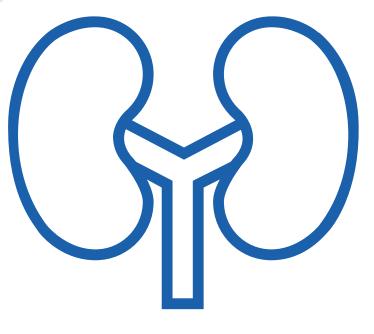# Disease severity and symptom control in patients with immunoglobulin A nephropathy: Results from a United States analysis of a real-world study

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Introduction

- IgAN, the most prevalent form of primary glomerulonephritis,[1,2] typically affects young adults (20–30 years) more than older adults (>65 years) and has an estimated annual incidence of ~7–21/million/year in the United States[2–4]
- Up to 50% of patients with IgAN develop kidney failure within 20 years of diagnosis, necessitating dialysis and/or kidney transplant.[5] IgAN can reduce a patient's life expectancy by >10 years, imposing a significant burden on patients, caregivers, and healthcare systems[5,6]
- Many patients are not diagnosed until they present with kidney dysfunction, including significant proteinuria (>0.75–1 g/day is associated with a high risk of progression)[7]
- In this analysis, we present patient- and physician-reported data on disease severity and symptomatology in patients with IgAN from a real-world study in the United States

Methods

- This was a retrospective analysis of secondary data from the Adelphi Real World IgAN DSP,[8] a cross-sectional survey of IgAN-treating nephrologists and their patients with IgAN. The survey was conducted in several countries, including the United States from June to October 2021
- Participating nephrologists completed patient record forms for consecutively consulting patients diagnosed with IgAN providing a representative "point in time" sample of consulting patients
- The same consulting patients were then invited by their physician to fill out a patient self-completion form on a voluntary basis
- On a scale of 0–10, patient responses from 7 to 10 were considered as severe IgAN symptoms

Results

Study population

- A total of 43 United States nephrologists participated in the survey; 68 patients filled out patient self-completion forms
- The patient-reported mean age was 39 (SD, 13.1) years when IgAN symptoms were first noticed (Table 1)

Treatment satisfaction

- ACEi and/or ARB without steroids or SGLT-2i were the most commonly prescribed 1st-line treatment. Other treatment lines included addition of corticosteroids, SGLT-2i, and other supportive care
- The majority of patients described that the current medications did not help alleviate the symptoms (91%, n=10/11), or they did not like the side effects of their medicines (55%, n=6/11)
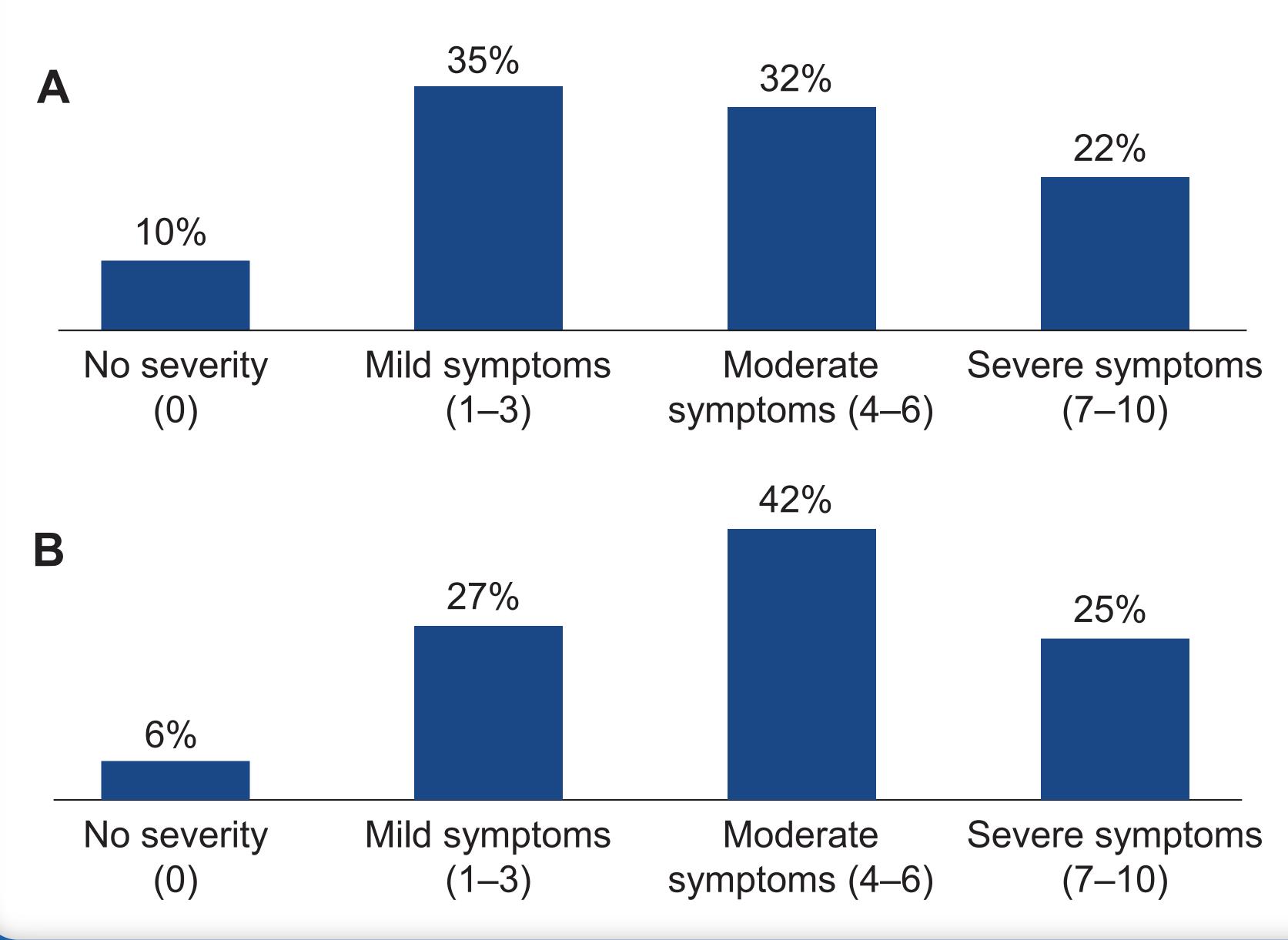
Conclusions

- In this real-world study, >20% of the patients with IgAN in the United States reported their symptoms as severe
- Patients reported that their symptoms were not well controlled with treatments that are currently available
- The findings from this study reflect that patients with IgAN need treatments that effectively control their symptoms and disease progression
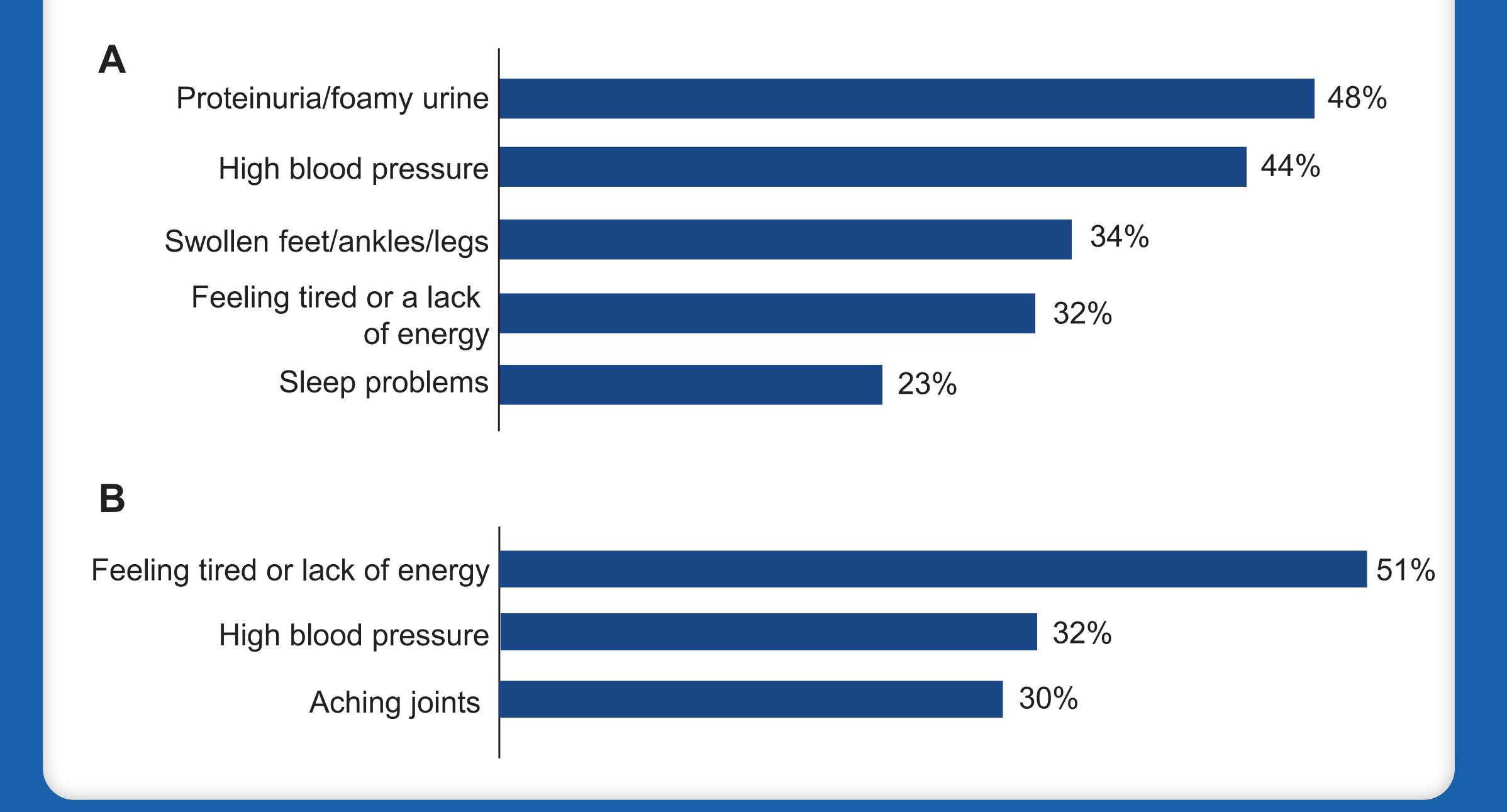
Key results

Disease severity

Figure 1. Patient-reported data for "How severe are your IgAN symptoms?" A) At point of survey (n=68); B) Before initiation of current treatment (n=67)

A

No severity (0)	Mild symptoms (1–3)	Moderate symptoms (4–6)	Severe symptoms (7–10)
10%	35%	32%	22%

B

No severity (0)	Mild symptoms (1–3)	Moderate symptoms (4–6)	Severe symptoms (7–10)
6%	27%	42%	25%

Symptomatology

Figure 2. A) Patient-reported top 5 symptoms at point of survey (n=62); B) 3 most bothersome symptoms reported by patients (n=57)

A

- Proteinuria/foamy urine — 48%
- High blood pressure — 44%
- Swollen feet/ankles/legs — 34%
- Feeling tired or a lack of energy — 32%
- Sleep problems — 23%

B

- Feeling tired or lack of energy — 51%
- High blood pressure — 32%
- Aching joints — 30%

- Of the patients who completed patient self-completion forms, IgAN symptoms were deemed severe by 25% (n=17/67, **Figure 1A**) before initiation of current treatment and 22% (n=15/68, **Figure 1B**) at the point of survey
- Proteinuria/foamy urine was one of the highest patient-reported symptoms (48%, n=30/62; **Figure 2A**) with 40% (n=12/30) and 43% (n=3/7) of patients describing their foamy and tea-colored urine as severe, respectively
- Feeling tired or lack of energy was described as the most bothersome symptom (51%, n=29/57) followed by high blood pressure (32%, n=18/57) and aching joints (30%, n=17/57); (**Figure 2B**)

Results

Table 1. Patient-reported demographics

Characteristics	Value
Age (years) when IgAN symptoms were first noticed, n=67	
Mean (SD)	39.0 (13.1)
Sex, n=68, n (%)	
Male	34 (50)
Female	34 (50)
Race, n=68, n (%)	
White/Caucasian	37 (54)
Asian (Indian subcontinent)	9 (13)
Hispanic/Latino	9 (13)

Characteristics	Value
Southeast Asian	4 (6)
African American	3 (4)
Asian (other)	3 (4)
Mixed race	3 (4)
BMI, n=68	
Mean (SD)	26.2 (4.7)
Smoking status, n=60, n (%)	
Current smoker	6 (10)
Ex-smoker	11 (18)
Never smoked	43 (72)

Treatment satisfaction (contd.)

- The patient-reported treatment satisfaction was consistent with physician-reported data, overall, across all lines of treatment (data not shown)
- At each line of treatment, proteinuria levels remained high and eGFR continued to fall (**Table 2**)

Table 2. Proteinuria and eGFR at each line of treatment

Treatment lines	Mean proteinuria (g/day), n	eGFR (mL/min/1.73m²), n
Line 1	2.7, n=54	60.3, n=52
Line 2	2.7, n=54	58.1, n=18
Line 3	4.2, n=4	52.8, n=4

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