Toxic epidermal necrolysis (TEN; Lyell syndrome)/ Stevens–Johnson syndrome (SJS)

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Condition for which IVIg has an emerging therapeutic role.

Specific Conditions	• Toxic epidermal necrolysis/Stevens–Johnson syndrome
Indication for IVIg Use	• To limit progression of TEN or SJS/TEN when administered in early stages.
Level of Evidence	Insufficient data (Category 4a)
Description and Diagnostic Criteria	Toxic epidermal necrolysis (TEN) is a rare, life-threatening hypersensitivity reaction to certain medications, such as sulphonamides, antibiotics, non-steroidal anti-inflammatory drugs and anti-convulsants. Drug-induced epidermal apoptosis has been proposed as possible pathogenesis. Stevens–Johnson syndrome (SJS) is a less extensive manifestation of the same phenomenon. TEN and SJS are characterised by severe bullous reaction, with extensive destruction of the epidermis, and morphologically by ongoing apoptotic keratinocyte cell death that results in the separation of the epidermis from the dermis. The term SJS is now used to describe patients with blistering and skin detachment involving a total body surface area of <10%. SJS/TEN describes patients with 10–30% detachment, and TEN describes patients with >30% skin detachment.
Justification for Evidence Category	The Biotext (2004) review identified one small cohort study (20 patients) without a control group, which found that there appeared to be no significant effect from intravenous immunoglobulin (IVIg) therapy and that the death rate seemed to be higher than had been previously reported. The Frommer and Madronio (2006) review found one small randomised study (four patients) with a control group of two patients (supportive care only). This study found that there was some improvement in epithelialisation and prominent difference in CD95 receptor between treated patients and controls. However, neither IVIg nor its comparison group could completely stop the TEN process.
Diagnosis Requirements	A diagnosis must be made by a Dermatologist.
Qualifying Criteria for IVIg Therapy	• TEN or SJS/TEN overlap with body surface area (erythema and/or erosions) of 10% or more. AND • Evidence of rapid evolution. IVIg should be initiated as early as possible, preferably within 24 hours of diagnosis. Urgent skin biopsy should be performed for confirmation, but should not delay IVIg therapy if indicated. The Adverse Drug Reactions Advisory Committee should be notified of the inciting medication.

Exclusion Criteria	SJS alone.
Review Criteria for Assessing the Effectiveness of IVIg Use	Review is not mandated for this indication however the following criteria may be useful in assessing the effectiveness of therapy. Clinical effectiveness of Ig therapy may be demonstrated by: • Clinical assessment one month after immunoglobulin treatment.
Dose	• **Dose** - 2 g/kg as a single dose, or divided over three consecutive days. **Dosing above 1 g/kg per day is contraindicated for some IVIg products.** **The aim should be to use the lowest dose possible that acheives the appropriate clinical outcome for each patient.** **Refer to the current product information sheet for further information.**

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