

Federal Employee Program.

# MARQIBO (vincristine liposome injection)

### RATIONALE FOR INCLUSION IN PA PROGRAM

## **Background**

Marqibo (vincristine) is used for the treatment of adults with Philadelphia chromosome negative (Ph-) acute lymphoblastic leukemia (ALL). Marqibo is approved for patients whose leukemia has relapsed two or more times, or whose leukemia has progressed following two or more regimens of anti-leukemia therapy. Marqibo contains vincristine, which is a chemical that stops cancer cells from dividing. The vincristine is encased within a liposome, a drug delivery vehicle composed of material similar to that of cell membranes, which delivers the drug direct to cancer cells (1).

## **Regulatory Status**

FDA-approved indication: Marqibo is a vinca alkaloid indicated for the treatment of adult patients with Philadelphia chromosome-negative (Ph-) acute lymphoblastic leukemia (ALL) in second or greater relapse or whose disease has progressed following two or more anti-leukemia therapies (1).

Marqibo has a boxed warning that the drug must only be given intravenously. Death has occurred with intrathecal use. Patients must be monitored for neurologic and myelosuppression symptoms such as neuropathy, neutropenia, thrombocytopenia, and anemia. Marqibo is contraindicated in patients with demyelinating conditions including Charcot-Marie-Tooth syndrome (1).

The safety and effectiveness of Margibo has not been established in pediatric patients (1).

#### Summary

Marqibo is a new liposome-encapsulated formulation of vincristine sulfate. It is indicated for patients 18 years of age and older with Philadelphia chromosome-negative (Ph-) acute lymphoblastic leukemia (ALL). Marqibo is contraindicated in demyelinating conditions including Charcot-Marie-Tooth syndrome (1).

Prior approval is required to ensure the safe, clinically appropriate, and cost-effective use of Marqibo while maintaining optimal therapeutic outcomes.



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### References

- 1. Marqibo [package insert]. East Windsor, NJ: Acrotech Biopharma LLC; June 2020.
- 2. NCCN Drugs & Biologics Compendium<sup>®</sup> Vincristine 2024. National Comprehensive Cancer Network, Inc. Accessed on May 6, 2024.