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Changes in BAI1 and Nestin Expression Are Prognostic Indicators for Survival and Metastases in Breast Cancer and Provide Opportunities for Dual Targeted Therapies
Walter Hans Meisen, Samuel Dubin, Steven T. Sizemore, Haritha Mathsyaraja, Katie Thies, Norman L. Lehman, Peter Boyer, Alena Cristina Jaime-Ramirez, J. Bradley Elder, Kimberly Powell, Arnab Chakravarti, Michael C. Ostrowski, and Balveen Kaur

Tumor antigen–targeting mAbs, such as Herceptin, are critical weapons in the cancer therapeutic arsenal, yet they cross the blood-brain barrier (BBB) poorly and their success treating brain tumors is limited. By conjugating an anti-HER2 mAb with a peptide that utilizes receptor-mediated transcytosis across the BBB, a brain-penetrant mAb, ANG4043, was created. ANG4043’s retention of tumor-targeting properties was demonstrated in HER2-positive BT-474 breast carcinoma cells. Colocalization of the control anti-HER2 mAb and the HER2 antigen is shown in yellow on the cell surface. For details, see article by Regina and colleagues on page 129.