

THE
Educated Patient®

Glioblastoma Multiforme

RESOURCE GUIDE



Presented by
cure®

A guide to organizations that provide information and support for patients with glioblastoma and the oncology professionals who treat them

"I didn't think I'd be alive today. Now here I am with Optune, still enjoying life."

- Marcia, an Optune user

Marcia is an Optune user.

Optune® is a wearable, portable FDA-approved treatment for glioblastoma (GBM)

What is Optune approved to treat?

Optune is a wearable, portable, FDA-approved device indicated to treat a type of brain cancer called glioblastoma multiforme (GBM) in adult patients 22 years of age or older.

Newly diagnosed GBM

If you have newly diagnosed GBM, Optune is used together with a chemotherapy called temozolomide (TMZ) if:

- Your cancer is confirmed by your healthcare professional **AND**
- You have had surgery to remove as much of the tumor as possible

Recurrent GBM

If your tumor has come back, Optune can be used alone as an alternative to standard medical therapy if:

- You have tried surgery and radiation and they did not work or are no longer working **AND**
- You have tried chemotherapy and your GBM has been confirmed by your healthcare professional

Who should not use Optune?

Optune is not for everyone. Talk to your doctor if you have:

- **An implanted medical device (programmable shunt), skull defect (missing bone with no replacement), or bullet fragment.** Optune has not been tested in people with implanted electronic devices, which may cause the devices not to work properly, and Optune has not been tested in people with skull defects or bullet fragments, which may cause Optune not to work properly
- **A known sensitivity to conductive hydrogels** (the gel on the arrays placed on the scalp like the ones used on EKGs). When Optune comes into contact with the skin, it may cause more redness and itching or may rarely cause a life-threatening allergic reaction

Do not use Optune if you are pregnant or are planning to become pregnant.

Talk to your doctor or visit **Optune.com** to learn more

It is not known if Optune is safe or effective during pregnancy.

What should I know before using Optune?

Optune should only be used after receiving training from qualified personnel, such as your doctor, a nurse, or other medical staff who have completed a training course given by Novocure™, the maker of Optune.

- Do not use any parts that did not come with the Optune Treatment Kit sent to you by Novocure or given to you by your doctor
- Do not get the device or transducer arrays wet
- If you have an underlying serious skin condition on the scalp, discuss with your doctor whether this may prevent or temporarily interfere with Optune treatment

What are the possible side effects of Optune?

Most common side effects of Optune when used together with chemotherapy (temozolomide, or TMZ) were low blood platelet count, nausea, constipation, vomiting, tiredness, scalp irritation from the device, headache, seizure, and depression.

The most common side effects when using Optune alone were scalp irritation (redness and itchiness) and headache. Other side effects were malaise, muscle twitching, fall and skin ulcers.

Talk to your doctor if you have any of these side effects or questions.

Please visit www.Optune.com/Safety for Optune Instructions for Use (IFU) for complete information regarding the device's indications, contraindications, warnings, and precautions.

Patient image reflects the health status of the patient at the time the photo was taken.

 **OPTUNE®**
Elevate Expectations

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Table of Contents

Information

- 2 About Glioblastoma Multiforme
- 6 Health, Diet and Emotional Support

GBM Resources

- 7 American Brain Tumor Association
- 8 Brain Science Foundation
- 9 The Brain Tumor Foundation
- 10 The EndBrainCancer Initiative | Chris Elliott Fund
- 11 Head for the Cure Foundation
- 12 International Brain Tumour Alliance
- 13 The Musella Foundation for Brain Tumor Research and Information
- 14 National Brain Tumor Society
- 15 Tug McGraw Foundation

General Resources

- 16 American Society of Clinical Oncology's Cancer.Net
- 17 CancerCare
- 18 Patient Advocate Foundation



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Community Together*



About Glioblastoma Multiforme

How Brain Tumors Develop

The central nervous system controls many functions of the human body and is composed of the brain and spinal cord.^{1,2} The brain controls all our thoughts, emotions and body movements. It is responsible for our memory, sight and ability to hear, smell and taste.² The brain is protected by the skull, three thin layers of tissue called meninges, and cerebrospinal fluid, which flows through spaces between the meninges and ventricles in the brain and acts as a cushion.^{1,2}

Cranial nerves, which are special nerves inside the head, serve as inputs for our senses (sight, hearing, taste), balance and facial sensations and expressions. Glial cells surround the nerve cells and support the brain functions such as nutrition, homeostasis and signal transmission.^{1,2}

To understand how a brain tumor forms, it is important to understand the relationship between cell growth and cancer. Normally, cells grow and divide as needed by the body. In order for a cell to divide, all of its DNA must first be copied. Once copied, DNA must be moved to the newly forming daughter cells (one copy to each cell) in a highly orchestrated process called mitosis. DNA stores biological information as a code. This information is important, as the DNA's code determines the building process important to cell division.³

Every time a cell divides, it must first replicate its DNA. If there is any damage to the DNA being replicated to form a new cell, genes responsible for the cell will try to control the division process and repair the damaged DNA. When the cell's DNA can't be repaired, old cells do not die when they normally should, and new cells grow abnormally and spread uncontrollably. These cells cluster together to form a mass of tissue known as a tumor.^{3,4}

There are several types of brain tumors. They are classified according to the type of cells, or the part of the brain, in which they begin. The most common types of brain tumors, gliomas, form from the glial cells.^{2,5}

What Is Glioblastoma Multiforme?

Glioblastoma multiforme (GBM), a type of glioma, is the most common type of malignant (cancerous) brain tumor in adults.²

GBM tumors are fast growing and very aggressive. They spread rapidly throughout the brain and mix with healthy brain tissue, making the complete removal of these types of tumors very difficult. However, GBMs rarely spread beyond the central nervous system.^{2,6}

When a tumor grows back after initial treatment, it is classified as recurrent. Most patients with GBMs will



eventually experience a recurrence of their tumor. Unfortunately, GBMs are not usually curable.^{7,8} However, it is important for you to consult your health care professional about your prognosis and understand the treatment options that are available to you.

GBM Causes and Risk Factors

Experts have been unable to identify the cause of GBMs. In addition, they have not yet discovered a way to prevent GBMs from forming.⁹ Notably, patients with allergies appear to have a decreased risk of developing GBMs.¹⁰ Although GBMs are considered spontaneous, about 1 percent of GBM tumors do have a familial link.¹¹

The only confirmed risk factor for the development of GBM tumors is ionizing radiation to the head and neck.¹⁰⁻¹² Most radiation-induced brain tumors are caused by radiation exposure to the head during the treatment of another type of cancer – for example, when a child undergoes radiation for the treatment of leukemia. In these cases, brain tumors typically develop 10 to 15 years after the initial radiation treatment.¹²

A small fraction of GBMs may be inherited as part of a genetic syndrome, including tuberous sclerosis, multiple endocrine neoplasia type 2A, neurofibromatosis type 1,

A man with a shaved head, wearing a white t-shirt and black athletic pants, is running on a dirt path. He has white earbuds and a black armband on his right arm. The background shows a sunset over a body of water with some industrial structures in the distance.

cure[®]

I am #MoreThanAPatient
I am an ATHLETE

Those who have gone through the cancer journey are more than their diagnosis.

They're parents, neighbors, athletes, brothers, teammates – they're #MoreThanAPatient.

At CURE[®], we provide insight to everyday people whose lives have been touched by cancer, letting them know that they are not alone. We strive to give readers an identity that goes further than their diagnosis. CURE[®] makes cancer understandable, and we aim to make life with cancer understandable.

A community of more than just patients. Join us.

Join the conversation on social media using #MoreThanAPatient



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Cure Magazine



CureToday

von Hippel-Lindau disease, Li-Fraumeni syndrome and Turcot syndrome.⁹⁻¹¹ Other predisposing factors for the development of GBS are continuously being explored.⁹ GBMs are rare in children, and the risk of GBMs increases with age.¹⁰ Risk among women increases after menopause; therefore, sex hormones are thought to be somehow at play.¹¹

External causative factors are also hypothesized to contribute to GBM development. Among immunocompromised adults, human cytomegalovirus induces congenital encephalitis and may be an etiologic agent for gliomas. Chemical agents, such as pesticides, polycyclic aromatic compounds and solvents, and electromagnetic fields may also contribute to the development of gliomas.¹¹

It is important to understand that having a risk factor does not guarantee that you will develop a brain tumor.

Symptoms of a GBM Tumor^{6,9-11}

A patient's symptoms will vary depending on the area of the brain affected and the size of the tumor. However, the most common symptoms of a GBM tumor include:

- Headaches
- Nausea and vomiting
- Loss of appetite
- Visual disturbances, especially blurred or double vision
- Hearing, speech or language difficulties
- Fainting
- Weakness or loss of balance
- Changes in personality, mood or behavior
- New onset of seizures
- Back and leg pain

Because the skull cannot expand or change in response to the growth of a brain tumor, the tumor may exert increased pressure on the brain. Many symptoms are caused by this increased pressure on adjacent structures within the brain and by direct invasion and damage to those structures. For example, nausea, vomiting and severe headaches are typically a direct result of this increased pressure on the brain. Many symptoms of a GBM tumor are nonspecific, leading to misdiagnosis and delay in treatment.

How a GBM Tumor Is Diagnosed

A GBM may not be detected until a patient begins experiencing symptoms of a brain tumor and visits a health care provider. Several testing procedures are available to help diagnose and monitor a GBM. Some of these procedures

may be used in combination to help determine a patient's prognosis.¹³

Physical Exam

Your health care provider will review your medical history and discuss your current symptoms with you. During your visit, your health care provider will perform a series of tests, including a neurological exam, to assess your reflexes, muscle strength, eye and mouth movement, coordination, alertness and other functions. These tests help check for signs of a brain tumor.^{9,13} If there are any abnormal findings during this initial exam, your physician may refer you to a neurologist, a physician who specializes in nervous system diseases. A neurologist can perform more specialized testing to help assess your condition.¹³

Imaging Tests

Your health care provider will perform one or more imaging tests, such as a magnetic resonance imaging (MRI) scan, computed tomography (CT) scan or magnetic resonance spectroscopy (MRS) scan, to aid in the diagnosis of a brain tumor and determine its size, location and type.^{6,9,13}

- **MRI scan:** This procedure is considered the gold standard for identifying a brain tumor. During an MRI scan, you must lie still on a table inside a narrow tube while strong magnets and radio waves are used to produce a series of detailed pictures of the brain and spinal cord. A contrast material called gadolinium may be injected into a vein before the procedure to improve the readability of the images. MRIs are lengthy procedures, often taking up to an hour, which may be problematic if you have a fear of closed spaces. Newer, open MRIs are now available, but they may not produce an image with as much detail as a traditional MRI machine.^{11,13}
- **CT scan:** This type of scan may also be helpful for detecting and diagnosing brain tumors. During this procedure, a machine attached to a computer takes a series of pictures from different angles as it rotates around your body. These photos can be combined to create a detailed image of tissues in your body. In some instances, a contrast dye may be injected through a vein to make the borders of the tumor more defined. CT scans are not used as frequently as MRIs, but they may be a good option for patients who are overweight or afraid of closed spaces.¹³

- **MRS scan:** An MRS scan is similar to MRI in the use of radio waves to measure levels of chemicals and minerals in a tumor, and it may help distinguish whether the tumor is malignant or benign. MRS scans may also help differentiate a brain tumor from other medical conditions, such as an infection or a stroke.^{6,9}

Brain Biopsy

A brain biopsy will be performed after a brain tumor is detected on an imaging scan. During a biopsy, a sample of tissue is taken from the tumor and sent to a lab for examination by a neuropathologist, a doctor who specializes in evaluating nerve cells and tissues. The neuropathologist will examine the biopsy sample under a microscope to assign a name and grade to the GBM and find out any additional information.^{6,13}

The 2 types of brain biopsy exams are:

- **Stereotactic or needle biopsy:** This is performed when an imaging test reveals that a tumor is located deep in the brain or in a spot that is difficult to access surgically. You may be awake with a local anesthetic or asleep under general anesthesia during this procedure. An MRI or CT scan may be used to help guide the surgeon.¹³
- **Surgical or open biopsy:** This type of biopsy is performed if imaging tests indicate that a tumor may be removed surgically. During a surgical biopsy, a craniotomy is performed, which involves removing the part of the skull above the tumor to access the tumor. Samples of the tumor may be examined immediately in the operating room to guide treatment, which may include further surgery.^{6,13}

Treating a GBM Tumor

Your health care provider will assess your prognosis and determine how to treat your GBM. Several options are available, and they may be used alone or in combination. For most patients, treatment begins with surgery, followed by radiation and chemotherapy. It is important to speak with your health care provider to understand your treatment options before beginning therapy.^{6,10}

Surgery⁶

Because GBMs are fast growing and very aggressive, complete surgical removal is not usually feasible. Surgery may provide an opportunity to obtain a biopsy and remove as much of the tumor as possible, with the goal of prolonging life and relieving symptoms.

Radiation Therapy⁹

In adults with GBM, radiation therapy typically follows surgical resection. Radiation may entail conventional fractionated external beam radiation used alone or in combination with some form of local radiation. The benefit of local radiation is that it targets only the tumor while protecting neighboring healthy cells.

Chemotherapy^{6,9,11}

Chemotherapy often accompanies radiation because the combination has been found to improve survival, with minimal added toxicity, among patients with GBM. Temozolomide is the drug of choice for GBMs because it can successfully cross the barrier into the brain. Temozolomide can be administered orally or intravenously. Other choices for chemotherapy continue to be investigated.

Tumor Treating Fields Therapy^{9,14}

Optune (formerly NovoTTF, from Novocure) is an FDA-approved portable device for adult patients 22 years or older with GBM that creates alternating electric fields (Tumor Treating Fields [TTFields]) to help slow down or stop the growth of cancer cells. Optune is intended for use in patients with newly diagnosed GBM who have had surgery and are receiving chemotherapy with temozolomide. Your health care provider may also utilize Optune with recurrent GBM after treatment with chemotherapy, radiation and surgery.

Adjunctive and Alternative Treatments

GBMs are very difficult to treat effectively for long periods of time because of the inherent aggressive nature of these tumors. Additional options, including supportive care agents and alternatives to standard care, may be appropriate for you. Your health care provider may prescribe drugs to help manage seizures, swelling of the brain and fatigue. Although these drugs will not directly treat your GBM, they may reduce symptoms caused by the tumor or treatment and improve your quality of life.^{9,11}

Clinical trials may be conducted to test potential new treatments and help researchers evaluate whether those treatments are beneficial in the management of a particular medical condition. Patients with difficult-to-treat conditions such as GBM may gain access to new treatments by enrolling in a clinical trial. Clinical trials evaluating biologic, targeted and immune therapies in the treatment of GBM are currently underway. If you are considering a clinical trial, it is important for you to understand and discuss your options with your health care provider so you can gather more information on how to search for and select a clinical study that may be appropriate for you.^{6,9}

Health, Diet and Emotional Support

There are steps you can take to help manage your cancer diagnosis and cope with treatment side effects. Adjusting to a life with a GBM may include making changes to your diet and lifestyle. The following information provides suggestions to help you stick to your treatment plan and manage the side effects associated with treatment. As with all other aspects of cancer care, it is important to consult your health care provider before trying anything new.

Rest and Exercise¹⁵

During treatment, fatigue is common. However, there is evidence that suggests that patients with cancer who are physically active during and after cancer treatment consistently experience improved muscular strength, greater energy, better quality of life and lower levels of depression.

If you are beginning or continuing an exercise program soon after receiving a diagnosis of a GBM, be sure to discuss your plans and the intensity of the intended workout with your health care provider. He or she can help you determine a safe and effective exercise program. You might also consult someone who is specialized in developing exercise routines, such as a physical therapist or exercise physiologist, and you should always be sure to let them know about your current health condition.

When planning an exercise routine, start slowly. Even small amounts of activity will add up and can produce positive results on your health. Begin with short periods of exercise and create time for intermittent breaks. Increase the length and intensity of your workout as you feel more comfortable.

Although it is important to incorporate exercise or physical activity into your daily living, it is also important to pay attention to your body and rest when you need to. Listen to your body and understand that it is OK to feel tired and decide to relax.

Diet¹⁶

Along with getting exercise, you should be sure to eat nutritious foods while undergoing treatment for your cancer. Maintaining a healthy weight and following a proper diet can be beneficial to your long-term health. You may find that your body requires extra calories and proteins during treatment. On the other hand, some days you may not be able to eat at all. These are normal responses to cancer treatment for many patients.

During treatment, you may experience side effects that make it difficult to eat properly. Common side effects related to diet include a change in sense of taste, nausea, vomiting, a change in body weight, diarrhea, constipation, sore throat and difficulty swallowing. To help cope with side effects from treatment, try to snack often. You may find it easier to consume

small portions five or six times per day instead of three large meals per day.

If you find it challenging to practice healthy eating habits, consider speaking with a dietician, a nutritionist or even your primary care physician before planning any special diet.

Emotional Support¹⁷

During and after treatment, you may experience many emotions. It is important to understand that these feelings are normal, but it is also important to manage them rather than dwell on them. Your attitude makes a difference when facing cancer.

To help you manage your emotions, you should discuss your diagnosis, thoughts, concerns and feelings with friends, family, your caregiver or your health care provider. In addition, you may want to consider seeking support from a local support group, a spiritual group or an online support community.

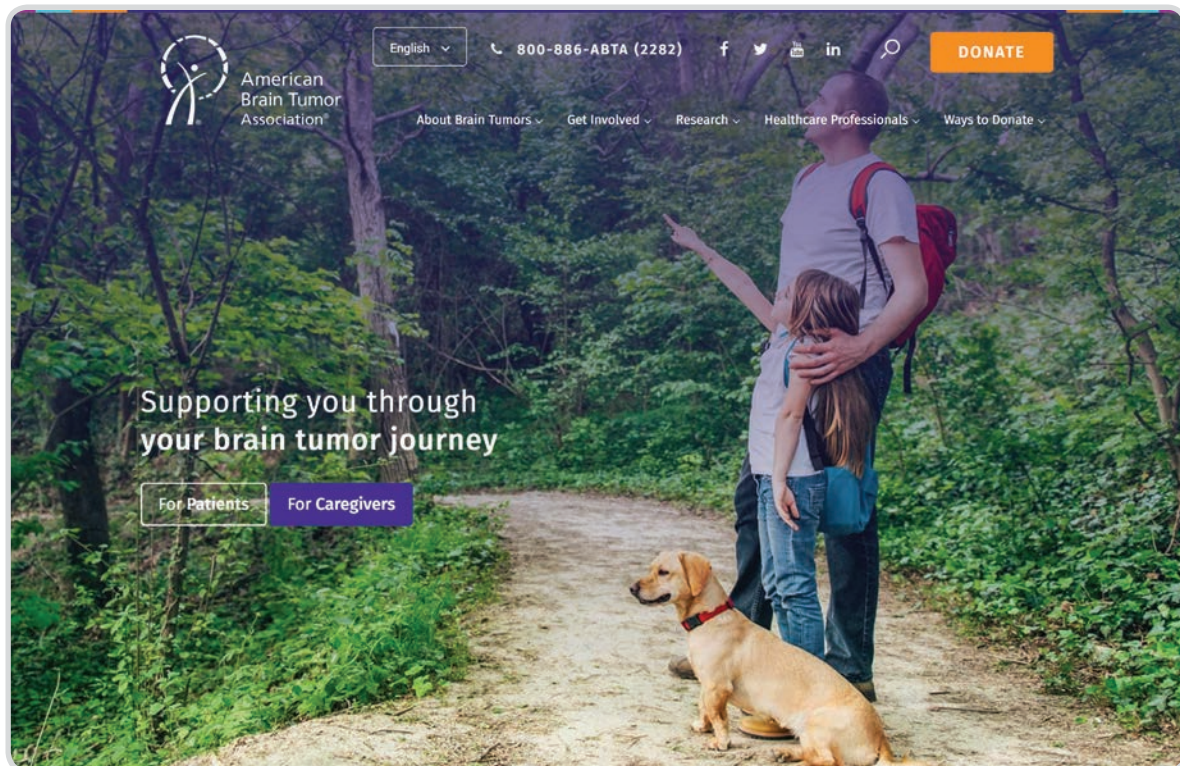
In this guide, we've included a number of website resources to help you find additional support. Starting on page 7, you will find information about advocacy groups for GBM tumors and brain cancer. The resources in this guide can help you learn more about GBM tumors and the treatment options and support available to you.

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American Brain Tumor Association

www.abta.org



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8550 W. Bryn Mawr Ave.,
Suite 550
Chicago, IL 60631

CONTACT INFO

Phone: 800-886-2282
773-577-8750
Email: info@abta.org

The American Brain Tumor Association is the nation's oldest nonprofit organization dedicated to brain tumor education, support and research. In 1973, the association was founded by two mothers determined to find answers that, at the time, were not yet available. Since then, the American Brain Tumor Association has funded more than \$30 million in brain tumor research and now reaches a national audience, providing educational and support resources.

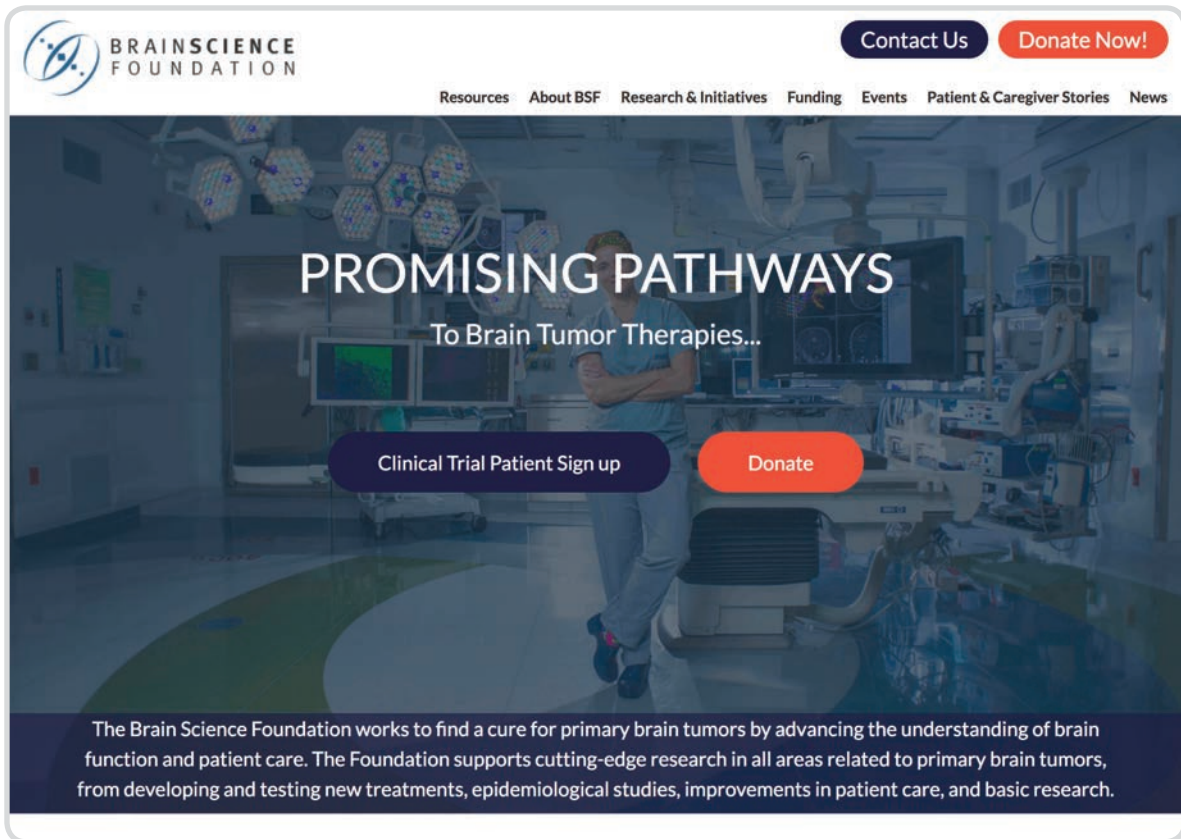
The American Brain Tumor Association is a steadfast advocate on behalf of the brain tumor community, and it exists to help patients, caregivers and their loved ones as they navigate the brain tumor journey.

Resource Checklist

- ✓ Downloadable resources
- ✓ Adolescent and pediatric brain tumor information
- ✓ Research funding programs
- ✓ Webinars
- ✓ CareLine
- ✓ Information for caregivers
- ✓ One-on-one CommYOUunity support

Brain Science Foundation

www.brainsciencefoundation.org



ADDRESS

P.O. BOX 812701
Wellesley, MA 02482

CONTACT INFO

Phone: 781-239-2903

Established in 2002 by Steven R. Haley and his wife, Kathleen Haley, the Brain Science Foundation is working to find a cure for primary brain tumors through education and research. The foundation supports cutting-edge research to further develop and test new treatments for patients with brain cancer.

Resource Checklist

- ✓ Brain tumor information
- ✓ Patient and caregiver stories
- ✓ Archive of current and past research projects
- ✓ Advocacy and support group information
- ✓ Newsletters

The Brain Tumor Foundation

www.braintumorfoundation.org

The screenshot shows the Brain Tumor Foundation website. At the top, there is a navigation bar with a logo on the left, a language selector, contact information, and a search bar. Below the navigation bar is a header with the organization's name and tagline. A main menu contains links to various sections. The content area is divided into three columns. The left column features a newsletter signup form with fields for name and email, and a 'SIGN UP!' button. The center column contains a large announcement about free MRI scans in Brooklyn, including details about the BTF Mobile Unit and the sponsoring center. The right column has a 'LATEST NEWS' section with three bullet points highlighting recent updates.

NEWSLETTER SIGNUP

Just enter your name and e-mail address below and we'll add you to our mailing list.

*These fields are required.

first name*
last name*
e-mail address*

SIGN UP!

NO ONE SHOULD FACE THIS BATTLE ALONE

The Brain Tumor Foundation (BTF) is a non-profit organization that guides and supports patients, families and caregivers touched by a brain tumor. BTF also raises awareness about the need for the early detection of brain tumors.

FREE MRI Brain Scans in Brooklyn!

The BTF Mobile Unit will be parked in Brooklyn, near Barclays Center and Metrotech starting November 9th.

This city visit is sponsored by the Michael D. Ratner Center for Early Detection.

Schedule your scan here: www.btfscanbk.org

LATEST NEWS

- Patient Education: Innovative Approaches to Brain Tumor Management
- DO YOU KNOW an individual or institution that has gone above and beyond to make a difference in the lives of those affected by glioblastoma (GBM)?
- Celldex Brain Tumor Vaccine Fails Pivotal Clinical Trial

ADDRESS

25 W. 45th St., Suite 1405
New York, NY 10036

CONTACT INFO

Phone: 212-265-2401

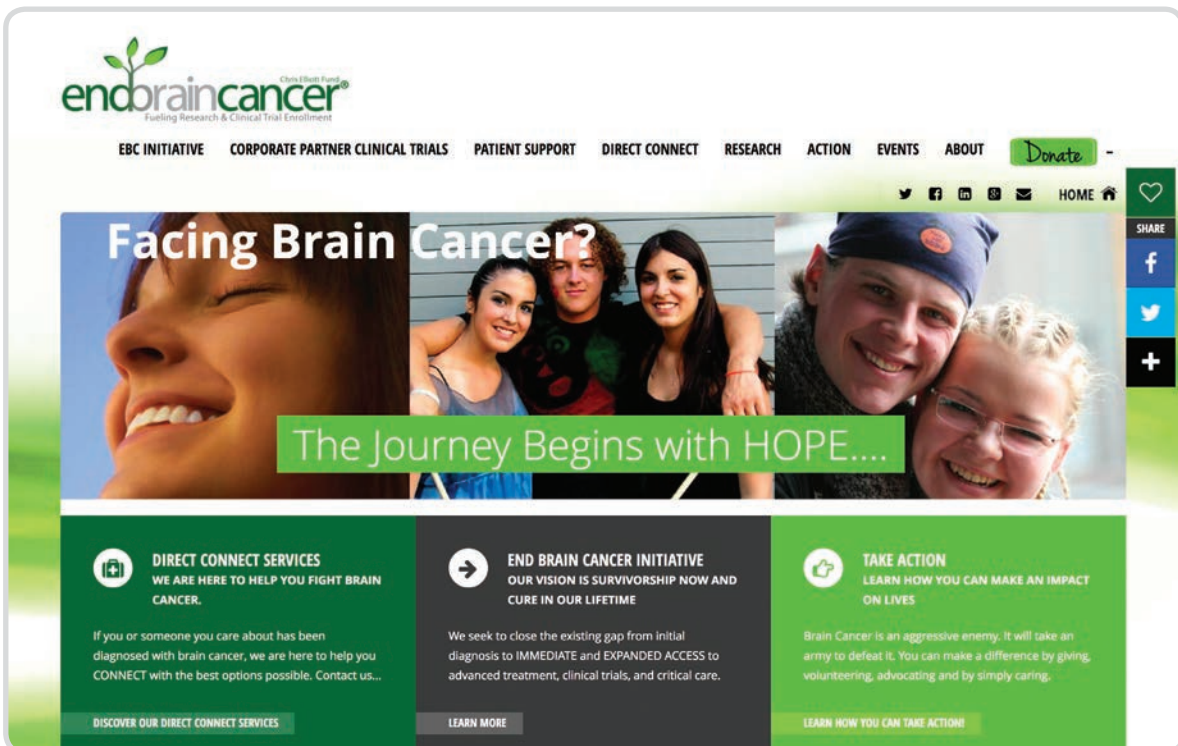
The Brain Tumor Foundation was founded in 1998 by a professor of neurosurgery at New York University School of Medicine to guide and support patients and families socially, financially and emotionally. The foundation comprises skilled individuals with a personal or family connection to brain tumors, as well as international experts in neurology, neurosurgery, neuro-oncology, medical ethics, psychiatry, radiation therapy and research who make up the scientific advisory board and the board of directors.

Resource Checklist

- ✓ Resource directories
- ✓ Webcasts
- ✓ Newsletters
- ✓ Face-to-face support groups
- ✓ Online support groups

The EndBrainCancer Initiative | Chris Elliott Fund

www.endbraincancer.org



ADDRESS

16150 NE 85th St., Suite 201
Redmond, WA 98052

CONTACT INFO

Phone: 425-444-2215

Email: wecare@endbraincancer.org

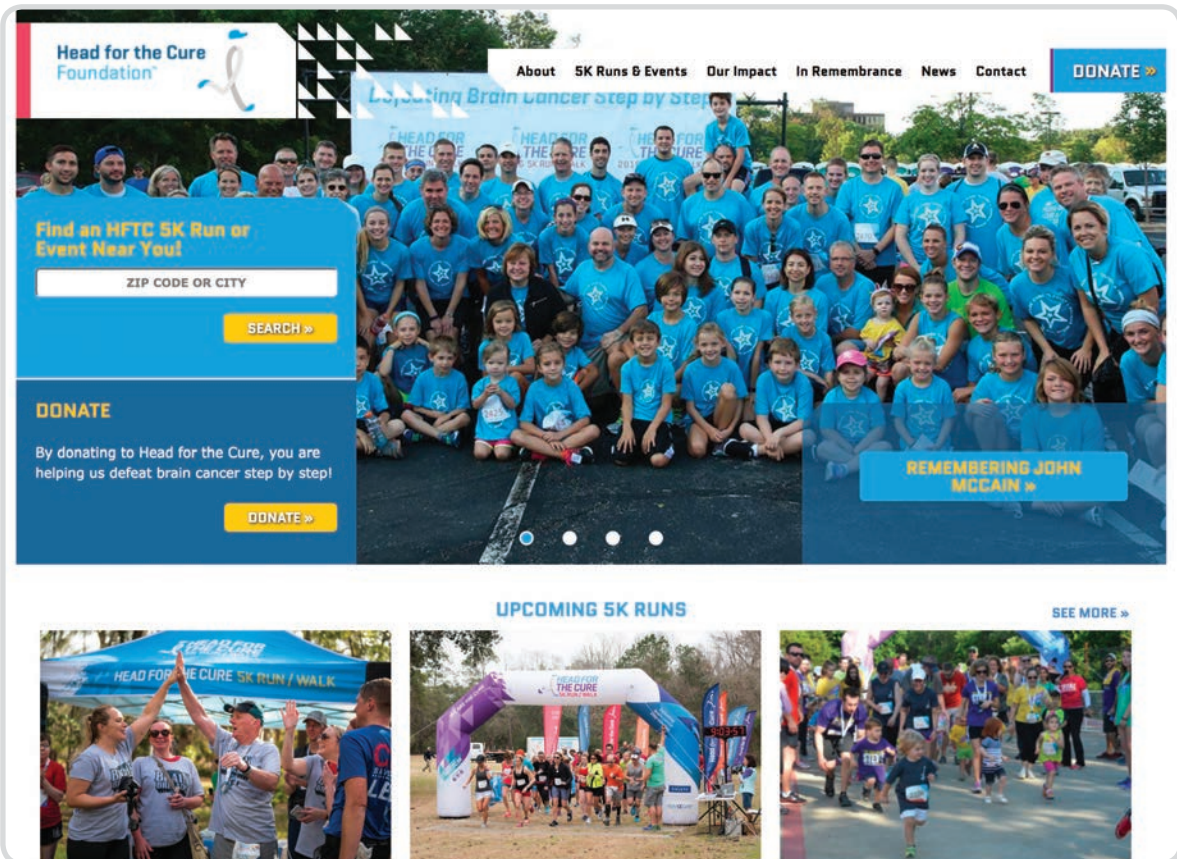
Chris Elliott, a father of two young children, received a diagnosis of terminal brain cancer and was given just one year to live. He fought against the disease for two years and, in his last months, decided to help others through the Chris Elliott Fund. The organization is committed to finding a cure for and ending brain cancer. Offering one-on-one support, the Chris Elliott Fund brings hope to the lives of patients and their families and provides patients with immediate access to advanced treatment options, specialists and comprehensive support programs.

Resource Checklist

- ✓ Direct connections/appointments to U.S. brain tumor specialists and clinical trials
- ✓ Patient stories
- ✓ Personalized one-on-one intake process
- ✓ Public health policy advocacy on behalf of patients with brain tumors for new treatments and clinical trials and appropriate classification/medical reimbursement

Head for the Cure Foundation

www.headforthecure.org



ADDRESS

1607 Oak St.
Kansas City, MO 64108

CONTACT INFO

Phone: 816-218-6871

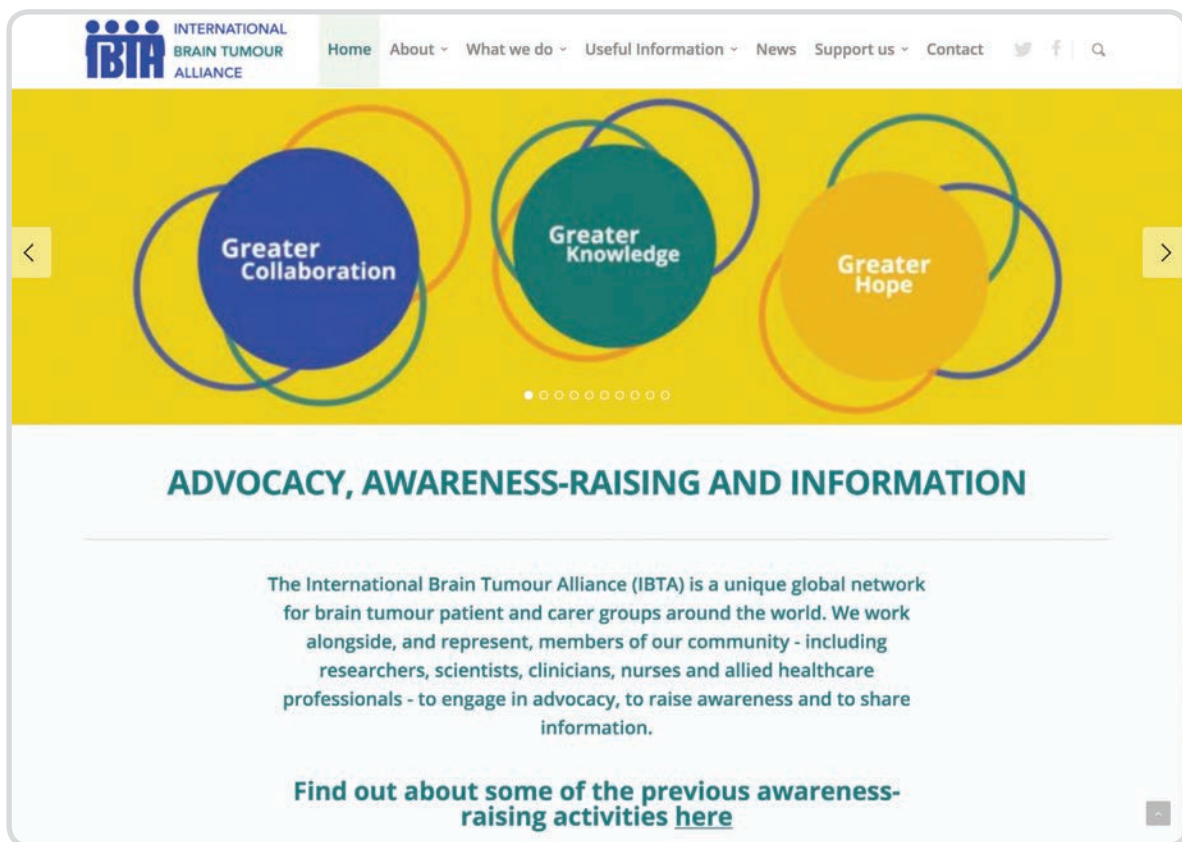
Head for the Cure Foundation raises money and strives to increase awareness and funding for patients with brain cancer and their support, family and caregivers. They have a partnership with Voices Against Brain Cancer. By hosting a series of 5K run/walks and other events, the organization raises funds for brain cancer research and assistance. Head for the Cure also provides support through survivor luncheons and other community programs.

Resource Checklist

- ✓ Brain tumor information
- ✓ Resource directories
- ✓ Brain cancer coach service
- ✓ Advocacy events
- ✓ Newsletters

International Brain Tumour Alliance

www.theibta.org



ADDRESS

P.O. Box 244
Tadworth
Surrey
KT20 5WQ
United Kingdom

CONTACT INFO

Phone: (44-0) 1737-813-872
Email: chair@theibta.org

The International Brain Tumour Alliance works in more than 100 countries to raise awareness and share information about brain tumors. It is a global network for patients and care groups that is involved with different members of the community to engage in conversations about the disease and enhance the life of patients with brain tumors and their families.

Established in May 2005, the highly regarded organization brings together experience and expertise from around the globe to provide a voice for those with brain tumors and their families and to work toward their vision of a world free from the fear of brain tumors.

Resource Checklist

- ✓ Clinical trials information
- ✓ Resource directories
- ✓ Advocacy events
- ✓ Monthly e-Newsletters
- ✓ World Summits

The Musella Foundation for Brain Tumor Research and Information

www.virtualtrials.com

The screenshot shows the homepage of the Musella Foundation. At the top is a navigation bar with links: Home, Learn About, Find A Treatment, Virtual Trial, Interact, Resources, About Us, and Donations. The main header reads "Clinical Trials and Noteworthy Treatments for Brain Tumors" presented by The Musella Foundation. A sidebar on the left lists the Officers: Al Musella, DPM (President), Mitchell Siegel (Vice President), Steven Ruttgeizer (Treasurer), and Neal Houslanger, DPM (Secretary). Below this is the Medical Advisory Board, including Keith Black MD (Cedars Sinai Medical Center), Nicholas A. Blondin MD (St. Vincent's Brain Tumor Center), John A. Boockvar MD (Lenox Hill Hospital), Arno Fried MD (Hackensack University Medical Center), and Henry Friedman MD. The main content area features a privacy policy update notice, a sponsored banner for a Phase 3 study in Recurrent Anaplastic Astrocytoma by Stellaris and Orbus, and an introduction section. The introduction states that the foundation is a 501(C)3 nonprofit public charity dedicated to helping patients with brain tumors through emotional and financial support, education, advocacy, and raising money for brain tumor research. It also includes a search bar and a note that the site was last updated on 11/11/2018 at 7:06 PM.

ADDRESS

1100 Peninsula Blvd.
Hewlett, NY 11557

CONTACT INFO

Phone: 888-295-4740

Formed in 1998, the Musella Foundation For Brain Tumor Research and Information Inc. is a nonprofit, public charity dedicated to helping patients with brain tumors by offering emotional and financial support, education and advocacy. The foundation provides tumor information, online support groups, chat rooms, newsletters, articles and the databases of clinical trials.

Log on to watch free videos of brain tumor conferences or browse the huge multimedia library on topics important for patients with brain tumors.

Resource Checklist

- ✓ Copay assistance program
- ✓ Online support groups
- ✓ The Brain Tumor Virtual Trial
- ✓ Newsletters
- ✓ Video library
- ✓ Clinical trial information
- ✓ Survivor stories

National Brain Tumor Society

www.brainumor.org



ADDRESS

55 Chapel St., Suite 200
Newton, MA 02458

CONTACT INFO

Phone: 617-924-9997
Email: development@braintumor.org

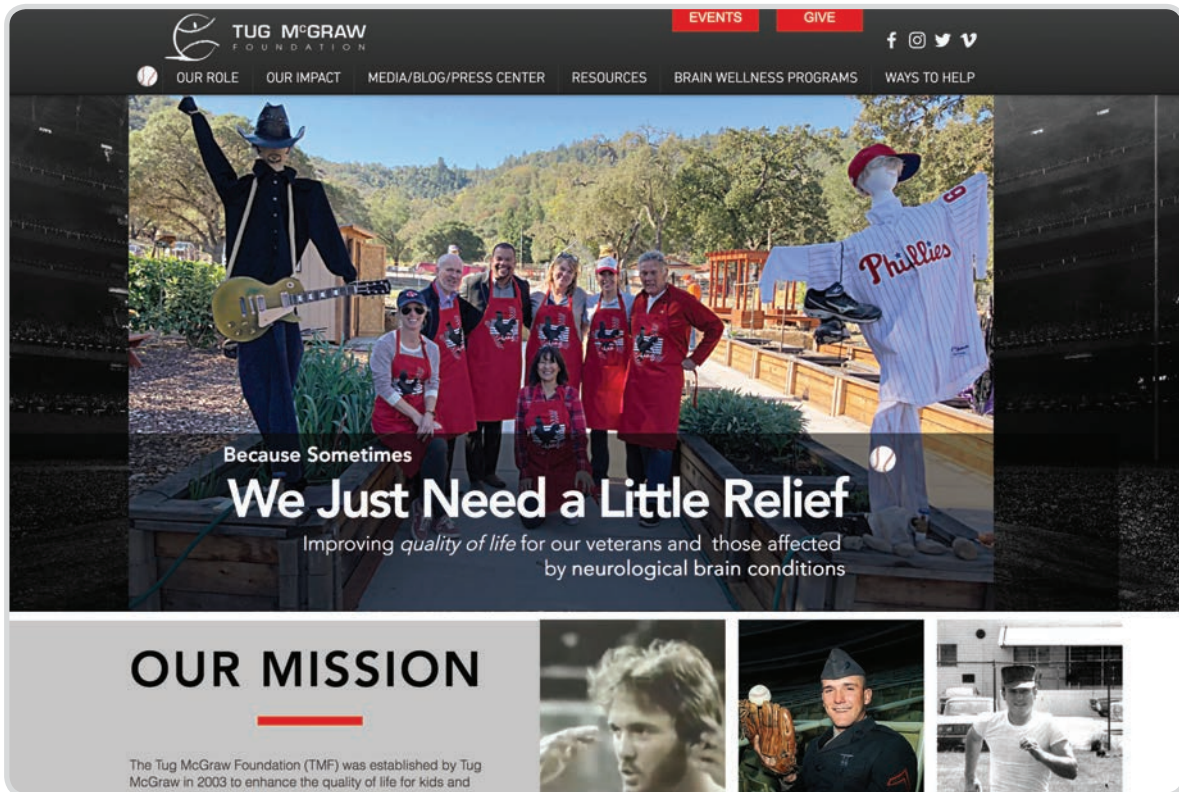
When the National Brain Tumor Foundation and the Brain Tumor Society decided to merge their collective efforts in 2008, the National Brain Tumor Society was formed. The organization unrelentingly invests in, mobilizes and unites the brain tumor community to discover a cure, deliver effective treatments and advocate for patients and care partners. Their vision is to conquer and cure brain tumors – once and for all. They strive to influence and fund strategic brain tumor research and discovery and to advocate for public policy changes to achieve the greatest impact, results and progress for patients with brain tumors. Research funds raised have directly led to groundbreaking discoveries, programs, clinical trials and new policy initiatives.

Resource Checklist

- ✓ Brain tumor information
- ✓ Up-to-date research
- ✓ Clinical trials information
- ✓ Financial support information
- ✓ Internet blog
- ✓ Advocacy educational webinars

Tug McGraw Foundation

www.tugmcgraw.org



OUR MISSION

The Tug McGraw Foundation (TMF) was established by Tug McGraw in 2003 to enhance the quality of life for kids and

ADDRESS

P.O. Box 45
Yountville, CA 94599

CONTACT INFO

Phone: 707-947-7124
Email: info@tugmcgraw.org

The Tug McGraw Foundation was established by Tug McGraw in 2003. A former baseball player who left a mark on the game, he received a diagnosis of brain cancer in 2003 and began his journey, aided by strong support. McGraw started the foundation to enhance the quality of life for kids and adults with debilitating neurological brain conditions such as brain tumors, traumatic brain injury and post-traumatic stress disorder (PTSD). Thanks to an extensive and well-connected network, the Tug McGraw Foundation has been instrumental in bridging military and civilian resources to help as many patients as possible and to extend and improve the lives of patients and families through fundraising, education and collaboration.

Resource Checklist

- ✓ PTSD information and resources
- ✓ Caregiver support network
- ✓ Internet blog
- ✓ Resource directories
- ✓ Newsletters

American Society of Clinical Oncology's Cancer.Net

www.cancer.net



ASCO and Cancer.net are trademarks of the American Society of Clinical Oncology.

ADDRESS

2318 Mill Rd., Suite 800
Alexandria, VA 22314

CONTACT INFO

Phone: 888-651-3038

571-483-1780

Email: contactus@cancer.net

Attn: Communications and Patient
Information

The American Society of Clinical Oncology is a leading voice of the world's cancer physicians. The society brings its expertise and resources to patients living with cancer and to their families and caregivers. Cancer.Net believes that well-informed patients are their own best advocates and are invaluable partners for physicians. For this reason, Cancer.Net provides timely, comprehensive information to help patients and family members make informed health care decisions.

Resource Checklist

- ✓ Brain tumor information
- ✓ Coping strategies
- ✓ Clinical trial information
- ✓ Resource directories
- ✓ Financial information
- ✓ Internet blog

CancerCare

www.cancercare.org

November Is Lung Cancer Awareness Month
Register for our upcoming two-part workshop series, Living With Lung Cancer
[REGISTER NOW](#)

A cancer diagnosis turns a person's world upside down — emotionally, physically and financially. CancerCare® can help.

[FOR PATIENTS & SURVIVORS](#) [FOR CAREGIVERS & LOVED ONES](#) [FOR HEALTH CARE PROFESSIONALS](#)

ADDRESS

275 Seventh Ave., 22nd Floor
New York, NY 10001

CONTACT INFO

Phone: 800-813-4673

Email: info@cancercare.org

Since 1994, CancerCare has been a leading national organization that provides free, professional support to help manage emotional and financial challenges that may arise for patients with cancer.

Resource Checklist

- ✓ Free counseling
- ✓ Community programs
- ✓ Limited financial assistance
- ✓ Free support groups
- ✓ Educational workshops directory

Patient Advocate Foundation

www.patientadvocate.org/gethelp

The screenshot shows the Patient Advocate Foundation website. At the top is a blue navigation bar with links for 'I need...', 'Donate', '(800) 532-5274', 'Media Center', 'Facebook', and 'Language'. Below this is a white header with the PAF logo and navigation links: 'Home', 'Connect With Services', 'Explore Our Resources', 'Get Involved', 'Learn About Us', and 'Contact'. The main hero section features a large orange background with a lighthouse on the left and two photographs on the right: a young girl and an elderly couple. The text 'We Guide Patients Through Complex Healthcare Challenges' is overlaid on the lighthouse image. Below the hero section, there are two columns of content. The left column is titled 'EXPERT CONTENT' and includes links to 'Open Enrollment: Choosing a Health Plan', 'Interacting with Insurer', and 'PAF News'. The right column is titled 'HOW WE HELP' and includes a quote: 'We provide patient services, eliminating obstacles in access to quality healthcare.' Below the quote are four icons representing different services: 'Case Management Assistance', 'Co-Pay Relief Program', 'National Financial Resource Directory', and 'Financial Aid Funds'. Each icon has a corresponding 'DOWNLOAD' button.

ADDRESS

421 Butler Farm Rd.
Hampton, VA 23666

CONTACT INFO

Phone: 800-532-5274

Email: help@patientadvocate.org

Patient Advocate Foundation aids patients who receive a diagnosis of a life-threatening or debilitating disease and are in active treatment. The foundation's case managers assist patients with issues specific to insurance, job retention, access to care and debt crisis.

Resource Checklist

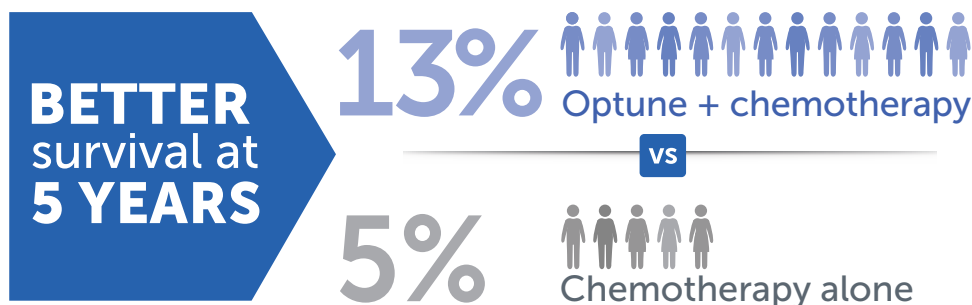
- ✓ Copay assistance
- ✓ Resource directories
- ✓ Toll-free helpline
- ✓ Information for uninsured patients
- ✓ Case management services

The power to PUT GBM ON PAUSE...



Optune®: Proven to extend survival

A large clinical study showed that adding Optune to chemotherapy* provided the greatest opportunity to live longer compared to chemotherapy alone **at 5 years** in people with newly diagnosed GBM.



* Temozolomide (TMZ), also known as Temodar®.

What is Optune approved to treat?

Optune is a wearable, portable, FDA-approved device indicated to treat a type of brain cancer called glioblastoma multiforme (GBM) in adult patients 22 years of age or older.

Newly diagnosed GBM

If you have newly diagnosed GBM, Optune is used together with a chemotherapy called temozolomide (TMZ) if:

- Your cancer is confirmed by your healthcare professional **AND**
- You have had surgery to remove as much of the tumor as possible

Recurrent GBM

If your tumor has come back, Optune can be used alone as an alternative to standard medical therapy if:

- You have tried surgery and radiation and they did not work or are no longer working **AND**
- You have tried chemotherapy and your GBM has been confirmed by your healthcare professional

Who should not use Optune?

Optune is not for everyone. Talk to your doctor if you have:

- **An implanted medical device (programmable shunt), skull defect (missing bone with no replacement), or bullet fragment.** Optune has not been tested in people with implanted electronic devices, which may cause the devices not to work properly, and Optune has not been tested in people with skull defects or bullet fragments, which may cause Optune not to work properly
- **A known sensitivity to conductive hydrogels** (the gel on the arrays placed on the scalp like the ones used on EKGs). When Optune comes into contact with the skin, it may cause more redness and itching or may rarely cause a life-threatening allergic reaction

References: 1. Stupp R, Taillibert S, Kanner A, et al. Effect of tumor-treating fields plus maintenance temozolomide vs maintenance temozolomide alone on survival in patients with glioblastoma: a randomized clinical trial. *JAMA Oncology*. 2017;318(23):2306-2316. 2. Taphoorn M, Dirven L, Kanner A, et al. Influence of treatment with tumor-treating fields on health-related quality of life of patients with newly diagnosed glioblastoma: a secondary analysis of a randomized clinical trial. *JAMA Oncology*. doi:10.1001/jamaoncol.2017.5082. Published online February 1, 2018.

and PUT LIFE ON PLAY



JB is an
Optune user.

Josh is JB's brother
and caregiver.

and maintain quality of life

People on Optune were also able to maintain their **mental, emotional, and physical health** longer than those on chemotherapy alone.*



Talk to your doctor
or visit **Optune.com**
to learn more

*As measured up to 12 months.

Do not use Optune if you are pregnant or are planning to become pregnant. It is not known if Optune is safe or effective during pregnancy.

What should I know before using Optune?

Optune should only be used after receiving training from qualified personnel, such as your doctor, a nurse, or other medical staff who have completed a training course given by Novocure™, the maker of Optune.

- Do not use any parts that did not come with the Optune Treatment Kit sent to you by Novocure or given to you by your doctor
- Do not get the device or transducer arrays wet
- If you have an underlying serious skin condition on the scalp, discuss with your doctor whether this may prevent or temporarily interfere with Optune treatment

What are the possible side effects of Optune?

Most common side effects of Optune when used together with chemotherapy (temozolomide, or TMZ) were low blood platelet count, nausea, constipation, vomiting, tiredness, scalp irritation from the device, headache, seizure, and depression.

The most common side effects when using Optune alone were scalp irritation (redness and itchiness) and headache. Other side effects were malaise, muscle twitching, fall and skin ulcers.

Talk to your doctor if you have any of these side effects or questions.

Please visit www.Optune.com/Safety for Optune Instructions for Use (IFU) for complete information regarding the device's indications, contraindications, warnings, and precautions.

Patient image reflects the health status of the patient at the time the photo was taken.

novocure™

OPTUNE®
Elevate Expectations

