



IMAGING PLATFORM FOR DERMO-COSMETOLOGY ASSESSMENT

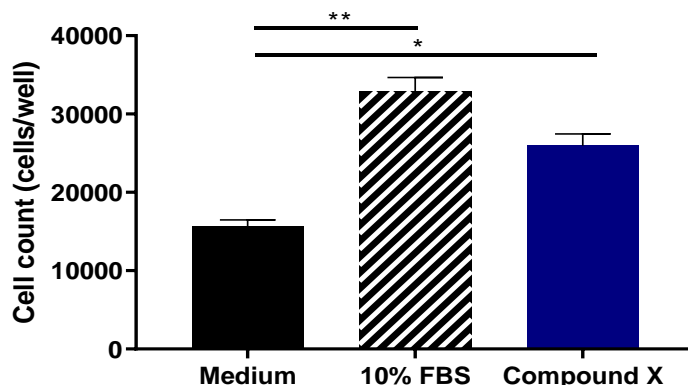
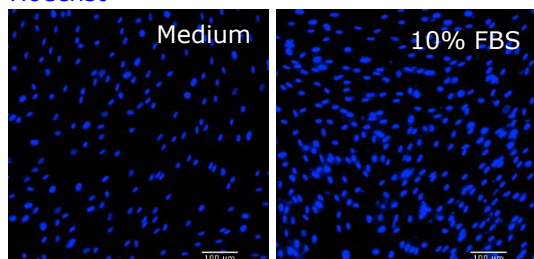
ANTI AGING ASSESSMENT

Skin aging is a natural and physiological process which can be accelerated by multiple factors. HCS Pharma has developed models to assess actives efficacy against it.

Skin aging process is characterized by a decrease in the dermal **fibroblasts proliferation** as well as their **production of ExtraCellular Matrix (ECM) components**, such as collagen and elastin fibers. A reduction in the levels of functional dermal components results in the emergence of clinical aging features, such as wrinkles and reduced elasticity.

➤ **Fibroblasts Proliferation : does my active stimulates cells ?**

Hoechst

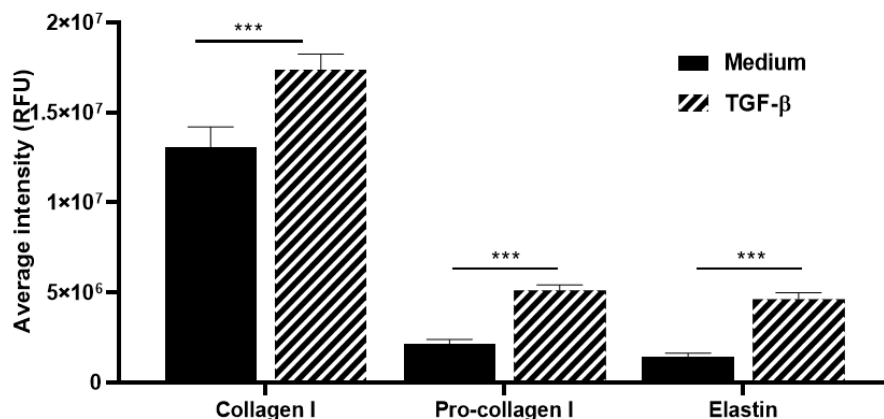
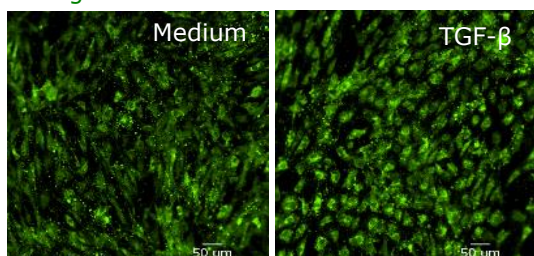


Endpoint : fibroblasts nucleus count after 3 days of culture.

T-test (* p-value < 0.05 ; ** p-value < 0.01 ; *** p-value < 0.001)

➤ **ECM Synthesis : does my active stimulates collagen and elastin production ?**

Collagen I



Endpoint : expression of pro-collagen, collagen, and elastin, produced on fibroblasts surface.

T-test (* p-value < 0.05 ; ** p-value < 0.01 ; *** p-value < 0.001)

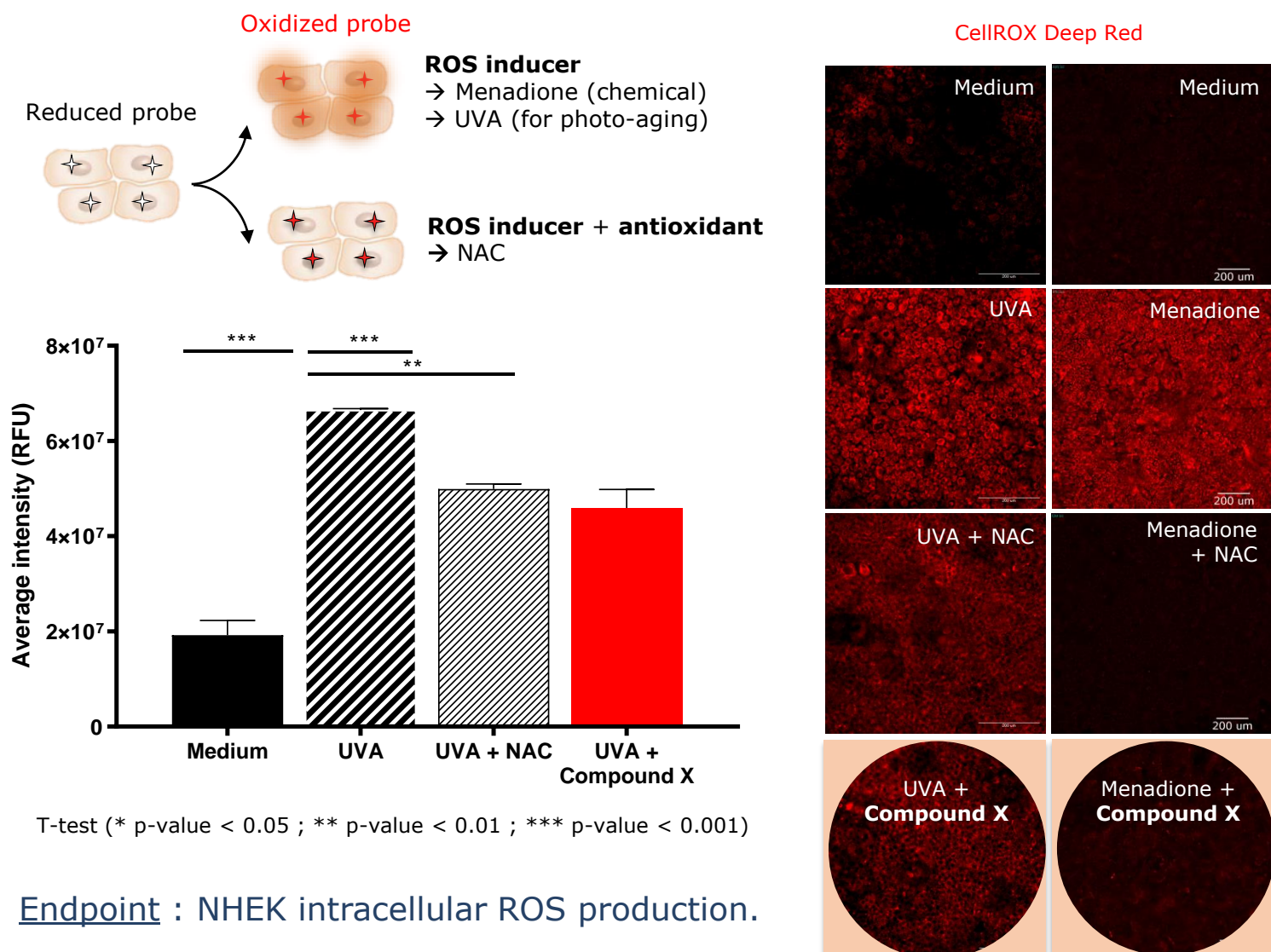


HCS Pharma

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Skin aging process involves genetic and environmental factors, including UVA light, considered as one of the most dangerous oxidative factors (**photo-aging**). **Oxidative stress** is characterized by an increased production of Reactive Oxygen Species (ROS), unstable chemical species formed by cellular entities of skin. Without effective action of endogenous and exogenous antioxidant systems, this leads to skin ECM degradation and cellular changes, generating aging signs, such as stains or redness.

➤ Oxidative stress / Photo-aging : has my active a protective effect ?



Check our other brochures for more details on each model, or visit our website.