

Trilaciclib: Adis Evaluation

Clinical Considerations

- First intravenous CDK 4/6 inhibitor approved to decrease the incidence of chemotherapy-induced myelosuppression (CIM) in patients with ES-SCLC
- Administered prior to chemotherapy
- Provides multilineage myeloprotection, reducing the need for supportive care interventions and dose delays/reductions and hospitalizations related to CIM and sepsis
- Provides improvements in patient-reported outcomes
- Improves overall safety profile of chemotherapy regimens

Plain Language Summary

Background and rationale

- As well as destroying cancer cells, chemotherapy also damages healthy, rapidly growing cells in the body, including blood-forming cells in the bone marrow (i.e. bone marrow suppression; also known as myelosuppression). This results in low levels of white blood cells (increasing the risk of infection), red blood cells (causing anemia) and platelets (increasing the risk of bleeding).
- Bone marrow suppression often occurs after treatment with the highly toxic chemotherapies, such as those used in the treatment of extensive-stage small cell lung cancer (ES-CLC).
- Trilaciclib (COSELA™) is a drug that transiently protects the white and red blood cells and platelets from chemotherapy damage during treatment.

Clinical findings

- Trilaciclib administration prior to standard-of-care chemotherapy for ES-SCLC reduced chemotherapy-induced myelosuppression (CIM) and the need for rescue interventions, chemotherapy dose reductions/delays and hospitalizations related to CIM and infection.
- The safety profile of the chemotherapy regimens was improved without affecting antitumour efficacy

Conclusion

Trilaciclib fulfils an unmet need to reduce the incidence of CIM, which is particularly relevant in patients with ES-SCLC for which the cornerstone of treatment is chemotherapy

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