



UNIVERSITÀ  
DEGLI STUDI  
DI PADOVA



UNIVERSITÀ  
DEGLI STUDI  
DI PADOVA

# La creazione del claim cosmetico: *dalla dimostrazione dell'efficacia alla comunicazione al consumatore*

**Alessandra Semenzato**

**17 marzo 2023**



Dipartimento di  
Scienze del Farmaco

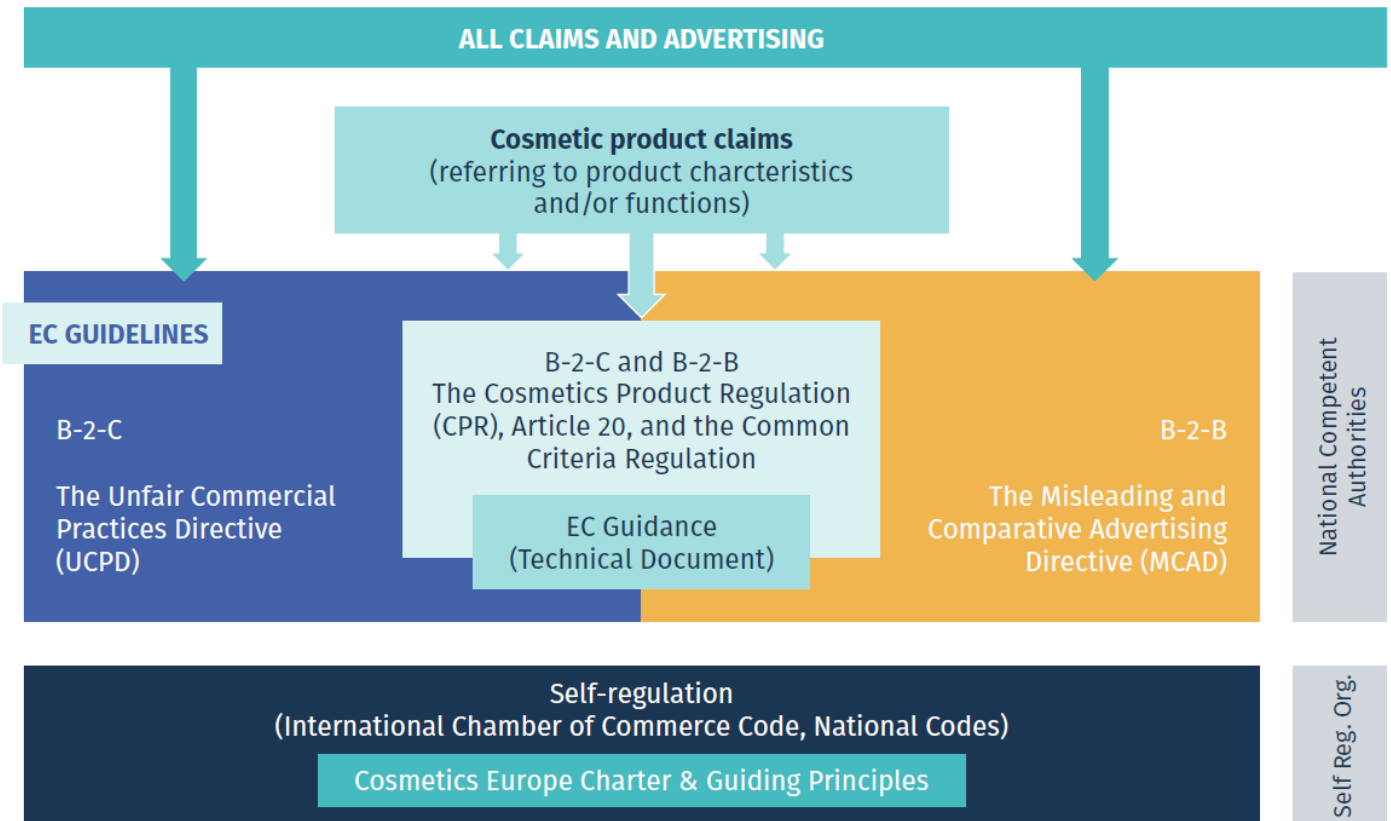
# GUIDELINES FOR COSMETIC PRODUCT CLAIM SUBSTANTIATION

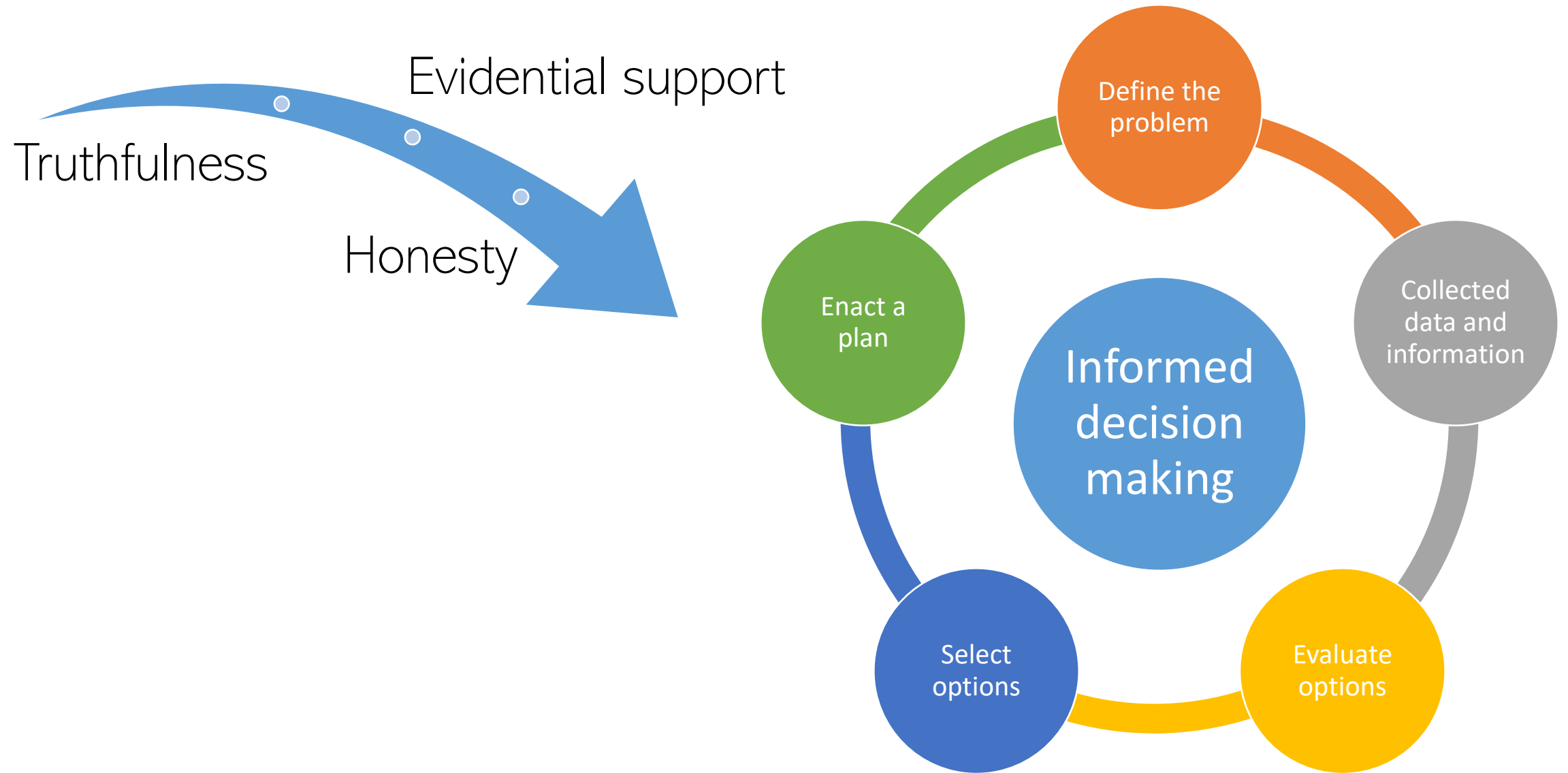
Revising and expanding the Colipa Guidelines on Efficacy (2001/rev. 2008)

22 May 2019

Cosmetic product claims must comply with the legally-binding Common Criteria Regulation<sup>5</sup> which lays down six criteria that must be met for the justification of claims used in relation to cosmetic products:

- legal compliance;
- truthfulness;
- evidential support;
- honesty;
- fairness;
- informed decision-making.

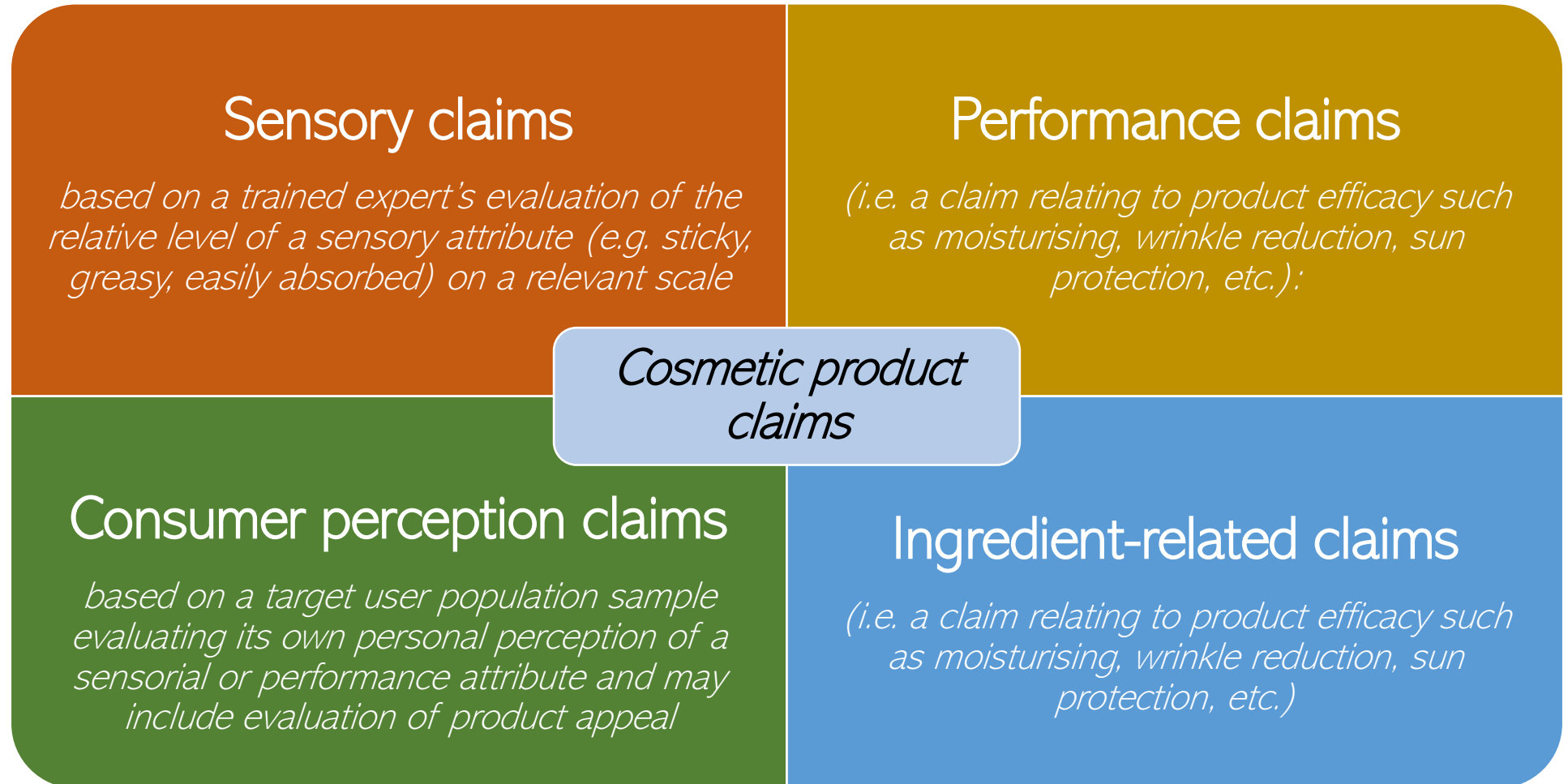




# GUIDELINES FOR COSMETIC PRODUCT CLAIM SUBSTANTIATION

Revising and expanding the Colipa Guidelines on Efficacy (2001/rev. 2008)

22 May 2019



EFFICACIA  
MISURATA

EFFICACIA  
PERCEPITA

Sensory claims

Performance claims

*Cosmetic  
product claims*

Consumer perception  
claims

Ingredient-related  
claims



EFFICACIA  
MISURATA

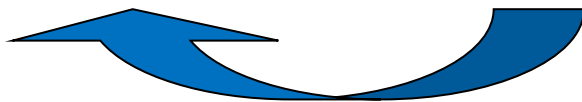


EFFICACIA  
PERCEPITA



INGREDIENTI

FORMA TECNICA



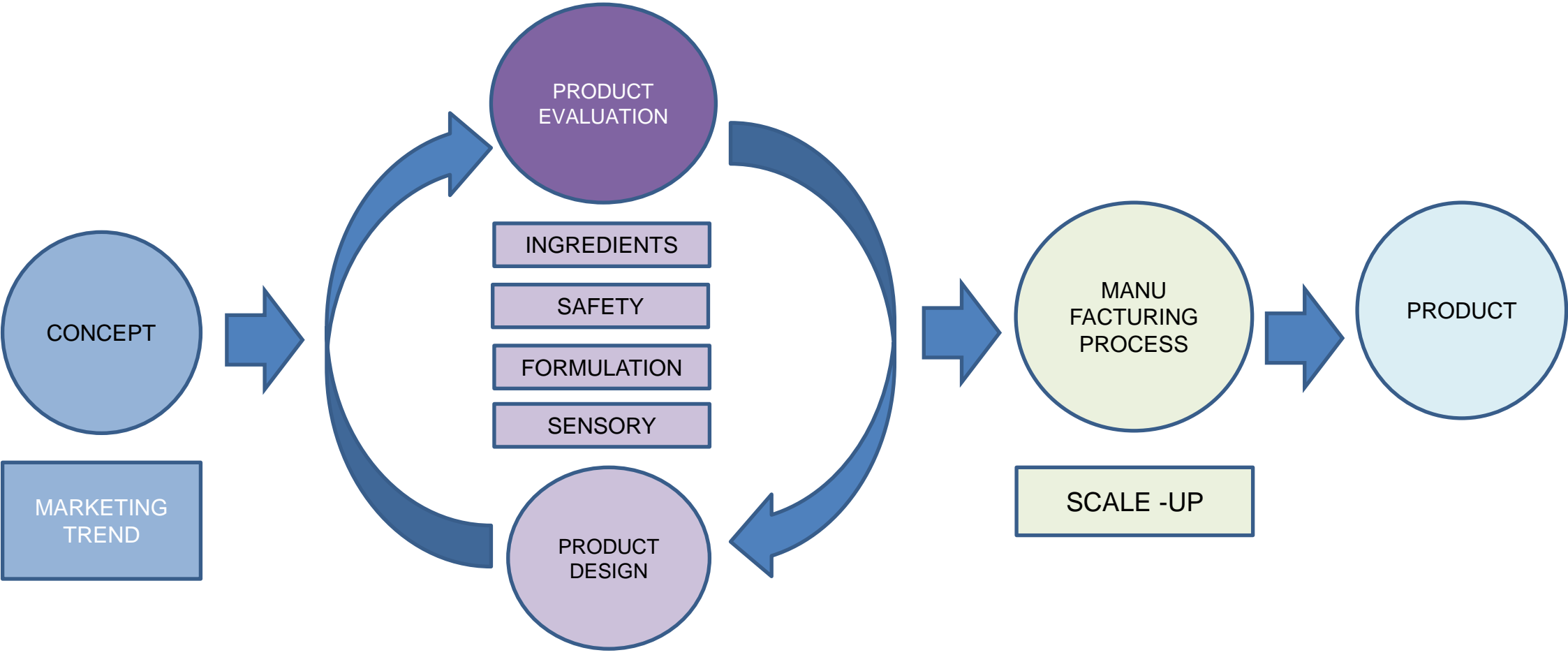
Effetto

- *Modificazione biologica indotta oggettivamente misurabile*

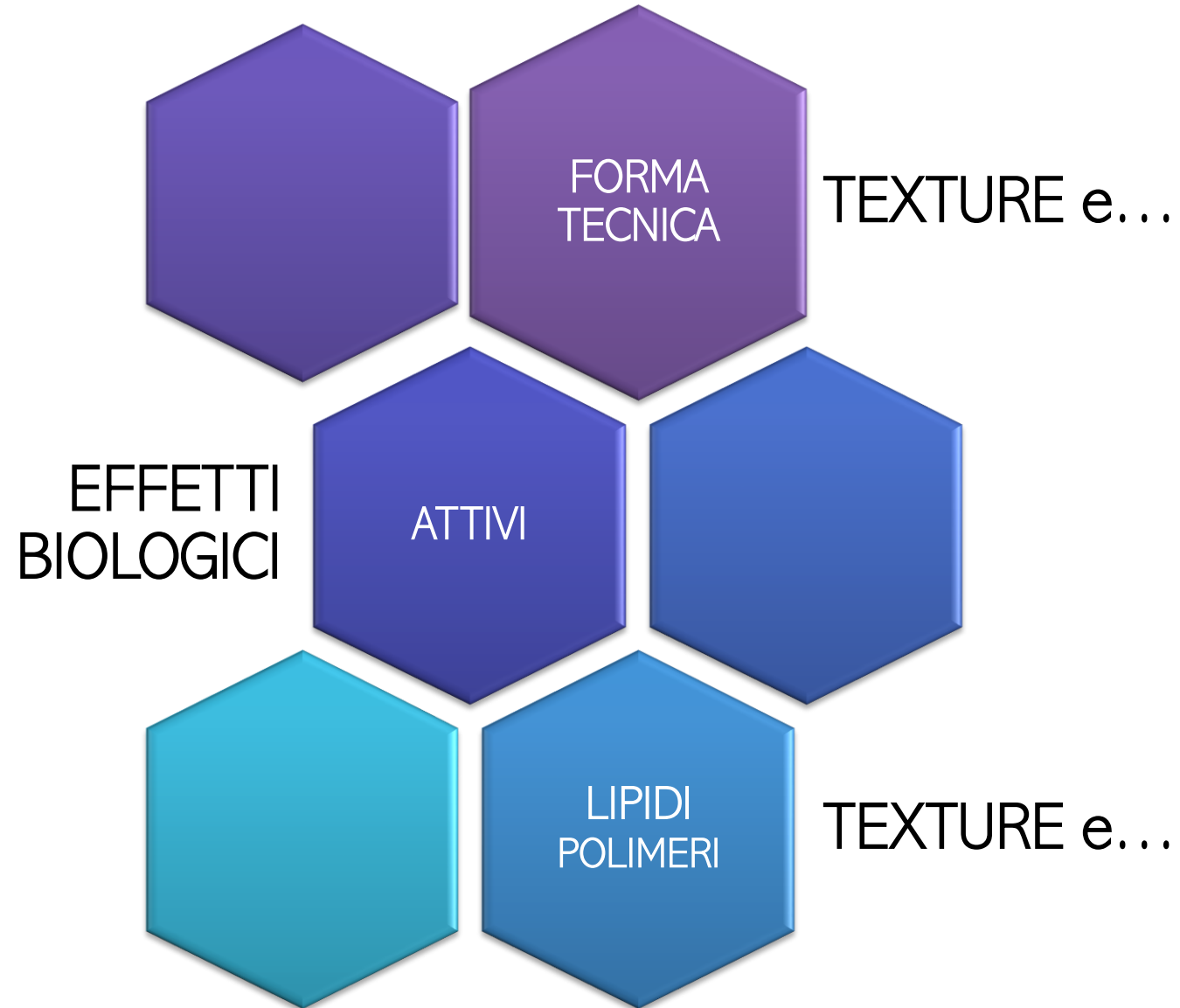
Efficacia

- *Stima del beneficio di quanto ci si è proposti*  
(W.Umbach)

# COSMETIC PRODUCT DESIGN



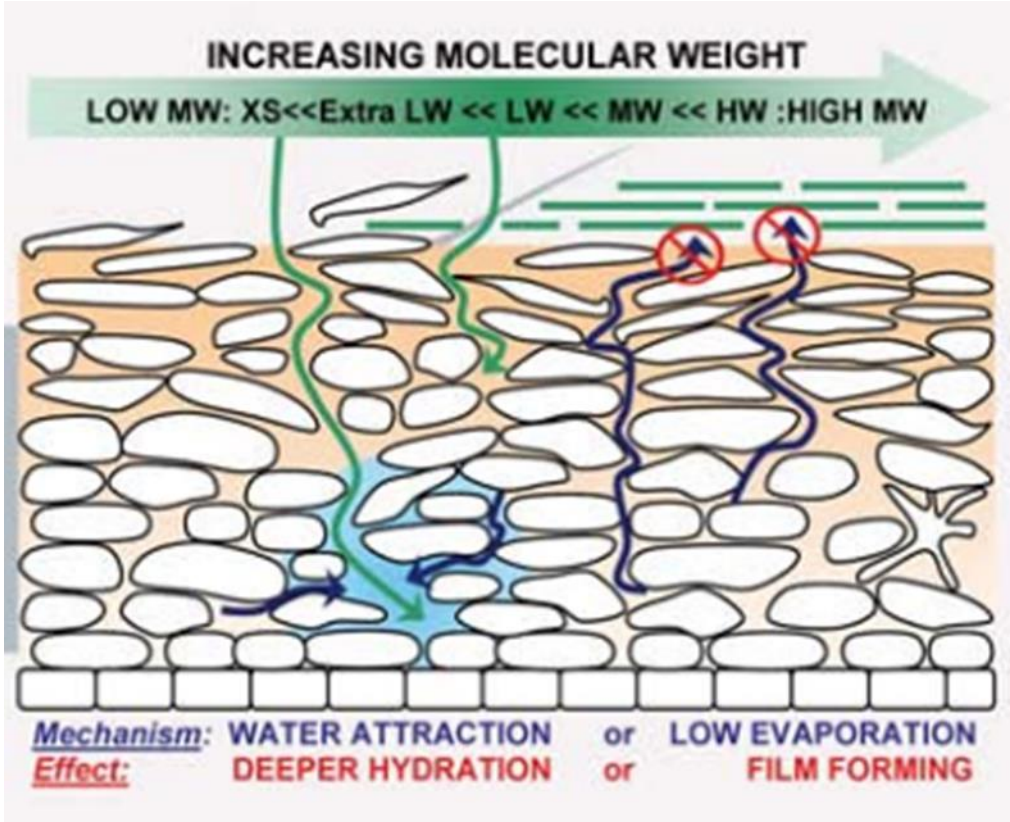
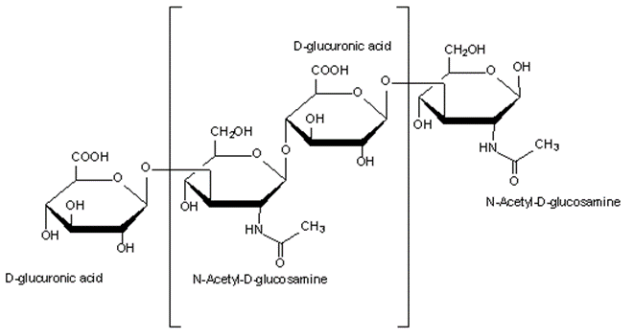
# COSMETIC PRODUCT DESIGN



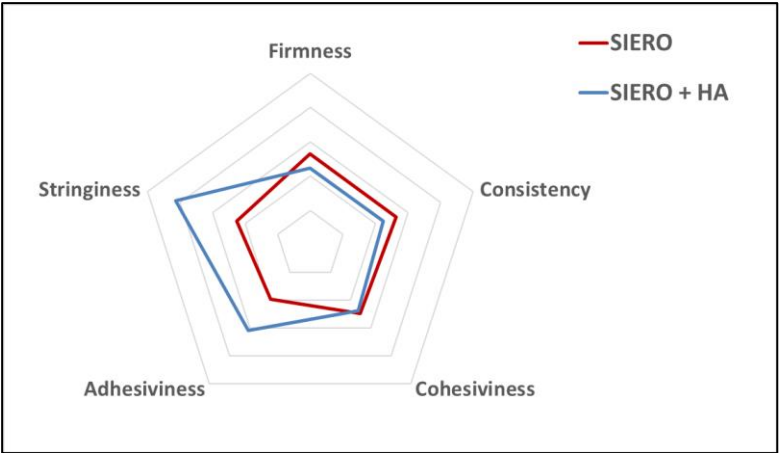
# ACIDO IALURONICO

POLIMERO formato da una catena lineare, costituita da unità disaccaridiche di N-acetilglucosammina ed acido glucuronico

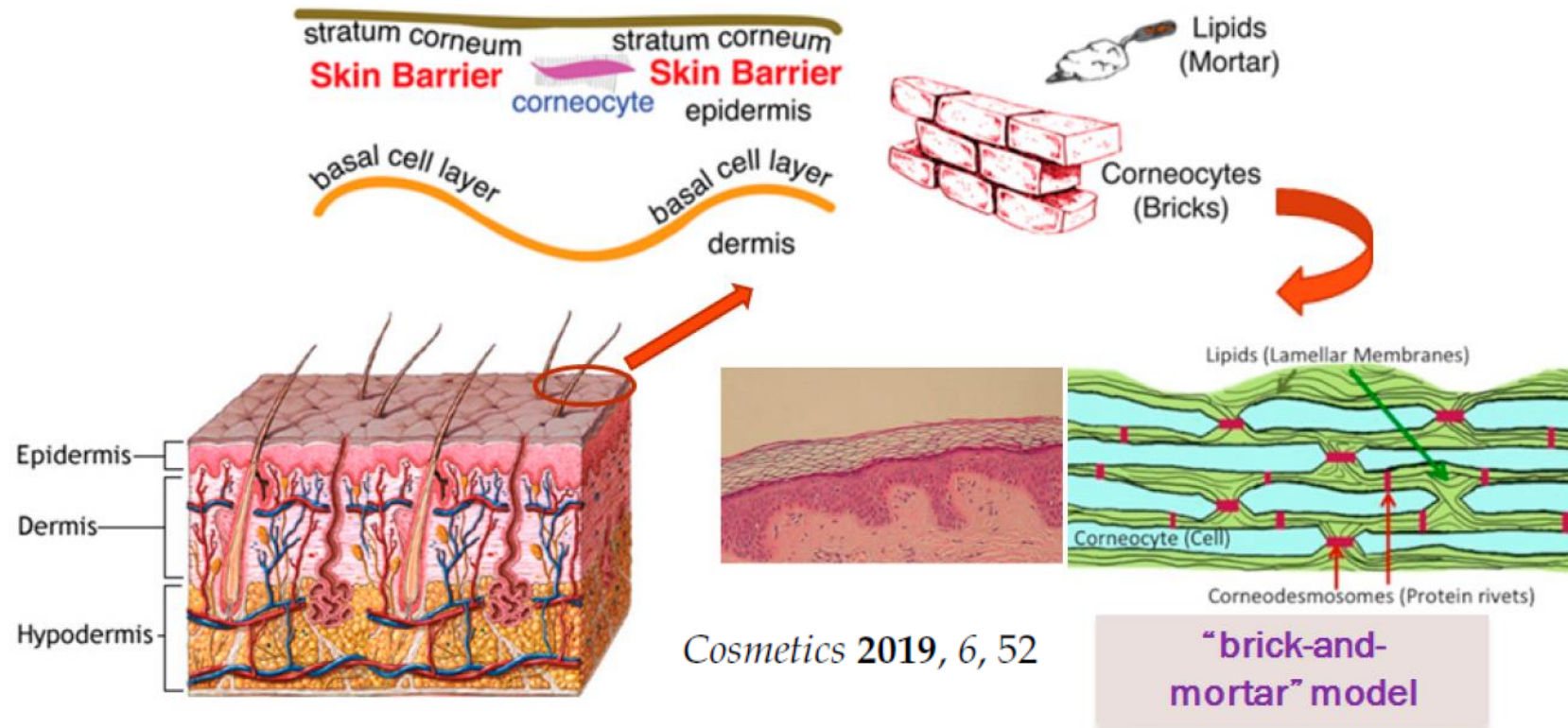
Struttura Random coil



Texture Analysis



# Skin homeostasis



## Cell communication

TESTING / CLAIM SUPPORT

Essere in linea con la  
regolamentazione



TESTING / CLAIM SUPPORT

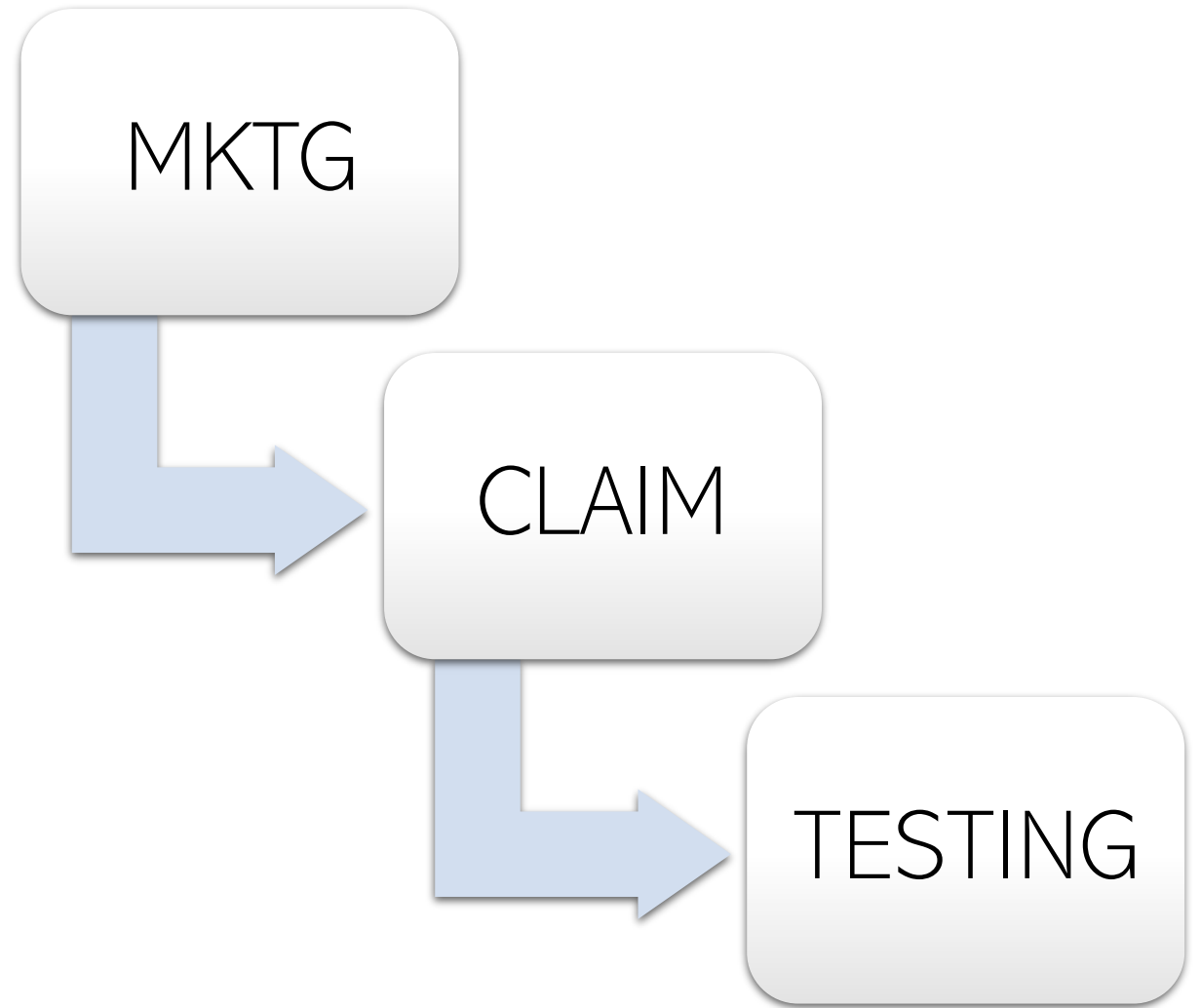
Essere in linea con la regolamentazione



SFIDA / OPPORTUNITA' per valorizzare le  
peculiarità del prodotto / INNOVAZIONE

# TESTING / CLAIM SUPPORT

Essere in linea con la  
regolamentazione

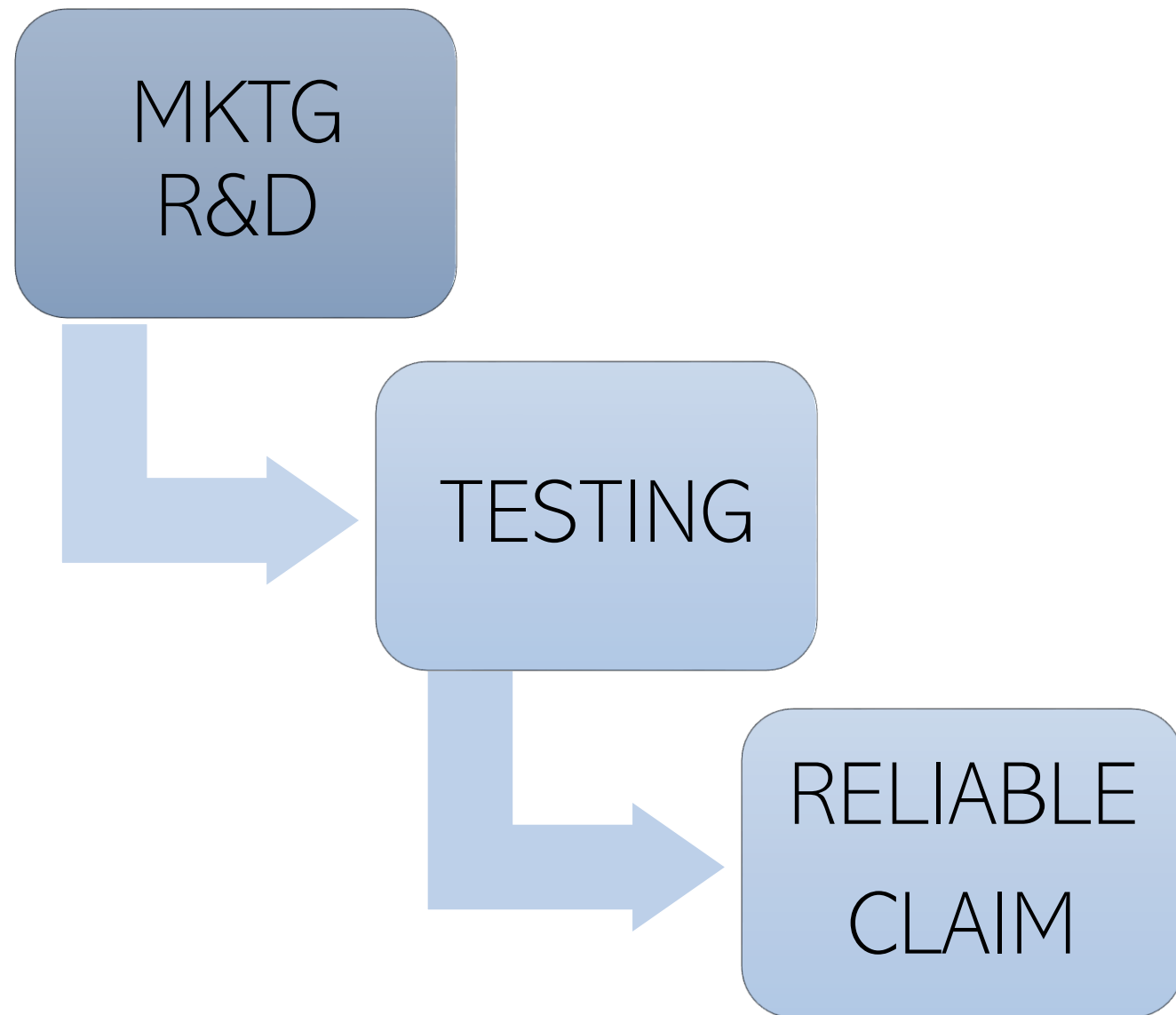


# TESTING / CLAIM SUPPORT

Essere in linea con la  
regolamentazione



SFIDA / OPPORTUNITA' per  
valorizzare le peculiarità del  
prodotto - INNOVAZIONE



# GUIDELINES FOR COSMETIC PRODUCT CLAIM SUBSTANTIATION

Revising and expanding the Colipa Guidelines  
on Efficacy (2001/rev. 2008)

22 May 2019

## EVIDENCE SUPPORT: THE BUILDING BLOCKS



*In Vitro*

tests conducted using living components of an organism (e.g. cells, hair follicles, skin explants, reconstructed skin, etc.) that have been isolated from their usual biological surroundings

## Evaluation of product & ingredient properties

Testing needs to provide a high level of confidence that the product delivers the benefits that are expected based on the ingredients claimed, the advertised claims and the general presentation of the product.



*In Vivo*

Performance measurement by instrumental methods

Performance assessment by ex-vivo methods

Controlled clinical testing

Performance Perception-by-others Tests

# IN VIVO PERFORMANCE MEASUREMENT BY INSTRUMENTAL METHODS CONTROLLED CLINICAL TESTING



Permettono di verificare e misurare l'azione specifica che si vuole vantare  
Forniscono la prova effettiva di efficacia  
Forniscono anche dati relativi a sicurezza



Disegno sperimentale complesso  
Necessità di chiarire bene gli endpoint  
Costo elevato

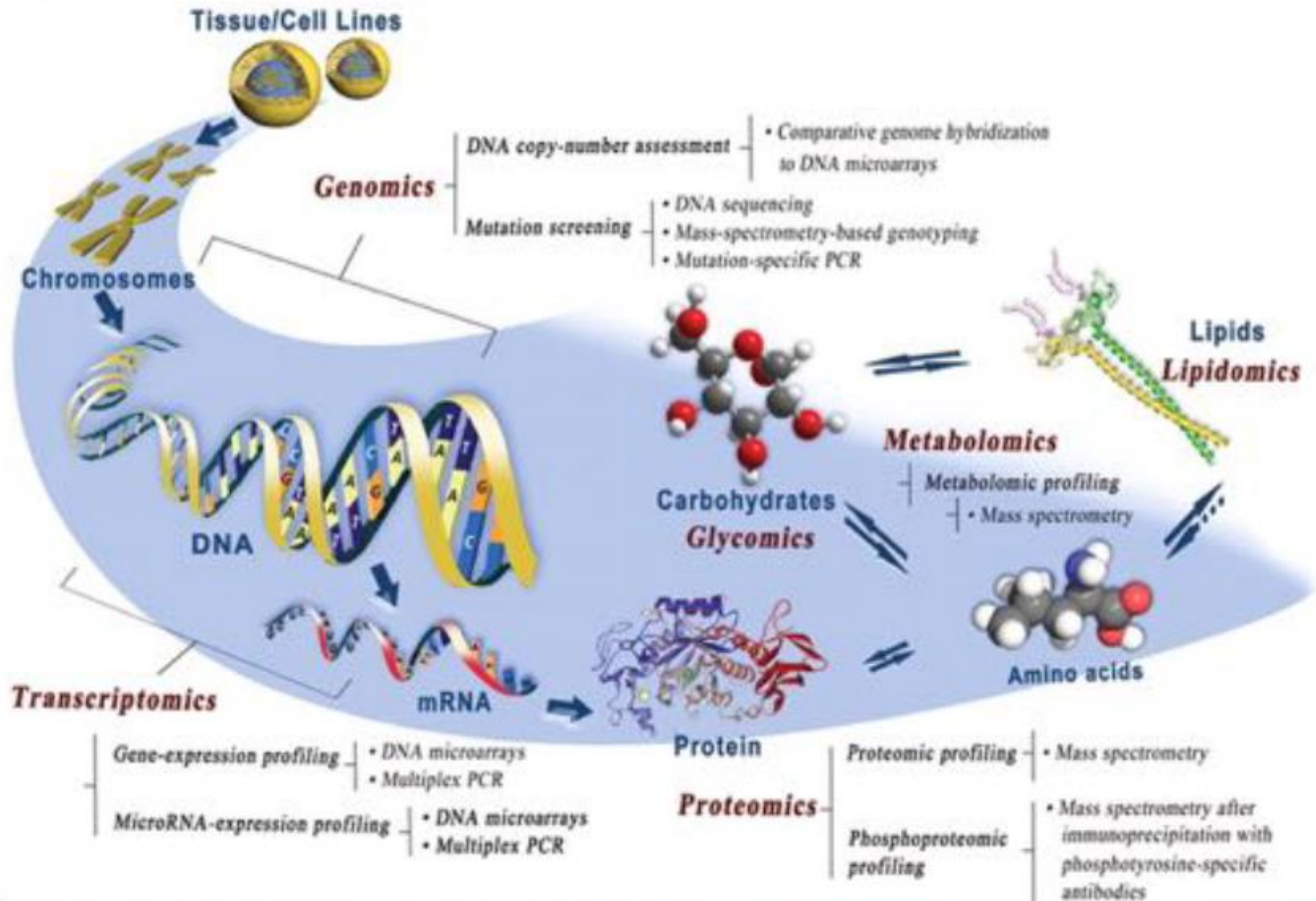
## Protocollo sperimentale

- Selezione dei soggetti
- Numerosità del campione
- Tipologia di strumentazione
- Valutazione clinica

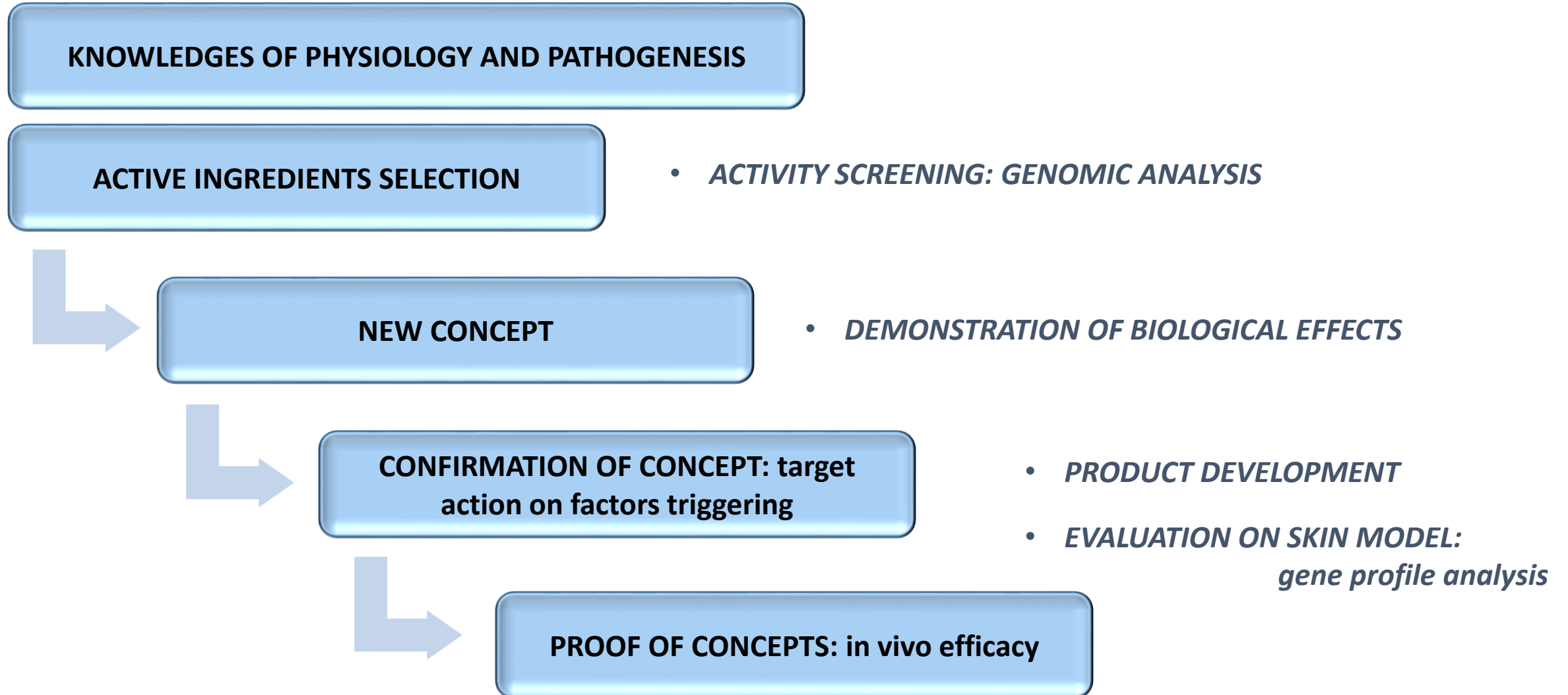
Linee guida EEMCO  
ISO standard solari



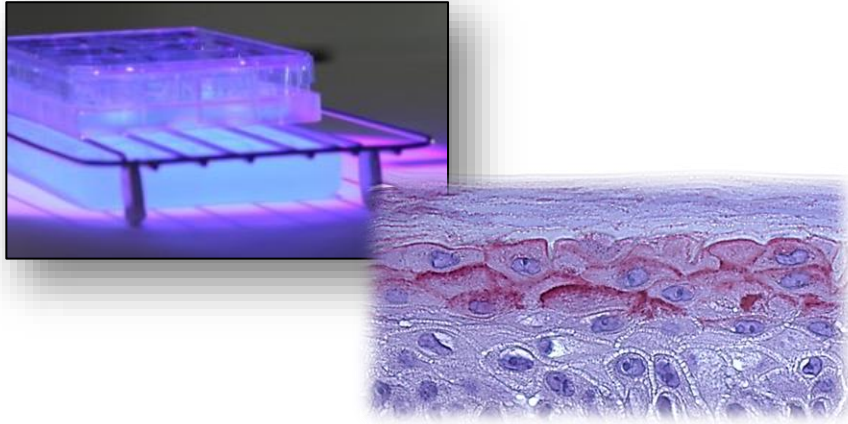
# OMICS SCIENCES



# FROM A CONCEPT TO PRODUCT: GENOMIC AS A POTENT AND PROTECTIVE TOOL



# Inflammasome: PRECLINICAL MODEL



Inflammasome biomarkers can be explored to figure out early biological events of **inflammaging**: it can be easily induced on 3D reconstructed skin models by relevant UV doses



## An Efficient Means to Mitigate Skin Inflammaging by Inhibition of the NLRP3 Inflammasome and NfKb Pathways: A Novel Epigenetic Mechanism

Hanane Chajra<sup>1</sup>, Sandrine Delaunois<sup>1</sup>, David Garandau<sup>1</sup>, Gaelle Saint-Auret<sup>2</sup>, Marisa Meloni<sup>3</sup>, Eunsun Jung<sup>4</sup>, Mathilde Frechet<sup>1</sup>

<sup>1</sup> Clariant Active Ingredients, Toulouse, France

<sup>2</sup> Genel, Grenoble, France

<sup>3</sup> Vitroscreen, Milano, Italy

<sup>4</sup> Biospectrum Life Science Institute, Yongin-City, Republic of Korea

## Current Updates in Dermatological Problems



### Research Article

Semenzato A, et al. Curr Updates Dermatol Probl: CUDP-100003.

## A New Synthetic Endocannabinoid as Anti-Inflammaging Cosmetic Active: an *In Vitro* Study on a Reconstructed Skin Model

Semenzato A<sup>1</sup>, Meloni M<sup>2</sup>, Caviola E<sup>2</sup>, Galizia G<sup>3</sup> and Baratto G<sup>4</sup>

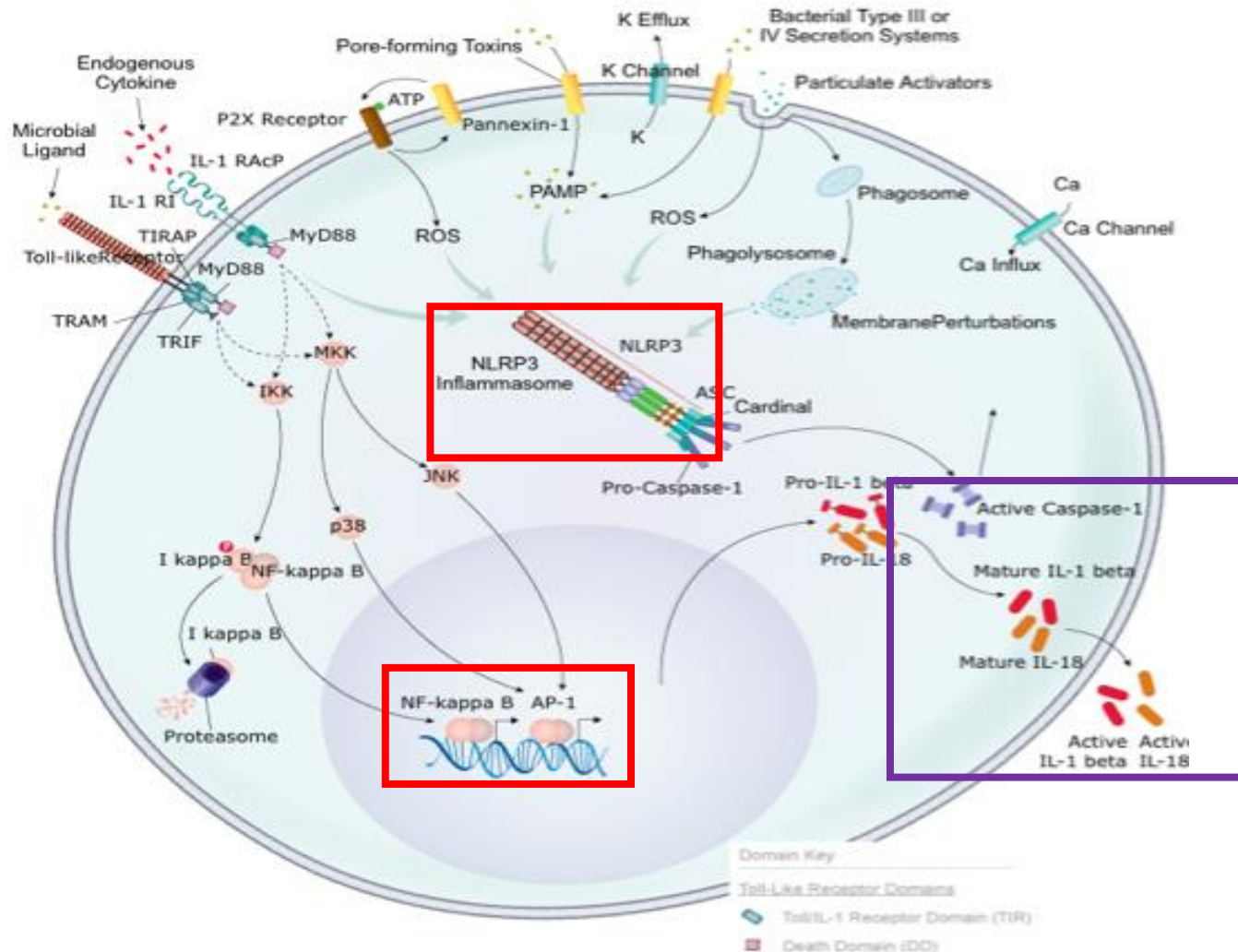
# Inflammasome PATHWAYS: Inflammaging

**Relevant in Medicine in almost all therapeutic areas**

Age-associated low-grade inflammation (inflammaging) is recognised as being a driving force of many age-associated diseases linked to irreversible cellular and molecular damage that **is not clinically evident** because it slowly accumulates over decades.

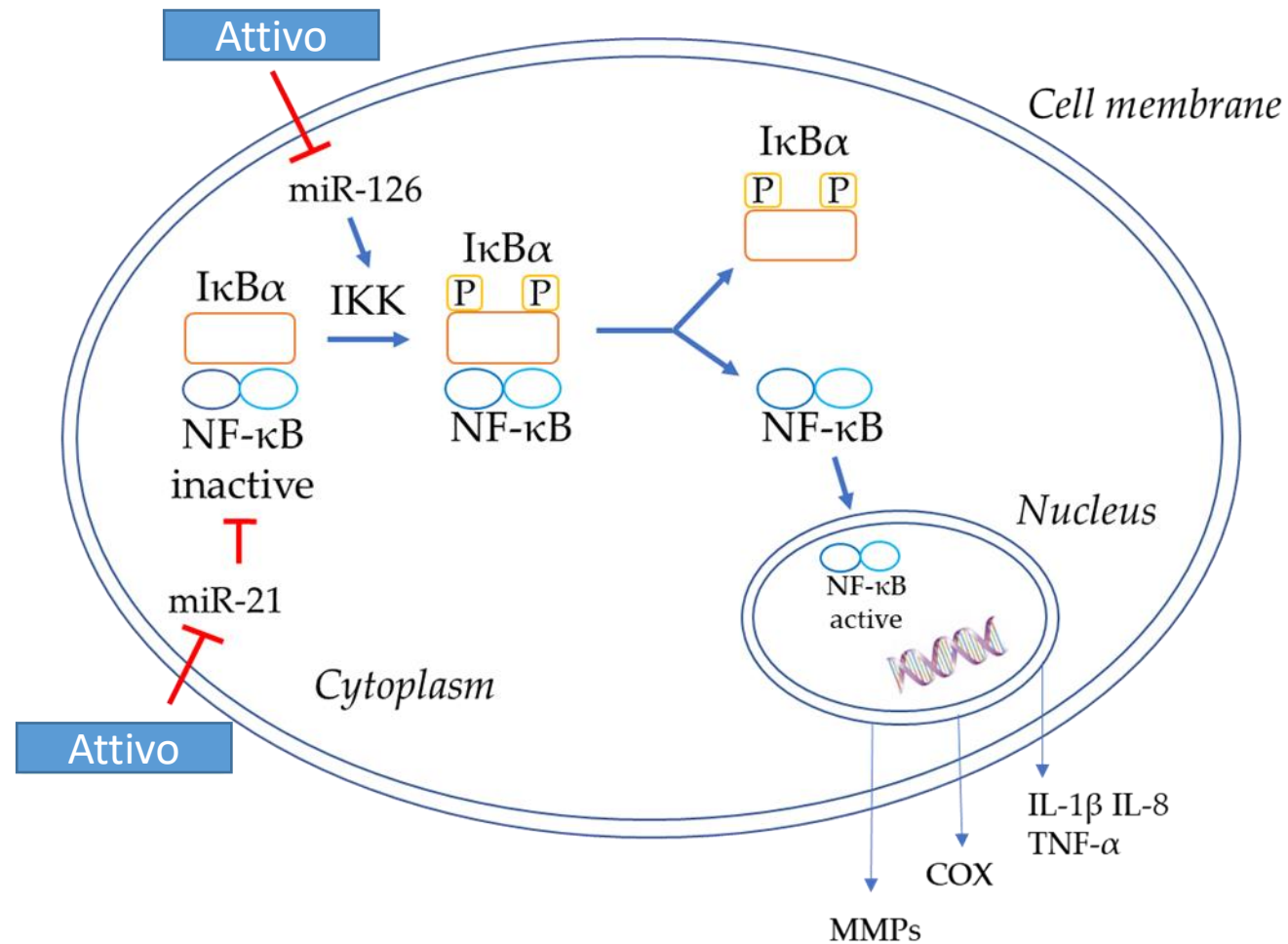
Inflammaging is believed to be a consequence of a **re-modelling of the innate and acquired immune system**, resulting both in cumulative lifetime exposure to pro-inflammatory cytokines at older ages and production of reactive oxygen determining **modification to skin appearance and involvement in chronic diseases**.

(Baylis et al. Longevity & Healthspan 2013 2:8).

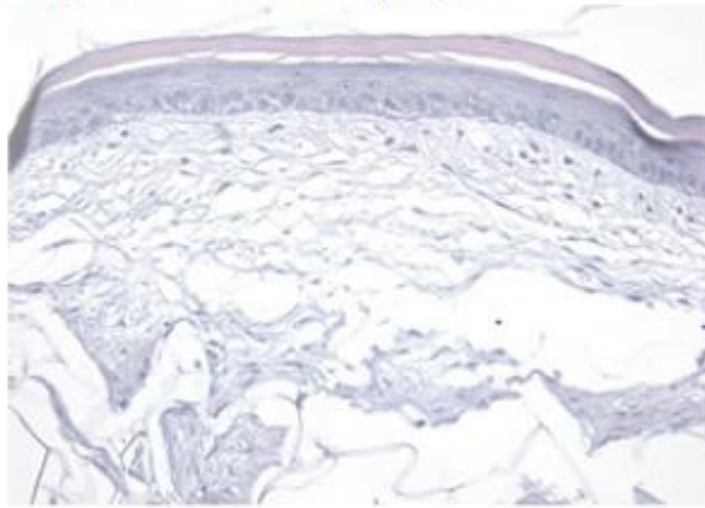


## ***Nuovo attivo ANTI - INFLAMMAGING***

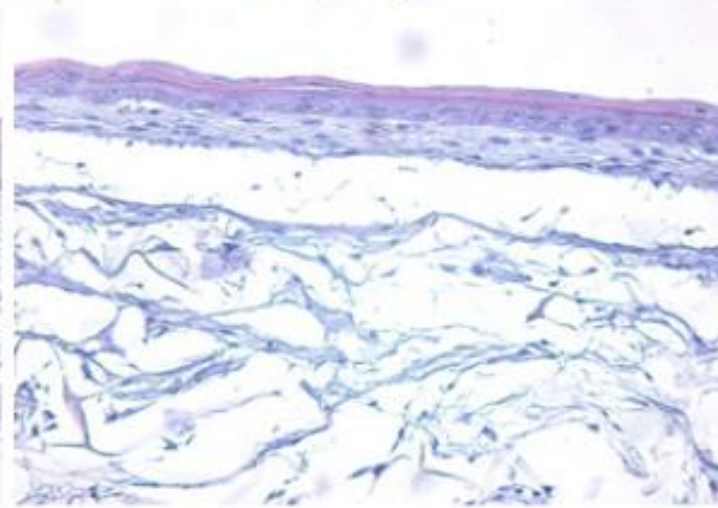
***Azione specifica sul mantenimento del BALANCE fisiologico dei microRNA***



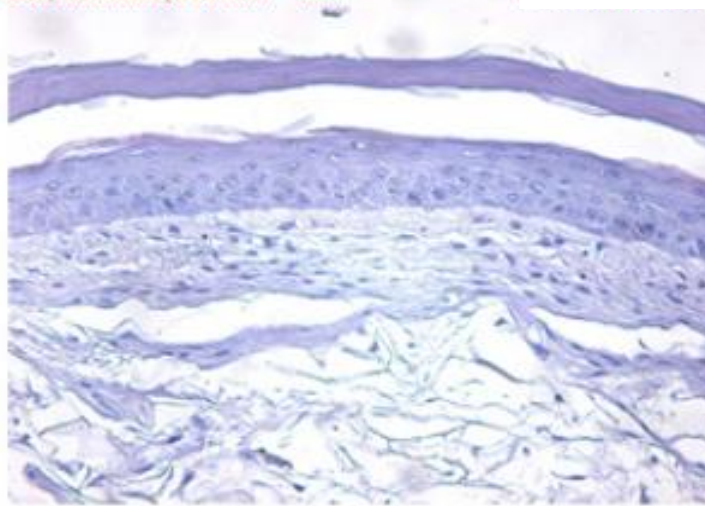
Negative Control (6h)



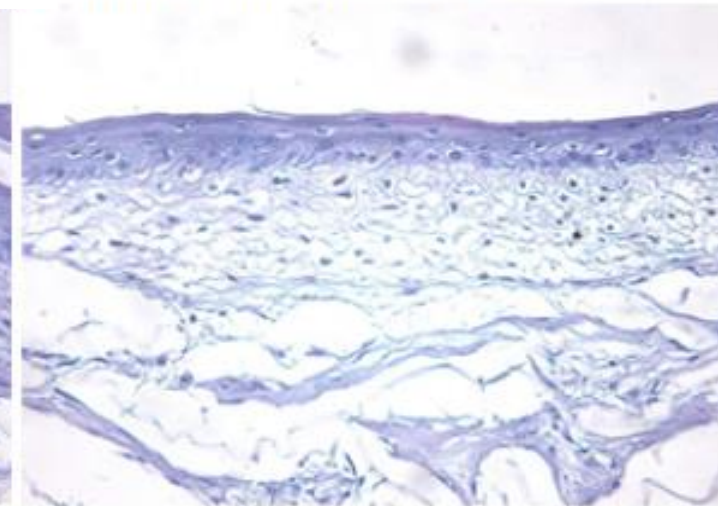
UVA (6h)



Anandamide 0,5% (6h)



Fluid Concentrate (6h)



**Figure 9:** H&E staining histology after 6 hours treatment post-irradiation analysed under light microscopy (20x)

**Valutazione clinica dell'efficacia** (scala **0** = scarsa, **1** = lieve, **2** = media, **3** = elevata)

**Tab. 3:** medie, deviazioni standard e confronto statistico (Anova Friedman e Coefficiente di Concordanza di Kendall).

	<b>T<sub>0</sub></b>	<b>T<sub>6wks</sub></b>	<b>T<sub>12wks</sub></b>	<b>p-level T<sub>0</sub> vs T<sub>6wks</sub></b>	<b>p-level T<sub>0</sub> vs T<sub>12wks</sub></b>
<b>IDRATAZIONE</b>	media 0,4 dev.st. 0,5	media 1,4 dev.st. 0,5	media 2,1 dev.st. 0,6	<b>p &lt; 0,0001</b>	<b>p &lt; 0,0001</b>
<b>ELASTICITA'</b>	media 0,6 dev.st. 0,5	media 1,5 dev.st. 0,5	media 1,9 dev.st. 0,4	<b>p &lt; 0,0001</b>	<b>p &lt; 0,0001</b>
<b>RUGHE SOTTILI</b>	media 1,9 dev.st. 0,5	media 1,4 dev.st. 0,6	media 1,3 dev.st. 0,6	<b>p &lt; 0,0001</b>	<b>p &lt; 0,0001</b>
<b>RUGHE PROFONDE</b>	media 2,1 dev.st. 0,7	media 1,9 dev.st. 0,8	media 1,8 dev.st. 0,8	<b>p &lt; 0,05</b>	<b>p &lt; 0,01</b>
<b>LUMINOSITA'</b>	media 0,5 dev.st. 0,6	media 1,4 dev.st. 0,5	media 2,2 dev.st. 0,5	<b>p &lt; 0,0001</b>	<b>p &lt; 0,0001</b>
<b>DISCROMIE CUTANEE</b>	media 1,6 dev.st. 0,6	media 1,3 dev.st. 0,7	media 1,1 dev.st. 0,6	<b>p &lt; 0,001</b>	<b>p &lt; 0,0001</b>

Dopo 6 e dopo 12 settimane di trattamento è stato evidenziato un miglioramento statisticamente significativo di tutti i parametri d'efficacia considerati.



# GUIDELINES FOR COSMETIC PRODUCT CLAIM SUBSTANTIATION

Revising and expanding the Colipa Guidelines  
on Efficacy (2001/rev. 2008)

22 May 2019

## EVIDENCE SUPPORT: THE BUILDING BLOCKS

Sensory tests with  
self-evaluations by  
trained expert panels

## Evaluation of Sensory or Performance by Perception Tests

Perception tests provide data that are either:

- **subjective** in nature and affected by individual differences in previous experience with use of similar products, varying expectations of product performance, and differences in behaviour and use of the product, as part of a normal day's routine.
- **objective** in nature through training to high consistency and validation with others

In-use Test with  
self-evaluation by  
consumers

# IN-USE TEST WITH SELF-EVALUATION BY CONSUMERS



Misurazione della percezione reale soggettiva del consumatore  
Immediatezza e semplicità di preparazione dello studio  
Permette di profilare il consumatore target  
Fornisce strumenti di conoscenza del prodotto

In PARALLELO con test strumentali per la valutazione di efficacia funzionale



**EFFICACIA  
PERCEPITA**

+

**EFFICACIA  
STRUMENTALE**



Tempistiche medio-lunghe di organizzazione studio e prova prodotto  
Numerosità del campione (>40 persone)  
Rischio *bias* nella selezione del campione  
Soggettività nei risultati

# SELF-PERCEPTION EVALUATION

## T30 – T60

Self-assessment test by answering questionnaires about **efficacy perception**, **sensorial** and **agreeable** characteristics about the product.

*Simple and Clear Questions*

*Questions focused on the study objective in order to support claims & communication.*

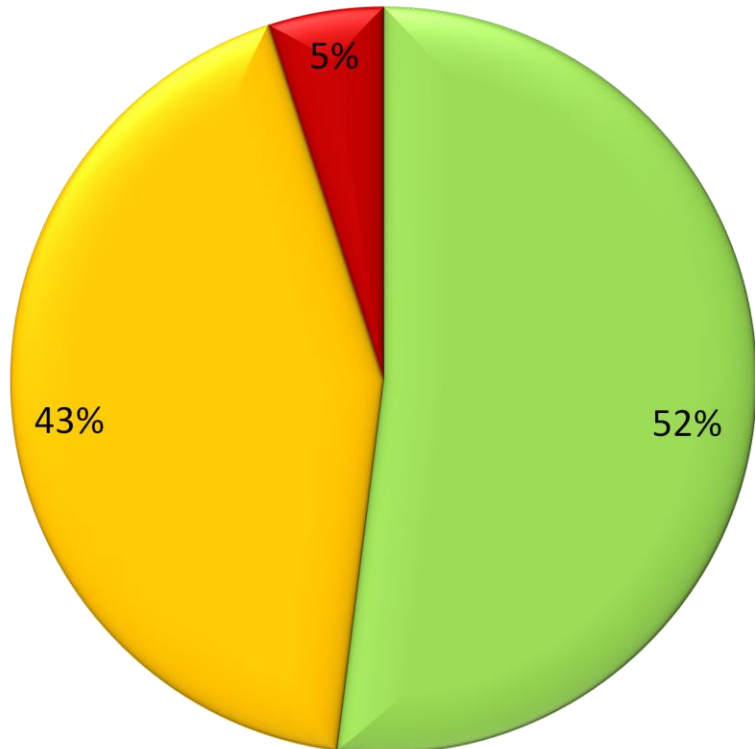
*Evaluation ratings easy to understand by the consumer.*



## SELF – PERCEPTION

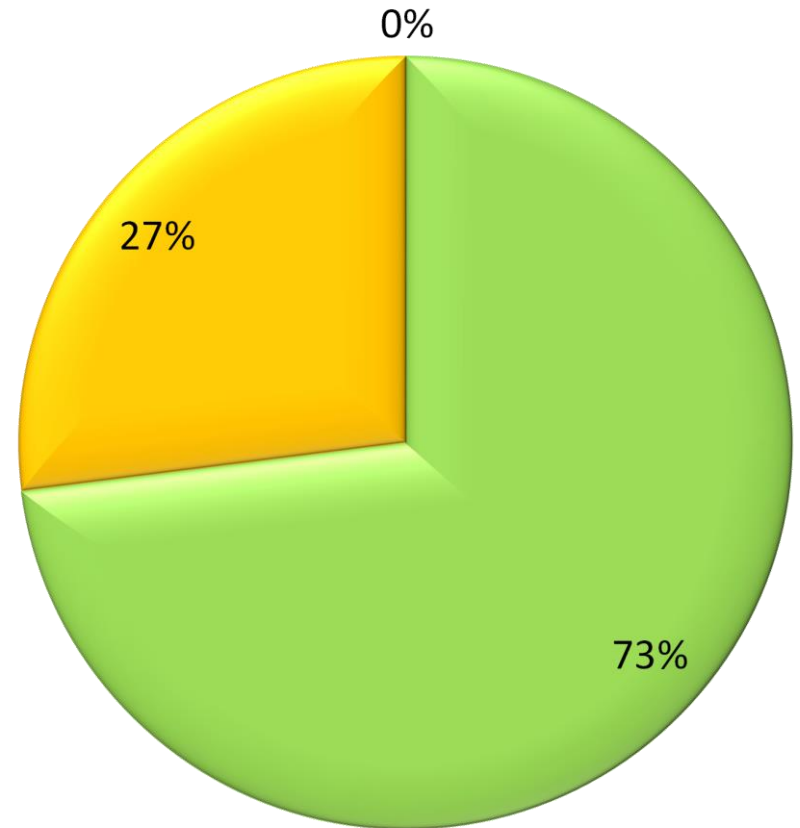
### EFFICACY EVALUATION

“After a treatment of **30 days** with the whitening product I see the intensity of the spots”:



- Attenuate
- Unchanged
- Increase

“After a treatment of **60 days** with the whitening product I see the intensity of the spots”:

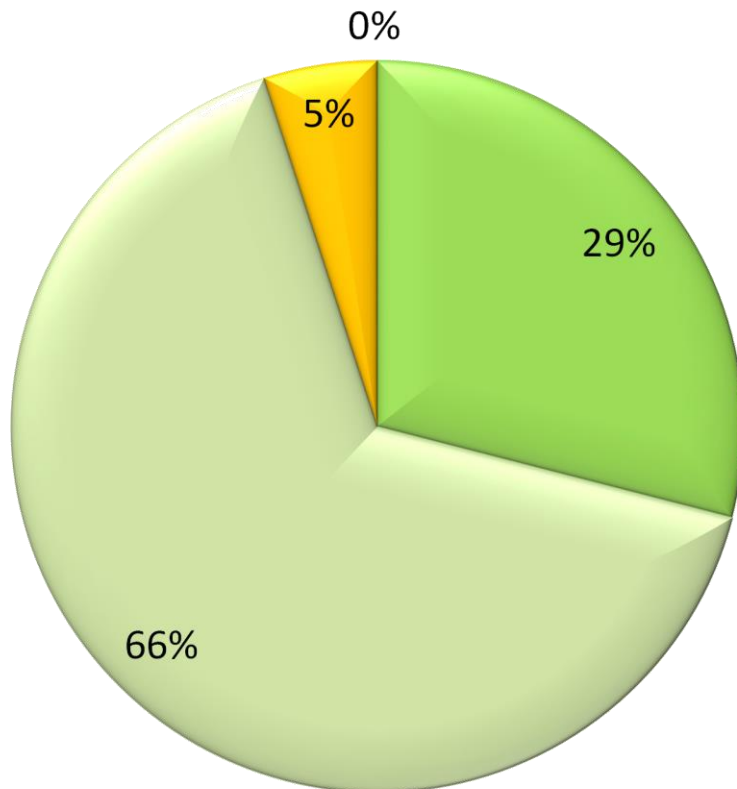


## OVERALL LIKING EVALUATION

T 30

“Overall, how satisfied are you with all the aspects of the whitening cream?”

T 60

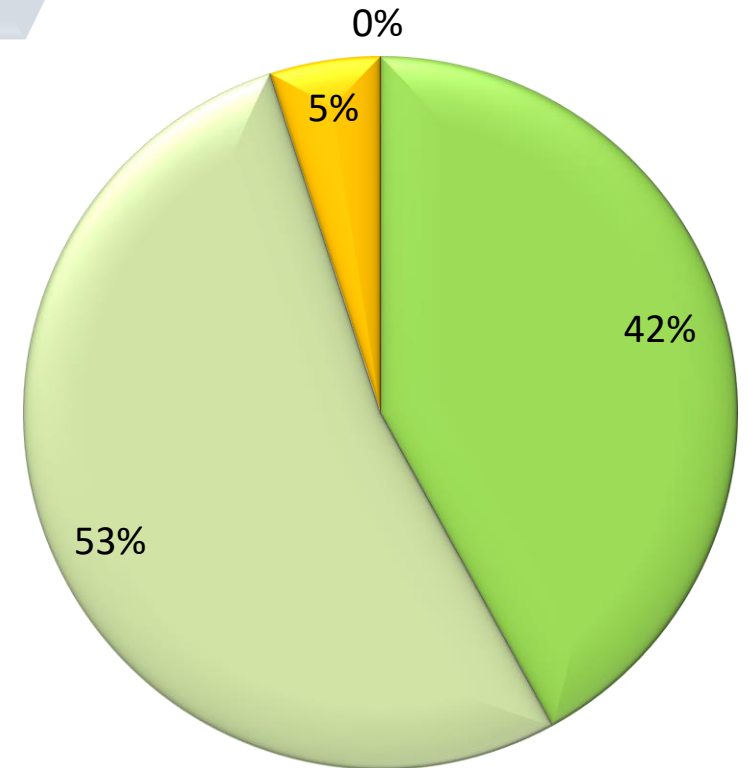


very good

good

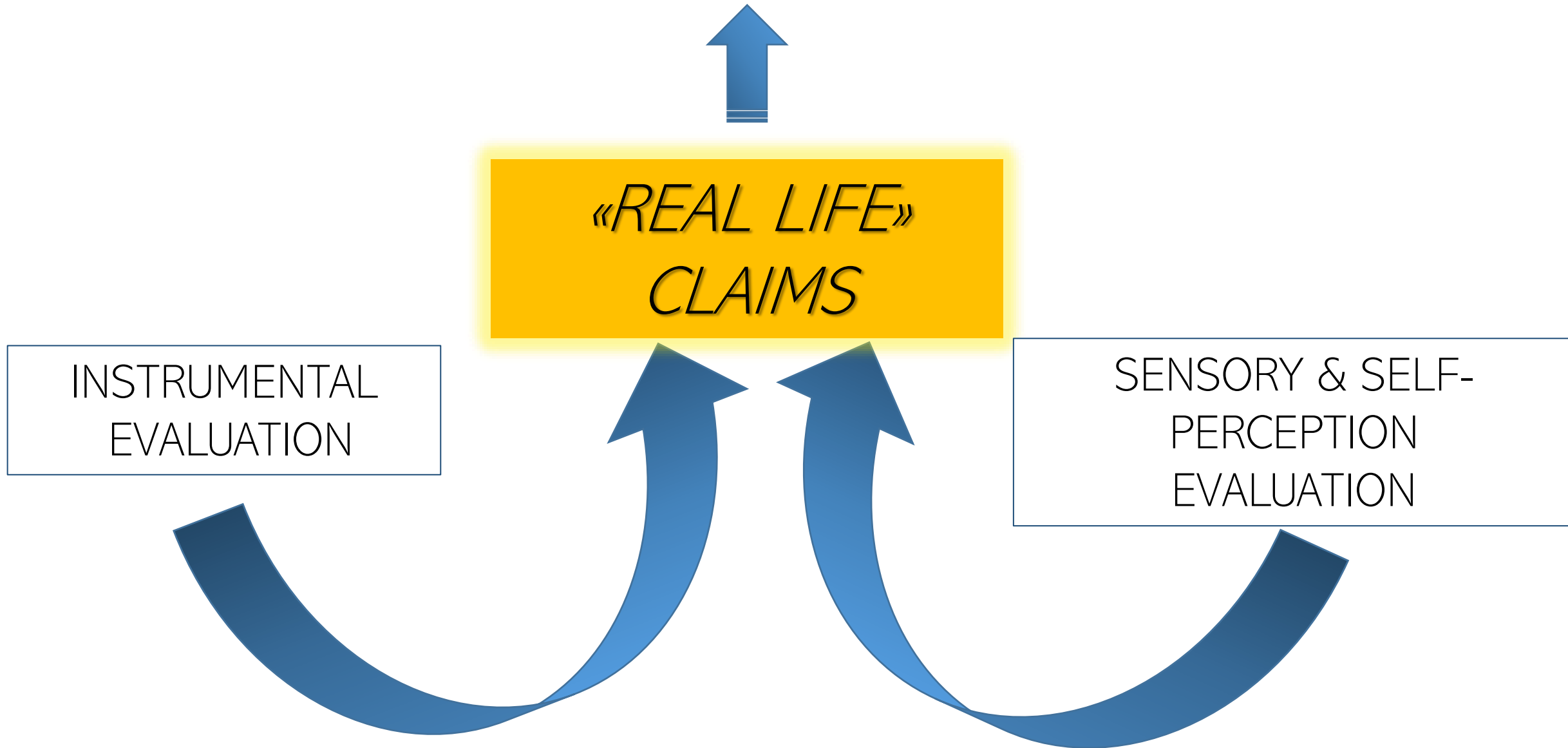
poor

not at all



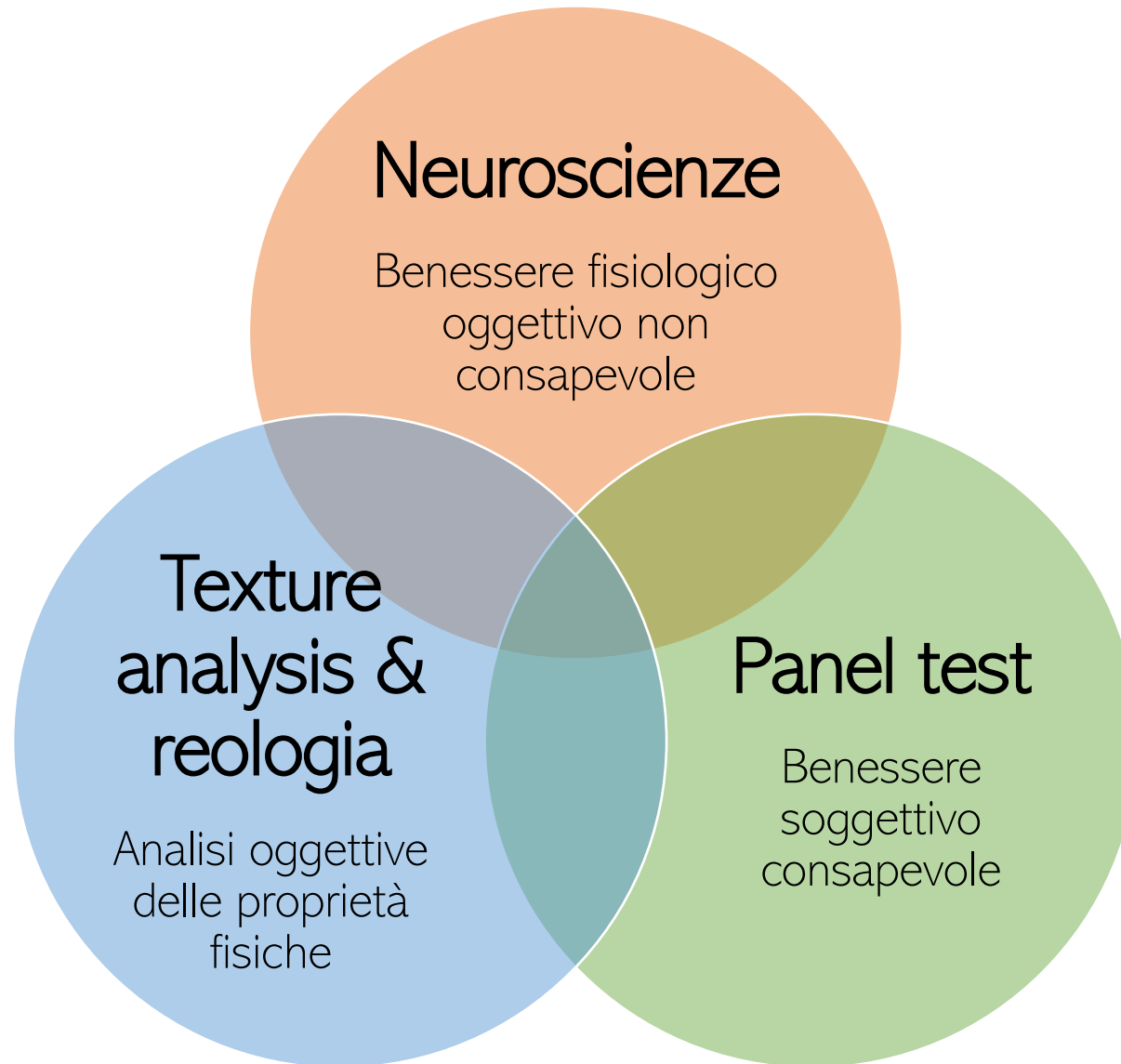
# AN INTEGRATED APPROACH FOR COSMETIC TESTING

---



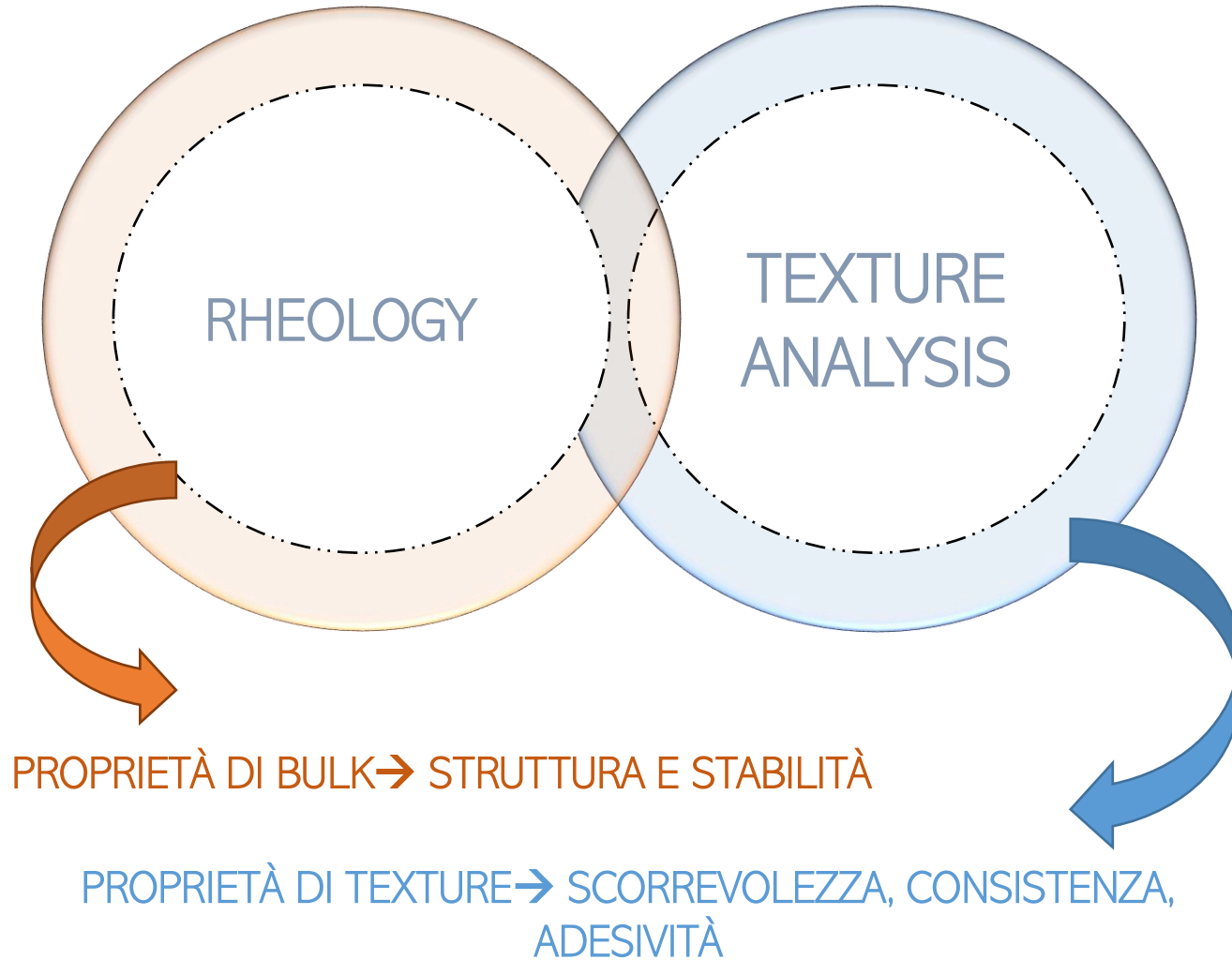
# IN-USE TEST WITH SELF-EVALUATION BY CONSUMERS

IN VITRO / IN VIVO



SUBJECTIVE/OBJECTIVE

# Misure strumentali per valutare le proprietà applicative del prodotto



*MISURE COMPLEMENTARI  
CORRELATE LLE CARATTERISTICHE  
APPLICATIVE E SENSORIALI*

Pick-up



Rub out



After feel



## A NEW DESIGN APPROACH

- ✓ Studio di neuromarketing per creare un nuovo protocollo di valutazione della risposta psico-fisica di benessere e piacere che produce l'applicazione di prodotti skin care.



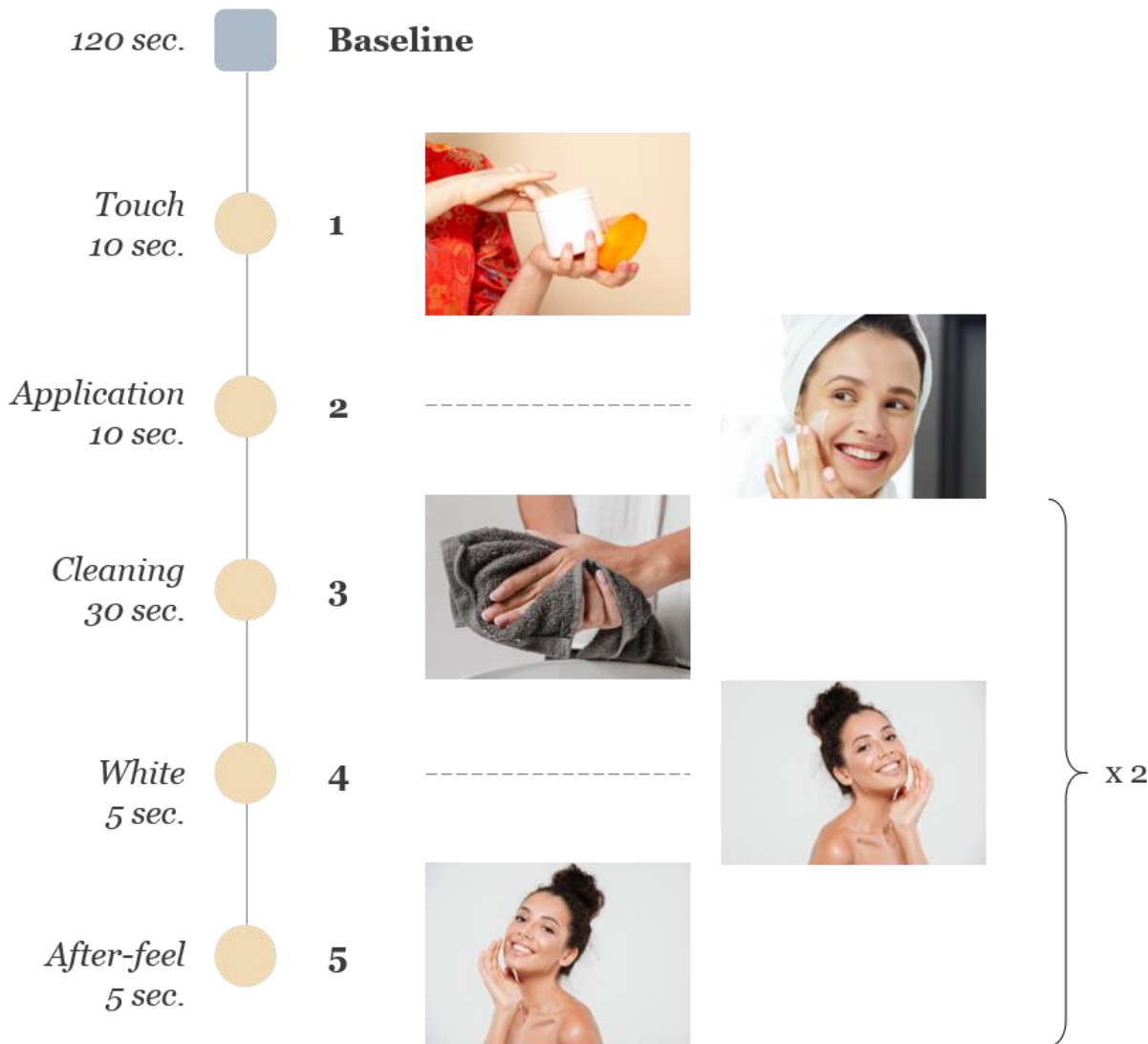
*A new design approach for cosmetic sensoriality: using neuromarketing to understand consumer feeling about the "Face Cream Experience"*



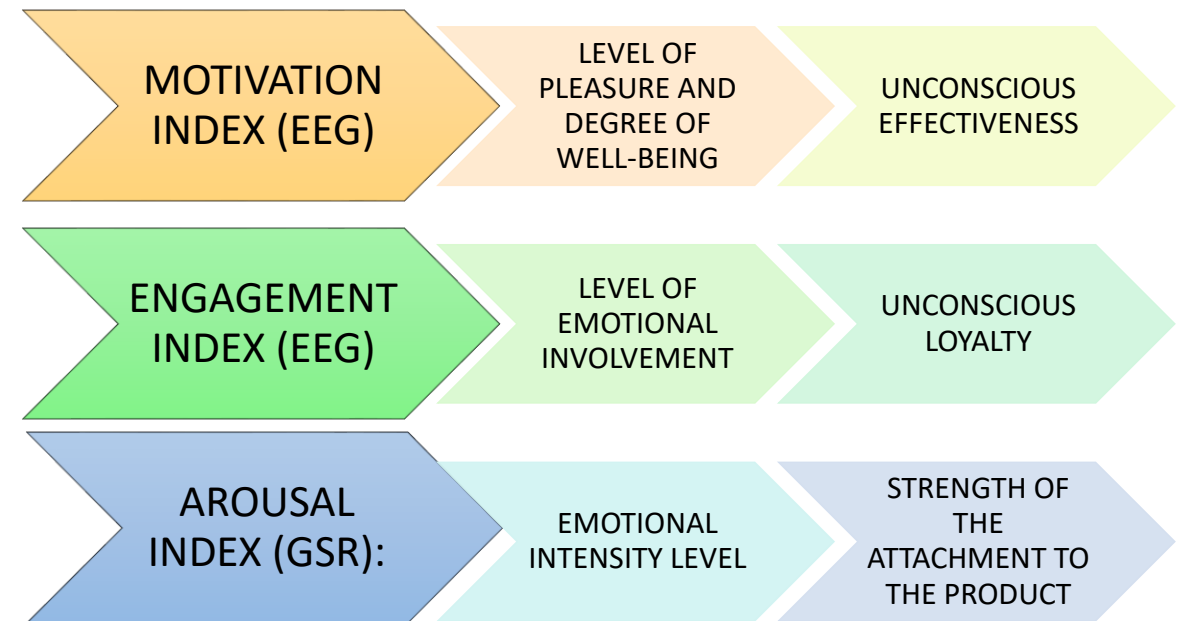
## *AIMS of the study*

*to decode the unconscious response to products  
and unexpressed needs of consumers*

*to better define marketing strategies and new  
efficacy claims.*




Experimental design



Physiological indexes

Review

# Quality of Life and Disease Impact of Atopic Dermatitis and Psoriasis on Children and Their Families

Chan Ho Na <sup>1</sup> , Janice Chung <sup>2</sup> and Eric L. Simpson <sup>3,\*</sup>

<sup>1</sup> Department of Dermatology, College of Medicine, Chosun University, Gwangju 61453, Korea; chna@chosun.ac.kr

<sup>2</sup> School of Medicine, Creighton University, Omaha, NE 68102, USA; JaniceChung@creighton.edu

<sup>3</sup> Department of Dermatology, Oregon Health & Science University, Portland, OR 97239-4501, USA

\* Correspondence: simpsons@ohsu.edu; Tel.: +1-503-494-2121

Received: 17 September 2019; Accepted: 25 November 2019; Published: 2 December 2019



**Abstract:** Atopic dermatitis (AD) and psoriasis are common chronic skin diseases affecting children. These disorders negatively impact the quality of life (QoL) of patients in health-related aspects such as physical, psychosocial, and mental functioning. This health impact is more accurately represented when accounting for the numerous comorbidities associated with each disorder, and the impact the disorders have on patients' families. A number of QoL tools have been developed and can be routinely implemented in the evaluation of QoL in pediatric patients and their caregivers. Ways to improve QoL include a multidisciplinary approach to care, education, and psychological support.

**Keywords:** atopic dermatitis; psoriasis; quality of life; QoL tools; multidisciplinary approach; education; psychological support



**Table 2.** Instruments to assess health-related quality of life (HRQoL) of pediatric patients and their parents/caregivers.

Dermatology-Specific Tools	Disease-Specific Tools	
	AD	Psoriasis
<ul style="list-style-type: none"> <li>- Dermatology Life Quality Index (DLQI) [30]</li> <li>- Children's Dermatology Life Quality Index (CDLQI) [24]</li> <li>- Infants' Dermatitis Quality of Life Index (IDQoL) [25]</li> <li>- Family Dermatology Life Quality Index (FDLQI) [31]</li> <li>- Skindex-Teen [32]</li> <li>- Toddler Quality of Life Survey [33]</li> </ul>	<ul style="list-style-type: none"> <li>- Dermatitis Family Index (DFI) [13]</li> <li>- Childhood Atopic Dermatitis Impact Scale (CADIS) [34]</li> <li>- Childhood Impact of Atopic Dermatitis (CIAD) [35]</li> <li>- DISABKIDS Atopic Dermatitis Module (DISABKIDS-ADM) [36]</li> <li>- Parents' Index of Quality of Life in Atopic Dermatitis (PIQoL-AD) [37]</li> <li>- Quality of Life in Primary Caregivers of children with Atopic Dermatitis (QPCAD) [38]</li> <li>- The Quality of Life in Parents of Children with Atopic Dermatitis [39]</li> </ul>	<ul style="list-style-type: none"> <li>- Children's Scalpdex in Psoriasis [40]</li> </ul>

HRQoL, health-related quality of life; AD, atopic dermatitis.

# THE ASSESSMENT OF SKIN-RELATED QOL IN INDIVIDUALS DISSATISFIED WITH THEIR SKIN: FACTOR STRUCTURE AND RESPONSIVENESS OF THE PADUA SKIN-RELATED QOL QUESTIONNAIRE

*Gioia Bottesi, Antonio Gion, Gianni Baratto, Alessandra Semenzato, Giulio Vidotto*

## Abstract

The current studies aimed at providing preliminary evidence about the factor structure, reliability, and responsiveness of the Padua Skin-Related QoL (PSRQ) questionnaire, an Italian self-report measure assessing skin-related Quality of Life (QoL) in people dissatisfied with their skin. The PSRQ was administered to 150 dermatological cosmetics consumers to test its factor structure and internal consistency. A further sample made up of 84 dermatological cosmetics consumers was then enrolled to evaluate the responsive-ness of the PSRQ.

Findings revealed the existence of 4 factors explaining the 54.8% of variance. Thirteen items of the original version were removed because they loaded on more than one factor or they had insufficient loadings; the final version of the PSRQ comprised 50 items, and internal consistency was excellent ( $.81 < \alpha < .95$ ). As regards responsiveness, only the "Positive feelings and emotions" scale resulted to be sensitive to change : individuals in the Experimental group reported significantly higher scores, after using a basic cream, compared to individuals in the Waiting list condition.

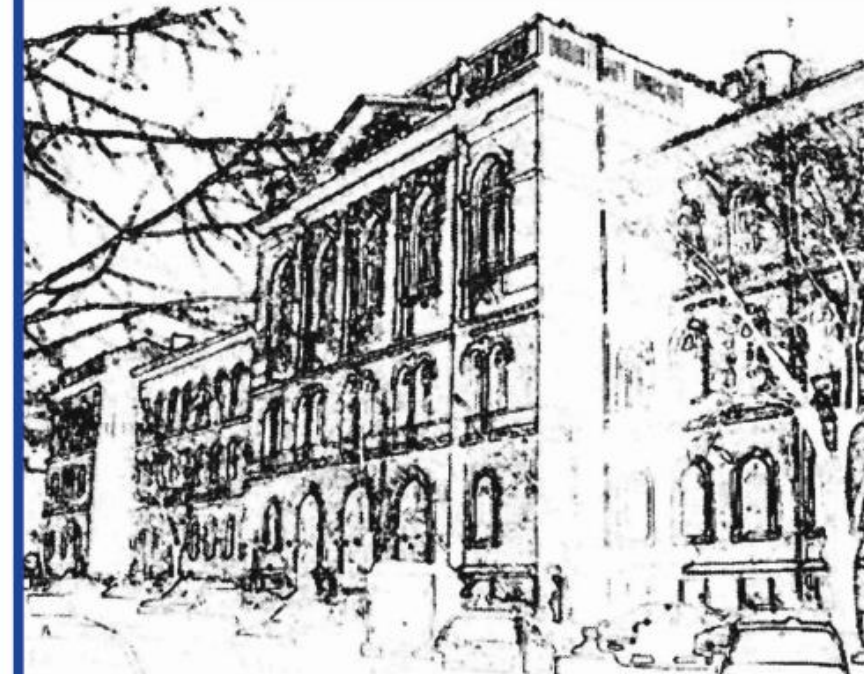
Current findings suggest that the PSRQ is a reliable measure capable of assessing multiple aspects of skin-related QoL in the target population. Further studies assessing its psychometric properties in different samples are recommended.

**Keywords:** Health-related Quality of Life; Well-being; Skin; Questionnaire; Psychometrics



## JOURNAL OF EVIDENCE-BASED PSYCHOTHERAPIES

The Official Journal of the  
International Institute for the Advanced Studies of Psychotherapy and Applied Mental Health  
(IIAS of PAMH)







*«Se usi i tuoi soldi per creare prodotti eccezionali avrai bisogno di spendere sempre meno in pubblicità»*

*«Non cercare clienti per i tuoi prodotti, ma cerca prodotti per i tuoi clienti»*

**Seth Godin**

*«Fare promesse e mantenerle è un bel modo per costruire un brand»*

*“Il nemico del marketing è la vendita mordi e fuggi, dove l'obiettivo è quello di vendere a tutti i costi, invece di acquisire un cliente a lungo termine”.*

**Philip Kotler**

*“Vi sono due tipi di imprese: quelle che cambiano e quelle che scompaiono.”*