ZOOM#30

skinobs

Édito

Skinobs is thrilled to bring you some news of testing experts for the Beauty Industry. Skinobs is hosting Boost Your Test at incosmetics Global in Paris, and then will be delighted to take on New York Supplier's Day with We Are Testing in May. 8 years after it's creation, Skinobs unveils a new version of the testing sourcing hub for beauty. Our vision remains the same: guide every evaluation manager in his evaluation project whether it is preclinical assays or clinical assesment. In this 30th ZOOM edition, we are happy ot bring you a summary of the in-vitro and in-vivo studies to evaluate healthy skin and, as usual, to share the latest news from our partners.



Happy reading! Anne Charpentier, CEO



We thank all our partners for their trust and collaborative work. They enable the evaluation managers around the world to use for free the testing database to substantiate claims. We are really glad to share this success with you.

Discover the 2.0 version!

All in one place: tests & CROs. Worldwide. In minutes.

8 years after the launch of the Clinical Testing Platform, Skinobs brings it's latest version: **Skinobs 2.0.**

New intuitive design, original features, for the same commitment to the beauty industry.

Log in to try the new features

- your private messaging,
- your project files & history,
- project appraisal & notes ...

You will never feel alone again in your evaluation projects!

- Q&A support,
- help desk,
- custom demo.

CONNECT FOR FREE SKINOBS.COM

PRECLINICALTESTING

500 Methods

50 Skin mechanisms

180 CROs

CLINICALTESTING

400 Methods 185 Claims 160 CROs



2023 KEY FIGURES

6 300 Users 34 700 Pages consulted 61830
Articles read

84
Users nationalities













Boost Your Test, in collaboration with in-cosmetics Global provides guidance for evaluating innovative and traditional claims. We assist in identifying suitable methods and selecting CROs worldwide for preclinical assays including stability, safety, container-content, and efficacy assays, and clinical objectivation such as tolerance, efficacy, sensory analysis, and consumer tests.

PhD Trials unveils a new strategy to evaluate anti-ageing claims



Using advanced image analysis and I.A, PhD Trials offers a new way to evaluate senescence effects on the skin. Artificial Intelligence algorithms are being used by scientists to create automatic classification systems that help and improve the output of large data sets. During in-cosmetics Global in Paris they present their innovative analysis methods for the evaluation of anti-ageing

products. With these methods they use some of the more advanced Al algorithms to classify and help to segment images obtained from our state-of-the-art systems such as the Confocal Microscope and the new VISIA CR units in order to speed the process and increase the sensitivity. www.phdtrials.com

C-Cube 3 measurements to prove your healthy skin's claims with Pixience



Healthy skin cells function correctly, retain moisture, and preventing harmful elements, maintaining a strong skin barrier against external aggressions. Healthy skin is well hydrated. Skin dryness often manifests itself as desquamation. The C-Cube converts image pixels into CIE L*a*b* measurements using its patented lighting and it specific color

calibration. Skin flakes are whitish and become visible when they are clearer than well-hydrated skin. Healthy skin requires good protection from external aggressors, notably pollution. Analyse the **amount of pollution with C-Cube 3**. It can detect and measure **pollution particles**. Compare formulations aiming at protecting of cleansing skin from pollutants. www.pixience.com

Enhancing sunscreen formulation and SPF through photodegradation testing with Abich Lifeanalytics



The physiological photodegradation of sunscreen filters follows a predictable pattern once normalization to the starting SPF value is considered. This baseline aids in predicting SPF loss over time and supports sunscreen formulation research and development. By understanding photodegradation, we can improve in-use behavior and prevent consumer harm. Additionally, this knowledge could

lead to a correction factor for in-vitro SPF measurements, potentially replacing costly and ethically challenging in vivo tests. While current in vitro methods lack reliability due to various real-life variables, addressing photostability is a crucial step towards a more efficient and ethical SPF testing process. www.abich.it

Antera 3D, hundred parameters by Miravex



The Antera 3D CS is a research-grade camera & software that will support your claims substantiation. It's versatile, precise, easy to use and it has been used in more than 150 scientific

papers. And it's FAST, completing a study in up to half the time than other devices. Real 3D images acquired with a patented method in less than 1 second contain information about skin colour, topography and spectral characteristics without any post processing. The powerful analysis software can output hundreds of measured parameters to an Excel spreadsheet in a single click. Support your claims on wrinkles, texture, pores, stretch marks, cellulite, brown spots, depigmenting, redness, inflammation, etc. Visit us at Booth 1V67 - www.miravex.com

Enhancing quality for consumer trust with Zurko Research







Testing the effectiveness of cosmetics with makeup products is essential to guarantee their quality and performance. These evaluations encompass various aspects such as durability, coverage, and skin compatibility, ensu-

ring that the products meet the expectations of consumers. Through rigorous assessments, factors like longwear and resistance to sweat, water, and everyday activities are thoroughly examined. The results obtained from these tests play a crucial role in refining formulations to enhance wear, pigmentation, and skincare benefits. Additionally, user trials offer valuable insights, ensuring that the products cater to diverse skin types. Overall, these measures instill trust and confidence among consumers, assuring them of the efficacy and safety of the products. Get these results with Zurko! www.zurkoresearch.com

ALS, a global company with local knowledge, customized solutions, innovation and technical excellence



ALS brings scientific and analytical solutions for the confirmation and support of claims. Beauty & Personal Care division is totally dedicated to the personal hygiene, perfumery and cosmetics industry, with more than 40 years of combined experience delivering results to clients in 32 countries, providing the best and most reliable solutions for

decision making. People, equipment and technical knowledge in a single place. When these variables intersect, performance allows for more control and comparability of results. Diversity and control all in one place. At ALS they make it easy. www.alsglobal.com



CLINICAL EVALUATION

Multi-modal in-vivo evaluation of healthy skin with IEC Group



IEC Group offers a multifactorial analysis of healthy skin integrating hydration, barrier function, radiance, homogeneity of skin tone and

texture, elasticity, specific biomarkers and also the skin microbiome, by combining several approaches:

- Instrumental: Moisture Map (C&K), VisioScan (C&K), Tewameter (C&K), C-Cube (Pixience), Fringe Projection (Dermatop Eotech), multi-parameter analyzes from Colorface (Newtone)
- Clinical: scoring by trained assessors of parameters such as skin texture, color homogeneity, radiance
- Biochemical: skin surface samples for analysis of microbiota and specific biomarkers such as proteins, enzymes, NMFs, lipids, ceramides
- Perception: perceived effects by trained assessors or naive subjects, with 9 EIZO ColorEdge 27" LCD Monitors for grading photos.

This expertise is performed in relation to skin type specificities and cultural perception in the 9 IEC test centers in France, Bulgaria, South-Africa, and Asia (Japan, Singapore, Korea and China) www.iecfrance.com

Factors in evaluating healthy skin by Validated Claim Support



The evaluation of healthy skin involves assessing various factors to determine its **overall well-being**. Some key aspects to consider are moisture content, texture, color, elasticity, pores, blemishes and imperfections, sun damage and irritation. Validated Claim Support can evaluate these factors with **expert visual clinical grading**, the latest **biophysical instrumentation measurements** and

dermatologist approved oversight. Our proprietary high resolution before and after photography is widely accepted as the best in the industry. Give your customers a reason to believe and let VCS custom design a clinical study to substantiate your claims and support your overall marketing strategy. www.validatedcs.com

Healthy skin: Ellead's skin tone evaluation with color chip specialized for skin color analysis.



Ellead has developed a **new efficacy evaluation method** that incorporates emotional expressions representing skin color and has hold a patent. It is possible to **quantify complex and emotional skin expressions** such as "healthy skin", "radiant skin" or "dull skin" and check the statistical significance through the improvement rate. This is a new method of quantifying and

evaluating through vague skin improvement rates, unlike conventional methods that used to evaluate through simple parameters such as CIE-Lab or digital color space. If you want to quantify the effectiveness of your product on vibrant, healthy, and radiant skin, you can contact Ellead. www.ellead.com

Come onboard of Complife healthy skin journey!



Maintaining healthy skin involves a delicate balance of various factors such as hydration, microbiota or environmental conditions like climate. This is why in Complife labs we developed a device that enables to modify temperature and hygrometry, to test in-vivo your cosmetic product performances under different climate conditions. Do not miss our technical seminar at in-cosmetics Global in Paris to discover more! And if you wish to deep dive into skin structure to discover the impact of your products on skin barrier and up to the dermis, experience with

us one of the latest devices: the Line-field Confocal Optical Coherence Tomography (LC-OCT) that provides cellular resolution in 3D...and many more solutions to discuss together! www.complifegroup.com

Top 8 claims 2023 Analyzing the stratum corneum with XFluo® 3D: structural characterization of corneocytes by Kamax

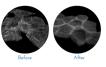


- 1 Hydration
- ² Anti-ageing
- Firming
- 4 Depigmenting
- 5 Barrier function

Clinical Studies

- 1 Hydration
- ² Anti-ageing
- 3 Nourishing
- 4 Anti-UVB
- 5 Anti-Maskné





- Kamax expands its testing range by introducing a **new application** of its innovative and patented XFluo® 3D technology. The startup provides a qualitative and quantitative analyses of the stratum corneum:
- 4K visuals with **3D images and videos of corneocytes** to compare before/after effects.
- Roughness parameters.
- Data on the barrier function state through precise morphological analysis of corneocytes at different layers of the stratum corneum.

This innovative protocol allows to claim **moisturising**, **improvement of the skin barrier function or skin softness effects. www.kamax-innovative.com**

CIDP's approach of cosmetics assessment in restoring skin barrier surface function



Evaluating the barrier function entails examining the skin's ability to retain moisture and defend against environmental stressors including but not limited to, measurement of transepidermal water loss (TEWL), skin pH, skin hydration levels, sebum production etc. Serums and moisturizers are known to restore the barrier function to a great extent. But of the plenty of cosmeceuticals available, which one to use? At CIDP, a highly trained team conducts studies to visually assess the

impact of a product coupled with instrumental evaluation wherein a significant decrease in TEWL using Tewameter or an improvement in skin hydration using Corneometer after product application and Corneometer reading after minimally invasive tape-stripping indicating product penetration can substantiate the efficacy of these products. These studies can be coupled with skin imaging and dermatological assessments to measure various signs of inflammation or damage. ww.cidp-cro.com

Healthy skin, better than ever



Personal care and toiletries are now designed to make the skin healthy. Healthy skin is frequently described as beautiful, flawless, glowing, and young. The healthy skin care maintains the skin in good state, protects it from the external aggression and helps to regulate the bad influences of the internal stresses. This is a question of aspect and perceived comfort; it generates a globally positive impression of good health. Skin treatments must correct any abnormality in skin health that deviates from the definition so that it attains the desirable attributes.

Find on the platform

140 methods
36 countries
190 CROs

Globally these products could help to decrease the imperfection of the skin (acne), the redness, optimise the skin structure and relief, improve the complexion radiance and the oxygenation, increase the tonicity and the elasticity, maintain a good level of hydration and the skin

barrier, respect the pH, the epidermis renewal and the microbiota, normalise the sebum, improve the skin softness and comfort.



MEASUREMENT DEVICES

3D skin relief analysis for pores measurement by Eotech



Although essential for exchanges between skin cells and the external environment, pores are also a source of imperfections (clogged or dilated pores). Fringe projection is a technique to measure in vivo with great precision the 3D skin relief. Using this technology, EvaSKIN and AEVA-HE² scanners, combined with an Eotech positioning bench, measure the size of pores on the face (number, volume, depth and area), especially on each side of the nose where they are most visible. The effect of cleaning, scrubbing or astringent products can thus be reliably quantified. www.eotech.fr

Examine all aspects of skin with the SkinCam by Newtone Technologies



Environmental stresses can harm the skin, leading to dryness, roughness, and irritation. The cosmetic industry aims to nourish and protect this organ precisely to prevent the detrimental effects of the environment and other exposome components. The SkinCam, a portable imaging device, captures high-quality 2D images from different body regions and even allows for 3D reconstruction. With a proven track record in diverse research areas, SkinCam assesses skin texture, color variations, scars, and dermatological conditions, including those that cause lesions such as inflammation, atopic skin, and pigmentation changes. Its efficacy and simplicity of use make it invaluable for clinical research on skin health and the substantiation of related claims.

www.newtone.fr

Gold standard skin measurement systems from Courage + Khazaka



You want to assess the different parameters around healthy skin? Here you will find all you need. The state-of-the-art TEWL probe, Tewameter TM Hex with its "open chamber" measuring principle has already been successfully established as barrier measurement standard because nothing compares to its accuracy and reproducibility.

Besides the barrier intactness, other benchmark systems, backed up by several hundreds of publications, are available: Corneometer (skin hydration), Sebumeter, (sebum content), Skin-pH-Meter, Mexameter (melanin and erythema assessment), Cutometer (the strength of collagen and elastin fibres), the new Skin-Colorimeter Flex CL 440, Visioscan imaging and many more. Build your own measurement centre according to your needs and application. Our almost 40 years of experience are at your disposal. www.courage-khazaka.de

Revolutionizing skincare: the introduction of T-Skin for enhanced product by Microfactory



Hydration is essential for maintaining healthy skin. Beyond simple water intake, cosmetic products significantly contribute to skin's barrier protection through occlusive or film-forming effects. Traditionally, these products are evaluated through volunteer testing, considered the standard despite the considerable variability in results. To overcome this limitation, Microfactory has introduced T-Skin, a groundbreaking innovation that replicates the skin's natural pervaporation

mechanism. This allows for precise measurements of a **product's barrier effect**, offering a more reliable method for evaluating cosmetic products. This technological advancement promises to enhance skin hydration and overall health, marking a **significant step forward** in skincare research. **www.microfactory.eu**

Upcoming

2024

1-2 MAY NEW YORK SUPPLIER'S DAY

29-30 MAY

COSMETOTEST

4-6 JUNE

ISBS 2024 CONGRESS

24-26 JULY IN-COSMETICS KOREA

25-26 SEPT. IN-COSMETICS LATIN AMERICA



PRECLINICAL ASSESSMENT

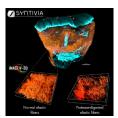
Skin microbiote and GLYcoPROFILE pre-clinical studies: Put innovation in your cosmetics ingredients with GLYcoDIAG



GLYcoDiag offer cosmetic ingredient evaluation through it's two specialities: Microbiote and Glycosciences. Ingredient activities on skin microbiote can be demonstrated on specific co-culture models mimicking skin environments in order to know the ability of your product to modulate: (1) diversity and growth of microbiota, (2) adhesions of respective microbial strains on corneccytes, (3) protect microbiote from environmental stresses. Moreover, our own

technology platform GLYcoPROFILE allows to determine interaction profiles of « glyco-actives » ingredients with glycans binding proteins thus anticipating afterwards on potential biological properties relevant for cosmetic applications. www.glycodiag.com

3D analysis of altered dermis by Syntivia



The Syntivia team has developed an ex-vivo human skin models with altered dermis after protease digestion. This model mimics accelerated intrinsic skin aging. After treatment, the skin explants are fixed and cleared to enable analysis by light-sheet microscopy. The skin can thus be imaged in 3D from the stratum corneum to the hypodermis. This allows us to study the different layers of the skin, as well as the different appendages. In partnership with Imactiv-3D, we observed regions of interest in the reticular dermis to quantify elastic fibers density and length. The partial alteration of the dermis in this ex-vivo model makes it possible to test the effect of products on dermal reconstruction for skin health improvement. www.syntivia.fr

StratiCELL-BOX, new cost-optimized multi-testing solutions by Straticell



Since the beginning of 2024, StratiCELL has been launching the StratiCELL-BOX, packages of multiple in-vitro assays for dermo-cosmetic claim objectivation. The originality lies in the technical organization of these tests, to optimize resources and therefore reduce unit costs. The first two cosmetic topics focus on skin ageing (Skin-Ageing-BOX) and skin protection against the exposome (Pollution-and-Light-Damage-BOX). Fully adapted to study several non-formulated compounds in parallel, these in-vitro multi-testing solutions facilitate the biological efficacy screening phase and accelerate the entry of new skin care active ingredients on a highly demanding market. www.straticell.com

In-vitro assays, a wealth of resources to evaluate healthy skin

The protective function of the epidermal barrier assumes a vital multifaceted role in safeguarding the body from environmental perturbations and in regulating transcutaneous permeation. The Stratum Corneum (SC) confers indispensable and dynamic attributes imparting a hydrophobic shield. This barrier maintains a delicate equilibrium essential for the preservation of skin health, thereby mitigating manifestations of sensitivity. Structurally, the SC exhibits a **stratified arrangement** and can be conceptualized as a composite material structured according to **w brick and mortar** w architecture, wherein a proteinaceous framework (corneocytes) is ensconced within a lipidic scaffold (intercellular lipids).



The «mortar» in this analogy denotes **lipids**, **or lamellar membranes**, enveloping corneocytes. Epidermal cells synthesize these, storing them in keratinocytes as lamellar bodies. As keratinocytes ascend into the stratum corneum, these bodies are discharged into the extracellular matrix surrounding corneocytes, forming lamellar membranes. Abalanced 1:1:1 ratio of **sterols**, **ceramides**, and **free fatty acids** within lamellar membranes maintains a healthy **permeability barrier**, crucial for preventing water loss and the ingress of allergens,

free radicals, toxins, and microorganisms.

Find on the platform

192 tests 58 providers 12 countries Despite comprising «dead» corneocytes, the stratum corneum exhibits metabolic activity, employing enzymes and cytokines for desquamation, inflammation reduction, lipid synthesis, and cell proliferation. The stratum corneum's surface forms the acid mantle, whose pH, when disturbed, initiates natural healing mechanisms. Yet, chronic acid mantle damage induces sustained inflammation and diminishes UVB protection and moisture retention capacities.

Skin barrier integrity can be evaluated using skin explants or **3D** reconstructed skin models, measuring Transepithelial/transendothelial electrical resistance (TEER) or the permeation of molecules through the epidermis via Franz Cell or other methods. The formation and renewal of this integrity are linked to

keratinocyte proliferation, differentiation, and desquamation. Biomarkers like keratins, transglutaminases, and filaggrin control these processes. Components of the dermal-epidermal junction, including Laminin 332 and integrins, affect keratinocyte survival and barrier function. Tight junction proteins like Corneodesmosin and Zonula Occludens 1 maintain cohesion between corneocytes, crucial for preventing molecule transfer.

Lipid composition, thickness, and organization are vital for barrier function and can be assessed using Raman microspectroscopy and liquid chromatography coupled with mass spectrometry, offering insights into ceramide synthesis and organization. Proper hydration and pH are essential for **enzyme function** in stratum corneum formation. Overall, these methods provide comprehensive evaluation of skin barrier function at various levels.



How do you get perfect glowing skin by Mérieux Nutrisciences



The mind-body link is key to beauty's role in well-being. Managing stress and emotions with mindfulness and **stress reduction** can improve skin health. How Mérieux NutriSciences can evaluate the efficacy of your product enhancing **mindfulness** that claim for a perfect glowing skin?

• **Urban shield:** an integrated and **multi-tool approach** exploits the synergies of in-vitro and in-vivo techniques to demonstrate the **skin resilience improvement** through the barrier effect against urban dust

and water loss (TEWL), enhancing the SPF protection.

- Glow effect: skin glossymeter evaluation measuring gloss on volunteers.
- End users mindfulness: implicit measurements offer an indirect approach to capturing emotions tied to product sensory properties without conscious awareness. www.merieuxnutrisciences.com

Effects on skin microbiota only or whole skin or skin without its microbiota by Phylogene



With the «omics» and bioinformatics analysis, Phylogene offers a **broad** evaluation of the effects of cosmetics on its microbiota or on whole skin.

- qPCR (targeted) quantification of major genera/species of the skin microbiota to determine whether or not the product impacts the targeted entities.
- Comparative metagenomic study of the microbiome of the skin by NGSequencing 16S rDNA and/or ITS to know the diversity and the

taxonomic composition of the microbiome and to know if the product impacts or not the microbiome.

• Comparative metaproteomic study of the microbiota and the skin by nanoLC-MS/MS proteomics, and data complementary bioinformatic/biostatistical analysis by CORAVALID and HolXplore for a functional description of the effects on the skin and its microbiota simultaneously in order to understand the mechanisms of action. www.phylogene.com

Tightening environmental regulations: Expertox unveils Etoxia!



Expertox introduces Etoxia, its ecotoxicological data portal, in anticipation of upcoming regulations mandating industrial assessment of environmental impact. Currently in beta, Etoxia offers subscription-based access to vital information on substance ecotoxicology. Stay alert to environmental toxicity risks related to your raw materials, and access data such as biodegradability, bioaccumulation, aquatic toxicity... The data will be re-

gularly updated and, eventually, supplemented with regulatory information for a **comprehensive view** of the ecotoxicological aspects of your products. Contact us now to secure your subscription! **www.expertoxcabinet.fr**

Art of combining science and technology at Dr. Goya Anàlisis



Skin surface imaging is revolutionising the cosmetic industry. Using techniques such as confocal microscopy or 3D imaging, it is possible to examine minute details of the skin, from superficial alterations to cellular structures. These images provide crucial information for assessing the efficacy of dermo-cosmetic products. In addition,

advances in AI have enabled the development of algorithms that automate image analysis, streamlining and improving the process of clinical evaluations of cosmetic products or ingredients. At Dr Goya Anàlisis they have 3D imaging technology (AEVA, VISIA) to help our clients with their products and claims. www.laboratoriogoya.com

CONTACT US

COSMETICS TESTING NEWS

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Immediate SPF protection by Helioscreen



HelioScreen developed a new method allowing to evaluate the immediate protection of your product, an important criteria to ensure a better security for your customers.

This test is based on the future norm ISO 23675 for the in-vitro determination of the Sun Protection Factor (SPF). The product is applied on PMMA plates thank to the HD-SPREAD-MASTER. In order to evaluate the immediate protection, the plates are measured just after the spreading, with no exposure step. We repeat the measure at different times to observe any variation of the SPF. To be claim as Immediate Protection sunscreen, we need to observe a low variation of the SPF over time. www.helioscreen.fr

Evaluate the texture of your cares and foundations with Syres sensory experts



Syres Sensory experts are qualified subjects who have demonstrated high sensory sensitivity and have received training. They are able to perform sensory evaluations of different products.

Objectives of their sensory panel:

- Characterize the sensory angle of a care or a foundation
- Compare its characteristics with those of its competitors
- Monitor its **positioning** in relation to the market
- Quantify potential differences
- Link the sensory data of a product with hedonic or instrumental data
- Identify and measure the effects of a change in formula or process on a few key characteristics
- Follow the evaluation of the sensory texture properties of a product over time
 A real aid to development and optimization! www.syres.fr

Byome Labs, expert in microbiome testing & analysis



Startup born from passion and commitment to microbiome-related technological innovation, Byome Labs offers a full range of microbiome analyses. From client support to

formulating microbiome-friendly products, our expertise includes skin, oral, vaginal, and scalp microbiomes. We also assess microbiome safety and efficacy. Additionally, we're developing a groundbreaking offering, developed with dermatologists: immediate analysis of the consumer's skin condition with Al-driven beauty routine recommendations, providing a personalized and innovative experience. www.byomelabs.com