SUPPLEMENTARY INFORMATION

Supplementary Figure 1.

Program flow of the Perl-based script.

Supplementary Figure 2.

Annotated figure about uses of the different types of stem cells in regenerative medicine.

Supplementary Figure 3.

PRISMA flow diagram of detailed screening process.

Supplementary Figure 4.

Comparison of expanded MSCs and the respective heterogeneous fraction, from bone marrow or adipose tissue.

Supplementary Figure 5.

Screenshot of the website http://multireview.perso.sfr.fr/.

Supplementary Figure 6.

Use of ASCs in regenerative medicine.

Supplementary Table 1.

List of packages employed in Perl script.

Supplementary Table 2.

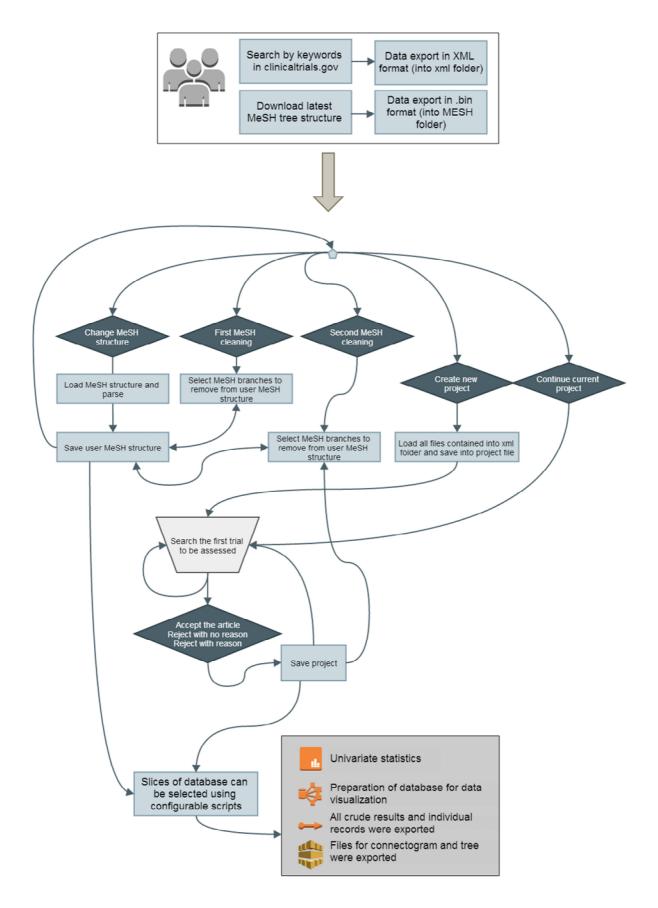
Characteristics of trials.

Supplementary Table 3.

List of cellular specialties identified during screening, with the description of the type of cells (cellular source, allogeneic or autologous), and the number of trials.

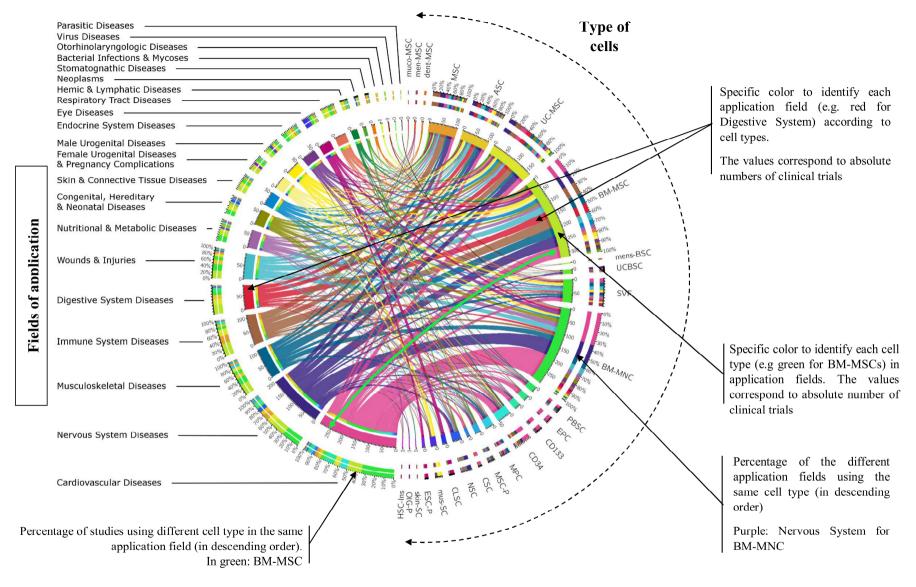
Supplementary File 1.

Refinement of the resulting MeSH terms before phylogenetic-like tree visualization.



Supplementary Figure 1. Program flow of the Perl-based script

Data aggregation was performed using a Perl script we developed, to minimize errors during the screening process and to computerize data for further analyses.



Ribbon connects cell type and application field

Supplementary Figure 2.

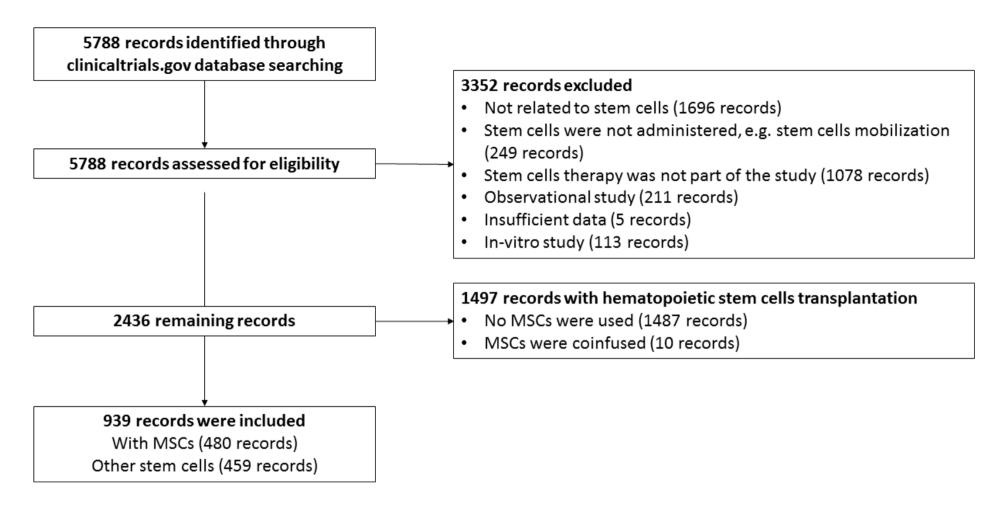
Annotated figure about uses of the different types of stem cells in regenerative medicine

Studies using hematopoietic stem cell transplant (with total body irradiation, myeloablative or non-myeloablative regimens, or genetically modified HSCs) were excluded from this figure. This chord diagram represents the proportion of studies dealing with each field of application, linked to their respective uses of stem cells.

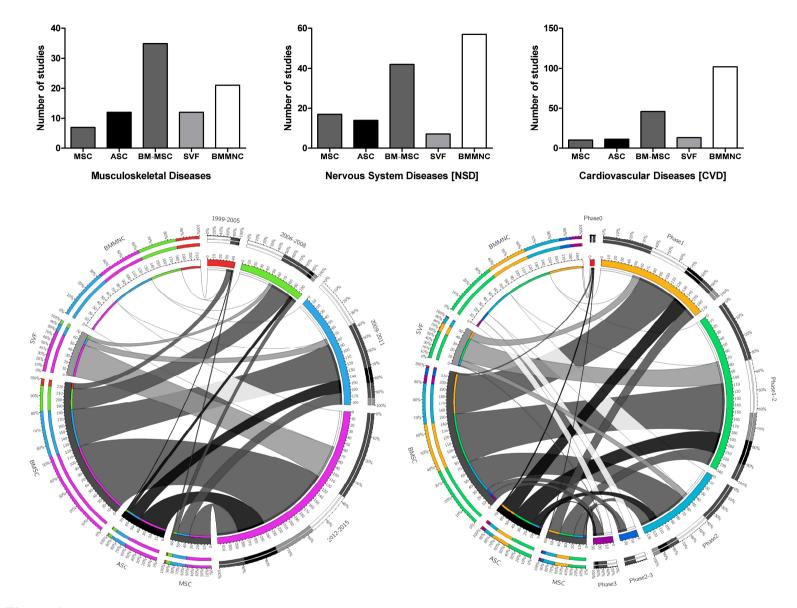
Abbreviations for cells: muco-MSC: mucosal Mesenchymal Stem Cell; men-MSC: menstrual Mesenchymal Stem Cell; dent-MSC: Mesenchymal Stem Cell from dental tissues; MSC: Mesenchymal Stem Cell (probably BMSCs); ASC: Adipose-derived Stromal/Stem Cells; UC-MSC: Umbilical-Cord or Umbilical-Cord Blood Mesenchymal Stem Cell or Wharton Jelly MSC or placental MSCs; BM-MSC: Bone Marrow Mesenchymal Stem Cell.

mens-BSC: menstrual Blood Stem Cell; UCBSC: Umbilical Cord Blood Stem Cell; SVF: Stromal Vascular Fraction; BMMNC: Bone Marrow MonoNuclear Cell; PBSC: Peripheral Blood Stem Cell; EPC: Endothelial or Angiogenic Precursor Cell; CD133: CD133+; CD34+ cells.

MPC: Mesenchymal Precursor Cell; MSC-P: MSC-derived progenitors and cells (osteoprogenitor, MSC-derived cardiopoietic cell, MSC-derived neuroprogenitor, MSC-derived osteoprogenitor, MSC-derived hepatic cell, MSC-derived endometrium); CSC: Cardiosphere-Derived Cells, Cardiac Stem Cells; NSC: Neural Stem Cell; CLSC: Corneal Limbal Stem Cell or Retinal progenitor cell; mus-SC: Muscular Stem Cell; ESC-P: embryonic stem cell-derived cells (ESC-RPE: Embryonic Stem Cell Retinal Pigment Epithelial and other progenitors); skin-SC: Skin Stem Cell; OlG-P: Oligodendrocyte or glial progenitor; HSC-Ins: HSC-derived cell producing insulin.



Supplementary Figure 3. PRISMA flow diagram of detailed screening process



Supplementary Figure 4.

Comparison of expanded MSCs and the respective heterogeneous fraction, from bone marrow or adipose tissue

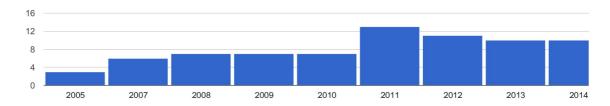
The histograms of the upper part of figure show the number of trials using MSCs, ASCs, BM-MSCs, SVF or BMMNCs for musculoskeletal diseases, NSD and CVD. The lower part of the figure represents the proportion of studies dealing with each type of cells, with the start years of trials and study phases.

Back to the list

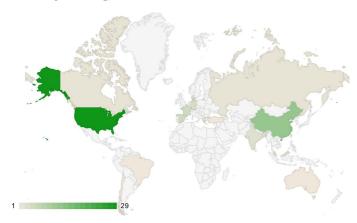


Cardiovascular Diseases

Histogram of years of publication of studies



Country of origin



List of trials for this MeSH descriptor

NCT02323477; NCT02283879; NCT01714167; NCT01716481; NCT01351610; NCT01824069; NCT01219452; NCT01720888; NCT00518401; NCT00260338; NCT02315027; NCT01211028; NCT01449032; NCT00644410; NCT00548613; NCT01739777; NCT00587990; NCT02287831; NCT01468064; NCT01795950; NCT02378974; NCT01745744; NCT01287936; NCT00550498; NCT01091701; NCT00911365; NCT01297413; NCT01770613; NCT01922908; NCT01753440; NCT00790764; NCT01840540; NCT01759212; NCT02145897; NCT00721006; NCT01087996; NCT01302015; NCT00114452; NCT00643981; NCT02304588; NCT01394432; NCT01076920; NCT01065337; NCT01484574; NCT00875654; NCT00919958; NCT02266394; NCT01678534; NCT00951210; NCT01558908; NCT01957826; NCT01291329; NCT00883727; NCT01652209; NCT00955669; NCT02368587; NCT01389453; NCT009855669; NCT02336646; NCT01291329; NCT01310114; NCT00768066; NCT01913886; NCT01410720; NCT01557543; NCT0129880; NCT02398804; NCT02398604; NCT02408432; NCT02448641; NCT02446641; NCT02460770; NCT02462330; NCT0087903; NCT01392625; NCT01392105; NCT01436123; NCT01216865; NCT01257776; NCT01686139; NCT01244287; NCT01849887; NCT01962233; NCT01946048;

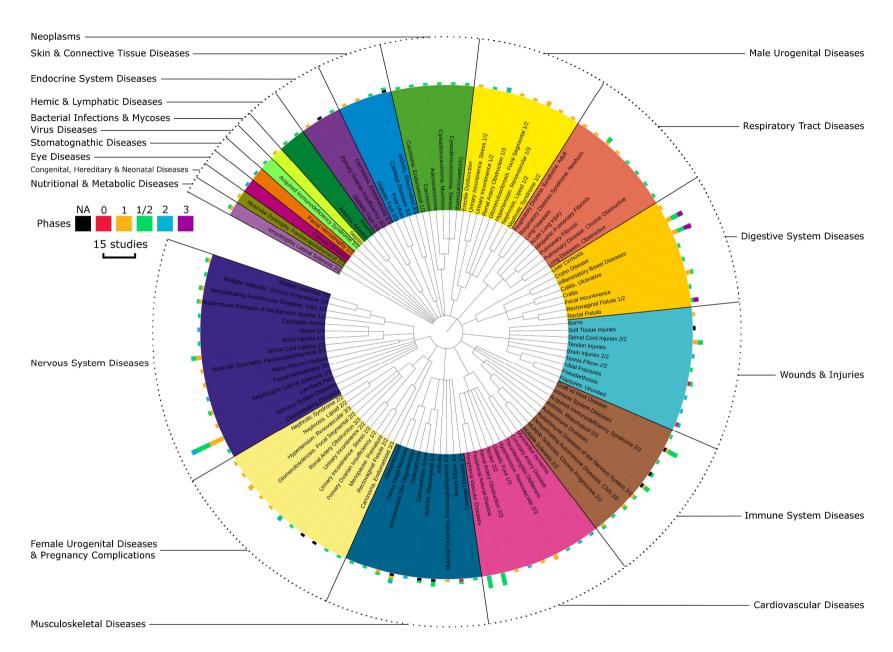
Study characteristics

	All studies	Percentage
State of the study	86	
Active, not recruiting	11	12.8%
Completed	22	25.6%
Not yet recruiting	17	19.8%
Recruiting	30	34.9%
Suspended	1	1.2%
Terminated	4	4.7%
Withdrawn	1	1.2%
Study size	30 [18 ; 59]	
Median [Q1; Q3]	N = 85	
Gender	86	
Both	85	98.8%
Male	1	1.2%
Study type	86	

Interventional	86	100.0%
Randomization	67	
Non-Randomized	14	20.9%
Randomized	53	79.1%
Intervention	86	
Crossover Assignment	1	1.2%
Factorial Assignment	3	3.5%
Parallel Assignment	51	59.3%
Single Group Assignment	31	36.0%
Blinding	86	
Double Blind (Subject	28	32.6%
Open Label	52	60.5%
Single Blind (Subject)	6	7.0%
Main sponsor	86	
Industry	31	36.0%
NIH	3	3.5%
Other	52	60.5%
Study phase	86	
Phase 1	26	30.2%
Phase 1/Phase 2	33	38.4%
Phase 2	21	24.4%
Phase 2/Phase 3	3	3.5%
Phase 3	3	3.5%
Study has DMC	78	
No	18	23.1%
Yes	60	76.9%
Donor	86	
Autologous	45	52.3%
Allogeneic	43	50.0%
Employed stem cells	86	
Umbilical Cord Mesenchymal Stem Cells	14	16.3%
Placental Mesenchymal Stem Cells	4	4.7%
Bone Marrow Mesenchymal Stem Cells	46	53.5%
Adipose derived Mesenchymal Stem Cells	11	12.8%
Mesenchymal Stem Cells	10	11.6%
Menstrual Mesenchymal Stem Cells	1	1.2%
Endothelial Precursor Cells	6	7.0%
Genetic or viral modification of cells	2	2.3%
Stromal Vascular Fraction	1	1.2%
Bone Marrow Mononuclear Cells	5	5.8%
Taking medication concomitantly	1	
Immunophilins	1	100.0%

Supplementary Figure 5. Screenshot of the website http://multireview.perso.sfr.fr/

The website http://multireview.perso.sfr.fr/ provides detailed results about studies (using stem cells, MSCs or ASCs) included for each MeSH keyword. This screenshot is an example of the CVD branch (C14 or Cardiovascular Diseases) for MSC therapy. It presents the temporal evolution of the trials, their geographical mapping, the list of included trials and all trial characteristics (state, size, gender, type, randomization, design, blinding, sponsoring, phases, donor, stem cells employed and medications taken concomitantly).



Supplementary Figure 6.
Use of ASCs in regenerative medicine

Phylogenetic-like tree of included studies using ASCs according to MeSH descriptors. All retrieved keywords from trials were considered to be terminal taxa and are represented around a phylogenetic-like tree. As MeSH is redundant, desired duplicates are identified to indicate that there are several occurrences (Supplementary File 1).

Ancestors of the tree are represented using MeSH sub-levels of these taxa, placed in the center of circle. The number of studies for each clinical phase (Phase 0: red, Phase 1: orange, Phase 1-2: green, Phase 2: pale blue, Phase 2-3: deep blue, Phase 3: purple, and not applicable: black) is illustrated in histograms at the extremity of each end branch of the tree. Bar heights refer to the scale provided.

The key message is both diversity in fields of application and diversity of diseases within some fields. For example, in musculoskeletal diseases, MeSH structure showed the use of ASCs in osteonecrosis, arthritis, muscular dystrophies, cartilage diseases and tennis elbow, in Phases 1 to Phase 2. A great diversity was also observed for the 14 nervous system diseases studies, fragmented into sub-subjects (e.g. spinal cord injuries, multiple sclerosis, brain injuries).

For digestive diseases, two major themes emerged, revealed by the MeSH structure: one theme for liver cirrhosis and one theme for the digestive system. We found Phase 3 studies only for the treatment of digestive system fistula and inflammatory bowel diseases.

Name of package	Description provided by CPAN	Version
Dancer	Lightweight yet powerful web application framework	1.3110
Storable	Persistent data structure mechanism	2.45
Data-Dumper	Convert data structure into perl code	2.136
XML-Simple	API to maintain XML (esp config files)	2.20
URI -Escape	General URI escaping/unescaping functions	3.31
LWP-UserAgent	Web user agent class	6.04
Spreadsheet -WriteExcel	Write to a cross-platform Excel binary file	2.39
Statistics-Descriptive	Descriptive statistical methods	3.0605

Supplementary Table 1. List of packages employed in Perl script.

The script was developed and run using Strawberry Perl 5.16.3.1-64 bits on Windows 7 operating system (Professional edition 64 bits) with 6Go RAM memory.

		Studies	s without hematopoietic stem cell tr	ansplantation	
	All studies (n = 939)	Studies using MSCs including ASCs (n = 480, 51.1% total)	Studies using MSCs excluding ASCs (n = 403, 42.9% total, 84.0% MSCs)	Studies using ASCs (n = 77, 8.2% total, 16.0% MSCs)	p
State of the study	939	480	403	77	
Not yet recruiting	219 (23.3%)	118 (24.6%)	98 (24.4%)	20 (26.0%)	0.76
Recruiting	421 (44.8%)	230 (47.9%)	196 (48.6%)	34 (44.2%)	0.47
Enrolling by invitation	27 (2.9%)	13 (2.7%)	12 (3.0%)	1 (1.3%)	0.41
Suspended	10 (1.1%)	3 (0.6%)	3 (0.7%)	0 (0.0%)	0.45
Withdrawn	11 (1.2%)	3 (0.6%)	3 (0.7%)	0 (0.0%)	0.45
Completed	220 (23.4%)	100 (20.9%)	80 (19.9%)	20 (26.0%)	0.23
Terminated	28 (3.0%)	11 (2.3%)	9 (2.2%)	2 (2.6%)	0.84
No longer available	3 (0.3%)	2 (0.4%)	2 (0.5%)	0 (0.0%)	0.54
Studensies (modien [O1 + O2])	25 [12; 55]	25 [10; 50]	27 [12 ; 50]	19 [10 ; 40]	0.02 *
Study size (median [Q1; Q3])	N = 919	N = 477	N = 403	N = 76	0.02 *
Gender	939	480	403	77	
Female only	26 (2.8%)	12 (2.5%)	9 (2.2%)	3 (3.9%)	0.39
Male only	28 (3.0%)	14 (2.9%)	10 (2.5%)	4 (5.2%)	0.19
Both	885 (94.2%)	454 (94.6%)	384 (95.3%)	70 (90.9%)	0.12
Clinical trial site	896	460	386	74	
Eastern Asia	203 (22.7%)	160 (34.8%)	133 (34.5%)	27 (36.5%)	0.74
Northern Asia	16 (1.8%)	6 (1.3%)	6 (1.6%)	0 (0.0%)	0.28
South Central Asia	105 (11.7%)	39 (8.5%)	34 (8.8%)	5 (6.8%)	0.56
South East Asia	18 (2.0%)	11 (2.4%)	9 (2.3%)	2 (2.8%)	0.84
Western Asia and Middle East	22 (2.5%)	13 (2.8%)	12 (3.1%)	1 (1.4%)	0.40
Central and South America	63 (7.0%)	19 (4.1%)	16 (4.1%)	3 (4.1%)	0.97
North America	222 (24.8%)	94 (20.4%)	87 (22.5%)	7 (9.5%)	0.01 **
Europe	290 (32.4%)	131 (28.5%)	90 (23.3%)	41 (55.4%)	< 0.001 ***
Africa	15 (1.7%)	9 (2.0%)	9 (2.3%)	0 (0.0%)	0.18
Oceania	15 (1.7%)	12 (2.6%)	12 (3.1%)	0 (0.0%)	0.12
Randomization	930	477	401	76	
Single arm study	369 (39.7%)	180 (37.7%)	150 (37.4%)	30 (39.5%)	0.73
Randomized	401 (43.1%)	213 (44.7%)	176 (43.9%)	37 (48.7%)	0.44
Non-randomized	160 (17.2%)	84 (17.6%)	75 (18.7%)	9 (11.8%)	0.15
Blinding	930	477	401	76	
Open label	652 (70.1%)	346 (72.5%)	290 (72.3%)	56 (73.7%)	0.55
Single blind	84 (9.0%)	33 (6.9%)	26 (6.5%)	7 (9.2%)	0.35
Double blind	194 (20.9%)	98 (20.5%)	85 (21.2%)	13 (17.1%)	0.47
Donor	918	464	388	76	
Allogeneic	316 (34.4%)	248 (53.4%)	224 (57.7%)	24 (31.6%)	< 0.001 ***
Autologous	604 (65.8%)	218 (47.0%)	167 (43.0%)	52 (68.4%)	
Main sponsor	939	480	403	76	

NIH	14 (1.5%)	8 (1.7%)	8 (2.0%)	0 (0.0%)	0.22
Industry	278 (29.6%)	146 (30.4%)	114 (28.3%)	32 (41.6%)	0.02 *
Other	647 (68.9%)	326 (67.9%)	281 (69.7%)	45 (58.4%)	0.07
Study phase	939	480	403	77	
Phase 0	6 (0.6%)	5 (1.0%)	3 (0.7%)	2 (2.6%)	0.14
Phase 1	252 (26.8%)	132 (27.5%)	108 (26.8%)	24 (31.2%)	0.43
Phase 1/Phase 2	342 (36.4%)	194 (40.4%)	162 (40.2%)	32 (41.6%)	0.82
Phase 2	187 (19.9%)	92 (19.2%)	80 (19.9%)	12 (15.6%)	0.38
Phase 2/Phase 3	38 (4.0%)	16 (3.3%)	16 (4.0%)	0 (0.0%)	0.08
Phase 3	41 (4.3%)	20 (4.2%)	16 (4.0%)	4 (5.2%)	0.62
N/A	73 (7.8%)	21 (4.4%)	18 (4.4%)	3 (3.9%)	0.82
Area of expertise	924	474	400	74	
Bacterial Infections and Mycoses	5 (0.5%)	5 (1.1%)	4 (1.0%)	1 (1.4%)	0.79
Virus Diseases	3 (0.3%)	3 (0.6%)	3 (0.5%)	1 (1.4%)	0.40
Parasitic Diseases	1 (0.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	-
Neoplasms	12 (1.3%)	6 (1.3%)	5 (1.3%)	1 (1.4%)	0.94
Musculoskeletal Diseases	110 (11.9%)	66 (13.9%)	54 (13.5%)	12 (16.2%)	0.54
Digestive System Diseases	85 (9.2%)	61 (12.9%)	47 (11.8%)	14 (18.9%)	0.09
Stomatognathic Diseases	10 (1.1%)	10 (2.1%)	9 (2.3%)	1 (1.4%)	0.62
Respiratory Tract Diseases	40 (4.3%)	29 (6.1%)	26 (6.5%)	3 (4.1%)	0.42
Otorhinolaryngologic Diseases	3 (0.3%)	1 (0.2%)	1 (0.3%)	0 (0.0%)	0.67
Nervous System Diseases – [NSD]	195 (21.1%)	96 (20.3%)	82 (20.5%)	14 (18.9%)	0.76
Eye Diseases	43 (4.7%)	11 (2.3%)	10 (2.5%)	1 (1.4%)	0.55
Male Urogenital Diseases	50 (5.4%)	26 (5.5%)	20 (5.0%)	6 (8.1%)	0.28
Female Urogenital Diseases and Pregnancy Complications	47 (5.1%)	27 (5.7%)	19 (4.8%)	8 (10.8%)	0.04 *
Cardiovascular diseases – [CVD]	274 (29.7%)	86 (18.1%)	75 (18.8%)	11 (14.9%)	0.43
Hemic and Lymphatic Diseases	21 (2.3%)	15 (3.2%)	14 (3.5%)	1 (1.4%)	0.33
Congenital, Hereditary, and Neonatal Diseases and Abnormalities	58 (6.3%)	26 (5.5%)	24 (6.0%)	2 (2.7%)	0.25
Skin and Connective Tissue Diseases	52 (5.6%)	34 (7.2%)	30 (7.5%)	4 (5.4%)	0.52
Nutritional and Metabolic Diseases	64 (6.9%)	29 (6.1%)	27 (6.8%)	2 (2.7%)	0.18
Endocrine System Diseases	49 (5.3%)	28 (5.9%)	25 (6.3%)	3 (4.1%)	0.46
Immune System Diseases – [ISD]	109 (11.8%)	91 (19.2%)	85 (21.3%)	6 (8.1%)	0.01 **
Wounds and injuries	91 (9.8%)	53 (11.2%)	40 (10.0%)	13 (17.6%)	0.06

Supplementary Table 2. Characteristics of trials.

Results for trials excluding therapeutics based on hematopoietic stem cell transplant, for trials using mesenchymal stromal cells including ASCs (MSCs), for trials using MSCs excluding ASCs, and for trials using adipose-derived stromal cells (ASCs). Characteristics were statistically compared between studies with ASCs and studies using MSCs (excluding ASCs) by means of a Chi² test for qualitative outcomes. Significance is presented as follows: *p<0.5, **p<0.01, ***p<0.001. Median and interquartile ranges are provided for study sizes retrieved from included trials, and frequencies and percentage are provided for categorical outcomes. State of the study, gender, country of origin, blinding, randomization, type of stem cells employed, and cell donors are described. The probable funding source was derived using an algorithm furnished by Califf *et al.*, and is categorized as NIH, industry or others.

Name of product	Manufacturer	Type of cells	Type of graft	Studies
AC607	Allocure	BM-MSC	Allogeneic	1
Adipocell/ANTG-adip	Bioheart	Adipocytes derived-ASC	Autologous	1
Adipoplus	Anterogen	ASC	Autologous	2
ALD301/401/451	Aldagen/Cytomedix	Selected BM-MNC	Autologous	3
ALLO-ASC	Anterogen	ASC	Allogeneic	4
Allostem	Allosource	ASC	Allogeneic	1
AMR-001/NBS10	Neostem/Caladrius	CD34+ cells	Autologous	2
ANT-SM/ANTG ASC	Anterogen	ASC	Autologous	2
ASCT01	Lifecells	BM-MNC	Autologous	1
C3 BS-CQR-1	Cardio3 BioSciences	MSC-CC	Autologous	2
Cartistem	Medipost	UC-MSC	Allogeneic	3
C-Cure	Cardio3 BioSciences	MSC-CC	Autologous	1
Cellbeads (GLP-1)	CellMed AG/BTG	MSC	Allogeneic	1
CAP-1002	Capricor	CDC	Allogeneic	2
CEP-41750	Teva	MPC	Allogeneic	1
Cerecellgram-Spine	Pharmicell	BM-MSC	Autologous	1
Cerecellgram-ED	Pharmicell	BM-MSC	Autologous	1
Chondrogen	Mesoblast	BM-MSC	Allogeneic	2
Cordstem-ST	CHABiotech	UC-MSC	Allogeneic	1
CTX0E03	ReNeuron	NSC w/ genetic modifications	Allogeneic	3
CX401 eASC	Cellerix/TiGenix	ASC	Autologous	3
CX601	Cellerix/TiGenix	ASC	Allogeneic	4
CX611-0101 eASC	Cellerix/TiGenix	ASC	Allogeneic	2
Furestem-AD	Kang Stem Biotech	UC-MSC	Allogeneic	1
Furestem-CD	Kang Stem Biotech	UC-MSC	Allogeneic	1
Furestem-RA	Kang Stem Biotech	UC-MSC	Allogeneic	1
Hearticellgram-AMI	Pharmicell	BM-MSC	Autologous	1
Hepastem	Promethera	Liver-P	Allogeneic	1
HomeoGH	HomeoTherapy	BM-MSC	Allogeneic	1
HuCNS SC	StemCells	NSC	Allogeneic	6
HYNR-CS Inj	Corestem	BM-MSC	Autologous	2
HYNR-CS-AlloInj	Corestem	BM-MSC	Allogeneic	1
Ixmyelocel-T	Vericel	BM-MSC	Autologous	2
Livercellgram	Pharmicell	BM-MSC	Autologous	1
Lungcellgram	Pharmicell	BM-MSC	Autologous	1
MA09-hRPE	Ocata therapeutics	hESC-RPE	Allogeneic	6
Mesendo	TCA Cellular Therapy	BM-MSC and EPC	Autologous	5
MSB-CAR001	Mesoblast	BM-MSC	Allogeneic	1
MSC-Apceth	Apceth GmbH	BM-MSC	Autologous	1
MSC-NTF/Nurown	Brainstorm Cell therapeutics	BM-MSC w/ growth factors	Autologous	2
Multistem	Pfizer/Athersys	MPC	Allogeneic	4
Myelocell	Bioheart	musc-SC	Autologous	1
Neofuse	Mesoblast	MPC	Allogeneic	5
Neurostem-AD	Medipost	UC-MSC	Allogeneic	2
Nucel	Nutech	Amniotic-SC	Allogeneic	1
cenplacel-L/PDA001	Celgene	pl-MSC	Allogeneic	3
PF-05206388	Pfizer	hESC-RPE	Allogeneic	1
PLX-PAD	Pluristem	pl-MSC	Allogeneic	3
Pneumostem	Medipost	UC-MSC	Allogeneic	3
Map3	RTI Biologics	MPC	Allogeneic	1
opRegen	CellCure Neurosciences	hESC-RPE	Allogeneic	1
Prochymal/Remestemcel	Osiris Therapeutics	BM-MSC	Allogeneic	13
Promostem	Medipost	UC-MSC	Allogeneic	1
Provacel	Osiris Therapeutics	BM-MSC	Allogeneic	1
Repaircell/ANL-adip-AL	Anterogen	Adipocytes derived-ASC	Allogeneic	1
Revascor	Mesoblast	MPC	Allogeneic	3
RNL-Astrostem	K-Stemcell	ASC	Autologous	1
RNL-Jointstem	K-Stemcell	ASC	Autologous	1
RNL-Vascostem	K-Stemcell	ASC	Autologous	1
SB623	SanBio	BM-MSC w/ genetic modification	Allogeneic	1
Stempeucel	Stempeutics	BM-MSC	Allogeneic	1
Trinity Evolution	Orthofix	BM-MSC and OP	Allogeneic	2
Vescell	Theravitae	APC	Autologous	4
XCEL-M-ALPHA	XCelia	BM-MSC	Autologous	2
XCEL-MT-OSTEO-ALPHA	XCelia	BM-MSC	Autologous	3

Supplementary Table 3.

List of cellular specialties identified during screening, with the description of the type of cells (cellular source, allogeneic or autologous), and the number of trials.

Supplementary File S1

```
Bacterial Infections and Mycoses (C01)
     ✓ Infection (C01.539)

☑ Bone Diseases, Infectious (C01.539.160)

                Spondylitis (C01.539.160.762)
          Sepsis (C01.539.757)
                Shock, Septic (C01.539.757.800)
✓ Virus Diseases (C02)
     ✓ DNA Virus Infections (C02.256)

✓ Herpesviridae Infections (C02.256.466)

               ✓ Cytomegalovirus Infections (C02.256.466.245)
     RNA Virus Infections (C02.782)
          Retroviridae Infections (C02.782.815)
                Lentivirus Infections (C02.782.815.616)
                     HIV Infections (C02.782.815.616.400)
                          Acquired Immunodeficiency Syndrome
                          (C02.782.815.616.400.040)

✓ Sexually Transmitted Diseases (C02.800)

✓ Sexually Transmitted Diseases. Viral (C02.800.801)
                ✓ HIV Infections (C02.800.801.400)
                     Acquired Immunodeficiency Syndrome
                    (C02.800.801.400.040)
     Slow Virus Diseases (C02.839)
          Acquired Immunodeficiency Syndrome (C02,839.040)

✓ Parasitic Diseases (C03)

     ✓ Protozoan Infections (C03.752)

✓ Euglenozoa Infections (C03.752.300)

☑ Trypanosomiasis (C03.752.300.900)

✓ Chagas Disease (C03.752.300.900.200)

                          Chagas Cardiomyopathy
                          (C03.752.300.900.200.190)

✓ Neoplasms (C04)

✓ Cysts (C04.182)

          ✓ Bone Cysts (C04.182.089)
     ✓ Neoplasms by Histologic Type (C04.557)
          Neoplasms. Germ Cell and Embryonal (C04.557.465)
                Neuroectodermal Tumors (C04.557.465.625)
                     Neoplasms. Neuroepithelial (C04.557.465.625.600)
                          Glioma (C04.557.465.625.600.380)
                                Astrocytoma (C04.557.465.625.600.380.080)
                                     -Glioblastoma
                                     (C04.557.465.625.600.380.080.335)
                                Gliosarcoma (C04.557.465.625.600.380.400)
                                - Oligodendroglioma
                               (C04.557.465.625.600.380.590)

✓ Neoplasms. Glandular and Epithelial (C04.557.470)

                ✓ Carcinoma (C04.557.470.200)
                     Adenocarcinoma (C04.557.470.200.025)
                          Carcinoma, Ductal (C04.557.470.200.025.232)
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✓ Carcinoma, Ductal, Breast
                               (C04.557.470.200.025.232.500)
                          - Carcinoma. Endometrioid
                          (C04.557.470.200.025.240)
                          Cystadenocarcinoma (C04.557,470,200,025,480)
                                Cvstadenocarcinoma. Mucinous
                               (C04.557.470.200.025.480.225)
                                Cystadenocarcinoma. Serous
                               (C04.557.470.200.025.480.240)
               Neoplasms. Cystic. Mucinous. and Serous (C04.557.470.590)
                     Cvstadenocarcinoma (C04,557,470,590,480)
                          Cvstadenocarcinoma, Mucinous
                          (C04.557.470.590.480.225)
                          Cystadenocarcinoma. Serous
                          (C04.557.470.590.480.240)
               Neoplasms, Ductal, Lobular, and Medullary (C04.557.470.615)
                     Carcinoma, Ductal (C04.557.470.615.132)
                          Carcinoma, Ductal, Breast
                          (C04.557.470.615.132.500)
               Neoplasms. Neuroepithelial (C04.557.470.670)
                     Glioma (C04.557.470.670.380)
                          Astrocytoma (C04.557.470.670.380.080)
                                Glioblastoma (C04.557.470.670.380.080.335)
                          Gliosarcoma (C04.557.470.670.380.400)
                          Oligodendroglioma (C04.557.470.670.380.590)

✓ Neoplasms, Nerve Tissue (C04.557.580)

               ✓ Neuroectodermal Tumors (C04.557.580.625)
                     ✓ Neoplasms. Neuroepithelial (C04.557.580.625.600)
                          ☑ Glioma (C04.557.580.625.600.380)
                                Astrocytoma (C04.557.580.625.600.380.080)
                                     Glioblastoma
                                    (C04.557.580.625.600.380.080.335)
                                ☑ Gliosarcoma (C04.557.580.625.600.380.400)
                                Oligodendroglioma
                               (C04.557.580.625.600.380.590)

✓ Neoplasms by Site (C04.588)

          ☐ <u>Breast Neoplasms</u> (C04.588.180)
               <u>Carcinoma. Ductal. Breast</u> (C04.588.180.390)
          ✓ Head and Neck Neoplasms (C04.588.443)
          ✓ Nervous System Neoplasms (C04.588.614)

✓ Central Nervous System Neoplasms (C04.588.614.250)

                     Brain Neoplasms (C04.588.614.250.195)
          ✓ Urogenital Neoplasms (C04.588.945)

✓ Genital Neoplasms. Female (C04.588.945.418)

<u>✓ Uterine Neoplasms</u> (C04.588.945.418.948)

✓ Endometrial Neoplasms (C04.588.945.418.948.585)

                                Carcinoma. Endometrioid
                               (C04.588.945.418.948.585.124)

✓ Genital Neoplasms. Male (C04.588.945.440)

                     ✓ Prostatic Neoplasms (C04.588.945.440.770)

✓ Precancerous Conditions (C04.834)

          ✓ Preleukemia (C04.834.770)

✓ <u>Musculoskeletal Diseases</u> (C05)
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✓ Bone Diseases (C05.116)

     ■ Bone Cysts (C05.116.070)

☑ Bone Diseases, Developmental (C05.116.099)
          Leg Length Inequality (C05.116.099.655)
          ✓ Osteochondrodysplasias (C05,116,099,708)

☑ Osteogenesis Imperfecta (C05.116.099.708.685)

■ Bone Diseases. Infectious (C05.116.165)

          Spondylitis (C05.116.165.762)

■ Bone Resorption (C05.116.264)

          ✓ Alveolar Bone Loss (C05.116.264.150)
     ✓ Osteochondritis (C05.116.791)
          ✓ Osteochondritis Dissecans (C05,116,791,668)
     ✓ Osteonecrosis (C05.116.852)
          ✓ Femur Head Necrosis (C05.116.852.175)
     ✓ Spinal Diseases (C05.116.900)
          ✓ Intervertebral Disc Degeneration (C05.116.900.153)
          ✓ Intervertebral Disc Displacement (C05.116.900.307)

■ Spinal Stenosis (C05.116.900.825)

          Spondylitis (C05.116.900.853)
                Spondylarthritis (C05.116.900.853.625)
                     Spondylarthropathies (C05.116.900.853.625.800)
                           Spondylitis. Ankylosing
                          (C05.116.900.853.625.800.850)
          ✓ Spondylosis (C05.116.900.938)

✓ Spondylolysis (C05.116.900.938.500)

                     Spondylolisthesis (C05.116.900.938.500.500)
✓ Cartilage Diseases (C05.182)
     ■ -Osteochondritis (C05.182.520)

✓ Foot Deformities (C05.330)

     ✓ Foot Deformities. Acquired (C05.330.488)
✓ Joint Diseases (C05.550)
     Ankylosis (C05.550.069)
          Spondylitis. Ankylosing (C05.550.069.680)
     ✓ Arthritis (C05.550.114)
          Arthritis. Rheumatoid (C05.550.114.154)
                Siogren's Syndrome (C05.550.114.154.774)
          Osteoarthritis (C05.550.114.606)
                Osteoarthritis. Hip (C05.550.114.606.400)
                Osteoarthritis. Knee (C05.550.114.606.500)
          Spondylarthritis (C05.550.114.865)
                Spondylarthropathies (C05.550.114.865.800)
                     Spondylitis. Ankylosing (C05.550.114.865.800.850)
✓ Muscular Diseases (C05.651)
     ✓ Compartment Syndromes (C05.651.180)

✓ Muscular Disorders. Atrophic (C05.651.534)

✓ Muscular Dystrophies (C05.651.534.500)

                Muscular Dystrophies. Limb-Girdle
               (C05,651,534,500,280)
                ✓ Muscular Dystrophy. Duchenne (C05.651.534.500.300)
                Muscular Dystrophy. Facioscapulohumeral
               (C05.651.534.500.400)
     <u>✓ Tendinopathy</u> (C05.651.869)
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☑ Rheumatic Diseases (C05.799)

          Arthritis. Rheumatoid (C05.799.114)
                ✓ Siogren's Syndrome (C05,799,114,774)
          ✓ Osteoarthritis (C05.799.613)
                ✓ Osteoarthritis. Hip (C05.799.613.400)
                ✓ Osteoarthritis. Knee (C05.799.613.500)
     ✓ Tennis Elbow (C05.906)
☑ Digestive System Diseases (C06)
     ☐ Biliary Tract Diseases (C06.130)
          ■ Bile Duct Diseases (C06.130.120)
               — Cholestasis, Intrahepatic (C06,130,120,135,250)
                           Liver Cirrhosis. Biliary (C06.130.120.135.250.250)

☑ Digestive System Fistula (C06.267)

          ✓ Intestinal Fistula (C06.267.550)
               Rectal Fistula (C06.267.550.600)
                     Rectovaginal Fistula (C06.267.550.600.650)
     ☑ Gastrointestinal Diseases (C06.405)
          Gastroenteritis (C06.405.205)
               Colitis (C06.405.205.265)
                     Colitis. Ulcerative (C06.405.205.265.231)
               Inflammatory Bowel Diseases (C06.405.205.731)
                     Colitis. Ulcerative (C06.405.205.731.249)
                     Crohn Disease (C06.405.205.731.500)
          ✓ Intestinal Diseases (C06.405.469)

✓ Colonic Diseases (C06,405,469,158)

                     ✓ Colitis (C06.405.469.158.188)
                           ☑ Colitis. Ulcerative (C06.405.469.158.188.231)
                ✓ Inflammatory Bowel Diseases (C06.405.469.432)
                     Colitis. Ulcerative (C06.405.469.432.249)
                     ☑ Crohn Disease (C06.405.469.432.500)
               ☐ <u>Intestinal Fistula</u> (C06.405.469.471)
                     Rectal Fistula (C06.405.469.471.600)
                           Rectovaginal Fistula (C06,405,469,471,600,650)

✓ Rectal Diseases (C06.405.469.860)

                     ✓ Fecal Incontinence (C06.405.469.860.300)
                     ✓ Rectal Fistula (C06.405.469.860.752)
                           Rectovaginal Fistula (C06.405.469.860.752.650)
     ✓ Liver Diseases (C06.552)

☑ Cholestasis. Intrahepatic (C06.552.150)

               ✓ <u>Liver Cirrhosis. Biliary</u> (C06.552.150.250)

✓ Hepatic Insufficiency (C06.552.308)

                ✓ Liver Failure (C06.552.308.500)
                     ☑ End Stage Liver Disease (C06.552.308.500.177)
          ✓ Hepatitis (C06.552.380)

✓ Hepatitis. Chronic (C06.552.380.350)

                     ✓ Hepatitis. Autoimmune (C06.552.380.350.050)
          ✓ Hypertension. Portal (C06.552.494)
          ✓ Liver Cirrhosis (C06.552.630)
                Liver Cirrhosis. Alcoholic (C06.552.630.380)
               ☐ Liver Cirrhosis. Biliary (C06.552.630.400)
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Liver Diseases. Alcoholic (C06.552.645)
                Liver Cirrhosis. Alcoholic (C06.552.645.590)

✓ Pancreatic Diseases (C06.689)

          ✓ Pancreatitis (C06.689.750)

☑ Pancreatitis. Chronic (C06.689.750.830)

✓ Stomatognathic Diseases (C07)

✓ Mouth Diseases (C07.465).

           ☑ Behcet Syndrome (C07.465.075)
          ✓ Facial Hemiatrophy (C07.465.284)
          ☐ <del>Lip Diseases</del> (C07.465.409)
                Cleft Lip (C07.465.409.225)
          ■ Mouth Abnormalities (C07.465.525)
                Cleft Lip (C07.465.525.164)
           Periodontal Diseases (C07.465.714)

☑ Periodontal Atrophy (C07.465.714.354)

                      ✓ Alveolar Bone Loss (C07.465.714.354.500)
                ✓ Periodontitis (C07.465.714.533)

☑ Chronic Periodontitis (C07.465.714.533.324)

✓ Periodontal Pocket (C07.465.714.533.750)

✓ Salivary Gland Diseases (C07.465.815)

                Xerostomia (C07.465.815.929)
                     ✓ Siogren's Syndrome (C07.465.815.929.669)

✓ Stomatognathic System Abnormalities (C07.650)

✓ Mouth Abnormalities (C07.650.525)

                ☑ Cleft Lip (C07.650.525.164)
     ✓ Tooth Diseases (C07.793)
           ✓ Dental Pulp Diseases (C07,793,237)
                ☑ Dental Pulp Necrosis (C07.793.237.315)
Respiratory Tract Diseases (C08)
     ☐ Bronchial Diseases (C08.127)
          ■ Bronchitis (C08.127.446)
                ■ Bronchiolitis (C08.127.446.135)
                      Bronchiolitis Obliterans (C08.127.446.135.140)
                Bronchitis. Chronic (C08.127.446.567)
     ✓ Larvngeal Diseases (C08.360)
           ✓ Vocal Cord Dysfunction (C08.360.895)
     ✓ Lung Diseases (C08.381)
           ✓ Hypertension. Pulmonary (C08.381.423)
          ✓ Lung Diseases. Interstitial (C08.381.483)
                ☐ Idiopathic Interstitial Pneumonias (C08.381.483.487)
                     ☐ Idiopathic Pulmonary Fibrosis (C08.381.483.487.500)
                Pneumoconiosis (C08.381.483.581)
                      ■ Silicosis (C08.381.483.581.760)
                Sarcoidosis. Pulmonary (C08.381.483.725)
           ✓ Lung Diseases. Obstructive (C08.381.495)
                Bronchitis (C08.381.495.146)
                      ☑ Bronchiolitis (C08,381,495,146,135)
                           ☑ Bronchiolitis Obliterans (C08.381.495.146.135.140)
                      Bronchitis. Chronic (C08.381.495.146.567)
                ☑ Pulmonary Disease, Chronic Obstructive (C08.381.495.389)
                      Bronchitis. Chronic (C08.381.495.389.500)
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Pulmonary Emphysema (C08.381.495.389.750)
          ✓ Lung Injury (C08.381.520)

✓ Acute Lung Injury (C08.381.520.500)

☑ Pneumoconiosis (C08.381.520.702)

                     Silicosis (C08.381.520.702.760)
               ✓ Ventilator-Induced Lung Injury (C08.381.520.750)
                     ☑ Bronchopulmonary Dysplasia (C08.381.520.750.500)
          ✓ Pulmonary Fibrosis (C08.381.765)
                ✓ Idiopathic Pulmonary Fibrosis (C08.381.765.500)
          Respiratory Distress Syndrome. Adult (C08.381.840)
          Respiratory Distress Syndrome. Newborn (C08.381.842)
     Respiration Disorders (C08.618)
          Respiratory Distress Syndrome, Adult (C08.618.840)
          Respiratory Distress Syndrome, Newborn (C08.618.842)
          ■ Vocal Cord Dysfunction (C08.618.980)
     Respiratory Tract Infections (C08.730)
          Bronchitis (C08.730.099)
               ■ Bronchiolitis (C08.730.099.135)
               ■ Bronchitis. Chronic (C08.730.099.567)
     ✓ Tracheal Diseases (C08.907)
          ✓ <u>Tracheal Stenosis</u> (C08.907.663)

✓ Otorhinolaryngologic Diseases (C09)

✓ Ear Diseases (C09.218)

✓ Hearing Disorders (C09,218,458)

                ✓ Hearing Loss (C09.218.458.341)
                     ☑ Deafness (C09.218.458.341.186)
                     ✓ Hearing Loss. Sensorineural (C09.218.458.341.887)
     ✓ Larvngeal Diseases (C09.400)
          ✓ Vocal Cord Dysfunction (C09.400.895)
✓ Nervous System Diseases (C10)
     ✓ Autoimmune Diseases of the Nervous System (C10.114)
          ☑ Demyelinating Autoimmune Diseases. CNS (C10.114.375)
                ✓ Multiple Sclerosis (C10.114.375.500)
                     ✓ Multiple Sclerosis. Chronic Progressive
                    (C10.114.375.500.200)
                     Multiple Sclerosis, Relapsing-Remitting
                    (C10.114.375.500.600)
                     ■ <u>Neuromyelitis Optica</u> (C10.114.375.500.650)

✓ Myelitis, Transverse (C10.114.375.600)

                     ✓ Neuromyelitis Optica (C10.114.375.600.500)
               ■ Neuromyelitis Optica (C10.114.375.650)

✓ Autonomic Nervous System Diseases (C10.177)

          Primary Dysautonomias (C10.177.575)
               Multiple System Atrophy (C10.177.575.550)
                     Shy-Drager Syndrome (C10.177.575.550.750)
     ☑ Central Nervous System Diseases (C10.228)
          ☑ Brain Diseases (C10.228.140)
                Basal Ganglia Diseases (C10.228.140.079)
                     Huntington Disease (C10.228.140.079.545)
                     ■ Multiple System Atrophy (C10.228.140.079.612)
                          Shy-Drager Syndrome (C10.228.140.079.612.700)
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Parkinsonian Disorders (C10.228.140.079.862)
           Parkinson Disease (C10.228.140.079.862.500)
     Supranuclear Palsy. Progressive (C10.228.140.079.882)
☑ Brain Damage. Chronic (C10.228.140.140)
     Cerebral Palsy (C10, 228, 140, 140, 254)

☑ Brain Diseases, Metabolic (C10.228.140.163)

☑ Brain Diseases, Metabolic, Inborn (C10.228.140.163.100)

           Hereditary Central Nervous System Demyelinating
          Diseases (C10.228.140.163.100.362)

✓ Adrenoleukodystrophy

               (C10,228,140,163,100,362,250)
                Pelizaeus-Merzbacher Disease
               (C10.228.140.163.100.362.775)
           Peroxisomal Disorders (C10.228.140.163.100.680)
                Adrenoleukodystrophy
               (C10.228.140.163.100.680.100)
           Urea Cycle Disorders, Inborn
          (C10.228.140.163.100.937)
☑ Brain Injuries (C10.228.140.199)
☐ Brain Neoplasms (C10.228.140.211)

☑ Cerebellar Diseases (C10.228.140.252)

✓ Cerebellar Ataxia (C10.228.140.252.190)

     Spinocerebellar Degenerations (C10.228.140.252.700)

☑ Cerebrovascular Disorders (C10.228.140.300)

      ☑ Brain Ischemia (C10.228.140.300.150)
           Brain Infarction (C10.228.140.300.150.477)
                Cerebral Infarction
               (C10.228.140.300.150.477.200)
                      ☐ Infarction. Anterior Cerebral Artery
                     (C10.228.140.300.150.477.200.400)
                      ☐ Infarction. Middle Cerebral Artery
                     (C10.228.140.300.150.477.200.450)
                      ■ Infarction. Posterior Cerebral Artery
                     (C10.228.140.300.150.477.200.475)
           Hypoxia-Ischemia, Brain
          (C10.228.140.300.150.716)
     Intracranial Arterial Diseases (C10.228.140.300.510)
           — Cerebral Arterial Diseases (C10.228.140.300.510.200)
                  Infarction. Anterior Cerebral Artery
               (C10.228.140.300.510.200.325)
                  Infarction. Middle Cerebral Artery
               (C10.228.140.300.510.200.387)
                ☐ Infarction. Posterior Cerebral Artery
               (C10.228.140.300.510.200.418)

✓ Intracranial Hemorrhages (C10.228.140.300.535)

           ✓ Cerebral Hemorrhage (C10.228.140.300.535.200)
      Stroke (C10.228.140.300.775)
           Brain Infarction (C10.228.140.300.775.200)
                Cerebral Infarction
               (C10.228.140.300.775.200.200)
                      ✓ Infarction. Anterior Cerebral Artery
                     (C10.228.140.300.775.200.200.400)
                      ✓ Infarction. Middle Cerebral Artery
                     (C10.228.140.300.775.200.200.450)
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☑ Infarction. Posterior Cerebral Artery

                              (C10.228.140.300.775.200.200.475)
          Dementia (C10.228.140.380)
               Alzheimer Disease (C10, 228, 140, 380, 100)
               Huntington Disease (C10.228.140.380.278)
          ✓ Epilepsy (C10.228.140.490)

☑ Epilepsies. Partial (C10.228.140.490.360)

✓ Epilepsy. Temporal Lobe

                    (C10.228.140.490.360.290)
          ✓ Hypoxia, Brain (C10.228.140.624)
               ✓ <u>Hypoxia-Ischemia. Brain</u> (C10.228.140.624.500)
          Leukoencephalopathies (C10,228,140,695)
                 Demyelinating Autoimmune Diseases, CNS
               (C10.228.140.695.562)
               Hereditary Central Nervous System Demyelinating Diseases
               (C10.228.140.695.625)
                     Adrenoleukodystrophy (C10.228.140.695.625.250)
                     Pelizaeus-Merzbacher Disease
                    (C10.228.140.695.625.775)
     ■ Movement Disorders (C10.228.662)
          Dyskinesias (C10.228.662.262)
               -Chorea (C10.228.662.262.249)
                     Huntington Disease (C10.228.662.262.249.750)
          Multiple System Atrophy (C10.228.662.550)
               Shy-Drager Syndrome (C10.228.662.550.700)
          Parkinsonian Disorders (C10.228,662,600)
               Parkinson Disease (C10.228.662.600.400)
          Supranuclear Palsy. Progressive (C10.228.662.700)
     ✓ Spinal Cord Diseases (C10.228.854)
          Amyotrophic Lateral Sclerosis (C10.228.854.139)
          Spinal Cord Injuries (C10.228.854.770)
          ■ <u>Spinocerebellar Degenerations</u> (C10.228.854.787)

✓ Facial Nerve Diseases (C10.292.300)

          ✓ Facial Hemiatrophy (C10.292.300.375)
     Ocular Motility Disorders (C10.292.562)
          Ophthalmoplegia (C10.292.562.750)
               Supranuclear Palsy. Progressive (C10.292.562.750.500)
     ✓ Optic Nerve Diseases (C10.292.700)
          ☑ Optic Atrophy (C10.292.700.225)
          Optic_Neuritis (C10.292.700.550)
               Neuromyelitis Optica (C10.292.700.550.500)
☑ <u>Demyelinating Diseases</u> (C10.314)
     Demyelinating Autoimmune Diseases. CNS (C10.314.350)
          ■ Multiple Sclerosis (C10.314.350.500)
               Multiple Sclerosis. Chronic Progressive
               (C10.314.350.500.200)
               Multiple Sclerosis. Relapsing-Remitting
               (C10.314.350.500.600)
               Neuromyelitis Optica (C10.314.350.500.650)
          Myelitis. Transverse (C10.314.350.600)
               Neuromyelitis Optica (C10.314.350.600.500)
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■ Neuromyelitis Optica (C10.314.350.650)
     ☐ Hereditary Central Nervous System Demyelinating Diseases
    (C10.314.400)
          Adrenoleukodystrophy (C10.314.400.250)
          Pelizaeus-Merzbacher Disease (C10,314,400,775)
✓ Nervous System Neoplasms (C10.551)

☑ Central Nervous System Neoplasms (C10.551.240)

          ☑ Brain Neoplasms (C10.551.240.250)
✓ Neurodegenerative Diseases (C10.574)

✓ Heredodegenerative Disorders. Nervous System (C10.574.500)

☑ Huntington Disease (C10.574.500.497)

          ✓ Neuronal Ceroid-Lipofuscinoses (C10,574,500,550)
          ✓ Spinocerebellar Degenerations (C10.574.500.825)
     ■ Motor Neuron Disease (C10.574.562)
          Amyotrophic Lateral Sclerosis (C10.574.562.250)
     Multiple System Atrophy (C10.574.625)
          Shy-Drager Syndrome (C10.574.625.700)
     ✓ Parkinson Disease (C10.574.812)
     Shy-Drager Syndrome (C10.574.875)

✓ Tauopathies (C10.574.945)

          ✓ Alzheimer Disease (C10.574.945.249)
          ✓ Supranuclear Palsy. Progressive (C10.574.945.500)
     ✓ TDP-43 Proteinopathies (C10.574.950)
          Amyotrophic Lateral Sclerosis (C10.574.950.050)
✓ Neurologic Manifestations (C10.597)
     Dvskinesias (C10.597.350)
          Ataxia (C10.597.350.090)
                Cerebellar Ataxia (C10,597,350,090,500)

✓ Neurobehavioral Manifestations (C10.597.606)

✓ Intellectual Disability (C10.597.606.643)

                Mental Retardation, X-Linked (C10.597.606.643.455)
                     Adrenoleukodystrophy (C10.597.606.643.455.124)

✓ Pain (C10.597.617)

          ☑ Back Pain (C10,597,617,232)
                ✓ Low Back Pain (C10.597.617.232.400)
     ☐ <u>Paralysis</u> (C10.597.622)
          — Ophthalmoplegia (C10.597.622.447)
                Supranuclear Palsy. Progressive (C10.597.622.447.690)
     ✓ Sensation Disorders (C10.597.751)

✓ Hearing Disorders (C10.597.751.418)

                Hearing Loss (C10.597.751.418.341)
                     ☑ Deafness (C10.597.751.418.341.186)
                     Hearing Loss. Sensorineural
                    (C10.597.751.418.341.887)
✓ Neuromuscular Diseases (C10.668)
     ✓ Motor Neuron Disease (C10.668.467)
          Amyotrophic Lateral Sclerosis (C10.668.467.250)
     Muscular Diseases (C10.668.491)
          Muscular Disorders. Atrophic (C10.668.491.175)

✓ Muscular Dystrophies (C10.668.491.175.500)

                     Muscular Dystrophies. Limb-Girdle
                    (C10.668.491.175.500.149)
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Muscular Dystrophy. Duchenne
                          (C10.668.491.175.500.300)
                           Muscular Dystrophy. Facioscapulohumeral
                          (C10.668.491.175.500.400)
          ✓ Peripheral Nervous System Diseases (C10.668.829)
                ☑ Diabetic Neuropathies (C10.668.829.300)
                Peripheral Nerve Injuries (C10.668.829.712)

✓ Trauma. Nervous System (C10.900)

✓ Craniocerebral Trauma (C10.900.300)

                ☐ Brain Injuries (C10.900.300.087)
                Skull Fractures (C10.900.300.918)
          Peripheral Nerve Injuries (C10.900.575)
          ☐ Spinal Cord Injuries (C10,900.850)

✓ Eve Diseases (C11)

     ✓ Corneal Diseases (C11.204)
          Corneal Injuries (C11.204.284)
     Eve Diseases, Hereditary (C11,270)
          Retinitis Pigmentosa (C11.270.684)
     ✓ Eve Injuries (C11,297)
          ✓ Corneal Injuries (C11,297,374)
     ✓ Lacrimal Apparatus Diseases (C11.496)
          ✓ Dry Eye Syndromes (C11.496.260)
                ✓ Sjogren's Syndrome (C11.496.260.719)

✓ Ocular Hypertension (C11.525)

          ✓ Glaucoma (C11.525.381)
                ☑ Glaucoma. Open-Angle (C11.525.381.407)

☑ Ocular Motility Disorders (C11.590)

          ✓ Ophthalmoplegia (C11.590.472)
                Supranuclear Palsy. Progressive (C11.590.472.500)
     ☑ Optic Nerve Diseases (C11.640)
          ✓ Optic Atrophy (C11.640.451)
          ✓ Optic Neuritis (C11.640.576)
                ✓ Neuromyelitis Optica (C11.640.576.695)
     ✓ Retinal Diseases (C11.768)
          ☑ Diabetic Retinopathy (C11.768.257)
          ✓ Retinal Artery Occlusion (C11.768.400)
          ✓ Retinal Degeneration (C11.768.585)
                ✓ Macular Degeneration (C11.768.585.439)
                     Geographic Atrophy (C11.768.585.439.122)
                ☑ Retinal Dystrophies (C11.768.585.658)
                     ✓ <u>Retinitis Pigmentosa</u> (C11.768.585.658.500)
          ✓ Retinitis (C11.768.773)

✓ <u>Uveal Diseases</u> (C11.941)

          ✓ Uveitis (C11.941.879)
                ✓ Panuveitis (C11.941.879.780)

<u>✓ Uveitis. Anterior</u> (C11.941.879.780.880)

                           Behcet Syndrome (C11.941.879.780.880.200)

✓ Male Urogenital Diseases (C12)

✓ Genital Diseases. Male (C12.294)

          Genital Neoplasms. Male (C12.294.260)
                Prostatic Neoplasms (C12.294.260.750)
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✓ Infertility (C12.294.365)
           ✓ Infertility, Male (C12.294.365.700)
                Azoospermia (C12,294,365,700,380)
     Penile Diseases (C12.294.494)
          ✓ Penile Induration (C12,294,494,508)
     Prostatic Diseases (C12,294,565)
          Prostatic Neoplasms (C12.294.565.625)
     Sexual Dysfunction. Physiological (C12.294.644)
           ☑ Erectile Dysfunction (C12.294.644.486)
                Impotence. Vasculogenic (C12.294.644.486.500)
✓ Urogenital Abnormalities (C12.706)
     ☑ Bladder Exstrophy (C12,706,132)
     ☑ Disorders of Sex Development (C12,706,316)

✓ Sex Chromosome Disorders of Sex Development

          (C12.706.316.795)
                ✓ Klinefelter Syndrome (C12.706.316.795.500)
     ■ Multicystic Dysplastic Kidney (C12.706.629)
✓ Urogenital Neoplasms (C12.758)

✓ Genital Neoplasms. Male (C12.758.409)

          ✓ Prostatic Neoplasms (C12.758.409.750)
✓ Urologic <u>Diseases</u> (C12.777)
     ✓ Kidney Diseases (C12.777.419)
           ☑ Diabetic Nephropathies (C12.777.419.192)
          Fanconi Syndrome (C12.777.419.250)

☑ Hypertension, Renal (C12.777.419.331)

                Hypertension. Renovascular (C12.777.419.331.490)

✓ Kidney Diseases, Cystic (C12,777,419,403)
                Multicystic Dysplastic Kidney (C12,777,419,403,750)
                ✓ Polycystic Kidney Diseases (C12.777.419.403.875)
          ✓ Nephritis (C12.777.419.570)

✓ Glomerulonephritis (C12.777.419.570.363)

✓ Glomerulosclerosis. Focal Segmental

                     (C12.777.419.570.363.660)
                      ✓ Lupus Nephritis (C12.777.419.570.363.680)
          ✓ Nephrosis (C12.777.419.630)
                ✓ Nephrosis. Lipoid (C12.777.419.630.477)
                ✓ Nephrotic Syndrome (C12.777.419.630.643)
          ☑ Renal Artery Obstruction (C12.777.419.775)
          ☑ Renal Insufficiency (C12.777.419.780)
                Acute Kidney Injury (C12.777.419.780.050)
                      Kidnev Tubular Necrosis. Acute
                     (C12.777.419.780.050.500)
                ✓ Renal Insufficiency. Chronic (C12.777.419.780.750)
                      Kidney Failure. Chronic (C12.777.419.780.750.500)
          Renal Tubular Transport. Inborn Errors (C12.777.419.815)
                ✓ Fanconi Syndrome (C12.777.419.815.450)
     ✓ Urethral Diseases (C12.777.767)
           Urethral Obstruction (C12.777.767.700)
                <u>Urethral Stricture</u> (C12.777.767.700.700)
     ✓ Urinary Bladder Diseases (C12.777.829)
          ■ Bladder Exstrophy (C12.777.829.132)
          Cystitis (C12.777.829.495)
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✓ Urination Disorders (C12.777.934)
                ☑ Urinary Incontinence (C12.777.934.852)
                     ☑ Urinary Incontinence. Stress (C12.777.934.852.249)
Female Urogenital Diseases and Pregnancy Complications (C13)

✓ Female Urogenital Diseases (C13.351)

☑ Genital Diseases, Female (C13,351,500)

✓ Adnexal Diseases (C13.351.500.056)

                      Ovarian Diseases (C13.351.500.056.630)
                           ✓ Menopause. Premature (C13.351.500.056.630.250)
                           Ovarian Neoplasms (C13.351.500.056.630.705)
                                Carcinoma. Endometrioid
                                (C13, 351, 500, 056, 630, 705, 331)

✓ Primary Ovarian Insufficiency

                          (C13.351.500.056.630.750)
                ✓ Gynatresia (C13.351.500.320)
                ✓ Infertility (C13.351.500.365)
                     ✓ Infertility. Female (C13.351.500.365.700)

✓ Vaginal Diseases (C13.351.500.894)

                      ✓ Vaginal Fistula (C13.351.500.894.767)
                           Rectovaginal Fistula (C13.351.500.894.767.249)
          ✓ Urogenital Abnormalities (C13.351.875)
                ☑ Bladder Exstrophy (C13.351.875.132)
                ☑ Disorders of Sex Development (C13.351.875.253)
                     Sex Chromosome Disorders of Sex Development
                     (C13.351.875.253.795)
                           ✓ Klinefelter Syndrome (C13.351.875.253.795.500)
                ■ Multicystic Dysplastic Kidney (C13.351.875.558)
          ✓ Urogenital Neoplasms (C13.351.937)
                Genital Neoplasms, Female (C13,351,937,418)
                     Ovarian Neoplasms (C13.351.937.418.685)
                           Carcinoma. Endometrioid
                          (C13.351.937.418.685.331)

<u>✓ Uterine Neoplasms</u> (C13.351.937.418.875)

                           Endometrial Neoplasms (C13.351.937.418.875.200)
                                Carcinoma. Endometrioid
                                (C13.351.937.418.875.200.124)
          ✓ Urologic Diseases (C13.351.968)
                ✓ Kidney Diseases (C13.351.968.419)
                     ☑ <u>Diabetic Nephropathies</u> (C13.351.968.419.192)
                     Fanconi Syndrome (C13,351,968,419,250)

☑ Hypertension. Renal (C13.351.968.419.331)

                           Hypertension, Renovascular
                          (C13.351.968.419.331.490)

✓ Kidney Diseases, Cystic (C13.351.968.419.403)

✓ Multicystic Dysplastic Kidney

                          (C13.351.968.419.403.750)
                           Polycystic Kidney Diseases
                          (C13.351.968.419.403.875)

✓ Nephritis (C13.351.968.419.570)

                           Glomerulonephritis (C13.351.968.419.570.363)

☑ Glomerulosclerosis. Focal Segmental

                                (C13.351.968.419.570.363.640)
                                ✓ Lupus Nephritis
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(C13.351.968.419.570.363.680)
                     Nephrosis (C13.351.968.419.630)
                          Nephrosis, Lipoid (C13,351,968,419,630,477)
                          Nephrotic Syndrome (C13,351,968,419,630,643)
                     ✓ Renal Artery Obstruction (C13.351.968.419.775)
                     ☑ Renal Insufficiency (C13.351.968.419.780)
                          Acute Kidney Injury (C13.351.968.419.780.050)

✓ Kidney Tubular Necrosis. Acute

                               (C13.351.968.419.780.050.500)
                          Renal Insufficiency, Chronic
                         (C13.351.968.419.780.750)
                               ✓ Kidney Failure, Chronic
                               (C13.351.968.419.780.750.500)
                     Renal Tubular Transport, Inborn Errors
                    (C13.351.968.419.815)
                          ✓ Fanconi Syndrome (C13.351.968.419.815.450)
               ✓ Urethral Diseases (C13.351.968.767)

☑ <u>Urethral Obstruction</u> (C13.351.968.767.700)

                          Urethral Stricture (C13,351,968,767,700,700)
               ✓ Urinary Bladder Diseases (C13.351.968.829)
                     Bladder Exstrophy (C13.351.968.829.132)
                     Cystitis (C13.351.968.829.495)
               ✓ Urination Disorders (C13.351.968.934)
                     ✓ Urinary Incontinence (C13.351.968.934.814)
                          Urinary Incontinence. Stress
                         (C13.351.968.934.814.500)
☑ Cardiovascular Diseases (C14)

✓ Cardiovascular Abnormalities (C14.240)

✓ Heart Defects. Congenital (C14.240.400)

                Cor Triatriatum (C14.240.400.200)
               Hypoplastic Left Heart Syndrome (C14.240.400.625)
     ✓ Heart Diseases (C14.280)
          Cardiomegaly (C14.280.195)
               ☐ Cardiomyopathy. Dilated (C14,280,195,160)
          ✓ Cardiomyopathies (C14.280.238)

☑ Cardiomyopathy. Dilated (C14.280.238.070)

                Chagas Cardiomyopathy (C14.280.238.190)
          Heart Defects. Congenital (C14.280.400)
                Cor Triatriatum (C14.280.400.200)
               Hypoplastic Left Heart Syndrome (C14.280.400.625)
          ✓ Heart Failure (C14.280.434)
          Myocardial Ischemia (C14.280.647)
                Angina Pectoris (C14.280.647.187)
                     Angina. Stable (C14.280.647.187.362)
               ✓ Coronary Disease (C14.280.647.250)
                     ✓ Coronary Artery Disease (C14.280.647.250.260)
                     Coronary Occlusion (C14.280.647.250.272)
               ✓ Myocardial Infarction (C14,280,647,500)
                     Anterior Wall Myocardial Infarction
                    (C14.280.647.500.093)
          Ventricular Dysfunction (C14.280.945)
                ✓ Ventricular Dysfunction. Left (C14.280.945.900)
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✓ Vascular Diseases (C14.907)

     ✓ Arterial Occlusive Diseases (C14.907.137)
          ✓ Arteriosclerosis (C14.907.137.126)
                ✓ Atherosclerosis (C14.907.137.126.307)
                     Peripheral Arterial Disease
                     (C14.907.137.126.307.500)
                Coronary Artery Disease (C14.907.137.126.339)
                ✓ Intermittent Claudication (C14.907.137.126.669)
          ☑ Renal Artery Obstruction (C14.907.137.727)
          ☑ Retinal Artery Occlusion (C14.907.137.780)
          Thromboangiitis Obliterans (C14,907,137,870)

☑ Cerebrovascular Disorders (C14.907.253)

          ☑ Brain Ischemia (C14.907.253.092)
                ■ Brain Infarction (C14.907.253.092.477)
                     Cerebral Infarction (C14.907.253.092.477.200)
                           Infarction. Anterior Cerebral Artery
                          (C14.907.253.092.477.200.400)
                           ☐ <u>Infarction. Middle Cerebral Artery</u>
                          (C14.907.253.092.477.200.450)
                           ☐ Infarction. Posterior Cerebral Artery
                          (C14.907.253.092.477.200.475)
                Hypoxia-Ischemia. Brain (C14.907.253.092.716)
          Intracranial Arterial Diseases (C14.907.253.560)
                — Cerebral Arterial Diseases (C14.907.253.560.200)
                     ■ Infarction, Anterior Cerebral Artery
                     (C14.907.253.560.200.325)
                     ☐ Infarction. Middle Cerebral Artery
                     (C14.907.253.560.200.387)
                     ■ Infarction. Posterior Cerebral Artery
                     (C14.907.253.560.200.418)
          ✓ Intracranial Hemorrhages (C14,907,253,573)
                ☑ Cerebral Hemorrhage (C14.907.253.573.200)
          ✓ Stroke (C14.907.253.855)
                Brain Infarction (C14.907.253.855.200)
                     ✓ Cerebral Infarction (C14.907.253.855.200.200)

☑ Infarction. Anterior Cerebral Artery

                          (C14.907.253.855.200.200.400)

☑ Infarction. Middle Cerebral Artery

                          (C14.907.253.855.200.200.450)

✓ Infarction. Posterior Cerebral Artery

                          (C14.907.253.855.200.200.475)
     ✓ Compartment Syndromes (C14.907.303)
     ✓ Diabetic Angiopathies (C14.907.320)
          ☑ Diabetic Foot (C14.907.320.191)
          ☑ Diabetic Retinopathy (C14.907.320.382)
     ✓ Hypertension (C14.907.489)

✓ <u>Hypertension. Renal</u> (C14.907.489.631)

                Hypertension. Renovascular (C14.907.489.631.485)

✓ Hypotension (C14.907.514)

          Shy-Drager Syndrome (C14.907.514.741)
     ■ Myocardial Ischemia (C14.907.585)
          Angina Pectoris (C14.907.585.187)
                Angina. Stable (C14.907.585.187.362)
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☐ Coronary Disease (C14.907.585.250)
                     Coronary Artery Disease (C14.907.585.250.260)
                     Coronary Occlusion (C14.907.585.250.272)
               ■ Myocardial Infarction (C14.907.585.500)
                     Anterior Wall Myocardial Infarction
                    (C14.907.585.500.093)
          ✓ Peripheral Vascular Diseases (C14.907.617)
                Peripheral Arterial Disease (C14.907.617.671)
          ✓ Varicose Veins (C14.907.927)
                ✓ Varicose Ulcer (C14.907.927.730)

✓ Vasculitis (C14.907.940)

                ☑ Behcet Syndrome (C14.907.940.100)
               ✓ Thromboangiitis Obliterans (C14.907.940.905)

✓ Hemic and Lymphatic Diseases (C15)

     ✓ Hematologic Diseases (C15.378)
          ✓ Anemia (C15.378.071)
                ✓ Anemia. Aplastic (C15.378.071.085)
                     Anemia. Hypoplastic. Congenital (C15.378.071.085.080)
                          ✓ Fanconi Anemia (C15.378.071.085.080.280)
               Anemia. Hemolytic (C15.378.071.141)
                     Anemia. Hemolytic. Congenital (C15.378.071.141.150)
                           Anemia. Sickle Cell (C15.378.071.141.150.150)

■ Blood Coagulation Disorders (C15.378.100)

☑ Blood Coagulation Disorders. Inherited (C15.378.100.100)

✓ Hemophilia B (C15.378.100.100.510)

               Coagulation Protein Disorders (C15.378.100.141)
                     Hemophilia B (C15.378.100.141.510)

■ Blood Platelet Disorders (C15.378.140)

☑ Thrombocytopenia (C15.378.140.855)

☑ Bone Marrow Diseases (C15.378.190)

                Anemia. Aplastic (C15.378.190.196)
                     Anemia. Hypoplastic. Congenital (C15.378.190.196.080)
                          Fanconi Anemia (C15.378.190.196.080.280)
                Myelodysplastic Syndromes (C15.378.190.625)
          ✓ Hemoglobinopathies (C15.378.420)
                ✓ Anemia. Sickle Cell (C15.378.420.155)
          Hemorrhagic Disorders (C15.378.463)
                ■ Hemophilia B (C15.378.463.510)
          ✓ Leukocyte Disorders (C15.378.553)
                ✓ Leukopenia (C15.378.553.546)
                     Agranulocytosis (C15,378,553,546,184)
                          ■ Neutropenia (C15.378.553.546.184.564)
          ✓ Pancytopenia (C15.378.700)
          ✓ Preleukemia (C15.378.800)
     ✓ Lymphatic Diseases (C15.604)
          ✓ Lymphedema (C15.604.496)
          ✓ Lymphoproliferative Disorders (C15.604.515)
                Sarcoidosis (C15.604.515.827)
                     Sarcoidosis. Pulmonary (C15.604.515.827.725)

✓ Congenital. Hereditary. and Neonatal Diseases and Abnormalities (C16)

✓ Congenital Abnormalities (C16.131)
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Abnormalities. Multiple (C16.131.077)
<u>Netherton Syndrome</u> (C16.131.077.619)
✓ Cardiovascular Abnormalities (C16.131.240)
✓ Heart Defects. Congenital (C16.131.240.400)
Cor Triatriatum (C16.131.240.400.200)
<u>✓ Hypoplastic Left Heart Syndrome</u> (C16.131.240.400.625)
Chromosome Disorders (C16.131.260)
Sex Chromosome Disorders (C16.131.260.830)
Sex Chromosome Disorders of Sex Development (C16.131.260.830.835)
-Klinefelter Syndrome (C16.131.260.830.835.500
✓ Skin Abnormalities (C16.131.831)
<u>■ Epidermolysis Bullosa</u> (C16.131.831.493)
✓ Epidermolysis Bullosa Dystrophica (C16.131.831.493.160)
✓ <u>Ichthyosis</u> (C16.131.831.512)
✓ Ichthyosiform Erythroderma. Congenital
(C16.131.831.512.400)
✓ Netherton Syndrome (C16.131.831.512.400.705)
✓ Stomatognathic System Abnormalities (C16.131.850)
✓ Mouth Abnormalities (C16.131.850.525)
☑ <u>Cleft Lip</u> (C16.131.850.525.164)
✓ <u>Urogenital Abnormalities</u> (C16.131.939)
Bladder Exstrophy (C16.131.939.132)
Disorders of Sex Development (C16.131.939.316)
<u>Sex Chromosome Disorders of Sex Development</u> (C16.131.939.316.795)
<u>Klinefelter Syndrome</u> (C16.131.939.316.795.500
■ Multicystic Dysplastic Kidney (C16.131.939.629)
<u>Genetic Diseases. Inborn</u> (C16.320)
Anemia. Hemolytic. Congenital (C16.320.070)
Anemia. Sickle Cell (C16.320.070.150)
Anemia. Hypoplastic. Congenital (C16.320.077)
✓ Fanconi Anemia (C16.320.077.280)
Blood Coagulation Disorders. Inherited (C16.320.099)
<u>✓ Hemophilia B</u> (C16.320.099.510)
Chromosome Disorders (C16.320.180)
 ✓ <u>Sex Chromosome Disorders</u> (C16.320.180.830) ✓ <u>Sex Chromosome Disorders of Sex Development</u>
(C16.320.180.830.835)
✓ <u>Klinefelter Syndrome</u> (C16.320.180.830.835.500)
<u>■ Eye Diseases. Hereditary</u> (C16.320.290)
✓ Retinitis Pigmentosa (C16.320.290.684)
Genetic Diseases. X-Linked (C16.320.322)
Hemophilia B (C16.320.322.235)
Mental Retardation. X-Linked (C16.320.322.500)
Adrenoleukodystrophy (C16.320.322.500.124)
Muscular Dystrophy. Duchenne (C16.320.322.562)
Pelizaeus-Merzbacher Disease (C16.320.322.906)
Hemoglobinopathies (C16.320.365)
✓ Anemia. Sickle Cell (C16.320.365.155)

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✓ Heredodegenerative Disorders. Nervous System (C16.320.400)

                Huntington Disease (C16.320.400.430)
                — Mental Retardation, X-Linked (C16,320,400,525)
                      Adrenoleukodystrophy (C16.320.400.525.124)
                ✓ Neuronal Ceroid-Lipofuscinoses (C16,320,400,600)
                ✓ Spinocerebellar Degenerations (C16.320,400,780)

✓ Metabolism. Inborn Errors (C16.320.565)

                Amino Acid Metabolism. Inborn Errors (C16.320.565.100)
                      Urea Cycle Disorders. Inborn (C16.320.565.100.940)

☑ Brain Diseases, Metabolic, Inborn (C16,320,565,189).
                      Hereditary Central Nervous System Demyelinating Diseases
                     (C16.320.565.189.362)
                           Adrenoleukodystrophy (C16.320.565.189.362.250)

✓ Pelizaeus-Merzbacher Disease

                          (C16.320.565.189.362.775)
                     Peroxisomal Disorders (C16.320.565.189.680)
                           Adrenoleukodystrophy (C16.320.565.189.680.100)
                      ✓ <u>Urea Cycle Disorders. Inborn</u> (C16.320.565.189.937)

✓ Hyperbilirubinemia. Hereditary (C16.320.565.300)

✓ Crigler-Najjar Syndrome (C16.320.565.300.281)

☑ Lipid Metabolism, Inborn Errors (C16.320.565.398)
                      ✓ Hyperlipoproteinemia Type I (C16.320.565.398.481)
                      Lipidoses (C16.320.565.398.641)
                           ■ Neuronal Ceroid-Lipofuscinoses
                          (C16.320.565.398.641.509)
                <u>Peroxisomal Disorders</u> (C16.320.565.663)
                      Adrenoleukodystrophy (C16.320.565.663.112)
                Renal Tubular Transport. Inborn Errors (C16.320.565.861)
                      Fanconi Syndrome (C16.320.565.861.450)
          ✓ Muscular Dystrophies (C16.320.577)
                Muscular Dystrophies, Limb-Girdle (C16.320.577.280)
                Muscular Dystrophy. Duchenne (C16.320.577.300)
                Muscular Dystrophy. Facioscapulohumeral (C16.320.577.400)
          ✓ Osteogenesis Imperfecta (C16.320.737)

✓ Skin Diseases. Genetic (C16.320.850)

                ✓ Dermatitis. Atopic (C16.320.850.210)
                ■ Epidermolysis Bullosa (C16.320.850.275)
                      Epidermolysis Bullosa Dystrophica
                     (C16.320.850.275.160)
                ☐ <u>Ichthyosiform Erythroderma</u>. <u>Congenital</u> (C16.320.850.400)
                      Netherton Syndrome (C16,320,850,400,705)
                ■ <u>Netherton Syndrome</u> (C16.320.850.673)
     ✓ Infant. Newborn. Diseases (C16.614)
          ☐ <u>-Ichthyosis</u> (C16.614.492)
                ☐ Ichthyosiform Erythroderma. Congenital (C16.614.492.400)
                     Netherton Syndrome (C16.614.492.400.705)
          ✓ Infant. Premature. Diseases (C16.614.521)
                ☑ Bronchopulmonary Dysplasia (C16.614.521.125)
                Respiratory Distress Syndrome. Newborn (C16.614.521.563)
Skin and Connective Tissue Diseases (C17)

✓ Connective Tissue Diseases (C17.300)

          ✓ Cartilage Diseases (C17.300.182)
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✓ Osteochondritis (C17.300.182.520)

✓ Collagen Diseases (C17.300.200)

          Epidermolysis Bullosa Dystrophica (C17,300,200,367)
          ✓ Keloid (C17.300.200.425)
          ✓ Osteogenesis Imperfecta (C17,300,200,540)
     ✓ Lupus Erythematosus. Systemic (C17.300.480)
          ✓ Lupus Nephritis (C17.300.480.680)
     ✓ Penile Induration (C17.300.715)
     ✓ Rheumatic Diseases (C17.300.775)
          ✓ Arthritis. Rheumatoid (C17.300.775.099)
                Sjogren's Syndrome (C17.300.775.099.774)
     Scleroderma. Systemic (C17.300.799)
          ✓ Scleroderma. Diffuse (C17,300,799,602)
✓ Skin Diseases (C17.800)

☑ Breast Diseases (C17.800.090)

          ☑ Breast Neoplasms (C17.800.090.500)
                Carcinoma, Ductal, Breast (C17.800.090.500.390)
     ✓ Dermatitis (C17.800.174)
          ✓ Dermatitis. Atopic (C17.800.174.193)
     ☐ <del>Foot Diseases</del> (C17.800.321)
          Foot Ulcer (C17.800.321.250)
     Keratosis (C17.800.428)
          ☐ <u>Ichthyosis</u> (C17.800.428.333)
                Ichthyosiform Erythroderma, Congenital
               (C17.800.428.333.250)
                     ■ <u>Netherton Syndrome</u> (C17.800.428.333.250.705)
     Scleroderma. Systemic (C17.800.784)
          ☐ Scleroderma. Diffuse (C17,800,784,602)

✓ Skin Abnormalities (C17.800.804)

          ☑ Epidermolysis Bullosa (C17.800.804.493)
                ✓ Epidermolysis Bullosa Dystrophica
               (C17.800.804.493.160)

✓ Ichthyosis (C17.800.804.512)

                Ichthyosiform Erythroderma, Congenital
               (C17.800.804.512.400)
                     ✓ Netherton Syndrome (C17.800.804.512.400.705)
     Skin Diseases. Eczematous (C17.800.815)
          Dermatitis. Atopic (C17.800.815.193)
     Skin Diseases, Genetic (C17.800.827)
          Dermatitis. Atopic (C17.800.827.210)
          □ <u>Epidermolysis Bullosa</u> (C17.800.827.275)
                Epidermolysis Bullosa Dystrophica
               (C17.800.827.275.160)
          ☐ <u>Ichthyosiform Erythroderma. Congenital</u> (C17.800.827.400)
                ■ Netherton Syndrome (C17.800.827.400.705)
          ■ Netherton Syndrome (C17.800.827.655)
     Skin Diseases. Metabolic (C17.800.849)
          ✓ Lipodystrophy (C17.800.849.391)

✓ Skin Diseases. Vascular (C17.800.862)

          <u>Behcet Syndrome</u> (C17.800.862.150)
     Skin Diseases. Vesiculobullous (C17.800.865)
          Epidermolysis Bullosa (C17.800.865.410)
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Epidermolysis Bullosa Dystrophica
                     (C17.800.865.410.160)
          ✓ Skin Ulcer (C17.800.893)
                Lea Ulcer (C17,800,893,592)

✓ Foot Ulcer (C17.800.893.592.450)

                           ☑ Diabetic Foot (C17.800.893.592.450.200)
                      ✓ Varicose Ulcer (C17.800.893.592.730)
                ✓ Pressure Ulcer (C17.800.893.665)
          Sweat Gland Diseases (C17.800.946)

✓ Nutritional and Metabolic Diseases (C18)

✓ Metabolic Diseases (C18.452)

          ☑ Brain Diseases, Metabolic (C18,452,132)

☑ Brain Diseases, Metabolic, Inborn (C18,452,132,100)

✓ Hereditary Central Nervous System Demyelinating Diseases

                     (C18.452.132.100.362)
                           Adrenoleukodystrophy (C18.452.132.100.362.250)
                           Pelizaeus-Merzbacher Disease
                          (C18.452.132.100.362.775)
                     Peroxisomal Disorders (C18.452.132.100.680)
                           Adrenoleukodystrophy (C18,452,132,100,680,100)
                     <u>W</u> <u>Urea Cycle Disorders. Inborn</u> (C18.452.132.100.937)
          ✓ DNA Repair-Deficiency Disorders (C18.452.284)
                Fanconi Anemia (C18.452.284.280)

☑ Glucose Metabolism Disorders (C18.452.394)

                ✓ <u>Diabetes Mellitus</u> (C18.452.394.750)
                      ☑ <u>Diabetes Mellitus. Type 1</u> (C18.452.394.750.124)
                      ☑ Diabetes Mellitus, Type 2 (C18,452,394,750,149)
          ✓ <u>Lipid Metabolism Disorders</u> (C18.452.584)
                Dyslipidemias (C18.452.584.500)
                      Hyperlipidemias (C18.452.584.500.500)
                           Hypercholesterolemia (C18.452.584.500.500.396)
                           Hyperlipoproteinemias (C18.452.584.500.500.644)
                                 Hyperlipoproteinemia Type II
                                (C18.452.584.500.500.644.475)
                <u>Lipodystrophy</u> (C18.452.584.625)</u>
                Lipidoses (C18.452.584.687)
                      Neuronal Ceroid-Lipofuscinoses (C18.452.584.687.509)

✓ Metabolism. Inborn Errors (C18.452.648)

                Amino Acid Metabolism. Inborn Errors (C18.452.648.100)
                     Urea Cycle Disorders. Inborn (C18.452.648.100.940)
                Brain Diseases, Metabolic, Inborn (C18,452,648,189)
                      Hereditary Central Nervous System Demyelinating Diseases
                     (C18.452.648.189.362)
                           Adrenoleukodystrophy (C18.452.648.189.362.250)
                           Pelizaeus-Merzbacher Disease
                          (C18.452.648.189.362.775)
                      Peroxisomal Disorders (C18.452.648.189.680)
                           Adrenoleukodystrophy (C18.452.648.189.680.100)
                      Urea Cycle Disorders. Inborn (C18.452.648.189.937)

✓ Hyperbilirubinemia. Hereditary (C18.452.648.300)

☑ Crigler-Najjar Syndrome (C18.452.648.300.281)

                ☑ Lipid Metabolism, Inborn Errors (C18.452.648.398)
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✓ Hyperlipoproteinemia Type II (C18.452.648.398.481)
                     Lipidoses (C18.452.648.398.641)
                           Neuronal Ceroid-Lipofuscinoses
                          (C18,452,648,398,641,509)
               Peroxisomal Disorders (C18.452.648.663)
                     Adrenoleukodystrophy (C18,452,648,663,112)
                Renal Tubular Transport. Inborn Errors (C18.452.648.861)
                     ✓ Fanconi Syndrome (C18.452.648.861.450)
          ✓ Proteostasis Deficiencies (C18.452.845)

☑ TDP-43 Proteinopathies (C18.452.845.800)

                     ✓ Amyotrophic Lateral Sclerosis (C18.452.845.800.050)

✓ Skin Diseases. Metabolic (C18.452.880)

                ✓ Lipodystrophy (C18.452.880.391)
Endocrine System Diseases (C19)
     Adrenal Gland Diseases (C19.053)
          Adrenal Insufficiency (C19.053.500)
                Adrenoleukodystrophy (C19.053.500.270)
     ☑ Diabetes Mellitus (C19.246)
          ✓ Diabetes Complications (C19.246.099)
                ☑ Diabetic Angiopathies (C19.246.099.500)
                     ☑ Diabetic Foot (C19.246.099.500.191)
                     ☑ <u>Diabetic Retinopathy</u> (C19.246.099.500.382)
                ☑ Diabetic Nephropathies (C19.246.099.875)
               ☑ Diabetic Neuropathies (C19.246.099.937)
                     Diabetic Foot (C19.246.099.937.250)
          ☑ <u>Diabetes Mellitus. Type 1</u> (C19.246.267)
          ☑ Diabetes Mellitus. Type 2 (C19.246.300)

✓ Gonadal Disorders (C19.391)

☑ Disorders of Sex Development (C19.391.119)

☑ Sex Chromosome Disorders of Sex Development

               (C19.391.119.795)
                     ✓ Klinefelter Syndrome (C19.391.119.795.500)

✓ <u>Hypogonadism</u> (C19.391.482)

                ☑ Klinefelter Syndrome (C19.391.482.629)
          ✓ Ovarian Diseases (C19.391.630)
                ✓ Ovarian Neoplasms (C19.391.630.705)
                     Carcinoma. Endometrioid (C19.391.630.705.331)
               Primary Ovarian Insufficiency (C19.391.630.750)
✓ Immune System Diseases (C20)
     ✓ Autoimmune Diseases (C20.111)
          Arthritis. Rheumatoid (C20.111.199)
                Sjogren's Syndrome (C20.111.199.774)
          ✓ Autoimmune Diseases of the Nervous System (C20.111.258)

☑ Demyelinating Autoimmune Diseases. CNS

               (C20.111.258.250)

✓ Multiple Sclerosis (C20.111.258.250.500)

                           ✓ Multiple Sclerosis. Chronic Progressive
                          (C20.111.258.250.500.200)

✓ Multiple Sclerosis. Relapsing-Remitting

                          (C20.111.258.250.500.600)
                           ■ Neuromyelitis Optica (C20.111.258.250.500.650)
                     Myelitis. Transverse (C20.111.258.250.550)
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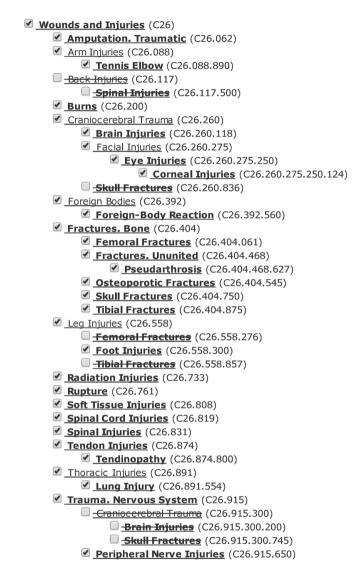
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✓ Neuromyelitis Optica (C20.111.258.250.550.500)
                     Neuromyelitis Optica (C20.111.258.250.600)
          Diabetes Mellitus. Type 1 (C20.111.327)
          ✓ Hepatitis. Autoimmune (C20.111.567)
          ✓ Lupus Ervthematosus. Systemic (C20.111.590)
                ✓ Lupus Nephritis (C20.111.590.560)
     Graft vs Host Disease (C20.452)

✓ <u>Hypersensitivity</u> (C20.543)

✓ Hypersensitivity, Immediate (C20.543.480)

                Dermatitis. Atopic (C20.543.480.343)
     ✓ Immunologic Deficiency Syndromes (C20.673)
          ✓ HIV Infections (C20.673.480)
                Acquired Immunodeficiency Syndrome (C20.673.480.040)
Pathological Conditions, Signs and Symptoms (C23)
     Pathological Conditions. Anatomical (C23.300)
          Atrophy (C23.300.070)
          Constriction. Pathologic (C23.300.287)
          ☐ -Fistula (C23.300.575)
                Digestive System Fistula (C23.300.575.185)
                     ☐ Intestinal Fistula (C23,300,575,185,550)
                           Rectal Fistula (C23.300.575.185.550.600)
                                Rectovaginal Fistula
                               (C23.300.575.185.550.600.650)
                ☐ Vaginal Fistula (C23.300.575.925)
                     Rectovaginal Fistula (C23.300.575.925.558)
          ☐ He<u>rnia</u> (C23.300.707)
                ■ Intervertebral Disc Displacement (C23.300,707.952)
          Leg Length Inequality (C23.300.808)
     ☐ Pathologic Processes (C23.550)
          -Ascites (C23.550.081)
          Delayed Graft Function (C23.550.277)
          ☐ <u>-Disease</u> (C23.550.288)
                Syndrome (C23.550.288.500)
          Emphysema (C23.550.325)
          ☐ <u>Fibrosis</u> (C23.550.355)
                — -Cicatrix (C23.550.355.274)
                     ■ Keloid (C23.550.355.274.510)
          ■ Hemorrhage (C23.550.414)
                ☐ <u>Intracranial Hemorrhages</u> (C23.550.414.913)
                      Cerebral Hemorrhage (C23.550.414.913.100)
          ☐ Inflammation (C23.550.470)
                ☐ <u>Foreign-Body Reaction</u> (C23.550.470.251)
                Systemic Inflammatory Response Syndrome (C23.550.470.790)
                     Sepsis (C23.550.470.790.500)
                           Shock. Septic (C23.550.470.790.500.800)
          ☐ -Ischemia (C23.550.513)
                ☐ <u>Infarction</u> (C23.550.513.355)
          ■ -Necrosis (C23.550.717)
                Dental Pulp Necrosis (C23.550.717.182)
                Gangrene (C23.550.717.427)
                ☐ Infarction (C23.550.717.489)
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☐ Osteonecrosis (C23.550.717.732)
                     Femur Head Necrosis (C23.550.717.732.368)
          ■ Nerve Degeneration (C23.550.737)
          ■ -Sclerosis (C23.550.823)
          ☐ -Shock (C23.550.835)
                ■ Multiple Organ Failure (C23.550.835.525)
                Systemic Inflammatory Response Syndrome (C23.550.835.900)
                      Shock. Septic (C23.550.835.900.712)
          Ulcer (C23.550.891)
     Signs and Symptoms (C23.888)
          ■ Intermittent Claudication (C23.888.531)
          ■ Neurologic Manifestations (C23.888.592)
                Dvskinesias (C23.888.592.350)
                     -Ataxia (C23.888.592.350.090)
                           Cerebellar Ataxia (C23.888.592.350.090.200)
                Neurobehavioral Manifestations (C23.888.592.604)
                      Intellectual Disability (C23.888.592.604.646)
                □ <u>Pain</u> (C23.888.592.612)
                     Back Pain (C23.888.592.612.107)
                           Low Back Pain (C23.888.592.612.107.400)
                ☐ <u>Paralysis</u> (C23.888.592.636)
                     Ophthalmoplegia (C23.888.592.636.447)
                           Supranuclear Palsy. Progressive
                          (C23.888.592.636.447.690)
                Sensation Disorders (C23.888.592.763)
                     Hearing Disorders (C23.888.592.763.393)
                           Hearing Loss (C23.888.592.763.393.341)
                                Deafness (C23.888.592.763.393.341.186)
                                Hearing Loss. Sensorineural
                               (C23.888.592.763.393.341.887)
          Pain (C23.888.646)
                Back Pain (C23.888.646.172)
                     Low Back Pain (C23.888.646.172.500)
                -Chest Pain (C23.888.646.215)
                     Angina Pectoris (C23.888.646.215.500)
                           Angina. Stable (C23.888.646.215.500.575)
          ☐ -Urological Manifestations (C23.888.942)
                Lower Urinary Tract Symptoms (C23.888.942.343)
                      Urinary Incontinence (C23.888.942.343.800)
                           Urinary Incontinence. Stress
                          (C23.888.942.343.800.500)
Occupational Diseases (C24)
     Pneumoconiosis (C24,800)
          ☐ <del>Silicosis</del> (C24.800.834)
Chemically-Induced Disorders (C25)
     Poisoning (C25.723)
     Substance-Related Disorders (C25.775)
          Alcohol-Related Disorders (C25.775.100)
                Alcohol-Induced Disorders (C25.775.100.087)
                     Liver Diseases, Alcoholic (C25,775,100,087,645)
                           Liver Cirrhosis. Alcoholic
                          (C25.775.100.087.645.550)
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Supplementary File 1.

Refinement of the resulting MeSH terms before phylogenetic-like tree visualization.

This file provides the final MeSH structure used. Bold: MeSH terms that were selected. Underlined: proximal branches of selected MeSH terms. Crossed out: branches that were removed for phylogenetic-like tree visualization.