

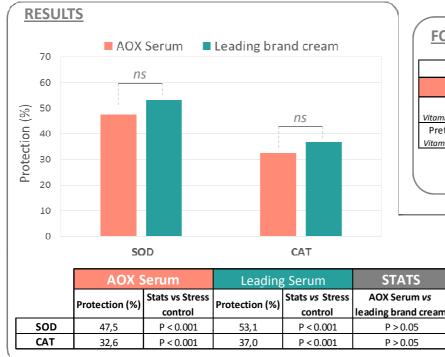
The biological model used in this study is an *in-vitro* reconstructed human epidermis obtained from human keratinocytes isolated from surgery.

To evaluate the anti-oxidative properties of the formulations, an oxidative stress was induced in the reconstructed human epidermis by using sunlight-stimulated radiations. Epidermis were irradiated by using a solar light simulator and the samples were exposed to a single acute UV dose (16.5J/cm<sup>2</sup>) according to a standard procedure.

The AOX Serum or the leading brand serum were topically applied 3h before UV exposure. The cutaneous substitutes were harvested 4h after irradiation for performing biochemical analyses.

The antioxidant capital of the epidermis was evaluated by measuring the enzymatic activities of the Superoxide dismutase (SOD) and the Catalase (CAT) following UV exposure.

All experimental conditions were performed in N=3 independent epidermis.



| FORMULATIONS                         |           |                                  |      |  |
|--------------------------------------|-----------|----------------------------------|------|--|
|                                      | Active in | gredients                        |      |  |
| AOX Serum                            |           | Leaging Serum                    |      |  |
| AA2G<br>Vitamin C precursor          | 1.8%      | Vitamin C                        | 15%  |  |
| Pretocopheryl<br>Vitamin E precursor | 2%        | α-tocopherol<br><i>Vitamin E</i> | 1%   |  |
|                                      |           | Ferulic acid                     | 0.5% |  |

| <b>Statistical</b> | analysis                     |
|--------------------|------------------------------|
| One-way A          | NOVA + Bonferroni's Multiple |
| Compariso          | on Test                      |
| P > 0.05           | ns                           |
| P < 0.05           | *                            |
| P < 0.01           | **                           |
| P < 0.001          | ***                          |

## **CONCLUSION**

The A-OXitive Serum provides an **anti-oxidative protection**, on *in-vitro* reconstructed human epidermis, similar to that observed when applying the leading brand serum which contains an high amount of pure vitamin C (15%).

