Scroll right to see the database codes for Disease status and Response	Diagnosis it refers to				
Disease status or response to treatment	***AML***	***ALL***	***CML***	***CLL***	***MDS or MD/MPN or acute leukaemia secondary to previous treatment of another disease***
Chronic phase			None of the features of accelerated phase or blast crisis		
Accelerated phase			**At least one** of the following: • blasts 10-19% of WBCs in peripheral blood and/or nucleated bone marrow cells; • peripheral blood basophils >=20%; • persistent thrombocytopenia (<100 x 10^9)/L unrelated to therapy; • persistent thrombocytosis (>1000 x 10^9/L) unresponsive to standard therapy; • increasing spleen size and increasing WBC count unresponsive to standard therapy; • cytogenetic evidence of clonal evolution		
Blast crisis			**At least one** of the following: • blasts >=20% of peripheral blood white cells or nucleated bone marrow cells; • extramedullary blast proliferation; • large foci or clusters of blasts in the bone marrow biopsy		
Progressive relapsing (malignant)					
Primary progressive					
Secondary progressive					
Relapsing/remitting					
Primary induction failure / Primary refractory	Despite treatment patient has never achieved a complete remission				Treatment with intent to achieve remission was given, but no **Complete remission** was achieved
Stable disease (no change, no response)				Patients who have not achieved a CR or a PR, and who have not exhibited progression, will be considered to have no change	
Stringent Complete remission (sCR)					
Complete remission or response (CR)	For at least 4 weeks: • < 5% blasts in the bone marrow • No blasts with Auer rods (applies to AML only) • Normal maturation of all cellular components in the bone marrow • No extramedullary disease (e.g., CNS, soft tissue disease) • Transfusion independent		If unqualified, **Complete remission** is considered to be **Haematological complete remission**	**All** of the following: • absence of clonal lymphocytes in the peripheral blood • absence of significant lymphadenopathy (e.g. lymph nodes greater than 1,5 cm in diameter) • absence of hepatomegaly or splenomegaly • absence of constitutional symptoms	Response must persist for a minimum duration of four weeks: Bone marrow with ≤5 percent myeloblasts with normal maturation of all cell lines. Dysplastic changes may be seen, but should be considered within the normal range of dysplastic changes. Peripheral blood demonstrates hemoglobin ≥11 g/dL, platelets ≥100 x 109/L, neutrophils ≥1 x 109/L, and no circulating blasts.
Haematological CR	For at least 4 weeks: • < 5% blasts in the bone marrow • No blasts with Auer rods (applies to AML only) • Normal maturation of all cellular components in the bone marrow • No extramedullary disease (e.g., CNS, soft tissue disease) • Transfusion independent		**All** of the following: • WBC<10X10^9/L; • Hemoglobin>11.0gm/dL; • platelet count<500X10^9/L; • normal differential (<1%precursor cells); no palpable splenomegaly; • no extramedullary disease;		
Cytogenetic CR	Disappearance of cytogenetic anomalies if previously detected		**All** of the following: • Haematological remission • 0% positive (t(9;22) metaphases		
Molecular CR	Disappearance of molecular anomalies if previously detected		**All** of the following: • Haematological remission • Cytogenetic remission (if cytogenetics done) • Cells with the BCR/ABL fusion protein are not detectable in the peripheral blood and /or the bone marrow, by an assay with a sensitivity to allow detection of one t(9;22) positive cell in 10^5 to 10^6 RT-PCR cells. The result should be confirmed by two consecutive tests done at least 4 weeks apart.		
CR confirmed					
CR unconfirmed					

Disease status or response to treatment		*AML*	*ALL*	*CML*	*CLL*	*MDS or MD/MPN or acute leukaemia secondary to previous treatment of another disease*
First partial remission (PR1)						
Very good PR (VGPR)						
Partial remission or response Note: • The specification " (>1, never CR, Solid tum only)" only applies to disease status in Solid Tumours • For any other diagnosis, the disease status of PR can have been preceded by a relapsed CR					**At leat one** of the following: • A decrease in the number of blood lymphocytes by below 50% or more from the value prior to therapy; • A decrease in lymph node size by below 50% or more in the sum products of up to 6 lymph nodes, or in one lymph node diameter if only a single lymph node was present prior to therapy, without increase in any lymph node, and no new enlarged lymph node; • A decrease in the size of the liver and/or spleen by 50% or more as defined by CT scan, palpation, or ultrasound. • The blood count should show one of the following results if abnormal prior to therapy: . Polymorphonuclear leukocytes at 1.500/µL or more or 50% improvement over baseline without G-CSF support;	
Minimal respponse / Poor partial remission or response						
Response / improvement (no CR)						
Relapse		> 5% blasts in the bone marrow after a period of **Complete remission**.		If unqualified, **Relapse** is considered to be **Haematological relapse**		At least one **Complete remission** was achieved with a previous treatment but the patient has relapsed since then
Haematological Relapse		> 5% blasts in the bone marrow after a period of **Complete remission**.		Cytological and/or histological evidence of the disease in the marrow-blood and/or in extramedullary sites (CNS, testis, skin, etc.) in a patient considered to have been in **Haematological complete remission**		
Cytogenetic Relapse		Reappearance of chromosome anomalies detected earlier in the history of the disease. **Cytogenetic relapse** can only be determined if **Cytogenetic remission** has been previously demonstrated.		Presence of one or more t(9:22) positive metaphases with standard cytogenetics or hypermetaphase FISH and/or >2% cells with the BCR/ABL fusion gene by interphase FISH, in a patient lacking any evidence of the disease at haematological/clinical level.		

Disease status or response to treatment		*AML*	*ALL*	*CML*	*CLL*	*MDS or MD/MPN or acute leukaemia secondary to previous treatment of another disease*
Molecular Relapse		Reappearance of molecular anomalies detected earlier in the history of the disease. **Molecular relapse** can only be determined if **Molecular remission** has been previously demonstrated.		Presence of one or more t(9:22) positive metaphases with standard cytogenetics or hypermetaphase FISH and/or >2% cells with the BCR/ABL fusion gene by interphase FISH, in a patient lacking any evidence of the disease at haematological/clinical level.		
untreated relapse						
sensitive (responding) relapse						
resistant relapse						
Progression					**At least one** of the following: • Progression of lymphadenopathy, defined as the occurrence of at least one of the following events . ..Appearance of any new lesion such as enlarged lymph nodes (> 1.5 cm), splenomegaly, hepatomegaly or other organ infiltrates. . ..An increase by 50% or more in greatest determined diameter of any previous site. . ..An increase of 50% or more in the sum of the product of diameters of multiple nodes. • An increase in the liver or spleen size by 50% or more or the de novo appearance of hepatomegaly or splenomegaly. • An increase in the number of blood lymphocytes by 50% or more with at least 5,000 B-cells per µL. • Transformation to a more aggressive histology (e.g. Richter's syndrome).	More blasts in bone marrow than before treatment or leukaemic transformation
[progression] resistant to chemotherapy					Patient received another treatment following progression but no remission of any type was achieved	
[progression] sensitive to chemotherapy					Patient received another treatment after progression and achieved some kind of remission	
Untreated relapse (from a previous CR) or progression from a previous (PR)						
Chemorefractory relapse or progression, including primary refractory disease						
Never in CR		use only if more precise evaluation is				
Not in CR		use only if more precise evaluation is				
Untreated/Upfront		Patient has never been treated for this disease			Patient has never been treated for this disease	Treatment is supportive or there has not been any treatment at all (blood transfusions are not considered as treatment in this context)
Adjuvant						
Not evaluable		if pat. died within 100 days after trans				
unknown		if data cannot be obtained				

Scroll right to see the database codes for Disease status and Response				
Disease status or response to treatment	***Myelofibrosis (MPN)***	***Lymphoma***	***Plasma cell disorders; mainly Multiple myeloma***	***Solid Tumors***
Chronic phase				
Accelerated phase				
Blast crisis				
Progressive relapsing (malignant)				
Primary progressive				
Secondary progressive				
Relapsing/remitting				
Primary induction failure / Primary refractory	Doest not present any of the features of any type of remission after treatment			The patient has not achieved any of the types of response described below until now with any type of therapy
Stable disease (no change, no response)		Less than 50% reduction in the disease burden	Does not meet the criteria for **Complete remission**, **Very good partial remission**, **Partial remission** or **Progressive disease**	Less than 50% reduction in the disease
Stringent Complete remission (sCR)			**All** of the following: • **Complete remission** as defined below • normal free light chain ratio • absence of clonal cells in bone marrow by immunohistochemistry or immunofluorescence	
Complete remission or response (CR)	**All** of the following: • Resolution of disease –related symptoms and signs including palpable hepatosplenomegaly. • Hb >11gr/dl, Platelet >100 x109/L and neutrophils >1 x 109/L. • normal bone marrow histology, and fibrosis grade no higher than 1	Complete absence of disease, no signs or symptoms of the original disease	**All** of the following: • Absence of detectable monoclonal immunoglobulin in serum and monoclonal light chains in the urine by immunofixation. Detectable monoclonal immunoglobulin, even if impossible to quantify, is not a **Complete remission**. • <5% of plasma cells in bone marrow aspirate • Disappearance of any soft tissue plasmacytomas. • No increase in size or number of lytic lesions if assessed (radiographic studies are not mandatory)	The patient has achieved complete absence of disease prior to HSCT and the HSCT is not part of any adjuvant therapy
Haematological CR				
Cytogenetic CR				
Molecular CR				
CR confirmed		**At least one** of the following: • no abnormalities detected in any scan • a negative PET scan if there is previous history of a positive PET scan, even in the presence of abnormalities in the CT scan		No abnormalities detected in scan
CR unconfirmed		Scan abnormalities of unknown significance in the absence of a negative PET scan		Persistent scan abnormalities of unknown significance

Disease status or response to treatment	*Myelofibrosis (MPN)*	*Lymphoma*	*Plasma cell disorders; mainly Multiple myeloma*	*Solid Tumors*
First partial remission (PR1)				Patient achieved a reduction in disease of 50% or more for the first time ever, but did not achieve **Complete remission**
Very good PR (VGPR)			**At least one** of the following: • Serum and urine M-protein detectable by immunofixation but not on electrophoresis • >90% reduction in serum M-protein plus urine M-protein level <0.1 g/ per 24h Plus no increase in size or number of lytic lesions if assessed (radiographic studies are not mandatory)	Disease burden is reduced by at least 90%
Partial remission or response Note: • The specification " (>1, never CR, Solid tum only)" only applies to disease status in Solid Tumours • For any other diagnosis, the disease status of PR can have been preceded by a relapsed CR		Reduction in the disease of 50% or more	**All** of the following: • >50% reduction in serum M-protein plus reduction in 24h urinary M-protein by >90% or to <0.2g/ per 24h In the absence of measurable serum and urine M-protein, the following criteria applies: . .. A decrease in the difference between involved and uninvolved free light chain (FLC) of more than 50% … If the FLC assay cannot be measured, the following criteria applies: …….- >50% reduction in plasma cells provided baseline bone marrow plasma cell percentage was >30% • A reduction of more than 50% in the size of soft tissue plasmacytomas if present at pre-treatment. • No increase in size or number of lytic lesions if assessed (radiographic studies are not mandatory)	Second or subsequent time a reduction in the disease of 50% or more is achieved in patients who have never achieved a **Complete remission**
Minimal respponse / Poor partial remission or response				
Response / improvement (no CR)	**At least one** of the following in the absence of progression: • Haemoglobin increase of 2 g/dL or transfusion independence • Spleen reduction of 50% • 100% increase in platelet count and an absolute platelet count of at least 50.000 x 10^9/L • 100% increase in ANC and an ANC of at least 0.5 x			
Relapse	Loss of **Complete remission**		**At least one** of the following for patients whose last disease status was **Complete remission**: - Reappearance of measurable monoclonal immunoglobulin in serum or urine by immunofixation or electrophoresis - Appearance of more than 5% plasma cells in the bone marrow - Increase of old/appearance of new osteolytic bone lesions on x-ray - Appearance of soft tissue plasmacytoma	Reappearance of disease in patients whose last disease status was **Complete remission**
Haematological Relapse				
Cytogenetic Relapse				

Disease status or response to treatment	*Myelofibrosis (MPN)*	*Lymphoma*	*Plasma cell disorders; mainly Multiple myeloma*	*Solid Tumors*
Molecular Relapse				
untreated relapse				Patient has not been treated for this relapse
sensitive (responding) relapse				Patient achieves a reduction of >50% in the disease burden after treatment for this relapse
resistant relapse				Patient has not achieved a reduction of more than 50% in the disease burden after treatment for this relapse
Progression	**At least one** of the following • progressive splenomegaly • leukemic transformation • an increase of peripheral blood blast percentage of at least 20%		**At least one** of the following: - Increase of 25% or more in measurable monoclonal immunoglobulin in serum or urine (absolute increase must be >0.5g/dL) - Increase of 25% or more in urinary light chains (absolute increase must be >0.2g/ per 24h) ...In the absence of measurable serum and urine M-protein, the following criteria applies: .. - An increase of 25% or more in the difference between involved and uninvolved free light chain (absolute increase must be >0.01g/dL) - An increase of 25% or more in bone marrow plasma cells (absolute % must be >10%) - Increase of old/appearance of new osteolytic bone lesions on x-ray - Appearance of soft tissue plasmacytoma - Development of hypercalcemia (corrected serum calcium >11.5 mg/dL or 2.65 mmol/L) that can be attributed solely to the plasma cell disorder	
[progression] resistant to chemotherapy				
[progression] sensitive to chemotherapy				
Untreated relapse (from a previous CR) or progression from a previous (PR)		Worsening of the disease status in patients in **PR** or re-appearance of the Lymphoma in patients in **CR**, such as: • Occurrence of new sites of the disease • Re-occurence of disease or systemic symptoms (B symptoms) Patient remains untreated after the relapse or progression		
Chemorefractory relapse or progression, including primary refractory disease		Does not present any of the features of any type of remission after treatment		
Never in CR	not possible			
Not in CR	not possible			
Untreated/Upfront	Treatment is supportive or there has not been any treatment at all (blood transfusions are not considered as treatment in this context)	Patient has never been treated for this disease	Patient has never been treated for this disease	Patient has never been treated for this disease and the high dose therapy is part of the overall treatment strategy
Adjuvant				Patient has no residual disease and the HSCT is part of the consolidation treatment; metastatic patients can never be considered as adjuvant.
Not evaluable	plant			
unknown				

Scroll right to see the database codes for Disease status and Response				Data base codes	
Disease status or response to treatment	***Severe Aplastic anaemia (SAA)***	***non Severe Aplastic anaemia (nSAA)***	***Multiple sclerosis***	**Disease status**	**Response**
Chronic phase				1	
Accelerated phase				2	
Blast crisis				3	
Progressive relapsing (malignant)			Continuous disease progression with clear acute disease exacerbation episodes	5	
Primary progressive			Continuous disease progression without distinct acute disease exacerbation episodes	6	
Secondary progressive			Acute disease exacerbations periods where there is disease progression after the acute disease exacerbation	7	
Relapsing/remitting			Acute disease exacerbation periods that resolve completely without worsening of neurologic functions	8	
Primary induction failure / Primary refractory				10	
Stable disease (no change, no response)	Still meeting criteria of severe aplastic anaemia and transfusion dependence	Not meeting criteria of partial or complete response		20	50
Stringent Complete remission (sCR)				28	10
Complete remission or response (CR)	**All** of the following: • haemoglobin normal for age • neutrophils >= 1.5 x 10^9/L • platelets >= 150 x 10^9/L			30	20 (21) (22) (23)
Haematological CR					
Cytogenetic CR					
Molecular CR					
CR confirmed					
CR unconfirmed					

Disease status or response to treatment	*Severe Aplastic anaemia (SAA)*	*non Severe Aplastic anaemia (nSAA)*	*Multiple sclerosis*	Disease status	Response
First partial remission (PR1)				40	
Very good PR (VGPR)				41	35 (36) (37) (38)
Partial remission or response Note: • The specification " (>1, never CR, Solid tum only)" only applies to disease status in Solid Tumours • For any other diagnosis, the disease status of PR can have been preceded by a relapsed CR	**All** of the following • transfusion independent • no longer meeting criteria for severe aplastic anaemia (see MED-AB Manual)	**At least one** of the following: • transfusion independence (if previously required) • doubling or normalization of at least one cell line • increase above baseline* by . 3 g/dl hemoglobin and . $0.5x10^9$/L neutrophils and . $20x10^9$/L platelets		45	30 (31) (32) (33)
Minimal respponse / Poor partial remission or response	**All** of the following • transfusion independent • levels of hemoglobin, neutrophils and platelets still meeting criteria for severe aplastic anaemia (see *MED-AB Manual*)				40
Response / improvement (no CR)				46	44
Relapse				50	60
Haematological Relapse					
Cytogenetic Relapse					

Disease status or response to treatment	*Severe Aplastic anaemia (SAA)*	*non Severe Aplastic anaemia (nSAA)*	*Multiple sclerosis*	Disease status	Response
Molecular Relapse					
untreated relapse					
sensitive (responding) relapse					
resistant relapse					
Progression				60	60
[progression] resistant to chemotherapy					
[progression] sensitive to chemotherapy					
Untreated relapse (from a previous CR) or progression from a previous (PR)				51	
Chemorefractory relapse or progression, including primary refractory disease				61	
Never in CR				65	70
Not in CR				66	
Untreated/Upfront				70	
Adjuvant				75	
Not evaluable				80	80
unknown				99	99