

Using nanoshells and lasers to treat brain cancer.

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Gliomas are a difficult-to-treat form of brain cancer. Researchers at institutions in Texas have shown that they can target gold nanoparticles to gliomas implanted in mice. Nanoparticles are extremely small and can easily float in the blood and reach tumors. The nanoparticles can then be exposed to an infrared laser that causes them to heat up, killing the cancer cells. In these experiments, 57% of the treated animals remained tumor free after three months. Because only the nanoparticles that are hit by the laser heat up, the treatment has the potential to be extremely precise, sparing normal tissue.

Source

<https://www.ncbi.nlm.nih.gov/pubmed/21110217>