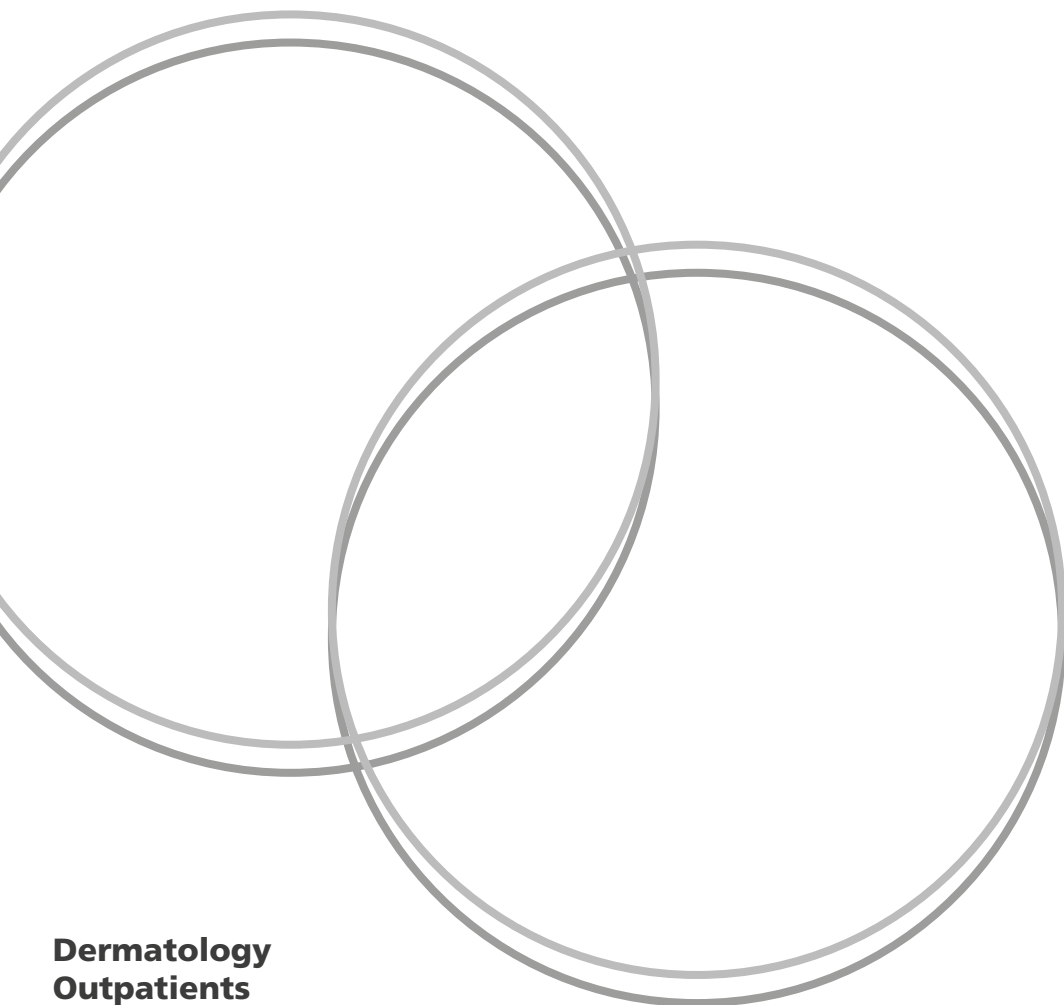




Oxford University Hospitals  
NHS Foundation Trust

# Topical Photodynamic Therapy (PDT)

Information for patients



**Dermatology  
Outpatients**

## Who is this leaflet for?

This leaflet is for patients who have been referred for Photodynamic Therapy (PDT) following their consultation with the dermatologist.

The dermatologist will suggest PDT to treat skin cancers and pre-cancers where it is likely to be a better option than other treatments. Some reasons the dermatologist might suggest PDT include:

- when they expect the skin to heal better after PDT than other treatments
- when lesions keep coming back in the same area
- when the treatment is affecting sensitive areas like the face
- when treating people who have had an organ transplant or have a suppressed immune system for other reasons
- when the treatment is needed for a large area of the face or scalp.

## **What is Topical Photodynamic Therapy?**

Topical Photodynamic Therapy (PDT) is a simple procedure used to treat certain types of skin cancers and pre-cancerous lesions. Pre-cancerous skin lesions, also known as pre-cancers, are groups of cells that grow on your skin and can increase your risk of developing a skin cancer in that same area. The commonest conditions that can be treated by PDT include:

- Some types of basal cell carcinomas (BCC), which is the commonest type of low-grade skin cancer.
- In situ squamous cell carcinoma, also known as Bowens disease, which is a pre-cancer.
- Actinic or solar keratosis (AK), which is an early area of sun-damage which is also considered to be a pre-cancer.

PDT uses a special light source in combination with application of a light-sensitive cream to destroy cancerous or pre-cancerous cells.

Your dermatologist or skin doctor will give you a separate information booklet about the skin condition that you have.

## **What does PDT involve?**

We will remove any crust on the skin lesions to prepare your skin. We will then apply a sensitising cream that needs to be left on the skin for three hours. The sensitising cream makes the abnormal or cancerous cells in the lesion that needs to be treated more sensitive to light.

Next, a red LED light is placed over the area. This makes the cream work more effectively and destroys any abnormal or cancerous cells. The cream does not affect healthy cells.

Most lesions need two treatment courses. If you need two treatments we will give you an appointment to return for your second in one week. Both treatments will be the same.

## **What will happen when I have my treatment?**

Your PDT will be carried out by the PDT trained Nurse. Your PDT nurse will check some details with you before you begin your treatment. You must tell us if you have any allergies, especially to peanut oil, almond oil or soya. If you are allergic to peanuts, almonds or soya then PDT treatment may not be suitable. This is because the cream contains arachis oil, which comes from peanuts.

Please can you also inform the PDT trained nurse if you have any heart problems, a pacemaker or any other major health complaints.

We do not recommend PDT if you are pregnant. This is because there is limited information about the side effects of the cream during pregnancy.

You will need to sign a consent form to confirm that you agree to have the treatment. The PDT trained nurse will discuss the risks and benefits with you so that you can make a decision to go ahead with the treatment.

Once you have agreed, the PDT nurse will clean your skin and gently remove any crust to prepare the lesion. The PDT nurse will then apply a cream to the lesion which is going to be treated and cover this with a dressing. Please do not remove the dressing, as this will make your treatment less likely to work.

There will be a three-hour gap before the light treatment is given. You will then be free to leave the department during this time. You may want to visit the local shops, or you can stay on the hospital site.

Please make sure you come back to the department in plenty of time for the light treatment.

You do not need to report to reception when you return. Please sit in the waiting area until you are called.

The PDT trained nurse will clean the area of your skin covered with the cream and then shine the red LED light on it. They will ask you to wear special protective glasses, as the light is very bright.

You may experience some prickling, soreness and/or discomfort during the treatment. This is variable and some people report significant pain although it is mostly tolerated well. It is not possible to predict how painful you might find the treatment.

The light treatment lasts for approximately 8 to 10 minutes to treat each lesion. We can treat up to 3 lesions each time. If you have more lesions, we will arrange extra appointments for you.

After the treatment we will give you a leaflet which explains how to look after the areas that you have had treated: Advice for patients after photodynamic therapy (PDT).

# What are the potential side effects of PDT?

## The short term side effects of PDT include:

- **Pain.** It may hurt when the red light is shining on the area being treated and the discomfort may last up to a few days after the treatment. This can normally be managed with over the counter pain killers. This is common and may affect up to 1 in 10 people.
- **Inflammation.** The treated area may initially become pink, red and swollen, and may crust or ooze a little; this is a normal reaction. It settles within a few days. This is common and may affect up to 1 in 10 people.
- **Blistering and ulceration.** The treated area may occasionally blister or open up (ulcerate) to develop a raw surface. This is not common and may affect 1 in 100 people.
- **Bruising.** The treated area may occasionally show some bruising. This is not common and may affect 1 in 100 people.
- **Changes in hair growth.** The treated area may occasionally show increased or loss of hair. This is not common and may affect 1 in 100 people.
- **Dermatitis (inflammation of the skin) and contact allergy.** The treated area may occasionally show signs of redness and itchiness with a rash due to a reaction to the cream. This is not common and may affect 1 in 100 people.
- **Infection.** If the treated area becomes red, swollen and more painful, it is possible that an infection may have developed, and you should contact your PDT nurse or your GP. This is not common and may affect 1 in 100 people.

## **Potential long-term side effects of PDT include:**

- **Scarring.** There may be some scarring after PDT. This is not common and may affect less than 1 in 100 people.
- **Colour change.** The skin may become darker or paler after PDT. This is not common and may affect 1 in 100 people.

The treatment may not be effective, or the condition that we have treated may come back again in the same place. If this happens, you may be offered further PDT, or an alternative type of treatment may be recommended.

## **Preparing for PDT**

If you are worried about the pain of the procedure, you can take a mild painkiller before the red LED light treatment. Please bring your own painkillers with you, such as paracetamol. We will tell you when the best time is to take them.

If you moisturise the area that requires treatment for a few weeks before coming in for PDT it can help to make the procedure more effective. This will soften any crust that needs to be removed. But do not apply anything on the area to be treated on the day of your appointment.

If you plan to stay in the department during the 3 hour gap between the cream being applied and having the light treatment, you might want to bring some snacks and a drink with you. We also have drinking water available. There are various cafés and a restaurant at the hospital, if you decide to leave the department during this time.

## How effective is PDT?

As explained, the dermatologist recommends PDT when it is likely to be a better option than other treatments. PDT offers results which are at least as good as the following treatments:

- topical treatment like Aldara or Efudix creams
- cryotherapy using liquid nitrogen.

PDT is less likely to cause scarring, compared to surgery and cryotherapy. However, sometimes the treatment may not be successful and further PDT or alternative treatment will need to be discussed. If you would like more information about other treatments, please speak to your dermatologist or PDT specialist nurse.

The dermatologist will review the effectiveness of your treatment during a follow-up appointment after 3 to 5 months

## Further information

If you have any questions please ask your PDT nurse or dermatologist. More information is also available online from the British Association of Dermatologists. Search for PDT when you visit [www.bad.org.uk](http://www.bad.org.uk)



## **How to contact us**

If you have any questions or concerns before the PDT treatment, or are unable to keep your appointment, please let us know by telephoning the Booking Administrator:

Telephone: 01865 228 225

Please leave a message if you are calling out of hours (after 5.00pm) and we will get back to you as soon as possible.





## Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

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