

# PROTECT Trial Design

## Maximized ACEI/ARB

- ≥12 weeks prior to screening
- ≥50% maximum approved dose

**Double-blind treatment**  
110 weeks, randomized 1:1

4 weeks post cessation  
of randomized treatment

## Randomized (1:1) and received study drug (N = 404)

- Adults (aged ≥18 years)
- Biopsy-proven IgAN
- UPE ≥1 g/day
- eGFR ≥30 mL/min/1.73 m<sup>2</sup>

**Sparsentan**  
200 mg/day →  
400 mg/day at week 2

**Irbesartan (active control)**  
150 mg/day →  
300 mg/day at week 2

**Study drug withdrawal period;  
resume SOC  
ACEI/ARB**

**Day -1**  
Discontinue maximized  
ACEI/ARB (**NO washout**)

**Week 36**  
Interim analysis

**Week 110**  
End of randomized treatment

**Week 114**  
End of double-blind  
period

## Primary Efficacy Endpoint

Change in UPCR from  
baseline to week 36

## Key Secondary Efficacy Endpoints

- eGFR slope:
- **Chronic** (weeks 6-110)
  - **Total** (day 1-week 110)

## Sparsentan Novel Mechanism of Action



- Orally active **dual endothelin (ET<sub>A</sub>R) angiotensin receptor antagonist (AT<sub>1</sub>R)**



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Interim analysis

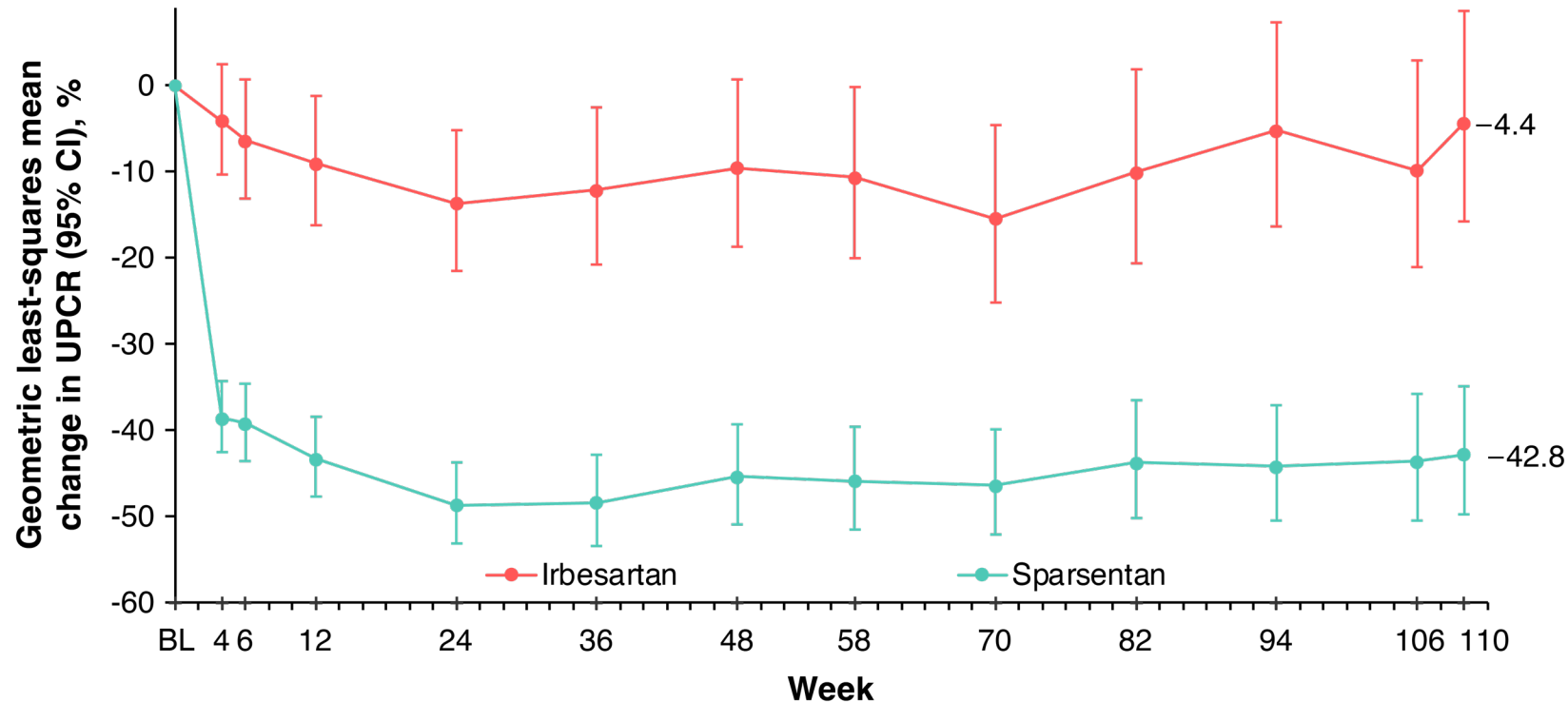
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**Week 114**  
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period

- Sparsentan received accelerated regulatory approval for treatment of IgAN
  - Patients in the sparsentan group had a **41% relative** reduction in proteinuria versus irbesartan at 36 weeks interim analysis ( $P < 0.0001$ )

# PROTECT Trial: Sustained Proteinuria Reduction

~43% proteinuria reduction with sparsentan compared to ~4% for irbesartan-treated patients sustained over 110 weeks

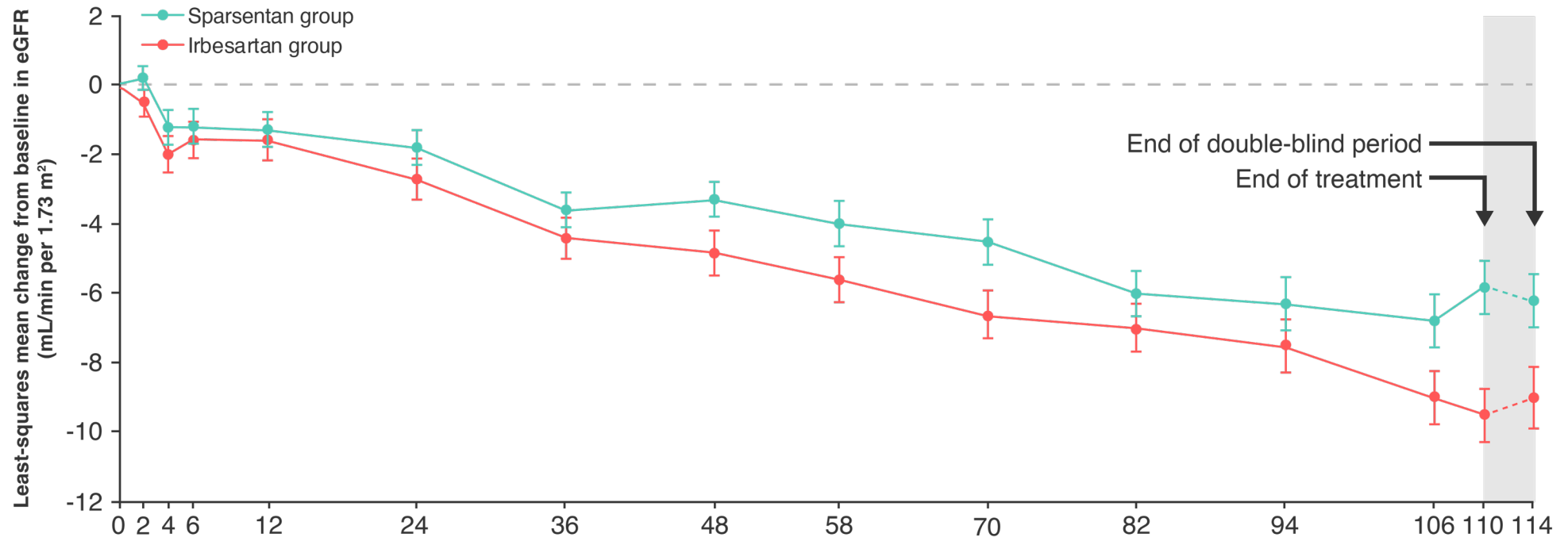


- Most patients achieved complete proteinuria remission (<0.3 g/day) with sparsentan vs irbesartan



# PROTECT Trial: Kidney Function (eGFR)

Patients treated with sparsentan over 2 years exhibited one of the **slowest** annual rates of kidney function decline seen in IgAN trials



## Number of participants

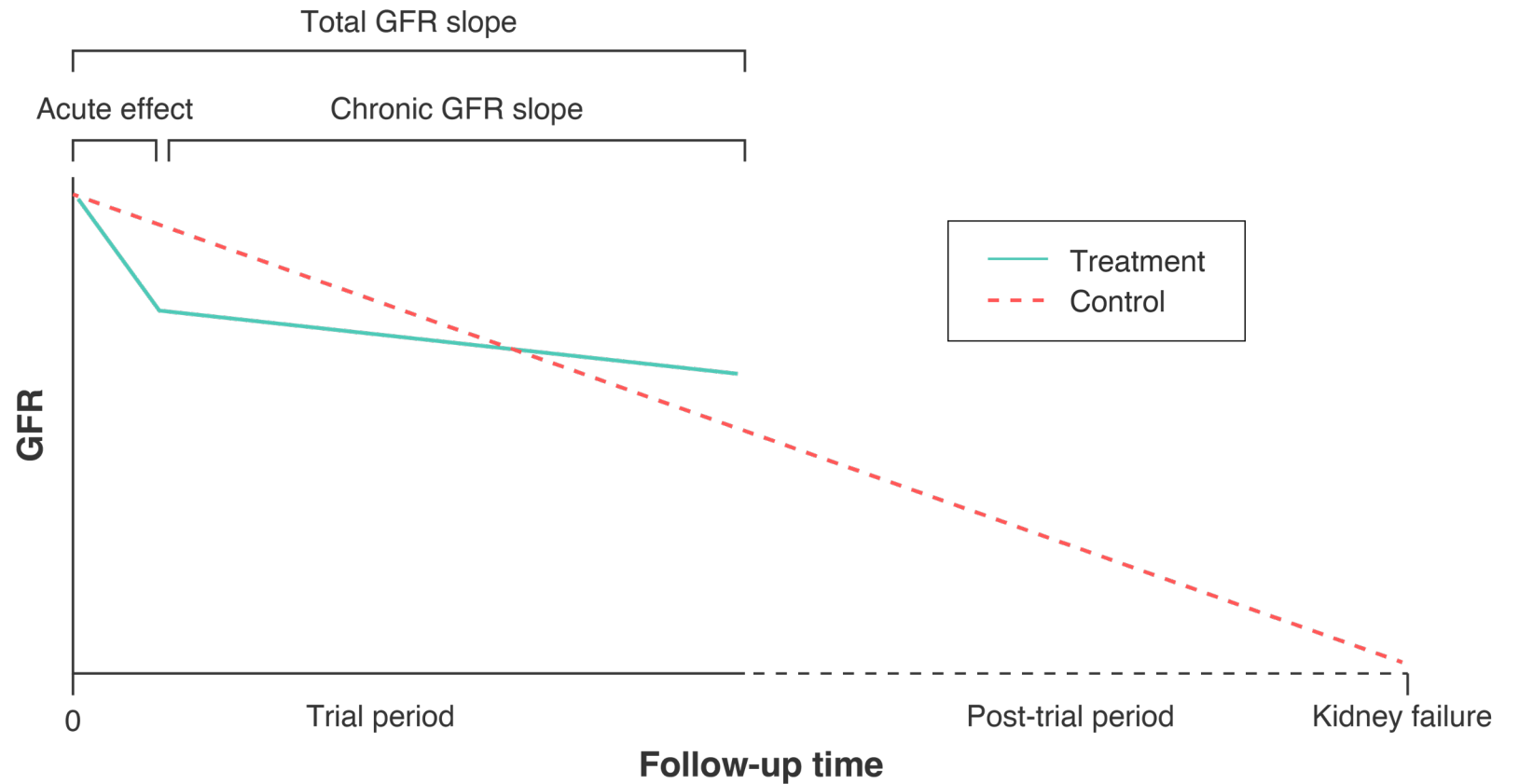
	0	2	4	6	12	24	36	48	58	70	82	94	106	110	114
Irbesartan group	202	196	191	193	188	176	179	173	162	160	159	154	144	138	148
Sparsentan group	202	197	197	193	196	191	189	184	180	182	176	173	170	159	170

eGFR by visit up to week 114

Difference (95% CI)  
3.7 (1.5 to 6.0)

# eGFR Slopes: Total vs Chronic

- Total or chronic slopes during the trial period are measures of CKD progression
  - Steeper negative GFR slope indicates ↑ likelihood of future kidney failure



# PROTECT: 2-Year Topline Confirmatory Endpoints

Annual eGFR slope (95% CI), mL/min/1.73 m <sup>2</sup> /year	Chronic slope	Total slope
Irbesartan	-3.8 (-4.6 to -3.1)	-3.9 (-4.6 to -3.1)
Sparsentan	-2.7 (-3.4 to -2.1)	-2.9 (-3.6 to -2.2)
Difference	1.1 (0.1 to 2.1)	1.0 (-0.03 to 1.9)
P value	<i>P</i> = 0.037	<i>P</i> = 0.058

The data suggest a clinically meaningful difference between sparsentan and irbesartan in total slope and other eGFR-based endpoints, including a composite kidney failure endpoint



Rovin BH, et al. *Lancet*. Published online November 3, 2023. doi:10.1016/S0140-6736(23)02302-4



## Quote by Jonathan Barratt, MD



*“And for a 30-year-old patient living with IgA nephropathy who's got another 50 years or so of life, that 1 mL/min/1.73 m<sup>2</sup>/year translates to a significant delay in the time to them reaching dialysis.”*





# PROTECT Trial: Safety

Sparsentan was well tolerated with a consistent safety profile comparable to irbesartan

Patients with TEAEs, n (%)	Sparsentan (n = 202)	Irbesartan (n = 202)
<b>Any TEAEs</b>	<b>187 (93)</b>	<b>177 (88)</b>
<b>Most common TEAEs (≥10% of patients in either group)</b>		
COVID-19	53 (26)	46 (23)
Hyperkalemia	32 (16)	26 (13)
Peripheral edema	31 (15)	24 (12)
Dizziness	30 (15)	13 (6)
Headache	27 (13)	26 (13)
Hypotension	26 (13)	8 (4)
Hypertension	22 (11)	28 (14)
<b>Transaminase elevations</b>	<b>5 (2)</b>	<b>7 (3)</b>
<b>Serious TEAEs</b>	<b>75 (37)</b>	<b>71 (35)</b>
<b>Serious TEAEs in ≥5 patients in either group</b>		
COVID-19	42 (21)	38 (19)
Chronic kidney disease	6 (3)	6 (3)
<b>TEAEs leading to treatment discontinuation</b>	<b>21 (10)</b>	<b>18 (9)</b>
<b>TEAEs leading to death</b>	<b>0</b>	<b>1 (&lt;1)</b>

- No cases of drug-induced liver injury with sparsentan
- Peripheral edema was similar in both groups, with no increases in body weight