

APPLAUSE-IgAN:

A multi-center, randomized, double-blind, placebo controlled, parallel group, phase III study to evaluate the efficacy and safety of LNP023 in primary IgA nephropathy patients

Vlado Perkovic¹², Brad Rovin³, Hong Zhang⁴, Naoki Kashihara⁵, Bart Maes⁶, Dana V Rizk⁷, Wenyan Wang⁸, Meier Matthias⁹, Kollins Dmitrij¹⁰, Olympia Papachristofi¹¹, Alan Charney¹², Jonathan Barratt¹³

1. University of New South Wales, Sydney, AUS
2. Royal North Shore Hospital, AUS
3. Ohio state university, Wexner medical center, USA
4. Peking University Institute of Nephrology, Beijing, China
5. Kawasaki medical school, Okayama, Japan
6. University Hospital Gasthuisberg, Leuven, Belgium
7. University of Alabama at Birmingham, Alabama, USA
8. Sr. clinical development director, rare renal disease, Novartis
9. Global Program Clinical Head, Cardiovascular & Renal & Metabolism, Novartis
10. Clinical development medical director, Novartis
11. London School of Hygiene and Tropical Medicine, London, UK
12. New York University Grossman School of medicine, New York, USA
13. University of Leicester, Leicester General Hospital, Leicester, UK

No targeted therapies are available for IgA nephropathy (IgAN), an autoimmune disease leading to kidney dysfunction due to IgA1 immune complexes glomerular deposit; KDIGO GL '12 recommends supportive care (RAS inhibition) and lifestyle correction.

Evidence supports complement activation, with alternative and lectin pathways, factor B action (FB) as component of C3-and C5-convertases. Iptacopan is an oral, first-in-class, highly potent selective FB inhibitor.

Iptacopan is evaluated in a double-blind placebo-controlled dose-ranging phase 2 study (CLNP023X2203) in patients with IgAN and UPCr ≥ 0.75 g/g. A 90day interim analysis (IA) shows that it (200 mg bid) is safe and may be effective in reducing proteinuria. Further IA and pivotal phase 3 trial in 2021.

The APPLAUSE-IgAN phase 3 study evaluates the safety and efficacy of iptacopan vs placebo + supportive care in proteinuria reduction and kidney disease progression; 450 adults will be 1:1 randomized to iptacopan 200 mg bid or placebo (2 yrs), with around 20 of them having severe renal impairment, to explore PK and safety in this fragile group. Patients will receive SC and vaccinations. Primary objectives (IA) with 250 pts at mth 9: show superiority of iptacopan in proteinuria reduction; final analysis on 430 pts at mth 24: show iptacopan superiority in slowing kidney disease progression by annualized total eGFR decline.

Trial evaluates the efficacy of iptacopan in reducing proteinuria and slowing loss of kidney function in 2 yrs.

