Chronic spontaneous urticaria (CSU) is characterized by the recurrent appearance of weals, angio-oedema or both, occurring at least twice weekly for longer than 6 weeks. It is often managed with antihistamines, but occasionally requires other systemic agents in recalcitrant cases.

A cross-sectional survey was conducted by means of an internet-based survey tool (Typeform: https://www.typeform.com). Participating consultants with a specialist interest in urticaria were identified through the specialist registers of the British Society of Allergy and Clinical Immunology (BSACI), the Improving Quality in Allergy Services (IQAS) Group and the British Association of Dermatologists (BAD), and invited to take part.

The survey content was based on current CSU treatment guidelines from EAACI/GA2LEN/EDF/WAO and the British Society for Allergy and Clinical Immunology (BSACI). The EAACI/GA2LEN/EDF/WAO guidelines are a joint initiative of the Dermatology Section of the European Academy of Allergy and Clinical Immunology (EAACI), the Global Allergy and Asthma European Network (GA2LEN) (a European Union-funded network of excellence), the European Dermatology Forum (EDF), and the World Allergy Organization (WAO). To standardize responses, all participants were presented with a case of recalcitrant CSU (failed on maximum dose of nonsedating antihistamines and montelukast), requiring alternative systemic treatment. Questions covered usage of systemic treatments, routine disease severity assessments, adherence to treatment guidelines and perceived barriers to prescribing.

Responses (Table 1) were received from 19 UK consultants (26 surveys sent; completion rate 73%), 15 of whom had >10 years’ experience in the treatment of CSU. The majority were allergy (58%) and dermatology consultants (37%). Of the 19 consultants, 56% provide a dedicated urticaria service, 37% treat both adult and paediatric patients, and the majority (79%) use systemic medications other than antihistamines and montelukast, requiring alternative systemic treatment. Questions covered usage of systemic treatments, routine disease severity assessments, adherence to treatment guidelines and perceived barriers to prescribing.

Responses Table 1. Summary of survey results.

| Parameter | Response, % (n) |
|-----------|----------------|
| **Section 1: Demographics** | |
| Country of work | United Kingdom 100% (19) |
| Hospital grade | Consultant 100% (19) |
| Specialty | Allergy 58% (11) |
| Dermatology 37% (7) |
| Immunology 5% (1) |
| Caseload | Adult only 42% (8) |
| Both adult and paediatric 37% (7) |
| Paediatric only 21% (4) |
| Number of years in specialty | > 20 53% (10) |
| 10–20 26% (5) |
| < 10 21% (4) |
| **Section 2: Use of systemic medications** | |
| Do you use systemic medication for the management of chronic urticaria? | Yes 79% (15) |
| No 21% (4) |
| First-line treatments? | Omalizumab 47% (7) |
| Ciclosporin 28% (4) |
| Other 20% (3) |
| Dapsone 7% (1) |
| Second-line treatments? | Omalizumab 40% (6) |
| Ciclosporin 33% (5) |
| Mycophenolate mofetil 13% (2) |
| Other 13% (2) |
| Third-line treatments? | Other 27% (4) |
| Dapsone 20% (3) |
| Ciclosporin 13% (2) |
| Methotrexate 13% (2) |
| Mycophenolate mofetil 13% (2) |
| If you use any of the listed treatments in children, which ones do you use? | Ciclosporin 80% (4) |
| Omalizumab 80% (4) |
| Azathioprine 60% (3) |
| Dapsone 60% (3) |
| Mycophenolate mofetil 60% (3) |
| Methotrexate 20% (1) |
| **Section 3: Use of standardized measures** | |
| Do you use standardized measures when assessing disease? | Yes 84% (16) |
| No 16% (3) |
Activity Score (UAS-7, 63%), the Physician Global Assessment (63%), the Patient Global Assessment (44%) and the Dermatology Quality of Life Index (DLQI) (38%). Guidelines are used by 89% to direct their management of CSU, with 50% using the EAACI/GA2LEN/EDF/WAO guideline, compared with 31% primarily using the BSACI guideline. The main perceived barriers to prescribing systemic medications were potential adverse effects (AEs) (32% strongly agreed), potential long-term toxicity (26% strongly agreed), cost of treatment (42% strongly agreed), and views expressed by the patient and their family (37% agreed).

Our findings show variance between dermatology, allergy and immunology consultants with regard to the prescribing of systemic agents in CSU (Fig. 2). Our findings suggest that allergists are more likely to prescribe omalizumab as first-line treatment, whereas dermatologists more commonly prescribe ciclosporin, which is not in keeping with National Institute for Care Excellence guidance. Drug-related AEs are the main perceived barrier for clinicians to prescribe systemic medications. Other barriers to prescribing are the cost of medications. The list price for omalizumab 300 mg monthly for 12 months is £6150, excluding the cost of post-injection observations required in a secondary care setting, whereas ciclosporin (in generic formulation) costs £2660 for 12 months (300 mg/day; 4 mg/kg/day for a patient weighing 75 kg), excluding the cost of renal function and blood-pressure monitoring. The main limitation to our survey was the number of respondents, as we chose to focus on consultant physicians with a specialist interest in urticaria.

In summary, our UK survey highlights the differences in management of CSU between dermatologists and other specialists, resulting in variation in the care provided for patients with CSU. Although national and international treatment guidelines now recommend omalizumab as a first-line treatment, allergists are more likely to prescribe it, whereas dermatologists more commonly prescribe ciclosporin.

| Parameter                          | Response, % (n) |
|------------------------------------|----------------|
| Physician Global Assessment        |                |
| Most of the time                   | 63% (10)       |
| Sometimes                          | 13% (2)        |
| Never                              | 25% (4)        |
| Patient Global Assessment          |                |
| Most of the time                   | 44% (7)        |
| Sometimes                          | 25% (4)        |
| Rarely                             | 6% (1)         |
| Never                              | 25% (4)        |
| UAS-7                              |                |
| Most of the time                   | 63% (10)       |
| Sometimes                          | 38% (6)        |
| In-clinic UAS                      |                |
| Most of the time                   | 25% (4)        |
| Sometimes                          | 13% (2)        |
| Rarely                             | 19% (3)        |
| Never                              | 44% (7)        |
| Angio-oedema Activity Score        |                |
| Sometimes                          | 44% (7)        |
| Rarely                             | 25% (4)        |
| Never                              | 31% (5)        |
| Itch severity score                |                |
| Most of the time                   | 13% (2)        |
| Sometimes                          | 19% (3)        |
| Rarely                             | 31% (5)        |
| Never                              | 38% (6)        |
| Weekly number of hives score       |                |
| Most of the time                   | 13% (2)        |
| Sometimes                          | 25% (4)        |
| Rarely                             | 19% (3)        |
| Never                              | 44% (7)        |
| DLQI                               |                |
| Most of the time                   | 38% (6)        |
| Sometimes                          | 25% (4)        |
| Rarely                             | 25% (4)        |
| Never                              | 13% (2)        |
| CU-Q2oL                            |                |
| Sometimes                          | 25% (4)        |
| Rarely                             | 25% (4)        |
| Never                              | 50% (8)        |
| AE-QoL                             |                |
| Sometimes                          | 6% (1)         |
| Rarely                             | 31% (5)        |
| Never                              | 63% (10)       |

**Section 4: Use of guidelines and perceived barriers**

Do you use guidelines to direct your management of urticaria?
Yes 89% (17)
No 11% (2)
Which guidelines do you refer to?
EAACI/GA2LEN/EDF/WAO 50% (8)
Other 38% (6)
Local guidelines 13% (2)
Support services for patients
Access to nursing support 89% (16)
Access to inpatient facilities 61% (11)
Dedicated urticaria service 56% (10)
Nurse prescribers 28% (5)
Main perceived barriers to prescribing systemic medications
Cost 89% (16)
Side effects of treatments 61% (11)
Views expressed by patient or family 56% (10)
Long-term toxicity 28% (5)

AE-QoL, Angioedema Quality of Life Questionnaire; CU-Q2oL, Chronic Urticaria Quality of Life Questionnaire; EACCI/GA2LEN/EDF/WAO, European Academy of Allergy and Clinical Immunology, Global Allergy and Asthma European Network, European Dermatology Forum and World Allergy Organization; DLQI, Dermatology Life Quality Index; UAS7, weekly Urticaria Activity Score.

**Figure 1** First-, second- and third-line systemic drug selection.
first-line agent for severe CSU not responding to antihista-
tamine and montelukast treatment, these guidelines are
based on placebo-controlled studies. The current lack of
head-to-head comparisons between conventional systemic
and biologic therapies may explain some of the variation
in treatment approaches we observed, and highlights the
need for further research in this area, including a com-
prehensive health economics evaluation.1,5

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References

1 Zuberbier T, Aberer W, Asero R et al. The EAACI/GA#
LEN/EDF/WAO Guideline for the definition, classification,
diagnosis, and management of urticaria: the 2013
revision and update. Allergy 2014; 69: 868–87.

2 Powell RJ, Leech SC, Till S et al. BSACI guideline for the
management of chronic urticaria and angioedema. Clin
Exp Allergy 2015; 45: 547–65.

3 National Institute for Health and Care Excellence.
Omalizumab for previously treated chronic spontaneous
urticaria. NICE Technology Appraisal Guidance (TA339),
2015. Available at: https://www.nice.org.uk/guidance/ta
339 (accessed 30 April 2018).

4 Joint Formulary Committee. British National Formulary.
Available at: http://www.medicinescomplete.com (accessed
on 10 January 2017).

5 Maurer M, Kaplan A, Rosén K et al. The XTEND-CIU
study: long-term use of omalizumab in chronic idiopathic
urticaria. J Allergy Clin Immunol 2018; 141(1138–9): e7.