

Patient education guide on severe cutaneous adverse reactions (SCAR)



Healthcare professionals may consider using relevant sections of this guide to explain to patients (and their caregivers) starting a new drug the potential risk of SCAR, what to watch for and what to do when SCAR is suspected.

What are severe cutaneous adverse reactions (SCAR)?

- Rare and serious skin reactions.
- May be life-threatening so **immediate medical attention** is important.
- May be caused by certain types of drugs such as antiepileptics or seizure drugs (e.g., carbamazepine, phenytoin, lamotrigine), anti-gout preparations (e.g., allopurinol) and antibiotics (e.g., co-trimoxazole).

What are the different types of SCAR?

- **Stevens-Johnson Syndrome (SJS)**, **Toxic Epidermal Necrolysis (TEN)** and **Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS)** are the more serious types of SCAR.
- SJS and TEN affect the skin and mucous membranes of the mouth, eyes and genitals. Painful blistering rashes develop and cause the skin to detach from the body. TEN is more severe and covers a larger body area compared to SJS.
- DRESS affects the skin, internal organs and blood. The rashes are generally extensive and itchy. The liver and kidney may also be affected. The lymph nodes may swell due to increase in white blood cells.



Fever, body aches, headaches



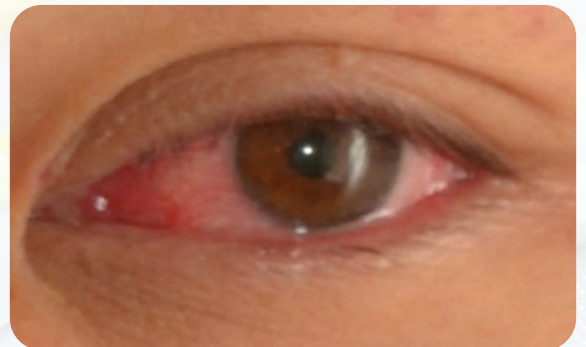
Painful red to purple rash

Early symptoms

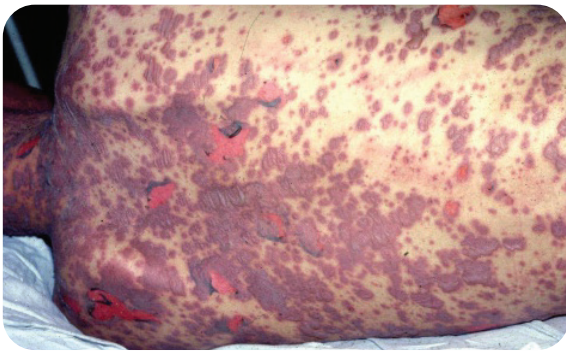
Monitor for early symptoms of SCAR, especially within the **first 3 months** of starting the drug. You may not develop all the symptoms.



Mouth ulcers



Red or sore eyes



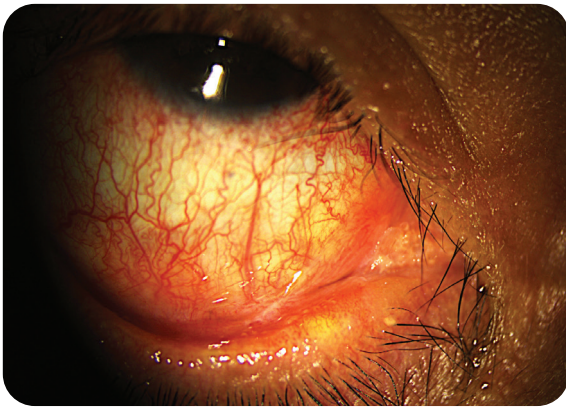
Blistering and peeling of skin



Blistering of lips and mouth

Late symptoms

If medical attention is not sought early, SCAR may progress further and become more serious, with a poorer outcome.



Excessive scarring of the conjunctiva (thin membrane covering the white of the eye)



New tiny blood vessels and scarring formed in the cornea, which can cause blindness

Important to recognise the early symptoms of SCAR and seek immediate medical attention as these reactions may cause less harm if detected and treated early.



Look out for **early symptoms** of SCAR, especially in the **first 3 months** after starting the drug.



STOP the drug and seek advice from your doctor if you experience **any** of these symptoms.



Photograph the rash if possible to show to your doctor.

This guide is designed to complement, and not replace advice provided by a healthcare professional. No material in this guide is intended to be a substitute for professional medical advice, diagnosis or treatment.

References and acknowledgments

1. Elkady, D., Kizluk, A., Khandelwal, A., Bouchard, C., Fuchs, E., Starnes, T., Saeed, H., Sanford, A., & Lake, E. "Patient Guide to: Stevens-Johnson Syndrome (SJS) and Toxic Epidermal Necrolysis (TEN)" (2023). Loyola University Chicago School of Medicine. <https://ecommons.luc.edu/medicine/5>
2. https://www.hsa.gov.sg/docs/default-source/hprg-vcb/adverse-events/scar-watch-guide.pdf?sfvrsn=650ba047_2

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