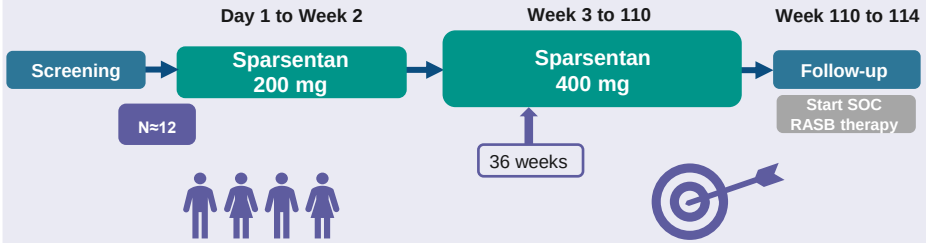
Sparsentan as First-Line Treatment of Incident Patients With IgA Nephropathy: Preliminary Findings From the SPARTAN Trial

Background

SPARTAN
NCT04663204

- Sparsentan is a **dual endothelin and angiotensin receptor antagonist**[1-3]
- **SPARTAN** is a 114-week phase 2 trial of **sparsentan** as a **first-line therapy in patients newly diagnosed with IgAN**[4]
- Clinical findings over **36 weeks** are reported

Study Design



Key inclusion criteria

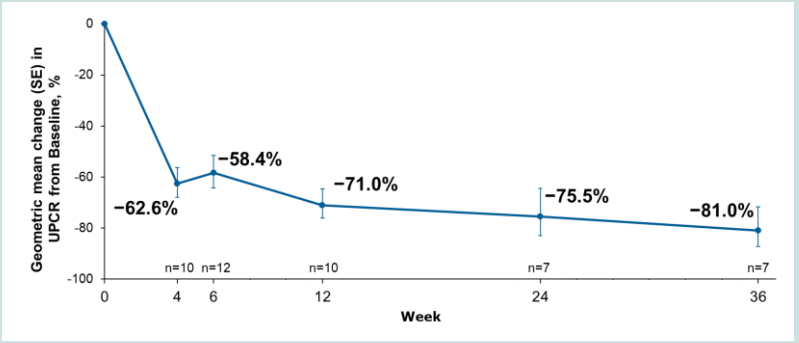
- Age ≥18 years
- Biopsy-proven IgAN in ≤6 mo
- Proteinuria ≥0.5 g/day
- eGFR ≥30 mL/min/1.73 m^2
- No ACEIs/ARBs in ≤12 mo

Key endpoints

- Safety
- Change in proteinuria from BL
- CR of proteinuria (<0.3 g/day)
- Change in GFR and BP from BL

Results

- **Reduction** in **proteinuria** was **≈60% from baseline** at week 4 and **sustained** over 36 weeks
- **67% (8/12) of patients achieved CR** (<0.3 g/day) at any time during the first 36 weeks



- **eGFR** measurements were **relatively stable** over 36 weeks
- Mean total **body water** showed **modest reduction** from BL to week 24
- Mean **body weight** showed **minor fluctuations** over 36 weeks of treatment
- After initial decrease, **BP remained stable** during follow-up
- Office and ambulatory BP were **similar at BL and week 6**

- Sparsentan was **generally well tolerated** over 36 weeks of treatment
- One patient discontinued treatment due to hypotension after 6 weeks
- No SAEs were treatment related

Conclusion

Sparsentan was effective at rapidly reducing proteinuria and controlling BP in patients with newly diagnosed IgAN. Total body water was modestly reduced with no evidence of fluid retention. Sparsentan treatment was generally well tolerated, and no new safety signals were observed. Ongoing studies, including analyses of repeat renal biopsies and biomarkers, will investigate the mechanistic actions of sparsentan and its potential renoprotective effects.

ACEI, angiotensin-converting enzyme inhibitor; ARB, angiotensin receptor blocker; BL, baseline; BP, blood pressure; CR, complete remission; eGFR, estimated glomerular filtration rate; GFR, glomerular filtration rate; IgAN, immunoglobulin A nephropathy; RASB, renin-angiotensin-system blocker; SAE, serious adverse event; SOC, standard of care; UPCR, urine protein-to-creatinine ratio

References: 1. Trachtman H, et al. *Expert Opin Emerg Drugs*. 2020;25(3):367-375. 2. Kowala MC, et al. *J Pharmacol Exp Ther*. 2004;309(1):275-284. 3. Nagasawa H, et al. *Nephrol Dial Transplant*. 2022;37(suppl 3):gfac067.060. 4. ClinicalTrials.gov. Accessed September 11, 2023. https://clinicaltrials.gov/study/NCT04663204.

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