



HCS Pharma

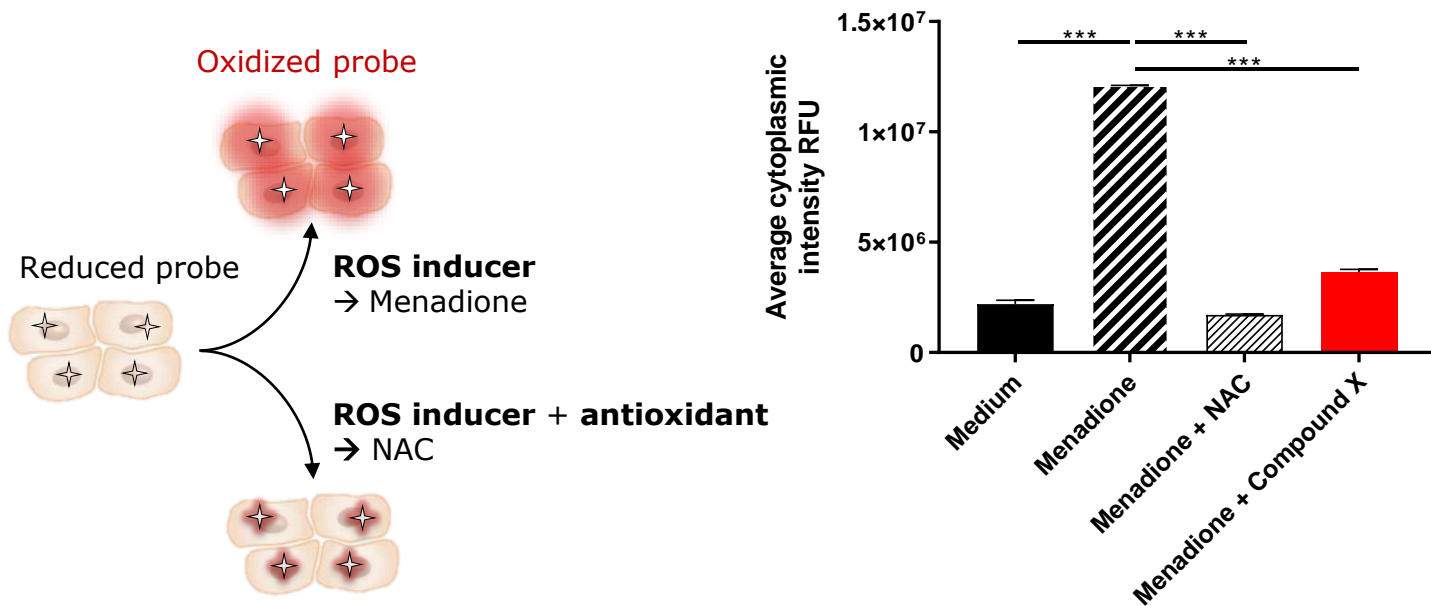
IMAGING PLATFORM FOR DERMO-COSMETOLOGY ASSESSMENT

OXIDATIVE STRESS ASSESSMENT

Skin is a major target of oxidative stress, which participates in skin aging process and skin disorders apparition. HCS Pharma has developped tests to assess actives efficacy against it.

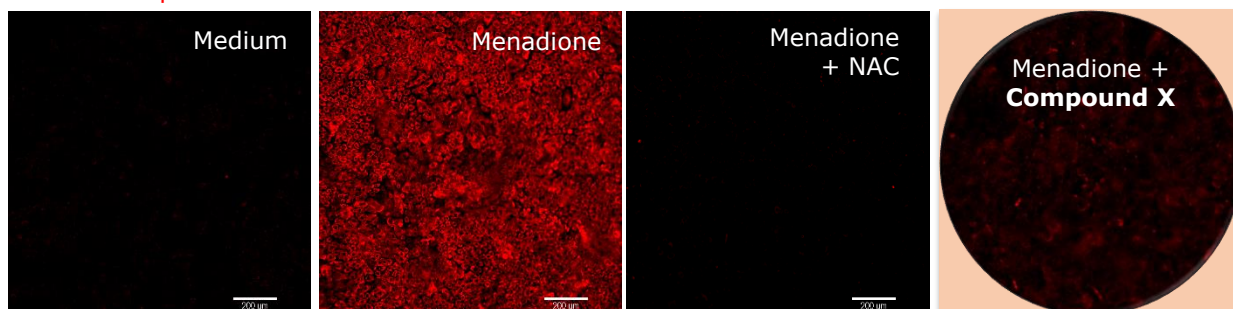
Oxidative stress is due to **Reactive Oxygen Species (ROS)** that originate from the environment and from the skin itself. **Increased production** of those **free radicals** without proper effective action of endogenous and exogenous antioxidant systems generates a condition of **oxidative stress**.

➤ *In vitro* ROS Assessment



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

CellROX Deep Red



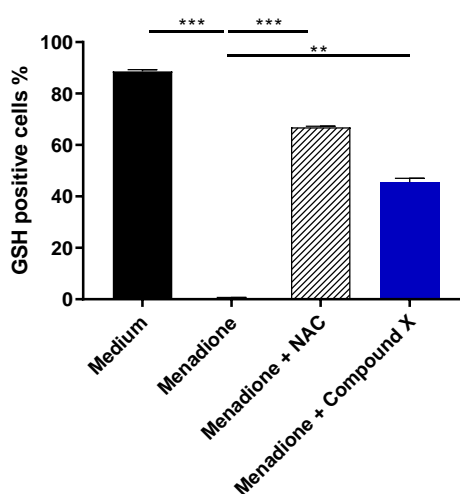
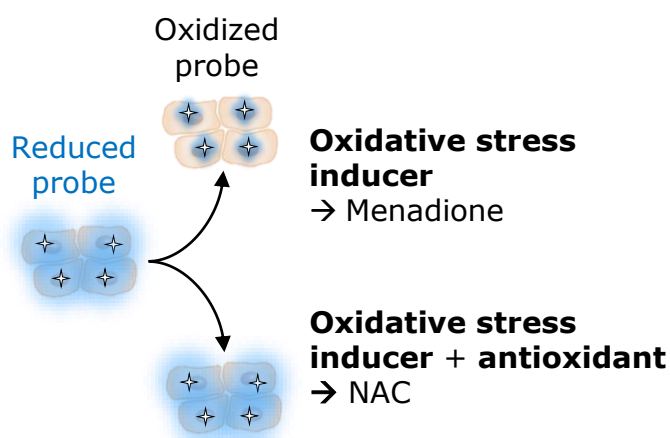
Endpoint : NHEK intracellular ROS production.



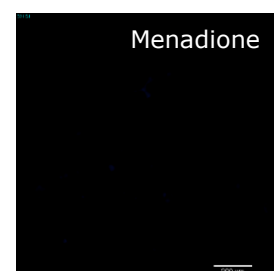
IMAGING PLATFORM FOR DERMO-COSMETOLOGY ASSESSMENT

In addition, the measurement of **glutathione stock** or **lipid peroxidation** can provide information on the damages caused by ROS, respectively, at the level of the cellular **antioxidant system** and **cell membranes**.

➤ *In vitro* Glutathione Stock Assessment



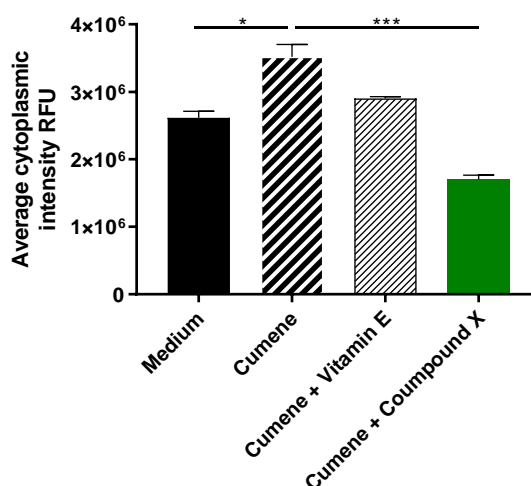
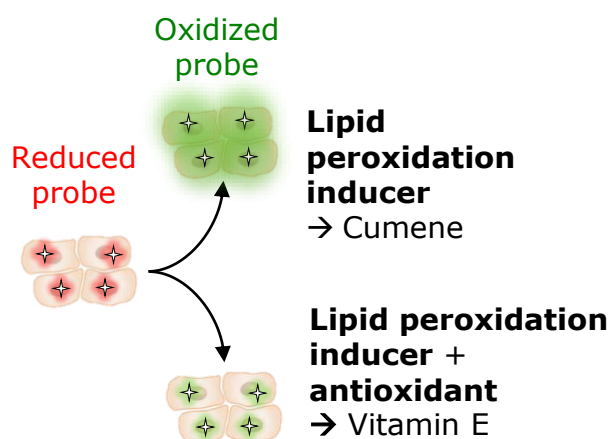
mBCI



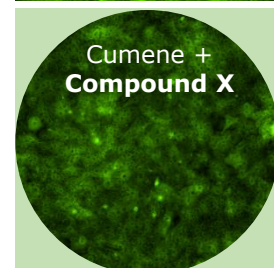
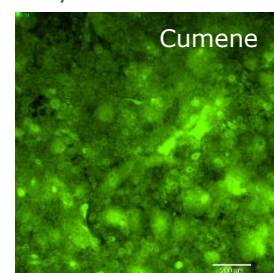
t.test (* p-value < 0.05 ; ** p-value < 0.01 ; *** p-value < 0.001)

Endpoint : NHEK intracellular glutathione stock.

➤ *In vitro* Lipid Peroxidation Assessment



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

Endpoint : NHEK cellular membrane lipid peroxidation.

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