Indications for SCT:

* The following table outlined the indications for Allogeneic and Autologous SCT/cellular therapy in **pediatric patients.**

Indication and Disease Status	SCT/ Cellular Therapy Type
Acute Myeloid Leukemia	
• CR1, Intermediate Risk (consideration)	Allogeneic
• CR1, High Risk	
• CR2 +	
• Not in remission	
• Acute Promyelocytic leukemia, relapse	Allogeneic/Autologous
Acute lymphoblastic leukemia	
• CR1, High Risk	Allogeneic Consider CART if indicated
• CR2, High risk, Positive MRD	
• CR3+	
• Not in remission	
Chronic Myeloid Leukemia	
• Failure of ≥ 2 TKIs (intolerance or resistance)	Allogeneic
• Accelerated Phase	
• Blast Phase	
Myelodysplastic Syndromes	
• Low Risk	Allogeneic
• High Risk	
• Juvenile Myelomonocytic Leukemia	
• Therapy related	

Indication and Disease Status	SCT/ Cellular Therapy Type
T-cell non-Hodgkin Lymphoma	
• CR1, High Risk (consider)	Allogeneic/ Autologous
• CR2	
• CR3+	
• Not in remission	
Burkitt's Lymphoma	
• First or greater relapse, sensitive	Allogeneic/Autologous
• First or greater relapse, resistant	Allogeneic
Hodgkin Lymphoma	
• Primary refractory, sensitive	Autologous
• Primary refractory, resistant	Allogeneic
• First relapse, sensitive	Autologous
• First relapse, resistant	Allogeneic
• Second or greater relapse	Allogeneic/Autologous
Anaplastic large cell lymphoma	
• Primary refractory, sensitive	Allogeneic/Autologous
• Primary refractory, resistant	Allogeneic
• First relapse, sensitive	Allogeneic/Autologous
• First relapse, resistant	Allogeneic
• Second or greater relapse	Allogeneic/Autologous
Solid Tumors	
• Germ cell tumor, relapse	Autologous
• Germ cell tumor, refractory	
• Ewing's Sarcoma, high risk or relapse	
• Neuroblastoma, high risk or relapse	
• Wilms tumor, relapse	
• Osteosarcoma, high risk	
• Medulloblastoma, high risk	
• Other malignant brain tumors	

Indication and Disease Status	SCT Type
Non-malignant diseases	
• Severe aplastic anemia, new diagnosis	Allogeneic
• Severe aplastic anemia, relapse/refractory	
• Fanconi's anemia	
• Dyskeratosis congenita	
• Blackfan-Diamond anemia	
• Sickle Cell Disease	
• Thalassemia	
• Congenital amegakaryocytic thrombocytopenia	
• Severe combined immunodeficiency	
• T-cell immunodeficiency, SCID variants	
• Wiskott-Aldrich Syndrome	
• Hemophagocytic disorders	
• Lymphoproliferative disorders	
• Severe congenital neutropenia	
• Chronic granulomatous disease	
• Other phagocytic cell disorders	
• IPEX syndrome	
• Other autoimmune and immune dysregulation disorders	
• Mucopolysaccharidosis (MPS-I and MPS-VI)	
• Other metabolic diseases	
• Osteopetrosis	
• Globoid cell leukodystrophy (Krabbe)	
• Metachromatic leukodystrophy	
• Juvenile rheumatoid arthritis	Autologous
• Systematic sclerosis	

* The following table outlined the indications for Allogeneic and Autologous SCT/ cellular therapy in **adult patients**

Indication and Disease Status	**SCT/ Cellular Therapy Type**
Non-Hodgkin Lymphoma **(Must achieve at least PR – not needed in CAR-T cell therapy)**	
• 1st remission in: o Mantel Cell Lymphoma o High risk T/NK cell lymphoma o Double hit DLBCL o Transformed indolent lymphoma / SLL (Richter's syndrome) o Primary CNS Lymphoma	Allogeneic/Autologous CAR-T (For B Cell NHL)
• Primary refractory, but chemosensitive to subsequent lines of therapy	
• ≥ 2nd remission, o Aggressive B or T cell NHL o High Grade B Cell NHL (Burkitt or Lymphoblastic Lymphoma) o Low Grade Lymphoma o Cutaneous T Cell Lymphoma	
• Relapse after autologous transplant	Allogeneic/ CAR-T
• CLL / SLL	Allogeneic

Hodgkin Lymphoma	
• Primary refractory, chemosensitive	Autologous
• ≥ 2nd remission, chemosensitive	
• Relapse after autologous transplant	Allogeneic
Multi-system Langerhans Cell Histiocytosis • Relapsed/ Refractory	Allogeneic
Plasma Cell malignancies	
• Multiple Myeloma	
○ 1st remission, front line	Autologous
○ Relapse post autologous SCT	
○ Tandem if patient is high risk or plasma cell leukemia or not meeting VGPR post 1st autologous SCT	Allogeneic/Autologous
○ Refractory/relapse after three lines of prior therapy including an immunomodulatory agent, a proteasome inhibitor and an anti-CD38	CAR-T
• Amyloidosis	Autologous
• POEMS	Autologous
Acute Myeloid Leukemia	
• CR1, Intermediate Risk	Allogeneic
• CR1, High Risk	
• CR2 or more	
• Acute Promyelocytic leukemia, relapse	Allogeneic/Autologous

Indication and Disease Status	SCT/ Cellular Therapy Type
Acute lymphoblastic leukemia	
• CR1, MRD positive at end of induction or High Risk	Allogeneic/ CAR-T
• CR2 or more	Allogeneic/ CAR-T
Chronic Myeloid Leukemia	
• Failure of ≥ 2 TKIs (intolerance or resistance)	Allogeneic
• Accelerated or Blast Crisis	
• T3151 mutation consideration	
Myelodysplastic Syndromes	
• Intermediate-2 or high-risk disease	Allogeneic
• Therapy related MDS	
MF with intermdiate-2 or high risk	Allogeneic
Non-malignant diseases	
• Severe aplastic anemia, new diagnosis	Allogeneic
• Severe aplastic anemia, relapse/refractory	
• Paroxysmal Nocturnal Hematuria	
• Fanconi's anemia	
• Dyskeratosis congenita	
• Blackfan-Diamond anemia	
• Sickle Cell Disease	
• Thalassemia	
• Other congenital BM failure syndromes	
Solid Tumors	
• Germ cell tumor, refractory	Autologous
• Ewing's Sarcoma, high risk or relapse	
• Testicular Tumors	
Others	
• HLH	Allogeneic
• Autoimmune disorders	Allogeneic/Autologous
• Primary Immunodeficiency disorders	Allogeneic