Livmarli® (maralixibat) – New indication

- On March 13, 2024, Mirum Pharmaceuticals announced the FDA approval of Livmarli (maralixibat), for the treatment of cholestatic pruritus in patients 5 years of age and older with progressive familial intrahepatic cholestasis (PFIC).
    - Livmarli is not recommended in a subgroup of PFIC type 2 patients with specific ABCB11 variants resulting in non-functional or complete absence of bile salt export pump (BSEP) protein.
- Livmarli is also approved for the treatment of cholestatic pruritus in patients 3 months of age and older with Alagille syndrome (ALGS).
- Livmarli is the second drug approved for PFIC.
    - Ipsen's Bylvay® (odevixibat) is approved for the treatment of pruritus in patients 3 months of age and older with PFIC and treatment of cholestatic pruritus in patients 12 months of age and older with ALGS.
- The approval of Livmarli for the new indication was based on a randomized, placebo-controlled study in 64 patients with documented molecular diagnosis of PFIC. Patients were randomized to receive Livmarli or placebo. Given the patients' young age, a single-item observer-reported outcome was used to measure patients' pruritus symptoms as observed by their caregiver twice daily on the Itch Reported Outcome Instrument (ItchRO[Obs]). Pruritus symptoms were assessed on a 5-point ordinal response scale, with scores ranging from 0 (none observed or reported) to 4 (very severe).
    - The change from baseline to weeks 15 to 26 in the average morning ItchRO(Obs) pruritus severity scores were -1.8 with Livmarli and -0.6 with placebo (mean difference -1.2, 95% CI: -1.7, -0.7; < 0.0001).
- The most common adverse reactions (≥ 5%) with Livmarli use for PFIC were diarrhea, fat soluble vitamin deficiency, abdominal pain, liver test abnormalities, hematochezia, and bone fractures.
- The recommended dosage of Livmarli for PFIC is 570 mcg/kg twice daily 30 minutes before a meal. The starting dose is 285 mcg/kg orally once daily in the morning, and should be increased to 285 mcg/kg twice daily, 428 mcg/kg twice daily, and then to 570 mcg/kg twice daily, as tolerated. The maximum daily dose should not exceed 38 mg (4 mL) per day.
    - Refer to the drug label for complete dosing by weight guidelines for PFIC and for dosing for ALGS.