

**Table SI. International Classification of Diseases (ICD) and Anatomic Therapeutic Chemical (ATC) codes**

	Code system	Codes
Diseases of the prepuce, n=45	ICD10 ICD9 ICD8	N479, N479B, N479C, N479D, N479X 605X 605,09, 607,90, 605,08, 605,00
Immunosuppressive drugs, n=36	ATC	L04AD01, L04AX03, L04AX01, L04AA06, L04AB04, L04AB01, L04AD02, L04AC05, L04AA18
Penile surgical procedure, n=24	ICD10 ICD9 ICD8	KGD00, KGD10, KGD96, KGW96, KGV20, KGD10, KGD20 6900, 6901, 6910, 6911, 6912 607A, 607W, 607B, 607C, 607X, 608W
Balanitis, n=45	ICD10 ICD9 ICD8	N480, N481, N481B, N481C, N481D, N481E, N481W, N482, N485, N488, N489 607A, 607W, 607B, 607C, 607X, 608W 607,00, 702,01, 607,10, 607,30, 607,50, 607,20, 607,90
Genital warts, n=24	ICD10 ICD9 ICD8	B977, A630, A630A, A630B, A630X 079W, 079E, 078B, 091D 079,90, 099,92, 079,10
Organ transplantation, n=13	ICD10 ICD9 ICD8	Z940, Z941, Z942, Z944, Z946, Z948, Z949 V42A, V42B, V42G, V42H, V42E, V42W, V42X Y29,08
Lichen sclerosus and lichen planus, n=28	ICD10 ICD9 ICD8	L900, N480A, L430, L431, L433, L433A, L433B, L433X, L438, L439 701A, 697A 701,01, 697,00, 697,99
Lichen sclerosus, n=20	ICD10 ICD9 ICD8	L900, N480A 701A 701,01
Lichen planus, n=9	ICD10 ICD9 ICD8	L430, L431, L433, L433A, L433B, L433X, L438, L439 697A 697,00, 697,99
Obesity, n=32	ICD10 ICD9 ICD8	E660, E661, E662, E668, E669 278A, 278W, 259X, 278A 277,99, 278,98, 277,99
Smoking and tobacco use, n=14	ICD10 ICD9 ICD8	Z720, Z720A V65W J440, J441, J448, J449
Chronic obstructive pulmonary disease, n=60	ICD10 ICD9 ICD8	496X, 491C, 491W 490,99, 491,01, 491,02, 491,04, 491,09
Pruritus, n=0	ICD10 ICD9 ICD8	L291, L293 698B, 698A 698,10, 698,00
Malignant neoplasms of anus and anal canal, n=3	ICD10 ICD9 ICD8	C211, C210, C218 154C, 154D, 154W 154,21, 153,87
Malignant neoplasms of tonsil and base of tongue, n=2	ICD10 ICD9 ICD8	C090, C091, C098, C024, C019, C020 146B, 146C, 146W, 141G, 141A, 141B 146,01, 146,81, 146,87, 141,01, 141,11
Human deficiency virus (HIV), n=2	ICD10 ICD9 ICD8	B20, B21, B22, B23 279F
Immunosuppressive agents, n=0	ICD10 ICD9 ICD8	Y434 E9331
Routine and ritual circumcision, n=0	ICD10 ICD9 ICD8	Z412 V50C Y51,99
Photodynamic therapy (PDT), psoralen plus ultraviolet A treatment (PUVA) tablet and bath, n=1	ICD10 ICD9 ICD8	DQ004, DQ010, DQ011

ICD: International Classification of Diseases.