

LEUKAEMIA DIAGNOSTIC TABLE- WHO HAEMATOLYMPHOID TUMOURS (5TH ED.)

Myeloid proliferations and neoplasms	Myeloid precursor lesions	• Clonal haematopoiesis of indeterminate potential (CHIP) • VEXAS syndrome • Clonal cytopenia of undetermined significance • Further diagnosis cannot be made based on the information available
	Myeloproliferative Neoplasms	• Chronic myeloid leukaemia • Chronic neutrophilic leukaemia • Chronic eosinophilic leukaemia • Polycythaemia vera • Essential thrombocythaemia • Primary myelofibrosis, prefibrotic • Primary myelofibrosis, fibrotic • Juvenile myelomonocytic leukaemia • Myeloproliferative neoplasm NOS (unclassifiable) • Further diagnosis cannot be made based on the information available
	Mastocytosis	• Cutaneous mastocytosis • Indolent systemic mastocytosis • Bone marrow mastocytosis • Smouldering systemic mastocytosis • Aggressive systemic mastocytosis • Systemic mastocytosis with an associated haematological neoplasm • Mast cell leukaemia • Mast cell sarcoma • Further diagnosis cannot be made based on the information available
	Myelodysplastic neoplasms (MDS) with defining genetic abnormalities	• Myelodysplastic neoplasm with low blasts and 5q deletion • Myelodysplastic neoplasm with low blasts and <i>SF3B1</i> mutation • Myelodysplastic neoplasm with biallelic <i>TP53</i> inactivation • Further diagnosis cannot be made based on the information available
	Myelodysplastic neoplasms (MDS) defined morphologically	• Myelodysplastic neoplasm with low blasts and single lineage dysplasia • Myelodysplastic neoplasm with low blasts and multilineage dysplasia • Myelodysplastic neoplasm, hypoplastic • Myelodysplastic neoplasm with increased blasts-1 • Myelodysplastic neoplasm with increased blasts-2 • Myelodysplastic neoplasm with increased blasts and fibrosis • Further diagnosis cannot be made based on the information available
	Myelodysplastic neoplasms (MDS) of childhood	• Childhood myelodysplastic neoplasm with low blasts-NOS • Childhood myelodysplastic neoplasm with low blasts, hypocellular • Childhood myelodysplastic neoplasm with increased blasts • Further diagnosis cannot be made based on the information available
	Myelodysplastic/myeloproliferative neoplasms	• Myelodysplastic chronic myelomonocytic leukaemia • Myeloproliferative chronic myelomonocytic leukaemia • Myelodysplastic/myeloproliferative neoplasm with neutrophilia (previously atypical chronic myeloid leukaemia) • Myelodysplastic/myeloproliferative neoplasm with <i>SF3B1</i> mutation and thrombocytosis

		• Myelodysplastic/myeloproliferative neoplasm, NOS (unclassifiable) • Further diagnosis cannot be made based on the information available
	AML with defining genetic abnormalities	• Acute promyelocytic leukaemia with <i>PML::RARA</i> fusion • Acute promyelocytic leukaemia with a variant <i>RARA</i> translocation • AML with <i>RUNX1::RUNX1T1</i> fusion • AML with <i>CBFB::MYH11</i> • AML with <i>DEK::NUP214</i> • AML with <i>RBM15::MRTFA</i> fusion • AML with <i>BCR::ABL1</i> fusion • AML with <i>KMT2A</i> rearrangement • AML with <i>MECOM</i> rearrangement • AML with <i>NUP98</i> rearrangement • AML with <i>NPM1</i> mutation • AML with <i>CEBPA</i> mutation • AML, with myelodysplasia-related • AML with <i>CBFA2T3::GLIS2</i> fusion • AML with <i>KAT6A::CREBBP</i> fusion • AML with <i>FUS::ERG</i> fusion • AML with <i>MNX1::ETV6</i> fusion • AML with <i>NPM1::MLF1</i> fusion • Further diagnosis cannot be made based on the information available
	Acute myeloid leukaemia defined by differentiation	• AML with minimal differentiation • AML without maturation • AML with maturation • Acute basophilic leukaemia • Acute myelomonocytic leukaemia • Acute monocytic leukaemia • Acute erythroid leukaemia • Acute megakaryoblastic leukaemia • Further diagnosis cannot be made based on the information available
	Myeloid sarcoma	• Myeloid sarcoma • Further diagnosis cannot be made based on the information available
	Myeloid neoplasms and proliferations associated with antecedent or predisposing conditions	• Myelodysplastic neoplasm post cytotoxic therapy • Myelodysplastic/myeloproliferative neoplasm post cytotoxic therapy • Acute myeloid leukaemia post cytotoxic therapy • Myeloid neoplasms with germline predisposition • Myeloid proliferations associated with Down syndrome • Myeloid leukaemia associated with Down syndrome • Transient abnormal myelopoiesis • Further diagnosis cannot be made based on the information available
	Myeloid/lymphoid neoplasms with eosinophilia and tyrosine kinase gene fusion	• Myeloid/lymphoid neoplasm with <i>PDGFRA</i> rearrangement • Myeloid/lymphoid neoplasm with <i>PDGFRB</i> rearrangement • Myeloid/lymphoid neoplasm with <i>FGFR1</i> rearrangement • Myeloid/lymphoid neoplasm with <i>JAK2</i> rearrangement • Myeloid/lymphoid neoplasm with <i>FLT3</i> rearrangement • Myeloid/lymphoid neoplasm with <i>ETV6::ABL1</i> fusion • Myeloid/lymphoid neoplasms with other tyrosine kinase fusion genes • Further diagnosis cannot be made based on the information available
	Acute leukaemias of mixed or ambiguous lineage with defining	• Mixed-phenotype acute leukaemia with <i>BCR::ABL1</i> fusion • Mixed-phenotype acute leukaemia with <i>KMT2A</i> rearrangement

	genetic abnormalities	- Mixed-phenotype acute leukaemia with <i>ZNF384</i> rearrangement - Acute leukaemia of ambiguous lineage with <i>BCL11B</i> rearrangement - Further diagnosis cannot be made based on the information available
	Acute leukaemias of ambiguous lineage defined immunophenotypically	- Mixed-phenotype acute leukaemia, B/myeloid - Mixed-phenotype acute leukaemia, T/myeloid - Mixed-phenotype acute leukaemia, B/T - Mixed-phenotype acute leukaemia, B/T/myeloid - Mixed-phenotype acute leukaemia, T/megakaryocytic - Acute leukaemias of ambiguous lineage, NOS - Acute undifferentiated leukaemia - Further diagnosis cannot be made based on the information available

	Tumour-like lesions with B-cell predominance	- Reactive B-cell-rich lymphoid proliferations that can mimic lymphoma - IgG4-related disease - Unicentric Castleman disease - Idiopathic multicentric Castleman disease - Kaposi sarcoma–associated herpesvirus / human herpesvirus 8 (KSHV/HHV8)-associated multicentric Castleman disease (KSHV/HHV8-MCD) - Further diagnosis cannot be made based on the information available
	Precursor B-cell lymphoid neoplasms	- B lymphoblastic leukaemia/lymphoma - B-lymphoblastic leukaemia/lymphoma with high hyperdiploidy - B-lymphoblastic leukaemia/lymphoma with hypodiploidy, near-haploid - B-lymphoblastic leukaemia/lymphoma with hypodiploidy, low hypodiploidy - B-lymphoblastic leukaemia/lymphoma with hypodiploidy, high hypodiploidy - B-lymphoblastic leukaemia/lymphoma with iAMP21 - B Lymphoblastic leukaemia/lymphoma with <i>BCR::ABL1</i> fusion - B lymphoblastic leukaemia/lymphoma, <i>BCR::ABL1</i>-like features - B lymphoblastic leukaemia/lymphoma with <i>KMT2A</i> rearrangement - B lymphoblastic leukaemia/lymphoma with <i>ETV6::RUNX1</i> fusion - B lymphoblastic leukaemia/lymphoma with <i>ETV6::RUNX1</i> - like features - B lymphoblastic leukaemia/lymphoma with <i>TCF3::PBX1</i> fusion - B-lymphoblastic leukaemia/lymphoma with <i>IGH::IL3</i> fusion - B-lymphoblastic leukaemia/lymphoma with <i>TCF3::HLF</i> fusion - B-lymphoblastic leukaemia/lymphoma with other defined genetic alterations- <i>DUX4</i> rearrangement - B-lymphoblastic leukaemia/lymphoma with other defined genetic alterations- <i>MEF2D</i> rearrangement - B-lymphoblastic leukaemia/lymphoma with other defined genetic alterations- <i>ZNF384</i> rearrangement - B-lymphoblastic leukaemia/lymphoma with other defined genetic alterations- <i>PAX5</i>alt - B-lymphoblastic leukaemia/lymphoma with other defined genetic alterations- <i>PAX5</i> p.P80R - B-lymphoblastic leukaemia/lymphoma with other defined genetic alterations- <i>NUTM1</i> rearrangement - B-lymphoblastic leukaemia/lymphoma with other defined genetic alterations- <i>MYC</i> rearrangement - B-lymphoblastic leukaemia/lymphoma, NOS

Lymphoid B-cell

		Further diagnosis cannot be made based on the information available
	Mature B-cell: preneoplastic and neoplastic small lymphocytic proliferations	- Monoclonal B-cell lymphocytosis, CLL/SLL type - Monoclonal B-cell lymphocytosis, non-CLL/SLL type - Chronic lymphocytic leukaemia / small lymphocytic lymphoma - Further diagnosis cannot be made based on the information available
	Mature B-cell: Splenic B-cell lymphomas and leukaemias	- Hairy cell leukaemia - Splenic marginal zone lymphoma - Splenic diffuse red pulp small B-cell lymphoma - Splenic B-cell lymphoma/leukaemia with prominent nucleoli (previously hairy cell variant) - Further diagnosis cannot be made based on the information available
	Mature B-cell: Lymphoplasmacytic lymphoma	- IgM-type lymphoplasmacytic lymphoma / Waldenström macroglobulinaemia - Non-IgM-type lymphoplasmacytic lymphoma / Waldenström macroglobulinaemia - Further diagnosis cannot be made based on the information available
	Mature B-cell: Marginal zone lymphoma	- Extranodal marginal zone lymphoma of MALT-Immunoproliferative small intestinal disease (alpha heavy chain disease) - Primary cutaneous marginal zone lymphoma - Nodal marginal zone lymphoma - Paediatric nodal marginal zone lymphoma - Further diagnosis cannot be made based on the information available
	Mature B-cell: Follicular lymphoma	- In situ follicular B-cell neoplasm - Follicular lymphoma (FL)- Classic - Follicular lymphoma (FL) with unusual cytological features - Follicular lymphoma (FL) with a predominantly diffuse growth pattern - Follicular lymphoma (FL)- Follicular large B-cell lymphoma - Paediatric-type follicular lymphoma - Duodenal-type follicular lymphoma - Further diagnosis cannot be made based on the information available
	Mature B-cell: Cutaneous follicle centre lymphoma	- Primary cutaneous follicle centre lymphoma - Further diagnosis cannot be made based on the information available
	Mature B-cell: Mantle cell lymphoma	- In situ mantle cell neoplasm - Cyclin D1–positive mantle cell lymphoma - Cyclin D1–negative mantle cell lymphoma - Leukaemic non-nodal mantle cell lymphoma - Further diagnosis cannot be made based on the information available
	Mature B-cell: Transformations of indolent B-cell lymphomas	- Transformations of indolent B-cell lymphomas - Further diagnosis cannot be made based on the information available

	Mature B-cell: Large B-cell lymphomas	• Diffuse large B-cell lymphoma, NOS- centroblastic subtype • Diffuse large B-cell lymphoma, NOS- immunoblastic subtype • Diffuse large B-cell lymphoma, NOS- anaplastic subtype • Diffuse large B-cell lymphoma, NOS- germinal-centre B-cell subtype • Diffuse large B-cell lymphoma, NOS- activated B-cell subtype • Diffuse large B-cell lymphoma, NOS- with <i>MYC</i> and <i>BCL6</i> rearrangements • T cell/histiocyte-rich large B-cell lymphoma, de novo • T cell/histiocyte-rich large B-cell lymphoma progressed from nodular lymphocyte-predominant Hodgkin lymphoma • DLBCL/HGBCL-<i>MYC/BL2</i> without <i>BCL6</i> rearrangement • DLBCL/HGBCL-<i>MYC/BL2</i> with <i>BCL6</i> rearrangement • DLBCL/HGBCL-<i>MYC/BL2</i> (with or without <i>BCL6</i> rearrangement) with TdT expression • ALK-positive large B-cell lymphoma • Large B-cell lymphoma with <i>IRF4</i> rearrangement • High-grade B-cell lymphoma with 11q aberration • Lymphomatoid granulomatosis, NOS- grade 1 • Lymphomatoid granulomatosis, NOS- grade 2 • Lymphomatoid granulomatosis, NOS- grade 3 • EBV-positive diffuse large B-cell lymphoma • Diffuse large B-cell lymphoma associated with chronic inflammation • Fibrin-associated large B-cell lymphoma • Fluid overload–associated large B-cell lymphoma • Plasmablastic lymphoma • Primary large B-cell lymphoma of immune-privileged sites- CNS • Primary large B-cell lymphoma of immune-privileged sites- vitreoretina • Primary large B-cell lymphoma of immune-privileged sites- testis • Primary cutaneous diffuse large B-cell lymphoma, leg type • Classic Intravascular large B-cell lymphoma • Cutaneous Intravascular large B-cell lymphoma • Haemophagocytic Intravascular large B-cell lymphoma • Primary mediastinal large B-cell lymphoma • Mediastinal grey zone lymphoma • High-grade B-cell lymphoma, NOS • High-grade B-cell lymphoma, NOS, with <i>MYC</i> and <i>BCL6</i> rearrangements • Further diagnosis cannot be made based on the information available
	Mature B-cell Burkitt lymphoma	• EBV-associated Burkitt lymphoma • EBV-negative Burkitt lymphoma • Further diagnosis cannot be made based on the information available
	Mature B-cell KSHV/HHV8- associated B-cell	• Primary effusion lymphoma • Extracavitary primary effusion lymphoma • KSHV/HHV8-positive diffuse large B-cell lymphoma

	lymphoid proliferations and lymphomas	• KSHV/HHV8-positive germinotropic lymphoproliferative disorder • Further diagnosis cannot be made based on the information available
	Mature B-cell Lymphoid proliferations and lymphomas associated with immune deficiency and dysregulation	• Hyperplasias arising in immune deficiency/dysregulation- • Polymorphic lymphoproliferative disorders arising in immune deficiency/dysregulation • EBV-positive mucocutaneous ulcer • Lymphomas arising in immune deficiency/dysregulation • Inborn error of immunity-associated lymphoid proliferations and lymphomas • Further diagnosis cannot be made based on the information available
	Hodgkin lymphoma	• Classic Hodgkin lymphoma • Classic Hodgkin lymphoma, nodular sclerosis • Classic Hodgkin lymphoma, mixed cellularity • Classic Hodgkin lymphoma, lymphocyte-rich • Classic Hodgkin lymphoma, lymphocyte-depleted • Nodular lymphocyte predominant Hodgkin lymphoma • Further diagnosis cannot be made based on the information available
	Plasma cell neoplasms and other diseases with paraproteins	• Cold agglutinin disease • IgM monoclonal gammopathy of undetermined significance • IgG monoclonal gammopathy of undetermined significance • IgA monoclonal gammopathy of undetermined significance • IgD monoclonal gammopathy of undetermined significance • IgE monoclonal gammopathy of undetermined significance • Light chain monoclonal gammopathy of undetermined significance • Monoclonal gammopathy of renal significance • Systemic AL amyloidosis • Localized AL amyloidosis • Heavy chain AL amyloidosis • Monoclonal immunoglobulin light chain deposition disease • Monoclonal immunoglobulin light and heavy chain deposition disease • Monoclonal immunoglobulin heavy chain deposition disease • Mu heavy chain disease • Gamma heavy chain disease • Alpha heavy chain disease • Solitary plasmacytoma of bone • Extramedullary plasmacytoma • Plasma cell myeloma • Smouldering (asymptomatic) plasma cell myeloma • Non-secretory plasma cell myeloma • Plasma cell leukaemia • Plasma cell neoplasms with associated paraneoplastic syndrome • Further diagnosis cannot be made based on the information available

Lymphoid T-cell

	Tumour-like lesions with T-cell predominance	• Kikuchi–Fujimoto disease • Autoimmune lymphoproliferative syndrome (ALPS) • Indolent T-lymphoblastic proliferation • Further diagnosis cannot be made based on the information available
	Precursor T-cell neoplasms	• T-lymphoblastic leukaemia/lymphoma (T-ALL/LBL), NOS • Early T-precursor lymphoblastic leukaemia/lymphoma • Further diagnosis cannot be made based on the information available
	Mature T-cell and NK-cell neoplasms	• T-prolymphocytic leukaemia • T-large granular lymphocytic leukaemia • NK-large granular lymphocytic leukaemia • Adult T-cell leukaemia/lymphoma • Smouldering adult T-cell leukaemia/lymphoma • Chronic adult T-cell leukaemia/lymphoma • Lymphoma adult T-cell leukaemia/lymphoma • Acute adult T-cell leukaemia/lymphoma • Sézary syndrome • Aggressive NK-cell leukaemia • Further diagnosis cannot be made based on the information available
	Mature T and NK-cell Primary cutaneous T-cell neoplasms	• Primary cutaneous CD4-positive small or medium T-cell lymphoproliferative disorder • Primary cutaneous acral CD8-positive T-cell lymphoproliferative disorder • Mycosis fungoides • Folliculotropic mycosis fungoides • Pagetoid reticulosis • Granulomatous slack skin disease • Primary cutaneous CD30-positive T-cell lymphoproliferative disorder: lymphomatoid papulosis • Primary mucosal CD30-positive T-cell lymphoproliferative disorder • Lymphomatoid papulosis subtypes A, B, C, D, E • Primary cutaneous CD30-positive T-cell lymphoproliferative disorder: primary cutaneous anaplastic large cell lymphoma • Subcutaneous panniculitis-like T-cell lymphoma • Primary cutaneous gamma-delta T-cell lymphoma • Primary cutaneous CD8-positive aggressive epidermotropic cytotoxic T-cell lymphoma • Primary cutaneous T-cell lymphoma, NOS • Further diagnosis cannot be made based on the information available
	Mature T and NK-cell Intestinal lymphoid proliferations	• Indolent T-cell lymphoma of the gastrointestinal tract • Indolent NK-cell lymphoproliferative disorder of the gastrointestinal tract • Enteropathy-associated T-cell lymphoma • Monomorphic epitheliotropic intestinal T-cell lymphoma • Intestinal T-cell lymphoma, NOS • Further diagnosis cannot be made based on the information available
	Mature T and NK-cell Hepatosplenic T-cell lymphoma	• Hepatosplenic T-cell lymphoma • Further diagnosis cannot be made based on the information available
	Mature T and NK-cell Anaplastic large cell lymphoma	• ALK-positive anaplastic large cell lymphoma • ALK-negative anaplastic large cell lymphoma • Breast implant–associated anaplastic large cell lymphoma • Further diagnosis cannot be made based on the information available
	Mature T -cell Nodal T follicular	• Nodal T follicular helper cell lymphoma, angioimmunoblastic type • Nodal T follicular helper cell lymphoma, follicular type • Nodal T follicular helper cell lymphoma, NOS

	helper cell lymphoma	Further diagnosis cannot be made based on the information available
	Mature T-cell Other peripheral T-cell lymphomas	- Peripheral T-cell lymphoma, NOS - Further diagnosis cannot be made based on the information available
	Mature T- and NK-cell EBV-positive lymphoma	- EBV-positive nodal T- and NK-cell lymphoma - Nasal Extranodal NK/T-cell lymphoma - Non-nasal Extranodal NK/T-cell lymphoma - Further diagnosis cannot be made based on the information available
	Mature T and NK-cell EBV-positive lymphoid proliferations and lymphomas of childhood	- Severe mosquito bite allergy - Hydroa vacciniforme lymphoproliferative disorder - Systemic chronic active EBV-positive disease - Systemic EBV-positive T-cell lymphoma of childhood - Further diagnosis cannot be made based on the information available

Histiocytic and Dendritic Cell Neoplasms	Plasmacytoid dendritic cell neoplasms	- Mature plasmacytoid dendritic cell proliferation associated with myeloid neoplasm - Blastic plasmacytoid dendritic cell neoplasm - Further diagnosis cannot be made based on the information available
	Langerhans cell and other dendritic cell neoplasms	- Langerhans cell histiocytosis - Primary Langerhans cell sarcoma - Secondary Langerhans cell sarcoma - Indeterminate dendritic cell tumour - Interdigitating dendritic cell sarcoma - Further diagnosis cannot be made based on the information available
	Histiocyte/macrophage neoplasms	- Juvenile xanthogranuloma - Erdheim–Chester disease - Rosai–Dorfman disease - ALK-positive histiocytosis - Histiocytic sarcoma - Further diagnosis cannot be made based on the information available

Stroma-derived neoplasms of lymphoid tissues	Mesenchymal dendritic cell neoplasms	- Follicular dendritic cell sarcoma - EBV-positive inflammatory follicular dendritic cell sarcoma - Fibroblastic reticular cell tumour - Further diagnosis cannot be made based on the information available
	Myofibroblastic tumours	- Intranodal palisaded myofibroblastoma - Further diagnosis cannot be made based on the information available
	Spleen-specific vascular-stromal tumours	- Littoral cell angioma - Splenic hamartoma - Sclerosing angiomatoid nodular transformation of spleen - Further diagnosis cannot be made based on the information available

Genetic tumour syndromes associated with haemato-lymphoid tumours	Genetic tumour syndromes associated with haematolymphoid tumours	• Fanconi anaemia • Bloom syndrome • Ataxia–telangiectasia • RASopathies • Further diagnosis cannot be made based on the information available
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