

Ready to start planning your care? Call us at [800-525-2225](tel:800-525-2225) to make an appointment.

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Memorial Sloan Kettering  
Cancer Center

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Your glioma treatment plan is based on the size, type, and grade of the tumor. We assess whether it's putting pressure on the brain or has spread to other parts of the body.

You will meet with an MSK brain surgeon. You also may see an MSK medical oncologist (cancer doctor) who is an expert in glioma. They will evaluate you and talk with you about your best treatment options.



Neuro-oncologist Lauren Schaff is an expert in treating people with primary brain tumors, including gliomas.

## Glioma surgery

New technologies have made brain surgery among the best treatments for people with a glioma. Surgery often is the best way to diagnose as well as treat gliomas.

During surgery, we often take a sample of the tumor. It's examined by a pathologist, a doctor who uses a microscope to diagnose disease. The pathology report helps the surgeon decide how much tumor tissue they can safely remove.

Research suggest that people have the best brain surgery result when their surgeon has done that procedure many times before. MSK neurosurgeons operate on hundreds of people with brain tumors each year. That is one of the highest numbers of brain tumor patients cared for in the world.

Learn about [glioma surgery](#) at MSK.

## Radiation therapy for glioma

Radiation therapy can shrink or kill tumor cells. We may recommend radiation therapy as the first treatment, followed by surgery, chemotherapy, or both. We may also recommend radiation for tumors that come back after treatment.

Learn about [radiation therapy](#) for gliomas at MSK.

## Chemotherapy for glioma

Chemotherapy may be given after surgery, usually together with radiation. This is an option after we know the tumor's exact location and other information. You also may have chemotherapy before surgery to shrink a tumor so it's easier to remove.

Learn about [chemotherapy for gliomas](#) at MSK.

## Immunotherapy for glioma

[Immunotherapy](#) uses the body's own immune system to fight cancer. There are no immunotherapies approved as a treatment option for gliomas. Some research studies, also known as [clinical trials](#), suggest immunotherapies may be a future treatment for some gliomas.

## Checkpoint inhibitors

Drugs called [checkpoint inhibitors](#), a type of immunotherapy, are being tested in gliomas. These drugs include pembrolizumab (Keytruda<sup>®</sup>) and nivolumab (Opdivo<sup>®</sup>). The drugs work by releasing the brakes on the immune system so it can find and fight cancer.

## Targeted drugs and clinical trials

An [experimental drug, vorasidenib](#), has been shown to slow the growth of some low-grade diffuse gliomas.

VIDEO | 02:08

### New Experimental Drug Shows Promise for Brain Cancer

"This represents the first new treatment option in low-grade glioma in more than 20 years," says Ingo Mellinghoff, MD, Chair of MSK's Department of Neurology, who led a clinical trial showing the drug's effectiveness.

[Video Details](#) →

### Low-grade glioma

Surgery often is the first treatment for low-grade glioma. The goal is to remove as much of the tumor as possible. Some people also may have radiation therapy or chemotherapy, or join a research study, also known as a clinical trial.

Most grade 2 gliomas in adults have a mutation (change) in an enzyme called isocitrate dehydrogenase (IDH). Gliomas with this mutation make up about 2 out of every 10 diffuse gliomas in adults. They are by far the most common kind of cancerous primary brain tumors.

There has been promising research into new treatments for lower grade gliomas with an *IDH* mutation. Researchers looked at grade 2 gliomas with mutations in the *IDH1* or *IDH2* genes. Results from this clinical trial were reported in 2023. The strong results suggest it's possible this treatment could become the future standard of care.

MSK is researching novel treatment and drug combination in many clinical trials that target the IDH mutation.

### High-grade glioma

It's hard to remove some aggressive tumors with surgery. But there are some promising new methods and clinical trials for high-grade tumors. The goal is to lengthen the time it takes for a high-grade tumor to start to grow back after surgery.

## Living beyond glioma

At MSK, we know you may need help even after you finished your cancer treatments. We're here to support your body, mind, and spirit for as long as you need us. You can learn more about all [MSK Living Beyond Cancer resources](#).

MSK has a special program for cancer survivors and their families. Our [Adult Survivorship Program](#) has many services for you and your loved ones. This includes support groups, follow-up programs, educational resources, and other services.

Our Resources for Life After Cancer program offers many services. They include individual and family counseling, lectures and support groups, and practical advice on employment and insurance issues.

MSK offers resources to help you with the lasting effects of cancer on your body, emotions, and daily life. Your survivorship team expert can help you choose resources that are best for you, including:

- Pain management
- Nutrition
- Exercise
- Integrative medicine therapies
- Skin, nail, and hair health
- Sexual health and fertility

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Available Monday through Friday, 8 a.m. to 6 p.m. (Eastern time)

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