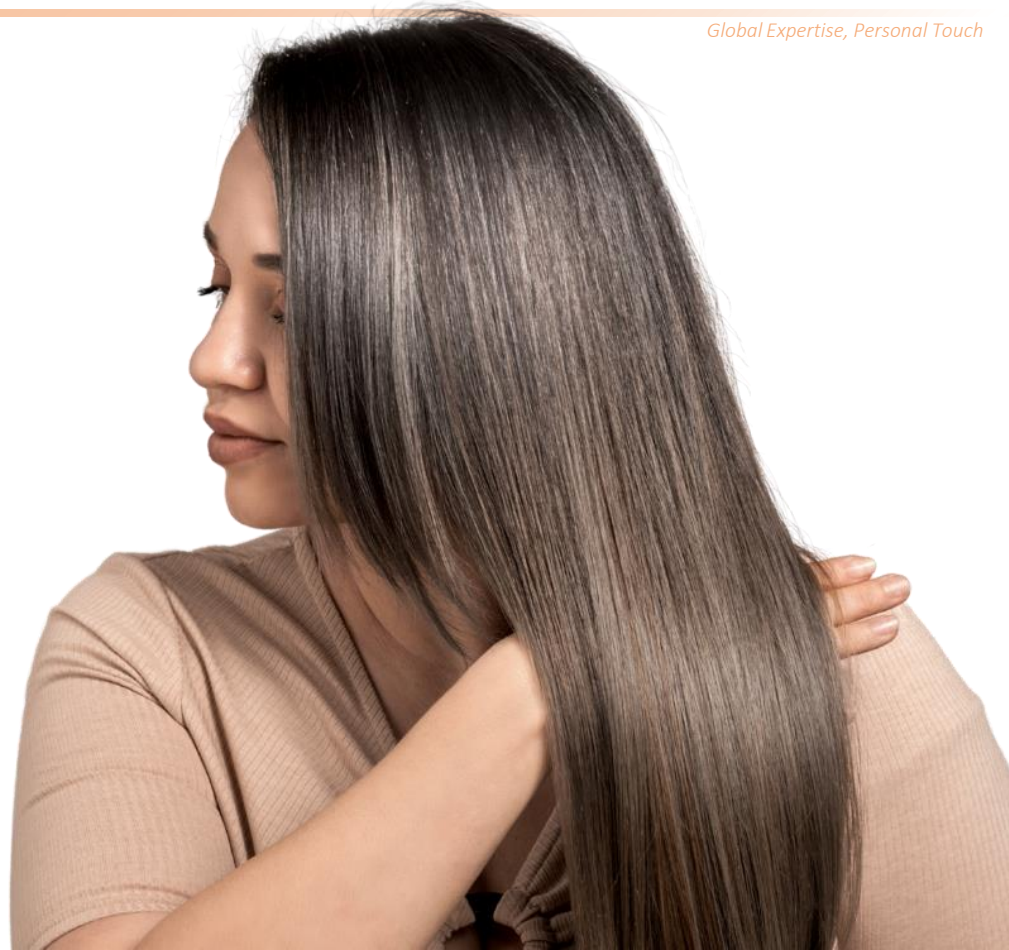
Caucasian hair



Before Treatment



After Treatment



UV protection

BIOCHEMICAL DOSAGES

- Hair samples inside UV BOX : simulates the effects of sunlight with ultraviolet rays
- Dosage:
 - *Total protein / Keratin*

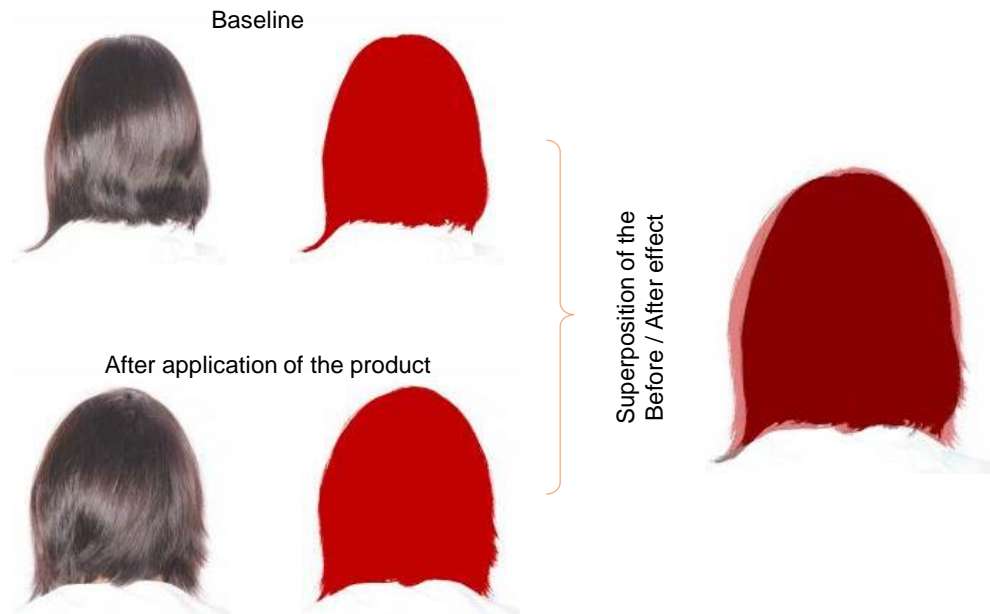


Volumizing effect



Global Expertise, Personal Touch

IMAGE ANALYSIS





MAKE-UP CLAIMS

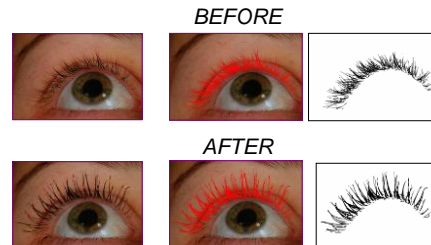
Mascara



Global Expertise, Personal Touch

IMAGE ANALYSIS

- Curling
- Lengthening
- Volumizing
- Separation
- Lash density
- Eye opening



CLINICAL EVALUATION

- Long lasting effect
- Waterproof/water resistant effect



Mascara flakes



Mascara smudges

Foundation



Global Expertise, Personal Touch

IMAGE ANALYSIS

Covering effect - Complexion homogeneity



Matifying effect



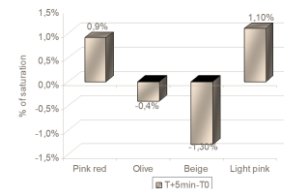
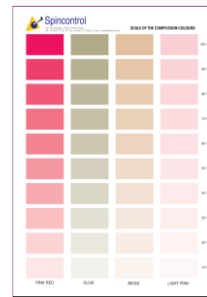
Parallel polarized photograph

Cross-polarized photograph

Difference between
grey level photographs
= only the skin
shininess (negative
image)

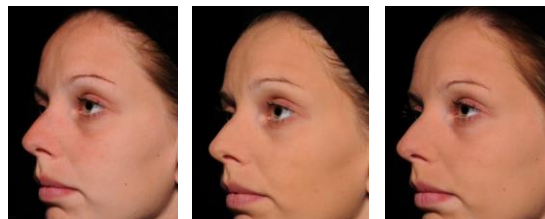
CLBT METHOD

Radiance



CLINICAL EVALUATION

Long lasting effect



Before

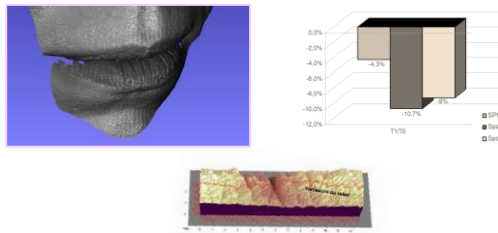
After

n hours

Lip relief analysis

FRINGE PROJECTION

In vivo lips acquisition, in 3 dimensions obtained with the Optocat software (Breuckmann, Germany- Eotech, France)



Long lasting effect

CLINICAL EVALUATION

Shininess
mirror or wet
effect notation



Shininess
gloss rating



Color
homogeneity



Migration

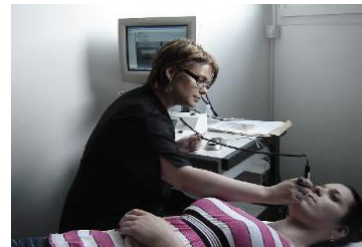


Color
intensity



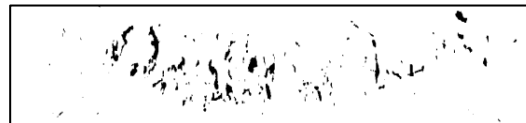
Moisturizing effect

CORNEOMETER



Acquisition on lips

IMAGE ANALYSIS



Nailpolish



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FRINGE PROJECTION

roughness evaluation (on replicas)

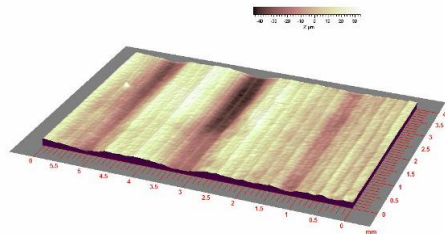


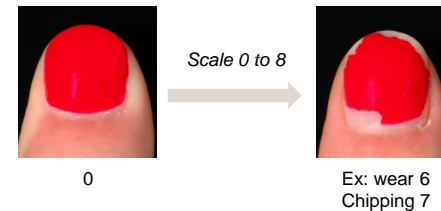
IMAGE ANALYSIS

Growth measurements



CLINICAL EVALUATION

Wear & chipping measurements



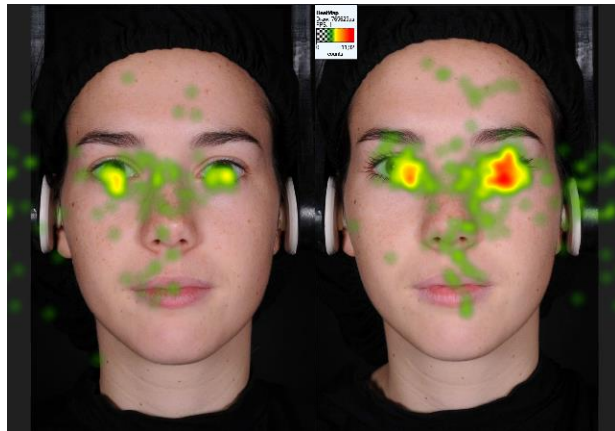
Make-up perception & removal



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EYE-TRACKING

Make-up perception - Make-up Impact



Without make-up

With make-up

IMAGE ANALYSIS

Make-up removal



Mascara – Lipstick – Foundation ...



BIOMEDICAL STUDIES

Beyond cosmetics

- ANSM (the French Health Products Safety Agency) authorized Spincontrol to carry out clinical and biomedical studies for:
 - Cosmetic products
 - Nutritional supplements
 - Medical devices (Class I and IIA)
- Assistance in submitting to the Independent Ethical Committee (IEC) and the ANSM

Food supplements allegations

- Against tired legs
- Anti-sleeping troubles
- Anti-stress & dynamising
- Beauty of the skin (*anti-ageing, anti dark-circles, moisturizing, firming...*)
- Painkiller
- Satiety
- Slimness
- Study of the hair & nails

EMOTIONAL STUDIES

Emotions and cosmetics



Global Expertise, Personal Touch

- Well-being/Emotions
- Consumer behaviour
- Sleep analysis

WHY EMOTION?

- Efficacy tests
- Emotional design
- Consumer behavior / Decision making
- Research

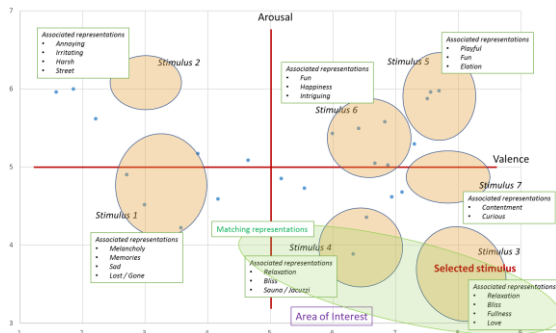
HOW TO ACCESS EMOTIONS?

- Cognition: Psychometric measures
- Behaviour: Behavioral/ethological analysis
- Physiological: Visceral component

VERBAL METHODS

SUBJECTIVE COMPONENT:

- Validated questionnaires
- Lickert-type scales
- Neurocognitive tests
- Implicit associations
- Structuration of free speech (*text mining*)



PSYCHOPHYSIOLOGICAL METHODS

VISCERAL COMPONENT:

- Electrodermal response (*i.e. skin conductance*)
- Skin temperature
- Cardiac activity (*e.g. HR, HRV, BP, ...*)
- Respiratory rate
- Mydriasis
- Hormonal levels
- Electromyography
- Electroencephalography
- Brain imaging



BEHAVIORAL METHODS

BEHAVIORAL ANALYSIS

- Posture
- Gesture
- Facial expression
- Eye tracking
- Specific act
- Vocalizations

Emotional studies - Specific methods



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MIRROR TEST

- Behavioral and psychometric approach
- Auto & Allo perception evaluation

Attest and quantify the anti-ageing « emotional » benefits of products because chronological age is important, but the subjective age has a stronger effect

EMOSIGN®

Provide emotional signature of your product...

In addition to sensorial mapping to understand affordance processes

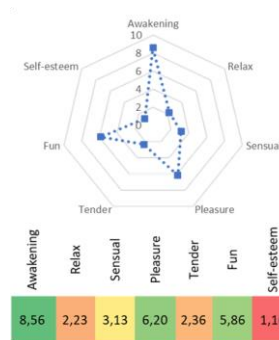
EMOIM®

Test your product by emotional 3D immersion

EMOCHAR®

Emotional characterization created by Emospin, scoring 7 main positive emotional :

- **Awakening**: focus, attention, stimulation
- **Relax**: serenity, relaxation, appeasing
- **Sensuality**: arousing, sexy, erotic
- **Pleasure**: liking, “gourmand”, satisfaction
- **Tenderness**: gentleness, softness
- **Fun**: excitement, joy, enthusiasm
- **Self-esteem**: confidence, assurance



Contact us



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Spincontrol

**THANK YOU
FOR YOUR
ATTENTION**