Instructions for ERA 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: C3 glomerulopathy current therapy and real-world management - interim results from a multi-country study

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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. No treatments have been proven effective through randomized controlled trials. KDIGO glomerular disease guidelines recommend treating with renin-angiotensin-aldosterone system inhibitors (RAASi) to reduce blood pressure and proteinuria, and, in select patients, utilization of immunosuppressants such as mycophenolate mofetil and corticosteroids. Newer agents, such as eculizumab, are also sometimes used off-label. The aim of this analysis was to better understand the current management of C3G in the US, Europe, and Asia.

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. Forms included information on current and most recent therapy.

Results:

In this interim analysis, 88 nephrologists had completed records for 277 patients, including 95 in US, 120 in EU5, 39 in China and 23 in Japan. Median patient age at time of the survey was 44, and 60% were male. 80% had C3 glomerulonephritis (C3GN) and 19% had dense deposit disease (DDD). At the time of the survey, 82% out of 277 patients were receiving treatment. The majority (69%) of 228 treated patients were receiving RAASi, 27% were receiving mycophenolate mofetil/ mycophenolate sodium, 48% corticosteroids, and biologics were used in almost a third of patients. At the time of the survey, mean proteinuria was 2.1 g/day, with 60% of patients having proteinuria ≥1 g/day (Table 1).

Conclusion:

C3G is a rapidly progressing glomerulonephritis for which there is no approved therapy. Most patients in this real-world study were receiving treatment, with both conventional immunosuppressants and biologics frequently added to RAASi. Despite this, proteinuria remained high, with the majority of patients having proteinuria ≥1 g/day. This highlights the need for novel therapies to actively treat C3G.

Table 1: Current therapy and proteinuria levels by region

	All	US	EU5	China	Japan
Base (All patients)	**n=277**	**n=95**	**n=120**	**n=39**	**n=23**
Currently on therapy	228 (82%)	75 (79%)	98 (82%)	37 (95%)	18 (78%)
No, but have been in the past	26 (9%)	10 (11%)	13 (11%)	0 (0%)	3 (13%)
Never received any therapy	23 (8%)	10 (11%)	9 (8%)	2 (5%)	2 (9%)
Current treatment					
Base (All patients receiving treatment at time of survey)	n=228	n=75	n=98	n=37	n=18
ACEi and/or ARB	158 (69%)	45 (60%)	72 (73%)	28 (76%)	13 (72%)
ARB	85 (37%)	20 (27%)	30 (31%)	22 (59%)	13 (72%)
ACE inhibitor	78 (34%)	25 (33%)	45 (46%)	8 (22%)	0 (0%)
Immunosuppressant	174 (76%)	63 (84%)	76 (78%)	27 (73%)	8 (44%)
Corticosteroid	109 (48%)	35 (47%)	43 (44%)	23 (62%)	8 (44%)
Non-steroidal immunosuppressants	75 (33%)	23 (31%)	41 (42%)	8 (22%)	3 (17%)
Mycophenolate mofetil/ mycophenolate sodium	61 (27%)	21 (28%)	34 (35%)	3 (8%)	3 (17%)
Biologics	71 (31%)	29 (39%)	31 (32%)	11 (30%)	0 (0%)
Eculizumab	40 (18%)	13 (17%)	22 (22%)	5 (14%)	0 (0%)
Proteinuria at time of survey					
Base	**n=235**	**n=66**	**n=110**	**n=36**	**n=23**
≥ 1 g/24hr	141 (60%)	43 (65%)	65 (59%)	25 (69%)	8 (35%)
Mean	2.1	1.9	2.1	3.1	0.7
Standard deviation	2.8	2.3	2.8	4	0.9