**Supplementary Data**

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| **Features** | **Definition** |
| Patient ID | Unique identifier for a patient within a study. |
| Sample ID | Unique identifier for a biological sample taken from the patient |
| Diagnosis Age | Age of the patient at the time of diagnosis. |
| American Joint Committee on Cancer Metastasis Stage Code | Code to represent the defined absence or presence of distant spread or metastases (M) to locations via vascular channels or lymphatics beyond the regional lymph nodes, using criteria established by the American Joint Committee on Cancer (AJCC). |
| Neoplasm Disease Lymph Node Stage American Joint Committee on Cancer Code | Lymph node stage (N), indicating regional lymph node involvement. |
| Neoplasm Disease Stage American Joint Committee on Cancer Code | Overall cancer stage, combining tumor size, lymph node involvement, and metastasis. |
| American Joint Committee on Cancer Publication Version Type | Version of the AJCC staging manual used (e.g., 8th Edition).The version or edition of the American Joint Committee on Cancer Cancer Staging Handbooks, a publication by the group formed for the purpose of developing a system of clinical staging for cancer that is acceptable to the American medical profession and is compatible with other accepted classifications. |
| American Joint Committee on Cancer | Code of pathological T (primary tumor) to define the size or contiguous extension of the primary tumor (T), using staging criteria from the American Joint Committee on Cancer (AJCC). |
| BRAF Mutation | Indicates the presence of mutations in the BRAF gene, often relevant in certain cancers. |
| Days to Sample Collection | Time (in days) from diagnosis to sample collection. |
| Last Alive Less Initial Pathologic Diagnosis Date Calculated Day Value | Duration from diagnosis to last known follow-up or death. |
| Disease-Free (Months) | Number of months the patient has remained disease-free since initial diagnosis |
| Disease-Free Status | disease free status since initial treatment |
| Ethnicity Category | Patient's self-reported ethnicity. |
| Extrathyroidal Extension | Indicates if thyroid cancer has spread beyond the thyroid gland. |
| Form Completion Date | Date when clinical or pathology form was completed. |
| Fraction Genome Altered | Percentage of the genome affected by somatic mutations. |
| Neoplasm Histologic Type Name | Description of the histological subtype of the tumor (e.g., adenocarcinoma). |
| Tumor Other Histologic Subtype | Additional classification details about the tumor’s histology. |
| Neoadjuvant Therapy Type Administered Prior to Resection Text | Type of pre-surgery treatment administered. |
| Prior Cancer Diagnosis Occurrence | Indicates if the patient had a prior cancer diagnosis. |
| ICD-10 Classification | Diagnostic code according to the International Classification of Diseases, 10th Revision. |
| ICD-O-3 Histology Code | ICD for Oncology (3rd Edition) code for histology. |
| ICD-O-3 Site Code | ICD for Oncology code for the primary site of cancer. |
| Informed Consent Verified | Confirms that informed consent for the study was verified. |
| Year Cancer Initial Diagnosis | Year when the initial cancer diagnosis was made. |
| Is FFPE | Indicates if the sample was preserved using Formalin-Fixed, Paraffin-Embedded (FFPE) technique. |
| Primary Tumor Laterality | Specifies the side of the body affected by the primary tumor. |
| Primary Lymph Node Presentation Assessment Indicator | the yes/no/unknown indicator whether a lymph node assessment was performed at the primary presentation of disease. |
| Positive Finding Lymph Node H&E Microscopy Count | Numeric value to signify the count of positive lymph nodes identified through hematoxylin and eosin (H&E) staining light microscopy. |
| Lymph Node(s) Examined Number | Total number of lymph nodes examined. |
| Metastatic Neoplasm Confirmed Diagnosis Method Name | Method used to confirm metastasis diagnosis. |
| Metastatic Neoplasm Confirmed Diagnosis Method Text | Textual description of the method used for diagnosis. |
| Mutation Count | Total count of somatic mutations in the sample. |
| New Neoplasm Event Post Initial Therapy Indicator | Indicates if a new neoplasm was detected post-treatment. |
| Oct Embedded | Specifies if the sample is embedded in Optimal Cutting Temperature compound (used for frozen sections). |
| Oncotree Code | Hierarchical cancer type code from OncoTree, used for precise tumor classification. |
| Overall Survival (Months) | Duration from diagnosis to death or last follow-up, in months. |
| Overall Survival Status | The patient's survival status; is the patient alive or deceased. |
| Tissue Prospective Collection Indicator | Indicates if the tissue was prospectively collected. |
| Race Category | Patient's self-reported race. |
| Adjuvant Postoperative Radiotherapy | Indicates if adjuvant (post-surgical) radiotherapy was initiated. |
| Surgical Margin Resection Status | Describes the status of surgical margins post-resection (e.g., clear, involved). |
| Tissue Retrospective Collection Indicator | Indicates if the tissue was retrospectively collected. |
| Number of Samples Per Patient | Total number of samples collected from the patient. |
| Sample Initial Weight | Initial weight of the collected sample. |
| Sample Type | Type of sample collected (e.g., blood, tissue biopsy). |
| Sample Type ID | Unique identifier for sample type. |
| Sex | Biological sex of the patient. |
| Somatic Status | Status indicating if the mutation is somatic or germline. |
| Tissue Source Site | Anatomical site of the tissue source. |
| TMB (Nonsynonymous) | Tumor Mutational Burden, representing the number of nonsynonymous mutations per megabase. |
| Person Neoplasm Status | Status of the neoplasm (e.g., active, in remission). |
| Vial Number | Identifier for the specific vial containing the sample. |
| Morphology | Description of tumor cell structure and form. |
| Prior Malignancy | Indicates if the patient had any prior malignancy. |
| Prior Treatment | Specifies previous treatments administered. |
| Project State | Current status of the project (e.g., active, completed). |
| Patient’s Vital Status | Current status indicating if the patient is alive or deceased. |
| Year of Death | Year when the patient passed away. |
| Year of Diagnosis | Year when the cancer was initially diagnosed. |