

Classification, List of Causes of Death

Disease groups	Disease subgroups		
1. Graft failure	1.1. Primary non-function		
	1.2. non-specific		
2. Graft rejection	2.1. Acute		
	2.2. Chronic	2.2.1. BOS	
3. Infections	3.1. Bacterial		
	3.2. Fungal		
	3.3. Viral	3.3.1. CMV	
		3.3.2. EBV	
		3.3.3. HSV	
		3.3.4. VZV	
		3.3.5. HBV	
		3.3.6. HCV	
		3.3.7. HIV	
		3.3.8. Other (specify in comment field)	
	3.4. Protozoal		
	3.5. Other infection, specify in comment field		
	3.6. Unknown aetiology		
4. GvHD	4.1. Acute		
	4.2. Chronic	4.2.1. BOS	
5. Veno-occlusive disease			
6. Hemorrhage	6.1. Gastro-intestinal		
	6.2. Ruptures vascular aneurysm		
	6.3. From surgery		
	6.4. Other (specify in comment field)		
7. Malignancy	7.1. De novo	7.1.1. De novo - Lip and oral cavity	
		7.1.2. De novo - Nasal cavity and middleear	
		7.1.3. De novo - Larynx, trachea, lung, mediastinum and pleura	
		7.1.4. De novo – Thymus	
		7.1.5. De novo – Heart	
		7.1.6. De novo - GI tract	7.1.6.1. De novo - Oesophagus
			7.1.6.2. De novo - Stomach

			7.1.6.3. De novo – Small intestine
			7.1.6.4. De novo - Colon
			7.1.6.5. De novo – Rectum
			7.1.6.6. De novo – Anus and anal canal
		7.1.7. De novo - Liver and intrahepatic bile duct	
		7.1.8. De novo – Gallbladder	
		7.1.9. De novo - Other biliary tract	
		7.1.10. De novo – Pancreas	
		7.1.11. De novo – Bone	
		7.1.12. De novo – Skin	7.1.12.1. De novo – Melanoma of skin
			7.1.12.2. De novo – Non-melanoma of skin
		7.1.13. De novo – Mesothelial and soft tissue	
		7.1.14. De novo – Urogenital system	7.1.14.1. De novo – Female genital organs
			7.1.14.1.1. De novo – Cervical
			7.1.14.1.2. De novo – Uterus
			7.1.14.1.3. De novo – Other (specify in comment field)
			7.1.14.2. De novo – Male genital organs
			7.1.14.2.1. De novo – Penis
			7.1.14.2.2. De novo – Prostate
			7.1.14.2.3. De novo – Testicles
			7.1.14.2.4. De novo – Other (specify in comment field)
			7.1.14.3. De novo – Kidney
			7.1.14.4. De novo – Bladder
		7.1.15. De novo – CNS	
		7.1.16. De novo – Eye	
		7.1.17. De novo – Thyroid gland	
		7.1.18. De novo – Lymphoid/haematopoietic tissue	7.1.18.1. De novo – Hodgkin lymphoma
			7.1.18.2. De novo – Non-Hodgkin lymphoma

			7.1.18.3. De novo – Plasma cell neoplasms
			7.1.18.4. De novo – Lymphatic leukemia
			7.1.18.5. De novo – Myeloid leukemia
			7.1.18.6. De novo – Other leukemia (specify in comment field)
			7.1.18.7. De novo – Other type (specify in comment field)
		7.1.19. De novo – Mamma	
	7.2. Relapse	7.2.1. Relapse - Lip and oral cavity	
		7.2.2. Relapse - Nasal cavity and middleear	
		7.2.3. Relapse - Larynx, trachea, lung, mediastinum and pleura	
		7.2.4. Relapse – Thymus	
		7.2.5. Relapse – Heart	
		7.2.6. Relapse - GI tract	7.2.6.1. Relapse - Oesophagus
			7.2.6.2. Relapse - Stomach
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		7.2.9. Relapse - Other biliary tract	
		7.2.10. Relapse – Pancreas	
		7.2.11. Relapse – Bone	
		7.2.12. Relapse – Skin	7.2.12.1. Relapse – Melanoma of skin

			7.2.12.2. Relapse – Non-melanoma of skin
		7.2.13. Relapse – Mesothelial and soft tissue	
		7.2.14. Relapse – Urogenital system	7.2.14.1. Relapse – Female genital organs
			7.2.14.1.1. Relapse – Cervical
			7.2.14.1.2. Relapse – Uterus
			7.2.14.1.3. Relapse – Relapse – Other (sepcify in comment field)
			7.2.14.2. Relapse – Male genital organs
			7.2.14.2.1. Relapse – Penis
			7.2.14.2.2. Relapse – Prostate
			7.2.14.2.3. Relapse – Testicles
			7.2.14.2.4. Relapse – Other (specify in comment field)
			7.2.14.3. Relapse – Kidney
			7.2.14.4. Relapse – Bladder
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			7.2.18.6. Relapse – Other leukemia (specify in comment field)
			7.2.18.7. Relapse – Other type (specify in comment field)
		7.2.19. Relapse – Mamma	
	7.3. Cancer progression of underlying malignancy	7.3.1. Cancer progression - Lip and oral cavity	
		7.3.2. Cancer progression – Nasal cavity and middle ear	
		7.3.3. Cancer progression - Larynx, trachea, lung, mediastinum and pleura	
		7.3.4. Cancer progression – Thymus	
		7.3.5. Cancer progression – Heart	
		7.3.6. Cancer progression - GI tract	
			7.3.6.1. Cancer progression - Oesophagus
			7.3.6.2. Cancer progression - Stomach
			7.3.6.3. Cancer progression – Small intestine
			7.3.6.4. Cancer progression - Colon
			7.3.6.5. Cancer progression – Rectum
			7.3.6.6. Cancer progression – Anus and anal canal
		7.3.7. Cancer progression - Liver and intrahepatic bile duct	
		7.3.8. Cancer progression – Gallbladder	
		7.3.9. Cancer progression – Other biliary tract	
		7.3.10. Cancer progression – Pancreas	
		7.3.11. Cancer progression – Bone	

		7.3.12. Cancer progression – Skin	7.3.12.1. Cancer progression – Melanoma of skin
			7.3.12.2. Cancer progression – Non-melanoma of skin
		7.3.13. Cancer progression – Mesothelial and soft tissue	
		7.3.14. Cancer progression – Urogenital system	7.3.14.1. Cancer progression – Female genital organs
			7.3.14.1.1. Cancer progression – Cervical
			7.3.14.1.2. Cancer progression – Uterus
			7.3.14.1.3. Cancer progression – Cancer progression – Other (sepcify in comment field)
			7.3.14.2. Cancer progression – Male genital organs
			7.3.14.2.1. Cancer progression – Penis
			7.3.14.2.2. Cancer progression – Prostate
			7.3.14.2.3. Cancer progression – Testicles
			7.3.14.2.4. Cancer progression – Other (specify in comment field)
			7.3.14.3. Cancer progression – Kidney
			7.3.14.4. Cancer progression – Bladder
		7.3.15. Cancer progression – CNS	
		7.3.16. Cancer progression – Eye	
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		7.3.18. Cancer progression – Lymphoid/haematopoietic tissue	7.3.18.1. Cancer progression – Hodgkin lymphoma
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			7.3.18.5. Cancer progression – Myeloid leukemia
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			7.3.18.7. Cancer progression – Other type (specify in comment field)
		7.3.19. Cancer progression – Mamma	
	7.4. Secondary cancer malignancy	7.4.1. Secondary cancer - Lip and oral cavity	
		7.4.2. Secondary cancer – Nasal cavity and middleear	
		7.4.3. Secondary cancer - Larynx, trachea, lung, mediastinum and pleura	
		7.4.4. Secondary cancer – Thymus	
		7.4.5. Secondary cancer – Heart	
		7.4.6. Secondary cancer - GI tract	
			7.4.6.1. Relapse - Oesophagus
			7.4.6.2. Relapse - Stomach
			7.4.6.3. Relapse – Small intestine
			7.4.6.4. Relapse - Colon
			7.4.6.5. Relapse – Rectum
			7.4.6.6. Relapse – Anus and anal canal
		7.4.7. Secondary cancer - Liver and intrahepatic bile duct	
		7.4.8. Secondary cancer – Gallbladder	
		7.4.9. Secondary cancer – Other biliary tract	
		7.4.10. Secondary cancer – Pancreas	

		7.4.11. Secondary cancer – Bone	
		7.4.12. Secondary cancer – Skin	7.4.12.1. Secondary cancer – Melanoma of skin
			7.4.12.2. Secondary cancer – Non-melanoma of skin
		7.4.13. Secondary cancer – Mesothelial and soft tissue	
		7.4.14. Secondary cancer – Urogenital system	7.4.14.1. Secondary cancer – Female genital organs
			7.4.14.1.1. Secondary cancer – Cervical
			7.4.14.1.2. Secondary cancer – Uterus
			7.4.14.1.3. Secondary cancer – Other (sepcify in comment field)
			7.4.14.2. Secondary cancer – Male genital organs
			7.4.14.2.1. Secondary cancer – Penis
			7.4.14.2.2. Secondary cancer – Prostate
			7.4.14.2.3. Secondary cancer – Testicles
			7.4.14.2.4. Secondary cancer – Other (specify in comment field)
			7.4.14.3. Secondary cancer – Kidney
			7.4.14.4. Secondary cancer – Bladder
		7.4.15. Secondary cancer – CNS	
		7.4.16. Secondary cancer – Eye	
		7.4.17. Secondary cancer – Thyroid gland	
		7.4.18. Secondary cancer – Lymphoid/haematopoietic tissue	7.4.18.1. Secondary cancer – Hodgkin lymphoma
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			7.4.18.3. Secondary cancer – Plasma cell neoplasms

			7.4.18.4. Secondary cancer – Lymphatic leukemia
			7.4.18.5. Cancer progression – Myeloid leukemia
			7.4.18.6. Cancer progression - Other leukemia (specify in comment field)
			7.4.18.7. Cancer progression – Other type (specify in comment field)
		7.4.19. Cancer progression – Mamma	
8. Organ failure or dysfunction (not due to graft rejection, graft failure, GvHD or infection)	8.1. Liver	8.1.1. Due to drug toxicity	
		8.1.2. Cirrhosis - not viral	
		8.1.3. Cystic liver disease	
		8.1.4. Liver failure - cause unknown	
	8.2. Cardiac or vascular	8.2.1. Myocardial ischemia and infarction	
		8.2.2. Hemorrhagic pericarditis	
		8.2.3. Other causes of cardiac failure (specify in commentfield)	
		8.2.4. Fluid overload	
		8.2.5. Pulmonary embolus	
		8.2.6. Cerebrovascular accident	
		8.2.7. Mesenteric infarction	
		8.2.8. Transplant-associated thrombocytic microangiopathy (TAM)	
	8.3. Pulmonary	8.3.1. BOS	
		8.3.2. COLD	
		8.3.3. Other (specify in comment field)	
	8.4. CNS		
	8.5. Renal	8.5.1. Acute	
		8.5.2. Chronic	
	8.6. GI tract		

	8.7. Pancreas	8.7.1. Pancreatitis	
		8.7.2. Other (specify in comment field)	
	8.8. Multi-organ failure		
	8.9. Haematological disease		
	8.10. Endocrine disease		
	8.11. Psychiatric disease		
	8.12. Skin and motor system		
	8.13. Urogenital disease		
	8.14. Obstetric complications		
	8.15. Congenital disorders		
	8.16. DM		
	8.17. Connective tissue disease		
	8.18. Other organ failure or dysfunction (specify in comment field)		
9. Substance abuse	9.1. Chronic alcohol abuse		
	9.2. Chronic intravenous drug-use		
	9.3. Acute intoxication		
10. Withdrawal of active treatment	10.1. The patients initiative		
	10.2. The clinicians initiative		
11. Accidental death			
12. Suicide			
13. Other causes (specify in comment field)			
14. Unclassifiable causes			
15. Unknown			

* The classification algorithm for defining cause of death was conditional and thus certain causes of death had a higher weight compared to others. For example if primary graft failure, graft rejection, graft versus host disease, infection or malignancy were present at time of death and initiated the train of morbid events that lead to death, then these were assigned as the underlying cause of death whereas contributing and immediate causes were recorded with one of the other appropriate categories. If more than one cause with the highest weight were present at time of death, then the sequence in time and the extent of contribution to the fatal outcome would determine which cause was recorded as underlying and which as contributing or immediate cause of death. If none of the aforementioned were recorded as the underlying cause of death, then the algorithm continued with hemorrhage, organ specific dysfunctions, etc.