# Hematology & Oncology\_TeamX\_Report.docx

## 1. Research Documentation

### Sources Used

* PubMed - https://pubmed.ncbi.nlm.nih.gov/
* American Society of Hematology (ASH) - https://www.hematology.org/
* American Cancer Society - https://www.cancer.org/
* Cleveland Clinic - https://my.clevelandclinic.org/
* Mayo Clinic - https://www.mayoclinic.org/
* National Comprehensive Cancer Network (NCCN) - https://www.nccn.org/
* Cancer Center -
* ClinicalTrials.gov - https://clinicaltrials.gov/
* Leukemia and Lymphoma Society (LLS) - https://www.lls.org/

### Methodology

* **Search Terms**:
  + “Hematologic malignancies treatment 2020+”
  + “Non-malignant blood disorders diagnosis guidelines”
  + “Anaplastic large cell lymphoma management meta-analysis”
  + “Blastic plasmacytoid dendritic cell neoplasm epidemiology”
  + “Hemophilia A gene therapy advancements”
* **Filters Applied**:
  + Publication years: 2019–2025
  + Article types: Meta-analyses, Systematic Reviews, Guidelines
  + Language: English
* **Validation**: Data was sourced from peer-reviewed publications, clinical guidelines, and reputable medical organizations, cross-checked across multiple databases for accuracy.

### Challenges Faced

* Limited updated guidelines on rare hematologic conditions (e.g., blastic plasmacytoid dendritic cell neoplasm, Erdheim-Chester disease).
* Some data restricted to high-income regions (e.g., prevalence of lymphomas in North America vs. sub-Saharan Africa).
* Difficulty accessing full-text articles without institutional access.
* Variability in diagnostic criteria and availability of advanced testing (e.g., cytogenetics, immunohistochemistry) affects incidence estimates.
* Rare conditions like extranodal NK/T-cell lymphoma are underdiagnosed in low-resource settings like Nigeria, complicating epidemiological clarity.
* Hospital-based studies dominate over population-based data, limiting generalizability.
* Regional differences in recognition and reporting of hematologic disorders exist, with fewer data from low- and middle-income countries like Nigeria.

### Date Accessed

* May 20–June 9, 2025

### Description of Contents

* Guidelines for diagnosis and treatment of blood disorders and hematologic malignancies.
* Recent advancements in targeted therapies (e.g., brentuximab vedotin, tagraxofusp), immunotherapy (e.g., CAR-T cell therapy), and gene therapy for hemophilia and sickle cell disease.
* Epidemiological data on blood cancers and non-malignant disorders.
* Causes, symptoms, and signs of hematologic conditions.
* Prevention strategies, including lifestyle modifications and genetic counseling.
* Management options, including chemotherapy, stem cell transplantation, and supportive care.
* Regional considerations, including challenges in Nigeria (e.g., delayed diagnosis due to limited access to cytogenetic testing, high cost of biologics like brentuximab vedotin).

## 2. Disease List & Individual Contributions

### Diseases Covered

* **Blood Cancers (Hematologic Malignancies)**:
  + **Leukemias**: Acute lymphoblastic leukemia (ALL), acute myeloid leukemia (AML), acute promyelocytic leukemia (APL), acute erythroid leukemia, acute megakaryoblastic leukemia, chronic lymphocytic leukemia (CLL), chronic myeloid leukemia (CML), chronic myelomonocytic leukemia (CMML), hairy cell leukemia (HCL), large granular lymphocytic leukemia (LGLL), mast cell leukemia (MCL), natural killer cell leukemia.
  + **Lymphomas**: Hodgkin lymphoma, nodular lymphocyte-predominant Hodgkin lymphoma (NLPHL), non-Hodgkin lymphoma (NHL), Burkitt lymphoma, diffuse large B-cell lymphoma (DLBCL), follicular lymphoma, mantle cell lymphoma, marginal zone lymphomas (MALT lymphoma, nodal and splenic marginal zone lymphoma), peripheral T-cell lymphoma (PTCL), skin lymphoma (cutaneous lymphoma), grey zone lymphoma, high-grade B-cell lymphoma (double-hit and triple-hit lymphomas), central nervous system (CNS) lymphoma, anaplastic large cell lymphoma, extranodal NK/T-cell lymphoma (nasal type).
  + **Plasma Cell Disorders**: Multiple myeloma, Waldenström macroglobulinemia, monoclonal gammopathy of undetermined significance (MGUS), plasmacytoma.
  + **Myelodysplastic and Myeloproliferative Disorders**: Myelodysplastic syndromes (MDS), blastic plasmacytoid dendritic cell neoplasm, myeloproliferative neoplasms (MPN) including polycythemia vera (PV), primary myelofibrosis (MF).
* **Non-Malignant Blood Disorders**:
  + Anemia (aplastic anemia, iron deficiency anemia, anemia of chronic disease), hemophilia (A, B, C), thrombocytopenia (including immune thrombocytopenic purpura, ITP), sickle cell disease, hemoglobinopathies, hereditary hemolytic anemias, autoimmune hemolytic anemia, Fanconi anemia, cryoglobulinemia, antiphospholipid syndrome, hypercoagulable disorders, hemochromatosis, amyloidosis, Castleman disease, hypereosinophilic syndrome, large granular lymphocyte disorders, thrombophilia, von Willebrand disease, hereditary hemorrhagic telangiectasia, X-linked agammaglobulinemia, Erdheim-Chester disease, histiocytic sarcoma.
* **Other Related Conditions**:
  + Bleeding disorders, benign hematologic conditions, blood clotting disorders, hamartoma, Factor V Leiden, bone marrow failure, iron metabolic disorders, thalassemias, paroxysmal nocturnal hemoglobinuria.

### Individual Contributions

* **[Placeholder Name : CHARLHAM EL]**: Researched hematologic malignancies (leukemias, lymphomas) and compiled epidemiological data, focusing on regional prevalence and diagnostic challenges in Nigeria.Compiled data on non-malignant blood disorders (e.g., hemophilia, thalassemias) and drafted treatment guidelines, addressing access to therapies in low-resource settings.

## 3. Submission Details

* **Deadline**: June 9, 2025
* **Requirements**: Submit as a Word Document (.docx) to the designated academic or clinical supervisor, formatted for patient standard comprehension.

## File Format and Size

* Format: Word Document (.docx)
* Size: 3.8 MB