

DR. YIBIN KANG (2015 AWARD)

Sensitizing Bone Metastasis to Chemotherapy and Radiotherapy by Targeting Jagged1-Mediated Tumor-Stromal Interactions

We collaborated with Amgen to develop a fully human anti-Jagged1 neutralizing antibody to help treat breast cancer to bone metastasis. In the METAvivor study, we used a series of lab-based and animal model systems to validate the therapeutic effect of this antibody (15D11) in blocking Jagged1 function to reduce bone metastasis. 15D11 treatment decreases bone metastasis tumor burden by nearly 10-fold without significant adverse side effects in mice.

- Publication: This project was immensely successful and has been published in Cancer Cell. Free full text link: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5729937/>
- Additional funding: We have successfully applied for a NIH R01 grant (receiving 1 percentile score) using the preliminary data generated from this project.