Response to treatment with maralixibat in Alagille syndrome is associated with improved health-related quality of life

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Introduction

- Alagille syndrome (ALGS) is a rare, life-threatening, autosomal dominant disease of the liver, lung, eye, and ear, typically diagnosed within the first 3 years of life, and characterized by intrahepatic cholestasis, liver disease, characteristic facies, and cardiopathy.
- Children with ALGS present with chronic cholestasis, pruritus, failure to thrive, and xanthomas.1
- The pruritus experienced by children with ALGS is considered among the most distressing symptoms, is typically severe, and negatively impacts physical and emotional wellbeing.2
- Maralixibat (Marlivo; Gaskari et al 2018) is a selective, intestinal bile salt transport inhibitor for pruritus in Alagille syndrome.
- In a Phase 3 trial, maralixibat met efficacy endpoints in subjects with moderate to severe pruritus in ALGS >1 year of age.8–10
- The minimal clinically important difference (MCID) for the PedsQL Multidimensional Fatigue Scale (PF) is 11.85 ± 0.92.11
- The pruritus experienced by children with ALGS is considered among the most distressing symptoms, is typically severe, and negatively impacts physical and emotional wellbeing.2

Methods

- Study design and participants: Children ≥1 year of age with moderate to severe pruritus in ALGS ≥1 year of age were enrolled in a 52-week, randomized, placebo-controlled, double-blind, multicenter,ashelitthorical trial with an open-label extension, in children with ALGS experiencing moderate to severe pruritus.8–10

Results

- The analysis presented here compares HRQoL data at baseline and week 48 among responders and non-responders to maralixibat treatment.
- Responders' Family Impact Scale scores increased an average of 16.9 points, more than three times the MCID, over the 48 weeks compared with non-responders (Table 4).
- Family Impact Scale Total Score changes were statistically significant and clinically meaningful. Responders had an average total score increase of 11.03 points, more than two times the MCID, compared with non-responders (Table 4).
- Responders reported significant improvement in physical and emotional functioning and physical and emotional well-being across all HRQoL scales compared with non-responders (Table 4).

Conclusions

- Respondents reported significant improvements in quality of life, including a greater improvement in physical functioning, emotional well-being, and a greater reduction in fatigue compared with non-responders. These improvements were more pronounced among responders compared with non-responders (Table 4).
- Responders also reported significantly improved pruritus scores compared with non-responders.
- These findings demonstrate that maralixibat treatment is associated with improved health-related quality of life among subjects with moderate to severe pruritus in ALGS.