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Nefecon effect on quality of life in patients with IgAN: SF-36 results from the Phase 3 NefIgArd trial

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INTRODUCTION

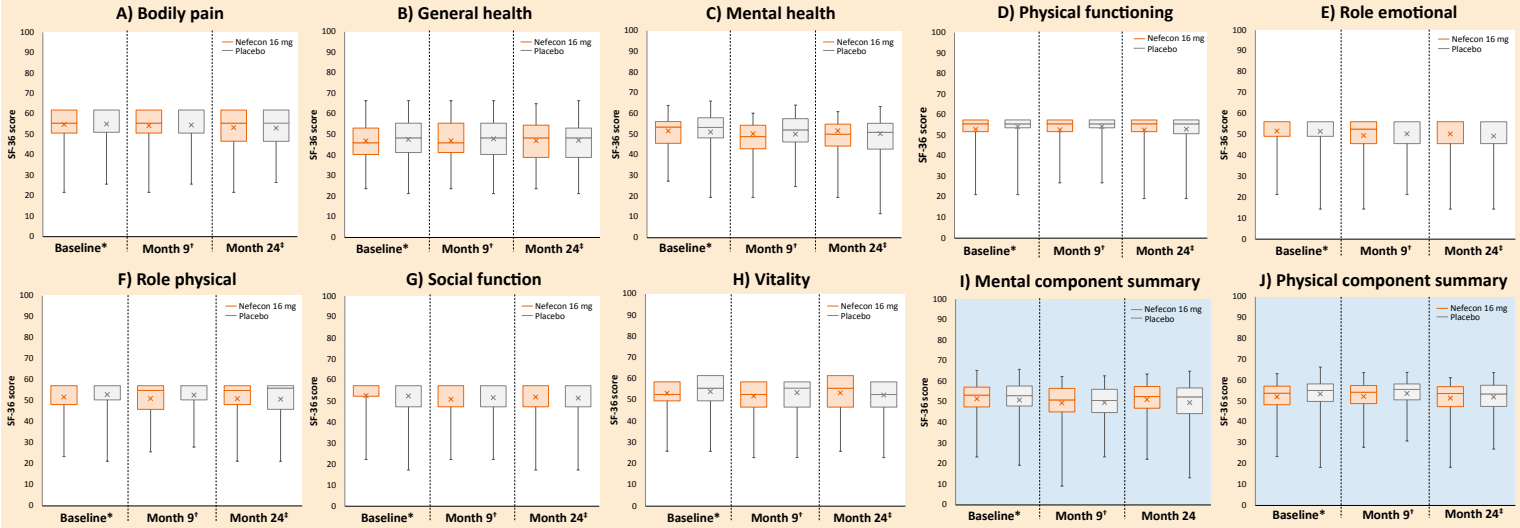
- **IgAN** is a chronic immune-mediated disease with **significant patient burden**,[1] underscoring the need for disease-modifying therapies that prevent kidney function decline
- **Nefecon** is a novel, oral, targeted-release capsule formulation of budesonide, designed to treat IgAN by **reducing Gd-IgA1 antibody production** at the Peyer's patch–rich distal ileum[1]
- Nefecon is **approved for use** by the **FDA** to **reduce the loss of kidney function** in adult patients with primary IgAN at risk of rapid disease progression irrespective of proteinuria levels, whereas the **EMA** has an additional requirement of a UPCR ≥1.5 g/g[2,3]
- Previously published results from the 2-year global NefIgArd trial demonstrated that treatment with Nefecon 16 mg/day for 9 months was associated with a **significant reduction in time-weighted average change in eGFR** over 2 years of 5.1 mL/min/1.73 m^2 versus placebo, and a **significant 30% reduction in UPCR at 9 months and a 50% reduction at 12 months** versus placebo[1]
- Here, we present the 2-year results of **QoL analyses based on SF-36 assessments at 9 and 24 months**

METHODS

- NefIgArd was a **global, double-blind, randomized, placebo-controlled Phase 3 trial** including patients with primary IgAN despite optimized renin–angiotensin system inhibition[1]
- Eligibility criteria included biopsy-confirmed **primary IgAN**, **persistent proteinuria** (UPCR ≥0.8 g/g or proteinuria ≥1 g/24 h in two consecutive measurements of the same parameter over ≥2 weeks), and an **eGFR** of 35-90 mL/min/1.73 m^2 estimated with the Chronic Kidney Disease Epidemiology Collaboration 2009 formula[1]
- Patients received a 9-month treatment course of **Nefecon 16 mg/day or placebo** in addition to optimized supportive care, followed by a 15-month, off-drug observational period[1]
- The **SF-36 QoL questionnaire** contains 36 questions, each of which are grouped into one of eight subscales: physical functioning, role limitations due to physical health, bodily pain, general health perceptions, vitality, social functioning, role limitations due to emotional problems, and mental health. Final scores for each subscale range from 0 to 100, with a **higher score indicating better health and QoL**[4]
- The **mean re-coded scores** for each of the eight subscales and **overall physical** and **mental health component scores** were summarized at **baseline, 9 months, and 24 months**

RESULTS

Figure 1: Box and whisker plots representing the SF-36 scores for QoL domains (A-H) and component scores (I-J) at baseline, Month 9, and Month 24 for Nefecon 16 mg versus placebo



Final SF-36 scores for each QoL domain or component summary range from 0 to 100, with a higher score indicating better health and QoL[4]

Mean represented by the cross; median represented by the middle line; IQR represented by the box; maximum and minimum by the whiskers.

The full analysis set comprised 364 patients. *Baseline is defined as the last measurement prior to the first dose of study drug. For placebo, n=176 for general health, physical functioning, role emotional, and role physical scores and n=177 for other scores; n=177 for Nefecon 16 mg.†n=170 for placebo and n=170 for Nefecon 16 mg (n=169 for mental component summary, mental health, physical component summary, and vitality). ‡n=164 for placebo and n=159 for Nefecon 16 mg.

CONCLUSIONS

- **SF-36 scores were similar between groups** at baseline across all QoL domains
- **No clinically meaningful worsening or improvement in QoL measurements was observed at any timepoint,** with **SF-36 scores remaining consistent after 15 months of off-drug observational follow-up**
- These findings further support the benefit/risk profile of Nefecon, demonstrating that 9 months of treatment with Nefecon 16 mg/day **did not result in changes in QoL** at any measure, while providing **significant benefit in preserving kidney function**

Scan to view Nefecon presentations, posters, and materials

REFERENCES

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ABBREVIATIONS

eGFR, estimated glomerular filtration rate; EMA, European Medicines Agency; FDA, US Food and Drug Administration; Gd-IgA1, galactose-deficient immunoglobulin A1; IgAN, immunoglobulin A nephropathy; IQR, interquartile range; QoL, quality of life; SF-36, 36-Item Short Form Survey; UPCR, urine protein-creatinine ratio.

DISCLOSURES

JB is a consultant to Calliditas and reports grants as well as consultancy and personal fees from Arzneimittel AG, Everest Medicines, Calliditas, and STADA. **JK** is a consultant for Calliditas. **AS** received support for the present study and reports consulting fees from AstraZeneca and Calliditas outside the submitted work. **JF** has received consultancy fees or honoraria from AstraZeneca, Bayer, Boehringer Ingelheim, Calliditas, Chinook, GSK, Novartis, Omeros, Otsuka, and Travere Therapeutics, and serves on data safety monitoring boards for Novo Nordisk and Visterra. **VT** has reported consultancy fees or honoraria from Calliditas, Novartis, Omeros, Otsuka, and Travere Therapeutics. **HT** has served on advisory boards for Calliditas and received grants, honoraria, consultancy fees, or travel support from Alexion, AstraZeneca, BioCryst, Calliditas, Chinook, George Clinical, Novartis, Omeros, Otsuka, Travere Therapeutics, and Vera Therapeutics. **HZ** has received consulting fees or honoraria from Calliditas, Chinook, Novartis, Omeros, and Otsuka. **NE** declares no competing interests. **AP** received honoraria and travel grants from Alexion, AstraZeneca, Bayer, Boehringer Ingelheim, GlaxoSmithKline, Otsuka, STADA Arzneimittel AG, and Vifor Pharma. **HNR** received support to serve as a member of the steering committee and funding for the execution of the study from Calliditas, has received grant support from the Kidney Foundation of Canada, Canadian Institutes of Health Research, and John and Leslie Pearson; has received fellowship support from the Louise Fast Foundation; reports consulting fees, honoraria, or travel support from Calliditas, Chinook, Novartis, Omeros, Pfizer, and Travere Therapeutics; served in advisory boards and steering committees for Chinook, Novartis, Omeros, Pfizer, and Travere Therapeutics; has been an investigator for Alnylam Pharmaceuticals, Calliditas, ChemoCentryx, Chinook, Omeros, Pfizer; and is Director of the Glomerulonephritis Fellowship, funded by the Louise Fast Foundation. **BHR** received support for the present study from Calliditas; reports consulting fees from Alpine Immune Sciences, Alexion, Calliditas, Novartis, Omeros, Otsuka/Visterra, Q32 Bio, Travere Therapeutics, and Vera Therapeutics; and is Co-Chair of Glomerular Diseases Guidelines for KDIGO. **RL** received support for the present study from Calliditas; reports institutional grants from Calliditas, ChemoCentryx, Omeros, Otsuka, Pfizer, Roche, Travere Therapeutics, Vera Therapeutics, and Visterra; and has served on advisory boards for Cara Therapeutics.