

WHO Classification (DRAFT – UNOFFICIAL -- Revised June 23, 2007)

[Brackets: subtypes, not listed in the short list classification]

MYELOPROLIFERATIVE NEOPLASMS

- Chronic Myelogenous Leukemia, *BCR-ABL1+*
- Chronic Neutrophilic Leukemia
- Polycythemia Vera
- Primary Myelofibrosis
- Essential Thrombocythemia
- Chronic Eosinophilic Leukemia, Not otherwise categorized
- Mast Cell Disease
 - Cutaneous Mastocytosis
 - Systemic Mastocytosis
 - Mast Cell Sarcoma
 - Extracutaneous Mastocytoma
- Myeloproliferative Neoplasms, unclassifiable

MYELOID NEOPLASMS ASSOCIATED WITH EOSINOPHILIA WITH ABNORMALITIES OF *PDGFRA*, *PDGFRB* OR *FGFR1*

- Myeloid Neoplasms associated with *PDGFRA* rearrangement
- Myeloid Neoplasms associated with *PDGFRB* rearrangement
- Stem cell leukemia/lymphoma syndrome with 8p11 (*FGFR1*) abnormalities
[see also below]

MYELODYSPLASTIC/MYELOPROLIFERATIVE NEOPLASMS

- Chronic Myelomonocytic Leukemia, not otherwise categorized
- Atypical Chronic Myeloid Leukemia, not otherwise categorized
- Juvenile Myelomonocytic Leukemia
- Myelodysplastic/Myeloproliferative Neoplasms, Unclassifiable

MYELODYSPLASTIC SYNDROMES

- Refractory Anemia with Unilineage Dysplasia
- Refractory Anemia with Ring Sideroblasts
- Refractory Cytopenia with Multilineage Dysplasia
- Refractory Anemia with Excess Blasts
- Myelodysplastic syndrome associated with isolated del (5q)
- Myelodysplastic syndrome, Unclassifiable
- Myelodysplastic syndromes in Children
 - Refractory cytopenia of childhood
 - Refractory anemia with excess blasts in children

ACUTE MYELOID LEUKEMIA

Acute Myeloid Leukemia with Recurrent Genetic Abnormalities

- AML with t(8;21)(q22;q22), *RUNX1-RUNX1T1 (CBFA/ETO)*
- AML with inv(16)(p13q22) or t(16;16)(p13;q22), *CBFB-MYH11*
- APL with t(15;17)(q22;q11-12), *PML-RARA*

AML with t(9;11)(p22;q23), *MLLT3-MLL* and other balanced translocations of 11q23 (*MLL*)
AML with t(1;22)(p13;q13), *RBM15-MKL1*
AML with t(9;22)(q34;q11), *BCR-ABL1*
AML with normal cytogenetics and cytoplasmic/mutated NPM
AML with mutation of *CEBPA*

Acute myeloid leukemia with myelodysplasia-related features

AML following a myelodysplastic syndrome
AML with multilineage dysplasia
AML with MDS-related cytogenetic abnormalities

Therapy-related acute myeloid leukemia, myelodysplastic syndromes and myelodysplastic/myeloproliferative neoplasms

Acute myeloid leukemia, not otherwise categorized

AML, minimally differentiated
AML without maturation
AML with maturation
Acute myelomonocytic leukemia
Acute monoblastic and monocytic leukemia
Acute erythroid/myeloid and pure erythroid leukemia
Acute megakaryoblastic leukemia
Acute basophilic leukemia
Acute panmyelosis with myelofibrosis

Myeloid Sarcoma

Myeloid proliferations related to Down syndrome

Transient abnormal myelopoiesis
Other myeloid leukemias of Down syndrome

OTHER MYELOID RELATED PRECURSOR NEOPLASMS

Precursor plasmacytoid dendritic cell neoplasm
Stem cell leukemia/lymphoma syndrome with 8p11 (*FGFR1*) abnormalities

ACUTE LEUKEMIAS OF AMBIGUOUS LINEAGE

Acute leukemias of ambiguous lineage

PRECURSOR LYMPHOID NEOPLASMS

B-cell lymphoblastic leukaemia/lymphoma
T-cell lymphoblastic leukaemia/lymphoma
NK-cell lymphoblastic leukaemia/lymphoma

MATURE B-CELL NEOPLASMS

Chronic lymphocytic leukemia /Small lymphocytic lymphoma
B-cell prolymphocytic leukaemia
Splenic marginal zone lymphoma
Hairy cell leukemia

Lymphoplasmacytic lymphoma
 Alpha heavy chain disease
 Gamma heavy chain disease
 Mu heavy chain disease
 Plasma cell myeloma
 [Heavy and light Chain deposition diseases]
 Solitary plasmacytoma of bone
 Extraosseous plasmacytoma
 Extranodal marginal zone B-cell lymphoma of mucosa-associated lymphoid tissue (MALT type)
 Nodal marginal zone B-cell lymphoma
 [Pediatric MZL]
 Follicular lymphoma
 [Pediatric follicular lymphoma]
 Primary cutaneous follicle centre lymphoma
 Mantle cell lymphoma
 Diffuse large B-cell lymphoma, unspecified
 Primary mediastinal (thymic) large B-cell lymphoma
 T cell/histiocyte rich large B-cell lymphoma
 Intravascular large B-cell lymphoma
 Primary DLBCL of the CNS
 Primary cutaneous DLBCL, leg type
 ALK positive DLBCL
 Plasmablastic lymphoma
 DLBCL associated with chronic inflammation
 Primary effusion lymphoma
 Lymphoma associated with HHV8-associated multicentric Castleman Disease
 Burkitt Lymphoma
 B-cell lymphoma with features intermediate between DLBCL and BL
 B-cell lymphoma with features intermediate between DLBCL and cHL

B-CELL LYMPHOPROLIFERATIVE DISORDERS OF VARIABLE MALIGNANT POTENTIAL

Lymphomatoid granulomatosis
 B-cell post-transplant lymphoproliferative disorders
 Other/non-transplant-associated iatrogenic immunodeficiency associated B-cell LPD
 Age-related EBV+ LPD

MATURE T-CELL AND NK-CELL NEOPLASMS

T-cell prolymphocytic leukemia
 T-cell large granular lymphocytic leukemia
 Indolent large granular NK-cell lymphoproliferative disorder
 Aggressive NK cell leukemia
 Fulminant EBV+ T-cell LPD of childhood
 Adult T-cell leukemia/lymphoma
 Extranodal NK/T cell lymphoma
 Enteropathy-associated T-cell lymphoma
 Hepatosplenic T-cell lymphoma
 Subcutaneous panniculitis-like T-cell lymphoma

Mycosis Fungoides
Sezary Syndrome
Primary cutaneous aggressive epidermotropic CD8 positive cytotoxic T-cell lymphoma
Cutaneous gamma-delta T-cell lymphoma
Primary cutaneous small/medium CD4 positive T-cell lymphoma (provisional)
Angioimmunoblastic T-cell lymphoma
Peripheral T-cell lymphoma, unspecified
Anaplastic large cell lymphoma (ALCL), ALK positive
Anaplastic large cell lymphoma (ALCL), ALK negative

T-CELL LPD OF VARIABLE MALIGNANT POTENTIAL

Cutaneous CD30+ LPD
 Lymphomatoid papulosis
 Primary cutaneous anaplastic large-cell lymphoma
T-cell PTL

HODGKIN LYMPHOMA

Nodular lymphocyte predominant Hodgkin lymphoma
Classical Hodgkin lymphoma
 Nodular sclerosis classical Hodgkin lymphoma
 Lymphocyte-rich classical Hodgkin lymphoma
 Mixed cellularity classical Hodgkin lymphoma
 Lymphocyte depleted classical Hodgkin lymphoma

HISTIOCYTIC AND DENDRITIC CELL NEOPLASMS

Histiocytic sarcoma
Langerhans cell histiocytosis/sarcoma
Interdigitating dendritic cell tumor/sarcoma
Follicular dendritic cell tumor/sarcoma
Dendritic-cell tumor/sarcoma, not otherwise specified
Juvenile xanthogranuloma (disseminated)