

<u>Technology Brief:</u> Anti-Glut 1 Antibodies as an Anti-cancer Therapy

Docket Number: 07B083

Summary	 Cancers utilize glucose as the primary fuel to meet its high energy demands. Glucose uptake is primarily accomplished by the Glut-1 transporter. Antibodies against Glut-1 can alter glucose transporter function; thereby reducing the influx of glucose into cancer cells, causing tumor cell death. Evidence shows Glut-1 inhibition makes tumors more vulnerable to chemotherapeutic and other targeted agents.
Features and Benefits	 Positive PET scans, standard practice used for cancer diagnosis, correlate to patient Glut-1 levels and activity. Technology has potential applications in multiple forms of cancer (eg. breast, lung, sarcoma, pancreas, etc). Works in synergy with existing oncology therapies.
Stage of Development	Dr. George Simon
Inventor	US provisional application filed
Patent Status	Initial findings have been published. Animal model studies underway. "Glut-1 antibodies induce growth arrest and apoptosis in human cancer cell lines." Rastogi S, Banerjee S, Chellappan S, Simon GR. Cancer Lett. 2007 Nov 18;257(2):244-51. Epub 2007 Oct 1

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