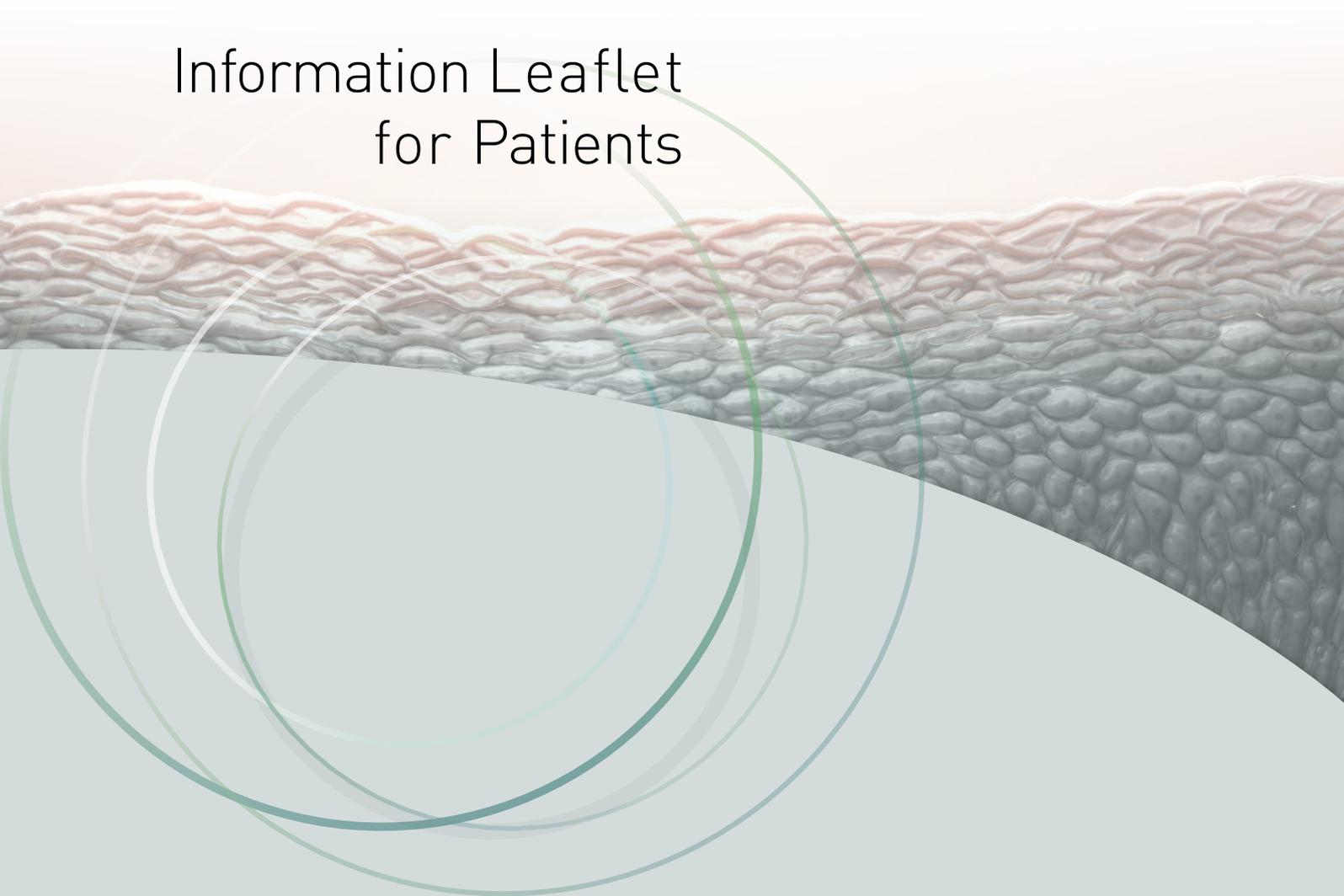


# Information Leaflet for Patients



## **BOWEN'S DISEASE**

### **The aim of this leaflet**

*This leaflet is designed to help you understand more about Bowen's disease, a type of non-melanoma skin cancer. It tells you what this condition is, what causes it, what it looks like, what can be done for treatment, and practical advice.*

# BOWEN'S DISEASE

## What is Bowen's disease?

Bowen's disease, also known as *squamous cell carcinoma in situ*, is a growth of cancerous cells that is confined to the outer layer of the skin. One or more patches of changed skin will remain, but there is a low (3-5%) lifetime risk of becoming an "invasive," quickly-spreading skin cancer.

## Who is affected by Bowen's disease?

Bowen's disease most commonly develops in fair-skinned people over the age of 60, with slightly more females affected than men.

## What causes Bowen's disease?

The exact cause of Bowen's disease is unknown. Long-term sun exposure is believed to be the main cause, with fair-skinned people and those who spend a lot of time outdoors in the sun at greatest risk. It is also more common in those receiving medication to suppress their immune system.

Bowen's disease occasionally occurs following radiotherapy or chronic arsenic ingestion. Infection with certain types of the *human papillomavirus (HPV)*, a virus that can cause warts) may contribute to causing the condition, particularly when Bowen's disease affects the genitals.

## Can it be inherited?

No, although a tendency to have fair skin does run in families.

## What does Bowen's disease look like?

Individuals develop a slow-growing, reddish scaly patch or *plaque* (elevated lesion) on the skin, typically 1-2 cm in diameter (**Figure 1**). Sometimes a few patches occur at the same time (**Figure 2**). Sun-exposed areas of the skin are most often affected, including hands, arms, and lower legs, as well as the head and neck.

In some cases, the lesions may be warty, split open, or, less often, darkly colored (pigmented). Lesions are usually painless, or may not be associated with any symptoms.

Development of an invasive squamous cancer would be suggested by the development of a lump or ulcer, with bleeding that can often be painful.

## How is Bowen's disease diagnosed?

A diagnosis of Bowen's disease can be made from its clinical appearance. However, a skin biopsy (when a skin sample is removed and examined under the microscope) may be performed if there is doubt, as a single growth can look like other types of skin cancer, and multiple patches in particular can resemble other scaly skin conditions including psoriasis.

## What is the treatment of Bowen's disease?

Several different treatments can be used, all of which have high success rates. The best treatment choice for you depends on several points, including the site of the body affected, the size and number of lesions, and your preference for hospital-delivered or home-applied treatment.

The most common treatments that you will be offered include:

**Topical chemotherapy:** the application of creams applied directly to the lesion. Two common creams used are 5-fluorouracil and imiquimod 5%. Treatment with 5-fluorouracil works by destroying the abnormal skin cells.

Affected individuals are usually asked to apply it once or twice daily for up to 4 weeks. Imiquimod 5% is generally used for lesions on the lower legs, larger lesions,



**Fig. 1** Bowen's disease: red, scaly, crusty plaque on the sun-exposed skin of the leg of a 75 year-old woman



**Fig. 2** Multiple areas of Bowen's disease: red, scaly, crusty plaques of the sun-exposed skin of the face of a 71 year-old man with a kidney transplant



**Fig. 3** Bowen's disease: red, scaly, crusty *confluent* (running together) of the sun-exposed skin of the shoulder of a 65 year-old man (previous farmer)

and the genital area. Different treatment courses are recommended by specialists, even though it is not specifically licensed for the treatment of Bowen's disease. The skin will become red and look worse during treatment, healing only after finishing the course of treatment.

**Freezing with liquid nitrogen (cryotherapy):** the use of extreme cold to freeze and destroy the tissue and cells of skin lesions. It is used in the clinic and often suggested for single or small lesions, but may be briefly painful and causes redness, swelling, and crusting, with occasional blistering. Healing occurs over several weeks.

**Curettage:** the lesion is scraped off the skin (performed under anesthesia). In some cases, curettage may be followed by cauterization, in which the lesion is burned by an electrical device. This procedure may need to be repeated in some cases, and will heal with a scab and usually leave a small white scar.

**Surgical Excision:** straightforward surgical removal in which the lesion is cut out and the wound may be closed by sutures. Surgical removal of a lesion is highly successful, but will leave a surgical scar. Direct closure of the wound may not be possible for larger lesions, especially over areas with little free movement of the skin (e.g. shins, fingers, etc.).

**Photodynamic therapy:** a cream is put on the skin patches and left to absorb for 3 hours, under an occlusive dressing. The cream makes the area(s) of Bowen's disease sensitive to light. Then, an intense red light is shone onto the skin. This treatment can cause discomfort and will result in a local reaction with swelling. This will settle in a few days, although full healing can take a few weeks.

Occasionally, you may be offered a combination of sequential treatments – one treatment followed by another.

**Rare therapies:** Radiotherapy is only rarely offered as treatment now, given the poor skin healing that follows treatment at common sites like the lower leg. Laser has

# BOWEN'S DISEASE

also been used for some patients, but large studies have not yet been performed.

Following assessment and discussion of the available options, your clinician may even suggest a “watch and wait approach” (without active treatment), especially if the affected area is thin, slow-growing, not causing problems, and if healing is likely to be poor (e.g. the lower leg).

## How can I prevent Bowen's disease from occurring or worsening?

The most important step to take to lower the risk of developing Bowen's disease is for you to limit or avoid excess exposure to the sun.

To lower the risk of developing more patches of Bowen's disease, wearing protective clothing, using sunscreen, avoiding tanning beds, and other measures can be taken.

## What is practical advice for considering or taking care of Bowen's disease?

1. Consider Bowen's disease if you have one or more red patches on sun-exposed skin that has not responded to creams given for a different skin condition.

2. If you are known to have had Bowen's disease, you may develop more patches. Be alert to the development of a painful nodule or ulcer with bleeding, which may indicate the presence of an invasive skin cancer and requires urgent attention.
3. You may feel worried, but try to remember that Bowen's disease is a low-risk skin growth. It is wise to discuss your treatment choices with a health care professional.
4. There are several treatment choices available, some delivered in the doctor's clinic, and others that can be applied at home. Some treatments are not suitable when Bowen's disease affects several areas, is a large patch, or develops on an area of poorly healing skin.
5. It is never too late to protect your skin from excess sun exposure in order to reduce the risk of developing more patches of Bowen's disease. ■

