Ibsrela® (tenapanor) – New drug approval

- On September 12, 2019, Ardelyx announced the FDA approval of Ibsrela (tenapanor), for treatment of irritable bowel syndrome with constipation (IBS-C) in adults.

- IBS-C is a gastrointestinal (GI) disorder in which abdominal pain is associated with constipation. It is estimated that IBS-C significantly affects the health and quality of life of at least 11 million people in the U.S.

- Ibsrela is a first-in-class, locally acting inhibitor of the sodium/hydrogen exchanger 3 (NHE3), an antiporter expressed on the apical surface of the small intestine and colon primarily responsible for the absorption of dietary sodium.

    — By inhibiting NHE3 on the apical surface of the enterocytes, tenapanor reduces absorption of sodium from the small intestine and colon, resulting in an increase in water secretion into the intestinal lumen, which accelerates intestinal transit time and results in a softer stool consistency.

- The efficacy of Ibsrela was established in two double-blind, placebo-controlled, randomized studies in adult patients with IBS-C. The intent-to-treat analysis population included 620 patients in study 1 and 606 patients in study 2. In both trials, the primary endpoint was the proportion of responders, where a responder was defined as a patient achieving both the stool frequency and abdominal pain intensity responder criteria in the same week for at least 6 of the first 12 weeks of treatment.

    — In study 1, the responder rate was 37% and 24% with Ibsrela and placebo, respectively (treatment difference: 13, 95% CI: 6, 20).
    — In study 2, the response rate was 27% and 19% with Ibsrela and placebo, respectively (treatment difference 8, 95% CI: 2, 15).

- Ibsrela carries a boxed warning for risk of serious dehydration in pediatric patients.

- Ibsrela is contraindicated in patients less than 6 years of age due to the risk of serious dehydration and patients with known or suspected mechanical GI obstruction.

- In addition, a warning and precaution for Ibsrela is diarrhea.

- The most common adverse reactions (≥ 2%) with Ibsrela use were diarrhea, abdominal distension, flatulence and dizziness.

- The recommended dose of Ibsrela is 50 mg orally twice daily.

    — Ibsrela should be taken immediately prior to breakfast or the first meal of the day and immediately prior to dinner.

- Ardelyx launch plans for Ibsrela are pending. Ibsrela will be available as a 50 mg tablet.