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Gliadel Wafers

The Gliadel Wafer is the first treatment for brain tumors that is delivered directly to the site of the tumor. The FDA approved it for use in late September of 1996. The wafer has been shown to drastically prolong the survival of patients with glioblastoma multiforme.

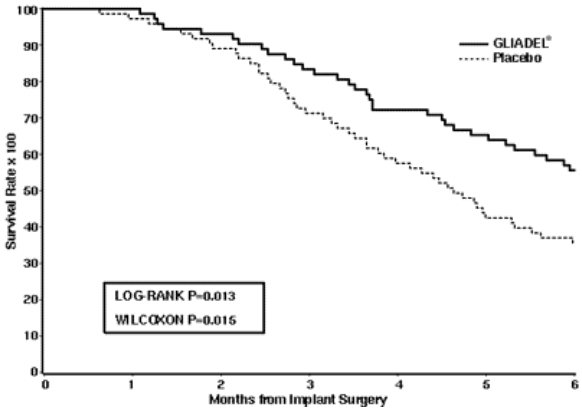
Glioblastoma multiforme (GBM) is a brain tumor. GBM is most malignant and cancerous form of astrocytomas that form in cells called astrocytes in the brain. This kind of tumor grows very quickly, invades surrounding healthy tissue, and often recurs after treatment. The Gliadel Wafer is a method of preventing or at least postponing (in severe cases) the recurrence of the tumors.

The Gliadel Wafer is used in addition to removal of the tumor from the tumor site. The wafer is implanted immediately following the surgery into the space formed by the removal of the tumor. In time, they dissolve, releasing the chemotherapy treatment that is standard for glioblastomas.

Before the Gliadel Wafer, patients were forced to take the potent chemotherapy drug Carmustine (also known as BCNU) intravenously. This procedure had many drawbacks. The drug caused sever nausea, vomiting, hair loss, lung problems, and decreased blood counts among other things. Also, large doses of the drug had to be given to get enough of the drug to the area of the brain where it was required. The wafer bypasses the blood-brain barrier and allows a more concentrated dose of the drug to the area that needs it while leaving other areas of the body mostly unaffected. There are none of the serious side effects associated with the IV method when the drug is given through the wafer.

The primary goal of the wafer is to eliminate any of the tumor cells that may have been left after the surgery. Anywhere from 1-8 of the wafers can be implanted at a time to release the drug into the surrounding tissues.

6-MONTH KAPLAN-MEIER SURVIVAL CURVES FOR PATIENTS UNDERGOING SURGERY FOR RECURRENT GBM



The Gliadel Wafer has been successful in prolonging the lives of people with GBM. According to one study, 56% of people who received the implant after surgery were still alive six months after the surgery compared to only 36% for those who only had the surgery. While it is not a cure for the affliction, it is a step in prolonging the life of people with it.