

Live Demonstration: Measuring Transdermal Drug Delivery in Mesoporation

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I. DIMOSTRATION SET UP: THE EQUIPMENT

- Lap top
- MESODERM™: FDA Class III Device approved for mesoporation (no needle)
- Embedded impedance spectroscopy (IEC 60601 bodily floating standard).

The equipment is safe for delegates to interact with..

II. VISITOR EXPERIENCE

Visitors can view videos in which the instrument has been calibrated through the use of known quantities injected.

Visitors will undergo short sessions of mesoporation of which our device will reveal the effectiveness:

1. a measure of impedance spectroscopy before treatment permit to draw a spectrum of impedance of the skin of the visitor
2. after the brief treatment of Mesoporation a new impedance measurement will allow to detect how much substance is actually penetrated into the skin following treatment

The visitor will test the effectiveness of the model defined in [1], which correlates the percentage of impedance variation measured to the amount of drug conveyed.



Fig. 1. The equipment.

REFERENCES

- [1]P. Arpaia, U. Cesaro, N. Moccaldi "Measuring the drug absorbed by biological tissues in laboratory emulsion of dermatological" Medical Measurements and Applications (MeMeA), 2015 IEEE International Symposium on. IEEE, 2015.