Figure 2.

Table 1. Patient demographics of baseline

| Comparator | GPP | PsO | Non-psoriasis
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Female, n (%)</td>
<td>1218 (62.6)</td>
<td>1236 (70.7)</td>
<td>475 (27.8)</td>
</tr>
<tr>
<td>Age, years, mean (SD)</td>
<td>63.9 (15.2)</td>
<td>64.4 (17.3)</td>
<td>59.6 (17.9)</td>
</tr>
<tr>
<td>&lt;18 years, n (%)</td>
<td>17 (1.0)</td>
<td>113 (1.9)</td>
<td>98 (1.8)</td>
</tr>
<tr>
<td>18–64 years, n (%)</td>
<td>739 (44.3)</td>
<td>7376 (43.3)</td>
<td>2966 (44.3)</td>
</tr>
<tr>
<td>≥65 years, n (%)</td>
<td>913 (54.7)</td>
<td>12672 (75.8)</td>
<td>3652 (54.7)</td>
</tr>
</tbody>
</table>

Figure 3. Comparison of patients with comorbidities at baseline

Figure 4. Medication use in patients with GPP and with PsO during 12-month follow-up

Figure 5. Comparison of healthcare resource utilisation during 12-month follow-up

Outpatient, inpatient, and ED visits during the 12-month follow-up

- Compared with the non-psoriasis group, patients with GPP had a higher total number of outpatient visits per patient (median: 7 vs 5, p = 0.003, 28.7 vs 15.0 visits).
- A higher proportion of patients with GPP had more inpatient visits (22.6 vs 10.6, with the mean number of inpatient visits for patients with GPP being 0.5 and the non-psoriasis group being 0.2).
- The duration of inpatient stays for patients with GPP tended to be longer than in the non-psoriasis group (median: 8 vs 5 days, mean 16.9± 14.4 days).
- Patients with GPP and in the non-psoriasis cohort both had a median total number of visits to the ED of 0, with the mean number of visits being 2.2 and 0.8, respectively.
- However, a substantially higher proportion of patients with GPP had at least 1 ED visit than those in the PsO group (40.5% vs 22.0%).

At baseline, concomitant medication burden shows that the most common prescription in patients with GPP were antihypertensives (86.5%) and antibiotics (83.8%) compared with those in PsO, however, the proportion of patients with prescription copayments was much lower (80.5%).

- The proportion of patients with GPP needing opioid pain medication was higher than those with PsO (39.5% vs 15.8%).

Table 2. Concomitant medications of baseline

| Comparator | GPP | PsO | Non-psoriasis
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Diuretics</td>
<td>35.0</td>
<td>21.2</td>
<td>13.6</td>
</tr>
<tr>
<td>Antihypertensives</td>
<td>98.1</td>
<td>68.0</td>
<td>40.3</td>
</tr>
<tr>
<td>Statins</td>
<td>63.5</td>
<td>38.6</td>
<td>10.9</td>
</tr>
<tr>
<td>Antidepressants</td>
<td>252.0</td>
<td>74.3</td>
<td>12.4</td>
</tr>
<tr>
<td>Insulin</td>
<td>48.2</td>
<td>28.8</td>
<td>11.1</td>
</tr>
<tr>
<td>Corticosteroids</td>
<td>285.1</td>
<td>613.9</td>
<td>10.2</td>
</tr>
<tr>
<td>Benzodiazepines</td>
<td>6.7</td>
<td>42.8</td>
<td>28.6</td>
</tr>
<tr>
<td>Opioid pain medication</td>
<td>404.9</td>
<td>957.1</td>
<td>15.0</td>
</tr>
</tbody>
</table>

Insights into generalized pustular psoriasis (GPP) using real-world data (Figure 1)

This retrospective cohort study (using Optum® Clinformatics® Data Mart, US administrative claims database) aimed to examine the demographics, comorbidities, use of concurrent medication and hospitalisation rates for patients with GPP compared with those with psoriasis vulgaris (PsO) and a real-world setting in the USA.

Methods

- A retrospective cohort study was conducted using Optum® Clinformatics® Data Mart, US administrative claims database (Figure 1).
- A cohabitation algorithm was used using the Aetion Evidence Platform, a scientifically validated analytic platform.
- Inclusion criteria: Patients with GPP or PsO who identified if they had at least one inpatient or two outpatient ICD-10 (International Classification of Disease, Tenth Revision) code(s) (L40.x or M45.x) diagnoses codes, respectively, separated by at least 30 days but within 365 days of the study period.
- Patients must have had >80 mishaps (months) of continuous baseline enrolment prior to study entry
- Patients selection started 1 October 2015, until 31 March 2019 (Figure 1).

Comorbidities

- Patients with GPP compared with those with PsO and the matched comparators in the non-psoriasis group were more likely to suffer from: psoriasis arthritis (GPP: 11.8%, PsO: 7.0%, non-psoriasis: 0.1%), anxiety (11.6%, 5.7%, 5.8%) and depression (10.7%, 5.5%, 5.0%) of baseline (n=1014).
- Patients with GPP were also more likely to suffer from hyperlipidaemia, obesity and COPD than patients with PsO and the non-psoriasis group at baseline (Figure 3).

Medication use

- Of the 104 GPP patients with 12 months of follow-up, 44.0% were treated with a systemic therapy during follow-up, including:
  - 51.5% who were treated with a biological only
  - 153.0% who were treated with both systemic and topical systemic therapy

- More than one-third (35.6%) of patients with GPP were treated with a topical steroid medication, 19.3% were treated with a topical non-steroid medication, and 19.3% were treated with a topical non-steroid medication.

- The use of systemic steroids was similar in patients with GPP (27.9%) and those with PsO (25.2%); however, the use of topical steroids was more common in patients with GPP (35.6%) than those with PsO.

- Methotrexate was the most commonly used oral systemic therapy in patients with GPP (35.6%), whereas 52.7% of patients with PsO were female, with a mean age of 56.4±5.6 years.

Medication use

- Of the 104 GPP patients with 12 months of follow-up, 44.0% were treated with a systemic therapy during follow-up, including:
  - 51.5% who were treated with a biological only
  - 153.0% who were treated with both systemic and topical systemic therapy

- More than one-third (35.6%) of patients with GPP were treated with a topical steroid medication, 19.3% were treated with a topical non-steroid medication, and 19.3% were treated with a topical non-steroid medication.

- The use of systemic steroids was similar in patients with GPP (27.9%) and those with PsO (25.2%); however, the use of topical steroids was more common in patients with GPP (35.6%) than those with PsO.

- Methotrexate was the most commonly used oral systemic therapy in patients with GPP (35.6%), whereas 52.7% of patients with PsO were female, with a mean age of 56.4±5.6 years.

Conclusions

- This study summarises the clinical characteristics of 1669 patients with GPP in a real-world setting in the USA.
- This study showed that patients with GPP had numerically higher amounts of comorbidities and differing concomitant medication burden compared with those in PsO, as well as differing needs to patients with PsO, highlighting an unmet need among patients with GPP.

References