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## **Online Supplementary Material**

Surgical Treatment Patterns, Healthcare Resource Utilization, and Economic Burden in Patients with Tenosynovial Giant Cell Tumor Who Underwent Joint Surgery in the United States. *JHEOR.* **2022;9(1):68-74.** doi:10.36469/jheor.2022.32485

Figure S1: Study Design

Table S1: Baseline Characteristics of Unmatched Nonsurgical Cohort vs Surgical Cohort

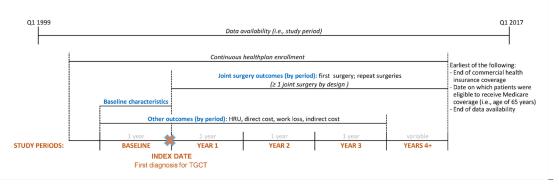
Table S2: All-Cause Work Loss and Associated Indirect Costs

This supplementary material has been provided by the authors to give readers additional information about their work.



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## Table S1. Study Design



Abbreviations: ICD-9-CM, International Classification of Diseases, Ninth Revision, Clinical Modification; ICD-10-CM, International Classification of Diseases, Tenth Revision, Clinical Modification; Q, quarter; TGCT, tenosynovial giant cell tumors.

TGCT diagnosis codes: ICD-9-CM: 719.2x, 727.02; ICD-10-CM: D48.1, D21.0-D21.9, M12.2.

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Table S1. Baseline Characteristics of Unmatched Nonsurgical Cohort vs Surgical Cohort

	Nonsurgical Cohort (n=373)	Surgical Cohort (n=462)	
Age at index date, mean [median]	45.8±8.9 [47.0]	45.9 [47.0]	
18-24 years, n (%)	7 (1.9) 8 (1.7)		
25-40 years, n (%)	86 (23.1)	102 (22.1)	
41-64 years, n (%)	280 (75.1)	352 (76.2)	
Female, n (%)	129 (34.6)	155 (33.5)	
US region, n (%)			
South	175 (46.9)	201 (43.5)	
Northeast	97 (26.0)	141 (30.5)	
Midwest	57 (15.3)	68 (14.7)	
West	44 (11.8)	50 (10.8)	
Unknown	0 (0.0)	2 (0.4)	
Type of healthcare plan, n (%)			
Preferred provider organization	182 (48.8)	220 (47.6)	
Point-of-service	123 (33.0)	140 (30.3)	
Other <sup>a</sup>	68 (18.3)	102 (22.1)	
Year of index date, n (%)			
2000-2005	131 (35.1)	189 (40.9)	
2006-2010	163 (43.6)	208 (45.0)	
2011-2016	79 (21.1)	65 (14.1)	
Annual employee earnings at the index date (2018 US\$), mean [median]	69 026 [53 601]	69 907 [55 668]	
Employer industry, n (%)			
Transportation	179 (48.0)	198 (42.9)	
Manufacturing	72 (19.3)	107 (23.2)	
Technology	27 (7.2)	47 (10.2)	
Telecommunications	24 (6.4)	25 (5.4)	
Energy/utility	18 (4.8)	22 (4.8)	
Healthcare	14 (3.8)	15 (3.2)	
Government/religion/education services	4 (1.1)	5 (1.1)	
Financial services/insurance	5 (1.3)	4 (0.9)	
Retail/consumer goods	5 (1.3)	4 (0.9)	
Food/beverage	3 (0.8)	2 (0.4)	
Other service	22 (5.9)	33 (7.1)	
Charlson Comorbidity Index, b mean±SD	0.3±0.8 [0.0]	0.3±0.7	
0, n (%)	319 (85.5)	383 (82.9)	
1, n (%)	33 (8.8)	44 (9.5)	
≥ 2, n (%)	21 (5.6)	35 (7.6)	
Comorbidities with prevalence ≥1%, b n (%)		35 (7:0)	
Hypertension	83 (22.3)	114 (24.7)	
Depression	28 (7.5)	40 (8.7)	
Hypothyroidism	26 (7.0)	32 (6.9)	
Chronic pulmonary disease	19 (5.1)	32 (6.9)	
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Diabetes without chronic complication	23 (6.2)	23 (5.0)	

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Valvular disease	15 (4.0)	17 (3.7)
Cardiac arrhythmias	10 (2.7)	14 (3.0)
Fluid and electrolyte disorders	7 (1.9)	12 (2.6)
Obesity	9 (2.4)	11 (2.4)
Rheumatic disease	19 (5.1)	11 (2.4)
Cerebrovascular disease	2 (0.5)	7 (1.5)
Deficiency anemia	6 (1.6)	7 (1.5)
Mild liver disease	8 (2.1)	7 (1.5)
Renal disease	1 (0.3)	7 (1.5)
Congestive heart failure	3 (0.8)	5 (1.1)
Diabetes with chronic complication	1 (0.3)	5 (1.1)
Drug abuse	1 (0.3)	5 (1.1)
Peripheral vascular disease	7 (1.9)	5 (1.1)
Patients with joint surgery in the baseline year, on (%)	_	38 (8)

<sup>&</sup>lt;sup>a</sup>Health maintenance organization, any indemnity, locked-in, and exclusive provider organization.

<sup>&</sup>lt;sup>b</sup>Measured based on diagnosis codes in the claims data in the baseline year.

<sup>&</sup>lt;sup>c</sup>Joint surgeries, including arthroplasty, arthrodesis, arthroscopic excision, open excision, and amputation, occurred within 12 months prior to the first TGCT diagnosis.

Table S2. All-Cause Work Loss and Associated Indirect Costs

All-Cause Indirect Burden	Study Sample (n=462)			
	Baseline Year	Year 1	Year 2	Year 3
Patients with any absenteeism, n (%)	422 (91.3)	428 (92.6)	403 (87.2)	412 (89.2)
Patients with any disability, n (%)	14 (3.0)	43 (9.3)	21 (4.5)	24 (5.2)
Total work loss days, mean [median]	9.9 [6]	19.4 [11]	12.7 [6]	12.9 [5]
Healthcare resource utilization-related absenteeism days	7.9 [6]	12.2 [10]	7.8 [5]	7.6 [5]
Short- and long-term disability days	1.9 [0]	7.2 [0]	4.9 [0]	5.3 [0]
Total indirect costs (2018 US\$), mean [median]	3104 [1533]	5345 [2902]	3217 [1520]	3284 [1531]
Healthcare resource utilization-related absenteeism costs	2794 [1485]	4262 [2639]	2619 [1387]	2475 [1433]
Short- and long-term disability costs	310 [0]	1083 [0]	598 [0]	809 [0]

Abbreviation: US\$, United States dollars.