Half of the world’s population lives in cities. Pollution is now a major concern for consumers. What is the impact on Earth? On my health? And on my skin!? Exposed to urban pollution, the skin becomes more sensitive. It loses its brightness and ages prematurely. This is «Polluaging®».

Algues & Mer (A&M) innovates with an incredible active ingredient: INVINCITY®, one of the most complete and achieved actives fighting pollution. It protects the skin from the inside and fights its damages to prevent Polluaging®.
1. ANTI-POLLUTION

INVINCITY® acts well before the visible reactions caused by pollution, regulating a specific receptor to polyaromatic hydrocarbons and some heavy metals: AhR.

AhR (Aryl hydrocarbon Receptor) are found in keratinocytes, melanocytes, fibroblasts & Langerhans cells. When activated by a pollutant, they trigger the expression of genes controlling reactions like oxidative stress, inflammation, melanogenesis...

INVINCITY® 3% decreases AhR expression by 73% compared to placebo. (1)

2. BARRIER REINFORCEMENT

The first role of skin is to protect the body from external attacks. A deficit of mature corneocytes leads to a dysfunctional barrier.

The impact of Fucoidans from Ascophyllum nodosum extract on the Cornified Envelope (CE) maturation process was evaluated on reconstructed epidermal skin.

The Transepidermal Water Loss (TEWL) is an indicator of the barrier dysfunction.

Native Fucoidans 5% increase the number of mature CE by 225%. (2)

In vivo and after 56 days, INVINCITY 3% decreases the TEWL by 13% versus placebo. (3)

Experiment sources:
(1) Ex-vivo test: Evaluation of the anti-pollution activity of INVINCITY® on Human skin explants
(2) Biological effect of various sulfated polysaccharides from algae on skin barrier function through their impact on corneocytes maturation, Potter et al; 2011
(3) In-vivo double blind-study – INVINCITY® 3% vs placebo - 56 days – 15 urban women

www.algues-et-mer.com
1. GLOBAL BRIGHTNESS

- ANTI-DARK SPOT

The tyrosinase is a key enzyme of the melanogenesis. It contributes to the melanin production by catalyzing the first chemical reactions of the synthesis pathway, leading to dark spots.

INVINCITY® shows a significant tyrosinase inhibition activity with a dose-dependent effect.\(^{(4)}\)

*In vivo*, after 28 days, INVINCITY® 3% decreases melanin content by 8% compared to placebo.\(^{(3)}\)

- ANTI-REDNESS

When the skin detects pollution, it sends an alert message which activates the production of inflammatory mediators. VEGF (Vascular Endothelial Growth Factor), one of these specific mediators, boosts the vasodilatation and the capillary permeability: redness appears.

After an oxidative stress, VEGF concentration rises.

From INVINCITY® 0.5%, it comes back to the baseline level.\(^{(5)}\)

*In vivo*, after 56 days, INVINCITY® 3% decreases hemoglobin content by 9% compared to placebo.\(^{(3)}\)

2. FIRMNESS

In the dermis, collagen brings structural support to the skin, therefore its firmness.

The analysis of the general morphology shows that INVINCITY® 3% improves the epidermal morphology and increases collagen density in the papillary dermis.\(^{(1)}\)

Experiment sources:

(4) In-tubo evaluation of the effect of INVINCITY® on tyrosinase modulation

(5) In vitro evaluation of the effect of INVINCITY® on VEGF modulation after oxidative stress on human keratinocytes
A&M: THE FUCOIDANS EXPERT

A&M is an expert in actives extracted from seaweeds. Located in an outstanding wild area, Ouessant Island, in Brittany, at the western tip of France, A&M has a unique know-how to produce Fucoidans with various molecular weights. Naturally present in brown seaweeds only, Fucoidans are sulfated polysaccharides. They are well-known for many different benefits in cosmetics and medicine. A&M also develops drug applications with high level academic researchers.

INVINCITY® is concentrated in High Molecular Weight (HMW) Fucoidans, over 100kDa. A&M extracts INVINCITY® from organic certified Ascophyllum nodosum seaweed, harvested and processed on Ouessant Island.

We will be very pleased to welcome you on our stand N46 at IN-COSMETICS Paris 2016

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Visuals available on request