

Supplementary table 1. International Statistical Classification of Disease and Related Health Problem 10th Revision (ICD-10) for Congenital malformations of the circulatory system

Congenital malformations of the circulatory system (Q20-Q28)	
Q20 Congenital malformations of cardiac chambers and connections	
<i>Excl.:</i>	
dextrocardia with situs inversus (Q89.3)	
mirror-image atrial arrangement with situs inversus (Q89.3)	
Q20.0 Common arterial trunk	
Persistent truncus arteriosus	
Q20.1 Double outlet right ventricle	
Taussig-Bing syndrome	
Q20.2 Double outlet left ventricle	
Q20.3 Discordant ventriculoarterial connection	
Dextrotransposition of aorta	
Transposition of great vessels (complete)	
Q20.4 Double inlet ventricle	
Common ventricle	
Cor triloculare biventriculatum	
Single ventricle	
Q20.5 Discordant atrioventricular connection	
Corrected transposition	
Laevotransposition	
Ventricular inversion	
Q20.6 Isomerism of atrial appendages	
Isomerism of atrial appendages with asplenia or polysplenia	
Q20.8 Other congenital malformations of cardiac chambers and connections	
Q20.9 Congenital malformation of cardiac chambers and connections, unspecified	

Q21 Congenital malformations of cardiac septa

Excl.:

acquired cardiac septal defect (I51.0)

Q21.0 Ventricular septal defect**Q21.1 Atrial septal defect**

Coronary sinus defect

Patent or persistent:

foramen ovale

ostium secundum defect (type II)

Sinus venosus defect

Q21.2 Atrioventricular septal defect

Common atrioventricular canal

Endocardial cushion defect

Ostium primum atrial septal defect (type I)

Q21.3 Tetralogy of Fallot

Ventricular septal defect with pulmonary stenosis or atresia,
dextroposition of aorta and hypertrophy of right ventricle.

Q21.4 Aortopulmonary septal defect

Aortic septal defect

Aortopulmonary window

Q21.8 Other congenital malformations of cardiac septa

Eisenmenger defect

Pentalogy of Fallot

Excl.:

Eisenmenger

complex (I27.8)

syndrome (I27.8)

Q21.9 Congenital malformation of cardiac septum, unspecified

Septal (heart) defect NOS

Q22 Congenital malformations of pulmonary and tricuspid valves**Q22.0 Pulmonary valve atresia****Q22.1 Congenital pulmonary valve stenosis****Q22.2 Congenital pulmonary valve insufficiency**

Congenital pulmonary valve regurgitation

Q22.3 Other congenital malformations of pulmonary valve

Congenital malformation of pulmonary valve NOS

Q22.4 Congenital tricuspid stenosis

Tricuspid atresia

Q22.5 Ebstein anomaly**Q22.6 Hypoplastic right heart syndrome****Q22.8 Other congenital malformations of tricuspid valve****Q22.9 Congenital malformation of tricuspid valve, unspecified****Q23 Congenital malformations of aortic and mitral valves****Q23.0 Congenital stenosis of aortic valve**

Congenital aortic:

atresia

stenosis

Excl.:

congenital subaortic stenosis (Q24.4)

that in hypoplastic left heart syndrome (Q23.4)

Q23.1 Congenital insufficiency of aortic valve

Bicuspid aortic valve

Congenital aortic insufficiency

Q23.2 Congenital mitral stenosis

Congenital mitral atresia

Q23.3 Congenital mitral insufficiency**Q23.4 Hypoplastic left heart syndrome**

Atresia, or marked hypoplasia of aortic orifice or valve, with hypoplasia of ascending aorta and defective development of left ventricle (with mitral valve stenosis or atresia).

Q23.8 Other congenital malformations of aortic and mitral valves**Q23.9 Congenital malformation of aortic and mitral valves, unspecified**

Q24 Other congenital malformations of heart

Excl.:

endocardial fibroelastosis (I42.4)

Q24.0 Dextrocardia

Excl.:

dextrocardia with situs inversus (Q89.3)

isomerism of atrial appendages (with asplenia or polysplenia) (Q20.6)

mirror-image atrial arrangement with situs inversus (Q89.3)

Q24.1 Laevocardia

Location of heart in left hemithorax with apex pointing to the left, but with situs inversus of other viscera and defects of the heart, or corrected transposition of great vessels.

Q24.2 Cor triatriatum**Q24.3 Pulmonary infundibular stenosis****Q24.4 Congenital subaortic stenosis****Q24.5 Malformation of coronary vessels**

Congenital coronary (artery) aneurysm

Q24.6 Congenital heart block**Q24.8 Other specified congenital malformations of heart**

Congenital:

diverticulum of left ventricle

malformation of:

myocardium

pericardium

Malposition of heart

Uhl disease

Q24.9 Congenital malformation of heart, unspecified

Congenital:

anomaly

disease

NOS of heart

Q25.0 Patent ductus arteriosus

Patent ductus Botalli

Persistent ductus arteriosus

Q25.1 Coarctation of aorta

Coarctation of aorta (preductal) (postductal)

Q25.2 Atresia of aorta**Q25.3 Stenosis of aorta**

Supravalvular aortic stenosis

Excl.:

congenital stenosis of aortic valve (Q23.0)

Q25.4 Other congenital malformations of aorta

Absence

Aplasia

Congenital:

aneurysm

dilatation

Aneurysm of sinus of Valsalva (ruptured)

Double aortic arch [vascular ring of aorta]

Hypoplasia of aorta

Persistent:

convolutions of aortic arch

right aortic arch

Excl.:

hypoplasia of aorta in hypoplastic left heart syndrome (Q23.4)

Q25.5 Atresia of pulmonary artery**Q25.6 Stenosis of pulmonary artery**

Supravalvular pulmonary stenosis

Q25.7 Other congenital malformations of pulmonary artery

Aberrant pulmonary artery

Agenesis

Aneurysm, congenital

Anomaly

Hypoplasia

Pulmonary arteriovenous aneurysm

Q25.8 Other congenital malformations of great arteries

Q25.9 Congenital malformation of great arteries, unspecified

Q26 Congenital malformations of great veins

Q26.0 Congenital stenosis of vena cava

Congenital stenosis of vena cava (inferior)(superior)

Q26.1 Persistent left superior vena cava

Q26.2 Total anomalous pulmonary venous connection

Q26.3 Partial anomalous pulmonary venous connection

Q26.4 Anomalous pulmonary venous connection, unspecified

Q26.5 Anomalous portal venous connection

Q26.6 Portal vein-hepatic artery fistula

Q26.8 Other congenital malformations of great veins

Absence of vena cava (inferior)(superior)

Azygos continuation of inferior vena cava

Persistent left posterior cardinal vein

Scimitar syndrome

Q26.9 Congenital malformation of great vein, unspecified

Anomaly of vena cava (inferior)(superior) NOS

Q27 Other congenital malformations of peripheral vascular system

Excl.:

anomalies of:

cerebral and precerebral vessels (Q28.0-Q28.3)

coronary vessels (Q24.5)

pulmonary artery (Q25.5-Q25.7)

congenital retinal aneurysm (Q14.1)

haemangioma and lymphangioma (D18.-)

Q27.0 Congenital absence and hypoplasia of umbilical artery

Single umbilical artery

Q27.1 Congenital renal artery stenosis

Q27.2 Other congenital malformations of renal artery

Congenital malformation of renal artery NOS

Multiple renal arteries

Q27.3 Peripheral arteriovenous malformation

Arteriovenous aneurysm

Excl.:

acquired arteriovenous aneurysm (I77.0)

Q27.4 Congenital phlebectasia

Q27.8 Other specified congenital malformations of peripheral vascular system

Aberrant subclavian artery

Absence

Atresia

Congenital:

aneurysm (peripheral)

stricture, artery

varix

Q27.9 Congenital malformation of peripheral vascular system, unspecified

Anomaly of artery or vein NOS

Q28 Other congenital malformations of circulatory system

Excl.:

congenital aneurysm:

NOS (Q27.8)

coronary (Q24.5)

peripheral (Q27.8)

pulmonary (Q25.7)

retinal (Q14.1)

ruptured:

cerebral arteriovenous malformation (I60.8)

malformation of precerebral vessels (I72.-)

Q28.0 Arteriovenous malformation of precerebral vessels

Congenital arteriovenous precerebral aneurysm (nonruptured)

Q28.1 Other malformations of precerebral vessels

Congenital:

malformation of precerebral vessels NOS

precerebral aneurysm (nonruptured)

Q28.2 Arteriovenous malformation of cerebral vessels

Arteriovenous malformation of brain NOS

Congenital arteriovenous cerebral aneurysm (nonruptured)

Q28.3 Other malformations of cerebral vessels

Congenital:

cerebral aneurysm (nonruptured)

malformation of cerebral vessels NOS

Q28.8 Other specified congenital malformations of circulatory system

Congenital aneurysm, specified site NEC

Q28.9 Congenital malformation of circulatory system, unspecified