### PROCRIT<sup>®</sup> (epoetin alfa) PROCRIT - Severe Cutaneous Adverse Reactions

#### SUMMARY

- Because clinical trials are conducted under widely varying conditions, adverse reaction
  rates observed in the clinical trials of a drug cannot be directly compared to rates in the
  clinical trials of other drugs and may not reflect the rates observed in practice.<sup>1</sup>
- Blistering and skin exfoliation reactions including erythema multiforme (EM) and Stevens-Johnson Syndrome (SJS)/Toxic Epidermal Necrolysis (TEN), have been reported in patients treated with erythropoiesis-stimulating agents (ESAs; including PROCRIT) in the post-marketing setting. Discontinue PROCRIT therapy immediately if a severe cutaneous reaction, such as SJS/TEN, is suspected.<sup>1</sup>
- A case report of a fatal EM post epoetin alfa was identified, but a causal relationship could not be made.<sup>2</sup>
- A case report of drug reaction with eosinophilia and systemic symptoms (DRESS) occurred in a patient after starting epoetin alfa 8 days prior to arriving at an emergency department. Upon admission, epoetin alfa was discontinued. The patient improved with methylprednisolone intravenous (IV) therapy for 2 days, however, rash, eosinophils, and creatinine worsened post methylprednisolone IV discontinuation. Patient was restarted on methylprednisolone with improvement and discharged on a steroid taper.<sup>3</sup>

## **Product Labeling**

Please refer to the following sections of the full Prescribing Information<sup>1</sup> which are relevant to your inquiry: WARNINGS AND PRECAUTIONS and ADVERSE REACTIONS.

# BACKGROUND

SJS and TEN are rare and severe cutaneous disorders that are extremely serious and potentially fatal. They are characterized by epidermal loss and multi-site mucositis, accompanied by systemic disturbance. Fever, malaise, and upper respiratory tract symptoms generally precede cutaneous eruptions by several days. Cutaneous pain, which is a prominent early feature, may signal initial stages of epidermal necrolysis. The earliest lesions may involve circular epidermal discolorations and/or purpuric macules. Initial sites of involvement are commonly the upper torso, proximal limbs, and face. Thereafter, lesions spread to involve the rest of the trunk and distal limbs.<sup>4</sup>

Severe cutaneous adverse reactions (SCAR) in general have been associated with exposures to certain drugs, particularly anti-infective medications. Clear evidence of associations with any genetic predisposition are lacking.<sup>5</sup>

In regard to SJS/TEN:5

- SJS/TEN have been associated with chemical exposures, mycoplasma pneumonia, human immuno-deficiency virus (HIV), tuberculosis and viral infections.
- SJS/TEN have also been associated with cancer and radiotherapy.
- Drugs most commonly associated with TEN include anticonvulsants, sulfa preparations, allopurinol, corticosteroids and nonsteroidal anti-inflammatory drugs (NSAIDs).

## In regard to EM:6

- EM can occur in patients of all ages.
- The herpes simplex virus is the most commonly identified etiology, accounting for more than 50% of cases.
- Mycoplasma pneumoniae and fungal infections are also identified as common etiologies.
- Medications most often associated with EM are barbiturates, hydantoins, NSAIDs, penicillins, phenothiazines, and sulfonamides.
- EM has also been associated with a variety of vaccines and other medications.

SCAR occur in approximately 1 in every 1000 hospitalized patients. SJS/TEN occurs with varying incidence between 2 and 7 cases/million/year in hospitalized patients.<sup>7</sup>
 Prevalence/incidence ranges from 1% (SJS/TEN) to 48% (urticaria and/or angioedema).<sup>8</sup>

# **CLINICAL DATA**

### **POSTMARKETING DATA**

Cases of severe cutaneous reactions of blistering and skin exfoliation, including EM and SJS/ TEN, have been reported in patients treated with ESAs (including PROCRIT) in the postmarketing setting.<sup>9</sup>

Since epoetin alfa (including PROCRIT) was first commercially available in June 1989, it is estimated there is over 10 million patient-years of exposure to epoetin alfa (including PROCRIT). During this time, there have been a small number of cases reported, which indicates that severe cutaneous reactions including SJS/TEN occurred rarely in the post-marketing setting.<sup>9</sup>

### LITERATURE SEARCH

A literature search of MEDLINE<sup>®</sup>, Embase<sup>®</sup>, BIOSIS Previews<sup>®</sup>, and Derwent Drug File databases (and/or other resources, including internal/external databases) pertaining to this topic was conducted on 25 August 2023.

#### REFERENCES

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- 4. Creamer D, Walsh SA, Dziewulski P, et al. UK guidelines for the management of Stevens-Johnson syndrome/toxic epidermal necrolysis in adults 2016. *J Plastic Reconstruct Aesthet Surg*. 2016;69:e119-e153.
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