AO-176, A Next-Generation CD47 Antibody, Induces Immunogenic Cell Death
Arch Oncology, 4320 Forest Park Avenue, St. Louis, MO 63108 and 2000 Sierra Point Parkway, Brisbane, CA 94005

Abstract

AO-176 Mediates Caspase-Independent Programmed Cell Death Type III in Hematologic and Solid Tumor Cell Lines

- Humanized IgG2
- Blocks CD47/SIRPα interaction to induce phagocytosis of tumor cells
- Selectively and potently binds to CD47 on human tumor cell lines
- Reduces binding to normal cells, negligible binding to human RBC; no hemagglutination
- Antibody-mediated killing of normal cells is observed and no killing of tumor cells
- Competition with endogenous CD47 programmed cell death type III and immunogenic cell death characterized by DAMPs
- Potentiation of ICID-inducing chemotherapy
- Auto tumor immunity in human xenograft models
- Greater binding affinity at acidic pH (TME is pH ~ 6-6.5, potential tumor targeting mechanism)
- Very well tolerated in IND enabling toxicology studies

AO-176 Preferentially Binds Tumor vs. Normal Cells and Negligibly Impacts RBC or Other Normal Cells

AO-176: An Next-Generation Humanized anti-CD47 mAb

AO-176 Has Negligible Binding to RBCs

AO-176 Induces DAMP Signaling in Hematologic and Solid Tumor Cell Lines

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