## Instructions for ASN congress abstract submission:

• Character limit: 2500 (including spaces)

For tables: 50 characters per row

For figures: Figure count is determined by image height but will not exceed 560 characters

• Submission deadline: 2pm Eastern Time, May 24th, 2023

• Submission fees: Each abstract submitted has a non-refundable mandatory EUR \$75.00 processing fee by credit-card (Amex, Master card and visa) only.

Title: Signs and Symptoms at Diagnosis in Patients with C3 Glomerulopathy - Results from a Real-World Multi-Country Study

Authors: Clare Proudfoot<sup>1</sup>, Katharina Pannagl<sup>2</sup>, Briana Ndife<sup>3</sup>, Serge Smeets<sup>1</sup>, Kathleen Murphy<sup>3</sup>, Jonathan de Courcy<sup>4</sup>, Susanna Libby<sup>4</sup>, Richard Lafayette<sup>5</sup>

**Affiliations:** <sup>1</sup>Novartis Pharma AG, Basel, Switzerland; <sup>2</sup>Novartis Pharmaceuticals UK Ltd, London, UK; <sup>3</sup>Novartis Pharmaceuticals Corporation, East Hanover, New Jersey, United States; <sup>4</sup>Adelphi Real World, Bollington, UK <sup>5</sup>Stanford University Medical Center, United States

### Background:

Complement 3 glomerulopathy (C3G) is a rare kidney disease, with an estimated incidence of 1-2/million/year. C3G associates with a high risk of disease progression, up to 50% of patients reach kidney failure within 10 years of diagnosis (Dx). Signs and symptoms include proteinuria, hematuria, edema, hypertension and fatigue. This analysis aimed to understand the signs and symptoms of C3G from patients in the US, Europe and Asia, at the time of Dx.

# Methods:

Data were drawn from the Adelphi C3G Disease Specific Programme, a cross-sectional survey with retrospective data, of C3G-treating nephrologists in US, France, Germany, Italy, Spain, UK (EU5), China and Japan between August 2022 and April 2023. Nephrologists completed forms for consecutive patients presenting with C3G. The forms included demographic and clinical information including signs, symptoms and lab values.

## **Results:**

111 nephrologists completed records for 385 C3G patients (US 100, EU5 189, China 60, Japan 36). Median patient age at Dx was 38.8 years, and 59% were men. Median eGFR at Dx was 49.0 ml/min/1.73m². Median proteinuria at Dx was 3.4 g/day and was ≥1 g/day in 85% of patients. The other most common signs and symptoms were hematuria, edema, hypertension and fatigue. Discolored urine, pain and appetite loss were also reported (**Table 1**). Physicians perceived disease severity at Dx as moderate in 50% and as severe in 34% of patients.

### **Conclusion:**

C3G patients experience symptomatic and clinical burden at Dx. This symptom burden, high proteinuria, and relatively low eGFR are consistent with physician assessment of moderate or severe disease at Dx. Effective Dx and treatment is an important goal to improve patient symptoms and disease.

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

Signs and symptoms present at	All patients	EU5	US	CN	JP
diagnosis	(n=385)	(n=189)	(n=100)	(n=60)	(n=36)
		163			36
Proteinuria	330 (86%)	(86%)	83 (83%)	48 (80%)	(100%)
Haematuria	232 (60%)	111 (59%)	56 (56%)	35 (58%)	30 (83%)
Edema	186 (48%)	102 (54%)	36 (36%)	35 (58%)	13 (36%)
Hypertension (140/90mmHg)	177 (46%)	107 (57%)	33 (33%)	27 (45%)	10 (28%)
Fatigue	147 (38%)	89 (47%)	35 (35%)	20 (33%)	3 (8%)
Discolored urine	68 (18%)	31 (16%)	16 (16%)	20 (33%)	1 (3%)
Pain in back/sides/abdomen	60 (16%)	32 (17%)	6 (6%)	20 (33%)	2 (6%)
Appetite loss	54 (14%)	31 (16%)	7 (7%)	15 (25%)	1 (3%)
High cholesterol	53 (14%)	27 (14%)	7 (7%)	12 (20%)	7 (19%)
Nausea	52 (14%)	30 (16%)	12 (12%)	10 (17%)	0 (0%)
Oliguria	50 (13%)	28 (15%)	8 (8%)	14 (23%)	0 (0%)
Sleep problems	47 (12%)	36 (19%)	5 (5%)	4 (7%)	2 (6%)
	All patients with a				
Proteinuria at diagnosis	known proteinuria				
	value at Dx	EU5	US	CN	JP
	(n=310)	(n=159)	(n=69)	(n=53)	(n=29)
<1 g/24hr	47 (15%)	9 (6%)	8 (12%)	12 (23%)	18 (62%)
≥1 g/24hr		150			
	263 (85%)	(94%)	61 (88%)	41 (77%)	11 (38%)
Median	3.4	4.0	2.9	3.1	0.1
Interquartile range	1.8-5.0	2.1-6.0	1.7-5.0	1.1-6.0	0.0-2.2
Mean (standard deviation)	3.7 (3.0)	4.2 (2.7)	3.2 (2.1)	4.4 (4.6)	1.3 (1.8)
Range	0-20	0-19	0-10	0-20	0-7
(e)GFR at diagnosis	All patients with a				
	known (e)GFR			<b>6</b> 11	
	value at Dx	EU5	US (n=CS)	CN (n=54)	JP (n=31)
Median	(n= <b>325</b> ) 49.0	(n=172) 40.0	(n=68) 50.0	(n= <b>54</b> ) 66.5	(n= <b>31</b> ) 50.0
Interquartile range	32.0-72.0	25.2-67.0	38.0-72.0	50.8-80.5	35.0-75.0
interquartile range	3Z.U-/Z.U	46.7	53.2	69.6	56.7
Mean (standard deviation)	52.8 (27.8)	(26.4)	(23.9)	(31.7)	(24.7)
Range	4-163	4-121	8-150	20-163	25-130

Total = **2472**/2500 characters