

The abstract is the basis of all registry functions. It is a tool used to help accurately determine stage and to aid cancer research; therefore, the abstract must be complete, containing all the information needed to provide a concise analysis of the patient's disease from diagnosis to treatment.

To assist registrars in preparing abstracts, NCRA's Education Committee has created a series of informational abstracts. These site-specific abstracts provide an outline to follow when determining what text to include. The outline has a specific sequence designed to maximize efficiency and includes eight sections: Physical Exam/History; X-Rays/Scopes/Scans; Labs; Diagnostic Procedures; Pathology; Primary Site; Histology; and Treatment. A list of relevant resources is located at the end of each informational abstract. The sources of information noted in the various sections below are not inclusive, but they are the most common. You may need to do additional research to complete the abstract.

When using the informational abstract, follow the outline and strive to complete all the sections. Be concise by using phrases, not sentences. Make sure to use text relevant to the disease process and the specific cancer site and to use NAACCR Standard Abbreviations. When the abstract is completed, review thoroughly to ensure accuracy.

### PHYSICAL EXAM/HISTORY

#### Include:

- **Demographics:** Age, sex, race, ethnicity of the patient.
- **Chief Complaint (CC):** Write a brief statement about why the patient sought medical care.
- **History:** Past history or family history of any cancer. Include tobacco (type, frequency, and amount) and/or alcohol (frequency and amount). Note any workplace exposure and/or relevant environmental factors. List any chronic health problems, irritations, or infections. Include history of other cancers, previous chemotherapy or radiation therapy, or other relevant information as deemed appropriate.

- **Genetics:** List any birth defects or other related genetic conditions.

*Example: 54-year-old white male presented to the ER with complaints of acute onset headaches increasing in severity, nausea, vomiting (N/V), memory loss, weakness, and a change in mental status. Patient's spouse observed one episode of seizure-like activity prompting this ER visit. Past medical history (PMH) significant only for hypercholesterolemia. Toxic habits: tobacco, EtOH, street drugs – all negative.*

**Where to Find Information:** H&P, consultations, nursing notes, physician progress notes, admission notes, discharge summary.

## X-RAYS/SCOPES/SCANS

### Include:

- **Imaging tests:** Date, name, and a brief summary of test results. Most commonly used imaging is contrast-enhanced Gadolinium MRI and Computer Tomography (CT).

*Example: 10/20/2018: CT-Head w/o contrast: Examination reveals 1.8cm right-sided hypodense mass. Evidence of edema causing mid-line shift to left, compression of right lateral and third ventricles. Recommend Gadolinium MRI for further evaluation.*

*Example: 10/22/18: MRI w/Gadolinium – Brain: Heterogeneously ring-enhancing mass noted - region of right frontal lobe. The mass measures 2.0cm with surrounding severe vasogenic edema, midline shift and compression of ventricles. Mass has irregular borders and evidence of central necrosis.*

**Where to Find Information:** This information might appear in the H&P or scans included in the chart.

## LABS

### Include:

- List all tests and dates:
- Immunohistochemical (IHC) and molecular genetic studies are often performed to assist with diagnosis, prognosis, or to predict therapeutic response.
- Common ancillary molecular testing in neuro-oncology includes testing for 1p and 19q co-deletion (LOH-loss of heterozygosity).
- Methylguanine-DNA methyltransferase (MGMT) promoter methylation studies
- p53 expression

- Copy number alterations in epidermal growth factor (EGFR) and phosphatase and tensin homolog (PTEN) (CAP CNS Protocol Brain/ Spinal Cord background documentation, ancillary studies).

*Example: Part C: Right Frontal Lobe Subtotal Resection: Glioblastoma multiforme (GBM), WHO Grade IV; 3% of tumor necrosis; 95% of tumor cellularity. IHC: MGMT 20%; PTEN retained (2+).*

## DIAGNOSTIC PROCEDURES

### Include:

- For any of these diagnostic procedures—procedures that detect the cancer, but do not remove it—make sure to include the date, name of procedure, and brief description of findings.

- **Biopsy:** Most often performed at the time of surgical resection. Rarely Stereotactic CT or MRI guided biopsy may be performed without surgical resection in patients considered surgically unresectable or not considered a good surgical candidate.

*Example: 10/20/2018: (performed during surgery): Biopsy of the abnormal tissue submitted to pathology. Frozen section diagnosis. Dx - GBM.*

## PATHOLOGY

### Include:

- Date and a brief summary of findings of all pathological reports. List in chronological (i.e. most recent to first).
- Extent (extension) of the primary tumor (usually found in the microscopic description of the pathology report).
- Cancer cell type
- Grade of the tumor (WHO Grade is not equivalent to tumor grade)
- Laterality
- Size of tumor (not specimen size)
- Specific lobe of the brain
- Evidence of further spread (often found in the microscopic description of the pathology report).
- **Margins:** Note extent of involvement of surgical margins.

*Example: 10/23/18 S18-2205: RT Frontal Lobe Subtotal Resection: GBM, WHO Grade IV; 3% of tumor necrosis; 95% of tumor cellularity. Infiltrating astrocytoma shows a small irregularly shaped angular and hyperchromatic nuclei associated with mitotic figures, endothelial proliferation and necrosis. IHC: MGMT 20%; PTEN retained (2+).*

## PRIMARY SITE

### Include:

- The primary site where the cancer started. If the exact location within the brain is not apparent, document as Brain NOS (C71.9).

*Example: Brain – Right Frontal Lobe (C71.1)*

**Where to Find Information:** Usually found in the surgical report and/or diagnostic reports (imaging or biopsy).

## HISTOLOGY

### Include:

- The exact cell type of the cancer.

*Example: Glioblastoma, (epithelioid, IDH wild-type or NOS) M-9440-3*

## TREATMENT

### Include:

- **Surgery:** Type, date, and any relevant statement to describe important details. (This is the definitive surgery that removes the cancer).
- **Most Commonly Performed Surgery:** Subtotal Resection of tumor, mass, or lesion in the brain and refers to removal of visibly abnormal tissue as seen on imaging or intraoperatively. It is completed to a degree that is consistent with preservation of functional neurologic tissue.

*Example: 10/25/18: Dr. T.E. Best – Subtotal Resection of Right Frontal Lobe Mass. Operative Findings: Large cystic mass noted in right frontal lobe, just below the cortex in white matter, just anterior to trigone of the ventricle. Biopsy of abnormal tissue sent to pathology and returned on frozen as GBM. All visible tumor was removed.*

- **Novocure® Optune treatment (NovoTTF-100A System)** – Code to Other (per SEERx)

**Do Not Record** Stereotactic Radiosurgery (SRS), Gamma Knife, Cyberknife, or Linac Radiosurgery as surgical tumor destruction. Each of these modalities are coded in radiation treatment fields.

- **Radiation:** Beginning and ending of treatment, type of radiation, to what part of body it was given, dosage and reaction to treatment, if noted. Record any boost dosages, date, and to where it was administered.

Radiation may be used alone or in combination with surgery and/or chemotherapy. Radiation treatment options often include external beam (EBRT) using 3D conformal or Intensity Modulated Radiation Therapy (IMRT) or stereotactic radiosurgery (SRS) also described as stereotactic radiotherapy (SRT). These are most often

identified as Gamma Knife, Cyberknife, or linear accelerator (LINAC).

*Example: 12/7/18-1/11/19: Dr. M. Curie: 6000cGy to whole brain at 200cGy IMRT in 30fx over 35days.*

*Phase 1: primary tumor volume 12 (brain), draining LNs 00 (no treatment), treatment modality 02 (external beam, photons), Planning technique 05 (IMRT).*

- **Chemotherapy:** Include beginning and end dates of chemotherapy, names of drugs, and route of administration, if available. Note any response to treatment.

Systemic is the administration of a chemotherapy drug into the circulatory system so that the entire body is affected. Note any new drugs, why the drug was changed, and when the new drug was started.

*Example: 10/25/18 Dr. B. Gentile: Temodar (temozolomide) with concurrent EBRT. Continue Temodar post-RT for one year.*

- **Clinical Trials:** The name and number of the clinical trial and the date patient was enrolled. Include other details of the patient's experience in the trial.

Note: May include patients who have not yet been treated.

*Example: 12/75/2018: Patient enrolled in NCT03213002 – Ph 1/2 Oral Capecitabine and Temozolomide (CAPTEM) for newly diagnosed GBM.*

- **Other:** Any other treatment that does not fit into one of the categories above.

## RESOURCES

**Abbreviations: Use NAACCR Recommended Abbreviations for Abstractors (Appendix G)**

<http://datadictionary.naacccr.org/default.aspx?c=17&Version=22>

**College of American Pathology (CAP)**

<https://www.cap.org/protocols-and-guidelines/cancer-reporting-tools/cancer-protocol-templates>

**Evidence-Based Treatment by Stage Guidelines**

[http://www.nccn.org/professionals/physician\\_gls/f\\_guidelines.asp](http://www.nccn.org/professionals/physician_gls/f_guidelines.asp)

The NCCN Guidelines are most frequently used for treatment and are also used for information on diagnostic workup.

**Labs/Tests–NCI: Understanding Lab Tests/Test Values**

<http://www.cancer.gov/cancertopics/factsheet/detection/laboratory-tests>

**Solid Tumor Rules**

<https://seer.cancer.gov/tools/solidtumor/>

**NCI Physician's Data Query (PDQ)**

<http://www.cancer.gov/cancertopics/pdq>

**SEER RX Antineoplastic Drugs Database**

<http://seer.cancer.gov/tools/seerrx/>

**Site-Specific Surgery Codes: STORE Manual Appendix A**

[https://www.facs.org/media/vssjur3j/store\\_manual\\_2022.pdf](https://www.facs.org/media/vssjur3j/store_manual_2022.pdf)

**Treatment**

[www.cancer.gov/types/brain/hp/adult-brain-treatment-pdq#section\\_233](http://www.cancer.gov/types/brain/hp/adult-brain-treatment-pdq#section_233)

**WHO Classification of Tumors of the CNS**

<https://publications.iarc.fr/Book-And-Report-Series/Who-Classification-Of-Tumours>

**General Information – American Brain Tumor Association**

<http://abta.org>