Drugs

PEER-REVIEWED FEATURE

Daratumumab: Adis Evaluation

Clinical Considerations

- First-in-class CD38-targeting monoclonal antibody
- Associated with higher rates of haematological complete response and major organ deterioration PFS when combined with bortezomib, cyclophosphamide and dexamethasone
- Acceptable tolerability profile

Plain Language Summary

Background and rationale

- Systemic light chain (AL) amyloidosis is a rare protein misfolding disease that causes serious damage to different organs, especially the heart and kidneys.
- Daratumumab (DARZALEX®) is a human monoclonal antibody that targets CD38, a protein expressed on clonal plasma cells. A subcutaneous formulation of daratumumab, co-formulated with recombinant human hyaluronidase (DARZALEX FASPRO®), is approved for use in adult patients with newly diagnosed AL amyloidosis.

Clinical findings

- When used in combination with bortezomib, cyclophosphamide and dexamethasone, daratumumab was associated with higher rates of haematological complete response and major organ deterioration progression-free survival (PFS) compared with bortezomib, cyclophosphamide and dexamethasone alone.
- The addition of daratumumab was also associated with near doubling of cardiac and renal response rates at 6 and 12 months.
- Subcutaneous daratumumab had an acceptable tolerability profile when used as combination therapy, with no new safety concerns.

Conclusion

The combination of daratumumab with bortezomib, cyclophosphamide and dexamethasone is an important treatment option for patients with newly diagnosed systemic AL amyloidosis.