"We undertook a retrospective study of 549 consecutive adult Out-Patient Antimicrobial Treatment (OPAT) episodes treated with intravenous teicoplanin." Matthews et al (2014).

Reference:

Matthews, P.C., Chue, A.L., Wyllie, D., Barnett, A., Isinkaye, T., Jefferies, L., Lovering, A. and Scarborough, M. (2014) Increased teicoplanin doses are associated with improved serum levels but not drug toxicity. The Journal of Infection. 68(1), p.43-9.

Abstract:

OBJECTIVE: Teicoplanin is widely used for the treatment of severe gram-positive infection,

aiming to achieve trough serum levels of 20-60 mg/L for patients with severe infection. A standard 400 mg daily dose is frequently associated with sub-therapeutic levels, and we have therefore changed our routine approach to 600 mg daily (following loading doses in each case). We set out to investigate the impact of this dose increase on drug levels and potential side-effects.

METHODS: We undertook a retrospective study of 549 consecutive adult Out-Patient Antimicrobial Treatment (OPAT) episodes treated with intravenous teicoplanin.

RESULTS: Therapeutic teicoplanin levels were more frequently achieved in patients treated with 600 mg compared to 400 mg daily (68% vs. 37% respectively, $p < 0.0001$), without an increased frequency of potentially toxic levels, defined as >60 mg/L (6% vs. 8% respectively, $p = 0.4$). There was no difference in the incidence of neutropaenia, eosinophilia, thrombocytopaenia, acute renal injury or treatment cessation in patients treated with the higher teicoplanin dose.

CONCLUSIONS: In the majority of stable adult patients with normal renal function, we advocate a loading regimen (600 mg b.d. for two doses) followed by a 600 mg daily teicoplanin dose in order to achieve therapeutic trough levels.

Other intravenous and vascular access resources that may be of interest (External links – IVTEAM has no responsibility for content).

Guide for intravenous chemotherapy and associated vascular access devices from Macmillan.
CancerUK IV chemotherapy information.