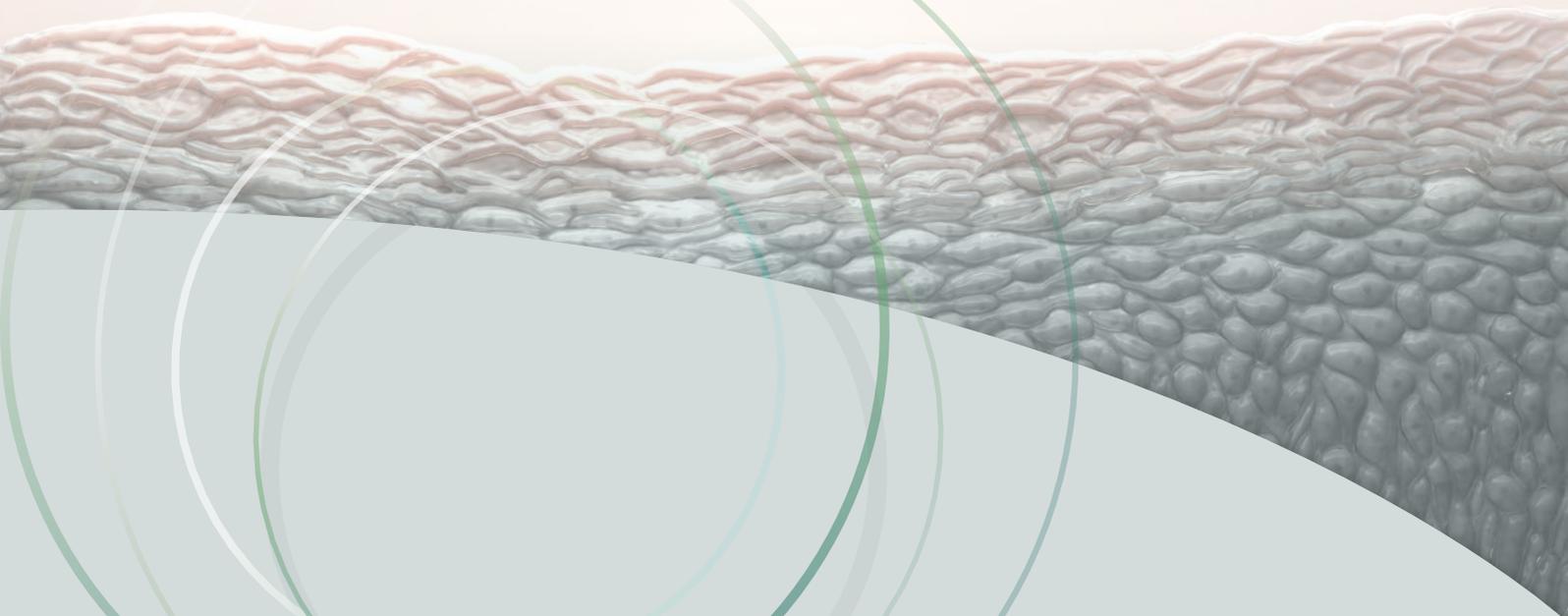


# Information Leaflet for Patients

A detailed illustration of a cross-section of human skin. The top layer is the epidermis, showing a wavy surface with many small, rounded cells. Below it is the dermis, which is a lighter, more uniform layer. The bottom part of the image is a solid light blue color. Overlaid on the skin illustration are several overlapping circles in shades of green and blue, creating a sense of depth and focus.

## SQUAMOUS CELL CARCINOMA OF THE SKIN

### The aim of this leaflet

*This leaflet is designed to help you understand more about squamous cell carcinoma of the skin, 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 what can be done to prevent it.*

# SQUAMOUS CELL CARCINOMA OF THE SKIN

## What is squamous cell carcinoma of the skin?

Squamous cell carcinoma (SCC) is a type of skin cancer that originates from the *squamous* cells of the skin (above the *basal* layer of cells). These cells are very different from *melanocytes* (from which melanomas originate) as they do not play a role in skin color, but compose most of the skin's most superficial layer (the *epidermis*).

## How common is squamous cell carcinoma?

SCC is the second most common skin cancer in Caucasian populations, and the most common skin cancer in persons with skin of color. It is estimated that in the USA, 1 million new cases are diagnosed every year, and as many as 8,800 patients die from the disease annually. In Europe, a great geographic variation in the incidence of SCC has been observed, with the highest incidence reported in the South Wales area of the UK (approximately 32 per 100,000 "person-years," a statistic used to describe cancer rates) and Switzerland (29 per 100,000 person-years), and the lowest one in Croatia (9 per 100,000 person-years). In addition, it has been shown that the age-standardized rates of SCC (a way to compare different populations) have been increasing, as studies from Ireland, Sweden and Denmark have reported absolute increases of approximately 2,000 new cases of SCC, annually, in populations of 4.5-9 million people.

## What causes squamous cell carcinoma?

SCC is mainly caused by cumulative exposure to the sun (ultraviolet [UV]) over the course of a person's life. This includes both the daily year-round sun exposure and the more intense exposure experienced during the summer months. In addition, UV exposure through tanning bed use can also cause skin damage that may lead to SCC formation.

## Who is at risk of developing squamous cell carcinoma?

People with fair skin, light hair, freckles, and blue, green, or gray eyes are at the highest risk of developing the disease. In addition, patients with diseases such as psoriasis (who have undergone phototherapy treatments), or transplant patients (who receive immunosuppressive drugs) are also at risk. Regardless of personal medical history, extensive sun exposure is also strongly associated with a high risk of developing this type of skin cancer.

The use of tanning beds also substantially increases the risk of SCC. More specifically, it has been reported that patients who use tanning beds have a 2.5 times higher risk of developing SCC than those who do not. Patients with skin of color can also develop SCCs on areas of pre-existing inflammatory skin conditions, burn injuries, or serious trauma.

## What does squamous cell carcinoma look like?

SCC usually look like wounds or elevated growths that may bleed without scratching and do not heal with time. SCC may also look like scaly patches or areas of skin covered by a thick *crust* (scab), surrounded by a deep red area that looks inflamed. Some SCC may also resemble warts. They are usually located in sun-exposed areas such as the face, the scalp, the edge of the ears and back of the hands, but can also be found on the lips and genitals.

## How is squamous cell carcinoma diagnosed and treated?

SCC is diagnosed with a skin biopsy. The treatment of choice for SCC is surgical removal. This type of surgery usually requires the use of topical anesthesia only. Afterwards, the skin is closed with stitches or a skin graft. Another type of treatment used for SCC is radiotherapy, which may require multiple sessions to be successful. In some cases, a combination of surgery and radiotherapy may be needed while in other more advanced tumors, chemotherapy may also be administered.

## What is the prognosis for squamous cell carcinoma?

Most SCCs have an excellent prognosis, as they are diagnosed early and can be treated successfully with only surgical removal. However, about 2%-6% of SCCs have been reported to give metastases. Overall, the 5-year relative survival for patients with SCC is considered to be 94%.

What can someone do to avoid developing a squamous cell carcinoma?

The use of various sun protection methods is very important in the prevention of SCC. These include the rigorous use of broad spectrum sunscreens (UVA and UVB), seeking shade on the beach, and the use of sun protective clothing, hats, and sunglasses. The use of tanning beds should also be avoided.

## What is practical advice for noticing any warning signs?

- Patients who observe new and/or growing lesions on the skin or ulcers that fail to heal should visit their dermatologist for a consultation.
- Patients with a history of extensive exposure to UV radiation (sun, phototherapy, or tanning beds) may develop one or more small red scaly patches on their skin. Sometimes these patches may be skin-colored but can feel “rough” when touched. These lesions may be *actinic keratoses* and are considered to be premalignant lesions that can lead to SCC formation. If a patient notices such a lesion, he/she should refer to a dermatologist to receive appropriate treatment. ■