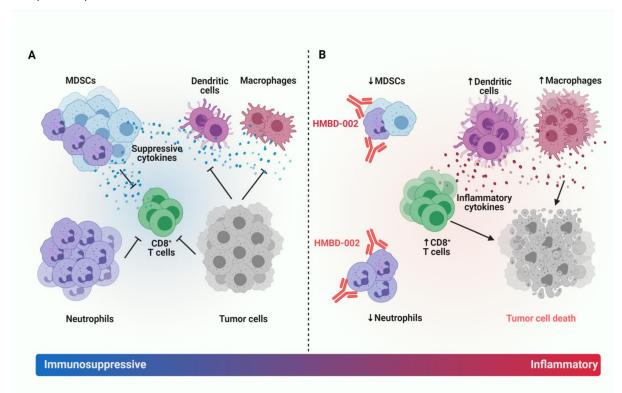
Title: A rationally targeted anti-VISTA antibody that blockades the C-C' loop region can reverse VISTA immune suppression and remodel the immune microenvironment to potently inhibit tumor growth in an Fc independent manner

Authors:

Dipti Thakkar¹, Shalini Paliwal¹, Bhushan Dharmadhikari¹, Siyu Guan¹, Lillian Liu¹, Shreya Kar¹, Nikhil K. Tulsian², Joshua J. Gruber³, Leah DiMascio⁴, Konrad H. Paszkiewicz¹, Piers J. Ingram⁴, and Jerome D. Boyd-Kirkup^{4*}



(A) MDSCs and neutrophils in the TME inhibit the function of CD8+ T cells APCs, including macrophages and dendritic cells leading to an immunosuppressive TME permissive of tumor growth. (B) HMBD-002 binds to and blocks VISTA on neutrophils and MDSCs, releasing their immunosuppressive effects and shifting the TME to a pro-inflammatory anti-tumorigenic phenotype, characterised by increased inflammatory cytokine release and increased proliferation and activation of CD8+ T cells and APCs.