

ONLINE SUPPLEMENTARY DATA

SUPPLEMENTARY MATERIAL. CODES USED TO IDENTIFY STUDY VARIABLES

Condition	ICD-10/ICD-8	SNOMED code	Topography codes
L-TGCT	--	M92520 tenosynovial giant cell tumor, localized type (from 2011)	
		M90400 benign synovioma (until 1 January 2013)	Restricted to the following topography: "Bone", "Vertebra", "Phalanx on a hand", "Femur", "Metatarsal bone", "Phalanx on a foot", "Joint", "Joint capsule", "Synovialis", "Intervertebral joint", "Discus intervertebralis", "Joint of upper extremity", "Shoulder joint", "Elbow joint", "Hand joint", "Metacarpal joint", "Interphalangeal joint on finger", "Joint of the lower extremity", "Hip joint", "Knee joint", "Meniscus", "Ankle joint", "Tarsal joint", "Metatarsal joint", "Interphalangeal joint of toe", "Tendon and tendon sheath", "Tendon", "Tendon sheath", "Finger", "Thumb", "Index finger", "Knee", "Ankle".
D- TGCT	M122 pigmentous villonodular synovitis	M92521 tenosynovial giant cell tumor, diffuse type (from 1 January 2013) M47830 pigmentous villonodular synovitis (until June 2011) M92510 giant cell tumor, diffus type (until 30 June 2011)/tenosynovial giant cell tumor, diffuse type (until 31 December 2013)	

Condition	ICD-8 codes	SNOMED codes
Sarcoma or benign tumors before the index date (exclusion criteria)	158, 170, 171, 213-215, 232	M88001, M88003, M88004, M88006, M88007, M88009, M88043, M88044, M88047, M88049, M88053, M88054, M88056, M88057, M88059, M880A3, M880A4, M880A6, M880A7, M880A8, M880A9, M880B1, M880B3, M880B4, M880B6, M880B7, M880B9, M880C1, M880C3, M880C4, M880C6, M880C7, M880C8, M880C9, M88103, M88104, M88106, M88107, M88109, M88113, M88114, M88116, M88117, M88119, M88143, M88144, M88146, M88147, M88149, M88151, M88153, M88154, M88156, M88157, M88159, M88211, M88221, M88271, M88303, M88303, M88304, M88304, M88306, M88306, M88307, M88307, M88309, M88309, M88313, M88314, M88316, M88317, M88319, M88323, M88324, M88326, M88327, M88329, M88403, M88406, M88411, M88423, M88424, M88426, M88427, M88429, M88503, M88504, M88506, M88507, M88509, M88513, M88514, M88516, M88517, M88519, M88523, M88524, M88526, M88527, M88529, M88533, M88534, M88536, M88537, M88539, M88543, M88544, M88546, M88547, M88549, M88553, M88554, M88556, M88557, M88559, M88583, M88584, M88586, M88587, M88588, M88589, M88902, M88903, M88904, M88906, M88907, M88909, M88913, M88914, M88916, M88917, M88919, M88963, M88964, M88966, M88967, M88969, M89003, M89004, M89006, M89007, M89009, M89013, M89014, M89016, M89017, M89019, M89023, M89024, M89026, M89027, M89029, M89103, M89104, M89106, M89107, M89109, M89203, M89204, M89206, M89207, M89209, M89303, M89304, M89306, M89307, M89309, M89311, M89333, M89334, M89336, M89337, M89339, M89363, M89364, M89366, M89367, M89369, M90403, M90404, M90406, M90407, M90408, M90409, M90423, M90424, M90426, M90427, M90428, M90429, M90433, M90434, M90436, M90437, M90438, M90439, M90443, M90444, M90446, M90447, M90449, M91203, M91203, M91204, M91204, M91206, M91206, M91207, M91207, M91209, M91209, M91303, M91304, M91306, M91307, M91309, M91331, M91403, M91404, M91406, M91407, M91409, M91501, M91503, M91504, M91506, M91507, M91509, M91703, M91704, M91706, M91707, M91709, M91803, M91804, M91806, M91807, M91809, M91813, M91814, M91816, M91817, M91819, M91823, M91824, M91826, M91827, M91829, M91833, M91834, M91836, M91837, M91839, M91843, M91844, M91846, M91847, M91849, M91853, M91854, M91856, M91857, M91859, M91903, M91904, M91906, M91907, M91909, M92203, M92204, M92206, M92207, M92209, M92213, M92214, M92216, M92217, M92219, M92223, M92224, M92226, M92227, M92246, M92247, M92303, M92304, M92306, M92307, M92309, M92313, M92313, M92314, M92314, M92316, M92316, M92317, M92317, M92319, M92319, M92403, M92404, M92406, M92407, M92409, M92501, M92501, M92503, M92504, M92506, M92507, M92509, M92511, M92513, M92514, M92516, M92517, M92519, M92603, M92604, M92606, M92607, M92609, M92613, M92614, M92616, M92617, M92619, M95403, M95404, M95404, M95406, M95406, M95407, M95407, M95409, M95409, M95603, M95603, M95604, M95604, M95606, M95606, M95607, M95607, M95609, M95609, M95803, M95804, M95806, M95807, M95809, M95813, M95814, M95816, M95817, M95819

Baseline characteristics

Group	Characteristic	Codes
Treatments and diagnostic procedures	Any operation or surgery of muscular-skeletal system	NOMESCO: KN (all subcodes) last measurement 16 days before the index date
	MRI/CT scan	U-codes: UXC (all subcodes, CT scan), UXM (all subcodes, MRI scans)
Musculoskeletal injuries	Any injury to spine or limbs	ICD10: S19-S99, T08-T13
	Any fracture	ICD10: S12, S22, S32, S42, S52, S62, S72, S82, S92, T02, T08, T10, T12 NOMESCO: KNAJ, KNBJ, KNCJ, KNDJ, KNEJ, KNFJ, KNGJ, KNHJ
	Fracture of sternum, spine, or pelvis	ICD10: S12 Fracture of neck, S22 Fracture of rib(s), sternum and thoracic spine, S32 Fracture of lumbar spine and pelvis, T08 Fracture of spine, level unspecified NOMESCO: KNAJ, KNEJ, operations to treat fracture of spine or pelvis
	Fracture of upper limb	ICD10: S42 Fracture of shoulder and upper arm, S52 Fracture of forearm, S62 Fracture at wrist and hand level, T10 Fracture of upper limb, level unspecified NOMESCO: KNBJ, KNCJ, KNDJ operations to treat fracture of upper limb
	Fracture of lower limb	ICD10: S72 Fracture of femur, S82 Fracture of lower leg, including ankle, S92 Fracture of foot, except ankle, T12 Fracture of lower limb, level unspecified NOMESCO: KNFJ, KNGJ, KNHJ, operations to treat fractures of lower limb
Chronic diseases	Arthropathies	ICD10: M00-M25
	Osteoarthritis	ICD10: M15-M19
	Chronic renal impairment	ICD10: N18
	Chronic lung disease	ICD10: J43-J47
	Cardiovascular disease	ICD10: I10-I25
Prescription medications (2004-)	Analgesics	ATC: N02
	Corticosteroids for systemic use	ATC: H02
	Antibiotics	ATC: J01
	Antiinflammatory and antirheumatic agents	ATC: M01
	Muscle relaxants	ATC: M03
Chemotherapy		In-hospital treatment codes: BWHA (cytostatic treatment)

Operations on musculoskeletal system and their skeletal regions

Operation category	Operation type	NOMESCO code (all subcodes if not otherwise specified, *=A-H, location)
Exploratory procedures including biopsy	Exploratory procedures including biopsy	KN*A (KNAA, KNBA, KNCA, KNDA, KNEA, KNFA, KNGA, KNHA)
Operations assumed to be for TGCT treatment	Operations on synovia and joint surfaces	KN*F (KNAF, KNBF, KNCF, KNDF, KNEF, KNFF, KNGF, KNHF)
	Operations on muscles and tendons (except in pelvis or hip/thigh)	KN*L except KNEL or KNFL (KNAL, KNBL, KNCL, KNDL, KNGL, KNHL)
	Operations of fascia, ganglia, synovial sheaths and bursae	KN*M
	Operations for tumors of musculoskeletal system	KN*R
All other operations on musculoskeletal system	KNEL, KNFL	Operations on muscles and tendons in pelvis or hip/thigh
	KN*B	Primary prosthetic joint replacement
	KN*C	Secondary prosthetic joint replacement
	KN*E	Operations on capsules and ligaments
	KN*G	Excision, reconstruction and fusion of joints
	KN*H	Miscellaneous operations on joints
	KN*J	Fracture surgery
	KN*K	Operations on bones
	KN*N	Transplantations
	KN*P	Replantation and autotransplantation
	KN*Q	Amputations
	KN*S	Operations for infections of tendons, joints and bone
	KN*T	Miscellaneous operations
	KN*U	Removal of implants and internal fixation devices
	KN*W	Reoperations
Region of the operation (3rd position of the KNxxxx codes)		
'A' = 'Spine and neck'		
'B' = 'Shoulder and upper arm'		
'C' = 'Elbow and forearm'		
'D' = 'Wrist and hand'		
'E' = 'Pelvis'		
'F' = 'Hip joint and thigh'		
'G' = 'Knee joint and lower leg'		
'H' = 'Ankle and foot'		

Supplementary Table 1. Distribution of topography codes among patients with TGCT, Denmark, 1997-2012.

Localization	L-TGCT	D-TGCT
Fingers	1,101 (53%)	33 (8.9%)
Knee/knee joint	155 (7.4%)	83 (22%)
Tendon, synovialis, tendon sheath, unspecified joints	625 (30%)	188 (51%)
Upper limb	105 (5.0%)	20 (5.4%)
Lower limb	47 (2.2%)	33 (8.9%)
Other, unspecified, unknown	54 (2.6%)	217 (37.8%)
Total	2,087 (100%)	574 (100%)