Impact of Long-Term Maralixibat Treatment on Concomitant Medication Use for the Treatment of Cholestatic Pruritus in Alagille Syndrome: Real-World Experience in the United States

Abstract #1094

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Introduction

- Alagille syndrome (ALGS) is a rare, debilitating, autosomal dominant disorder that presents with a broad range of clinical manifestations.[1]
  - Key clinical manifestations include cholestasis, pruritus, failure to thrive, xanthomas, and progressive liver disease, all of which can lead to liver transplantation or death.[1]
- Cholestatic pruritus is the most debilitating symptom of ALGS and among the most severe of any chronic liver disease.[2]
- Maralixibat is a minimally absorbed ileal bile acid transporter (IBAT) inhibitor that prevents enterohepatic bile acid recirculation and is approved for the treatment of cholestatic pruritus in patients with ALGS ≥2 months of age in the EU and ≥3 months of age in the US.[3,4]
- Prior to the introduction of IBAT inhibitors like maralixibat, conventional pharmacologic management of cholestatic pruritus in ALGS typically involved utilisation of ursodiol, rifampin, and antihistamines, with limited success, and many patients would require combination therapy.[5]
- Most participants studied in clinical trials of maralixibat for ALGS received ≥3 medications to help alleviate cholestatic pruritus.[6]
- In ICONIC, a phase 2b, placebo-controlled, randomised drug-withdrawal study with an open-label extension period evaluating efficacy and safety of maralixibat in children with ALGS, participants were permitted to continue preexisting antipruritic medications at stable dosages.[6]
- Maralixibat has been commercially available in the US since September 2021.[3]

Objective

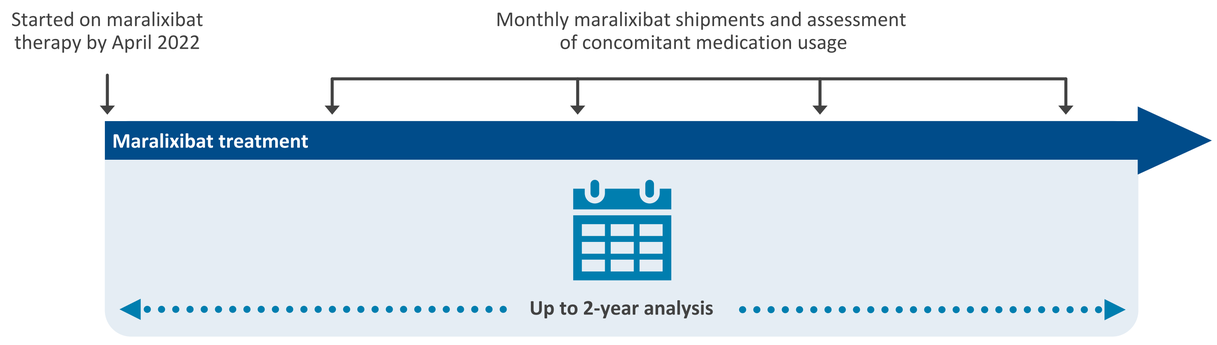
- To assess long-term real-world concomitant medication usage at the initiation of maralixibat treatment and change in usage over time.

Methods

- Pharmacy data from the Mirum Access Plus programme in the US were used to evaluate concomitant medication trends for up to 2 years of potential use.
  - The Mirum Access Plus programme is a single-source specialty pharmacy and education programme for patients receiving maralixibat that provides insurance coverage assistance, financial support, medication delivery, refill reminders, and educational resources.[7,8]
  - The analysis included patients in the US who had started on maralixibat therapy by April 2022 and had not discontinued therapy.
- Concomitant medications were confirmed by the Mirum Access Plus pharmacy prior to each maralixibat shipment, which typically occurs monthly.

Figure 1. Mirum Access Plus Programme[7,8]

Figure 2. Study Design



Results

178
Patients treated with maralixibat included

53%
Male

At maralixibat initiation

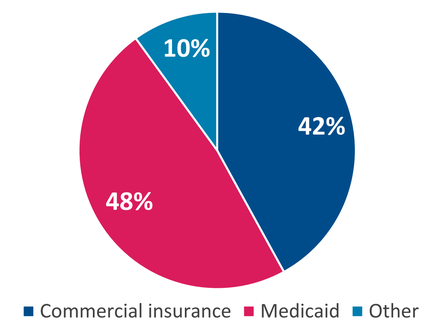
6 y
Median age

2
Median antipruritic medications

1
Median nutritional or vitamin supplement

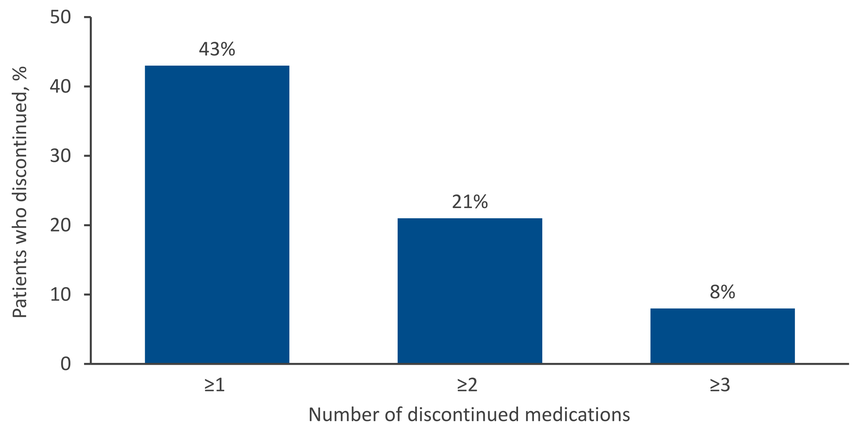
751
Median days on maralixibat

Figure 3. Proportion of Patients With Different Primary Payers of Maralixibat



More Than 40% of Patients Discontinued ≥1 Concomitant Medication, and More Than 20% Discontinued ≥2 Concomitant Medications During Maralixibat Treatment

Figure 5. Number of Concomitant Medications Discontinued During Maralixibat Treatment



Reductions in Concomitant Medication Usage During Maralixibat Treatment Were Seen Across All Medication Types

Figure 4. Concomitant Medication Usage at Baseline and During Maralixibat Treatment

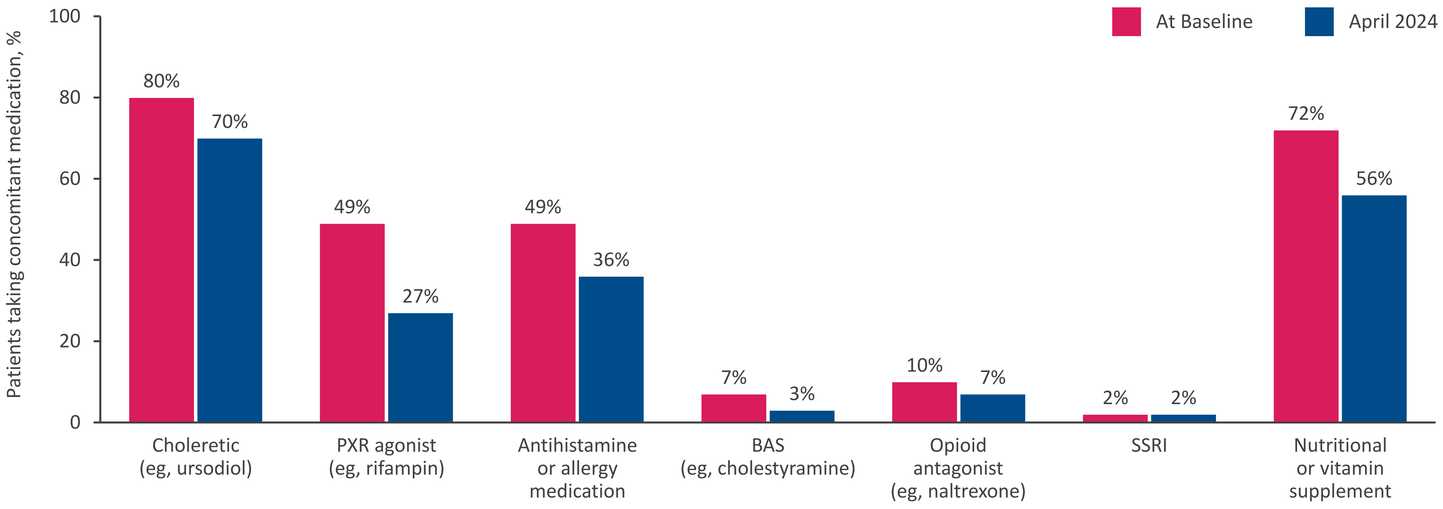
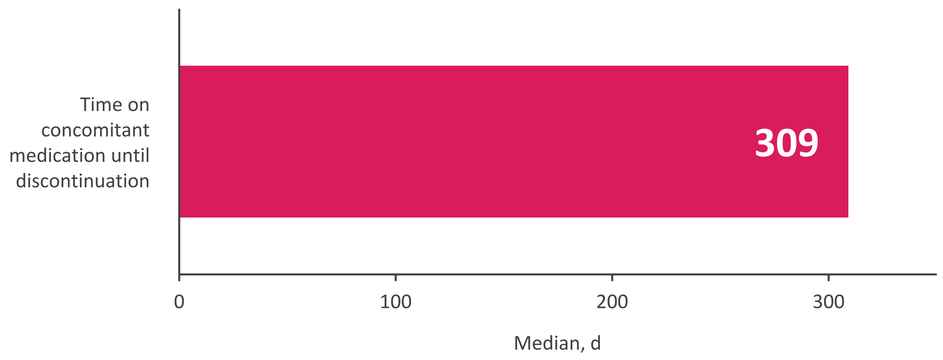


Figure 6. Impact of Maralixibat on Time to Discontinuation of Concomitant Antipruritic Medications



Conclusions

- Consistent with the natural history of ALGS, most patients in this analysis were taking multiple antipruritic medications prior to starting treatment with maralixibat.
- More than 40% of patients were able to discontinue ≥1 concomitant antipruritic medication during maralixibat treatment.
- More than 20% of patients decreased their use of nutritional or vitamin supplements.
- Concomitant medication usage trends with up to 2 years of treatment with maralixibat are consistent with previously reported findings from this dataset after 1 year of maralixibat treatment, highlighting the long-term durability of these results.[9]

Abbreviations

ALGS, Alagille syndrome; BAS, bile acid sequestrant; IBAT, ileal bile acid transporter; PXR, pregnane X receptor; SSRI, selective serotonin reuptake inhibitor.

Disclosures

TT, JMT-R, RH, RS, and LT are employees of and shareholders in Mirum Pharmaceuticals, Inc. WS is a consultant for Mirum Pharmaceuticals, Inc.

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