In many cases, treating brain tumors requires extremely precise technology. Proton therapy can be used to treat certain brain tumors by delivering high doses of radiation to tumors with accuracy. While the treatment works to eliminate cancerous cells, it also minimizes exposure to non-targeted, healthy tissue surrounding the brain. As a result, patients get the benefit of extremely precise tumor targeting with a lower risk for potential side effects.

How Proton Therapy Works
During treatment, a narrow proton beam is guided to focus the highest energy of the beam at the location of the tumor in the brain. While the proton beam is being delivered, it can also:

• Be designed to conform to the shape, size and depth of tumors
• Limit excess radiation near surrounding areas of the body

Precise Radiation Targeting
Once the proton beam enters the body at the targeted brain tumor, less radiation is administered. Then, after the proton beam hits the tumor, little to no radiation is delivered to help protect nearby tissue.

Proton Therapy Candidates
Proton therapy most often treats tumors in sensitive areas where conventional therapy may not be the best option. The accuracy of proton therapy makes it particularly useful in treating:

• Patients with benign tumors
• Tumors near sensitive areas of the brain
• Patients who require postoperative radiation therapy
• Patients who have recurrent brain tumors following treatment
• Select patients, including those with brain metastases, who may be candidates for stereotactic proton therapy

More Benefits of Proton Therapy
• Non-invasive and may reduce side effects
• May reduce recurrence rates
• May have less effect on quality of life during and after treatment
• May treat areas near previously irradiated volumes
• Potentially faster recovery time after treatment

Refer a Patient Today
To refer a patient to Texas Center for Proton Therapy, fax the applicable referral form and the patient’s medical records to the patient intake team at 469-420-9619. Referrals can also be made online at TexasCenterforProtonTherapy.com by clicking the “Request an Appointment” button in the upper right-hand corner of the home page. If you need further assistance or have questions, please call Texas Center for Proton Therapy at 469-513-5500.

Red: High Radiation Dose
Green: Intermediate Radiation Dose
Blue: Low Radiation Dose
Texas Center for Proton Therapy provides an advanced lifesaving cancer treatment to North Texas — bringing more hope to cancer patients.

Leading-Edge Technology
Texas Center for Proton Therapy offers some of the most advanced treatments available with next-generation proton and imaging technology.

• **Pencil-beam scanning** combined with 4D treatment planning, allows for adaptation to complex-shaped tumors, improves dose conformity and reduces excess radiation to normal tissues.

• **Cone-beam computed tomography** (cone-beam CT) provides 3D volumetric imaging, which delivers improved anatomic visualization, better patient positioning and more precise targeting of cancerous tumors.

• **PET/CT** is a powerful imaging tool used to diagnose, stage or restage cancer, as well as evaluate the effectiveness of treatment.

• **3-Tesla MRI** is double the strength of the clinical-setting standard and provides extremely clear and vivid images that can often be performed faster, decreasing overall scan time. The larger bore opening also has a more spacious feel and can accommodate larger patients.

Clinical Expertise
With more than 70 years of combined experience delivering proton therapy, our physicians, nurses and scientists provide high-quality care for our patients.

Cancers Treated by Proton Therapy
• Bladder
• Brain
• Breast
• Esophageal
• Head, neck and skull base
• Liver
• Lung and thorax
• Lymphoma
• Pancreatic
• Pediatric
• Prostate
• Recurrent disease
• Sarcoma
• Spinal

Patient-Centered Approach
Texas Center for Proton Therapy has a patient support services team dedicated to making patients’ lives easier so they can focus on their care and recovery. Patient support services include:

• Wellness and nutrition programs
• Educational activities
• Focused therapeutic activities for patients, families and caregivers
• Friendship Room activities and child play area
• Assistance with logistics of care and travel
• On-site tours and patient orientations

Sources: American Cancer Society, American Society of Clinical Oncology, National Cancer Institute, Prostate Cancer Foundation and Texas Cancer Registry.