Disclaimer

The FDA chose a specific outcome algorithm that met its need for a given medical product-outcome assessment. The use of a specific outcome algorithm in a Sentinel assessment should not be interpreted as an endorsement from FDA to use the algorithm for all safety assessments. Investigators should always consider the objective, study design, analytic approach, and data source of a given medical product safety assessment when choosing the outcome algorithm. The suitability of an outcome algorithm may change when applied to different scenarios. For additional information, please refer to the

Best Practices for Conducting and Reporting Pharmacoepidemiologic Safety Studies Using Electronic Healthcare Data guidance document provided by the FDA.

Overview

Title	Cardiac Congenital Malformations Defined in "Risk of Cardiac Congenital Malformations Following Armodafinil or Modafinil Use: A Propensity Score Matched Analysis"
Request ID	cder_mpl2p_wp023
Description	This report lists International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) diagnosis codes and algorithms used to define cardiac congenital malformations in this request. For additional information about the algorithm and how it was defined relative to the cohort and exposures of interest in the inferential analysis, see the analysis page here: https://www.sentinelinitiative.org/assessments/drugs/risk-cardiac-malformations-following-armodafinil-or-modafinil-use-propensity-score
Outcome	Cardiac congenital malformations
Algorithm to Define Outcome	Evidence of at least two occurrences of ventricular septal defect in the inpatient care setting, at least one occurrence of right ventricular outlfow tract obstruction in any care setting with no evidence of preterm delivery, or at least one occurrence of other cardiac malformations in any care setting with no evidence of chromosomal malformations in any care setting in either the mother's or the infant's records.[1]
Query Period	January 1, 2000 - December 31, 2019
Request Send Date	June 10, 2020

1 Palmsten, K., Huybrechts, K. F., Kowal, M. K., Mogun, H., & Hernández-Díaz, S. (2014). Validity of maternal and infant outcomes within nationwide Medicaid data. Pharmacoepidemiology and drug safety, 23(6), 646-655.

Glossary

Care Setting - type of medical encounter or facility where the exposure, event, or condition code was recorded. Possible care settings include: Inpatient Hospital Stay (IP), Non-Acute Institutional Stay (IS), Emergency Department (ED), Ambulatory Visit (AV), and Other Ambulatory Visit (OA). For laboratory results, possible care settings include: Emergency department (E), Home (H), Inpatient (I), Outpatient (O), or Unknown or missing (U)

Outcome - outcome of interest (either primary or secondary)

Principal Diagnosis (PDX) - diagnosis or condition established to be chiefly responsible for admission of the patient to the hospital. 'P' = principal diagnosis, 'S' = secondary diagnosis, 'X' = unspecified diagnosis, '.' = blank. Along with the Care Setting values, forms the Caresetting/PDX parameter.

Query Period - period in which the modular program looks for exposures and outcomes of interest

Request Send Date - date the request was sent to Sentinel Data Partners

International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Cardiac Congenital Malformations in this Request

Code	Description	Code Type	Code Category
Ventricular Septal Defect			
745.4	Ventricular septal defect	ICD-9-CM	Diagnosis
I27.83	Eisenmenger's syndrome	ICD-10-CM	Diagnosis
Q21.0	Ventricular septal defect	ICD-10-CM	Diagnosis
Right Ventricular Outlfow Tract Obstruction			
746.02	Congenital stenosis of pulmonary valve	ICD-9-CM	Diagnosis
747.3	Anomalies of pulmonary artery	ICD-9-CM	Diagnosis
747.31	Pulmonary artery coarctation and atresia	ICD-9-CM	Diagnosis
747.32	Pulmonary arteriovenous malformation	ICD-9-CM	Diagnosis
747.39	Other anomalies of pulmonary artery and pulmonary circulation	ICD-9-CM	Diagnosis
Q22.1	Congenital pulmonary valve stenosis	ICD-10-CM	Diagnosis
Q25.5	Atresia of pulmonary artery	ICD-10-CM	Diagnosis
Q25.6	Stenosis of pulmonary artery	ICD-10-CM	Diagnosis
Q25.7	Congenital Insufficiency of aortic valve	ICD-10-CM	Diagnosis
Q25.71	Coarctation of pulmonary artery	ICD-10-CM	Diagnosis
Q25.72	Congenital pulmonary arteriovenous malformation	ICD-10-CM	Diagnosis
Q25.79	Other congenital malformations of pulmonary artery	ICD-10-CM	Diagnosis
746.01	Congenital atresia of pulmonary valve	ICD-9-CM	Diagnosis
746.09	Other congenital anomalies of pulmonary valve	ICD-9-CM	Diagnosis
746.83	Congenital infundibular pulmonic stenosis	ICD-9-CM	Diagnosis
Q22.0	Pulmonary valve atresia	ICD-10-CM	Diagnosis
Q22.2	Congenital pulmonary valve insufficiency	ICD-10-CM	Diagnosis
Q24.3	Pulmonary infundibular stenosis	ICD-10-CM	Diagnosis
Other Cardiac Malformations			
745	Bulbus cordis anomalies and anomalies of cardiac septal closure	ICD-9-CM	Diagnosis
745.0	Bulbus cordis anomalies and anomalies of cardiac septal closure, common truncus	ICD-9-CM	Diagnosis
745.1	Transposition of great vessels	ICD-9-CM	Diagnosis
745.10	Complete transposition of great vessels	ICD-9-CM	Diagnosis
745.11	Transposition of great vessels, double outlet right ventricle	ICD-9-CM	Diagnosis
745.12	Corrected transposition of great vessels	ICD-9-CM	Diagnosis
745.19	Other transposition of great vessels	ICD-9-CM	Diagnosis
745.2	Tetralogy of Fallot	ICD-9-CM	Diagnosis
745.3	Bulbus cordis anomalies and anomalies of cardiac septal closure, common ventricle	ICD-9-CM	Diagnosis
745.6	Endocardial cushion defects	ICD-9-CM	Diagnosis
745.60	Unspecified type congenital endocardial cushion defect	ICD-9-CM	Diagnosis
745.61	Ostium primum defect	ICD-9-CM	Diagnosis
745.69	Other congenital endocardial cushion defect	ICD-9-CM	Diagnosis
745.7	Cor biloculare	ICD-9-CM	Diagnosis
745.8	Other bulbus cordis anomalies and anomalies of cardiac septal closure	ICD-9-CM	Diagnosis
745.9	Unspecified congenital defect of septal closure	ICD-9-CM	Diagnosis
746	Other congenital anomalies of heart	ICD-9-CM	Diagnosis
746.00	Unspecified congenital pulmonary valve anomaly	ICD-9-CM	Diagnosis
746.1	Congenital tricuspid atresia and stenosis	ICD-9-CM	Diagnosis

International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Cardiac Congenital Malformations in this Request

Code	Description	Code Type	Code Category
746.2	Ebstein's anomaly	ICD-9-CM	Diagnosis
746.3	Congenital stenosis of aortic valve	ICD-9-CM	Diagnosis
746.5	Congenital mitral stenosis	ICD-9-CM	Diagnosis
746.7	Hypoplastic left heart syndrome	ICD-9-CM	Diagnosis
746.8	Other specified congenital anomaly of heart	ICD-9-CM	Diagnosis
746.80			
746.81	Congenital subaortic stenosis	ICD-9-CM	Diagnosis
746.82	Cor triatriatum	ICD-9-CM	Diagnosis
746.84	Congenital obstructive anomalies of heart, not elsewhere classified	ICD-9-CM	Diagnosis
746.85	Congenital coronary artery anomaly	ICD-9-CM	Diagnosis
746.86	Congenital heart block	ICD-9-CM	Diagnosis
746.87	Congenital malposition of heart and cardiac apex	ICD-9-CM	Diagnosis
746.89	Other specified congenital anomaly of heart	ICD-9-CM	Diagnosis
747	Other congenital anomalies of circulatory system	ICD-9-CM	Diagnosis
747.1	Coarctation of aorta	ICD-9-CM	Diagnosis
747.10	Coarctation of aorta (preductal) (postductal)	ICD-9-CM	Diagnosis
747.11	Congenital interruption of aortic arch	ICD-9-CM	Diagnosis
747.2	Other congenital anomaly of aorta	ICD-9-CM	Diagnosis
747.20	Unspecified congenital anomaly of aorta	ICD-9-CM	Diagnosis
747.21	Congenital anomaly of aortic arch	ICD-9-CM	Diagnosis
747.22	Congenital atresia and stenosis of aorta	ICD-9-CM	Diagnosis
747.29	Other congenital anomaly of aorta	ICD-9-CM	Diagnosis
747.4	Congenital anomalies of great veins	ICD-9-CM	Diagnosis
747.40	Congenital anomaly of great veins unspecified	ICD-9-CM	Diagnosis
747.41	Total congenital anomalous pulmonary venous connection	ICD-9-CM	Diagnosis
747.42	Partial congenital anomalous pulmonary venous connection	ICD-9-CM	Diagnosis
747.49	Other congenital anomalies of great veins	ICD-9-CM	Diagnosis
747.6	Other congenital anomaly of peripheral vascular system	ICD-9-CM	Diagnosis
747.60	Congenital anomaly of the peripheral vascular system, unspecified site	ICD-9-CM	Diagnosis
747.61	Congenital gastrointestinal vessel anomaly	ICD-9-CM	Diagnosis
747.62	Congenital renal vessel anomaly	ICD-9-CM	Diagnosis
747.63	Congenital upper limb vessel anomaly	ICD-9-CM	Diagnosis
747.64	Congenital lower limb vessel anomaly	ICD-9-CM	Diagnosis
747.68			
747.8	Other specified congenital anomalies of circulatory system	ICD-9-CM	Diagnosis
747.81	Congenital anomaly of cerebrovascular system	ICD-9-CM	Diagnosis
747.82	Congenital spinal vessel anomaly	ICD-9-CM	Diagnosis
747.83	Persistent fetal circulation	ICD-9-CM	Diagnosis
747.89	Other specified congenital anomaly of circulatory system	ICD-9-CM	Diagnosis
P29.30	Pulmonary hypertension of newborn	ICD-10-CM	Diagnosis
P29.38	Other persistent fetal circulation	ICD-10-CM	Diagnosis
Q20.0	Common arterial trunk	ICD-10-CM	Diagnosis
Q20.1	Double outlet right ventricle	ICD-10-CM	Diagnosis

International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Cardiac Congenital Malformations in this Request

Code	Description	Code Type	Code Category
Q20.2	Double outlet left ventricle	ICD-10-CM	Diagnosis
Q20.3	Discordant ventriculoarterial connection	ICD-10-CM	Diagnosis
Q20.4	Double inlet ventricle	ICD-10-CM	Diagnosis
Q20.5	Discordant atrioventricular connection	ICD-10-CM	Diagnosis
Q20.6	Isomerism of atrial appendages	ICD-10-CM	Diagnosis
Q20.8	Other congenital malformations of cardiac chambers and connections	ICD-10-CM	Diagnosis
Q21.1	Atrial Septal Defect	ICD-10-CM	Diagnosis
Q21.2	Atrioventricular septal defect	ICD-10-CM	Diagnosis
Q21.3	Tetralogy of Fallot	ICD-10-CM	Diagnosis
Q21.4	Aortopulmonary septal defect	ICD-10-CM	Diagnosis
Q21.8	Other congenital malformations of cardiac septa	ICD-10-CM	Diagnosis
Q21.9	Congenital malformation of cardiac septum, unspecified	ICD-10-CM	Diagnosis
Q22.3	Other congenital malformations of pulmonary valve	ICD-10-CM	Diagnosis
Q22.4	Congenital tricuspid stenosis	ICD-10-CM	Diagnosis
Q22.5	Ebstein's anomaly	ICD-10-CM	Diagnosis
Q22.6	Hypoplastic right heart syndrome	ICD-10-CM	Diagnosis
Q22.8	Other congenital malformations of tricuspid valve	ICD-10-CM	Diagnosis
Q22.9	Congenital malformation of tricuspid valve, unspecified	ICD-10-CM	Diagnosis
Q23.0	Congenital stenosis of aortic valve	ICD-10-CM	Diagnosis
Q23.1	Atresia of aorta	ICD-10-CM	Diagnosis
Q23.2	Congenital mitral stenosis	ICD-10-CM	Diagnosis
Q23.4	Hypoplastic left heart syndrome	ICD-10-CM	Diagnosis
Q23.8	Other congenital malformations of aortic and mitral valves	ICD-10-CM	Diagnosis
Q23.9	Congenital malformation of aortic and mitral valves, unspecified	ICD-10-CM	Diagnosis
Q24.0	Dextrocardia	ICD-10-CM	Diagnosis
Q24.1	Levocardia	ICD-10-CM	Diagnosis
Q24.2	Cor triatriatum	ICD-10-CM	Diagnosis
Q24.4	Congenital subaortic stenosis	ICD-10-CM	Diagnosis
Q24.5	Malformation of coronary vessels	ICD-10-CM	Diagnosis
Q24.6	Congenital heart block	ICD-10-CM	Diagnosis
Q24.8	Other specified congenital malformations of heart	ICD-10-CM	Diagnosis
Q25.1	Coarctation of aorta	ICD-10-CM	Diagnosis
Q25.2	Other congenital malformations of pulmonary artery	ICD-10-CM	Diagnosis
Q25.21	Interruption of aortic arch	ICD-10-CM	Diagnosis
Q25.29	Other atresia of aorta	ICD-10-CM	Diagnosis
Q25.3	Supravalvular aortic stenosis	ICD-10-CM	Diagnosis
Q25.40	Congenital malformation of aorta unspecified	ICD-10-CM	Diagnosis
Q25.41	Absence and aplasia of aorta	ICD-10-CM	Diagnosis
Q25.42	Hypoplasia of aorta	ICD-10-CM	Diagnosis
Q25.43	Congenital aneurysm of aorta	ICD-10-CM	Diagnosis
Q25.44	Congenital dilation of aorta	ICD-10-CM	Diagnosis
Q25.45	Double aortic arch	ICD-10-CM	Diagnosis
Q25.46	Tortuous aortic arch	ICD-10-CM	Diagnosis

International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Cardiac Congenital Malformations in this Request

Code	Description	Code Type	Code Category
Q25.47	Right aortic arch	ICD-10-CM	Diagnosis
Q25.48	Anomalous origin of subclavian artery	ICD-10-CM	Diagnosis
Q25.49	Other congenital malformations of aorta	ICD-10-CM	Diagnosis
Q25.8	Other congenital malformations of other great arteries	ICD-10-CM	Diagnosis
Q25.9	Congenital malformation of great arteries, unspecified	ICD-10-CM	Diagnosis
Q26.0	Congenital stenosis of vena cava	ICD-10-CM	Diagnosis
Q26.1	Persistent left superior vena cava	ICD-10-CM	Diagnosis
Q26.2	Total anomalous pulmonary venous connection	ICD-10-CM	Diagnosis
Q26.3	Partial anomalous pulmonary venous connection	ICD-10-CM	Diagnosis
Q26.4	Anomalous pulmonary venous connection, unspecified	ICD-10-CM	Diagnosis
Q26.5	Anomalous portal venous connection	ICD-10-CM	Diagnosis
Q26.6	Portal vein-hepatic artery fistula	ICD-10-CM	Diagnosis
Q26.8	Other congenital malformations of great veins	ICD-10-CM	Diagnosis
Q26.9	Congenital malformation of great vein, unspecified	ICD-10-CM	Diagnosis
Q27.1	Congenital renal artery stenosis	ICD-10-CM	Diagnosis
Q27.2	Other congenital malformations of renal artery	ICD-10-CM	Diagnosis
Q27.30	Arteriovenous malformation, site unspecified	ICD-10-CM	Diagnosis
Q27.31	Arteriovenous malformation of vessel of upper limb	ICD-10-CM	Diagnosis
Q27.32	Arteriovenous malformation of vessel of lower limb	ICD-10-CM	Diagnosis
Q27.33	Arteriovenous malformation of digestive system vessel	ICD-10-CM	Diagnosis
Q27.34	Arteriovenous malformation of renal vessel	ICD-10-CM	Diagnosis
Q27.4	Congenital phlebectasia	ICD-10-CM	Diagnosis
Q27.9	Congenital malformation of peripheral vascular system, unspecified	ICD-10-CM	Diagnosis
Q28.0	Arteriovenous malformation of precerebral vessels	ICD-10-CM	Diagnosis
Q28.1	Other malformations of precerebral vessels	ICD-10-CM	Diagnosis
Q28.2	Arteriovenous malformation of cerebral vessels	ICD-10-CM	Diagnosis
Q28.3	Other malformations of cerebral vessels	ICD-10-CM	Diagnosis
Q28.8	Other specified congenital malformations of circulatory system	ICD-10-CM	Diagnosis
Chromosomal Abnormalities			
758.0	Down's syndrome	ICD-9-CM	Diagnosis
758.1	Patau's syndrome	ICD-9-CM	Diagnosis
758.2	Edwards' syndrome	ICD-9-CM	Diagnosis
758.3	Autosomal deletion syndromes	ICD-9-CM	Diagnosis
758.31	Cri-du-chat syndrome	ICD-9-CM	Diagnosis
758.32	Velo-cardio-facial syndrome	ICD-9-CM	Diagnosis
758.33	Autosomal deletion syndromes, other microdeletions	ICD-9-CM	Diagnosis
758.39	Autosomal deletion syndromes, other autosomal deletions	ICD-9-CM	Diagnosis
758.4	Balanced autosomal translocation in normal individual	ICD-9-CM	Diagnosis
758.5	Other conditions due to autosomal anomalies	ICD-9-CM	Diagnosis
758.6	Gonadal dysgenesis	ICD-9-CM	Diagnosis
758.7	Klinefelter's syndrome	ICD-9-CM	Diagnosis
758.8	Other conditions due to chromosome anomalies	ICD-9-CM	Diagnosis
758.81	Other conditions due to sex chromosome anomalies	ICD-9-CM	Diagnosis

Code	Description	Code Type	Code Category
758.89	Other conditions due to chromosome anomalies	ICD-9-CM	Diagnosis
758.9	Conditions due to anomaly of unspecified chromosome	ICD-9-CM	Diagnosis
759.81	Prader-Willi syndrome	ICD-9-CM	Diagnosis
759.82	Marfan's syndrome	ICD-9-CM	Diagnosis
759.83	Fragile X syndrome	ICD-9-CM	Diagnosis
Q87.1	Congenital malformation syndromes predominantly associated with short stature	ICD-10-CM	Diagnosis
Q87.11	Prader-Willi syndrome	ICD-10-CM	Diagnosis
Q87.40	Marfan's syndrome, unspecified	ICD-10-CM	Diagnosis
Q87.410	Marfan's syndrome with aortic dilation	ICD-10-CM	Diagnosis
Q87.418	Marfan's syndrome with other cardiovascular manifestations	ICD-10-CM	Diagnosis
Q87.42	Marfan's syndrome with ocular manifestations	ICD-10-CM	Diagnosis
Q87.43	Marfan's syndrome with skeletal manifestation	ICD-10-CM	Diagnosis
Q87.81	Alport syndrome	ICD-10-CM	Diagnosis
Q87.82	Arterial tortuosity syndrome	ICD-10-CM	Diagnosis
Q90.0	Trisomy 21, nonmosaicism (meiotic nondisjunction)	ICD-10-CM	Diagnosis
Q90.1	Trisomy 21, mosaicism (mitotic nondisjunction)	ICD-10-CM	Diagnosis
Q90.2	Trisomy 21, translocation	ICD-10-CM	Diagnosis
Q90.9	Down syndrome, unspecified	ICD-10-CM	Diagnosis
Q91.0	Trisomy 18, nonmosaicism (meiotic nondisjunction)	ICD-10-CM	Diagnosis
Q91.1	Trisomy 18, mosaicism (mitotic nondisjunction)	ICD-10-CM	Diagnosis
Q91.2	Trisomy 18, translocation	ICD-10-CM	Diagnosis
Q91.3	Trisomy 18, unspecified	ICD-10-CM	Diagnosis
Q91.4	Trisomy 13, nonmosaicism (meiotic nondisjunction)	ICD-10-CM	Diagnosis
Q91.5	Trisomy 13, mosaicism (mitotic nondisjunction)	ICD-10-CM	Diagnosis
Q91.6	Trisomy 13, translocation	ICD-10-CM	Diagnosis
Q91.7	Trisomy 13, unspecified	ICD-10-CM	Diagnosis
Q92.0	Whole chromosome trisomy, nonmosaicism (meiotic nondisjunction)	ICD-10-CM	Diagnosis
Q92.1	Whole chromosome trisomy, mosaicism (mitotic nondisjunction)	ICD-10-CM	Diagnosis
Q92.2	Partial trisomy	ICD-10-CM	Diagnosis
Q92.5	Duplications with other complex rearrangements	ICD-10-CM	Diagnosis
Q92.6	Marker chromosomes	ICD-10-CM	Diagnosis
Q92.61	Marker chromosomes in normal individual	ICD-10-CM	Diagnosis
Q92.62	Marker chromosomes in abnormal individual	ICD-10-CM	Diagnosis
Q92.7	Triploidy and polyploidy	ICD-10-CM	Diagnosis
Q92.8	Other specified trisomies and partial trisomies of autosomes	ICD-10-CM	Diagnosis
Q92.9	Trisomy and partial trisomy of autosomes, unspecified	ICD-10-CM	Diagnosis
Q93.0	Whole chromosome monosomy, nonmosaicism (meiotic nondisjunction)	ICD-10-CM	Diagnosis
Q93.1	Whole chromosome monosomy, mosaicism (mitotic nondisjunction)	ICD-10-CM	Diagnosis
Q93.2	Chromosome replaced with ring, dicentric or isochromosome	ICD-10-CM	Diagnosis
Q93.3	Deletion of short arm of chromosome 4	ICD-10-CM	Diagnosis
Q93.4	Deletion of short arm of chromosome 5	ICD-10-CM	Diagnosis
Q93.5	Other deletions of part of a chromosome	ICD-10-CM	Diagnosis
Q93.51	Angelman syndrome	ICD-10-CM	Diagnosis

International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Cardiac Congenital Malformations in this Request

Code	Description	Code Type	Code Category
Q93.59	Other deletions of part of a chromosome	ICD-10-CM	Diagnosis
Q93.7	Deletions with other complex rearrangements	ICD-10-CM	Diagnosis
Q93.8	Other deletions from the autosomes	ICD-10-CM	Diagnosis
Q93.81	Velo-cardio-facial syndrome	ICD-10-CM	Diagnosis
Q93.82	Williams syndrome	ICD-10-CM	Diagnosis
Q93.88	Other microdeletions	ICD-10-CM	Diagnosis
Q93.89	Other deletions from the autosomes	ICD-10-CM	Diagnosis
Q93.9	Deletion from autosomes, unspecified	ICD-10-CM	Diagnosis
Q95.0	Balanced translocation and insertion in normal individual	ICD-10-CM	Diagnosis
Q95.1	Chromosome inversion in normal individual	ICD-10-CM	Diagnosis
Q95.2	Balanced autosomal rearrangement in abnormal individual	ICD-10-CM	Diagnosis
Q95.3	Balanced sex/autosomal rearrangement in abnormal individual	ICD-10-CM	Diagnosis
Q95.5	Individual with autosomal fragile site	ICD-10-CM	Diagnosis
Q95.8	Other balanced rearrangements and structural markers	ICD-10-CM	Diagnosis
Q95.9	Balanced rearrangement and structural marker, unspecified	ICD-10-CM	Diagnosis
Q96.0	Karyotype 45, X	ICD-10-CM	Diagnosis
Q96.1	Karyotype 46, X iso (Xq)	ICD-10-CM	Diagnosis
Q96.2	Karyotype 46, X with abnormal sex chromosome, except iso (Xq)	ICD-10-CM	Diagnosis
Q96.3	Mosaicism, 45, X/46, XX or XY	ICD-10-CM	Diagnosis
Q96.4	Mosaicism, 45, X/other cell line(s) with abnormal sex chromosome	ICD-10-CM	Diagnosis
Q96.8	Other variants of Turner's syndrome	ICD-10-CM	Diagnosis
Q96.9	Turner's syndrome, unspecified	ICD-10-CM	Diagnosis
Q97.0	Karyotype 47, XXX	ICD-10-CM	Diagnosis
Q97.1	Female with more than three X chromosomes	ICD-10-CM	Diagnosis
Q97.2	Mosaicism, lines with various numbers of X chromosomes	ICD-10-CM	Diagnosis
Q97.3	Female with 46, XY karyotype	ICD-10-CM	Diagnosis
Q97.8	Other specified sex chromosome abnormalities, female phenotype	ICD-10-CM	Diagnosis
Q97.9	Sex chromosome abnormality, female phenotype, unspecified	ICD-10-CM	Diagnosis
Q98.0	Klinefelter syndrome karyotype 47, XXY	ICD-10-CM	Diagnosis
Q98.1	Klinefelter syndrome, male with more than two X chromosomes	ICD-10-CM	Diagnosis
Q98.3	Other male with 46, XX karyotype	ICD-10-CM	Diagnosis
Q98.4	Klinefelter syndrome, unspecified	ICD-10-CM	Diagnosis
Q98.5	Karyotype 47, XYY	ICD-10-CM	Diagnosis
Q98.6	Male with structurally abnormal sex chromosome	ICD-10-CM	Diagnosis
Q98.7	Male with sex chromosome mosaicism	ICD-10-CM	Diagnosis
Q98.8	Other specified sex chromosome abnormalities, male phenotype	ICD-10-CM	Diagnosis
Q98.9	Sex chromosome abnormality, male phenotype, unspecified	ICD-10-CM	Diagnosis
Q99.0	Chimera 46, XX/46, XY	ICD-10-CM	Diagnosis
Q99.1	46, XX true hermaphrodite	ICD-10-CM	Diagnosis
Q99.2	Fragile X chromosome	ICD-10-CM	Diagnosis
Q99.8	Other specified chromosome abnormalities	ICD-10-CM	Diagnosis
Q99.9	Chromosomal abnormality, unspecified	ICD-10-CM	Diagnosis