

Medical Terms and Definitions



Medical Term	Definition
Abnormal	Outside of the expected norm or uncharacteristic of a particular patient or process/ presentation.
Absolute Neutrophil Count (ANC)	Neutrophils are a type of white blood cells (WBC), ANC measures the actual number of this type of WBC. This value is monitored to know when to treat neutropenia (low WBC count) especially during chemotherapy treatments.[8]
Accelerated Approval	The FDA instituted its Accelerated Approval Program to allow for earlier approval of drugs that treat serious conditions, and fill an unmet medical need to be approved on a surrogate endpoint.
Acupuncture	An alternative treatment method where specially designed hair-thin needles of different sizes are inserted into acu-points, areas along the body that when manipulated help correct and rebalance the natural flow of energy in the body.[2]
Adjuvant	A drug or other substance, or a combination of substances, that is used to increase the efficacy or potency of certain drugs.
Administration	How a drug is formulated and given to a patient. For example, patients can take an oral drug at home, once-a-day (OAD).
Advance Directives	These directives pertain to treatment preferences and the designation of a surrogate decision-maker in the event that a person should become unable to make medical decisions on their own behalf. Types of advance directives vary based on state law and individual preferences within the states' legal requirements. The 2 most common types of advance directives are the living will and the durable power of attorney for health care, which is sometimes called the health care power of attorney or health care proxy. It is important to share your wishes with your family/caregiver/friends.[3]

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Adverse Event	Any untoward medical occurrence in a patient or clinical investigation subject administered a pharmaceutical product and which does not necessarily have a causal relationship with this treatment.
Amygdala	Structure in the brain that plays an important role in expressing emotion and extreme states of excitement, aggression, fear, and anger. It is also believed to be associated with conditions such as autism and depression.[8]
Anaplasia	Cells or group of cells that grow without structure; a term often used to describe cancer cells.[4],[8]
Anesthesiologist	A physician specializing in the study and administration of anesthetic medications and the care of patients before, during, and after anesthesia. They are also specially trained in pain management.[4]
Anticonvulsant	Medication used to control or prevent seizures (convulsions) or stop an ongoing series of seizures.[1]
Antigen	In immunology, an antigen is a molecule or molecular structure or any foreign particulate matter or a pollen grain that can bind to a specific antibody or T-cell receptor. The presence of antigens in the body may trigger an immune response.
Aphasia	Difficulty with understanding or expressing language, but not exclusively due to damage in the cerebral cortex.[8]
Ataxia	Ataxia is a degenerative disease of the nervous system. Many symptoms of Ataxia mimic those of being drunk, such as slurred speech, stumbling, falling, and incoordination.[5]
Atypical	Not normal. Describes a condition that is unusual or different from what is considered normal. Also called abnormal.
Autologous	Cells or tissues obtained from the same individual.

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Axon	A branch of the nerve body that typically carries signals from the neuron to other neuron or cells, and to muscles and glands.[8]
Benign	Not malignant (not cancerous). A benign tumor can continue to grow larger, but does not spread to other areas of the body. [8]
Bio-Marker	Biomarkers (short for biological markers) are biological measures of a living system. They are the measures used to perform a clinical assessment to monitor and predict health states in individuals.
Biopsy	A biopsy is the removal of a small piece of tissue for laboratory examination under a microscope or other laboratory tests. Biopsies are performed as part of the diagnosis of a brain tumor, and determine whether the tissue is cancerous, what type of cancer, and the results help guide a treatment plan.[1]
Blood Brain Barrier (BBB)	<p>A protective barrier formed by blood vessels and glial cells that prevents some substances in the blood from entering the brain.[1]</p> <p>A network of blood vessels and tissue that is made up of closely spaced cells and helps keep harmful substances from reaching the brain. The blood-brain barrier lets some substances, such as water, oxygen, carbon dioxide, and general anesthetics, pass into the brain. It also keeps out bacteria and other substances, such as many anticancer drugs.</p>
Brachytherapy	A system of treatment in which radioactive substances are placed in or near the tumor.
Brain	The portion of the central nervous system that is located within the skull.
Brain Lesions	A general anatomical abnormality of the brain. A brain lesion may be due to trauma or any other disease that can cause inflammation, malfunction, or destruction of brain cells or brain tissue.

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Brain Stem	The stem-like part of the base of the brain that is connected to the spinal cord. The brain stem controls the flow of messages between the brain and the rest of the body, and it also controls basic body functions such as breathing, swallowing, heart rate, blood pressure, consciousness, and whether one is awake or asleep.
Brain Swelling Also known as Brain Edema	Swelling can occur in specific locations or throughout the brain. Wherever it occurs, brain swelling increases the pressure inside the skull which is known as intracranial pressure or ICP. This pressure can prevent blood from flowing to your brain, which deprives it of the oxygen it needs to function. Symptoms of brain swelling included but not limited to headaches, nausea, neck stiffness, seizures, dizziness, vision loss or blurry vision, memory loss, etc. Swelling can be reduced with the use of steroids, or by surgically relieving the pressure by insertion of a drain, or by temporarily removing a small section of the skull bone.
Brain Tumor	A benign or malignant growth (cancer) in the brain. Primary brain tumors initially form in brain tissue. Secondary brain tumors are cancers that have spread (metastasized) to the brain tissue from tissue elsewhere in the body. Brain tumors can occur in people of any age.
Breakthrough Therapy	A process designed to expedite the development and review of drugs which may demonstrate substantial improvement over available therapy.
Burr Hole	A surgical small round hole made in the skull usually made for shunt placement to reduce the pressure inside the brain.[6]
Cancer	An abnormal and uncontrolled growth of cells, forming malignant tumors, and invading nearby parts of the body. Cancer may also spread to more distant parts of the body through the lymphatic system or bloodstream. Not all tumors are cancerous; benign tumors do not invade neighboring tissues and do not spread throughout the body.

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Cancer Vaccines	Belong to a class of substances known as biological response modifiers. Biological response modifiers work by stimulating or restoring the immune system’s ability to fight infections and disease. Therapeutic cancer vaccines are intended to treat an existing cancer by strengthening the body’s natural immune response against the cancer. [7]
Cells	The basic structural and functional unit of any living thing.[1]
Central Nervous System (CNS)	The central nervous system is composed of the brain and spinal cord which serves as the main "processing center" of the body.[8]
Cerebellum	A structure that is located at the back of the brain. Its function is to coordinate and regulate muscular activity.
Cerebrospinal Fluid (CSF)	A watery fluid that is continuously produced and absorbed and that flows into the chambers (ventricles) within the brain and around the surface of the brain and spinal cord. It bathes, protects, and lubricates the Central Nervous System.[8]
Cerebrum	The largest part of the brain. It is divided into two hemispheres or halves. The 4 lobes control senses, thoughts, and movement. [8]
Checkpoint Blockade	A type of drug that blocks proteins called checkpoints that are made by some types of immune system cells, such as T cells, and some cancer cells. These checkpoints help keep immune responses from being too strong and sometimes can keep T cells from killing cancer cells.
Chemotherapy	Treatment of cancer with powerful medications that prevent cancer cells from dividing and growing. This can have the effect of shrinking existing tumors, or prevent stray tumor cells from developing into larger tumors. Because chemotherapy agents are such powerful medications, they are often accompanied by moderate to severe side effects: nausea, hair loss, brain fog, tiredness, weakened immune system, etc.

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Chimeric Antigen Receptor T-cell (CAR- T Cells)	A type of treatment in which a patient's T cells (a type of immune system cell) are changed in the laboratory so they will attack cancer cells. T cells are taken from a patient's blood. Then the gene for a special receptor that binds to a certain protein on the patient's cancer cells is added in the laboratory. The special receptor is called a chimeric antigen receptor (CAR).
Clinical Endpoint or Clinical Outcomes	These are outcome measures referring to occurrence of disease, symptom, sign or laboratory abnormality constituting a target outcome in clinical research trials.
Clinical Trials	<p>Prospective biomedical research studies on human participants designed to answer specific questions about biomedical or behavioral interventions, including new treatments and known interventions that warrant further study and comparison. (ClinicalTrials.gov is a service of the U.S. National Institutes of Health (NIH)).</p> <p>Trials to evaluate the effectiveness and safety of medications or medical devices by monitoring their effects on large groups of people. In cancer patients, a new medication is tested among people with a similar diagnosis to see how it compares to current therapies or “standard of care” regarding effectiveness. Clinical trials are carefully monitored by Human Subjects Review Boards.[7]</p>
Coagulation	The process by which the blood clots to form solid masses or clots.
Cognition	A general term involving perceiving, recognizing, conceiving, judging, sensing, reasoning, remembering, and imaging. [7]
Combination Therapy	Uses more than one medication or modality. Typically, the term refers to using multiple therapies to treat a single disease and often all the therapies are pharmaceutical such as the combination of medications.

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Complete Response (CR)	The disappearance of all signs of cancer in response to treatment. This does not always mean the cancer has been cured. Also called complete remission.[7]
Comprehensive Genomic Testing	A next-generation sequencing (NGS) approach that uses a single assay to assess hundreds of genes including relevant cancer biomarkers, as established in guidelines and clinical trials, for therapy guidance.
Computed Tomography Scan (CT)	An imaging procedure that uses special x-ray equipment to create detailed pictures, or scans, of areas inside the body.[7] See also CT scan.
Conformal Radiation	A cancer treatment that shapes the radiation beams to match the shape of the tumor. It focuses precisely on the tumor, while avoiding the healthy surrounding tissue.
Congenital	A condition that is present at birth, and often runs in families. [7]
Corpus Callosum	A bundle of nerve fibers connecting the halves of the brain (cerebrum), allowing information to move back and forth between the two hemispheres.
Craniotomy	A surgical procedure in which a piece of the skull (bone flap) is temporarily removed, to allow surgery to be performed on the brain.[7]
CT or CAT scan	Abbreviation for computed tomography scan. A type of computer-assisted X-ray technology that produces detailed, multidimensional images of internal organs. CT imaging is sometimes compared to looking into a loaf of bread by cutting the loaf into thin slices. When the image slices are reassembled by computer software, the result is a very detailed multidimensional view of the body's interior. CT imaging is often used in the diagnosis of cancer since it allows a physician to confirm the presence of a tumor and measure its size,

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	precise location, and the extent of the tumor's involvement with other nearby tissue.[7]
CyberKnife and Gamma Knife	A non-invasive surgery procedure that destroys tumors w/out the risks of traditional surgery, through the use of radiation to destroy tumor cells. Patients are typically able to return to their usual activities sooner than with traditional surgery. This type of procedure may be appropriate for some types and sizes of brain tumors.
Cytotoxic Agent	A substance that kills cells, including cancer cells. These agents may stop cancer cells from dividing and growing and may cause tumors to shrink in size.
Dendrite	A branch of the nerve body that receives signals from other neurons or sensory organs.[8]
Diplopia	Double Vision [8]
Disease Free Survival (DFS)	The length of time after primary treatment for a cancer ends that the patient survives without any signs or symptoms of that cancer. In a clinical trial, measuring the disease-free survival is one way to see how well a new treatment works. Also relapse-free survival (RFS).[7]
Dose	A quantity of a medicine or drug taken or recommended to be taken at a particular time. Example is mg or milligram.
Double Blind	An experimental procedure in which neither the subjects nor the experimenters know which subjects are in the experimental and control groups during the actual course of the experiments
Drain	A device for removing fluid from a cavity or wound. A drain is typically a tube attached to some sort of collection container.
Dura Mater	Tough outer membrane covering the brain.[8]

Medical Term	Definition
Dysarthria	A speech disorder causing an inability to articulate words, a symptom that may occur with tumors located in the medulla of the brain.[8]
Dysmetria	An inability to judge distance between the eyes, hands, or feet. This is often tested by having the patient alternate pointing to his or her nose and then to the physicians finger. [8]
Dysphagia	Difficulty in swallowing.[7]
Dysphasia	Language disorder with difficulty or inability to put words in proper order.[8]
Edema	Swelling or puffiness caused by extra fluid that builds up in the tissues of the body.[7]
Efficacy	The ability of an intervention (for example, a drug) to produce the desired beneficial effect.
Electroencephalogram (EEG)	A test that measures electrical activity in the brain. Often used to describe and diagnose seizures.[7]
EMLA	A skin numbing cream that is used to relieve the pain associated with a needle stick.
Encapsulated	Refers to a tumor that is localized, or confined to a specific area, surrounded by a tissue capsule. [7]
Endpoint	An event or outcome that can be measured objectively to determine whether the intervention being studied is beneficial.
Epidermal Growth Factor Receptor (EGFR)	The protein found on the surface of some cells and to which epidermal growth factor binds, causing the cells to divide. It is found at abnormally high levels on the surface of many types of cancer

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	cells, so these cells may divide excessively in the presence of epidermal growth factor.[7]
Fast Track	A process designed to facilitate the development, and expedite the review of drugs to treat serious conditions and fill an unmet medical need.
Food and Drug Administration (FDA)	A federal agency of the Department of Health and Human Services. The FDA is responsible for protecting the public health by ensuring the safety, efficacy, and security of human and veterinary drugs, biological products, and medical devices.
Frontal Lobe	A section in the front of the brain that has much to do with the intellect and the ability to fit into a social group, helping us plan and prioritize, concentrate and recall, and exert control over our behavior. The ability to filter thoughts is sometimes impaired by damage to the frontal lobe. [8]
Functional Magnetic Resonance Imaging (f MRI)	A scanning technique used to show brain function by demonstrating changes in the chemical composition of the brain or changes in the flow of fluids. [7]
Gadolinium	The contrast material used for magnetic resonance imaging. [7]
Ganglia Cells	Groups or bundles of nerve cells.[8]
Genetic	The branch of biology that deals with heredity, especially the study of single genes and their role in the way traits or conditions are passed from one generation to the next.[7]
Genome	A genome is comprised of a complete set of DNA and all the genes it contains. Each genome contains all of the information needed to build and maintain a person’s cells from the beginning to the end of their lives. [7]

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Genomic sequencing	With new technologies, it is now possible to identify areas within a person’s DNA where changes (or genetic mutations) have taken place, including those that could cause abnormal cell growth or cancer. This enables precise targeting of therapies, or personalized medicine, where treatments are tailored to a person’s unique genetic profile, as opposed to being based on clinical signs and symptoms.[7]
Genomics	Genomics is the study of all genes and their inter relationships in order to identify their combined influence on the growth and development of the organism.
Grade	A measure of how much tumor cells differ from normal cells. In Grade 1, cells are quite similar to normal cells for that part of the body; in Grade 2, there is a fair degree of difference. Grade 3 cells are “poorly differentiated”. Typically Grade 3 cells are extremely aggressive and signify a rapidly-growing tumor.
Granulocyte Colony-Stimulating Factor (GCSF)	A medication given by injection to stimulate the bone marrow to manufacture new white blood cells. This medication may be used when the Absolute Neutrophil Count (ANC) drops below a safe threshold. [8]
Gray (Gy)	A unit of measurement in radiation; can be used interchangeably with rad.[8]
Gross Total Resection	Complete removal of a tumor as measured by the surgeon’s observation (without a microscope).[7] This is what is implied when a surgeon says, “I got all the tumor I could see.’
Guided Imagery	A relaxation technique involving visualization of peaceful images guided by a soothing voice to help cope with painful or anxiety provoking experiences [8]
Health-Related Quality of Life (HRQoL)	Is an assessment of how an individual's well-being may be affected over time by a disease, disability of disorder.

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Hemoglobin (HGB) Test	A measurement of red blood cells in the blood, often used as the basis for decisions regarding the need for a red cell blood transfusion. This number (HGB) accounts for approximately one-third of the hematocrit (HCT).[8]
Hippocampus	Part of the brain that assists in the formation of memories from new experiences.[8]
Home Care	Services designed to provide equipment, support, and nurses so that medical care can be provided at home.[8]
Hospice care	Care designed to give supportive care to people in the final phase of an illness and focus on comfort and quality of life, rather than cure. The goal is for patients to be comfortable and free from pain.
Hydrocephalus	A buildup of abnormal amount of cerebral spinal fluid (CSF) within the brain's ventricular system that causes pressure on the brain. [7]
Hyper fractionated Radiation Therapy	The administration of radiation therapy in smaller and more frequent doses to equal the total prescribed amount.[8]
Hypothalamus	A regulatory center involved in many functions, such as hormone secretion, the autonomic nervous system, eating, sleeping, temperature, emotion, and sexual behaviors.[8]
Hypotonic	Floppy; low muscle tone.[8]
Hypoxia	Low level of oxygen in the blood.[8]
Immune Cells	Immune cells are made up of several types of cells, such as White Blood Cells (WBCs), B & T cells, Natural Killer (NK) cells, phagocytes, and others. The immune cells work together to protect the body against infectious disease and foreign invaders including cancer cells. Cancer spreads because it finds a way of hiding from the body's immune system.

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<p>Immune Checkpoint Inhibitor</p>	<p>A type of drug that blocks certain proteins made by some types of immune system cells, such as T cells, and some cancer cells.</p> <p>These proteins help keep immune responses in check and can keep T cells from killing cancer cells. When these proteins are blocked, the “brakes” on the immune system are released and T cells are able to kill cancer cells better.[7]</p>
<p>Immune System</p>	<p>A complex system that is responsible for protecting their body against infections and foreign substances.[7]</p>
<p>Immunotherapy</p>	<p>Using the body's own defense system (antibodies, white blood cells, immune cells) to combat a tumor.[7]</p>
<p>Incidence</p>	<p>The frequency with which something, such as a disease or trait, appears in a particular population or area.[7]</p>
<p>Incision</p>	<p>A cut through skin or other tissue as part of a medical procedure.</p>
<p>Inflammation</p>	<p>A localized reaction that produces redness, warmth, swelling, and pain as a result of infection, irritation, or injury. Inflammation can be external or internal.</p>
<p>Infratentorial</p>	<p>The bottom portion of the brain (located in the posterior fossa under the tentorium) consisting of the cerebellum and brainstem.</p>
<p>Infusion</p>	<p>An injection is the act of administering a liquid, especially a drug, into a person's body using a needle and a syringe. Typically, this procedure is done in a medical setting or infusion center.</p>
<p>Intensity Modulated Radiation Therapy (IMRT)</p>	<p>A 3-D computer aided radiation therapy that targets treatments at the tumor, decreasing damage to normal tissue.[7]</p>
<p>Intra-Arterial (IA)</p>	<p>Enables the distribution or delivery of high concentration therapeutics through a targeted vascular territory, while potentially limiting systemic toxicity.</p>

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Intracranial	Within the skull, the bony dome that houses and protects the brain.[8]
Intrathecal Injection	An injection into the cerebrospinal fluid often used as a part of chemotherapy or pain management applications.[8]
Isocitrate dehydrogenase (IDH) 1 and 2	Mutations in isocitrate dehydrogenase (IDH) 1 and 2 occur in the vast majority of low grade gliomas and secondary high grade gliomas. Understanding of this mutation may help guide treatment plans
Leptomeningeal	Term used to describe the spread of cancer to tissue lining around the brain.[7]
Lesion	An area of abnormal tissue change. Lesions vary in severity from harmless to serious.
Leukapheresis	Removal of blood to obtain cells needed to generate an investigational vaccine. The remaining blood is returned to the patient.
Local Therapy	In the context of cancer, treatment that affects cells in the tumor and the area close to it. Also known as local treatment.
Long-Tail	There is a lengthy period during which a person could develop drug resistance. Drug resistance only arises in situations like this when there is some drug in the body but not enough to fully suppress an infection.
Lumbar Puncture (LP)	Also called a spinal tap. A needle penetrates the subarachnoid space of the lumbar spine and a sample of spinal fluid is withdrawn for laboratory examination. This procedure can also be used to inject dye prior to myelography or to administer medication.
Lymphatic System	The tissues and organs, including the bone marrow, spleen, thymus, and lymph nodes (all located outside the brain), that produce and

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	store cells that fight infection and disease. The channels that carry lymphatic fluid are also part of this system.
Magnetic Resonance Imaging (MRI)	A procedure in which radio waves and a powerful magnet linked to a computer are used to create detailed pictures of areas inside the body. These pictures can show the difference between normal and diseased tissue. Brain tumors are most often imaged with MRI.[7]
Malignant	A term for diseases in which abnormal cells divide without control and often invade nearby tissues. Malignant (cancer) cells can also spread to other parts of the body.[7]
Medical Device	Any device intended to be used for medical purposes. Significant potential for hazards is inherent when using a device for medical purposes and thus medical devices must be proved safe and effective with reasonable assurance before regulating governments allow marketing of the device.
Meninges	The covering membranes of the brain consisting of the dura mater, the arachnoid, and the pia mater.[7]
Meningioma	A common type of slow-growing, usually benign brain tumor that arises from the dura, one of the membranes (meninges) covering the brain and spinal cord. The symptoms depend on the location of the tumor. Treatment ranges from observation to neurosurgical resection.
Meningitis	Infection or inflammation of the membranes (meninges) that cover the brain and spinal cord. Meningeal infections can be bacterial, viral, or fungal in nature. [7]
Metabolic Response	A metabolic response is any reaction by the body to a specific influence or impact. [7]
Metastasis	Metastasis is a complex process where a tumor or cancer spreads to distant parts of the body from its original site. The majority of brain

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	tumors originate in another part of the body such as the lung, breast or colon and spread to the brain.
Modality	A method of treatment. For example, surgery and chemotherapy are treatment modalities.
Molecular Pathways	A series of actions among molecules in a cell that leads to a certain end point or cell function.
Multi-Arm Trials	An arm of a clinical trial is a group of patients receiving a specific treatment (or no treatment). Multi-arm trials involve several arms, or randomized trials that treat randomly selected groups of patients with different therapies in order to compare their medical outcomes.[7]
Mutation	A permanent change, a structural alteration, in the DNA or RNA. [1]
National Cancer Institute (NCI)	The federal government's principal agency for cancer research and training. Established under the National Cancer Institute Act of 1937, NCI is part of the National Institutes of Health (NIH), one of 11 agencies that make up the Department of Health and Human Services (HHS).
Neoplasm	A tumor, either non-malignant or malignant.[8]
Neuroendocrinologist	A doctor who specializes in endocrinology who monitors the possible effects of surgery, radiation therapy, or chemotherapy on the endocrine glands [8]
Neurologist	A doctor specializing in the diagnosis and treatment of disorders and diseases affecting the brain, spinal cord, and peripheral nerves
Neuro-oncologist	An oncologist who specializes in tumors of the brain and other parts of the nervous system.[8]

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Neuro-ophthalmologist	A doctor specializing in the diagnosis and treatment of eye problems that are a result of damage to the brain.[8]
Neuropathology	The study of disease of nervous system, which includes the brain and spinal cord tissue, usually in the form of either small surgical biopsies or whole body autopsies.
Neuropsychologist	A psychologist who specializes in the effects that injury to or disease of the brain and spinal cord have on emotions, behavior, and learning. [8]
Neuro-radiologist	A physician who orders and interprets imaging studies relative to the brain and central nervous system [8]
Neurosurgeon	A physician who specializes in surgery on the brain and other parts of the nervous system.[8]
Next Generation Sequencing (NGS)	A test that examines the genes associated with cancer. This test may show if a gene is mutated and causing cancer growth.
Nurse Practitioner (ARNP)	A specially educated nurse who provides direct care in collaboration with your physician. Nurse Practitioners are Masters or Doctoral prepared, and are able to independently prescribe medications and order diagnostic studies
Octreotide scan	A non-invasive test used to evaluate the body for the presence of neuroendocrine tumor cells.
Ommaya reservoir	A medical device implanted under the scalp that delivers medication directly into the ventricles of the brain. [8]
Oncogenes	Fragments of genetic material (DNA) that carry the potential to cause cancer.[8]

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Oncologist	<p>A physician who specializes in the diagnosis and treatment of cancer.</p> <p>After a cancer diagnosis is made, it is the oncologist’s role to explain the cancer diagnosis and the meaning of the disease stage to the patient, discuss various treatment options, recommend the best course of treatment, and consider the patient’s goals in the development of the treatment plan.[7]</p>
Oncology	A branch of medicine that deals with the study, treatment, diagnosis and prevention of cancer.
Onset	In medicine, the first appearance of the signs or symptoms of an illness as, for example, the onset of a cold or influenza (when the person starts to ache, cough, or feel sneezy).
Open-Label	Clinical study participants and researchers both know which treatment the patient is receiving. Open-label trials can be used to compare treatments or gather additional information about the long-term effects in the intended patient population.
Papilledema	Swelling of the optic nerve usually caused by intracranial pressure that can be seen on physical examination by looking at the back of the eye with an ophthalmoscope; not an uncommon finding with brain tumors [7]
Papilloma	A small solid benign tumor with a clear-cut border that projects above the surrounding tissue. A raised wart is an example of a papilloma.
Paralysis	Total loss of muscle control.
Parietal lobe	Part of the brain, specifically the section of the cerebral hemisphere that lies beneath the parietal bone, the main side bone of the skull. Responsible for processing of sensory information.

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Partial Response (PR)	A decrease in the size of a tumor, or in the extent of cancer in the body, in response to treatment. Also called partial remission.[7]
Pathologist	A physician who identifies diseases and conditions by studying cells and tissues, under magnification by a microscope. This identification is a critical step in diagnosis and treatment of any type of cancer.[8]
Peripheral	Situated away from the center, as opposed to centrally located.[8]
Peripheral Nervous System	The network of nerves that connects the central nervous system to the arms, legs, eyes, ears, and other organs [8]
Personalized medicine	Any type of treatment specifically tailored to the individual patient (as opposed to the physical characteristics of the disease), most commonly used to describe treatments based on the patient’s unique genetic profile.
Phase 0	Phase 0 studies use only a few small doses of a new drug in a few people. They might test whether the drug reaches the tumor, how the drug acts in the human body, and how cancer cells in the human body respond to the drug.
Phase I	A phase I clinical trial tries to show that people can safely use a new drug or treatment. The goal is to find the dose that works best without causing severe side effects.[7]
Phase II	Phase II clinical trials give doctors more information about the treatment’s safety and how well it works. These trials also look at whether the new treatment works for a specific cancer.[7]
Phase III	Phase III clinical trials start with a new treatment that’s worked well in a small number of patients with a certain disease. Doctors compare the treatment with the standard of care for that disease.[7]

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Physical Therapist	A person who is trained and certified by a state or accrediting body to design and implement programs that rebuild a patient’s physical function including, strength, stamina, flexibility and balance.[8]
Pituitary Gland	A small structure in the head. It is called the master gland because it produces hormones that control other glands and many body functions including growth.
Plasticity	The brain's ability to adjust to injury or loss of brain cells by making new interconnections which take over for the loss of others.
Positron Emission Tomography (PET) scan	A type of scanning used to measure metabolic activity within a structure. Increased metabolic activity (defined by the uptake of glucose) may indicate a malignancy.
Posterior Fossa	The portion or location in the brain that includes the cerebellum, brainstem, and fourth ventricle.[8]
Postictal	A period of sleepiness, confusion, or agitation after a seizure.[8]
Precancerous or Premalignant	Likely to become cancer.
Precision Medicine (Personalized Medicine)	A medical model that separates people into different groups—with medical decisions, practices, interventions and/or products being tailored to the individual patient based on their predicted response or risk of disease.
Preclinical	A stage of research that begins before clinical trials and during which important feasibility, iterative testing and drug safety data are collected, typically in laboratory animals.
Primary Tumor	Tumors that start in cells of the brain are called primary brain tumors. Primary brain tumors may spread to other parts of the brain or to the spine, but rarely to other organs.[8]

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Priority Review	This designation means the FDA's goal is to take action on a drug or device application within 6 months.
Prognosis	The forecast of the most likely course of a disease and outcome; the patient's chance of recovery. This is based on what happened to other patients with a similar diagnosis, the treatments selected, and other factors such as the patient's general health.
Progression	The worsening of a disease over time. This concept is most often used for chronic and incurable diseases where the stage of the disease is an important determinant of therapy and prognosis.[7]
Progression-Free Survival (PFS)	The length of time during and after the treatment of cancer, that a patient lives with the disease but it does not get worse. In a clinical trial, measuring the progression-free survival is one way to see how well a new treatment works.[7]
Progressive Disease (PD)	Cancer that is growing, spreading, or getting worse.[7]
Proteinomics	A comprehensive characterization of all modified forms of a protein.
Proton-Beam Radiation	A specific type of radiation therapy using particle beams of protons in a very confined area of the brain. [8]
Pseudo-Progression (psPD)	<p>Refers to post-treatment imaging changes in the tumor, where the tumor appears larger and/or brighter from greater contrast uptake as compared to the pre-treatment baseline CT or MRI image.</p> <p>These changes may mislead the patient and the doctor in thinking the tumor is getting worse due to true progression when in fact these changes are transient. In true psPD, eventually the tumor stabilizes or even shrinks as opposed to further growth if true progression.[7]</p>
Pseudo-Response	It refers to tumors appearing to respond to a specific treatment on imaging criteria, when the lesion actually remains stable or has even progressed.[7]

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Quality of Life	The patient's ability to enjoy normal life activities. Quality of life is an important consideration in medical care as some medical treatments can seriously impair quality of life without providing appreciable benefit, whereas others greatly enhance quality of life. Quality of life is defined by the patient and family.[7]
Rad	A unit of measurement used in radiation; can be used interchangeably with a unit called the Gray (Gy).[8]
Radiation Oncologist	A physician who specializes in the treatment of tumors by radiation. [8]
Radiation Therapy Radiotherapy	The treatment of disease with ionizing radiation. In radiation therapy, high-energy rays are often used to damage cancer cells and stop them from growing and dividing. A specialist in the radiation treatment of cancer is called a radiation oncologist. Stereotactic radiosurgery (SRS) and hypofractionated stereotactic radiotherapy (HFSRT) have become important treatments for brain tumors.[8]
Radiologist	A doctor who specializes in the interpretation of x-ray films and other imaging techniques [8]
Randomization	A sampling method used in scientific experiments. In randomized controlled trials, the research participants are assigned by chance, rather than by choice, to either the experimental group or the control group. Randomization reduces bias as much as possible.[7]
Recurrence (Relapsed)	Tumor progression or the tumor has come back.
Refractory	Refractory describes a disease or condition which does not respond to attempted forms of treatment. A cancer is considered refractory when it does not respond to (or is resistant to) cancer treatment. Refractory cancer is also known as resistant cancer.
Registry	A collection of information. A registry is usually organized so that the data in it can be analyzed. A brain cancer registry provides data on

Medical Term	Definition
	all primary and malignant brain and other central nervous system tumors.
Remission	The decrease or disappearance of clinical symptoms of disease.[7]
Resection	Surgical removal of part of an organ or tumor.[7]
Resistant Cancer or Refractory Cancer	The cancer that does not respond to medical treatment. It may be resistant at the beginning of treatment, or it may become resistant during treatment.
Rule out	Term used in medicine, meaning to eliminate or exclude something from consideration.
Secondary Tumor	A tumor that develops away from the original site. See also metastasis.
Shunt	Hole or small tube which moves, or allows movement of fluid from one part of the body to another. In brain tumor patients, a shunt is used to prevent buildup of fluid and pressure in the brain.
Side-Effect	An effect, whether therapeutic or adverse, that is secondary to the one intended; although the term is predominantly employed to describe adverse effects, it can also apply to beneficial, but unintended, consequences of the use of a drug.
Social Determinants of Health (SDOD)	The economic and social conditions that influence individual and group differences in health status. For example, not every patient has access to tests, complicated by rural disparities and insurance coverage.
Solid Tumor	An abnormal mass of tissue that usually does not contain cysts or liquid areas. Different types of solid tumors are named for the type of cells that form them.

Medical Term	Definition
Sonodynamic Therapy (SDT)	Uses focused ultrasound to activate agents that selectively accumulate in tumor cells and cause cell death.
Stable Disease (SD)	Cancer that is neither decreasing nor increasing in extent or severity.[7]
Stage	Stage is based on our knowledge of how cancer typically progresses and provides a common language for describing the severity of a person’s cancer based on the size and/or extent of the original tumor and whether or not cancer has spread in the body. Staging is important for planning the most appropriate treatment, estimating prognosis, and identifying clinical trials that might be helpful. [7]
Steroid	One of a large group of chemical substances classified by a specific carbon structure. Steroids include drugs used to relieve swelling and inflammation, such as dexamethasone, prednisone and cortisone, and some sex hormones, such as testosterone and estradiol.
Suprasellar Tumors	<p>Suprasellar masses present with a variety of neurologic or endocrine dysfunctions depending on their site of origin and mass effect on adjacent structures.</p> <p>The suprasellar cistern is a cerebrospinal fluid filled space between the top of the pituitary and bottom of the hypothalamus. The pituitary stalk normally courses through this space to enter the pituitary gland and is critical for the normal operation of the pituitary.</p>
Surrogate Endpoint	In clinical trials, a surrogate endpoint is a measure of effect of a specific treatment that may correlate with a real clinical endpoint but does not necessarily have a guaranteed relationship. The National Institutes of Health defines surrogate endpoint as "a biomarker intended to substitute for a clinical endpoint".
Survivor	Anyone who is either currently undergoing treatment for cancer or has done so in the past. With new treatment options, more and more people are cured or living a very long time following a diagnosis of

Medical Term	Definition
	cancer. “Survivorship” is increasingly becoming an area of focus to help these patients with the numerous physical, psychological, social, spiritual and financial issues often faced during and after active treatment.
Symptom	Anything out of the normal, in function, appearance, or sensation, experienced by the patient. Symptoms can be caused by the disease itself or side effects of treatment.
T Cell	A T cell is a type of immune cell that can recognize and kill abnormal cells/cancer cells in the body. T cells can be extracted from the patient's blood and a modified gene placed into them so that they can recognize and kill brain cancer cells. (CAR-T Cell Therapy).[7]
Targeted Therapy or Molecularly Targeted Therapy	One of the major modalities of medical treatment for cancer.
TCGA	The Cancer Genome Atlas (TCGA) is a collaboration between the National Cancer Institute (NCI) and the National Human Genome Research Institute (NHGRI) that has generated comprehensive, multi-dimensional maps of the key genomic changes in 33 types of cancer.
Therapeutic Combination	More than one therapy is administered to the patient.
Therapy	The treatment of disease. Therapy is synonymous with treatment. [7]
Toxic	Having to do with poison or something harmful to the body. Toxic substances usually cause unwanted side effects.
Trauma	Refers to either an emotional shock or severe body injury, either from the impact of a lifechanging event such as a cancer diagnosis, or a physical injury resulting from a fall or surgery.[7]

Medical Term	Definition
Tumor (or Neoplasm)	An abnormal mass of tissue. Tumors can be benign or malignant (cancerous). They may be solid or fluid-filled. A tumor does not always mean cancer - tumors can be benign (not cancerous), pre-malignant (pre-cancerous), or malignant (cancerous). Their specific names usually reflect their shape and part of the body where they appear (for example, a brain tumor occurs in the brain, and is comprised of brain tissue).
Tumor Board	Tumor board review is conducted when teams of expert physicians meet to review and discuss complex patients with a diagnosis of cancer.
Vaccine	<p>There are vaccines that treat existing cancer, called treatment vaccines or therapeutic vaccines.</p> <p>These vaccines are a type of cancer treatment called immunotherapy. They work to boost the body's immune system to fight cancer.</p>
Vascular	Having to do with blood vessels including veins, arteries, and capillaries.
Vestibular	Having to do with a structure that is a vestibule (entrance), such as the vestibule of the ear. Having to do with the body's system for maintaining equilibrium.
Viral Therapy	Treatment using a virus that has been changed in the laboratory to find and destroy cancer cells without harming healthy cells. It is a type of targeted therapy. Also called oncolytic virotherapy, oncolytic virus therapy, and virotherapy.
Wild-Type	A strain, gene, or characteristic which prevails among individuals in natural conditions, as distinct from an atypical mutant type.
World Health Organization (WHO)	A specialized agency of the United Nations responsible for international public health.

Medical Term	Definition
X-Ray	High-energy radiation with waves shorter than those of visible light. X-ray is used in low doses to make images that help to diagnose diseases and in high doses to treat cancer.

Brain Tumor Type	Definition
Adenoma	A benign tumor that arises in or resembles glandular tissue. If an adenoma becomes cancerous, it is called an Adenocarcinoma.
Astrocytes	A star-shaped glial cell of the central nervous system.
Astrocytoma	A tumor that begins in the brain or spinal cord in small, star-shaped cells called astrocytes. The location of the tumor depends on the age of the person. In adults, astrocytoma most often arise in the cerebrum, whereas in children, they may arise in the brain stem, cerebrum, and cerebellum.[8]
Chondrosarcoma	It is a rare, benign tumor that tends to arise at the base of the skull, especially in the area near the pituitary gland. These tumors are generally very slow-growing and may be present for a long time before causing any symptoms. [9]
Choroid Plexus Tumor	These tumors arise from brain tissue called the “choroid plexus.” They commonly invade nearby tissue and spread widely via the cerebrospinal fluid. Most common in children. [8]
Cysts	Cysts located in the brain are not truly “brain tumors” because they do not arise from the brain tissue itself. Although they tend to be benign (noncancerous), they are sometimes found in parts of the brain that control vital functions.[8]
Diffuse Intrinsic Pontine Glioma (DIPG)	Highly-aggressive and difficult-to-treat brain tumor found at the base of the brain. They are glial tumors, meaning they arise from the brain's glial tissue – tissue made up of cells that help support and protect the brain's neurons.

Brain Tumor Type	Definition
Diffuse Midline Glioma	Primary central nervous system (CNS) tumors. This means they begin in the brain or spinal cord. Diffuse midline glioma is a rare subtype of glial tumors.
Ependymoma	A type of brain tumor that derives from the glial cells that line the cavities within the brain's ventricles. Because cerebrospinal fluid normally flows through these ventricles, blockage due to an ependymoma can cause buildup of fluid, pressure on the brain, and swelling of tissues.
Epithelioid Glioblastoma	Epithelioid glioblastoma is a rare aggressive variant of glioblastoma multiforme (GBM). Clinically, epithelioid GBMs are characterized by aggressive features, such as metastases and cerebrospinal fluid dissemination, and an extremely poor prognosis.
Ganglioglioma	A type of brain tumor that most commonly occurs in the temporal lobe of the cerebral hemispheres, the third ventricle, and less commonly in the spine. These tumors arise in the ganglia cells.[9]
Germ Cell Tumor	Also known as germinoma, embryonal carcinoma, endodermal sinus tumor, or teratoma. Tumor arising in the pineal or supra-sellar regions, above the pituitary gland. This type of tumor is most often diagnosed around the time of puberty and is more likely to affect boys than girls .
Glioblastoma Multiforme (GBM)	A fast-growing type of astrocytoma that forms from glial (supportive) tissue of the brain and spinal cord and has cells that look very different from normal cells. Glioblastoma multiforme usually occurs in adults and affects the brain more often than the spinal cord. Also called GBM, glioblastoma, and grade IV astrocytoma.[7]
Glioma	A brain tumor that begins in a glial, or supportive, cell, in the brain or spinal cord. Malignant gliomas are the most common primary tumors of the central nervous system (the brain and spinal cord). They are often resistant to treatment and carry an unfavorable prognosis.[8]

Brain Tumor Type	Definition
Medulloblastoma	A type of brain tumor that tends to occur in children, arise in the cerebellum (in the lower part of the brain), and spread along the spine. Medulloblastoma is the most common type of primary brain tumor in childhood. Medulloblastomas occasionally metastasize outside the central nervous system.[9]
Meningioma	A common type of slow-growing, usually benign brain tumor that arises from the membranes covering the brain and spinal cord. They tend to occur in people between ages 40 and 60 but can occur at any age. A person may have several meningiomas. Very rarely do meningiomas become malignant. Treatment ranges from observation to surgery.[9]
Neurofibroma	Neurofibromas are tumors of the nerve fibers. The term neurofibromatosis refers to two different genetic diseases characterized by skin abnormalities and nervous system tumors.[9]
Oligoastrocytoma	An oligoastrocytoma is a “mixed glioma” tumor, which contains both abnormal oligodendroglioma and astrocytoma cells. Treatment is typically based on the fastest growing component of the tumor.
Oligodendroglioma	<p>A slow-growing brain tumor that usually occurs in young adults. These tumors are frequently located within the frontal, temporal or parietal lobes and cause seizures in a relatively high percentage of patients.</p> <p>Many oligodendrogliomas contain little specks of calcium (bone) and can easily bleed.[9]</p>
Optic Pathway Glioma	Brain tumors that involve the optic nerve. These tumors may lead to vision and/or hormone problems because of their location near the pituitary gland.
Pineal Tumors	These tumors originate from normal cells in the pineal gland. The pineal gland is located in the center of the brain and is involved in the secretion of specific hormones.

Brain Tumor Type	Definition
Pineoblastoma	A sub-type of a supra-tentorial primitive Neuro-ectodermal brain tumor of the cerebral hemisphere. Symptoms depend on location and proximity to the CSF spaces.[9]
Pituitary Adenoma	A benign tumor of the pituitary, the master gland that controls other glands and influences numerous body functions including growth. Although the tumor itself is not cancerous, it may affect pituitary function, and therefore may need to be removed.
Pleomorphic Xanthoastrocytoma (PXA)	A rare, benign brain tumor that likely arises from astrocytes, cells in the nervous system that make up the supportive network for the brain.
Primitive Neuroectodermal Tumor (PNET)	Tumor arising in the posterior fossa of the brain. However, tumors with the same characteristics can also occur in other areas of the brain. This type of tumor tends to spread to other areas of the brain and spinal cord.[9]

Notes..

End Notes:

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