Magnetic Targeting of Therapy to Tumors: Nano-Particles, Magnetized Immune Cells, and Reaching Metastases

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Abstract
We are using precise control of magnetic fields to direct therapy to targets. In particular, for improved treatment of cancer, we are designing systems that will better direct therapy to hard to reach primary and metastatic tumors. In this short talk, I will give an overview of our projects for manipulation magnetic nano-particles to targets, including reaching thousands of poorly vascularized metastatic tumors, and will also discuss a collaborative project with the City of Hope to direct "magnetized immune cells" to brain gliomas.

Keywords: Magnetic drug targeting, Nano-particles, Immune cells, Control

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