

## **British Photodermatology Group Position Statement**

### **Home Phototherapy**

#### **Background**

Narrowband UVB (NB-UVB) phototherapy is the use of narrowband UVB ultraviolet light to treat skin disease. This is the main form of phototherapy used in the United Kingdom (UK) to treat inflammatory skin disease, including psoriasis and atopic eczema but also vitiligo and generalised itch. There is increasing evidence for the cost efficacy of narrowband UVB phototherapy<sup>1,2</sup> but convenience and availability remains an issue, which prevents patients accessing an effective and safe treatment.

The use of home phototherapy was first reported for patients with psoriasis in 1979<sup>3</sup>. A randomised controlled non inferiority study in 2009 comparing home with hospital based phototherapy for psoriasis, showed home phototherapy to be safe, effective and a cost effective method of treatment delivery<sup>4</sup>. Despite this, the uptake of home phototherapy in the UK has been very poor with only 2 centres offering a National Health Service (NHS) home phototherapy service. This is in contrast to other European countries, such as the Netherlands, where home phototherapy is widely available.

A large study from Ninewells Hospital which included patients with a variety of dermatoses including psoriasis, eczema, urticaria and vitiligo has demonstrated home phototherapy within an NHS service to have similar outcomes to hospital based therapy<sup>5</sup>. A recent randomised controlled trial reported on the use of a small local unit to treat patients with localised vitiligo at home and found this to be safe and effective<sup>6</sup>

The lack of home phototherapy provision in the UK limits the optimal use of phototherapy for skin disease, leading to earlier use of pharmacological therapies with associated increased risk of adverse effects and cost. Increased physical distancing and cleaning requirements due to the current COVID-19 pandemic are expected to continue to reduce access to hospital phototherapy for a long time. Recognition of this and that there is even more need for home phototherapy to increase the availability of NB-UVB helped at least 2 UK centres to expand their hospital-supervised home phototherapy services.

Concerns expressed by dermatologists about home phototherapy include safety, effectiveness, patient compliance as well as the practical aspects of training, oversight and support. These concerns have been addressed by a large randomised trial<sup>4</sup> and the Ninewell's experience<sup>5</sup>. Patient selection, close but remote supervision by trained hospital based staff along with the use of standardised treatment protocols and clear governance arrangements ensure this treatment is effective and safe. A useful model for setting up home phototherapy services is described by Hung et al<sup>7</sup> and experience of setting up a new service is reported<sup>8</sup>.

#### **Recommendations**

All phototherapy units in the UK should consider providing a home phototherapy service

It is important that home phototherapy should, in the UK NHS, be complementary to, not instead of, hospital-based phototherapy as it is not suitable for everyone. Careful patient selection and training followed by remote but close monitoring by experienced phototherapy nurses, supported by the base hospital phototherapy service is necessary for good outcomes and patient safety.

Medical physics support is required to evaluate, safety check and carry out irradiance measurements at regular intervals suitable for the frequency of use of the home units.

We strongly recommend people do not purchase their own units from manufacturers as medical supervision and medical physics support to safety check and carry out irradiance measurements are essential for the safe use of home units.

Robust governance arrangements, linked to those of the hospital based service are necessary along with regular audit, including outcome and erythema rates, following the recommendations of British Association of Dermatologists Guidance and Standards for Phototherapy Units<sup>9</sup>.

## References

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- 4 Koek MB, Buskens E, van Weelden H et al. Home versus outpatient ultraviolet B phototherapy for mild to severe psoriasis: pragmatic multicentre randomised controlled non-inferiority trial (PLUTO study). *BMJ* 2009; **338**: b1542.
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9 British Association of Dermatologists. Service Guidance and Standards for Phototherapy units available  
[http://www.bad.org.uk/librarymedia/documents/Phototherapy%20Service%20Guidance%20and%20Standards%202018\(4\).pdf](http://www.bad.org.uk/librarymedia/documents/Phototherapy%20Service%20Guidance%20and%20Standards%202018(4).pdf). 2016.

**PRODUCED June 2021**  
**REVIEW DATE JULY 2024**