

SUPPLEMENTARY MATERIAL

Table S1. Modified Delphi methodology and consensus criteria.

1. After the exhaustive review of the literature and discussion, the scientific committee generated 137 debatable statements/items addressing the concept of control in chronic urticaria and recommendations on how to monitor the disease activity and its impact.
2. In a second step these statements were sent to an expert panel comprised of 138 members for assessment. The scientific committee selected the members of the panel among dermatologists and allergists/allergologists considering their recognized experience, professional prestige and publications in the reference field. Another inclusion criterion for someone to be included as an expert in the panel was to be a member of any Spanish regional urticaria study group. These groups are formed by allergists and dermatologists with extensive experience and keen interest in the pathology, and in carrying out initiatives related to urticaria management and control.
3. Afterwards, the items were sent to the panellists for an online evaluation and validation by voting in two rounds.
4. Panellists assessed the items using a single 9-point Likert-type ordinal scale: minimum 1, full disagreement; and maximum 9, full agreement. Responses were organized into three groups according to the level of agreement-disagreement with a statement: points 1-3 were considered as disagreement, 4-6 as neither agreement nor disagreement, and 7-9 as agreement.

5. Consensus was reached if the median of the responses was in the range 7-9 (agreement) or 1-3 (disagreement) and less than one-third of the panellists voted outside these ranges. Also, the interquartile range (IQR) should be less than 4.
6. The results obtained in the first round were analysed, and the results of the first vote were circulated among the participants. The items that did not reach consensus were re-circulated and subjected to a second round of voting. In this manner, the experts could reconsider their responses in light of the pooled results. Those items on which a consensus was not reached (in favour or against) in the first round could be reformulated by the scientific committee.
7. The results obtained in this second round were analysed using the same criteria as in the first round to determine which issues had finally achieved a consensus among the panellists.
8. Results are shown in Tables S3-S5 as median and IQR of the panellists' responses, and degree of agreement, which was defined as the percentage of panellists who voted within the category that included the median of the answers (1-3, 4-6 or 7-9). Taking into account the consensus statements, the scientific committee developed an algorithm and a table to summarise conclusions and recommendations on the assessment and management of patients with CU, according to the degree of disease control.

Table S2. Details of the literature search.

1. Search for guidelines on chronic urticaria in the websites of the following Scientific Societies:
 - Academia Española de Dermatología y Venereología (AEDV):
<https://aedv.es/>
 - Sociedad Española de Alergología e Inmunología Clínica (SEAIC):
<https://www.seaic.org>
 - European Academy of Allergy and Clinical Immunology (EAACI):
<https://www.eaaci.org/>
 - Global Allergy and Asthma European Network (GA²LEN):
<http://www.ga2len.net/>
 - European Dermatology Forum (EDF): <https://www.edf.one/es/home.html>
 - World Allergy Organization (WAO): <https://www.worldallergy.org/>
 - British Society for Allergy and Clinical Immunology (BSACI):
<https://www.bsaci.org/>
 - The National Institute for Health and Care Excellence (NICE).
<https://www.nice.org.uk/>
 - American Academy of Allergy, Asthma & Immunology (AAAAI) .
<https://www.aaaai.org/>
 - American Academy of Dermatology (AAD). <https://www.aad.org/>

2. Search for guidelines, systematic reviews or narrative reviews of the last 5 years on chronic urticaria in the following repositories:
 - The Cochrane Library
 - U.S. National Guidelines Clearinghouse
 - Tripdatabase
 - Biblioteca de Guías de Práctica Clínica del Sistema Nacional de Salud (GuiaSalud)

3. Search in PubMed for guidelines and reviews of articles in English or Spanish from the last 5 years with the terms:
 - **"Chronic Urticaria"[Mesh] OR Chronic Urticaria**. Results: 276 references

4. Search in Pubmed for articles in the last 10 years in Spanish or English with the terms:
 - "Chronic Urticaria"[Mesh]) OR (Chronic Urticaria)) AND (Control OR Remission OR Recovery of Function OR Disease Activity OR Urticaria Activity Score OR Urticaria Control Test). Results: 967 references.

Table S3. Block I results. Definitions and terms.

	Median (IQR)	Agreement level	Result
1. CU is characterized by the presence of hives and / or angioedema that appear continuously for more than 6 weeks	9 (8-9)	90.6%	Agreement in 1 st round
2. The hives last up to 24 hours	9 (8-9)	93.5%	Agreement in 1 st round
3. The angioedema usually lasts 24-72 hours	9 (8-9)	96.4%	Agreement in 1 st round
4. In the management of CU, there is no agreed definition of "control"	7 (5-8)	67.6%	Agreement in 1 st round
5. In the management of CU, there is no agreed definition of "remission"	8 (6-9)	71.9%	Agreement in 1 st round
6. The concepts of CU control and remission are different	9 (8-9)	99.3%	Agreement in 1 st round
7. Speaking of CU control, the patient must be without signs or symptoms when on treatment	8 (7-9)	76.3%	Agreement in 1 st round
8. Speaking of CU remission, the patient must be without signs or symptoms when not on treatment	9 (8-9)	94.2%	Agreement in 1 st round
The CU definition of control should assess:			
9. The presence or absence of hives	9 (9-9)	97.1%	Agreement in 1 st round
10. The presence or absence of pruritus	9 (9-9)	97.8%	Agreement in 1 st round
11. The presence or absence of angioedema	9 (8-9)	92.8%	Agreement in 1 st round
Talking about the degree of control (complete control, good control, or partial control):			
12. It is recommended to use only a validated questionnaire (e.g. UAS7 or UCT) without the need to complement it with a clinical assessment by the treating physician*	2 (1-5)	72.5%	Disagreement in 2 nd round
13. It is recommended to use a validated questionnaire and complement it with an assessment of the clinical condition by the treating physician	9 (8-9)	88.5%	Agreement in 1 st round
14. It is recommended to use only the assessment of the clinical condition evaluated by the treating physician	2 (1-3)	75.5%	Disagreement in 1 st round
15. The assessment of the clinical condition by the patient must be taken into account	8 (7-9)	89.9%	Agreement in 1 st round
16. Complete CU control can be defined as the absence of signs or symptoms of the disease while the patient is receiving treatment for it	9 (8-9)	95.0%	Agreement in 1 st round

17. Good CU control can be defined as a decrease of the symptoms or signs with treatment at an appropriate level as judged by both the physician and the patient	8 (7-9)	85.6%	Agreement in 1 st round
18. Partial CU control can be defined as a decrease in the intensity of the symptoms or signs of the disease with treatment, but without reaching an adequate level according to the opinion of the doctor and the patient and without reaching a normal quality of life	8 (8-9)	90.6%	Agreement in 1 st round
19. Remission of CU can be defined as the total absence of signs or symptoms of the disease in the absence of treatment	9 (8-9)	92.8%	Agreement in 1 st round
The best term to define the reappearance of symptoms in an asymptomatic CU patient while on treatment is:			
20. Flare up ("brote")**	7 (4-8)	59.4%	No agreement
21. Break out ("rebrote")**	5 (2-8)	18.1%	No agreement
22. Exacerbation ("exacerbación")**	6 (3-8)	18.8%	No agreement
23. Flare up, break out or exacerbation indistinctly.	3 (1-7)	55.1%	No agreement
The best term to define the reappearance of symptoms in an asymptomatic CU patient in the absence of treatment is:			
24. Relapse ("recidiva")**	8 (6-9)	74.1%	Agreement in 1 st round
25. Relapse ("recaída")**	7 (3-8)	57.2%	No agreement
26. Recurrence ("recurrencia")**	7 (4-8)	61.6%	No agreement
27. Recurrence, relapse or recidivate indistinctly	5 (2-8)	18.1%	No agreement

*Change in the formulation in the 2nd round. **Term translation into Spanish in brackets.
 UAS7: Urticaria Activity Score 7; CU: Chronic urticaria; IQR: Interquartile range; UCT: Urticaria Control Test.

Table S4. Block II results. Available and recommended PROs in CU

	Median (IQR)	Agreement level	Result
28. There is a need to define which PROs are most indicated to use in daily clinical practice when caring for a patient with CU	8 (8-9)	92.8%	Agreement in 1 st round
In daily clinical practice it is advisable to use PROs to help us measure:			
29. CU activity	9 (8-9)	99.3%	Agreement in 1 st round
30. The degree of CU control	9 (8-9)	98.6%	Agreement in 1 st round
31. The quality of life of patients with CU	9 (8-9)	96.4%	Agreement in 1 st round
To evaluate the activity and / or control of the CSU that occurs with hives and pruritus, it is recommended to use:			
32. UAS7 once a day	9 (8-9)	92.8%	Agreement in 1 st round
33. UAS7 twice a day	3 (1-7)	57.2%	No agreement
34. UCT	8 (7-9)	83.5%	Agreement in 1 st round
35. Visual analogue scale of pruritus or similar*	7 (4-8)	53.2%	No agreement
36. Visual analogue scale of hives or similar*	6 (3-7)	30.9%	No agreement
37. Validated control scales (UCT) and disease activity (UAS) together with visual analogue scale of pruritus and hives*	8 (6-8)	73.2%	Agreement in 2 nd round
To evaluate the activity and / or control of CSU that occurs with frequent angioedema attacks (regardless of the concomitant presence of hives and pruritus), it is recommended to use*			
38. AAS7	8 (7-9)	78.4%	Agreement in 1 st round
39. AAS28	7 (6-8)	72.5%	Agreement in 2 nd round
40. Number of angioedema episodes in a month	8 (6-9)	71.9%	Agreement in 1 st round
41. AECT (Angioedema Control Test)	8 (7-9)	76.3%	Agreement in 1 st round
42. Validated scales of control and activity of urticaria together with a visual analogue scale of angioedema*	7 (5-8)	62.3%	No agreement
To evaluate the activity and / or control of CINDU, it is recommended to use:			
43. UCT	8 (7-9)	87.1%	Agreement in 1 st round
44. Validated scales of control and activity of urticaria together with a visual analogue scale of pruritus*	7 (5-8)	60.1%	No agreement
45. Validated urticaria activity and control scales together with a visual analogue scale of hives*	7 (5-8)	55.8%	No agreement
46. Thresholds of provocation tests (e.g. tempest).	8 (6-9)	74.8%	Agreement in 1 st round
To evaluate the quality of life of CU with hives and pruritus, it is recommended to use:			
47. SF-36	5 (3-6)	43.5%	No agreement

48. DLQI	7 (6-8)	71.7%	Agreement in 2 nd round
49. CU-Q2oL	8 (7-9)	82.7%	Agreement in 1 st round
50. AE-QoL (if angioedema is present)	8 (7-9)	83.5%	Agreement in 1 st round
51. Medical Outcomes Study Sleep Scale (MOS-Sleep Scale)	5 (3-7)	42.0%	No agreement
52. Visual analogue quality of life, sleep, or similar scale	7 (5-8)	57.2%	No agreement
53. The use of PROs can help in decision-making during the clinical management of patients with urticaria	9 (8-9)	95.7%	Agreement in 1 st round
54. There is a need to define when and how PROs should be used in order to guide treatment changes in CU	8 (8-9)	93.5%	Agreement in 1 st round
55. The use of PROs in CU patients is recommended to assess response to treatment	9 (8-9)	95.0%	Agreement in 1 st round
56. The use of PROs in CU patients is recommended to assess the need to change a treatment	9 (8-9)	94.2%	Agreement in 1 st round
In CU, disease activity should be assessed with at least one PRO:			
57. During the first visit	9 (8-9)	90.6%	Agreement in 1 st round
58. During each visit when there is active disease	8 (7-9)	87.8%	Agreement in 1 st round
59. Before starting a new treatment	9 (8-9)	93.5%	Agreement in 1 st round
60. After a change or modification in treatment	9 (8-9)	95.0%	Agreement in 1 st round
61. When there is worsening of symptoms	9 (7-9)	89.2%	Agreement in 1 st round
62. In the CU, it is advisable to measure disease activity by means of a PRO on a routine basis*	8 (7-9)	79.0%	Agreement in 2 nd round
In CU, the level of disease control should be measured with at least one PRO:			
63. During the first visit	9 (8-9)	88.5%	Agreement in 1 st round
64. During each visit when there is active disease	8 (7-9)	84.2%	Agreement in 1 st round
65. Before starting a new treatment	9 (8-9)	90.6%	Agreement in 1 st round
66. After a change or modification in treatment	9 (8-9)	92.1%	Agreement in 1 st round
67. When there is worsening of symptoms	8 (7-9)	87.8%	Agreement in 1 st round
68. In CU, it is advisable to measure the degree of control of the disease by means of a PRO on a routine basis*	8 (7-9)	84.1%	Agreement in 2 nd round
In CU, quality of life should be measured with at least one PRO:			
69. During the first visit	8 (7-9)	84.9%	Agreement in 1 st round

70. In CU, quality of life should be measured with at least one PRO during each visit when there is moderate or severe active disease*	7 (6-8)	71.7%	Agreement in 2 nd round
71. Before starting a new treatment	8 (7-9)	78.4%	Agreement in 1 st round
72. After a change or modification in treatment	8 (7-9)	80.6%	Agreement in 1 st round
73. When there is worsening of symptoms	8 (6-9)	71.2%	Agreement in 1 st round
74. In CU, it is advisable to measure quality of life using a PRO on a routine basis*	7 (5-8)	59.4%	No agreement

*Change in the formulation in the 2nd round.

AAS: Angioedema Activity Score; AECT: Angioedema Control Test; AE-QoL: Angioedema Quality of Life Questionnaire; CINDU: Chronic inducible urticaria; CSU: Chronic spontaneous urticaria; CU: Chronic urticaria; CU-Q2oL: Chronic Urticaria and Quality of Life Questionnaire; IQR: Interquartile range; DQLI: Dermatology Quality of Life Index; PRO: Patient-reported outcome; QoL: Quality of life; SF-36: Short Form-36 Health Survey; UAS: Urticaria Activity Score; UCT: Urticaria Control Test.

Table S5. Block III results. CU therapeutic objective

	Median (IQR)	Agreement level	Result
75. The therapeutic objective of CU should be to achieve complete control of the disease	9 (8-9)	91.4%	Agreement in 1 st round
76. If complete control is not achieved, after exhausting treatment alternatives, the therapeutic objective should be good control, trying to achieve a minimum activity of the disease	9 (8-9)	99.3%	Agreement in 1 st round
77. Partial control is not an optimal therapeutic goal	8 (7-9)	84.2%	Agreement in 1 st round
In relation to quality of life (regardless of the activity and / or level of disease control) it is recommended:			
78. Perform quality of life PROs (DLQI, CU-Q2oL...)	9 (7-9)	88.5%	Agreement in 1 st round
79. Actively inquire of the sleep quality	8 (7-9)	87.8%	Agreement in 1 st round
80. Actively inquire of the mood state	8 (7-9)	81.3%	Agreement in 1 st round
81. Actively inquire of the quality of personal interactions (family, friends, sexual and emotional life)	8 (7-9)	76.3%	Agreement in 1 st round
82. Actively inquire of performance at work and school	8 (7-9)	81.3%	Agreement in 1 st round
It is recommended to define complete control of CU in clinical practice by fulfilling the criteria:			
83. UAS7 = 0 (does not apply in CINDU and angioedema)	9 (8-9)	89.2%	Agreement in 1 st round
84. UCT = 16	9 (7-9)	81.3%	Agreement in 1 st round
85. Absence of angioedema (ASS7 or ASS28 = 0) if there was a history of angioedema previously	9 (8-9)	89.9%	Agreement in 1 st round
86. Optimal quality of life (Ex. DLQI = 0-1)	8 (7-9)	77.7%	Agreement in 1 st round
It is recommended to define good CU control in clinical practice by fulfilling the criteria:			
87. UAS7 1-6 (does not apply in CINDU and angioedema)	8 (8-9)	95.7%	Agreement in 1 st round
88. UCT ≥ 12	8 (7-9)	89.2%	Agreement in 1 st round
89. Presence of angioedema (ASS7 or ASS28 > 0) that does NOT interfere with normal activity or does NOT have a high / significant impact on quality of life (if there was a history of angioedema previously)	8 (7-9)	89.2%	Agreement in 1 st round
90. Good quality of life (e.g., DLQI = 2-5)	8 (7-9)	82.0%	Agreement in 1 st round
It is recommended to define CU partial control when, despite observing some clinical improvement, the patient continues with active disease by maintaining:			
91. UAS7 > 6 (does not apply in CINDU and angioedema)	8 (7-9)	84.9%	Agreement in 1 st round

92. UCT < 12	8 (7-9)	83.5%	Agreement in 1 st round
93. Presence of angioedema (ASS7 or ASS28 > 0) that interferes with normal activity or has a significant impact on quality of life (if there was a history of angioedema previously)	8 (7-9)	82.7%	Agreement in 1 st round
94. A significant impact on quality of life (e.g., DLQI > 5)	8 (6-9)	74.1%	Agreement in 1 st round
Absence of response:			
95. It can be defined considering the evaluation of the clinical condition made by the treating physician and taking into account the assessment made by the patient*	8 (7-9)	85.5%	Agreement in 2 nd round
96. It can be defined as the absence of evident positive changes in the symptoms and quality of life of the patient after starting treatment	8 (7-9)	86.3%	Agreement in 1 st round
97. There is not yet a specific percentage or threshold of any PROs that serve to definitively define the absence of a response*	7 (5-8)	68.1%	Agreement in 2 nd round
98. There is a need to determine a specific percentage or threshold of some PROs to define the absence of response	8 (7-9)	75.5%	Agreement in 1 st round
The recommended time in the absence of CU signs and symptoms to confirm that a patient WITHOUT treatment is in remission is:			
99. 1 month	2 (1-3)	76.8%	Disagreement in 2 nd round
100. 3 months	7 (4-8)	55.1%	No agreement
101. 6 months	8 (6-9)	74.1%	Agreement in 1 st round
102. 1 year	8 (4-9)	65.9%	No agreement
The recommended time of absence of signs and symptoms (complete control) to confirm that a patient WITH treatment is in complete responder is:			
103. 1 month	3 (1-6)	58.0%	No agreement
104. 3 months.	7 (6-8)	68.3%	Agreement in 1 st round
105. 6 months.	8 (6-8)	71.0%	Agreement in 2 nd round
106. 1 year	5 (2-9)	19.6%	No agreement
The recommended time of good control to confirm that a patient WITH treatment is a good responder is:			
107. 1 month	3 (2-7)	52.9%	No agreement
108. 3 months	8 (7-8)	77.7%	Agreement in 1 st round
109. 6 months	8 (7-9)	76.8%	Agreement in 2 nd round

110. 1 year	5 (2-8)	18.8%	No agreement
The recommended partial control time to confirm that a patient WITH treatment is a partial responder is:			
111. 1 month	3 (1-5)	65.2%	No agreement
112. 3 months	7 (6-8)	71.2%	Agreement in 1 st round
113. 6 months	8 (7-9)	81.9%	Agreement in 2 nd round
114. 1 year	4 (2-8)	18.1%	No agreement
The recommended time of absence of response to confirm that a patient WITH treatment is a non-responder is:			
115. 1 month	2 (1-4)	73.2%	Disagreement in 2 nd round
116. 3 months	6 (3-8)	24.6%	No agreement
117. 6 months	8 (6-9)	73.9%	Agreement in 2 nd round
118. 1 year	2 (1-7)	59.4%	No agreement
A modification of the dosage regimen of a treatment is recommended when the patient:			
119. Presents an absence of response to treatment	9 (9-9)	98.6%	Agreement in 1 st round
120. Presents a partial response to treatment	8 (7-9)	82.0%	Agreement in 1 st round
121. Has achieved a good response to treatment (but not a complete response), the patient requests it, and effective therapeutic alternatives are available*	7,5 (7-8)	78.3%	Agreement in 2 nd round
122. Has achieved a good response or a complete response to treatment, but there is a treatment-related adverse event	9 (8-9)	91.4%	Agreement in 1 st round
A change in treatment is recommended when the patient:			
123. Presents an absence of response to treatment	9 (9-9)	99.3%	Agreement in 1 st round
124. Presents a partial response to treatment	7 (6-8)	71.9%	Agreement in 1 st round
125. Has achieved a good response to treatment (but not a complete response), and effective therapeutic alternatives are available	7 (5-8)	70.5%	Agreement in 1 st round
126. Has achieved a good response or a complete response to treatment, but there is a treatment-related adverse event.	9 (8-9)	90.6%	Agreement in 1 st round
If a decrease in the dosage regimen of a well-tolerated treatment in a patient with a complete response is desired, it is recommended to lower the dosage regimen when the patient:			
127. Presents a complete response for ≥ 1 month	3 (2-7)	53.6%	No agreement
128. Presents a complete response for ≥ 3 months	8 (6-9)	69.1%	Agreement in 1 st round

129. Presents a complete response for ≥ 6 months	8 (5-9)	68.3%	Agreement in 1 st round
130. Presents a complete response for ≥ 1 year	5 (2-9)	10.1%	No agreement
If a well-tolerated treatment is to be withdrawn in a patient with a complete response, it is recommended to withdraw it when the patient:			
131. Presents a complete response for ≥ 1 month	2 (1-4)	72.7%	Disagreement in 1 st round
132. Presents a complete response for ≥ 3 months	6 (3-8)	17.4%	No agreement
133. Presents a complete response for ≥ 6 months	8 (6-9)	70.5%	Agreement in 1 st round
134. Presents a complete response for ≥ 1 year	7 (2-9)	54.3%	No agreement
135. It is not recommended to withdraw treatment in a patient who has a good response (but not a complete response) and the treatment is well tolerated	8 (8-9)	92.1%	Agreement in 1 st round
136. It is not recommended to lower the treatment dosage in a patient who has a good response (but not a complete response) and the treatment is well tolerated	8 (6-9)	74.1%	Agreement in 1 st round
137. A decrease in the treatment dosage could be considered in a patient with a good response (but not a complete response) with a well-tolerated treatment	5 (2-7)	18.8%	No agreement

* Change in the formulation in the 2nd round.

AAS: Angioedema Activity Score; AECT: Angioedema Control Test; AE-QoL: Angioedema Quality of Life Questionnaire; CINDU: Chronic inducible urticaria; CSU: Chronic spontaneous urticaria; CU: Chronic urticaria; CU-Q2oL: Chronic Urticaria and Quality of Life Questionnaire; IQR: Interquartile range; DQLI: Dermatology Quality of Life Index; PRO: Patient-reported outcome; QoL: Quality of life; UAS: Urticaria Activity Score; UCT: Urticaria Control Test.