

RADIATION THERAPY OPTIONS

FOR BRAIN TUMORS

All radiation therapies disrupt tumor cell replication and destroy tumor cells.¹ Treatment timing, the number of treatments required, and the potential for side effects may differ based on the therapy and the way the radiation is delivered (internal/external). It's important to understand the differences as you evaluate your options.



	BRACHYTHERAPY	EXTERNAL BEAM RADIATION THERAPY (EBRT)		
	GAMMATILE (Tile-Based Radiation Therapy)	PHOTON / INTENSITY-MODULATED RADIATION THERAPY	PROTON BEAM THERAPY	STEREOTACTIC RADIOSURGERY/ RADIOTHERAPY
Radiation Source	INTERNAL Collagen tiles embedded with radiation sources are placed at the end of brain tumor removal surgery. Radiation is then delivered immediately and continuously from inside the tumor site. ²⁻⁹	EXTERNAL X-ray (photon) beams travel from a machine through the skin, skull, and healthy brain tissue to reach the tumor site. ¹⁴	EXTERNAL High-energy proton beams travel from a machine through the skin, skull, and healthy brain tissue to reach the tumor site. ¹⁴	EXTERNAL X-ray beams travel from a machine through the skin, skull, and healthy brain tissue to reach the tumor site. ¹⁴
Daily Outpatient Radiation Treatments	NO Outpatient treatments related to GammaTile are not required. ¹⁰	YES Up to 30 daily outpatient treatments over 6 weeks may be required. ^{12,15}	YES Up to 30 daily outpatient treatments over 6 weeks may be required. ^{12,15}	YES Up to 5 outpatient treatments may be required. ^{12,15}
Brain Tumor Types Treated (Malignant)	OPERABLE¹¹ - GLIOMAS - BRAIN METASTASES - RECURRENT MENINGIOMAS	OPERABLE OR INOPERABLE¹⁴ - GLIOMAS - BRAIN METASTASES - MENINGIOMAS	OPERABLE OR INOPERABLE¹⁴ - GLIOMAS - BRAIN METASTASES - MENINGIOMAS	OPERABLE OR INOPERABLE¹⁴ - GLIOMAS - BRAIN METASTASES - MENINGIOMAS
Treatment Delay	NO Treatment begins at the time of surgery and continues while you recover. ^{9,12,13}	YES Treatment may be delayed for weeks while the surgical wound heals, and may be further delayed for rehab. ¹²	YES Treatment may be delayed for weeks while the surgical wound heals, and may be further delayed for rehab. ¹²	YES Treatment may be delayed for weeks while the surgical wound heals, and may be further delayed for rehab. ¹²
Potential for Hair Loss	NOT EXPECTED GammaTile radiation does not travel from the outside through the scalp, like external radiation, reducing the risk of hair loss. ^{4,12}	YES¹⁶	YES¹⁶	YES¹⁶



LEARN MORE ABOUT **GammaTile Therapy** | [gammatile.com](https://www.gammatile.com)

GammaTile® is indicated as a treatment for patients with newly diagnosed malignant intracranial neoplasms and patients with recurrent intracranial neoplasms. The potential for, and symptoms of, adverse events related to radiation exposure vary depending on the radiosensitivity of the exposed tissue, the amount of radiation delivered, and the placement of GammaTile(s). GammaTile should not be used for patients with a known history of hypersensitivity to bovine-derived materials. More information on indications, contraindications, warnings, and instructions for use can be found in the GammaTile Instructions for Use.

CAUTION: The law restricts these devices to sale by or on the order of a physician.

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