Despite enthusiasm from key opinion leaders (KOLs), about Johnson & Johnson's (J&J's) Darzalex being incorporated into frontline treatment as part of the first quadruplet combination to enter the multiple myeloma market, there remain several challenges to its success, according to GlobalData , a leading data and analytics company.

The ALCYONE trial evaluated Darzalex in combination with the drug triplet of Velcade + melphalan + prednisone (VMP) in stem cell transplant (SCT)-ineligible patients only. In this study, treatment with D-VMP resulted in a 50% decrease in the risk of progression or death at a median follow-up of 16.5 months (p

If approved, D-VMP will be competing against the triplet regimen of Velcade + Revlimid + dexamethasone (VRD), which is currently the most frequently prescribed regimen in this setting, according to GlobalData's primary research.

Cai Xuan, Senior Healthcare Analyst at GlobalData , comments: "The cost of D-VMP will be an estimated $75,000 higher than that of VRD in the first year of treatment. This difference will be compounded in the near future when both Velcade and Revlimid will be available in generic form.

"While cost is generally less of a concern in the US market, European KOLs have expressed doubts over the feasibility of administering quadruplet regimens upfront from an economic perspective."

US KOLs have expressed doubts over the tolerability of quadruplet regimens in SCT-ineligible patients, who are typically less able to tolerate intensive treatments. They instead envision that quadruplet regimens will have better uptake in the SCT-eligible population, while SCT-ineligible patients may see Velcade being replaced by Darzalex in the future, making way for a Darzalex + Revlimid + dexamethasone (DRD) regimen as standard-of-care (SOC) in the front line.

VMP is a seldom-used regimen that is considered to be inferior to VRD in the US and US KOLs question whether D-VMP can demonstrate superior efficacy to VRD without a

head-to-head study. This is less of an issue in other markets, as VMP remains the SOC for frontline treatment of SCT-ineligible patients in Europe, where simply adding Darzalex to the current SOC will be less of a concern from a clinical point of view.

Xuan adds: "As US KOLs foresee a shift from triplet to quadruplet combination regimens in the frontline setting in the next five years, Darzalex has a major advantage as a drug that has already significantly impacted the current treatment algorithms."