



## **Photodynamic treatment of nodular and superficial BCCs using intense pulsed light delivered with mechanical pressure. The rationale and early results**

Photodynamic treatment of BCCs can have remarkable results but recurrences are an issue with conventional red light (630 nm) treatment.

At our clinic, we have been treating BCCs with topical methyl aminolevulinate (MAL)-PDT using a combination of 630 nm red light and intense pulsed light (IPL) (using long pulsed, non-thermal settings) since August 2017. The IPL is delivered immediately following 630 nm light and is delivered with enough mechanical pressure in order to blanch the skin. This “compression protocol” has been used on all patients who have consented to photodynamic treatment for BCC.

The clinical diagnosis of BCC has been supported by histopathology (17 tumours) and/or optical coherence tomography (OCT) (21 tumours) in all cases. 32 BCCs from 31 patients (age range; 26 - 80, mean: 54) up to a thickness of 1.36 mm have been treated. 18 tumours were nodular, 13 tumours were superficial and 1 tumour was morphoeic. Four tumours were recurrent lesions. 20/32 tumours were located on the face including 16 tumours within the “H-zone.

There has been no clinical or OCT evidence of recurrence in 31/32 tumours. The follow-up period has been 3–24 months (mean: 10 months). The one tumour that did not respond completely was a cryotherapy-recurrent 4 cm nodular tumour on a forearm. A 4 mm focus remained at review 3 months later and this was simply excised.

We conclude that there is a strong rationale for the use of compression in photodynamic activation of BCC. There are several proposed mechanisms and these will be illustrated in this presentation.

