NORD poster summary: Characteristics of generalized pustular psoriasis (GPP) patients: results from the Optum® Clinformatics™ Data Mart database

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Generalized pustular psoriasis is a rare, multisystemic, neutrophilic skin disease characterized by episodes of widespread eruption of sterile, macroscopically visible pustules that can occur with or without systemic inflammation and with or without plaque psoriasis[1,2]. To date, there are no approved therapies for the specific indication of GPP in the USA or Europe and the treatments used are often associated with adverse events and limited efficacy, making them inappropriate for long-term use[2–4]. This claims database study described the clinical burden and characteristics of patients with GPP in the USA compared with those with plaque psoriasis (as well as a matched general population cohort) to understand and evaluate the unmet needs in this poorly understood patient population. Patients included in the study cohort were identified as having GPP or plaque psoriasis if they had ≥1 inpatient or 2 outpatient diagnostic code(s) for ICD-10 L40.1 or L40.0, respectively, separated by 30–365 days. All analyses were conducted via the Aetion Evidence Platform® v3.11, using Optum® Clinformatics™ Data Mart, a US administrative claims database. Patient characteristics during the 180-day baseline period and medication use among patients with 12 months' follow-up were analyzed.

Analysis of patient populations and demographics showed that patients with GPP were more likely to be female than male (67.6%) and had a mean age of 63.9 years compared with those with plaque psoriasis in which patients had a mean age of 56.4 years and 50.7% were female. Patients with GPP were more likely to suffer from comorbidities than those with plaque psoriasis and those in the matched general population cohort, including psoriatic arthritis (11.8% vs 7.0% and 0.1%, respectively), anxiety (11.6% vs 6.7% and 5.8%, respectively), and depression (10.7% vs 5.5% and 5.0%, respectively); they were also more likely to suffer from hyperlipidemia, type 2 diabetes, obesity, chronic obstructive pulmonary disease, and chronic kidney disease.

Dermatological medication use in patients with GPP during the 12-month follow-up period differed to the dermatological medication use in those with plaque psoriasis. Fewer patients with GPP than those with plaque psoriasis were treated with combination therapies (24.2% vs 34.8%, respectively) and biologic monotherapies (5.0% vs 9.6%, respectively), however, patients with GPP were more than twice as likely to be treated with a non-biologic systemic therapy than patients with

plaque psoriasis (15.0% vs 7.2%, respectively). Concomitant medication uses for comorbidities during the 12-month follow-up period also showed that the most common prescription for patients with GPP was for antihypertensives (64.0%) whereas the most common prescription for patients with plaque psoriasis was for antibiotics (49.8%). Despite this, the proportion of patients with GPP receiving antibiotics was higher than for those with plaque psoriasis (53.0% vs 49.8%, respectively). In addition, the use of all measured concomitant medications was higher in patients with GPP than those with plaque psoriasis and the matched general population cohort, with the most notable differences for the following medications: statins, type 2 diabetes medication, and opioid pain medication.

These findings suggest that patients with GPP tend to have more comorbidities that require extensive management than patients with plaque psoriasis and those in the matched general population cohort. The medication burden for both dermatological symptoms and comorbidities was higher in patients with GPP than those with plaque psoriasis, suggesting that there are higher unmet healthcare needs in this patient population. The study is not without limitations, as data were collected from an administrative claims database for reimbursement purposes rather than scientific research. As such, there may be instances of miscoding; however, data for treatments are generally considered to be accurate and reflective of what the patient received at the pharmacy. Together, these real-world results show that patients with GPP have a different clinical profile to patients with plaque psoriasis as well as substantial disease burden, which has previously been under-reported, further highlighting an unmet clinical need in patients with GPP.

References

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