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Preclinical development of a humanized chimeric antigen receptor
against B cell maturation antigen for multiple myeloma

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Contributions: LPA and BMA designed the study, LPA performed in vitro and in vivo experiments. GS: performed clonings, virus production and in vivo experiments. LPA and BMA analyzed data and wrote the manuscript. AN designed the scFv of ARI2m and provided viral vector for GFP-Ffluc. MC and AA provided advice for experiments. AA performed some of the CART in vitro expansions. MJ, SI and AL performed clinical grade ARI2 production. JB and NFF performed predictive models for binding affinity. CB performed cell sortings. AUI provided funding and constructive ideas. All authors reviewed the manuscript.