Atacicept Reduces Serum Immune Complex Levels in Patients with Immunoglobulin A Nephropathy (IgAN)

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Results:
- Decrease in serum IgA-IgG immune complex levels was observed in both atacicept 25 mg and 75 mg groups over time.
- At 24 weeks, mean percent change from baseline was 17% decrease for atacicept 25 mg, 21% decrease for atacicept 75 mg, and 3% decrease for placebo.
- At 72 weeks, 29% decrease for atacicept 25 mg, 26% decrease for atacicept 75 mg, and 13% decrease for placebo was observed.

Methods:
- JANUS patients were evaluated for serum IgA-IgG immune complex levels by ELISA at baseline, weeks 4, 12, 24, 48, and 72. Serum samples were normalized using 3 standard serum samples included on all plates.

Conclusion:
- Atacicept is the first therapeutic to show reduction in serum Gd-IgA1, anti-Gd-IgA1, and now immune complex levels in IgAN patients.
- Atacicept’s ability to mitigate the first three hits of the 4-hit mechanism illustrates its potential as a disease-modifying treatment for IgAN.
- The ongoing Ph2b ORIGIN trial evaluating atacicept 25 mg, 75 mg, and 150 mg in IgAN patients will help determine how attenuation of these multiple hits translates to preservation and improvement of renal function.

Sources:
- Study MS700461-0035 CSR Tables 15.3.3.35; Barratt, et al. Kid Int Rep. 2022 (7), 1831-1841.

Atacicept lowers Gd-IgA1
- In the JANUS randomized, placebo-controlled trial in IgAN patients, atacicept, administered subcutaneously once weekly, demonstrated a substantial reduction in serum Gd-IgA1 in a dose dependent manner that was durable through 72 weeks.

Atacicept lowers anti-Gd-IgA1
- Data from the same trial demonstrated decrease in serum anti-Gd-IgA1 levels observed in both atacicept 25- and 75-mg groups over time. At 24 weeks, mean % change from baseline was 24% decrease for atacicept 25 mg and 29% decrease for atacicept 75 mg. At 72 weeks, 28% decrease for atacicept 25 mg and 39% decrease for atacicept 75 mg was observed.

Atacicept Lowers Immune Complexes

Figure 1: Pathogenesis of IgA Nephropathy

Figure 2: Percent change from baseline in immune complexes to week 72