

TCS/16/47 – Long-term and high exposure effects of NB-UVB phototherapy in relation to increased risk of skin cancers: A 30-year retrospective cohort study in Scotland.

Phototherapy ('light treatment') is widely used for many skin diseases. One form of light treatment called PUVA in which UVA rays are used to 'activate' a psoralen drug is associated with an increased risk of skin cancers. Since it was introduced (in Dundee, Scotland and Utrecht, the Netherlands) in the 1980' s narrowband ultraviolet B (NB-UVB) has become the form of light treatment used most widely around the world to treat various skin diseases. So far, no definite increased risk of skin cancer has been detected with NB-UVB, but the studies done so far have been too small to detect anything less than a large risk. We propose a retrospective study, following on from the largest study done on this topic so far which we published in 2008. This study will involve many more patients, followed-up for longer, as it will involve all the people (about 62,753) in Scotland who have been treated with NB-UVB, and we have many more years (from 1985 to 2015) of follow-up. It will allow us to better answer the question as to whether or not NB-UVB increases the risk of any of the main types (BCC, SCC, or melanoma) of skin cancers in humans.