# Oncology Data Gathering Documentation

## 1. Research Documentation

### Sources Used

* PubMed - https://pubmed.ncbi.nlm.nih.gov/
* American Cancer Society (ACS) - https://www.cancer.org/
* Mayo Clinic - https://www.mayoclinic.org/
* Cleveland Clinic - https://my.clevelandclinic.org/
* National Comprehensive Cancer Network (NCCN) - https://www.nccn.org/
* National Cancer Institute (NCI) - https://www.cancer.gov/
* Surveillance, Epidemiology, and End Results Program (SEER) - https://seer.cancer.gov/
* World Health Organization (WHO) - https://www.who.int/
* Johns Hopkins Medicine - https://www.hopkinsmedicine.org/
* Mouth Cancer Foundation - https://www.mouthcancerfoundation.org/
* ClinicalTrials.gov - https://clinicaltrials.gov/
* Medscape - https://emedicine.medscape.com/

### Methodology

* **Search Terms**:
  + “Acoustic neuroma diagnosis and treatment guidelines 2020+”
  + “Adenocarcinoma epidemiology and risk factors”
  + “Osteosarcoma treatment advancements 2020+”
  + “Liposarcoma management and prognosis”
  + “Chondrosarcoma genetic alterations and treatment”
  + “Lip cancer epidemiology and treatment 2020+”
  + “Mouth cancer risk factors and staging guidelines”
  + “Laryngeal cancer diagnosis and management 2020+”
  + “Appendix cancer treatment and prognosis”
  + “Cardiac tumors epidemiology and surgical outcomes”
  + “Vaginal cancer HPV-related risk factors 2020+”
  + “Vulvar cancer staging and treatment guidelines”
  + “Cancer care access Nigeria 2020+”
* **Filters Applied**:
  + Publication years: 2020–2025
  + Article types: Clinical guidelines, systematic reviews, meta-analyses, clinical trials, epidemiological studies
  + Language: English
* **Validation**: Data was cross-referenced across peer-reviewed journals, clinical guidelines, and reputable medical organizations (e.g., NCI, ACS, WHO, SEER). Nigeria-specific data was sourced from regional studies, WHO reports, and local health ministry publications where available.

### Challenges Faced

* Limited Nigeria-specific data for rare cancers (e.g., acoustic neuroma, chondrosarcoma, cardiac tumors, appendix cancer, vaginal cancer, vulvar cancer), with most epidemiological data derived from hospital-based studies rather than population-based registries.
* Scarcity of recent, high-quality studies on rare cancers (e.g., cardiac tumors, mesenchymal chondrosarcoma, vaginal melanoma, vulvar sarcoma) due to their low incidence, complicating treatment guideline development.
* Variability in diagnostic and staging criteria across global regions, particularly for head and neck cancers (e.g., lip, mouth, laryngeal) and CNS tumors (e.g., acoustic neuroma).
* Limited access to full-text articles for some rare cancers without institutional subscriptions.
* Underreporting of cancer incidence in Nigeria due to inadequate diagnostic infrastructure (e.g., limited MRI/CT/PET availability, lack of specialized pathology services).
* High cost of advanced diagnostics (e.g., PET scans, colposcopy) and treatments (e.g., chemotherapy, radiation, HIPEC for appendix cancer, targeted therapies) in low-resource settings like Nigeria, limiting outcome data.
* Lack of standardized screening protocols for vaginal and vulvar cancers in low-resource settings, affecting early detection rates.
* Hospital-based data dominates over population-based studies in Nigeria, reducing generalizability of epidemiological findings.

### Date Accessed

* June 15–July 5, 2025

### Description of Contents

* Comprehensive guidelines for diagnosis, staging, and treatment of cancers, including acoustic neuroma, adenocarcinoma, osteosarcoma, liposarcoma, chondrosarcoma, lip cancer, mouth cancer, laryngeal cancer, appendix cancer, cardiac tumors, vaginal cancer, and vulvar cancer.
* Recent advancements in cancer treatments, including surgical techniques (e.g., limb-sparing surgery, laryngectomy, vulvectomy), chemotherapy regimens, radiation therapy (e.g., stereotactic radiosurgery, external beam radiation), targeted therapies, immunotherapy, and palliative care.
* Epidemiological data on cancer incidence, prevalence, mortality, and demographic patterns (e.g., age, sex, geographic variation) globally and in Nigeria where available.
* Causes, risk factors, and symptoms, emphasizing genetic (e.g., NF2 mutations in acoustic neuroma, TP53 mutations in mouth cancer, IDH1/IDH2 in chondrosarcoma) and environmental/lifestyle factors (e.g., tobacco, alcohol, sun exposure, HPV infection, betel quid chewing).
* Prevention strategies, including lifestyle modifications (e.g., tobacco/alcohol cessation, healthy diet, HPV vaccination), genetic counseling for high-risk individuals, and screening recommendations (e.g., pelvic exams, Pap tests).
* Management options, including surgical excision, chemotherapy, radiation, and supportive care for symptom management.
* Nigeria-specific considerations, such as limited access to advanced diagnostics (e.g., MRI, PET scans, colposcopy, biopsy facilities), high treatment costs, and delays in diagnosis due to resource constraints.
* Doctor-patient conversation templates for each cancer type, designed for patient education and informed decision-making.
* Differential diagnoses, covering benign, precancerous, malignant, and infectious/inflammatory conditions mimicking these cancers.

## 2. Disease List & Individual Contributions

### Diseases Covered

* **Carcinomas (Epithelial Cell Cancers)**:
  + Adenocarcinoma (lung, prostate, pancreatic, esophageal, colorectal, breast, gastric)
  + Basal cell carcinoma, squamous cell carcinoma, transitional cell carcinoma
  + Breast cancers (ductal carcinoma in situ, invasive ductal/lobular carcinoma, medullary, mucinous, papillary)
  + Hepatocellular carcinoma, cholangiocarcinoma, lung cancer (non-small cell, small cell)
  + Cervical, endometrial, ovarian, prostate, bladder, renal cell, thyroid, Merkel cell, nasopharyngeal, oral cavity, laryngeal, anal, testicular, adrenocortical carcinomas
  + Lip cancer (predominantly squamous cell carcinoma, 90%; basal cell carcinoma, melanoma less common; primarily lower lip)
  + Mouth cancer (mainly squamous cell carcinoma; affects lips, gums, tongue, cheeks, palate)
  + Vaginal cancer (predominantly squamous cell carcinoma; adenocarcinoma, melanoma, sarcoma less common)
  + Vulvar cancer (mainly squamous cell carcinoma, 90%; melanoma, basal cell carcinoma, Bartholin gland adenocarcinoma, sarcoma, verrucous carcinoma rare)
* **Sarcomas (Connective Tissue Cancers)**:
  + Osteosarcoma, Ewing sarcoma, chondrosarcoma (conventional, dedifferentiated, clear cell, mesenchymal, juxtacortical)
  + Liposarcoma, leiomyosarcoma, rhabdomyosarcoma, synovial sarcoma, malignant fibrous histiocytoma
  + Angiosarcoma, Kaposi sarcoma, fibrosarcoma, dermatofibrosarcoma protuberans
* **Hematologic Cancers**:
  + Acute lymphoblastic leukemia (ALL), acute myeloid leukemia (AML), chronic lymphocytic leukemia (CLL), chronic myelogenous leukemia (CML), hairy cell leukemia
  + Hodgkin lymphoma, non-Hodgkin lymphoma, multiple myeloma, myelodysplastic syndromes, myeloproliferative neoplasms, cutaneous T-cell lymphoma, primary CNS lymphoma
* **Central Nervous System (CNS) Tumors**:
  + Acoustic neuroma (vestibular schwannoma), astrocytomas (including glioblastoma), medulloblastoma, oligodendroglioma, ependymoma, craniopharyngioma, atypical teratoid/rhabdoid tumor, germ cell tumors, optic nerve glioma, meningioma
* **Germ Cell Tumors**:
  + Seminoma, dysgerminoma, teratoma, yolk sac tumor, choriocarcinoma
* **Blastomas**:
  + Neuroblastoma, retinoblastoma, nephroblastoma (Wilms tumor), hepatoblastoma, medulloblastoma
* **Neuroendocrine Tumors**:
  + Carcinoid tumors (GI tract, lung), pancreatic neuroendocrine tumors, small cell lung cancer
  + Appendix cancer (carcinoid tumors, mucinous adenocarcinomas, colonic-type adenocarcinomas, goblet cell carcinomas, signet-ring cell adenocarcinomas)
* **Cardiac Tumors**:
  + Primary (benign: myxoma, papillary fibroelastoma, lipoma, hemangioma, rhabdomyoma, teratoma, fibroma, hamartoma; malignant: angiosarcoma, rhabdomyosarcoma, malignant fibrous histiocytoma, lymphoma, mesothelioma, paraganglioma)
  + Metastatic (from lung, breast, melanoma, lymphoma, leukemia, renal cell carcinoma, esophageal cancer)
* **Other Conditions**:
  + Multiple endocrine neoplasia syndromes, Langerhans cell histiocytosis, male breast cancer, metastatic cancer, midline tract carcinoma with NUT gene changes

### Individual Contributions

* **Charlham El**: Researched carcinomas (e.g., adenocarcinoma) and CNS tumors (e.g., acoustic neuroma), focusing on epidemiology, risk factors, and Nigeria-specific diagnostic challenges.

Compiled data on sarcomas (e.g., osteosarcoma, liposarcoma, chondrosarcoma) and drafted treatment guidelines, emphasizing surgical and adjuvant therapies in low-resource settings.

Researched head and neck cancers (lip, mouth, laryngeal), focusing on epidemiology, risk factors, and Nigeria-specific diagnostic and treatment barriers.

Compiled data on appendix cancer and cardiac tumors, emphasizing diagnostic challenges and surgical treatment options in low-resource settings.

* Focused on gynecologic cancers (vaginal, vulvar), detailing HPV-related risk factors, staging, and preventive strategies like vaccination.

## 3. Submission Details

* **Deadline**: July 1, 2025
* **Requirements**: Submit as a Word document (.docx) to the designated academic or clinical supervisor, formatted for both patient and clinician comprehension.
* **File Format and Size**: Word document (.docx), approximately 5.0 MB