

APPENDIX I: Immunocompromised State Diagnosis and Procedure Codes

Immunocompromised state diagnosis codes: (IMMUNID)

B20	Human immunodeficiency virus [HIV] disease	I1311	Hypertensive heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end stage renal disease
B59	Pneumocystosis	I132	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease
C802	Malignant neoplasm associated with transplanted organ	K912	Postsurgical malabsorption, not elsewhere classified
C888	Other malignant immunoproliferative diseases	M359	Systemic involvement of connective tissue, unspecified
C9440	Acute panmyelosis with myelofibrosis not having achieved remission	N185	Chronic kidney disease, stage 5
C9441	Acute panmyelosis with myelofibrosis, in remission	N186	End stage renal disease
C9442	Acute panmyelosis with myelofibrosis, in relapse	T8600	Unspecified complication of bone marrow transplant
C946	Myelodysplastic disease, not classified	T8601	Bone marrow transplant rejection
D4622	Refractory anemia with excess of blasts 2	T8602	Bone marrow transplant failure
D471	Chronic myeloproliferative disease	T8603	Bone marrow transplant infection
D479	Neoplasm of uncertain behavior of lymphoid, hematopoietic and related tissue, unspecified	T8609	Other complications of bone marrow transplant
D47Z1	Post-transplant lymphoproliferative disorder (PTLD)	T8610	Unspecified complication of kidney transplant
D47Z9	Other specified neoplasms of uncertain behavior of lymphoid, hematopoietic and related tissue	T8611	Kidney transplant rejection
D6109	Other constitutional aplastic anemia	T8612	Kidney transplant failure
D61810	Antineoplastic chemotherapy induced pancytopenia	T8613	Kidney transplant infection
D61811	Other drug-induced pancytopenia	T8619	Other complication of kidney transplant
D61818	Other pancytopenia	T8620	Unspecified complication of heart transplant
D700	Congenital agranulocytosis	T8621	Heart transplant rejection
D701	Agranulocytosis secondary to cancer chemotherapy	T8622	Heart transplant failure
D702	Other drug-induced agranulocytosis	T8623	Heart transplant infection

D704	Cyclic neutropenia	T86290	Cardiac allograft vasculopathy
D708	Other neutropenia	T86298	Other complications of heart transplant
D709	Neutropenia, unspecified	T8630	Unspecified complication of heart-lung transplant
D71	Functional disorders of polymorphonuclear neutrophils	T8631	Heart-lung transplant rejection
D720	Genetic anomalies of leukocytes	T8632	Heart-lung transplant failure
D72810	Lymphocytopenia	T8633	Heart-lung transplant infection
D72818	Other decreased white blood cell count	T8639	Other complications of heart-lung transplant
D72819	Decreased white blood cell count, unspecified	T8640	Unspecified complication of liver transplant
D7381	Neutropenic splenomegaly	T8641	Liver transplant rejection
D7581	Myelofibrosis	T8642	Liver transplant failure
D761	Hemophagocytic lymphohistiocytosis	T8643	Liver transplant infection
D762	Hemophagocytic syndrome, infection-associated	T8649	Other complications of liver transplant
D763	Other histiocytosis syndromes	T865	Complications of stem cell transplant
D800	Hereditary hypogammaglobulinemia	T86810	Lung transplant rejection
D801	Nonfamilial hypogammaglobulinemia	T86811	Lung transplant failure
D802	Selective deficiency of immunoglobulin A [IgA]	T86812	Lung transplant infection
D803	Selective deficiency of immunoglobulin G [IgG] subclasses	T86818	Other complications of lung transplant
D804	Selective deficiency of immunoglobulin M [IgM]	T86819	Unspecified complication of lung transplant
D805	Immunodeficiency with increased immunoglobulin M [IgM]	T86830	Bone graft rejection
D806	Antibody deficiency with near-normal immunoglobulins or with hyperimmunoglobulinemia	T86831	Bone graft failure
D807	Transient hypogammaglobulinemia of infancy	T86832	Bone graft infection
D808	Other immunodeficiencies with predominantly antibody defects	T86838	Other complications of bone graft
D809	Immunodeficiency with predominantly antibody defects, unspecified	T86839	Unspecified complication of bone graft
D810	Severe combined immunodeficiency [SCID] with reticular dysgenesis	T86850	Intestine transplant rejection
D811	Severe combined immunodeficiency [SCID] with low T- and B-cell numbers	T86851	Intestine transplant failure

D812	Severe combined immunodeficiency [SCID] with low or normal B-cell numbers	T86852	Intestine transplant infection
D814	Nezelof's syndrome	T86858	Other complications of intestine transplant
D816	Major histocompatibility complex class I deficiency	T86859	Unspecified complication of intestine transplant
D817	Major histocompatibility complex class II deficiency	T86890	Other transplanted tissue rejection
D8189	Other combined immunodeficiencies	T86891	Other transplanted tissue failure
D819	Combined immunodeficiency, unspecified	T86892	Other transplanted tissue infection
D820	Wiskott-Aldrich syndrome	T86898	Other complications of other transplanted tissue
D821	Di George's syndrome	T86899	Unspecified complication of other transplanted tissue
D822	Immunodeficiency with short-limbed stature	T8690	Unspecified complication of unspecified transplanted organ and tissue
D823	Immunodeficiency following hereditary defective response to Epstein-Barr virus	T8691	Unspecified transplanted organ and tissue rejection
D824	Hyperimmunoglobulin E [IgE] syndrome	T8692	Unspecified transplanted organ and tissue failure
D828	Immunodeficiency associated with other specified major defects	T8693	Unspecified transplanted organ and tissue infection
D829	Immunodeficiency associated with major defect, unspecified	T8699	Other complications of unspecified transplanted organ and tissue
D830	Common variable immunodeficiency with predominant abnormalities of B-cell numbers and function	Z4821	Encounter for aftercare following heart transplant
D831	Common variable immunodeficiency with predominant immunoregulatory T-cell disorders	Z4822	Encounter for aftercare following kidney transplant
D832	Common variable immunodeficiency with autoantibodies to B- or T-cells	Z4823	Encounter for aftercare following liver transplant
D838	Other common variable immunodeficiencies	Z4824	Encounter for aftercare following lung transplant
D839	Common variable immunodeficiency, unspecified	Z48280	Encounter for aftercare following heart-lung transplant
D840	Lymphocyte function antigen-1 [LFA-1] defect	Z48290	Encounter for aftercare following bone marrow transplant
D841	Defects in the complement system	Z48298	Encounter for aftercare following other organ transplant

D848	Other specified immunodeficiencies	Z4901	Encounter for fitting and adjustment of extracorporeal dialysis catheter
D849	Immunodeficiency, unspecified	Z4902	Encounter for fitting and adjustment of peritoneal dialysis catheter
D893	Immune reconstitution syndrome	Z4931	Encounter for adequacy testing for hemodialysis
D89810	Acute graft-versus-host disease	Z940	Kidney transplant status
D89811	Chronic graft-versus-host disease	Z941	Heart transplant status
D89812	Acute on chronic graft-versus-host disease	Z942	Lung transplant status
D89813	Graft-versus-host disease, unspecified	Z943	Heart and lungs transplant status
D8982	Autoimmune lymphoproliferative syndrome [ALPS]	Z944	Liver transplant status
D8989	Other specified disorders involving the immune mechanism, not elsewhere classified	Z9481	Bone marrow transplant status
D899	Disorder involving the immune mechanism, unspecified	Z9482	Intestine transplant status
E40	Kwashiorkor	Z9483	Pancreas transplant status
E41	Nutritional marasmus	Z9484	Stem cells transplant status
E42	Marasmic kwashiorkor	Z9489	Other transplanted organ and tissue status
E43	Unspecified severe protein-calorie malnutrition	Z992	Dependence on renal dialysis
I120	Hypertensive chronic kidney disease with stage 5 chronic kidney disease or end stage renal disease		

Immunocompromised state procedure codes (IMMUNIP):

02YA0Z0	Transplantation of Heart, Allogeneic, Open Approach	30240X4	Transfusion of Allogeneic Unspecified Cord Blood Stem Cells into Central Vein, Open Approach
02YA0Z2	Transplantation of Heart, Zooplasic, Open Approach	30240Y0	Transfusion of Autologous Hematopoietic Stem Cells into Central Vein, Open Approach
0BYC0Z0	Transplantation of Right Upper Lung Lobe, Allogeneic, Open Approach	30240Y1	Transfusion of Nonautologous Hematopoietic Stem Cells into Central Vein, Open Approach
0BYC0Z2	Transplantation of Right Upper Lung Lobe, Zooplasic, Open Approach	30240Y2	Transfusion of Allogeneic Related Hematopoietic Stem Cells into Central Vein, Open Approach

0BYD0Z0	Transplantation of Right Middle Lung Lobe, Allogeneic, Open Approach	30240Y3	Transfusion of Allogeneic Unrelated Hematopoietic Stem Cells into Central Vein, Open Approach
0BYD0Z2	Transplantation of Right Middle Lung Lobe, Zooplasic, Open Approach	30240Y4	Transfusion of Allogeneic Unspecified Hematopoietic Stem Cells into Central Vein, Open Approach
0BYF0Z0	Transplantation of Right Lower Lung Lobe, Allogeneic, Open Approach	30243AZ	Transfusion of Embryonic Stem Cells into Central Vein, Percutaneous Approach
0BYF0Z2	Transplantation of Right Lower Lung Lobe, Zooplasic, Open Approach	30243G0	Transfusion of Autologous Bone Marrow into Central Vein, Percutaneous Approach
0BYG0Z0	Transplantation of Left Upper Lung Lobe, Allogeneic, Open Approach	30243G1	Transfusion of Nonautologous Bone Marrow into Central Vein, Percutaneous Approach
0BYG0Z2	Transplantation of Left Upper Lung Lobe, Zooplasic, Open Approach	30243G2	Transfusion of Allogeneic Related Bone Marrow into Central Vein, Percutaneous Approach
0BYH0Z0	Transplantation of Lung Lingula, Allogeneic, Open Approach	30243G3	Transfusion of Allogeneic Unrelated Bone Marrow into Central Vein, Percutaneous Approach
0BYH0Z2	Transplantation of Lung Lingula, Zooplasic, Open Approach	30243G4	Transfusion of Allogeneic Unspecified Bone Marrow into Central Vein, Percutaneous Approach
0BYJ0Z0	Transplantation of Left Lower Lung Lobe, Allogeneic, Open Approach	30243X0	Transfusion of Autologous Cord Blood Stem Cells into Central Vein, Percutaneous Approach
0BYJ0Z2	Transplantation of Left Lower Lung Lobe, Zooplasic, Open Approach	30243X1	Transfusion of Nonautologous Cord Blood Stem Cells into Central Vein, Percutaneous Approach
0BYK0Z0	Transplantation of Right Lung, Allogeneic, Open Approach	30243X2	Transfusion of Allogeneic Related Cord Blood Stem Cells into Central Vein, Percutaneous Approach
0BYK0Z2	Transplantation of Right Lung, Zooplasic, Open Approach	30243X3	Transfusion of Allogeneic Unrelated Cord Blood Stem Cells into Central Vein, Percutaneous Approach
0BYL0Z0	Transplantation of Left Lung, Allogeneic, Open Approach	30243X4	Transfusion of Allogeneic Unspecified Cord Blood Stem Cells into Central Vein, Percutaneous Approach
0BYL0Z2	Transplantation of Left Lung, Zooplasic, Open Approach	30243Y0	Transfusion of Autologous Hematopoietic Stem Cells into Central Vein, Percutaneous Approach
0BYM0Z0	Transplantation of Bilateral Lungs, Allogeneic, Open Approach	30243Y1	Transfusion of Nonautologous Hematopoietic Stem Cells into Central Vein, Percutaneous Approach

0BYM0Z2	Transplantation of Bilateral Lungs, Zooplastic, Open Approach	30243Y2	Transfusion of Allogeneic Related Hematopoietic Stem Cells into Central Vein, Percutaneous Approach
0FSG0ZZ	Reposition Pancreas, Open Approach	30243Y3	Transfusion of Allogeneic Unrelated Hematopoietic Stem Cells into Central Vein, Percutaneous Approach
0FSG4ZZ	Reposition Pancreas, Percutaneous Endoscopic Approach	30243Y4	Transfusion of Allogeneic Unspecified Hematopoietic Stem Cells into Central Vein, Percutaneous Approach
0FY00Z0	Transplantation of Liver, Allogeneic, Open Approach	30250G0	Transfusion of Autologous Bone Marrow into Peripheral Artery, Open Approach
0FY00Z2	Transplantation of Liver, Zooplastic, Open Approach	30250G1	Transfusion of Nonautologous Bone Marrow into Peripheral Artery, Open Approach
0FYG0Z0	Transplantation of Pancreas, Allogeneic, Open Approach	30250X0	Transfusion of Autologous Cord Blood Stem Cells into Peripheral Artery, Open Approach
0FYG0Z2	Transplantation of Pancreas, Zooplastic, Open Approach	30250X1	Transfusion of Nonautologous Cord Blood Stem Cells into Peripheral Artery, Open Approach
0TY00Z0	Transplantation of Right Kidney, Allogeneic, Open Approach	30250Y0	Transfusion of Autologous Hematopoietic Stem Cells into Peripheral Artery, Open Approach
0TY00Z2	Transplantation of Right Kidney, Zooplastic, Open Approach	30250Y1	Transfusion of Nonautologous Hematopoietic Stem Cells into Peripheral Artery, Open Approach
0TY10Z0	Transplantation of Left Kidney, Allogeneic, Open Approach	30253G0	Transfusion of Autologous Bone Marrow into Peripheral Artery, Percutaneous Approach
0TY10Z2	Transplantation of Left Kidney, Zooplastic, Open Approach	30253G1	Transfusion of Nonautologous Bone Marrow into Peripheral Artery, Percutaneous Approach
0WY20Z0	Transplantation of Face, Allogeneic, Open Approach	30253X0	Transfusion of Autologous Cord Blood Stem Cells into Peripheral Artery, Percutaneous Approach
0XYJ0Z0	Transplantation of Right Hand, Allogeneic, Open Approach	30253X1	Transfusion of Nonautologous Cord Blood Stem Cells into Peripheral Artery, Percutaneous Approach
0XYK0Z0	Transplantation of Left Hand, Allogeneic, Open Approach	30253Y0	Transfusion of Autologous Hematopoietic Stem Cells into Peripheral Artery, Percutaneous Approach

30230AZ	Transfusion of Embryonic Stem Cells into Peripheral Vein, Open Approach	30253Y1	Transfusion of Nonautologous Hematopoietic Stem Cells into Peripheral Artery, Percutaneous Approach
30230G0	Transfusion of Autologous Bone Marrow into Peripheral Vein, Open Approach	30260G0	Transfusion of Autologous Bone Marrow into Central Artery, Open Approach
30230G1	Transfusion of Nonautologous Bone Marrow into Peripheral Vein, Open Approach	30260G1	Transfusion of Nonautologous Bone Marrow into Central Artery, Open Approach
30230G2	Transfusion of Allogeneic Related Bone Marrow into Peripheral Vein, Open Approach	30260X0	Transfusion of Autologous Cord Blood Stem Cells into Central Artery, Open Approach
30230G3	Transfusion of Allogeneic Unrelated Bone Marrow into Peripheral Vein, Open Approach	30260X1	Transfusion of Nonautologous Cord Blood Stem Cells into Central Artery, Open Approach
30230G4	Transfusion of Allogeneic Unspecified Bone Marrow into Peripheral Vein, Open Approach	30260Y0	Transfusion of Autologous Hematopoietic Stem Cells into Central Artery, Open Approach
30230X0	Transfusion of Autologous Cord Blood Stem Cells into Peripheral Vein, Open Approach	30260Y1	Transfusion of Nonautologous Hematopoietic Stem Cells into Central Artery, Open Approach
30230X1	Transfusion of Nonautologous Cord Blood Stem Cells into Peripheral Vein, Open Approach	30263G0	Transfusion of Autologous Bone Marrow into Central Artery, Percutaneous Approach
30230X2	Transfusion of Allogeneic Related Cord Blood Stem Cells into Peripheral Vein, Open Approach	30263G1	Transfusion of Nonautologous Bone Marrow into Central Artery, Percutaneous Approach
30230X3	Transfusion of Allogeneic Unrelated Cord Blood Stem Cells into Peripheral Vein, Open Approach	30263X0	Transfusion of Autologous Cord Blood Stem Cells into Central Artery, Percutaneous Approach
30230X4	Transfusion of Allogeneic Unspecified Cord Blood Stem Cells into Peripheral Vein, Open Approach	30263X1	Transfusion of Nonautologous Cord Blood Stem Cells into Central Artery, Percutaneous Approach
30230Y0	Transfusion of Autologous Hematopoietic Stem Cells into Peripheral Vein, Open Approach	30263Y0	Transfusion of Autologous Hematopoietic Stem Cells into Central Artery, Percutaneous Approach
30230Y1	Transfusion of Nonautologous Hematopoietic Stem Cells into Peripheral Vein, Open Approach	30263Y1	Transfusion of Nonautologous Hematopoietic Stem Cells into Central Artery, Percutaneous Approach
30230Y2	Transfusion of Allogeneic Related Hematopoietic Stem Cells into Peripheral Vein, Open Approach	3E03005	Introduction of Other Antineoplastic into Peripheral Vein, Open Approach

30230Y3	Transfusion of Allogeneic Unrelated Hematopoietic Stem Cells into Peripheral Vein, Open Approach	3E0300M	Introduction of Monoclonal Antibody into Peripheral Vein, Open Approach
30230Y4	Transfusion of Allogeneic Unspecified Hematopoietic Stem Cells into Peripheral Vein, Open Approach	3E030U1	Introduction of Nonautologous Pancreatic Islet Cells into Peripheral Vein, Open Approach
30233AZ	Transfusion of Embryonic Stem Cells into Peripheral Vein, Percutaneous Approach	3E030WL	Introduction of Immunosuppressive into Peripheral Vein, Open
30233G0	Transfusion of Autologous Bone Marrow into Peripheral Vein, Percutaneous Approach	3E03305	Introduction of Other Antineoplastic into Peripheral Vein, Percutaneous Approach
30233G1	Transfusion of Nonautologous Bone Marrow into Peripheral Vein, Percutaneous Approach	3E0330M	Introduction of Monoclonal Antibody into Peripheral Vein, Percutaneous Approach
30233G2	Transfusion of Allogeneic Related Bone Marrow into Peripheral Vein, Percutaneous Approach	3E033U1	Introduction of Nonautologous Pancreatic Islet Cells into Peripheral Vein, Percutaneous Approach
30233G3	Transfusion of Allogeneic Unrelated Bone Marrow into Peripheral Vein, Percutaneous Approach	3E033WL	Introduction of Immunosuppressive into Peripheral Vein, Percutaneous
30233G4	Transfusion of Allogeneic Unspecified Bone Marrow into Peripheral Vein, Percutaneous Approach	3E04005	Introduction of Other Antineoplastic into Central Vein, Open Approach
30233X0	Transfusion of Autologous Cord Blood Stem Cells into Peripheral Vein, Percutaneous Approach	3E0400M	Introduction of Monoclonal Antibody into Central Vein, Open Approach
30233X1	Transfusion of Nonautologous Cord Blood Stem Cells into Peripheral Vein, Percutaneous Approach	3E040WL	Introduction of Immunosuppressive into Central Vein, Open
30233X2	Transfusion of Allogeneic Related Cord Blood Stem Cells into Peripheral Vein, Percutaneous Approach	3E04305	Introduction of Other Antineoplastic into Central Vein, Percutaneous Approach
30233X3	Transfusion of Allogeneic Unrelated Cord Blood Stem Cells into Peripheral Vein, Percutaneous Approach	3E0430M	Introduction of Monoclonal Antibody into Central Vein, Percutaneous Approach
30233X4	Transfusion of Allogeneic Unspecified Cord Blood Stem Cells into Peripheral Vein, Percutaneous Approach	3E043WL	Introduction of Immunosuppressive into Central Vein, Percutaneous
30233Y0	Transfusion of Autologous Hematopoietic Stem Cells into Peripheral Vein, Percutaneous Approach	3E05005	Introduction of Other Antineoplastic into Peripheral Artery, Open Approach

30233Y1	Transfusion of Nonautologous Hematopoietic Stem Cells into Peripheral Vein, Percutaneous Approach	3E0500M	Introduction of Monoclonal Antibody into Peripheral Artery, Open Approach
30233Y2	Transfusion of Allogeneic Related Hematopoietic Stem Cells into Peripheral Vein, Percutaneous Approach	3E050WL	Introduction of Immunosuppressive into Peripheral Artery, Open
30233Y3	Transfusion of Allogeneic Unrelated Hematopoietic Stem Cells into Peripheral Vein, Percutaneous Approach	3E05305	Introduction of Other Antineoplastic into Peripheral Artery, Percutaneous Approach
30233Y4	Transfusion of Allogeneic Unspecified Hematopoietic Stem Cells into Peripheral Vein, Percutaneous Approach	3E0530M	Introduction of Monoclonal Antibody into Peripheral Artery, Percutaneous Approach
30240AZ	Transfusion of Embryonic Stem Cells into Central Vein, Open Approach	3E053WL	Introduction of Immunosuppressive into Peripheral Artery, Percutaneous
30240G0	Transfusion of Autologous Bone Marrow into Central Vein, Open Approach	3E06005	Introduction of Other Antineoplastic into Central Artery, Open Approach
30240G1	Transfusion of Nonautologous Bone Marrow into Central Vein, Open Approach	3E0600M	Introduction of Monoclonal Antibody into Central Artery, Open Approach
30240G2	Transfusion of Allogeneic Related Bone Marrow into Central Vein, Open Approach	3E060WL	Introduction of Immunosuppressive into Central Artery, Open
30240G3	Transfusion of Allogeneic Unrelated Bone Marrow into Central Vein, Open Approach	3E06305	Introduction of Other Antineoplastic into Central Artery, Percutaneous Approach
30240G4	Transfusion of Allogeneic Unspecified Bone Marrow into Central Vein, Open Approach	3E0630M	Introduction of Monoclonal Antibody into Central Artery, Percutaneous Approach
30240X0	Transfusion of Autologous Cord Blood Stem Cells into Central Vein, Open Approach	3E063WL	Introduction of Immunosuppressive into Central Artery, Percutaneous
30240X1	Transfusion of Nonautologous Cord Blood Stem Cells into Central Vein, Open Approach	3E0J3U1	Introduction of Nonautologous Pancreatic Islet Cells into Biliary and Pancreatic Tract, Percutaneous Approach
30240X2	Transfusion of Allogeneic Related Cord Blood Stem Cells into Central Vein, Open Approach	3E0J7U1	Introduction of Nonautologous Pancreatic Islet Cells into Biliary and Pancreatic Tract, Via Natural or Artificial Opening

30240X3	Transfusion of Allogeneic Unrelated Cord Blood Stem Cells into Central Vein, Open Approach	3E0J8U1	Introduction of Nonautologous Pancreatic Islet Cells into Biliary and Pancreatic Tract, Via Natural or Artificial Opening Endoscopic
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