



PSORIASIS

# GENERALIZED PUSTULAR PSORIASIS: A SYSTEMATIC REVIEW OF SYSTEMIC TREATMENTS

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**Introduction:** Generalized pustular psoriasis (GPP) is a rare but serious dermatologic disease, characterized by widespread erythema and superficial sterile cutaneous pustules, often accompanied by fever, chills and leukocytosis. Current reports indicate that up to 3% of patients with psoriasis develop GPP<sup>1</sup>. It is a notoriously challenging skin condition to manage despite the numerous treatment regimens available. Despite the disease's high morbidity and mortality rates, the overall quality of evidence-based information to guide treatment is limited.

**Objective:** To evaluate and review current evidence based literature available for efficacy, safety and tolerability of systemic therapies in treating GPP.

**Materials and Methods:** Multiple databases were systematically searched for relevant publications. Inclusion criteria included all primary research studies (RCTs, cohort studies, case series, and case reports) that explored systemic medications for adult patients with GPP.

**Results:** A total of 25 studies met eligibility criteria. Treatments evaluated include retinoids, cyclosporine, methotrexate, biologics (including TNF-alpha inhibitors, IL-1 inhibitors, and IL-17A inhibitors), dapsone, and combination therapies (Table 1). Systemic therapies reviewed have been shown to be efficacious and tolerable with a minimal number and severity of adverse events.

**Conclusion:** A significant gap exists in the management of GPP as no comprehensive treatment algorithm is currently available for this life-threatening variant of pustular psoriasis. Current evidence suggests retinoids, cyclosporine, methotrexate, and biologics as first-line options with good efficacy, safety and tolerability. Within the realm of current evidence, the ultimate treatment of choice should then be based on the patient's specific presentation including but not limited to the extent of the disease and the underlying risk factors.

