# Impact of immunoglobulin A nephropathy on work productivity and activity impairment in the United States: Results from a real-world study

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#### Introduction

- IgAN is the most prevalent form of primary glomerulonephritis, affecting 7–21 adults per million each year in the United States<sup>1–4</sup>
- IgAN typically affects younger adults (20–30 years) more than older adults (>65 years)<sup>2</sup> and reduces a patient's life expectancy by >10 years<sup>5</sup>
- Up to 50% of patients with IgAN develop kidney failure within 20 years of diagnosis necessitating dialysis and/or kidney transplant,<sup>6</sup> placing considerable socioeconomic burden on patients, their caregivers, and healthcare systems
- In this analysis, we describe the economic burden in the form of work productivity and activity impairment due to IgAN in the United States

#### Methods

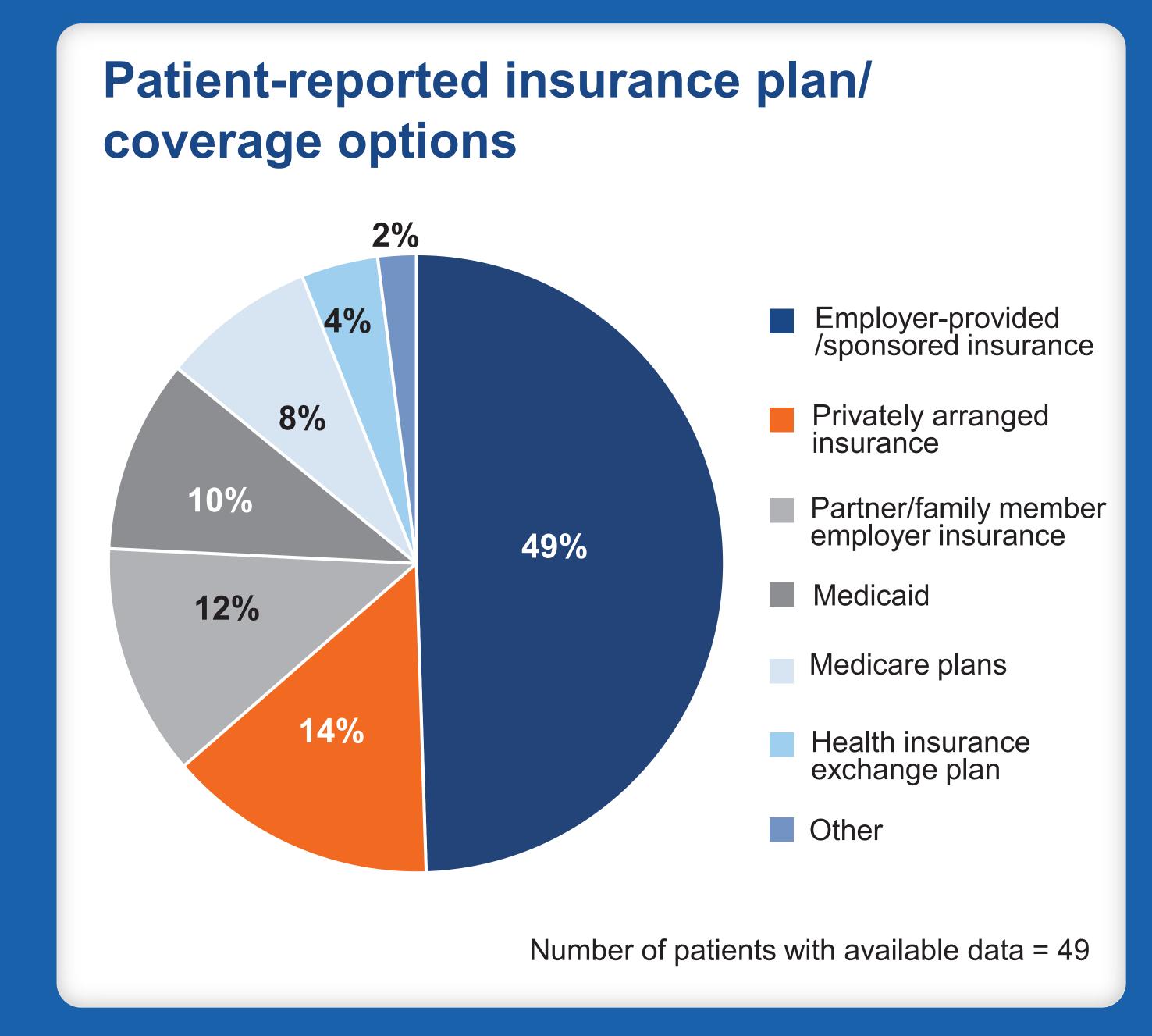
- This was a retrospective analysis of secondary data from the Adelphi Real World IgAN Disease Specific Programme, a cross-sectional survey of IgAN-treating nephrologists and their consecutively consulting patients with IgAN from the United States
- The survey was conducted in the US (as well as in the UK, Spain, France, Germany, Italy, China, and Japan) from June to October 2021
- Participating nephrologists completed patient record forms for their consecutively consulting patients diagnosed with IgAN, providing a representative "point in time" sample of consulting patients. The DSP methodology has been previously published in detail<sup>7</sup>
- The same consulting patients were then invited by their physicians to fill out a patient-self-completed form on a voluntary basis
- Patient-reported data were matched to the physician-reported clinical data to allow direct comparison of clinical characteristics and patient-reported outcomes
- The survey captured data on insurance coverage of patients and impact of the disease on patients' routine activities and their work using the Work Productivity and Activity Impairment – General Health questionnaire (WPAI-GH)

### Results

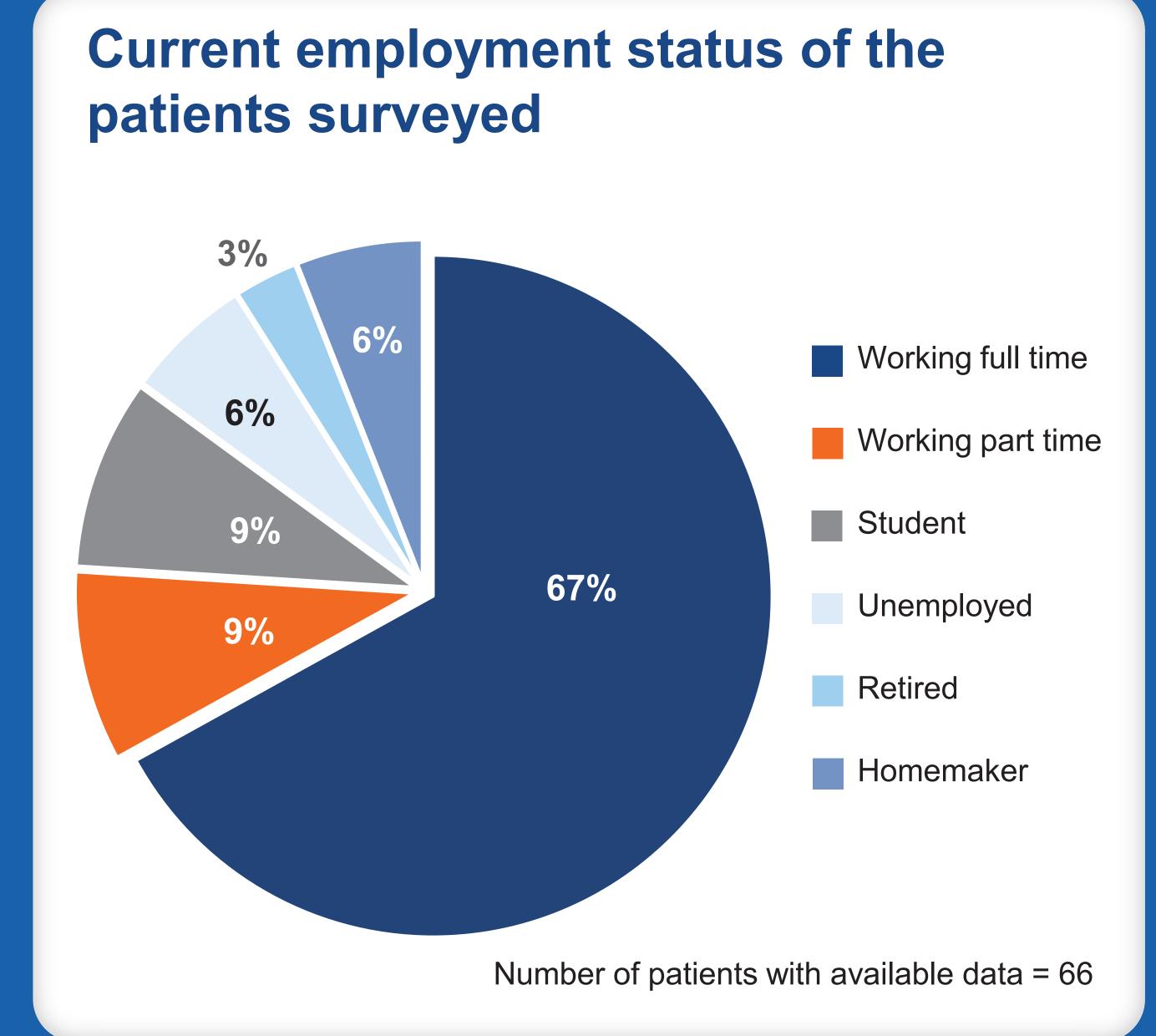
- A total of 68 patients completed their forms and were included in this analysis
- The median patient-reported age when IgAN symptoms were observed was 36 years. Mean duration of diagnosis of IgAN at the time of survey was 4.1±5.7 years (**Table**)
- Nearly two-third (65.7%) of patients had proteinuria ≥1 g/day at the time of survey, which is a known risk factor for IgAN progression (Table)

- The results of this analysis indicate that IgAN typically affects the prime, working-age population in the United States, resulting in noticeable impairment in work productivity and activity
- Patients with high proteinuria (≥1 g/day) report greater severity of disease and show greater impairment in work productivity and activity, highlighting the need for therapies that reduce proteinuria, a known risk-factor for disease progression in IgAN

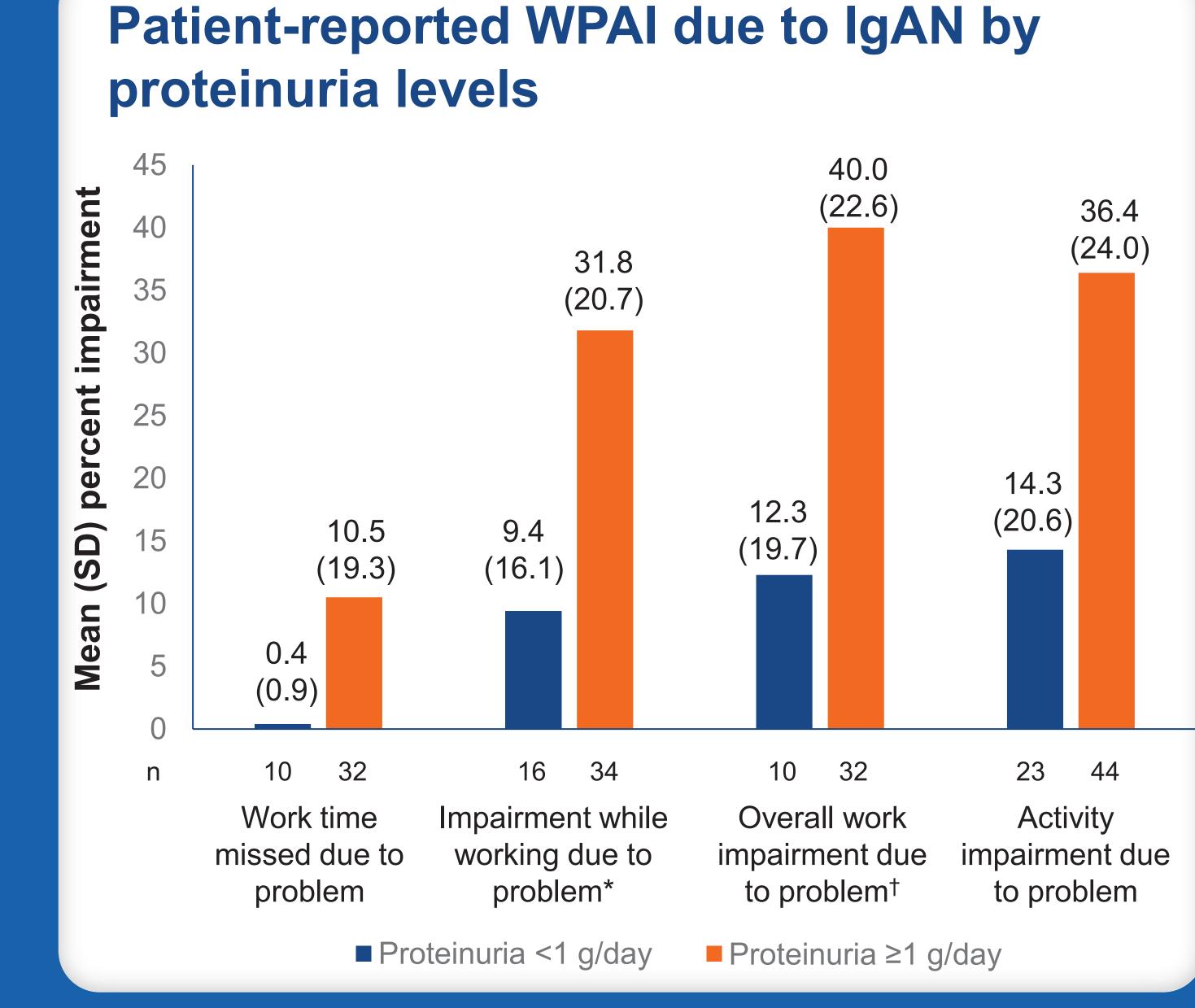
## Key results



 Nearly all patients (96%; n=55/57) had health insurance that covered IgAN treatment. Among the surveyed patients, 49% had employer-provided/sponsored insurance (n=24/49), while 8% (n=4/49) were covered under various Medicare plans and 10% (n=5/49) had Medicaid (or equivalent) coverage



 A majority of patients (>75%; n=50/66) were employed either full time or part time



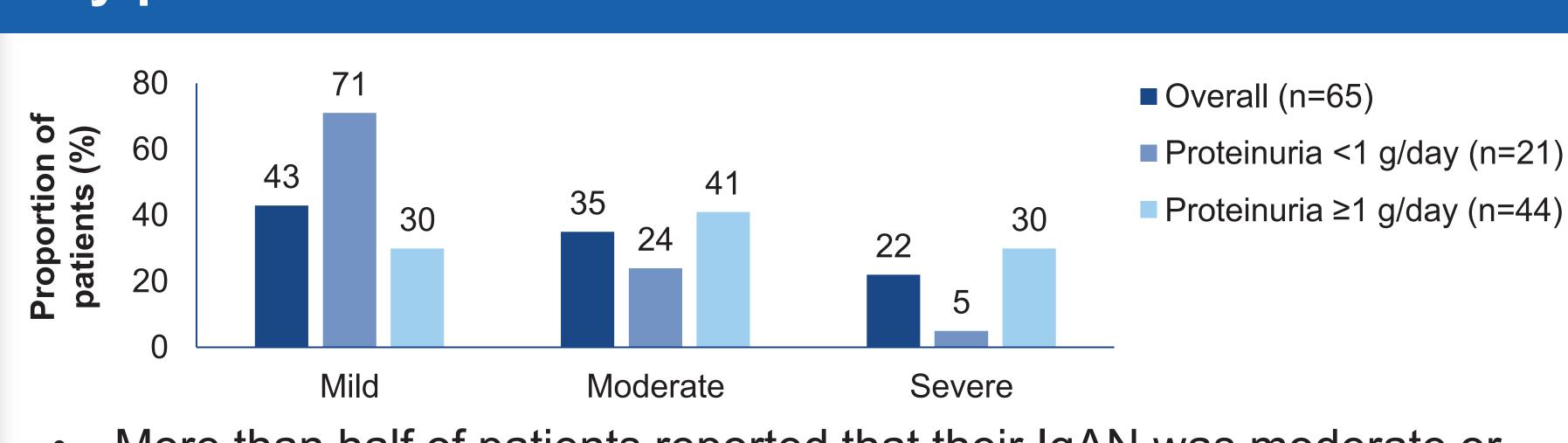
 At the time of the survey, on average, patients reported 8.1% missed work time (n=42), 24.6% impairment while working (n=50), 33.4% overall work impairment (n=42), and 28.8% activity impairment (n=67) due to IgAN

\*The effect that the disease has had on the patient's productivity while working in the last 7 days; †Percent overall work impairment considers this interference in combination with the working hours missed in the last 7 days.

#### Table: Patient-reported demographics and clinical characteristics

Characteristics*	Value
Age, years, mean±SD	43.5±12.9
Sex, (%)	
Male	50
Female	50
Race, (%) (n=67)	
White/Caucasian	54
Asian <sup>‡</sup>	24
Hispanic/Latino	13
African American	4
Other	4
BMI, kg/m² (mean±SD)	26.2±4.7
Age when IgAN symptoms were first noticed (median [min, max]) (n=66)	36.0 (9.0, 70.0)
Proteinuria (mean±SD) at the time of survey (n=67)	2.0±3.7
<1 g/day, n (%)	23 (34.3)
≥1 g/day, n (%)	44 (65.7)
*N=68, unless otherwise specified; ‡Asian (Indian subcontinent), Southeast Asian, and Asian	(other).

#### Patient-reported severity of IgAN at the time of survey by proteinuria levels



More than half of patients reported that their IgAN was moderate or severe at the time of survey; a higher proportion of patients with proteinuria ≥1 g reported that their IgAN was severe

#### **Abbreviations**

BMI, body mass index; IgAN, IgA nephropathy; SD, standard deviation; WPAI, work productivity and activity

#### Funding

as part of an independent survey. Novartis is one of the subscribers to the IgAN Disease Specific Programme.

#### **Disclosures**

M. Kroes, L. Prieto, C. Aldworth, and B. Ndife are employees and shareholders of Novartis; A.T. George an employee of Novartis; J. DeCourcy and J. Garratt-Wheeldon are employees of Adelphi Real World; R. Lafayette is an employee of Stanford University Medical Center; his employers have received research funding from Omeros, Vera, Chinook, Alexion, Otsuka, Calliditas and has provided consultancy for: Omeros, Vera, Calliditas, Chinook, Alexion, Otsuka, Novartis.

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