## Ojjaara (momelotinib) – New orphan drug approval

- On September 15, 2023, GSK announced the FDA approval of Ojjaara (momelotinib), for the treatment of intermediate or high-risk myelofibrosis (MF), including primary MF or secondary MF [post-polycythemia vera (PV) and post-essential thrombocythemia (ET)], in adults with anemia.

- Myelofibrosis is a blood cancer affecting approximately 25,000 patients in the U.S. About 40% of patients have moderate to severe anemia at the time of diagnosis.

- Ojjaara is an inhibitor of wild type Janus kinase 1 and 2 (JAK1/JAK2) and mutant JAK2V617F, which contribute to signaling of a number of cytokines and growth factors that are important for hematopoiesis and immune function.

- The efficacy of Ojjaara was established in the MOMENTUM study and in a subpopulation of adults with anemia in the SIMPLIFY-1 study.

- MOMENTUM was a randomized, double-blind, active-controlled study in 195 symptomatic and anemic adults with MF who had previously received an approved JAK inhibitor therapy. Patients were treated with Ojjaara or danazol for 24 weeks. The primary endpoint was the percentage of patients achieving a Myelofibrosis Symptom Assessment Form (MFSAF v4.0) Total Symptom Score reduction of 50% or more at week 24 compared with their own baseline score. A key secondary endpoint was transfusion independence.

    - The primary endpoint was met in 25% and 9% of patients with Ojjaara and danazol, respectively (treatment difference 16, 95% CI: 6, 26; $p < 0.01$).
    - Transfusion independence was achieved in 30% and 20% of patients with Ojjaara and danazol, respectively (non-inferiority treatment difference 14, 95% CI: 2, 25; $p = 0.023$).

- SIMPLIFY-1 was a randomized, double-blind, active-controlled study in 432 adults with MF who had not previously received a JAK inhibitor. Patients were treated with Ojjaara or Jakafi® (ruxolitinib) for 24 weeks. The efficacy results provided are for the subset of patients who had anemia (Hb < 10 g/dL) at baseline (N = 181). The primary endpoint was spleen volume response (reduction by 35% or greater).

    - Spleen volume reduction was achieved in 31.4% (95% CI: 21.8, 42.3) and 32.6% (95% CI: 23.4, 43.0) of patients with Ojjaara and Jakafi, respectively.
    - A numerically lower percent of patients treated with Ojjaara (25%) achieved a Total Symptom Score reduction of 50% or more at week 24 compared with Jakafi (36%).

- Warnings and precautions for Ojjaara include risk of infection; thrombocytopenia and neutropenia; hepatotoxicity; major adverse cardiovascular events; thrombosis; and malignancies.

- The most common adverse reactions (≥ 20%) with Ojjaara use were thrombocytopenia, hemorrhage, bacterial infection, fatigue, dizziness, diarrhea, and nausea.

- The recommended dose of Ojjaara is 200 mg orally once daily.

- GSK's launch plans for Ojjaara are pending. Ojjaara will be available as 100 mg, 150 mg, and 200 mg tablets.