

**Figure S1. Mechanisms of action of daratumumab.** Daratumumab has potent anti-myeloma activity through mechanisms of action that are dependent on high CD38 expression levels on tumor cells (CDC, ADCP and ADCC). Daratumumab also depletes CD38-positive immune suppressor cells such as regulatory T cells, which may result in an improved host-anti-tumor immune response. In addition, daratumumab treatment results in a rapid reduction of CD38 levels on the cell surface of myeloma cells. The daratumumab-mediated CD38 downregulation on myeloma cells may result in several beneficial effects including decreased adenosine production, reduced nanotube formation and mitochondrial transfer, and altered adhesive interactions in the bone marrow microenvironment.

**Abbreviations:** MAC: membrane attack complex; C1q, complement component 1q; CDC, complementdependent cytotoxicity; ADCC, antibody-dependent cellular cytotoxicity; ADCP, antibody-dependent cellular phagocytosis; Treg, regulatory T cell.