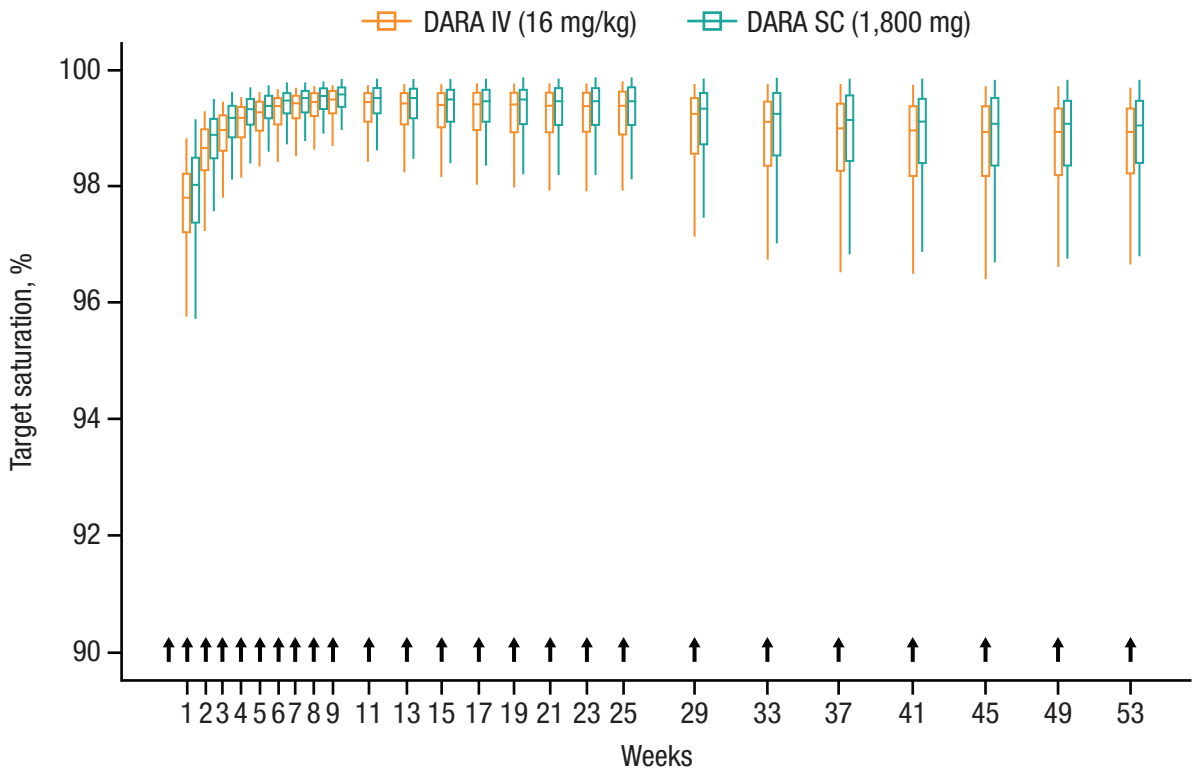


**Figure S1. Box plot for the simulated target saturation over time after DARA SC monotherapy or DARA IV monotherapy.**

DARA, daratumumab; SC, subcutaneous; IV, intravenous.

Note: Black arrows represent dose events.

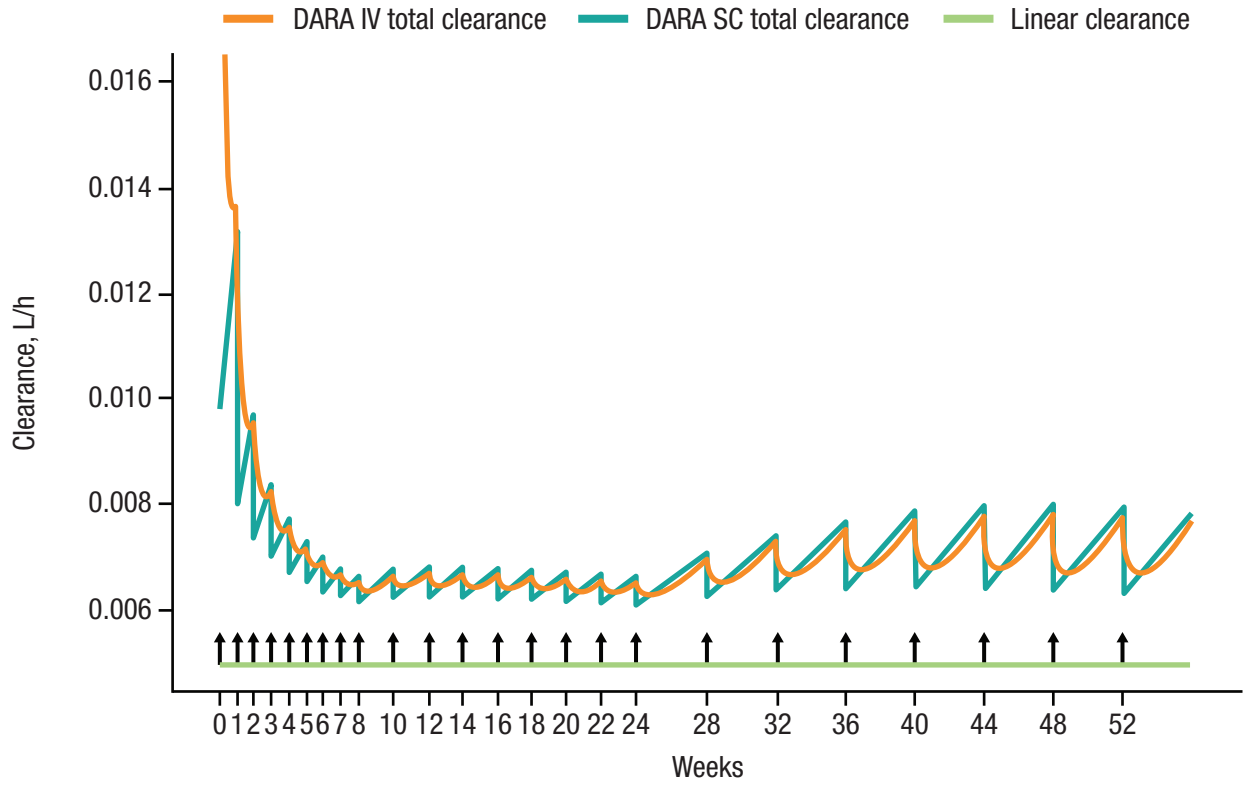


**Figure S2. Simulated total clearance and linear clearance versus time profiles for DARA SC and DARA IV for monotherapy dosing schedule<sup>a</sup> based on typical values of final model parameters.**

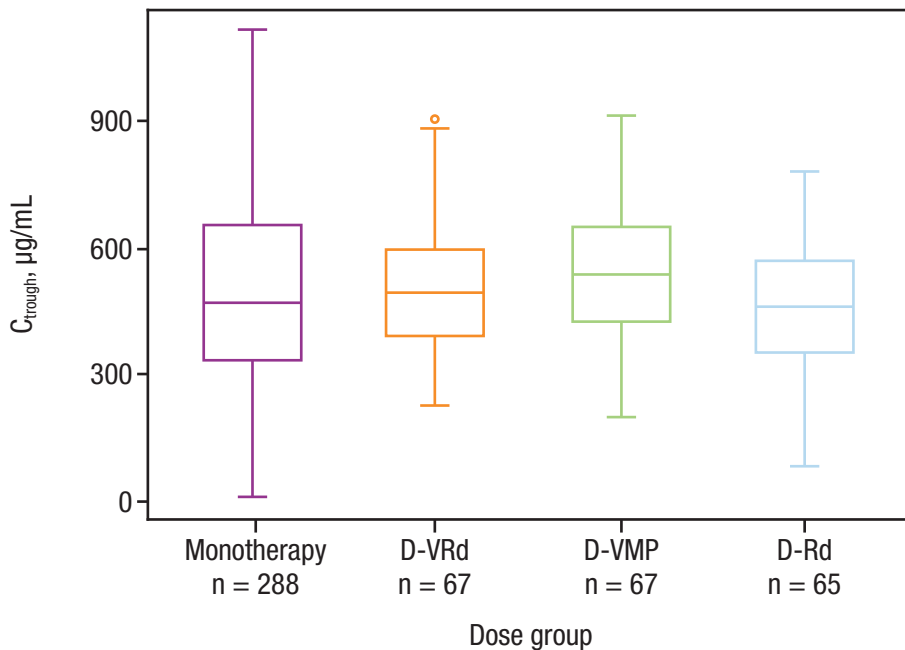
DARA, daratumumab; SC, subcutaneous; IV, intravenous.

Note: Black arrows represent dose events.

<sup>a</sup>Approved dose schedule consisted of weekly administration for 8 weeks (8 doses), every 2 weeks for 16 weeks (8 doses), and every 4 weeks thereafter (eg, 8 doses).



**Figure S3. Simulated DARA  $C_{troughs}$  after 6 weekly doses of DARA SC 1,800 mg monotherapy or combination therapies.**  
DARA, daratumumab;  $C_{trough}$ , predicted trough concentration; SC subcutaneous; D-VRd, daratumumab SC plus bortezomib/lenalidomide/dexamethasone;  
D-VMP, DARA SC plus bortezomib/melphalan/prednisone; D-Rd, DARA SC plus lenalidomide/dexamethasone.



**Figure S4. ORR in relation to DARA maximum  $C_{trough}$  (by Quartiles) at the end of weekly dosing for combination therapies.**

ORR, overall response rate; DARA, daratumumab;  $C_{trough}$ , predicted trough concentration; D-VRd, daratumumab SC plus bortezomib/lenalidomide/dexamethasone; D-VMP, DARA SC plus bortezomib/melphalan/prednisone; D-Rd, DARA SC plus lenalidomide/dexamethasone; SC subcutaneous; Q, quartile.

Note: The quartiles for maximum  $C_{trough}$ s are: Q1 (0.1-428  $\mu\text{g/mL}$ ), Q2 (428-548  $\mu\text{g/mL}$ ), Q3 (548-662  $\mu\text{g/mL}$ ), and Q4 (662-1210  $\mu\text{g/mL}$ ).

