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## **Optical Coherence Tomography monitoring of PDT effect on Basal Cell Carcinomas wins gold**

A presentation by the Dermatology Departments at Roskilde & Gentofte Hospitals, Copenhagen which documents how Optical Coherence Tomography (OCT) can monitor the effectiveness of PDT treatment on superficial Basal Cell Carcinomas (BCCs) has been awarded gold by the 22<sup>nd</sup> World Congress of Dermatology. The investigation was carried out using the Michelson Diagnostics' VivoSight OCT Scanner.

The study performed on BCC patients describes the OCT morphology in Non-Melanoma Skin Cancer (NMSC) lesions during PDT treatment and assesses how OCT morphology before, during and after treatment reflects the treatment out-come at 3 months follow-up.

Presented by Lotte Themstrup, Mette Mogensen and G.B.E. Jemec from the Copenhagen hospitals, the e-poster summary of the study was selected for one of ten gold awards by the Congress Scientific Committee from a field of 2,400 submissions. The 22<sup>nd</sup> World Congress of Dermatology begins on 24 May in Seoul and is hosted by the International League of Dermatological Societies.

The key benefit of Photodynamic Therapy (PDT) of NMSCs over conventional surgical excision is that it is non-invasive and therefore avoids surgery scars. This is a major advantage for the patient, because this type of skin cancer frequently occurs on the face, where disfiguring scars are highly undesirable. However, because no tissue is removed for analysis in the PDT procedure, it can be difficult for clinicians to be sure that they have successfully treated the tumour, and this has limited its clinical use. The study shows that the use of the VivoSight OCT scanner to image skin before, during and after PDT treatment, could solve this problem.

The VivoSight scanner uses OCT which provides images of sub-surface tissue similar to ultrasound, but at far higher resolution, enabling the clinician to see critical details of the skin epidermis and dermis in real time. Michelson Diagnostics has already obtained CE mark and FDA clearance for clinical use of the scanner in Europe and USA, and it is being evaluated at leading cancer clinics in Europe and USA.

### **Notes for editors:**

22<sup>nd</sup> World Conference of Dermatology awards listing: <http://www.wcd2011.org/scientific/awards.html>

### **Image:**

A BCC lesion below the eye, in close-up and a corresponding image from the VivoSight OCT scanner courtesy of Roskilde Hospital, Copenhagen.



### About Michelson Diagnostics

Michelson Diagnostics was founded in 2006; it is privately owned and based in Kent, U.K. The company develops imaging products using a technology called Multi-Beam Optical Coherence Tomography. The technology provides real time images of up to 2 mm into tissue with a resolution of better than 10 microns. The company's VivoSight OCT scanner has CE and 510(k) clearance for use to aid clinical judgments in the field of dermatology including non-melanoma skin cancer assessment and guiding skin cancer surgery.

Further information about Michelson Diagnostics can be found on the Internet at <http://www.michelsondiagnostics.com> or by emailing [enquiries@md-ltd.co.uk](mailto:enquiries@md-ltd.co.uk)

### For clinical use in the US FDA 510(k) K093520 applies:

- The VivoSight Topical OCT system is indicated for use in the two-dimensional, cross-sectional, real-time imaging of external tissues of the human body. This indicated use allows imaging of tissue microstructure, including skin, to aid trained and competent clinicians in their assessment of a patient's clinical conditions.
- US Federal law restricts this device to sale by or on the order of a physician.

The Michelson Diagnostics logo and the VivoSight name are the trademarks of Michelson Diagnostics Ltd and are registered in the UK, the US & throughout the European Union

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