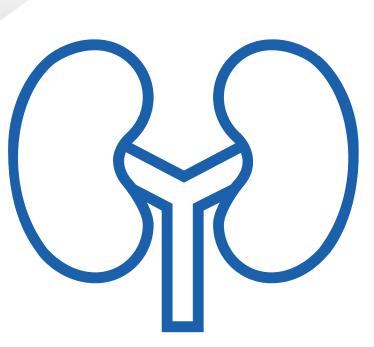# Treatment patterns and outcomes in patients with immunoglobulin A nephropathy: Results from a United States data analysis of a real-world study

Richard Lafayette,[1] Michel Kroes,[2] Carolina Aldworth,[3] Aneesh Thomas George,[4] Briana Ndife,[3] Jonathan DeCourcy,[5] Keisha Golden,[5] Dario Roccatello[6]

[1]Department of Medicine, Division of Nephrology, Stanford University School of Medicine, Stanford, CA, USA; [2]Novartis Pharma AG, Basel, Switzerland*; [3]Novartis Pharmaceuticals Corporation, East Hanover, NJ, USA; [4]Novartis Healthcare Pvt. Ltd, Hyderabad, India; [5]Adelphi Real World, Bollington, UK; [6]Nephrology and Dialysis Unit (ERK-net Member), Center of Research of Immunopathology and Rare Diseases, Coordinating Center of the Network for Rare Diseases of Piedmont and Aosta Valley, San Giovanni Bosco Hospital, Torino, Italy
*Affiliation at the time of the analysis; current affiliation: Novartis Pharma K.K., Tokyo, Japan

Introduction

- IgAN is the most prevalent form of primary glomerulonephritis with an estimated annual incidence of ~7–21 adults per million each year in the United States[1–4]
- Up to 50% of patients with IgAN develop kidney failure within 20 years of diagnosis[5] and the disease can reduce a patient's life expectancy by >10 years, imposing a significant burden on patients, caregivers, and healthcare systems[5,6]
- KDIGO 2021 clinical practice guidelines recommend optimized supportive care as the primary focus of management. However, there are patients who remain at high risk of progressive chronic kidney disease despite maximal supportive care[7]
- Proteinuria is the strongest clinical predictor of IgAN kidney function decline with levels of >0.75–1 g/day associated with a high risk of progression[8]
- In this analysis, we present physician-reported data on treatment patterns, outcomes, and rationale for treatment changes 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, 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. The DSP methodology has been published previously in detail[9]
- Participating nephrologists completed patient report forms for consecutively consulting patients diagnosed with IgAN providing a representative "point in time" sample of consulting patients

Results

Study population
- A total of 43 nephrologists completed records for 305 patients and were included in this analysis

Treatment classes and duration of treatment
- ACEi and/or ARB were the most commonly prescribed 1st-line treatment
- Corticosteroids and SGLT-2i were prescribed in combination with ACEi/ARB at the 1st and 2nd line of treatments

Conclusions

- Results from this real-world study indicated that in line with the KDIGO 2021 guidelines, United States physicians prescribed ACEi/ARB as the 1st-line therapy in the majority of patients with IgAN
  - Despite that, proteinuria remained uncontrolled in >70% of the patients with IgAN
- Physicians switched the patients across different treatments, including adding periods of corticosteroids or immunosuppressants to ACEi/ARB
  - Lack of efficacy was cited as one of the main reasons for dissatisfaction with the current treatment
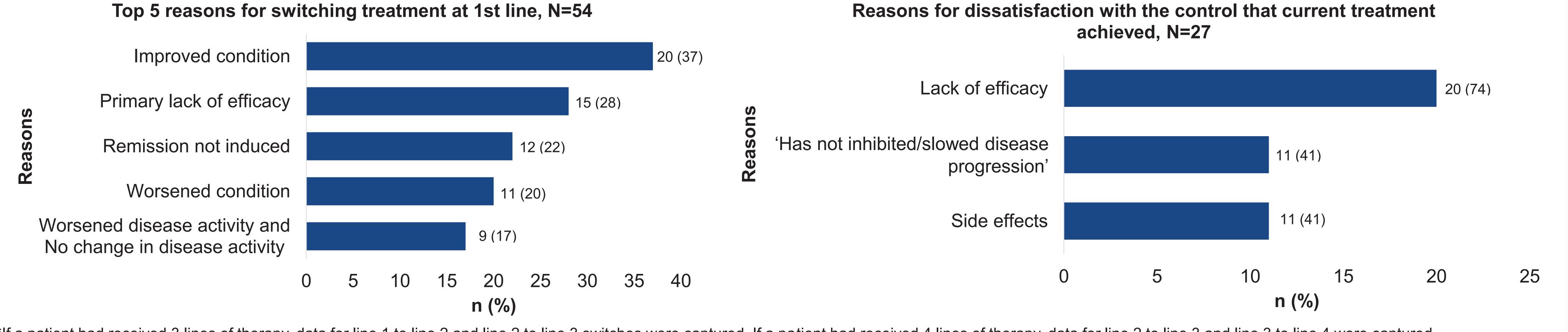
Key results

Table 1. Physician-reported data on proteinuria with 1st-line treatment classes

1st-line treatment classes*	Proteinuria (≥1 g/day) before 1st line, n/N (%)	Number of patients receiving 1st line, n (%)	Number of patients who switched from 1st to 2nd line, n (%)	Persistent proteinuria (≥1g/day) after 1st line, n (%)
ACEi/ARB only	65/102 (64)	118/268 (44)	19/118 (16)	11/19 (58)
ACEi/ARB+corticosteroids	61/73 (84)	80/268 (30)	27/80 (34)	22/27 (81)
ACEi/ARB+SGLT-2i	11/13 (85)	16/268 (6)	1/16 (6)	-†

*All treatments were given with/without other treatments. These treatments included additional treatments other than ACEi/ARB, SGLT-2i, or steroids. †No additional data were reported regarding 2nd-line treatment due to low base.

Figure 1. Physician-reported reasons for A) Switching treatment at 1st line* and B) Dissatisfaction with the current treatment

Top 5 reasons for switching treatment at 1st line, N=54

Reasons for dissatisfaction with the control that current treatment achieved, N=27

*If a patient had received 3 lines of therapy, data for line 1 to line 2 and line 2 to line 3 switches were captured. If a patient had received 4 lines of therapy, data for line 2 to line 3 and line 3 to line 4 were captured. There were 3 patients within the dataset with 4+ lines, and hence, their 1st-line treatment switch reasons were not captured.

Results

Treatment classes and duration of treatment (contd.)
- ARB, prednisone, ACEi, SGLT-2i, and statins were the most commonly prescribed (>35% of patients) 2nd-line therapies
- Median duration (Q1, Q3) of 1st- (n=84) and 2nd-line (n=12) treatments were 27 (11.5, 76.7) weeks and 30.7 (4.7, 54.5) weeks, respectively

Lines of treatment
- Adding a treatment was considered a new line. Overall, of the 268 patients who received 1st-line treatment, 57 patients were switched to 2nd-line treatment (Table 1); 10 patients were not in the treatment lines presented in Table 1
- After 1st line of treatment, persistent proteinuria of ≥1g/day was reported in 77% (n=40/52) of patients receiving ACEi/ARB (mean proteinuria: 2.5 g/day)
- Data on patients who received anything but ACEi/ARB at 2nd line were not reported due to a low base

Satisfaction with current treatment
- For 9% (n=27/288) of patients, physicians reported being "dissatisfied" or "very dissatisfied" with the control that the current treatment approach was providing for IgAN
- Top reasons for dissatisfaction with the current treatment are shown in Figure 1B
- Physician-reported common reasons for switching from corticosteroids at 1st-line (N=19) were improved condition (63%, n=12), lack of tolerability, worsened disease activity (16% each, n=3 each) and worsened condition, remission not induced, and secondary lack of efficacy (11%, n=2 each)

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