

Instructions for ERA-EDTA congress abstract submission:

- **Character limit:** 3600 (without spaces)
- **Submission deadline:** Feb 6th
- **Submission fees:** Each abstract submitted has a non-refundable **mandatory EUR 25.00 processing fee by credit-card (Master and visa card) only.**

Title: Real-world Signs and Symptoms at Diagnosis in Patients with C3 Glomerulopathy - interim results from a multi-country study**Authors: Clare Proudfoot¹, Katharina Pannagl², Jennifer Nguyen³, Andrea King¹, Kathleen Murphy³, Jonathan de Courcy⁴, Richard Lafayette⁵****Affiliations:** ¹Novartis Pharma AG, Basel, Switzerland; ²Novartis Pharmaceuticals UK Ltd, London, UK; ³Novartis Pharmaceuticals Corporation, East Hanover, New Jersey, United States; ⁴Adelphi Real World, Bollington, U K ⁵Stanford University Medical Center, United States**Background and Aims:**

C3 glomerulopathy (C3G) is a rare form of glomerulonephritis, with an estimated incidence of 1 – 2 per million per year. C3G is associated with a high risk of disease progression with approximately 50% of patients reaching kidney failure within 10 years of diagnosis. Common signs and symptoms include proteinuria, hematuria, edema and hypertension. The aim of this analysis was to better understand the clinical characteristics of C3G patients from the US, Europe and Asia, at the time of diagnosis.

Methods:

An analysis was conducted using interim data from the Adelphi C3G Disease Specific Programme (DSP), a cross-sectional survey of C3G-treating nephrologists in US, EU5 (France, Germany, Italy, Spain, UK), China and Japan (study ongoing since August 2022; interim analysis based on data until November). Nephrologists completed structured forms administered via online links for consecutive patients presenting with C3G. The forms included demographic and clinical information including signs, symptoms, and lab values amongst others.

Results:

In this interim analysis, 88 nephrologists had completed records for 277 patients in this survey, including 95 in US, 120 in EU5, 39 in China and 23 in Japan. Median patient age at diagnosis was 40.9, and 60% were male. 80% had C3 glomerulonephritis (C3GN) and 19% had dense deposit disease (DDD). Median proteinuria at diagnosis was 2.9 g/day, and was ≥ 1 g/day in 82% of patients. Median eGFR at diagnosis was 50 ml/min/1.73m² (**Table 1**). In addition to proteinuria, the main clinical signs and symptoms at diagnosis were hematuria, edema, hypertension and fatigue. Pain, appetite loss and sleep problems were also reported. Physicians described disease severity at diagnosis as moderate in 53% and severe in 31% of patients.

Conclusion:

This study allows evaluation of a rare disease across geographies. C3G patients experience substantial symptomatic and clinical burden at diagnosis. This symptom burden, high proteinuria, and relatively low eGFR is consistent with physician assessment that the disease is moderate or severe by the time of diagnosis. Facilitating early diagnosis of C3G and rapid initiation of treatment could be beneficial for patients in slowing disease progression.

Table 1: Patient signs and symptoms at diagnosis by geographic region

	All Patients n=277	Geographic region			
		US n=95	EU5 n=120	China n=39	Japan n=23
Signs and symptoms at diagnosis					
Proteinuria	229 (83%)	78 (82%)	97 (81%)	31 (79%)	23 (100%)
Hematuria	155 (56%)	54 (57%)	62 (52%)	22 (56%)	17 (74%)
Edema	127 (46%)	34 (36%)	64 (53%)	23 (59%)	6 (26%)
Hypertension (140/90mmHg)	117 (42%)	32 (34%)	59 (49%)	19 (49%)	7 (30%)
Fatigue	95 (34%)	34 (36%)	47 (39%)	13 (33%)	1 (4%)
Discolored urine	52 (19%)	16 (17%)	23 (19%)	12 (31%)	1 (4%)
Pain in back/sides/abdomen	40 (14%)	6 (6%)	21 (18%)	11 (28%)	2 (9%)
High cholesterol	37 (13%)	7 (7%)	17 (14%)	8 (21%)	5 (22%)
Appetite loss	35 (13%)	7 (7%)	19 (16%)	8 (21%)	1 (4%)
Nausea	35 (13%)	11 (12%)	18 (15%)	6 (15%)	0 (0%)
Oliguria	32 (12%)	8 (8%)	15 (12%)	9 (23%)	0 (0%)
Sleep problems	29 (10%)	5 (5%)	18 (15%)	4 (10%)	2 (9%)
Proteinuria at diagnosis					
Number of patients	n=224	n=64	n=104	n=34	n=22
<1 g/24hr	40 (18%)	8 (12%)	9 (9%)	9 (26%)	14 (64%)
≥1 g/24hr	184 (82%)	56 (88%)	95 (91%)	25 (74%)	8 (36%)
Median	2.9	2.8	3.4	3.2	0.3
Interquartile range (IQR)	1.3 – 5	1.5 - 5	1.8 - 5	0.8 - 7.1	0.0 - 1.8
Mean (standard deviation)	3.4 (3.0)	3.2 (2.1)	3.6 (2.3)	4.8 (5.2)	1.1 (1.6)
Range	0 – 20	0 - 10	0 - 13	0 - 20	0 - 8
eGFR at diagnosis					
Number of patients	n=233	n=65	n=111	n=36	n=21
Median	50	50	40	67.2	55
IQR	31.5 – 75	38 - 72	25 - 70	57 - 82.2	31 - 79
Mean (standard deviation)	54.5 (28.9)	53.2 (24.4)	47.9 (27.9)	73.5 (32.2)	60.1 (27.7)
Range	5 – 163	8 - 150	5 - 121	20 - 163	25 - 130