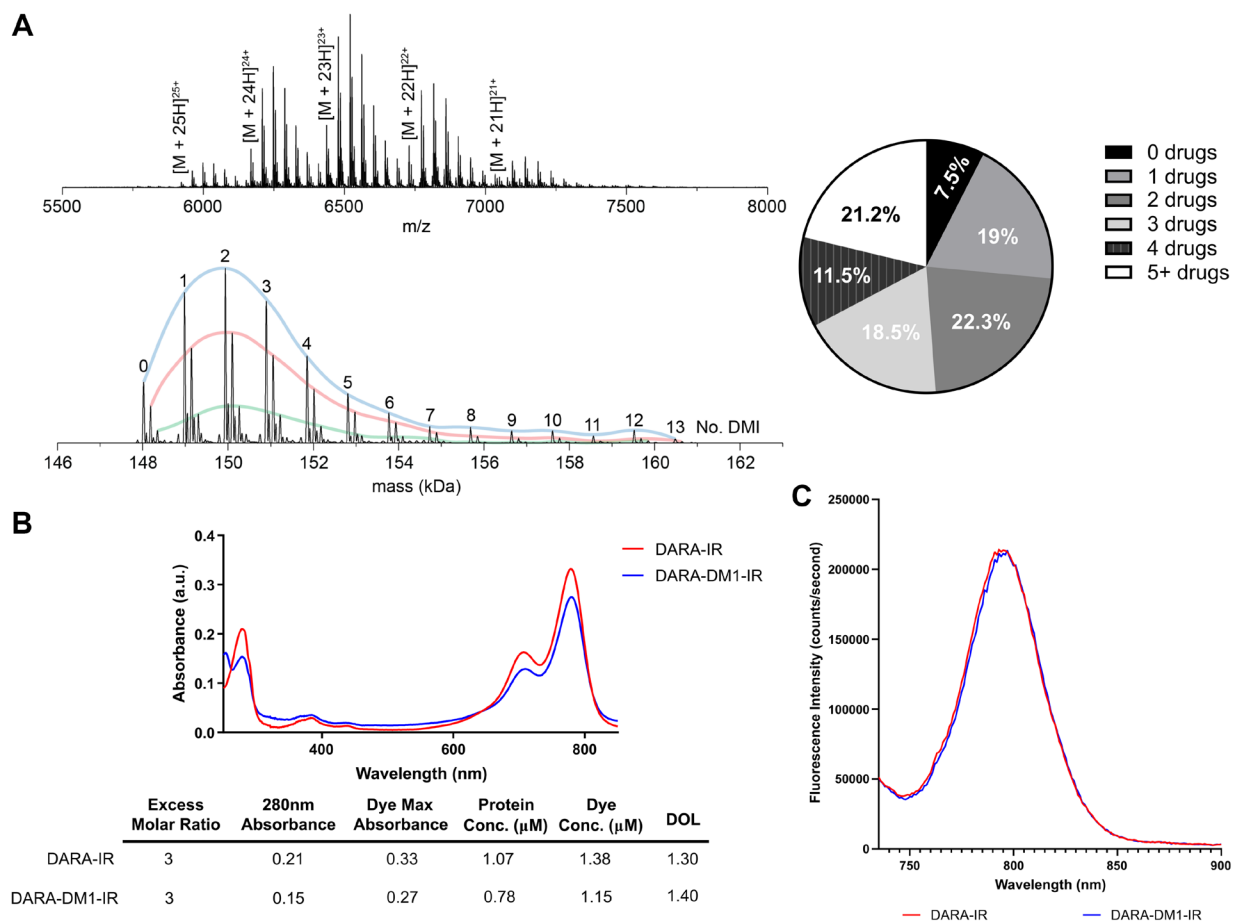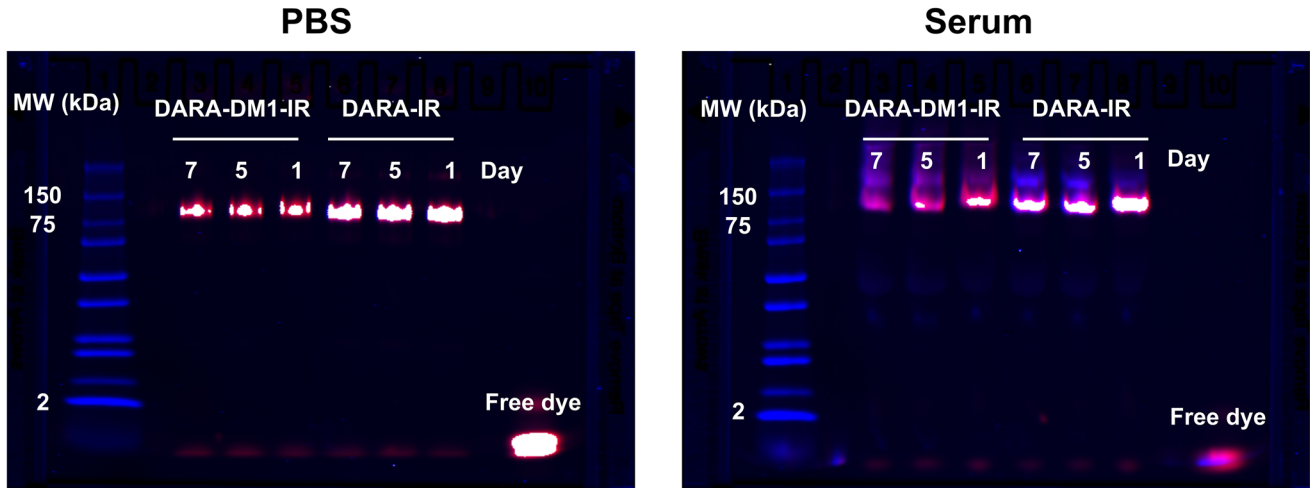# Tissue biodistribution and tumor targeting of near-infrared labelled anti-CD38 antibody-drug conjugate in preclinical multiple myeloma

## SUPPLEMENTARY MATERIALS

Supplementary Figure 1: Analytical characterization of DARA-DM1 and DARA-DM1-IR. (**A**) Representative mass spectrometry spectra and percent distribution of DARA with 1, 2, 3, 4 or 5+ DM1 drugs per antibody at a 20 to 1 conjugation ratio. (**B**) Antibody-dye absorbance spectra of DARA-DM1-IR and DARA-IR. After reaction and purification, the absorbance spectrum for DARA-DM1-IR and DARA-IR were used to determine the DoL as described in the methods section. DoL was determined by dividing bulk fluorophore concentration by antibody concentration. (**C**) Fluorescence emission spectra of DARA-DM1-IR and DARA-IR.

Table from panel B:

	Excess Molar Ratio	280nm Absorbance	Dye Max Absorbance	Protein Conc. (µM)	Dye Conc. (µM)	DOL
DARA-IR	3	0.21	0.33	1.07	1.38	1.30
DARA-DM1-IR	3	0.15	0.27	0.78	1.15	1.40

Supplementary Figure 2: *In vitro* stability of DARA-DM1-IR and DARA-IR. SDS-PAGE of DARA-DM1-IR and DARA-IR incubated in PBS and human serum between 1 and 7 days.
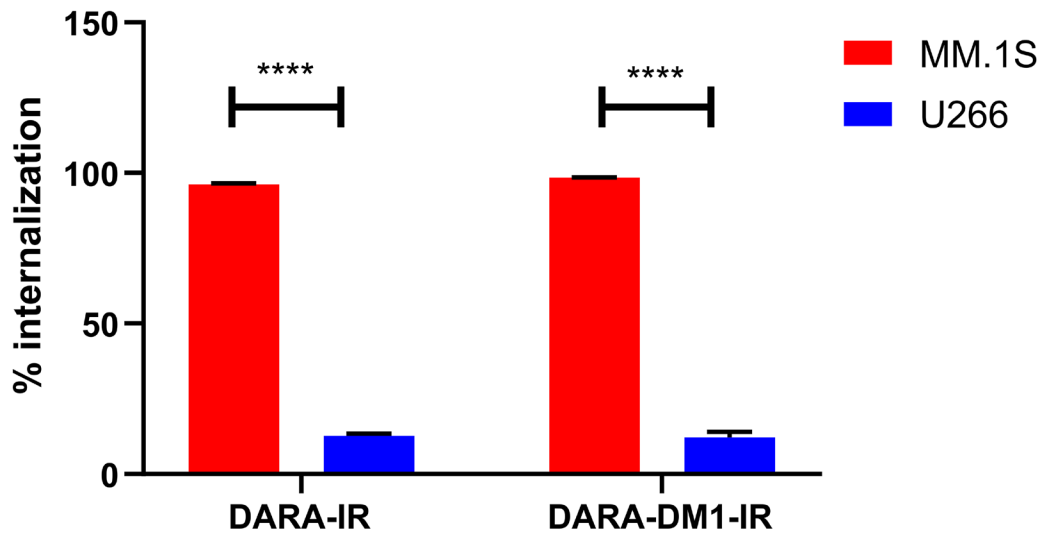
Supplementary Figure 3: Internalization of DARA conjugates. Flow cytometric analysis of percent of MM.1S and U266 cells internalized with DARA-IR and DARA-DM1-IR in LAMP-1$^+$ lysosomes 3 hours post-incubation. Student t-tests were performed for each conjugate and cell line. $^{****}p < 0.0001$. Error bars represent standard deviation.
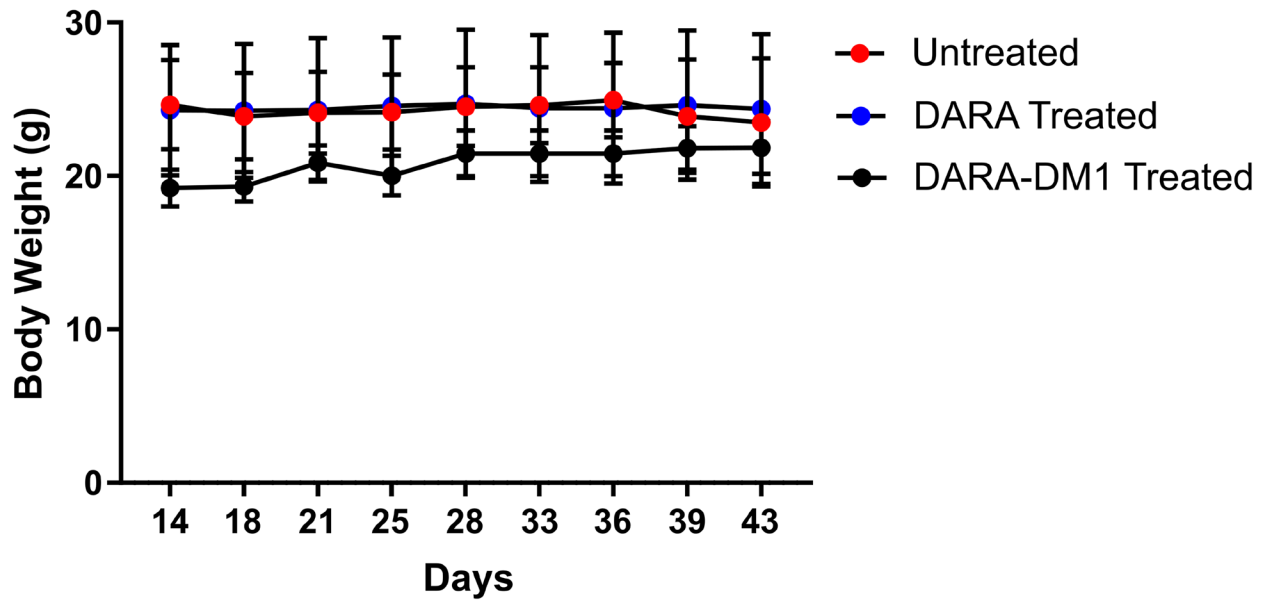
Supplementary Figure 4: Body weights of untreated and treated MM.1S IV mice. Mean body weights of MM.1S IV mice following treatment with DARA or DARA-DM1. Error bars represent standard deviation.