

Real-World time to diagnosis in C3G

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Conclusions

- The diagnostic pathway of C3G patients varied depending on geographical region. Patients in China experienced the shortest time from first consultation to C3G diagnosis, while patients in Japan waited the longest.
- Some patients experienced long durations between first consultation to C3G diagnosis, with 10% of patients in the study waiting over 21.9 weeks for a C3G diagnosis. Reducing time between first consultation and diagnosis may reduce the progression to worse CKD stages.
- These findings highlight that many C3G patients experience diagnostic delays.
- Improving diagnostic process may improve prognosis of some patients.

Introduction and Objective

- Complement 3 Glomerulopathy (C3G) is a rare kidney disease, with an estimated incidence of 1-2 cases per million in a year¹.
- It is characterized by the dysregulation of the alternative pathway of the complements system, resulting in C3 deposition in the glomeruli².
- The disease is fast progressing, with approximately 50% of C3G patients reaching kidney failure within 10 years of diagnosis³.
- Delayed diagnosis of C3G patients may result in poorer outcomes and prognosis of patients.

The aim of this real-world analysis is to describe the diagnostic pathway in C3G patients.

Methods

- Data were drawn from the 2022 Adelphi C3G Disease Specific Programme™, a cross-sectional survey of C3G-treating nephrologists and their consulting patients in the US, France, Germany, Italy, Spain, UK (EU5), China and Japan between August 2022 and April 2023.
- The DSP methodology has been previously published and was conducted according to the relevant regulations⁴.
- Physicians reported data on patient demographics, clinical information and reasons for diagnostic delay.

Results

Patient Demographics

- In total 111 nephrologists completed records for 385 C3G patients (EU5 189; US 100; CN 60; JP 36). Median patient age at time of survey was 42.0 (17.4) in the EU5, 40.0 (15.7) in the US, 39.0 (11.3) in China and 51.5 (12.4) in Japan. (Table 1).

Table 1: Patient demographics by geographical region.

	EU5	US	China	Japan
Number of patients, n	189	100	60	36
Age at time of survey; median years (SD)	40.0 (18.9)	41.0 (15.7)	39.0 (11.3)	51.5 (12.4)
Age at diagnosis; median years (SD)	38.3 (18.9)	38.4 (15.8)	36.0 (11.0)	48.5 (13.3)
Sex, male; n (%)	113 (60)	56 (56)	34 (57)	24 (67)
BMI; median Kg/m², (SD)	23.7 (4.1)	25.5 (3.6)	22.9 (2.5)	20.4 (2.8)
Working full or part time*; n (%)	90 (49)	60 (62)	36 (62)	27 (77)
C3G subtype*				
C3GN; n (%)	152 (80)	77 (81)	48 (80)	33 (97)
DDD; n (%)	34 (18)	18 (19)	12 (20)	1 (3)

SD, Standard Deviation. BMI, Body Mass index
EU5 – France, Germany, Italy, Spain, and the United Kingdom
*Base size differences due to 'don't knows' being excluded

Table 2: Nephrologist-reported time from patient symptom onset to first consultation with any physician, and time from the patient's first consultation to C3G diagnosis.

	EU5	US	China	Japan
Number of patients, n	150	63	59	30
Time from symptom onset to 1st consultation; median weeks (IQR)	4.1 (0.3-8.7)	4.4 (1.3-6.4)	4.4 (1.3-12.4)	6.8 (4.1-17.6)
Number of patients, n	159	77	59	33
Time from first consultation to C3G diagnosis; median weeks (IQR)	5.0 (3.0-9.9)	4.6 (2.1-13.0)	3.9 (1.4-9.4)	8.4 (4.4-10.8)

IQR, Interquartile Range
EU5 – France, Germany, Italy, Spain, and the United Kingdom

Figure 1: Nephrologist-reported time (weeks) from first consultation to diagnosis split by percentiles for all markets (n=385).

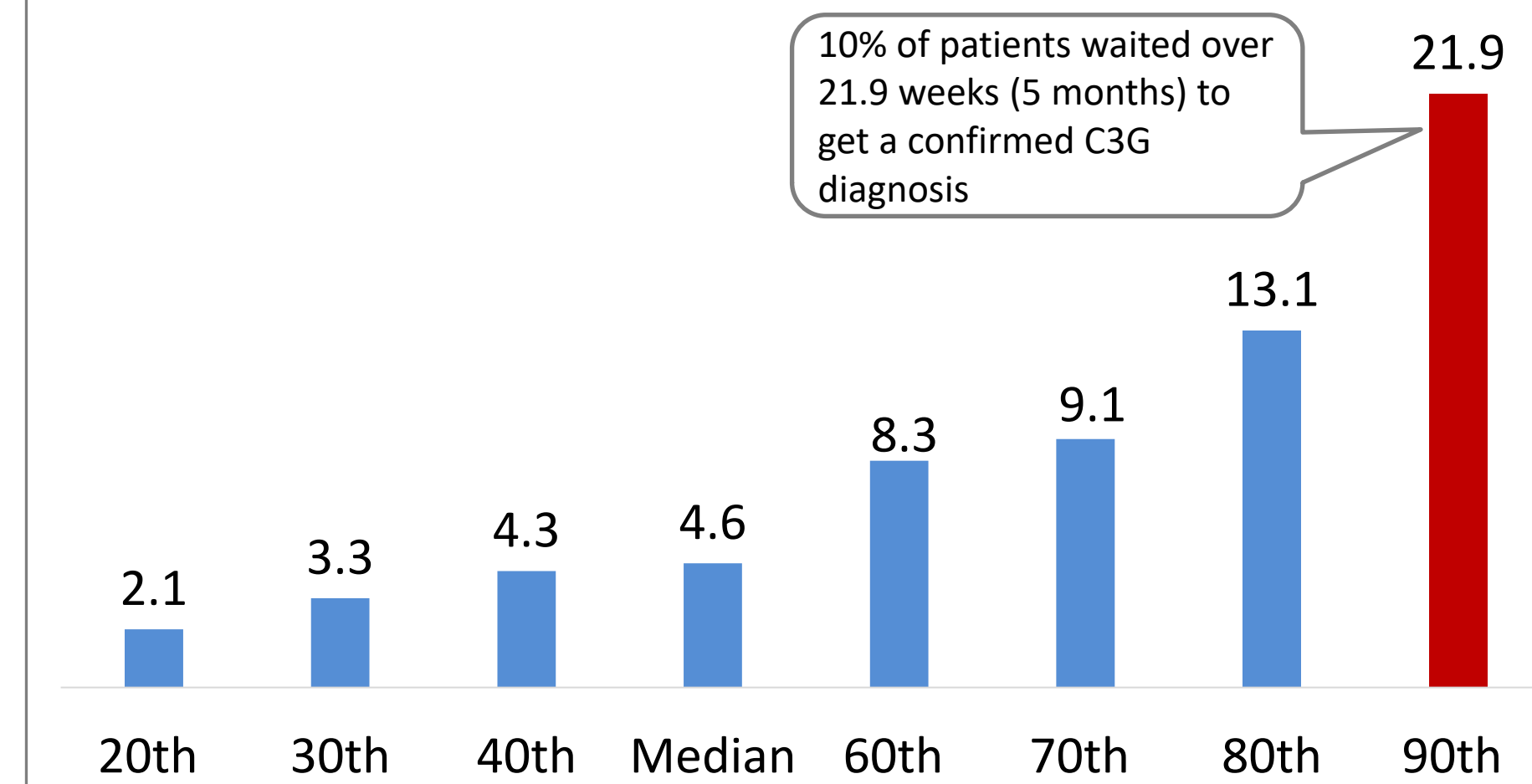
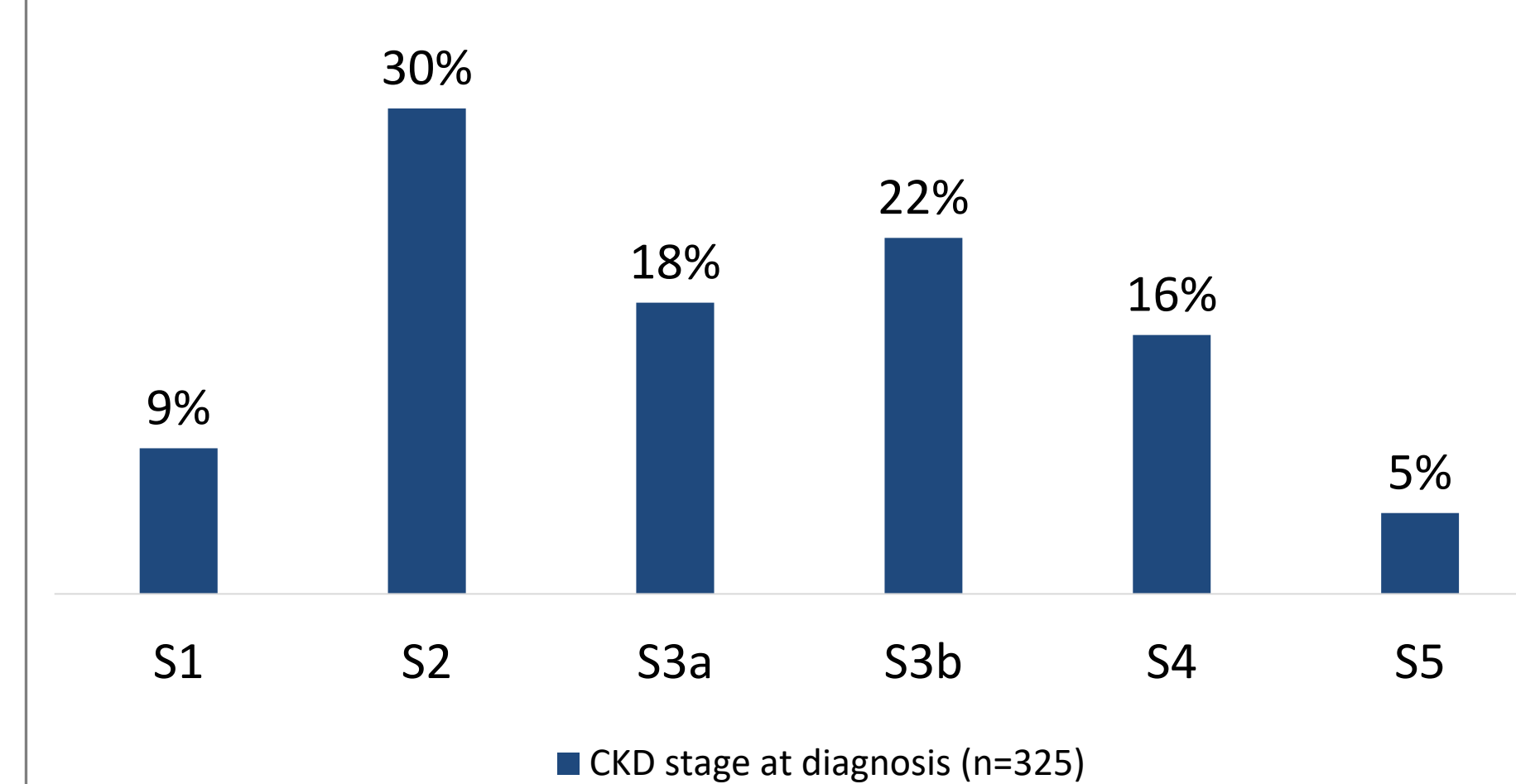


Figure 2: CKD stage of C3G patients at diagnosis



eGFR/GFR value for each stage: S1, ≥90; S2, 60-89.99; S3a, 45-59.99; S3b, 30-44.99; S4, 15-29.99; S5, <15 eGFR/GFR.

Symptom onset to first consultation

- Median time from symptom onset to first consultation was reported for 78% of patients.
- Patients in EU5 waited the shortest time for their first C3G consultation from symptom onset with median time for EU5, US, China and Japan being 4.1, 4.4, 4.4 and 6.8 weeks, respectively (Table 2).

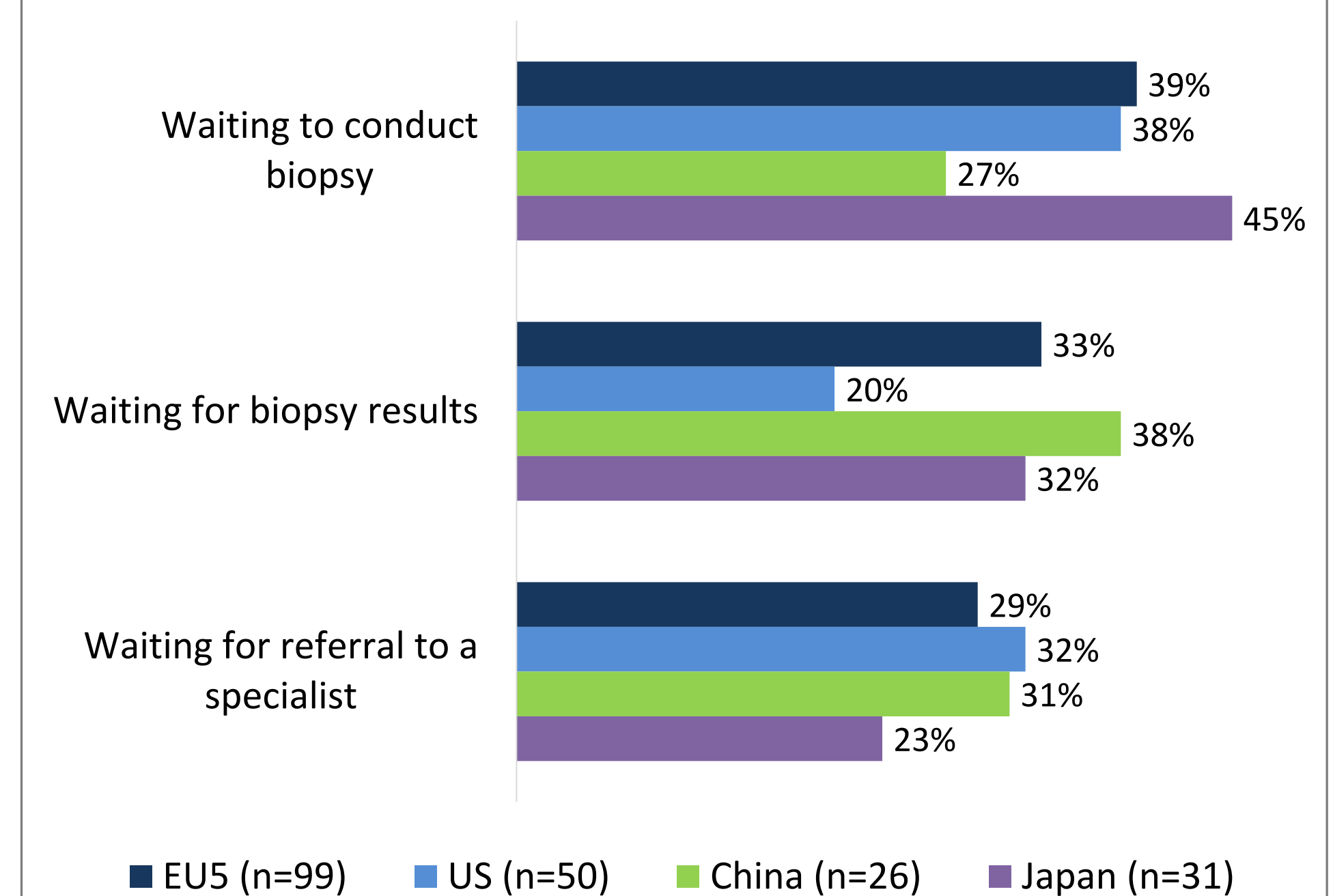
First consultation to diagnosis

- Median time from first consultation to diagnosis was reported for 85% patients (Table 2).
- Half of patients received a C3G diagnosis within 4.6 weeks, while 10% waited over 21.9 weeks (Figure 1).

CKD stages at diagnosis and point in survey

- eGFR at diagnosis was recorded for 84% of patients.
- Most patients were in CKD stage 2, while 43% of patients were at CKD stages 3b-5 (GFR <45 mL/min/1.73 m²).

Figure 3: Nephrologist-reported top 5 reasons for a time delay between the patient's initial consultation and C3G diagnosis.



* A delay was defined as more than four weeks
EU5 – France, Germany, Italy, Spain, and the United Kingdom

Reasons for diagnostic delay

- Reason for delay of greater than a month for C3G diagnosis from first consultation were reported for 54% of patients (n=206).
- Waiting to conduct a biopsy (39% EU5, US 38%, 27% China and 45% Japan) and waiting for biopsy results (33% EU5, 20% US, 38% China and 32% Japan) were the most common causes.

Limitations

- Patients included in the DSP sample are the next eligible patients who consult the physician; therefore, it may not truly represent the overall population of patients, as it is more likely to collect data on patients who consult more frequently.

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Disclosures

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