Squamous Cell Carcinoma

Some facts about skin cancer

There are two categories of skin cancers: melanoma and non-melanoma. A melanoma is a cancer that originates in the melanocytes—those are cells that produce the pigment melanin that cause skin to tan, and causes freckles or moles to develop. This type of cancer has a higher risk of spreading to other parts of the body. Non-melanoma is skin cancer that forms in the epidermis layers (skin surface), and these can be either basal cell or squamous cell carcinomas. These non-melanomas are very common, typically slow growing, and are usually cured when treated early. Each year, almost 3 million Americans are diagnosed with non-melanoma skin cancer.

Understanding skin

The skin is the largest organ in your body that works hard making millions of new cells every day.

Skin is multi-layered, and the top protective layer, the epidermis, is comprised of several layers of flat cells called squamous cells. When skin cancer forms in this layer, it is called squamous cell carcinoma.

Who gets squamous cell carcinoma?

Squamous cell carcinoma generally (but not always) occurs due to sunlight or ultraviolet radiation. It appears most often on the neck, ears, face, back, and head. People with light-colored eyes and hair have the highest risk. Darker-skinned people have less risk, but they still can get skin cancer and should use preventive protection. This condition also can develop in scars, or skin injuries such as burns or chemical exposure, persistent sores, and ulcers. People with organ transplant, receiving chemotherapy, or who have other immune system conditions also can be at higher risk. Smoking is also known to increase risk. Squamous cell carcinoma is usually diagnosed in older adults (ages 40+), and twice as frequently in men versus women.

How is squamous cell carcinoma diagnosed at the lab?

Tissue from a biopsy is sent to a pathology lab. There the tissue is prepared on glass slides and reviewed by a pathologist, a clinician who has specialized in the diagnosis of disease. At Inform Diagnostics, all of the pathologists have further specialized in their specific field of practice, such as dermapathology for dermatology conditions. The pathologist looks for abnormal cellular changes under a microscope. He or she interprets the findings under the microscope in the context of the clinical information provided by the healthcare provider. Some cases require additional special analysis to evaluate proteins, RNA and/or DNA.

At Inform Diagnostics, difficult and unusual cases are reviewed together by our specialists at large multi-headed microscopes to render the most accurate and definitive diagnosis possible.

The pathologist creates a pathology report with all the important findings, including critical information to help guide treatment and assess prognosis, which is sent back to the healthcare provider.
How do skin cells become cancers?
Sun exposure can cause certain chemical changes that damage the DNA of skin cells and alters cells’ instructions of how to reproduce themselves. So then instead of dying off, those affected cells continue to reproduce, but they don’t make normal cells, they make more damaged cells—cancer cells—and these appear as a growth on the skin. Pathologists can confirm this abnormal cell growth by looking at a tissue sample under a microscope.

Taking the next step—treatments and preventions
While these skin cancers typically grow very slowly, they most often are cured when treated early. Surgical removal techniques are done right in the healthcare provider’s office. Because squamous cell cancers are known to recur, it’s important to monitor the skin for any changes and to visit a healthcare provider regularly.

Follow these guides for prevention:
- Wear protective clothing and a hat outdoors
- Always wear UVA/UVB sunscreen
- Minimize outdoor exposure between 10:00 a.m. and 4:00 p.m.
- Contact a healthcare professional immediately if any new changes occur on the skin

Learn more!
These trusted resources can provide more information.
www.skincancer.org