Tibsovo® (ivosidenib) – New indication

- On October 24, 2023, Servier announced the FDA approval of Tibsovo (ivosidenib), for the treatment of adult patients with relapsed or refractory myelodysplastic syndromes (MDS) with a susceptible isocitrate dehydrogenase-1 (*IDH1*) mutation as detected by an FDA-approved test.

- Tibsovo is also approved for treatment of newly diagnosed acute myeloid leukemia (AML), relapsed or refractory AML, and locally advanced or metastatic cholangiocarcinoma.

- In the U.S., approximately 16,000 new cases of MDS are reported each year. Approximately 3.6% of MDS patients have an *IDH1* mutation.

- The approval of Tibsovo for the new indication was based on an open-label, single-arm, study in 18 adult patients with relapsed or refractory MDS with an *IDH1* mutation. Patients received Tibsovo continuous for 28-day cycles until disease progression, development of unacceptable toxicity, or undergoing hematopoietic stem cell transplantation. Efficacy was established on the basis of the rate of complete remission (CR) or partial remission (PR), the duration of CR+PR, and the rate of conversion from transfusion dependence to transfusion independence.

    - The CR rate was 38.9% (95% CI: 17.3, 64.3).
    - The median duration of CR was not estimable (95% CI: 1.9, 80.8+).
    - Among the 9 patients who were dependent on red blood cell (RBC) and/or platelet transfusions at baseline, 6 (67%) became independent of RBC and platelet transfusions during any 56-day post-baseline period. Of the 9 patients who were independent of both RBC and platelet transfusions at baseline, 7 (78%) remained transfusion independent during any 56-day postbaseline period.

- Tibsovo has a boxed warning for differentiation syndrome in AML and MDS.

- The most common adverse reactions including laboratory abnormalities (≥ 25%) with Tibsovo use in MDS were increased creatinine, decreased hemoglobin, arthralgia, decreased albumin, increased aspartate aminotransferase, fatigue, diarrhea, cough, decreased sodium, mucositis, decreased appetite, myalgia, decreased phosphate, pruritus, and rash.

- The recommended dosage of Tibsovo for all its indications is 500 mg orally once daily until disease progression or unacceptable toxicity.

    - For patients with AML or MDS without disease progression or unacceptable toxicity, Tibsovo should be continued for a minimum of 6 months to allow time for clinical response

- Patients should be selected for treatment with Tibsovo based on the presence of *IDH1* mutations. Information on FDA-approved tests for the detection of *IDH1* mutations is available at http://www.fda.gov/CompanionDiagnostics.