Prevalence and overall disease burden of chronic spontaneous urticaria in five European countries (France, Germany, Italy, Spain, United Kingdom)


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## Conflict of Interest disclosure

☐ I have no, real or perceived direct or indirect conflicts of interest that relate to this presentation

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Introduction and Objective

- Chronic spontaneous urticaria (CSU) is an inflammatory skin condition characterized by the development of hives and/or angioedema that persists >6 weeks\(^1\)
- CSU has been associated with negative impact on patients’ health-related quality of life (HRQoL) as well as health care resource utilization\(^2\)
- The burden of CSU in European countries is substantial, and the published evidence is limited\(^3\)
- To estimate the prevalence, overall disease profile and burden among adult patients with chronic spontaneous urticaria in 5 European countries (EU5): France, Germany, Italy, Spain, and United Kingdom

\(^1\)Zuberbier et al. Allergy, 2022; \(^2\)Kolkhir et al. Nature Reviews, 2022
\(^3\)Balp et al. Patient, 2015
## Methodology

<table>
<thead>
<tr>
<th>Data Source</th>
<th>EU5 2020 National Health and Wellness Survey, nationally representative for France, Germany, Italy, Spain, UK</th>
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</thead>
<tbody>
<tr>
<td>Population</td>
<td>Adult respondents with a physician diagnosis of chronic spontaneous urticaria (CSU)</td>
</tr>
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</table>
| Outcomes    | - **Weighted 12-month Prevalence**: 2019 international census projections (adjusted for age & sex)  
- **Disease control**: Urticaria Control Test (UCT), 4-week recall  
- **General status**: SF-12v2 (Mental and Physical Component Summary) & Utility SF-6D, EQ-5D scores  
- **Dermatology-QoL**: Dermatology Life Quality Index (DLQI), 7-day recall  
- **Anxiety**: General Anxiety Disorder (GAD-7); 2-week recall  
- **Depression**: Patient Health Questionnaire (PHQ-9); 2-week recall  
- **Healthcare resource utilization**: % of patients with visits and mean (SD) number of visits to any healthcare provider, emergency room and hospitalizations, in the past 6 months  
- **Work Productivity and Activity Impairment (WPAI)**: calculated absenteeism, presenteeism, overall work impairment and activity impairment % scores, 7-day recall |
| Analysis    | Descriptive statistics and results were reported as frequency, mean and standard deviation (SD) |
Results - Frequency of Chronic Urticaria Forms

Among 62,319 respondents - 1,040 (1.7%) reported symptoms in the past 12 months

- **Diagnosed CSU**
  - n=519 (65.4%)
- **Diagnosed ClndU**
  - n=255 (32.1%)
- **Diagnosed CSU + ClndU**
  - n=20 (2.5%)
- **Not diagnosed or did not know**
  - n=246 (23.7%)

*Presence of itch, hives, and/or angioedema for ≥ 6 weeks
**Diagnosed by a physician
Results – Weighted 12-month prevalence diagnosed CSU

EU5: 0.92% (0.92%-0.92%)
United Kingdom: 0.79% (0.79%-0.79%)
Germany: 0.79% (0.78%-0.79%)
France: 0.76% (0.76%-0.76%)
Italy: 1.30% (1.3%-1.3%)
Spain: 1.0% (1.0%-1.0%)
Results - Sociodemographic profile

Patient characteristics  N=539

Age, mean [SD] years

- At diagnosis 37.8 [16.8]
- At survey completion 42.4 [14.8]

Female,% 58.1

Disease duration, mean [SD] years 9.2 [10.4]

Employment status
- Employed full time 47.3%
- Retired 6.1%
- Employed part time 8.0%
- Self-employed 11.7%
- Homemaker 14.5%
- Others 12.4%

Body Mass Index (BMI)
- Underweight (<18.5 kg/m2) 17.8%
- Normal weight (18.5 to <25.0 kg/m2) 42.7%
- Overweight (25 to <30.0 kg/m2) 26.0%
- Obese (30.0 kg/m2 and above) 7.8%
- Decline to answer 5.8%
Results - Confirmed CSU diagnosis by specialty

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Percentage of Patients</th>
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<tbody>
<tr>
<td>Primary care physician</td>
<td>35.1</td>
</tr>
<tr>
<td>Dermatologist</td>
<td>34.7</td>
</tr>
<tr>
<td>Allergist</td>
<td>26.7</td>
</tr>
<tr>
<td>Others</td>
<td>3.6</td>
</tr>
</tbody>
</table>
Results - Most frequently diagnosed comorbidities

- Headache and/or Migraine* (42.7%)
- Allergies (38.4%)
- Autoimmune conditions** (26.2%)
- Anxiety (24.1%)
- Depression (23.0%)
- Sleep difficulties*** (18.9%)
- Obesity (17.8%)
- Hypertension (16.9%)
- Thyroid (15.2%)
- Asthma (13.4%)
- CCI ≥ 2 (20.0%)

*Headache (23.2%), Migraine (19.5%)

**Ulcerative colitis (5.8%), Rheumatoid arthritis (5.2%), Sjogren’s syndrome (1.5%), Lupus (4.6%), Ankylosing spondylitis (4.3%), Crohn’s disease (4.8%)

***Sleep difficulties (11.5%), Sleep apnea (6.1%), Narcolepsy (1.3%)

Note: The groups are not mutually exclusive
CCI: Charlson Comorbidity Index
Results - Treatment patterns and disease control

Only 48.4% received treatment (N=261)

Only 28.4% had controlled disease (N=539)

OTC: over the counter medication; UCT: Urticaria Control Test
Results - Lower general status on SF-12v2 & utility scores

- MCS: Mental Component Summary; PCS: Physical Component Summary
- Mean [SD] MCS and PCS scores for general population = 50 [10]
- Dermatology-QoL - mean (SD) DLQI score was 8.8 (9.3)

MCS: Mental Component Summary; PCS: Physical Component Summary
Mean [SD] MCS and PCS scores for general population = 50 [10]
Results - More than 70% reported mild-severe anxiety & depression

GAD-7: General Anxiety Disorder-7; PHQ-9: Patient Health Questionnaire-9
## Results - High healthcare resource use over 6 months

<table>
<thead>
<tr>
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<th>N=539</th>
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<tbody>
<tr>
<td><strong>Any Healthcare provider</strong></td>
<td></td>
</tr>
<tr>
<td>Visited, %</td>
<td>96.8</td>
</tr>
<tr>
<td>Number of visits, mean [SD]</td>
<td>9.1 [18.7]</td>
</tr>
<tr>
<td><strong>Emergency room (ER)</strong></td>
<td></td>
</tr>
<tr>
<td>Visited, %</td>
<td>40.3</td>
</tr>
<tr>
<td>Number of visits, mean [SD]</td>
<td>3.6 [6.4]</td>
</tr>
<tr>
<td><strong>Hospitalizations</strong></td>
<td></td>
</tr>
<tr>
<td>Hospitalized, %</td>
<td>32.1</td>
</tr>
<tr>
<td>Number of hospitalizations, mean [SD]</td>
<td>3.2 [4.4]</td>
</tr>
</tbody>
</table>
Results - Impairment of work and daily activities

SD: standard deviation; WPAI: Work Productivity and Activity Impairment (past 7 days); Absenteeism, presenteeism & overall work impairment assessed among employed respondents only.

Higher Impairment

Mean [SD] % Score, WPAI

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<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
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<tr>
<td>Absenteeism</td>
<td>349</td>
<td>24.1</td>
<td>26.7</td>
</tr>
<tr>
<td>Presenteeism</td>
<td>353</td>
<td>47.5</td>
<td>31.8</td>
</tr>
<tr>
<td>Overall work impairment</td>
<td>344</td>
<td>54.4</td>
<td>34.3</td>
</tr>
<tr>
<td>Activity impairment</td>
<td>539</td>
<td>48.1</td>
<td>30.9</td>
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Conclusion

- In this real-world study, weighted 12-month prevalence of diagnosed CSU in EU5 was 0.92%
- Only two-thirds of symptomatic patients had a physician diagnosis of CSU
- More than 70% of patients had poorly controlled disease and less than 50% were treated
- Patients reported a variety of clinical comorbidities, anxiety, depression, low mental & physical status, high HRU and impairment of work and activities
- This study reflects the high humanistic and economic burden of CSU and need for better diagnosis and management
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