



Latest protocol for « healthy skin » Welcome in Indonesia

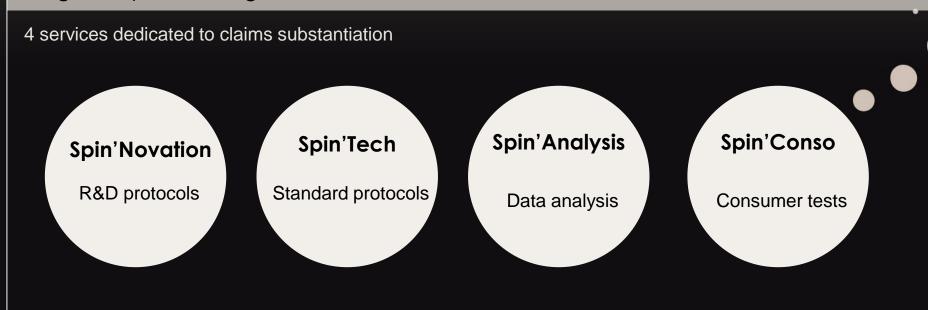
Spin'Analysis A new service dedicated to data analysis

Behind Spincontrol

Fields of activities

Techniques & Claims

- More than 25 years of innovation
- 5 locations around the world: France (headquaters), Thailand, Canada, India & Indonesia
- More than 30 000 volunteers around the world
- More than 100 people working for Spincontrol Group around the world
- Tailor-made protocols, from standard to innovative methods
- Top level Quality System, ISO 9001 certified in France, Thailand and India
- Regulatory monitoring



An overall « thinking » dedicated to each consumer knowledge.



Headquarters of the Group, specialised in innovative and standard protocols, created in 1991

- * The first service provider to apply original methods such as MRI and Fringe projection to the Cosmetic Industry
- * More than 5,000 studies performed since the creation of Spincontrol France
- * Development of exclusive protocols for customers
- * More than 15,000 volunteers (Local panel: 10,000 people, national panel: 5,000 people)
- * Knowledge of consumers: more than 10 years of experience in consumer tests (benchmark, blind tests (re-conditionning of the products in our premises according to the Good Manufacturing Practices requirements), sensorial analysis
- * Expertise in the evaluation of positive emotions (impact of the use of perfumes or cosmetics on the well-being or the self-esteem)

Behind Spincontrol

Fields of activities

Techniques & Claims



Expert in studies performed in harsh climate conditions, created in 2008.

- * 500 studies performed since the creation of SPNA
- * Availability of multicultural panels (African, Asian, Hispanic and Caucasian people) and relevant information about the perception of products on the American continent
- * Strong expertise in studies performed under "high cold temperature"



More than 10 years of experience. Created in 2003

- * 1,000 studies performed since the creation of Spincontrol Asia
- * More than 20,000 volunteers with a wide range of Asian complexions (very light to dark complexion)
- * Strong expertise in whitening products evaluations



Result of a partnersh

company Mascot

with the famous Indiano

Universal, created in 2011

- * Various studies for skin. hair, color cosmetics and tolerance performed since the creation of Mascot-Spincontrol India
- * Expert in hair care products evaluations (in vitro hair care studies performed on Diastron)



- partnership with the French CRO IDEA, created in 2015
- * Offers an Indonesian panel, providing relevant information about the Indonesian cosmetic market with a focus on Halal cosmetics.
- * Expertise in irritation and sensitization tests

Behind Spincontrol

Fields of activities

Techniques & Claims

Our Strengths

- *Accuracy in the selection of the volunteers (more than 300 information per panelists in our database, regular loyalty campaigns to develop their compliance in the test)
- *Development of bench systems to get reproducible and repeatable measurements
- *Stability and availability of the team
- *Tailor-made protocols according to your marketing speech
- *Quality control at each step of the study
- •Studies conducted under the GCP/ICH6
- * Recognized by the French Ministry as an innovative company



Fields of activities

Techniques & Claims

Our clinical studies can be performed according to different protocols

* 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...

Targeted consumers will be asked to evaluate the product at home and to fill out a questionnaire at the end of the study (more than 30,000 panelists around the world – multicultural panels and relevant information about the perception of products in the targeted countries). The products can be reconditioned in our French premises according to the Good Manufacturing Practices requirements.

* 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

* Consumer approach



In vivo tolerance assessments

In vivo tolerance assessments

- Volunteers spontaneous comments on the tested product acceptability
- Clinical evaluation :
 - By a dermatologist (in-use test, non-comedogenicity test...)
 - By an ophthalmologist (in-use test)
- Specific studies on sensitive skin : stinging test, Capsaïcin method...



Efficacy Tests

Consumer Tests Technical Tests Clinical Tests Sensorial Tests Emotional Approach

Consumer tests

- Spinconso: department of Spincontrol, dedicated to consumer tests.
- More than **20 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
- 100% completed questionnaires returned
- Fast setting-up of studies and delivery of results

Consumer tests

- Benchmark studies, blind or brand tests according to 2 options:
 - Questionnaires filling process under supervision and on Spincontrol premises
 - Questionnaires filling process by email

Cosmetovigilance follow-up for all our studies

- Panel characteristics:
 - People from Tours and its suburbs: 10,000 panelists with more than 300 details
 - People from all over France (a developing panel since April 2013): 5,000 panelists with over 300 details (including cosmetic habits, purchasing sectors, purchased brands etc...)

Technical methods & clinical evaluation

Innovation dedicated to claims'substantiation

Cosmetic studies



Face claims

Body claims

Hair claims

Make-up claims

Well-being claims

Biomedical researches



Food supplements

Dermocosmetical products

Face claims



Anti ageing

Anti dark-circles

Anti dark spots

Anti pollution

Anti sagging effect

Anti sebum effect

Anti under-eye bags

Anti wrinkle

Astringent

Cell renewal

Complexion homogeneity

Complexion radiance

Elasticity/firmness

Healthy skin

Mattifying

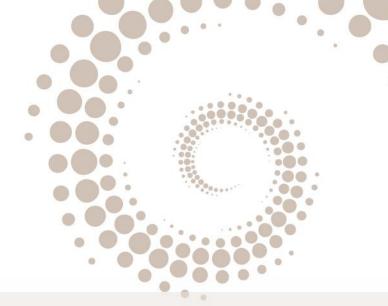
Moisturizing

Refreshing

Self tanning

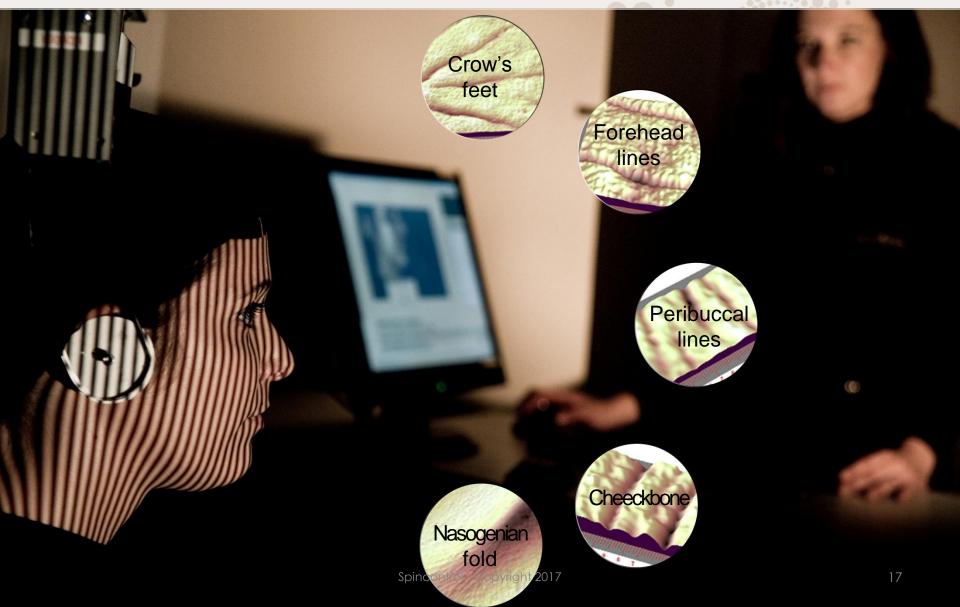
Sun care products

Volume of the hollow cheeks



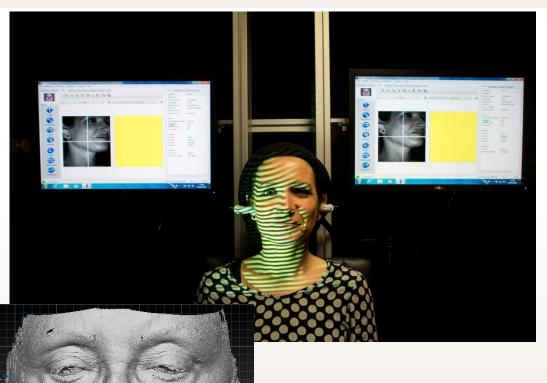
Anti wrinkles

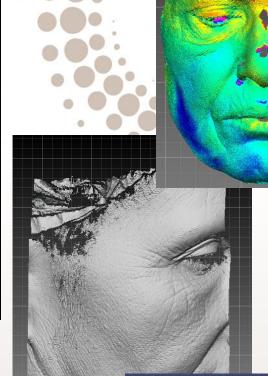
Fringe projection – 3D topography: volume and area analysis performed in vivo or on replicas



Global 3D topography: AEVA-HE





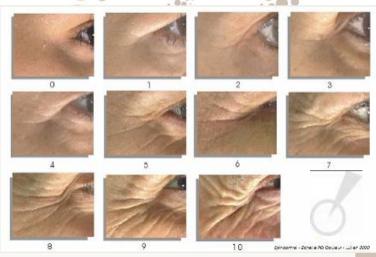


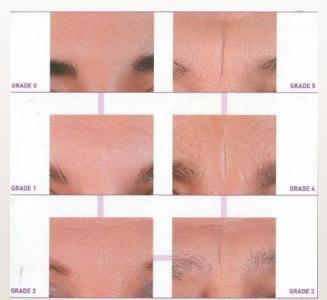
Retexturizing & plumping effect (overall roughness of the face by "radius of curvature" approach Spincontrol - Copyright 2017

Clinical Assessment: grading by trained experts

in vivo or on photos Evaluation based on the «Skin aging Atlas – T1: Caucasian type» written by R.BAZIN



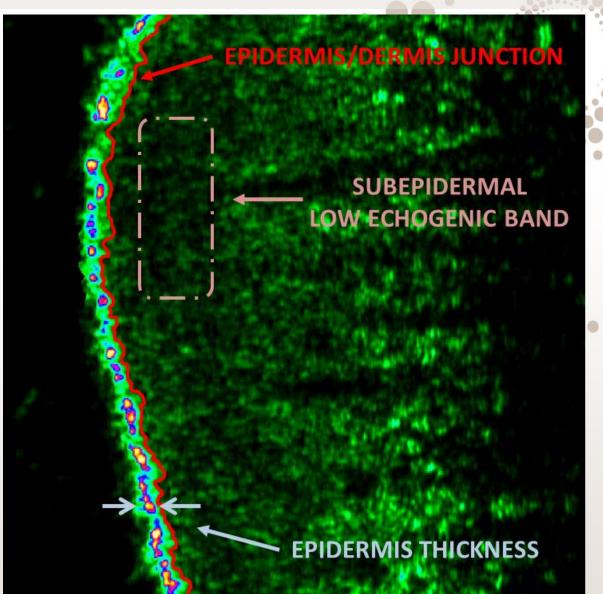




Ultrasound imaging: skin thickness & homogeneity measurement

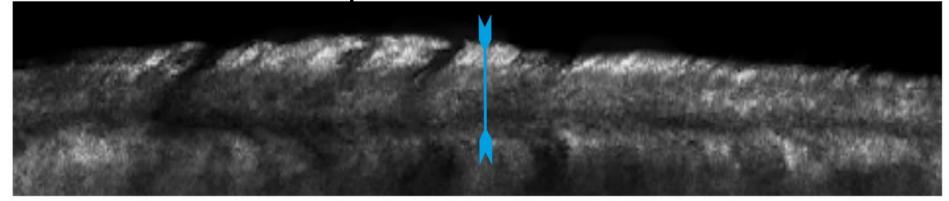


75 MHz

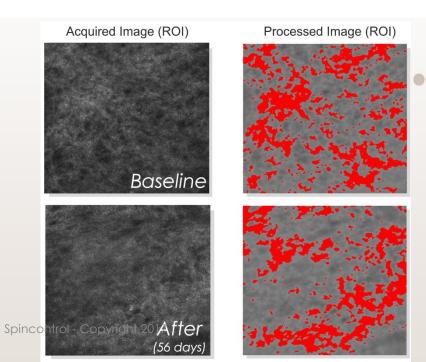


Confocal microscopy

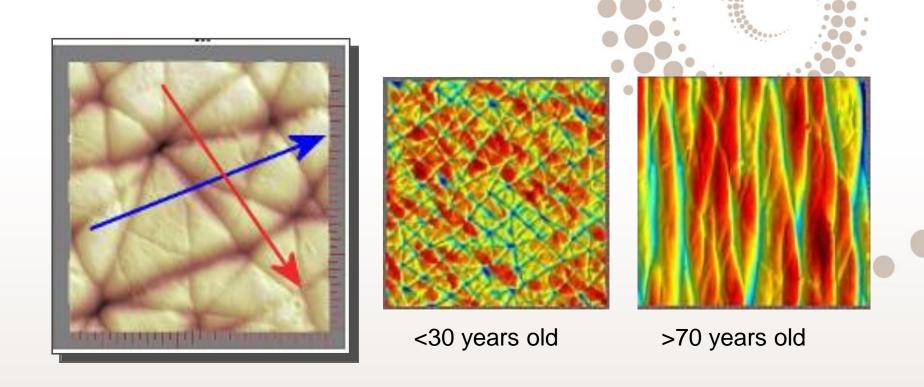
Epidermis thickness



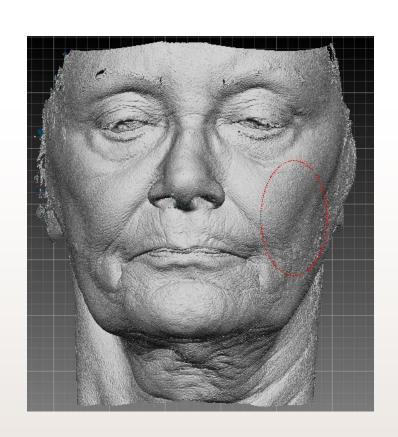
Collagen network

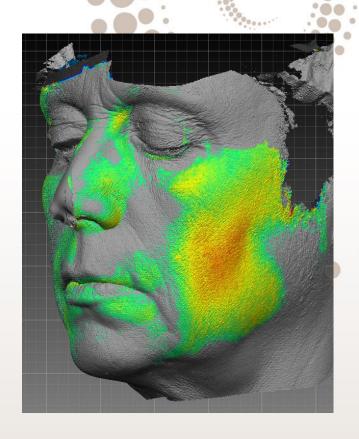


Skin micro relief: 3D Microscopy



Fringe projection: volume of the hollow cheeks

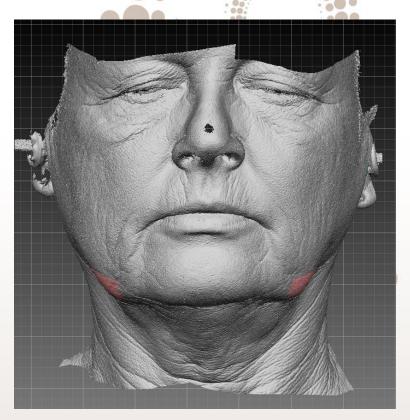




Modification of the volume

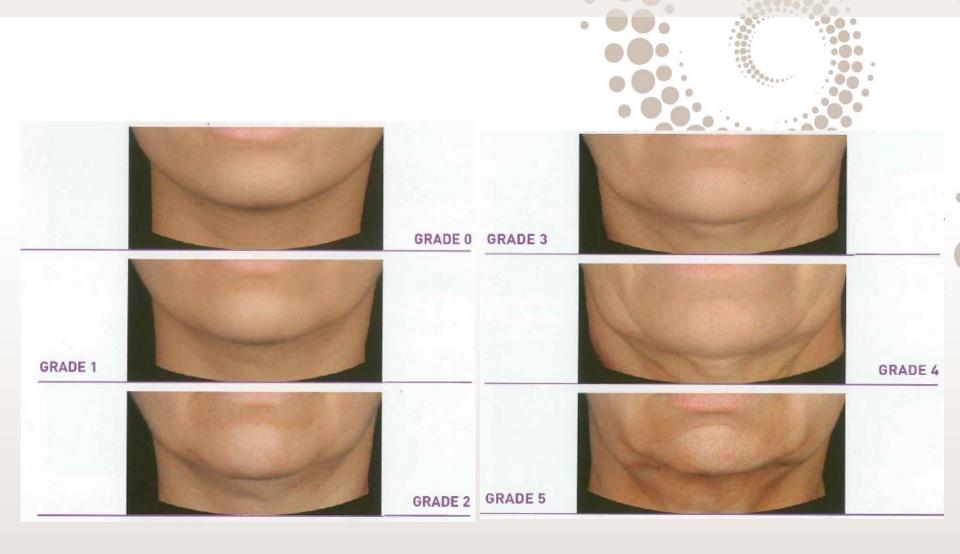
Fringe projection: sagging effect

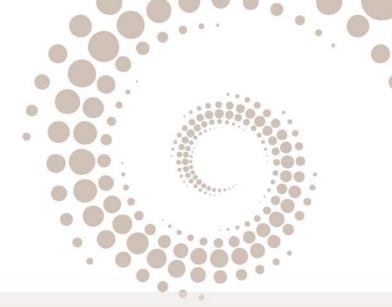




Analyzed parameter : jawlines relative volume expressed in mm³

Clinical evaluation of the jaw line on photos





Moisturizing

Usual techniques

CORNEOMETRY

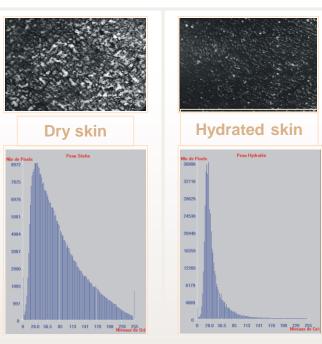


TEWL

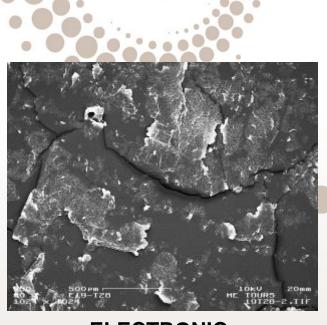


MOISTUREMETER





D'SQUAME



ELECTRONIC MICROSCOPY

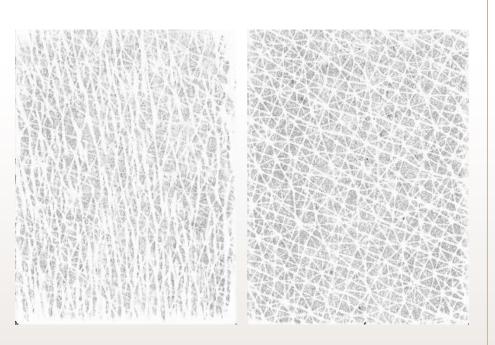
Other technique: softness of the skin



New techniques



MOISTUREMAP®



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

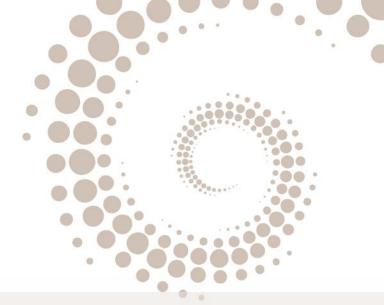
AU 10: Raising of upper lip

AU 25 : Parting

lips



Index of tightness feelings

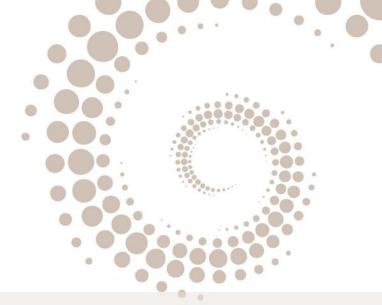


Firmness - Elasticity

Mechanical properties



and also Ballistometer, Cutometer and Clinical evaluation



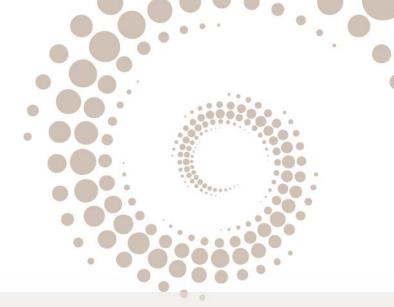
« Healthy skin »

MICROBIAL IDENTIFICATION





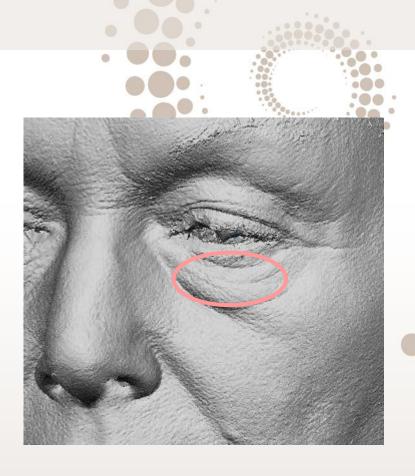
Partnership: SYNELVIA

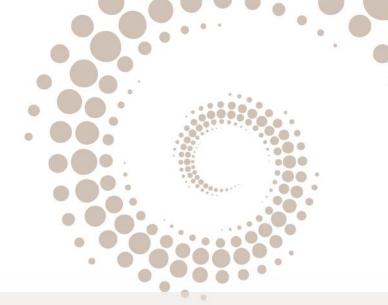


Under-eye puffiness

Fringe projection





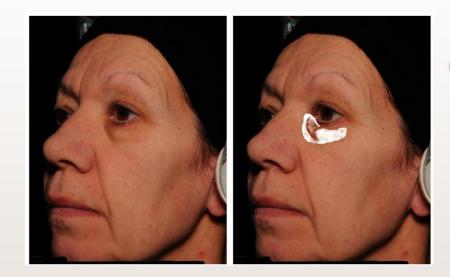


Anti dark circles

Image analysis: by Visioface® or Visia-CR®

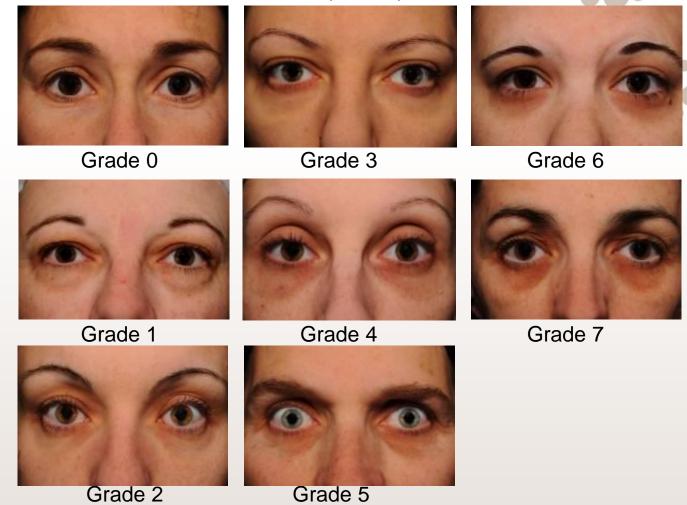


Analysis of the color intensity (due to eye-bags) or vascular or melanin component.



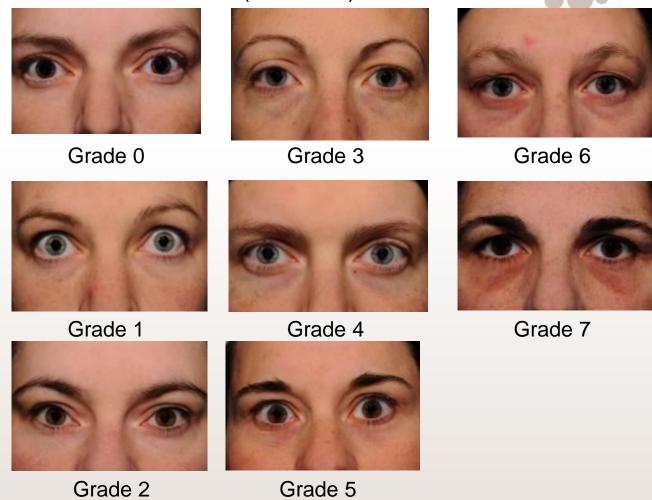
Clinical evaluation on photos

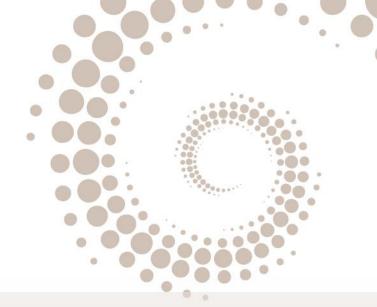
Scale of dark-circles (brown) on a Caucasian skin



Clinical evaluation on photos

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





Whitening & Tanning effect

Image analysis: By Visioface® or Visia-CR®

On Caucasian skins for a tanning effect



On Asian skins for a whitening effect



Image analysis: By Visioface® or Visia-CR®

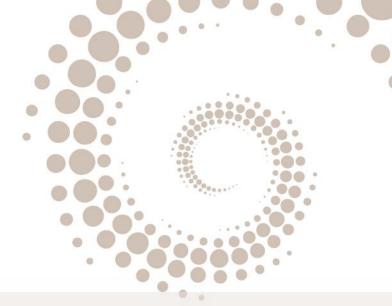
Charasteristic color of skin tone





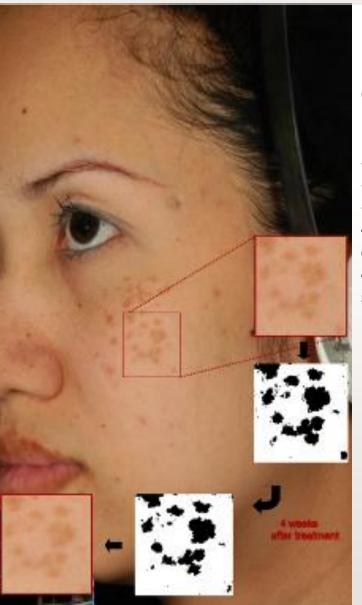
Chromameter & Mexameter





Anti-dark spots

Image analysis: By Visioface® or Visia-CR®



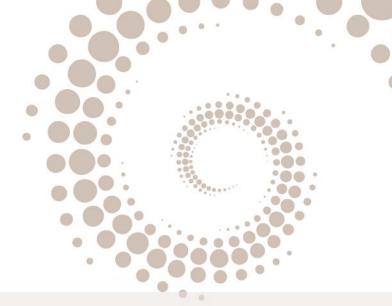
Calculated parameters .

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



Image analysis: By Visioface® or Visia-CR® Melanin component





Focus on complexion

Complexion homogeneity by image analysis



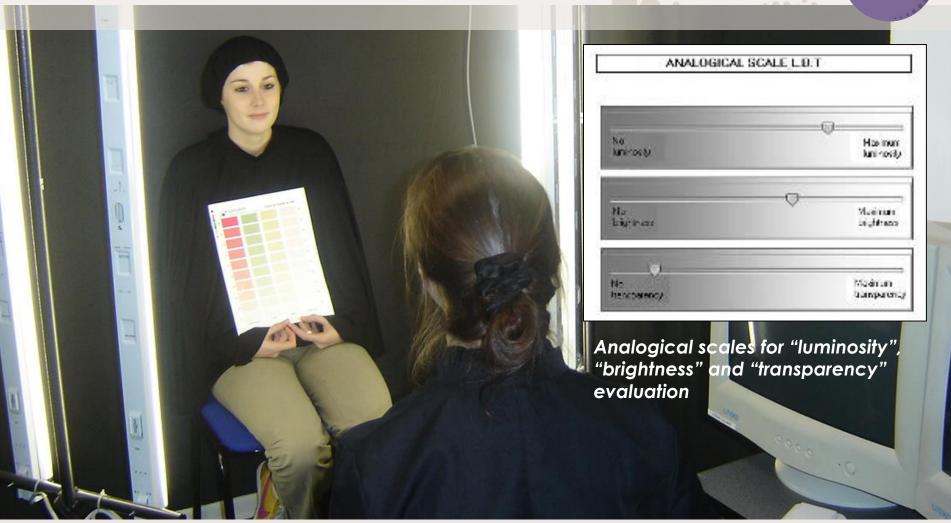
skin is more homogeneous / skin is much smoother



By color homogeneity

Complexion radiance by CLBT method





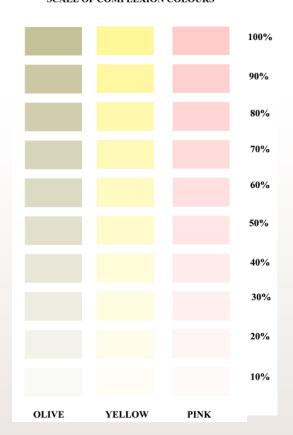
 \sum

Calculation of a C.L.B.T index based on the colours, luminosity, brightness and transparency of the skin Spincontrol - Copyright 2017

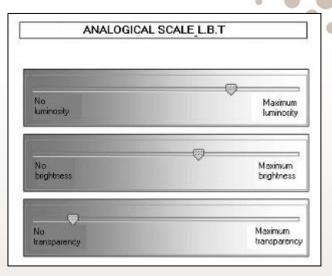
Complexion radiance by CLBT method



SCALE OF COMPLEXION COLOURS



Structured scale of the complexion colours – Spincontrol Asia



Analogical scales for "luminosity", "brightness" and "transparency" evaluation

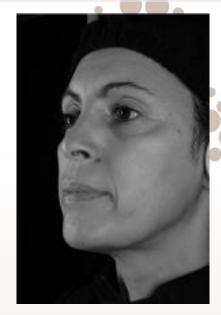
Complexion radiance by image analysis



Photo under "Daylight" condition



Saturation mapping



Luminosity mapping



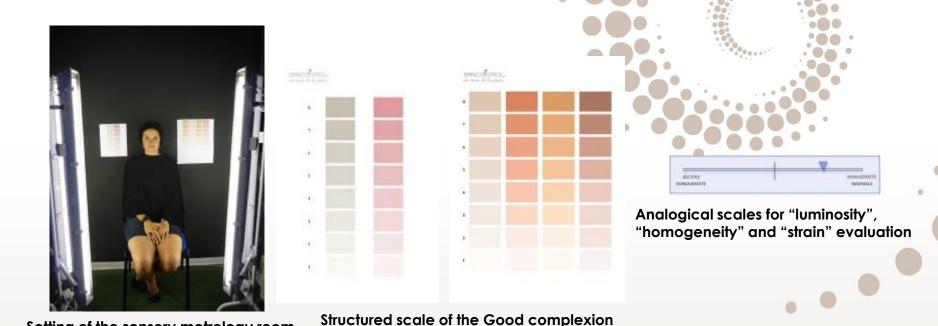
Radiance cumulative effect

A mapping of the saturation allows us to extract the quantity of the surface scattering light correlated to the skin surface aspect (skin grain)

A mapping of the luminosity allows to extract the quantity of the volume scattering light correlated to the transparency of the skin

An increase in the saturation and in the luminosity leads to an improvement in the radiance of the complexion.

Healthy glow effect by sensorial metrology



Measured parameters

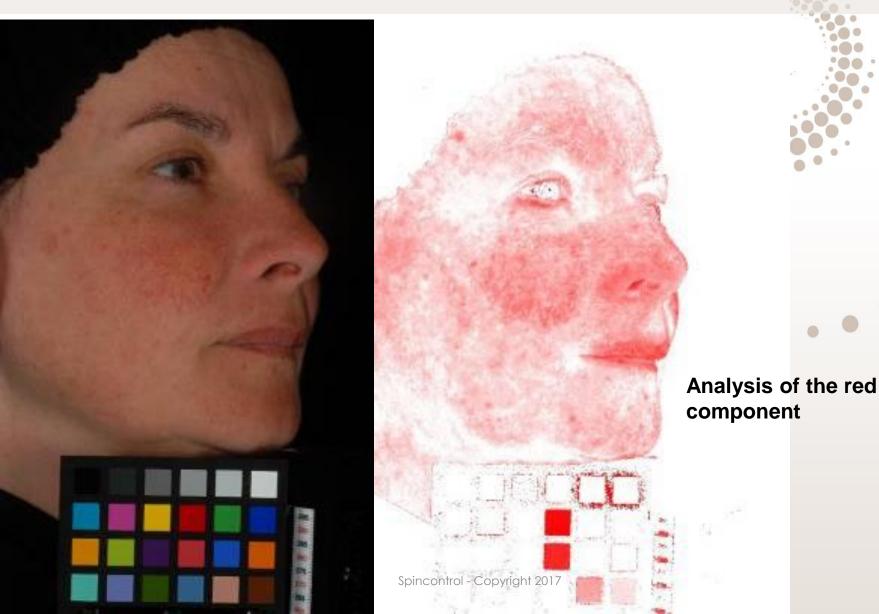
Setting of the sensory metrology room

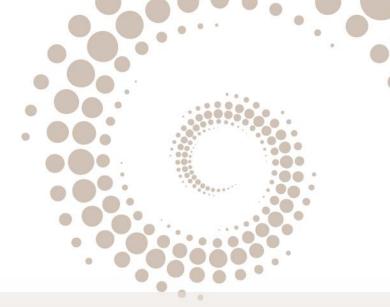
Colours of the skin: Pink-red, olive, tan (beige, apricot-coloured, blond colour and brown colour)

colours - Spincontrol

Physical characteristics: luminosity, homogeneity of the skin and strain on the skin

Anti rosacea by image analysis (By Visioface® or Visia-CR®) and also SIAscope & mexameter



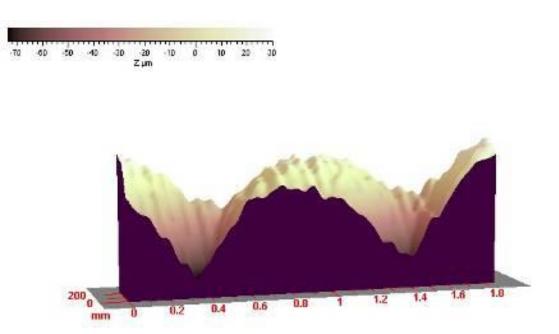


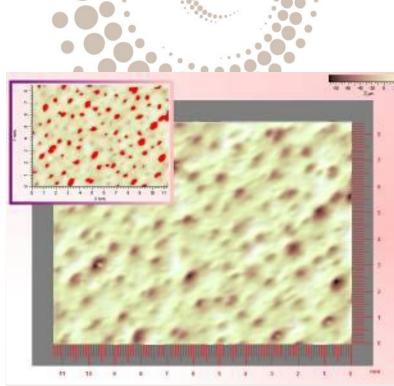
Anti-oily skin effect

Image analysis



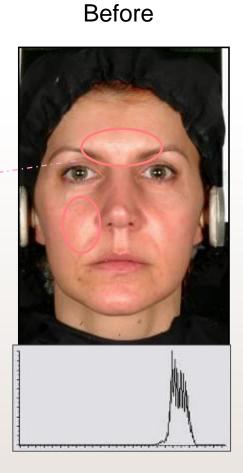
Fringe projection: diameter of the pores on replicas





Matifiying effect by Image analysis

Intensity of grey level in pixels



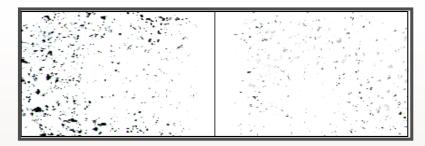
After



Anti-sebum effect

BY SEBUTAPE

Before treatment



After treatment

Intensity of sebum in grey level

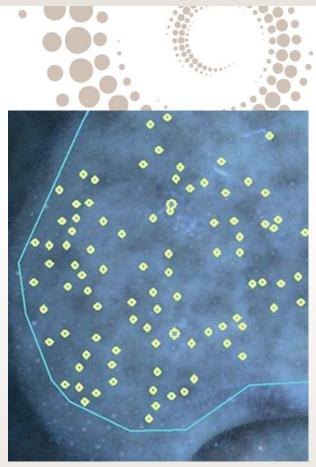


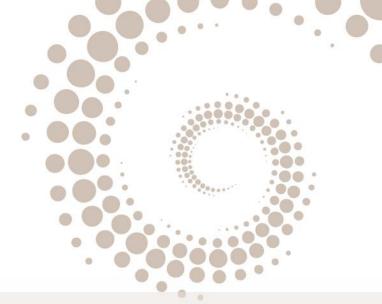
immediate rate of grease measurement

Anti-sebum effect by Image analysis

Focused on porphyrins by Visia-CR® (images: Canfield copyrights)







Anti-pollution

Biochemical dosages

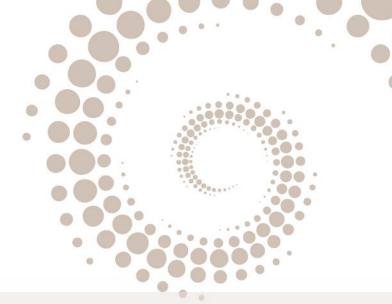


* Skin surface samples in polluted cities (Mumbai, Bangkok or Jakarta).

*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

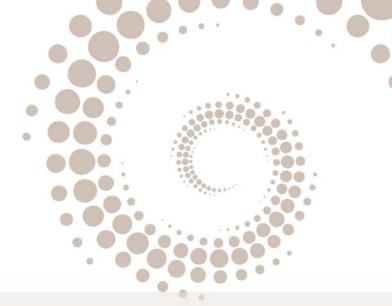
Partnership: SYNELVIA



Cell renewal

Chromameter after applying DHA patch

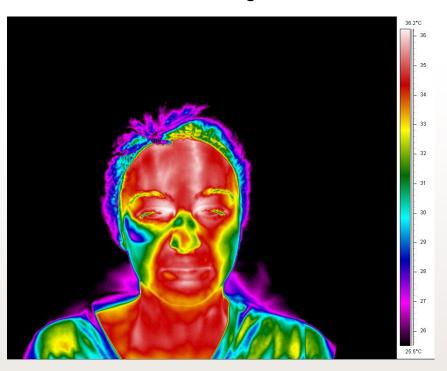




Refreshing effect

Thermal camera

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



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



Body claims



Anti-stretch marks

Anti-dimples

Anti-heavy legs

Elasticity

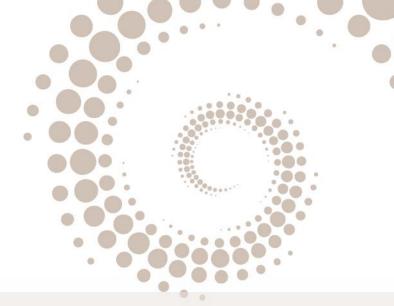
Exfoliating

Firmness

Hair removing effect

Heating effect

Slimming

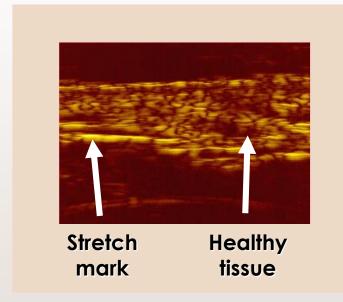


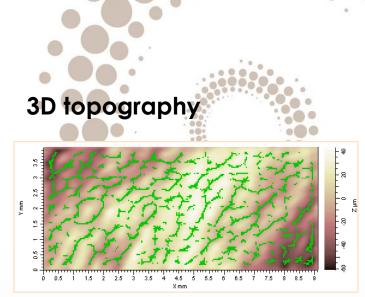
Anti-stretch marks

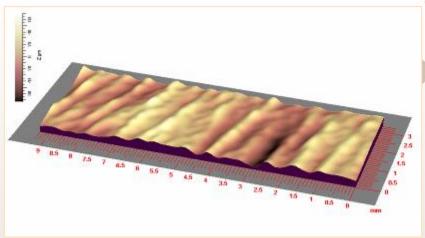
Image analysis

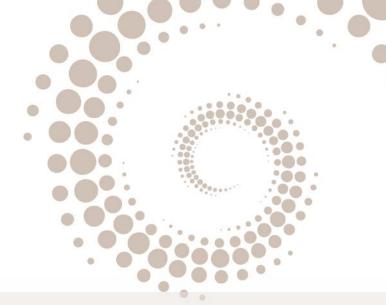


Ultrasound







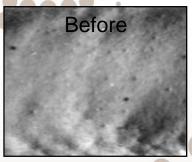


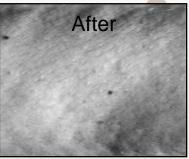
Anti-dimples

Profilometry 2D: roughness of the dimples









Ra and Rz roughness parameters frequently used to describe the cutaneous relief are determined with the variations of grey levels on the image.

Clinical assessment: grading of the dimples

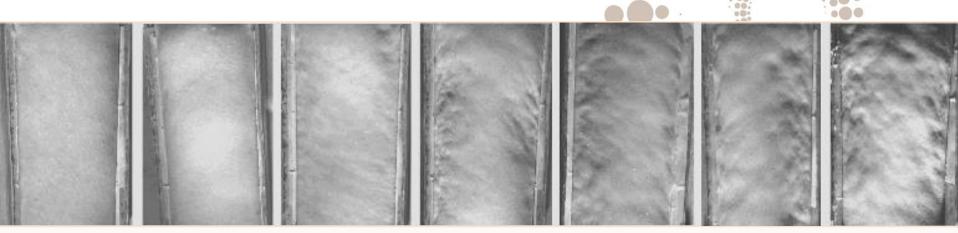


Fig 1: structured scale for the visual evaluation of the severity or orange peel/dimpling on pinched thighs

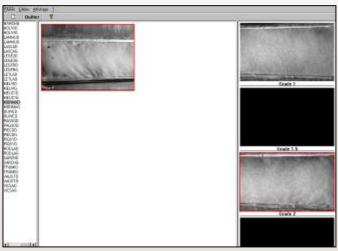
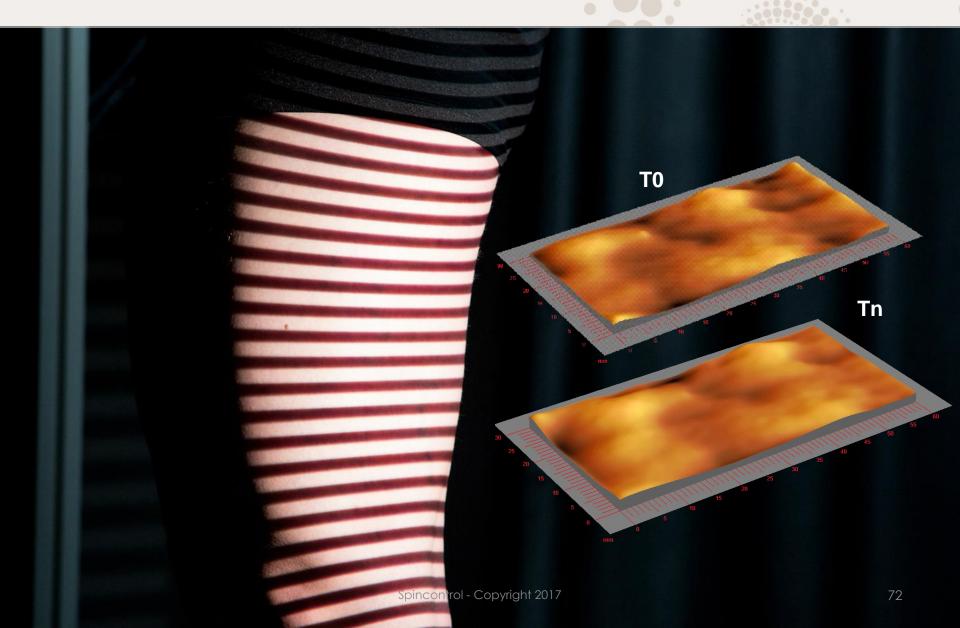
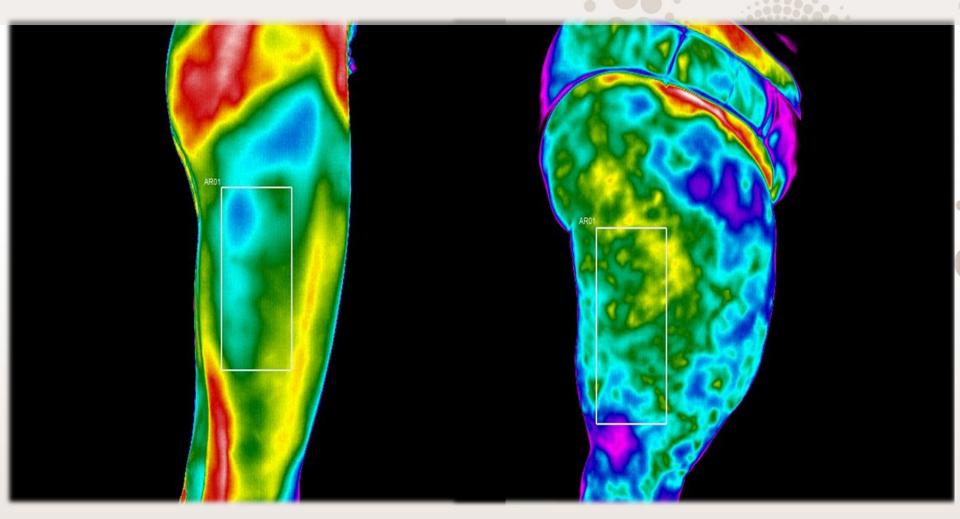


Fig 2: Software for the evaluation of pinched thighs (Notephoto software)

Fringe projection: roughness of the dimples



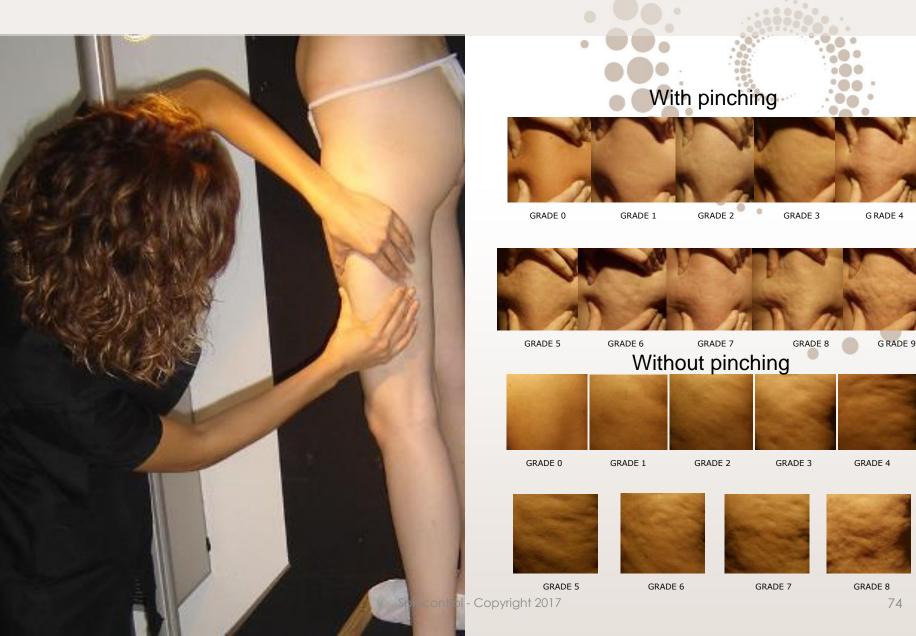
Thermal camera



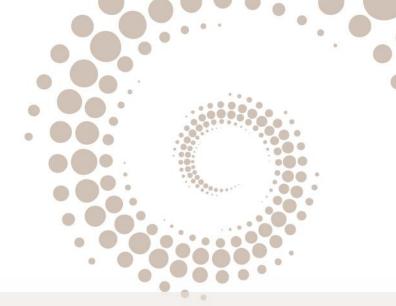
Uniformity of temperature

Heterogeneity of temperature

Clinical evaluation: in vivo with & without pinching



74

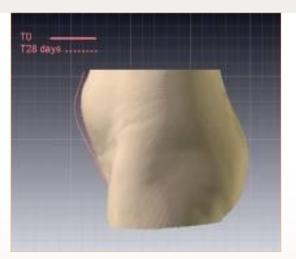


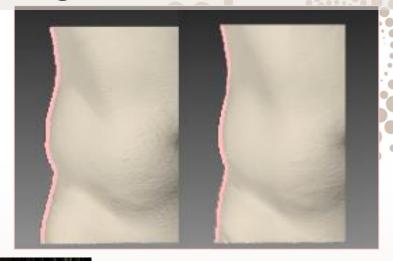
Slimming

Laser centimetry without contact



Fringe projection: abdominal slimming, « love handles » and thighs





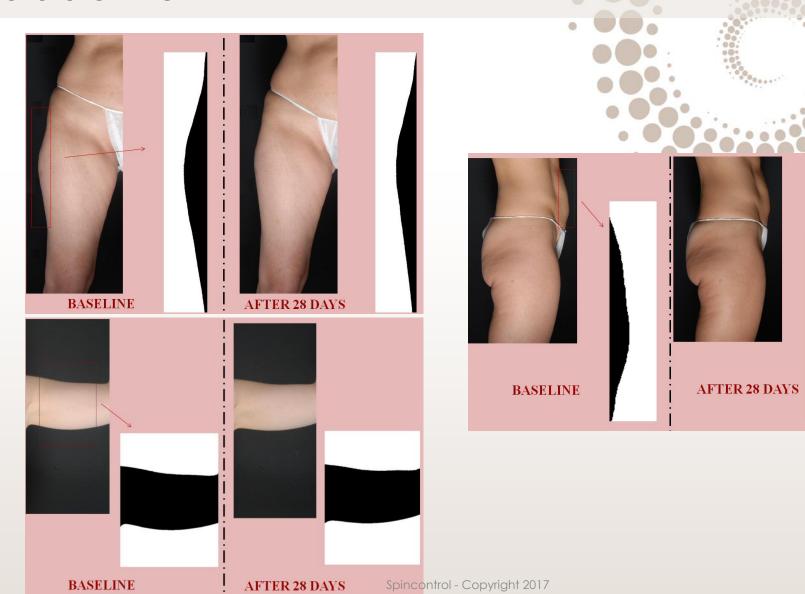


Volume of buttocks & saddlebags



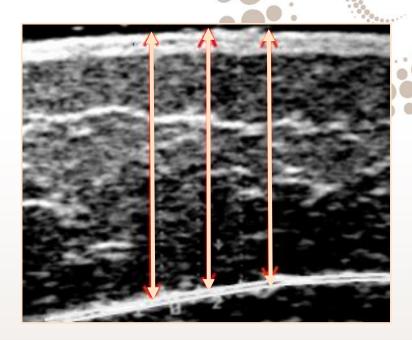


Image analysis: area of thighs, arms & lower abdomen

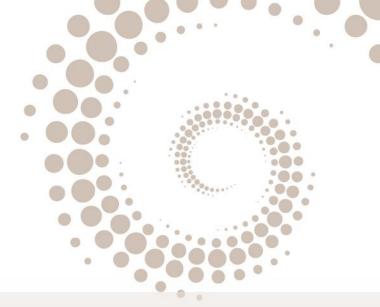


Ultrasound Imaging: measurement of the adipose tissue thickness (on the thighs or the abdomen)



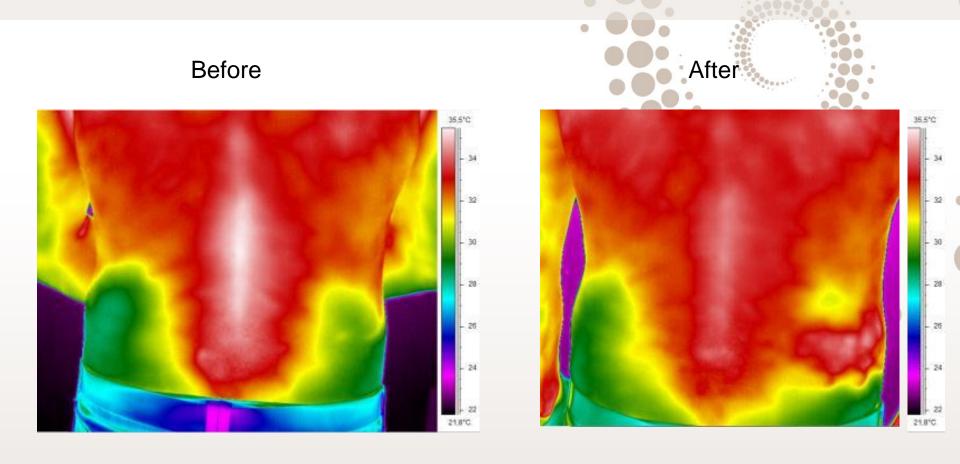


Reference: PERIN et al. Methodological aspects of the ultrasonic measurement of subcutaneous adipose-tissue thickness for the evaluation of the efficacy of slimming treatments. Journal d'Echographie et de Médecine par Ultrasons, vol 20, n° 5(6): 318-325, 1999.

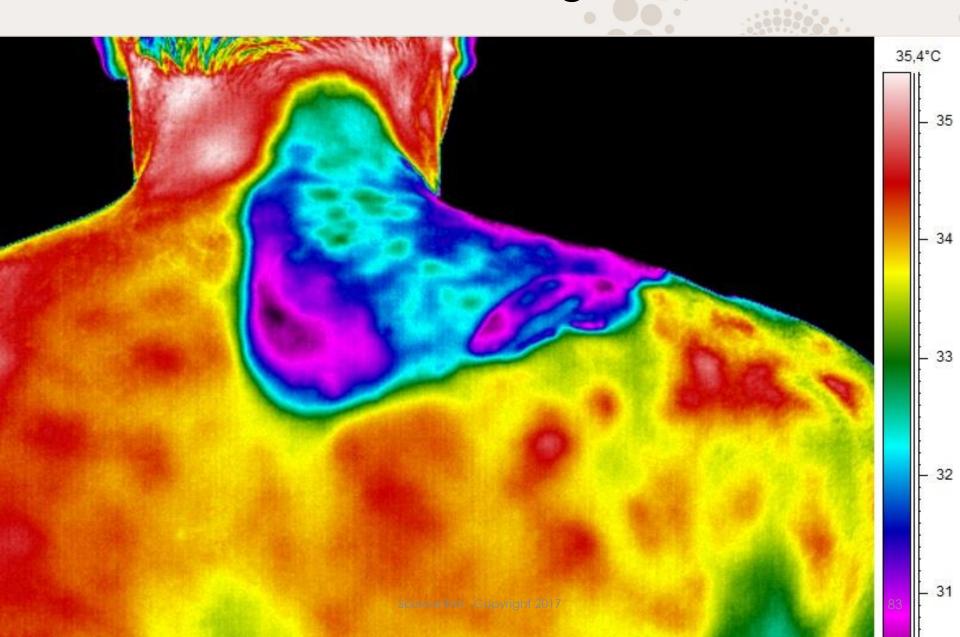


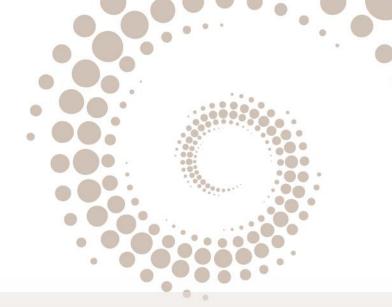
Heating & refreshing effect

Thermal camera: heating effect



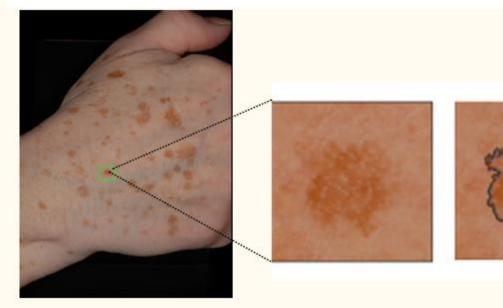
Thermal camera: refreshing effect





Anti-dark spots

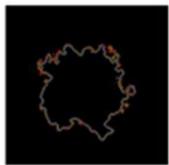
Image analysis: By Visioface®

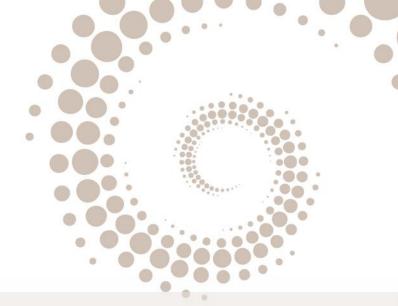


Calculated parameters

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



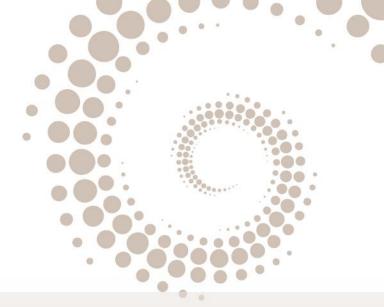




Firmness & elasticity

Torquemeter, Cutometer, Ballistometer or Dynaskin, Clinical assessment





Hairs removal effect

Image analysis: length & density measurements

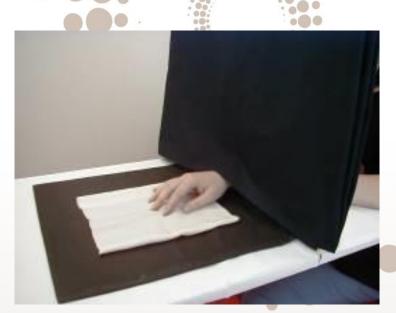


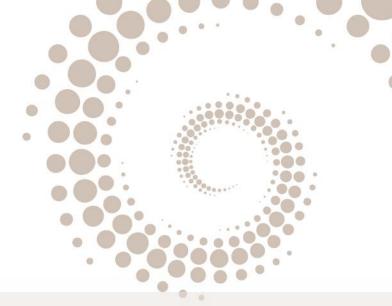




Sensorial metrology: softness of the skin







Moisturizing

Usual techniques

CORNEOMETRY

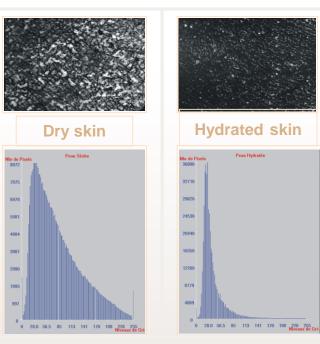


TEWL

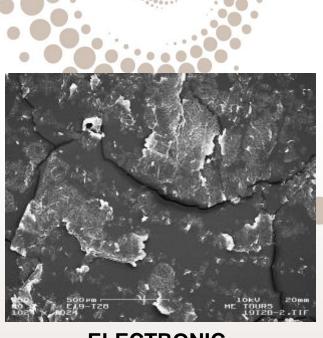


MOISTUREMETER





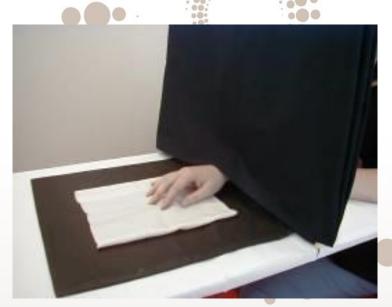
D'SQUAME

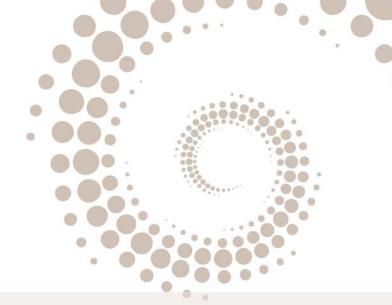


ELECTRONIC MICROSCOPY

Sensorial metrology: softness of the skin

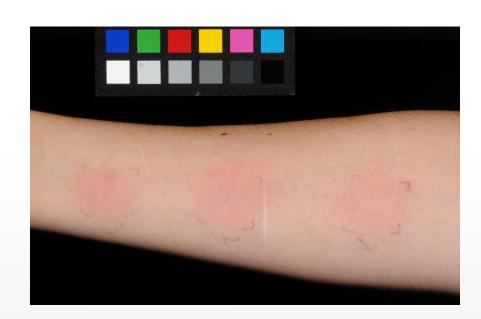


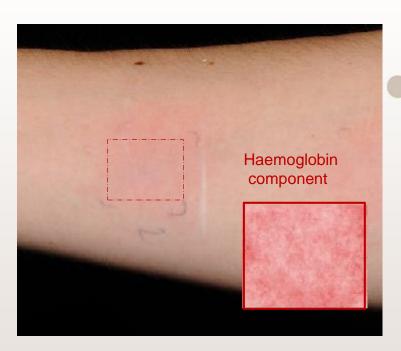


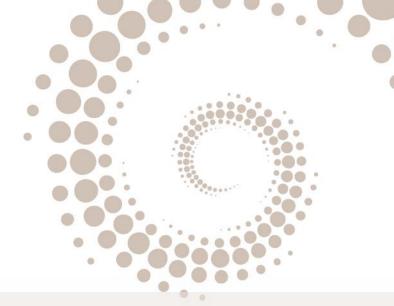


Soothing effect

Image analysis: haemoglobin component analysis



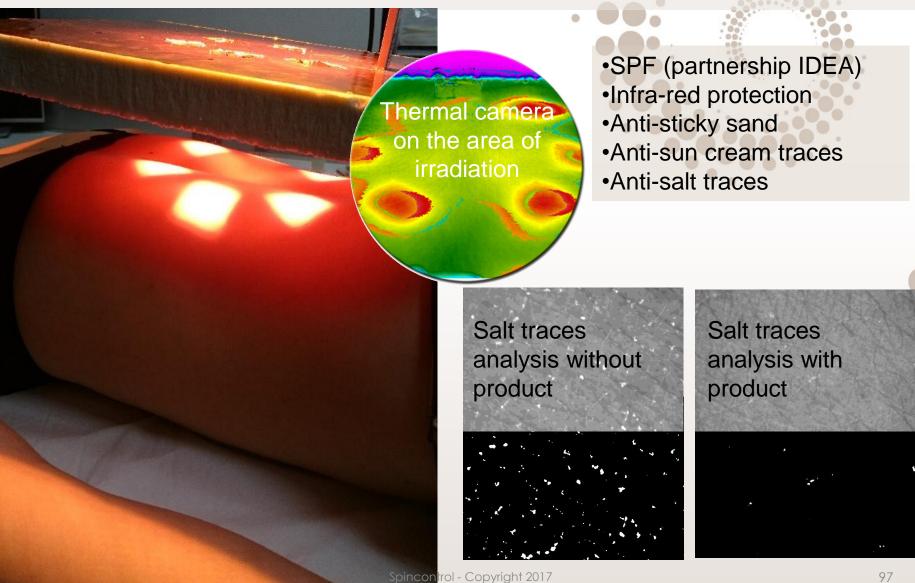


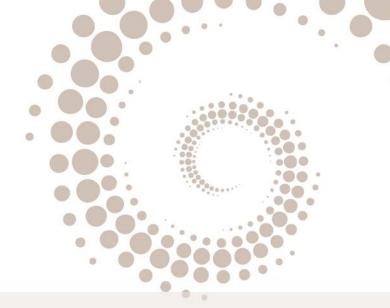


Sun claims

Protocols for sun care products







Tensing & Uplifting effect of the bust

Fringe projection: volumizing & uplifting effect

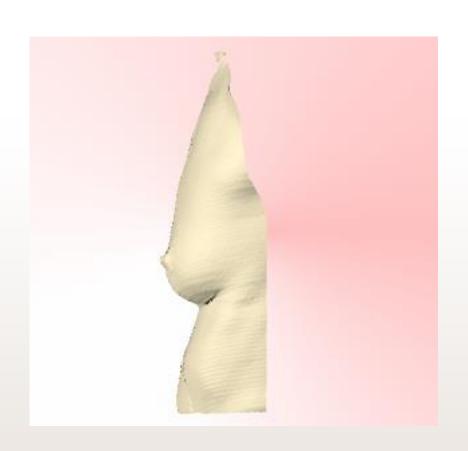
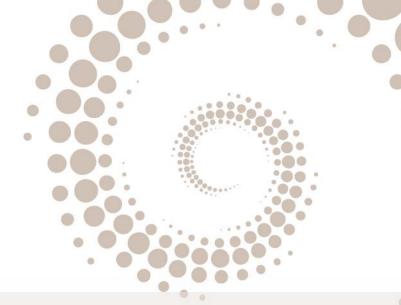




Image analysis: uplifting effect

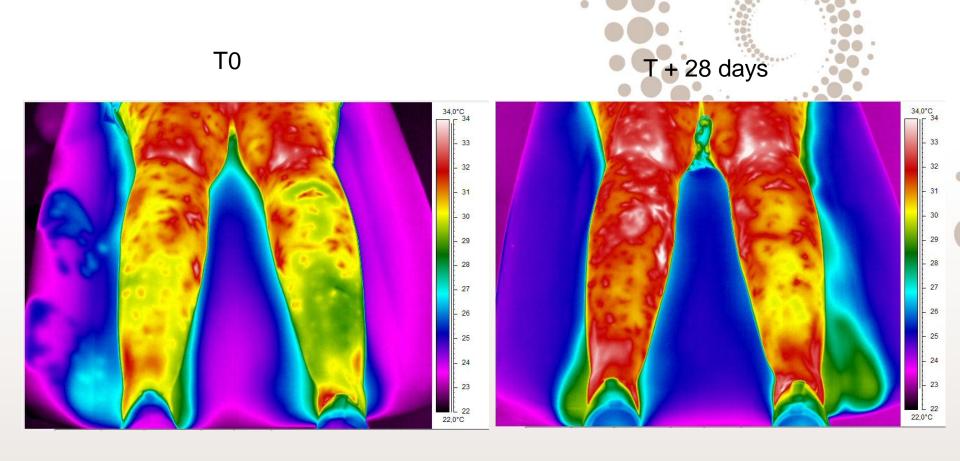






Tired legs

Thermal camera





Hair claims

Damage – split ends

Straightening - smoothing effective

Hair softness

Frizz

Hair sheen

Smoothing effect



Color protection

Anti hair loss • •

Dryness - Moisturizing

Volumizing - Thinning effect

Anti-sebum effect

Heat protective effect

Hair damage

Hair ageing



Loss of density, hair becomes drier, and the texture seems coarser and more brittle than before



Ultraviolet light, friction from brushing, heat from blow dryers, curling irons, and straighteners, and possible chemical exposure through coloring, perming or straightening

Hair sheen









Hair sheen

Ex vivo



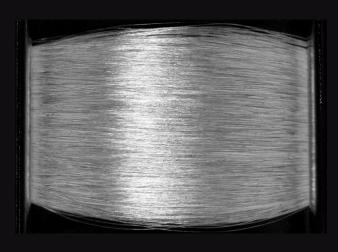




Hair sheen By image analysis

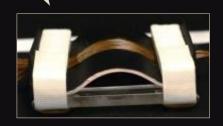
The parallel polarised photographs are transformed into cartographies of saturation (axis "S" in the colorimetric space HSL), which enables to emphasize the contrast of the photographs in term of shininess



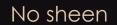


Hair sheen By experts grading







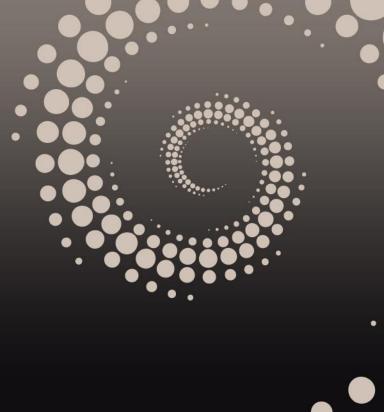




Maximum sheen

Growth speed





Growth speed By centimeter measurement



TO



Tn

Anti hair loss

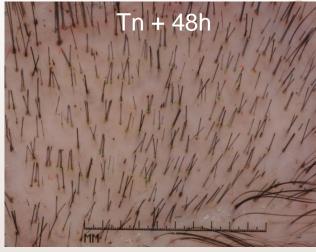




Phototrichogram

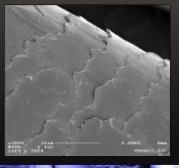




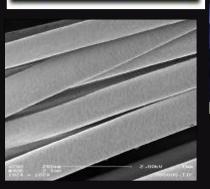


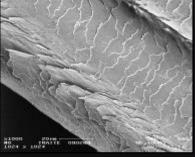
Anti damaged effect

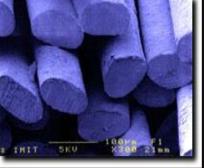
Smoothing effect
By electronic & interferometric
microscopy

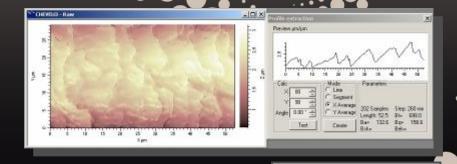


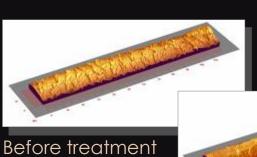














Anti-breakage and split ends



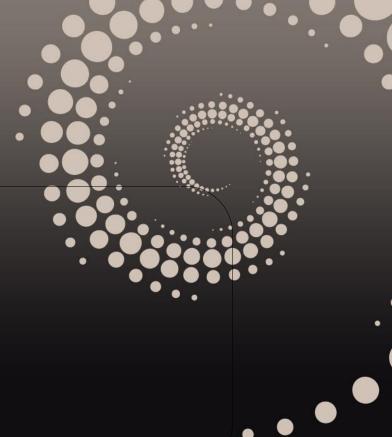




The results are expressed in % and proportion (x times) of reduction of hair fall or split ends for the treated hair locks in comparison with the non treated hair locks (neutral shampoo only).

Dryness

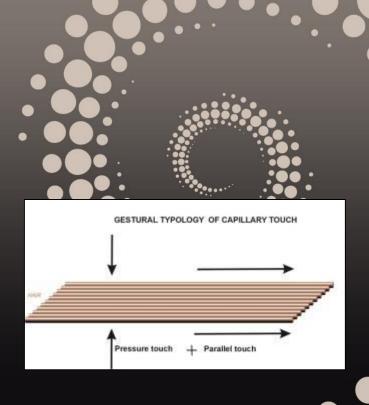




By sensorial metrology



Expert panels

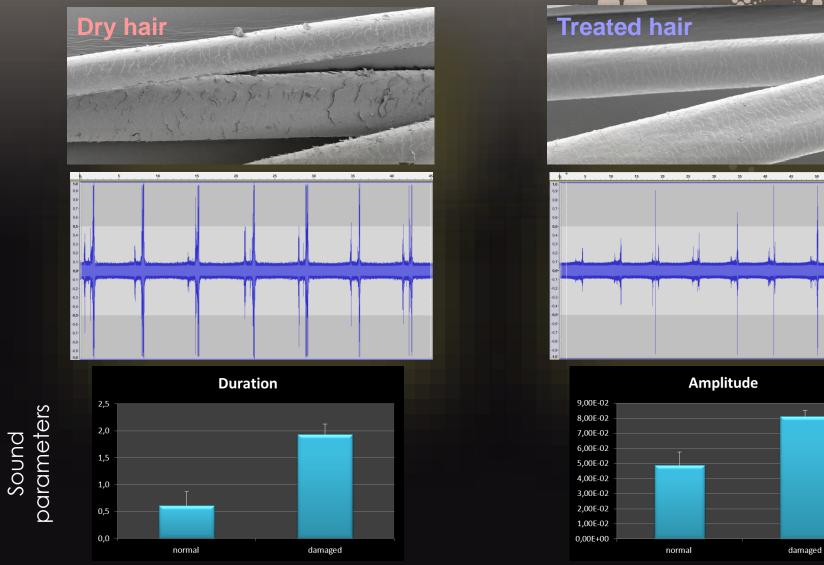




Hair surface evaluation

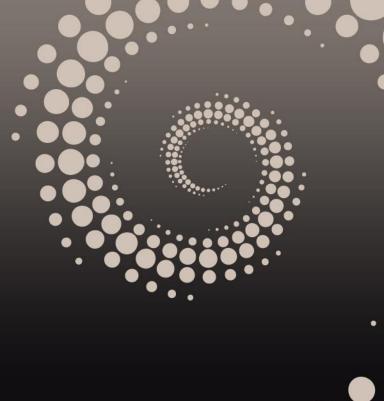
« Hair Tune » protocol: the sound of hair

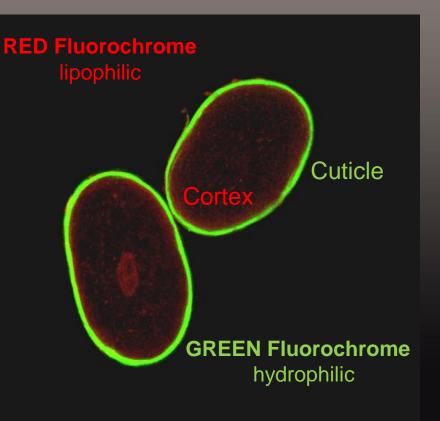




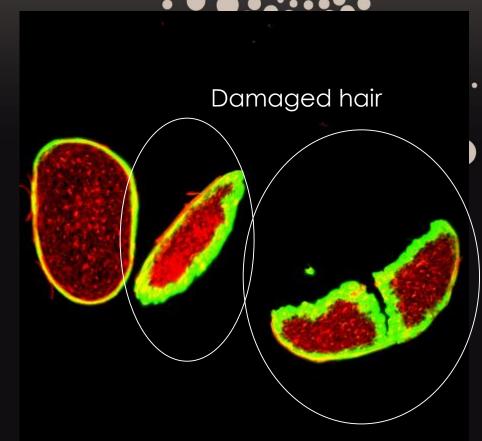
Permeability











Partnership Transderma system - France

Pollution





Biochemical dosages

NEW

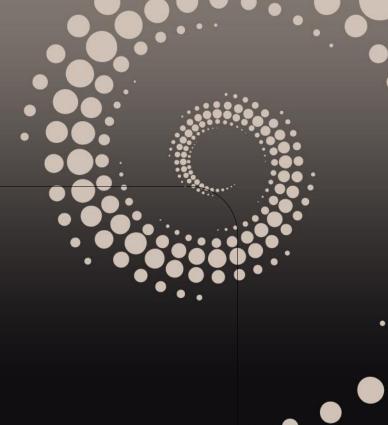
* Hair or scalp samples in polluted cities (Mumbai, Bangkok or Jakarta).



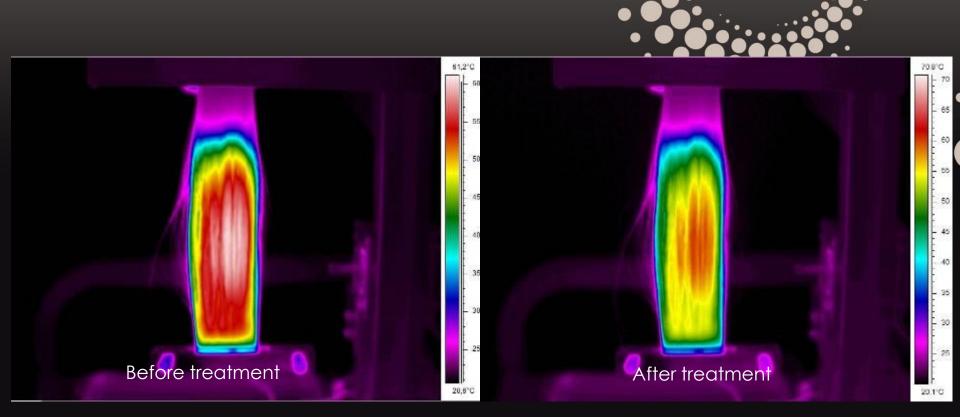
- * Possible dosages:
 - Hair: levels of elements as heavy metals
 - Hair: Lipids peroxydation (MDA)
 - Hair: cysteine oxydation
 - Scalp: squalene peroxydation

Heat protection effect





Heat protection effect By thermal camera



UV protection





Biochemical dosages



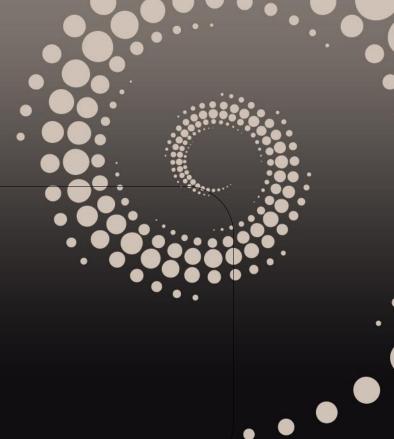
* Hair samples inside UV BOX : simulates the effects of sunlight with ultraviolet rays

* Dosage :

Total protein / Keratin

Anti grey hair







Grey hair

Ex vivo

In vivo



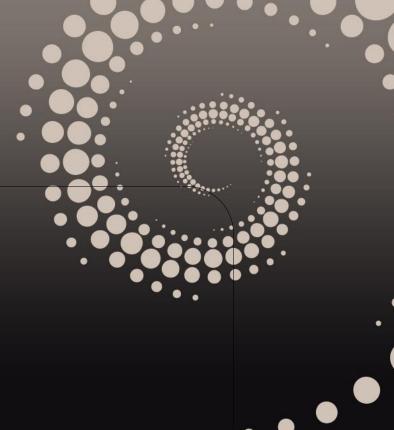




By image analysis

Anti Humidity







By image analysis

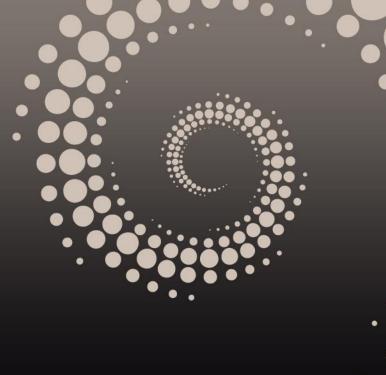
Scalp





Anti-sebum Anti-dandruff





Anti-sebum effect

By Sebumeter

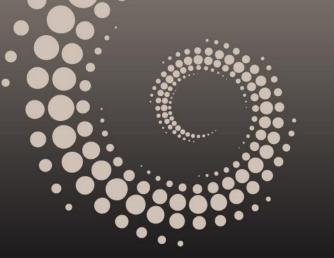


Anti-dandruff effect

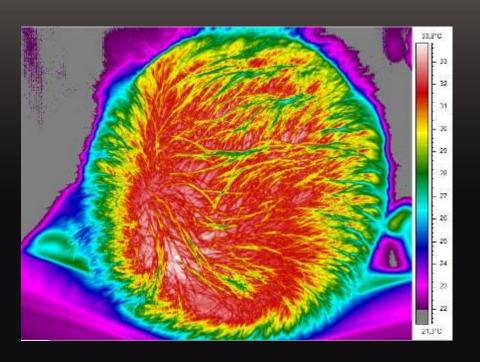
By Expert/dermatological evaluation

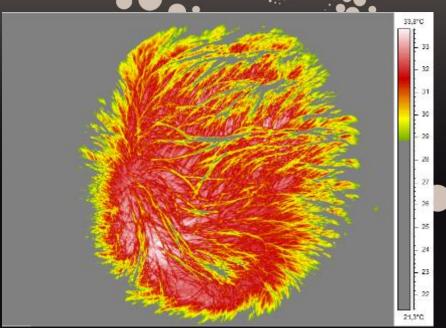
Refreshing or Soothing effect:





Refreshing or Soothing effe By thermal camera





AND

- Self Perception questionnaire
- Dermatological evaluation

Styling





Combing effect





Combing properties By Dia-stron MTT175



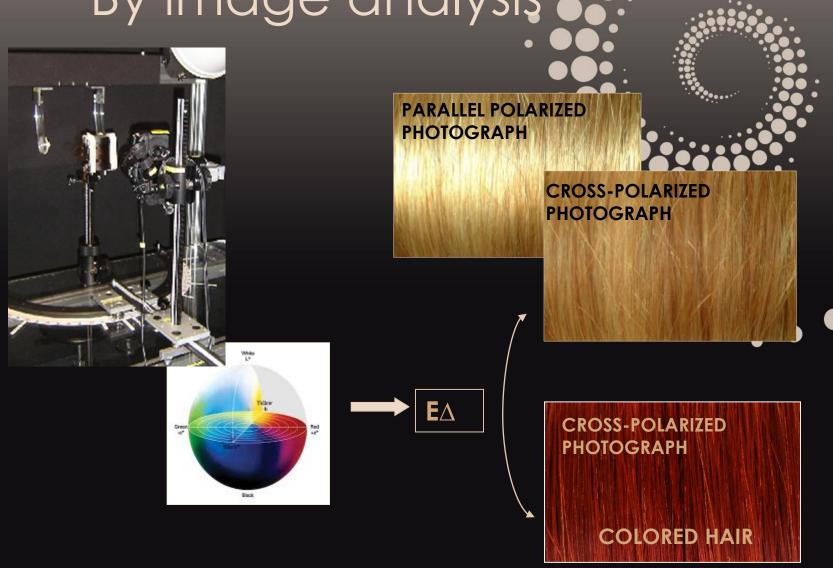


Color protection



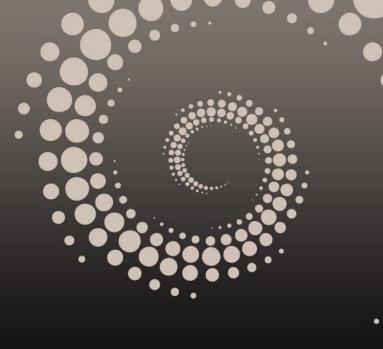


Color protection By image analysis



Straightening effect Curling effect





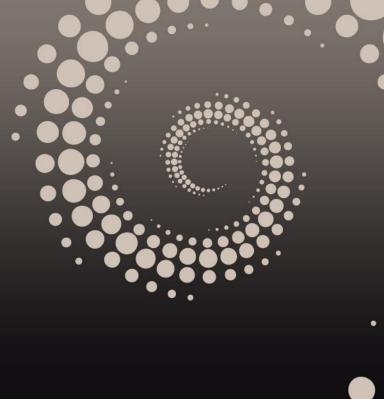
Straightening – Curling of By image analysis





Volumizing effect





Volumizing effect By image analysis

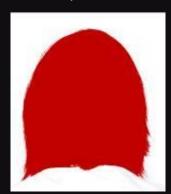
TO

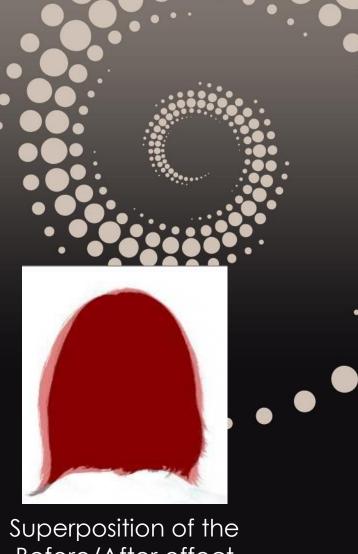




Tafter application of the product







Before/After effect

Make-up



Mascara

- -Curling
- -Lengthening
- -Separation
- -Volume
- -Waterproof

Foundation

- -Complexion homogeneity
- -Covering effect
- -Matifying effect

Nailpolish

- "streakfree " effect
- -Lasting duration

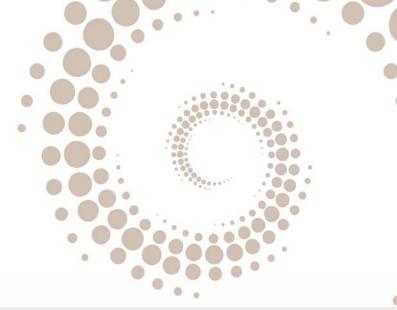
Lipstick

- -Sheen
- -No transfer
- -Relief
- -Lasting duration

Spincontrol - CopMoisturizing

146

And make-up removal



Mascara

Image analysis: curling measurement

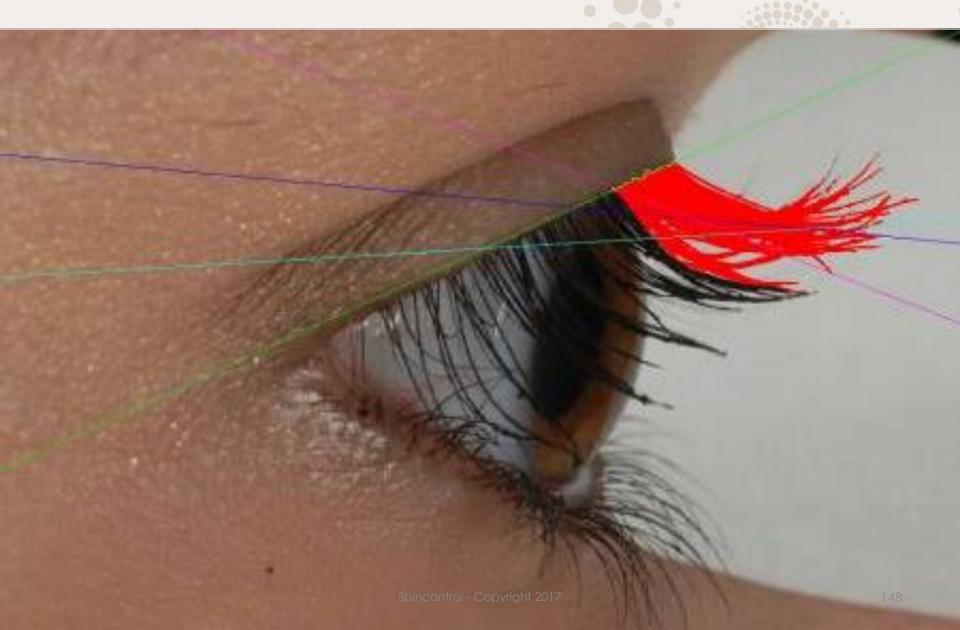


Image analysis: Lengthening, volumizing and separation measurements







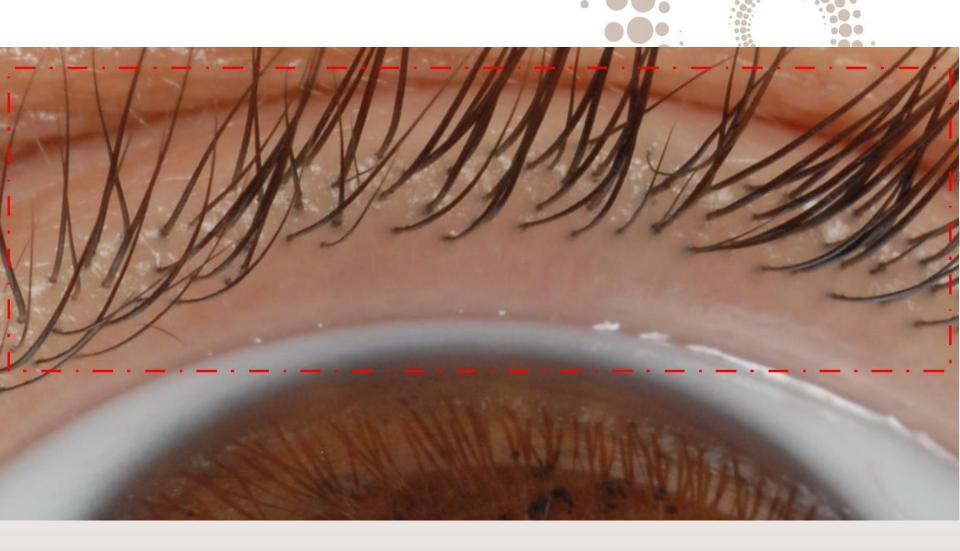








Image analysis: lash density



Clinical evaluation on photos Long lasting effect



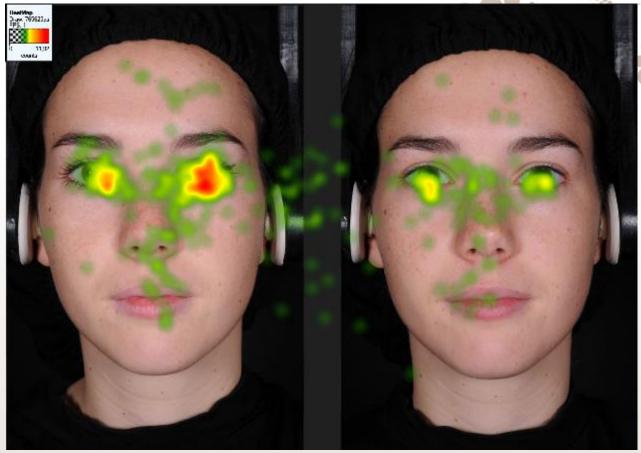




Before After n hours

Make-up Impact

EYE-TRACKING



With make-up

Without make-up

Clinical evaluation Waterproof/water resistant effect

Position of the subject above the eye washes

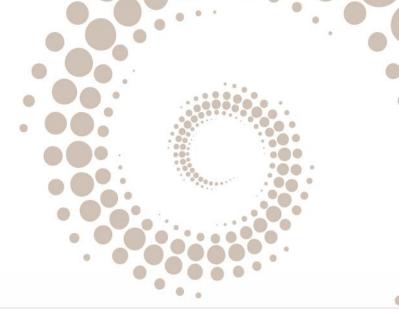




Evaluation of 3 descriptors :

- -mascara flakes
- -mascara smudges
- -mascara transfer to a cotton and to the eyelid





Foundation

Image analysis: complexion homogeneity (colour)



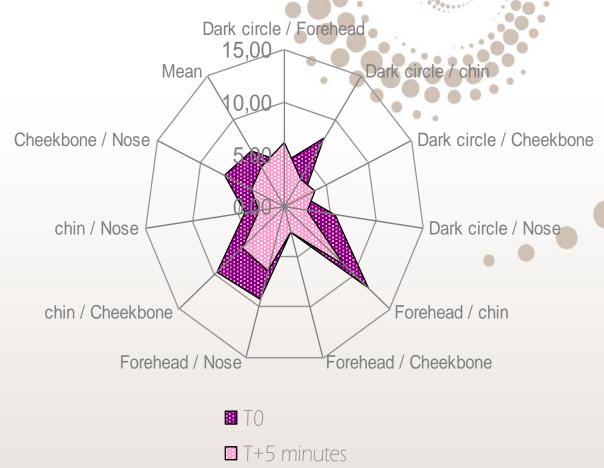


Image analysis: complexion homogeneity (texture)







After

The parametric image analysis allows us to extract a parameter characterizing the homogeneity.

An increase in this parameter corresponds to an improvement of the facial skin homogeneity after the foundation application and later on allows an assessment of the covering effect of the foundation.

CLBT method: complexion radiance



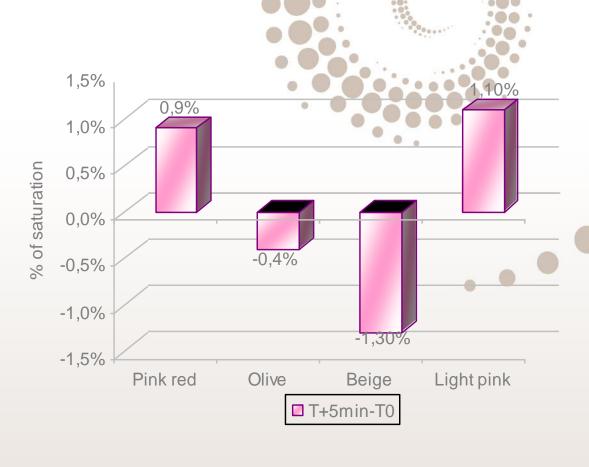


Image analysis: matifying effect



Parallel polarized photograph



Cross-polarized photograph



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

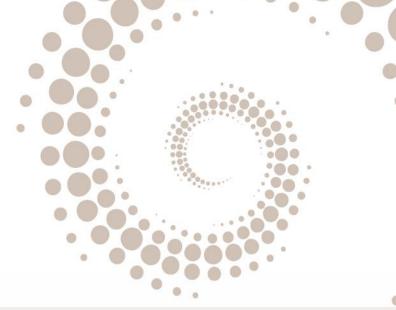
Clinical evaluation on photos Long lasting effect





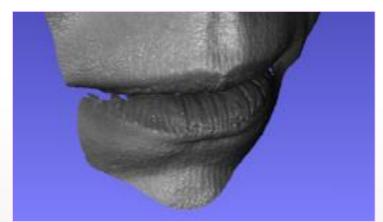


Before After n hours

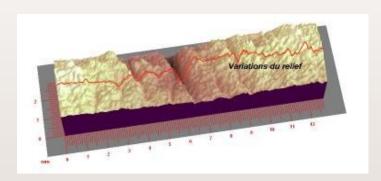


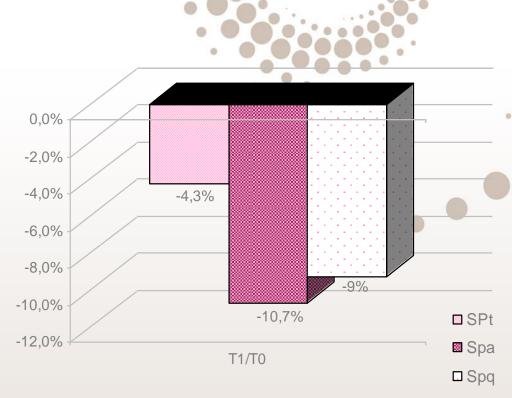
Lipstick

Fringe projection: lip relief analysis



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





Results example: lip roughness N minutes after lipstick application.

Moisturizing effect

BY CORNEOMETER



Acquisition on lips



Clinical evaluation: long lasting effect (shininess)

Notation de l'effet miroir ou effet mouillé d'un rouge à lèvres. Il faut évaluer l'intensité de l'effet et non la quantité.



GRADE 10 Effet miroir/mouillé maximum



GRADE 8 L'effet miroir s'atténue légèrement



GRADE 6 Reste un léger effet mouillé, la brillance se disperse



GRADE 4
Disparition pratiquement totale de l'effet mouillé



GRADE 2
Disparition de l'effet miroir/mouillé, reste une légère brillance diffuse



GRADE 0
Absence totale de brillance



Clinical evaluation: long lasting effect (shininess)

ECHELLE BRILLANCE : EFFET IRISE

Notation de la brillance d'un rouge à lèvres. Il faut évaluer l'intensité de l'effet et non la quantité.



GRADE 10

L'intensité de la brillance est au maximum



GRADE 8

Diminution de la brillance qui se diffuse



GRADE 6 Reste une légère brillance irisée

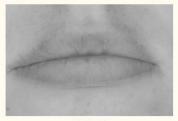


GRADE 4

La brillance se matifie

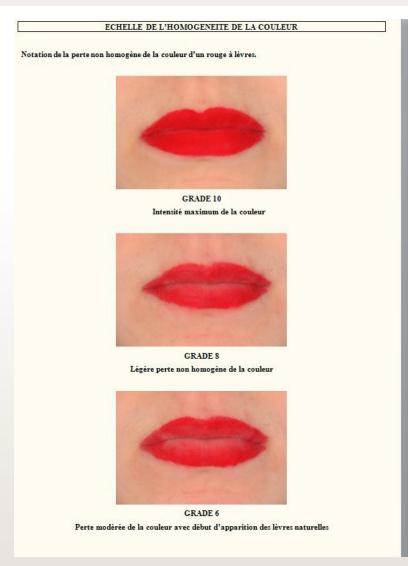


GRADE 2 Absence presque totale de l'effet irisé



GRADE 0 Absence totale de la brillance irisée

Clinical evaluation: long lasting effect (colour homogeneity)





GRADE 4

Perte importante non homogène de la couleur avec apparition sur certaines zones des lèvres naturelles



Les zones ou les lèvres naturelles apparaissent sont plus importantes que les zones colorées par le rouge à lèvres



GRADE 0 Absence totale de matière



Clinical evaluation: long lasting effect (migration)





GRADE 6
Effet filant assez important



GRADE 8 Effet filant très important



GRADE 10

Effet filant très important sur l'ensemble des contours ainsi qu'un effet de matière qui se diffuse autour des lèvres



Clinical evaluation: long lasting effect (color)

ECHELLE DE LA TENUE DE LA COULEUR

Notation de l'intensité de la couleur d'un rouge à lèvres.



GRADE 10 Intensité maximum de la couleur du rouge à lèvres



GRADE 8 Légère diminution de l'intensité de la couleur sur l'ensemble de la bouche



GRADE 6 Perte modérée de l'intensité de la couleur



GRADE 4
Perte importante de la couleur



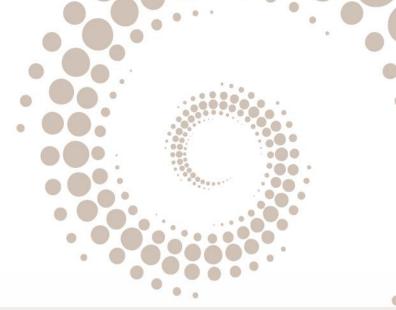
GRADE 2

Matière pratiquement disparue, apparition de la couleur des lèvres



GRADE 0 Absence totale de couleur, lèvres naturelles





Nailpolish

Fringe projection: roughness evaluation (on replicas)

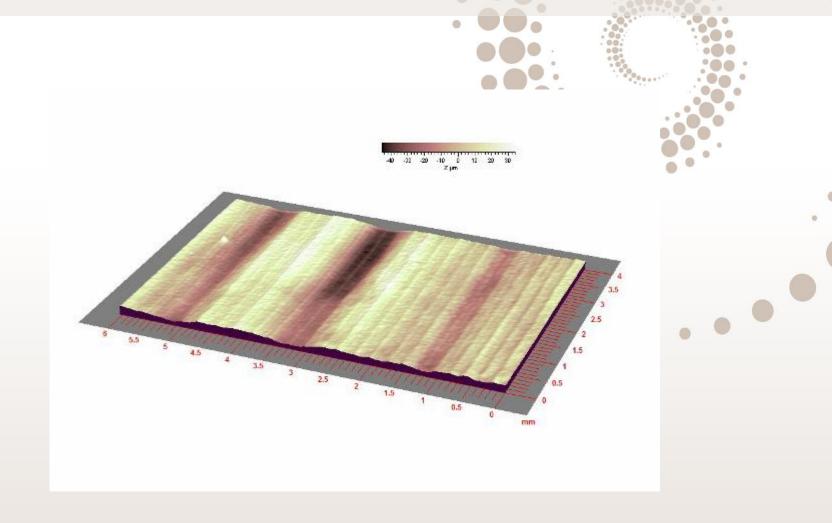
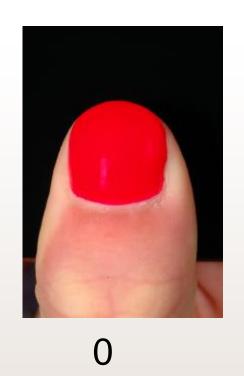


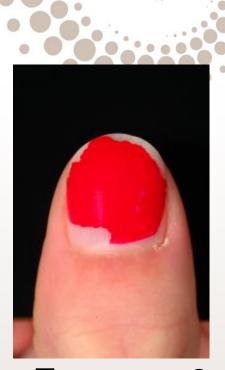
Image analysis: growth measurements



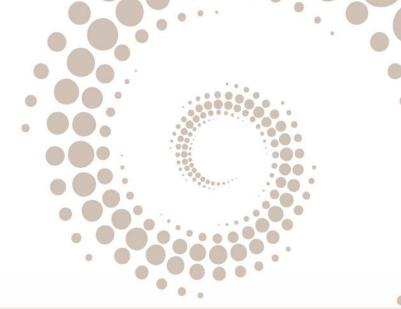
Clinical evaluation: wear & chipping measurements



Scale 0 to 8



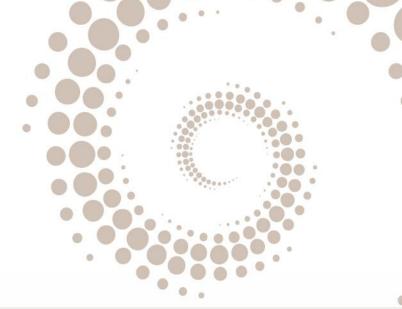
Ex: wear 6 Chipping 7



Make-up removal

Image analysis

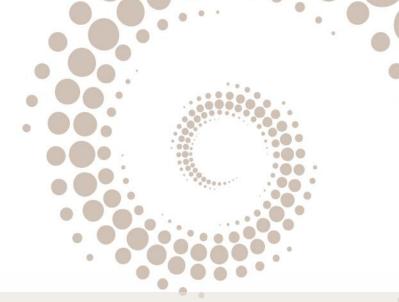




Biomedical studies

Biomedical studies

- -ANSM (the French Health Products Safety Agency) authorized Spincontrol to carry out clinical and biomedical studies for:
 - Cosmetic products
 - Nutritional supplements
 - Medical devices (Class 1 and 2A)
- Studies are conducted according to the GCP/ICH E6
- Support in the writing of the « investigator's brochure »
- Assistance in submitting to the Independent Ethic Committee (CEI) and the ANSM.

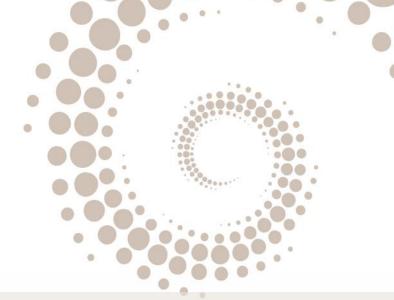


Food supplements

Food supplements'allegations



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



Dermocosmetics'allegations

Dermocosmetics' allegations



"Our emotions often dictate our decisions"

"we make emotional decisions and justify them rationally"

Emotion claims

In partnership with
Emospin



Expertise and services

- Product efficiency Claim validity
 - E.g. Objectivation of emotional responses
- Product design and development
 - E.g. Characterization of emotional signature of a specific product and/or its interaction with specific consumers
- Consumer insight
 - E.g. Objectivation of non-conscious behavioral and emotional processes
 - E.g. Typologies of consumers (interindividual differences)
 - E.g. Transcultural comparisons (intercultural variations)



Studying emotions: what for?



Examples of claims

Marketing efficiency: What is the contribution of packaging in the emotional experience associated with a product?

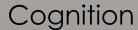
Consumers' behavior: Impulsive buying or reflexive thought?

Pleasure and well-being: What is the form of hedonic response associated with the use of skincare products, make-up, perfumes: Relaxing, stimulating quality of life, self esteem

Does my product improve the sleepiness?

Etc....

How to access emotions?





Psychometric measures

Physiological



Visceral component

Behaviour



Behavioral / ethological analyses



Verbal methods

Subjective component:

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





Psychophysiological methods

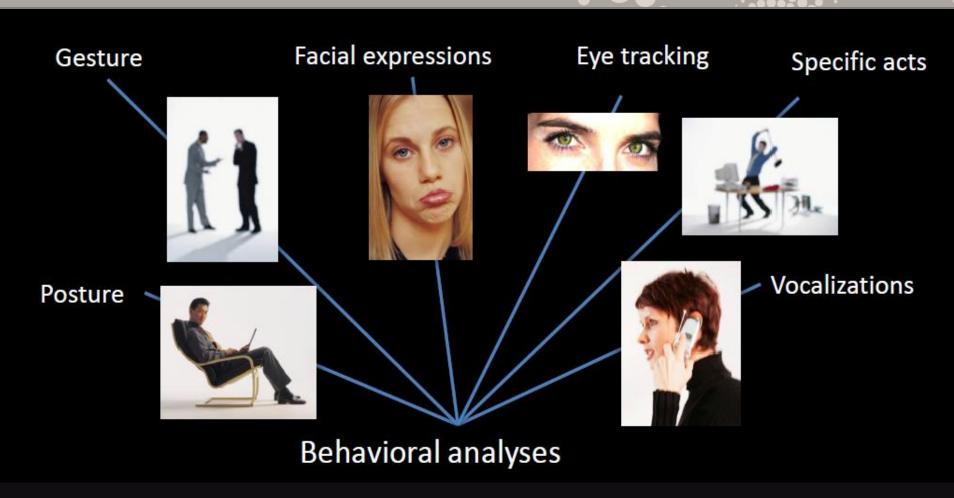
Visceral component:

- •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





Exemple: Mydriasis

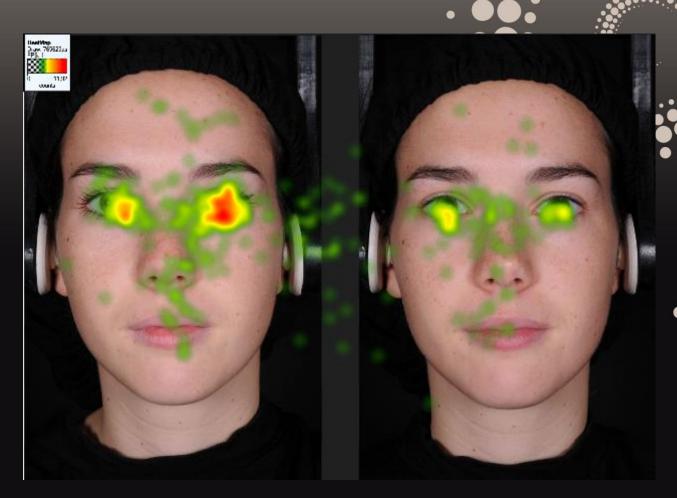
Mydriasis can be considered a physiological marker of emotional arousal (increase in pupil diameter)







Exemple: Eye-tracking

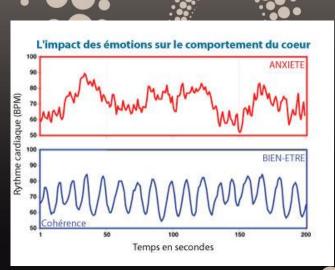


With make-up

Without make-up

Example: Heart rate variation





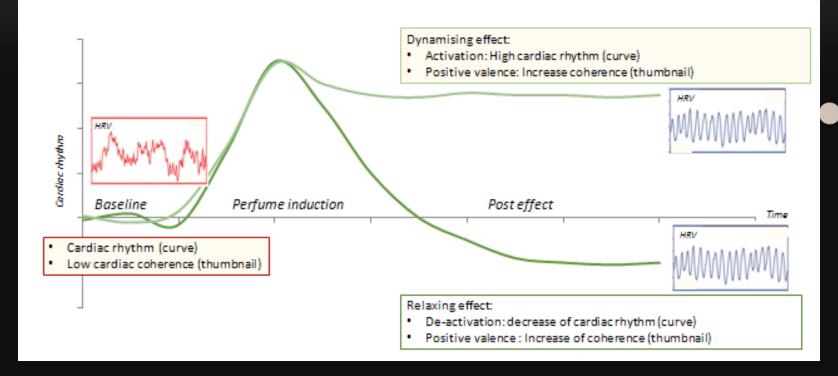
Cardiac rhythm / HRW

- * Heart rate variability reflects the inner emotional states and stress. Negative emotions lead to increased disorder in the heart's rhythms
- * In contrast, positive emotions create increased harmony and coherence in heart rhythms

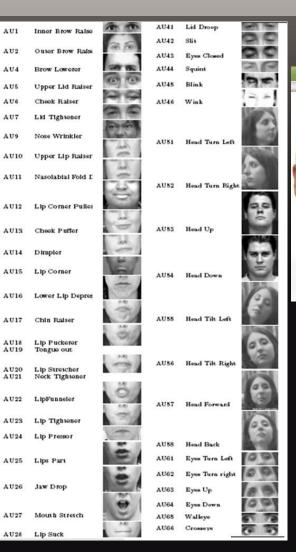
Example



Example of cardiac parameters evolution



Example: Facial expressions analysis





Facial expressions analysis with the Facial Action Coding System FACS (Facial Action Coding System, Ekman & Friesen, 1978; Ekman, Frisen & Hager, 2002).

Facial expressions analysis Stress & relaxation evaluation





Before

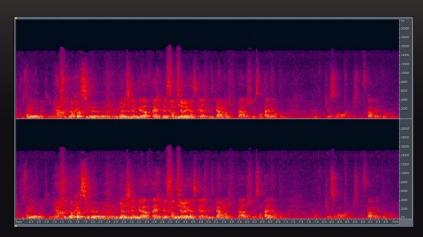
Cheek / cheekbone upward movement

- Eyelid movement
- Mouth movement
- Aperture of mouth

After

Example: Prosody Analysis of the acquistic signal of

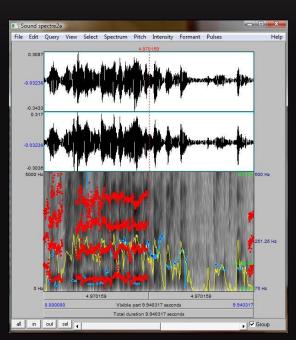
Analysis of the acoustic signal of subject's voice



Spectral analysis of the voice

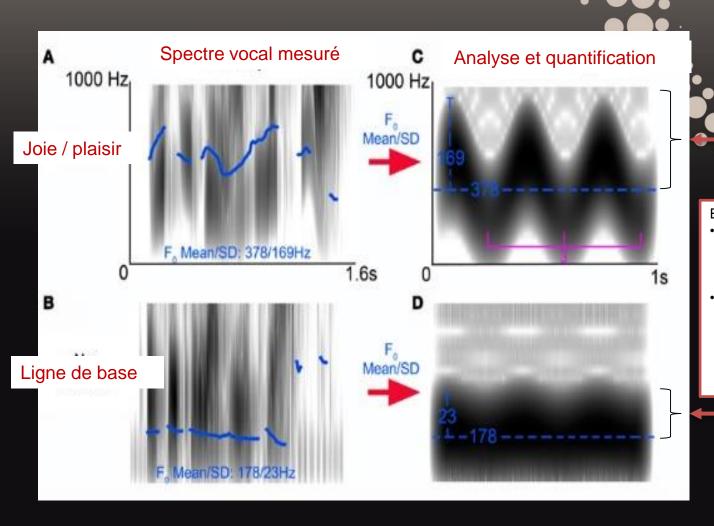


- fundamental frequency
- intensity





Example: Prosody Analysis of the acoustic signal of subject's voice.



Emotion de joie / plaisir:

- Valeur moyenne plus élevée de la fréquence fondamentale (hauteur tonale de la voix)
- Plus forte variabilité de la fréquence fondamentale (plus de variations tonales)

Example: Postural analysis Dynamising effect



- -Analysis according to the common ethological methodology (Lehner, 1998)
- -Measurement of the angular variation between the vertebral and shoulder axes

Example: Vigilance & attentional processes Mental effect

STROOP test (Stroop, 1935)





To say as many words as possible from a category (commonly semantic) in a given time (usually 60 seconds).

Physical activity measurement Sleep analysis

