**Table 6A.B.1.9**: Bone and Joint Cancer Tumors Treatment and Surgical Approaches, United States 2004-2015

		Surgical_Tx		Radiation_Tx Proportion		Chemotherapy_Tx Proportion		HORMONE_Tx Proportion		IMMUNO_Tx Proportion	
	0		Proportion								
			Cases		Cases		Cases		Cases		Cases
Histology	Total Cases	N Cases	Treated	N Cases	Treated	N Cases	Treated	N Cases	Treated	N Cases	Treated
Adamantinoma of long bones	122	113	93%	1	1%	1	1%	-	0%	-	0%
Central osteosarcoma	273	244	89%	12	4%	206	75%	5	2%	1	0%
Chondroblastic osteosarcoma	982	787	80%	100	10%	745	76%	11	1%	1	0%
Chondroblastoma, malignant	44	41	93%	2	5%	4	9%	-	0%	-	0%
Chondroid chordoma	86	68	79%	34	40%	3	3%	1	1%	-	0%
Chondrosarcoma, NOS	4,840	4,129	85%	499	10%	145	3%	6	0%	-	0%
Chordoma, NOS	1,574	1,224	78%	652	41%	38	2%	4	0%	-	0%
Clear cell chondrosarcoma	. 98	90	92%	10	10%	3	3%	-	0%	-	0%
Dedifferentiated chondrosarcoma	504	433	86%	66	13%	151	30%	1	0%	-	0%
Dedifferentiated chordoma	18	12	67%	8	44%	2	11%	1	6%	1	6%
Epithelioid hemangioendothelioma, malignant	80	52	65%	40	50%	17	21%	-	0%	2	3%
Ewing sarcoma	3,023	1,553	51%	1,351	45%	2,574	85%	50	2%	16	1%
Fibroblastic osteosarcoma	353	300	85%	35	10%	248	70%	2	1%	1	0%
Fibrosarcoma, NOS	99	79	80%	20	20%	24	24%	-	0%	-	0%
Giant cell tumor of bone, malignant	309	250	81%	46	15%	52	17%	2	1%	18	6%
Hemangiosarcoma	197	93	47%	78	40%	54	27%	-	0%	1	1%
Hemangioendothelioma, malignant	31	15	48%	11	35%	7	23%	-	0%	1	3%
High grade surface osteosarcoma	44	38	86%	3	7%	30	68%	3	7%	-	0%
Intracortical osteosarcoma	1	1	100%	-	0%	-	0%	-	0%	-	0%
Intraosseous well-differentiated osteosarcoma	13	11	85%	1	8%	1	8%	-	0%	-	0%
Juxtacortical chondrosarcoma	72	66	92%	4	6%	1	1%	-	0%	-	0%
Leiomyosarcoma, NOS	144	104	72%	45	31%	50	35%	1	1%	-	0%
Malignant fibrous histiocytoma	235	173	74%	57	1%	112	48%	-	0%	1	0%
Mesenchymal chondrosarcoma	100	72	72%	26	26%	53	53%	1	1%	-	0%
Myxoid chondrosarcoma	369	295	80%	102	28%	34	9%	1	0%	1	0%
Neoplasm, malignant	148	38	26%	25	17%	12	8%	-	0%	-	0%
Osteosarcoma in Paget disease of bone	68	27	40%	12	18%	17	25%	1	1%	-	0%
Osteosarcoma, NOS	3,997	3,049	76%	301	8%	2,951	74%	44	1%	16	0%
Parosteal osteosarcoma	296	279	94%	3	1%	65	22%	-	0%	-	0%
Periosteal osteosarcoma	89	81	91%	8	9%	51	57%	1	1%	-	0%
Peripheral neuroectodermal tumor	61	33	54%	30	49%	51	84%	-	0%	-	0%
Primitive neuroectodermal tumor, NOS	87	49	56%	35	40%	68	78%	1	1%	1	1%
Small cell osteosarcoma	62	43	69%	7	11%	49	79%	-	0%	-	0%
Spindle cell sarcoma	191	120	63%	52	27%	97	51%	-	0%	-	0%
Telangiectatic osteosarcoma	200	173	87%	7	4%	174	87%	1	1%	1	1%
Undifferentiated sarcoma	71	50	70%	26	37%	35	49%	-	0%	-	0%
Total Bone and Joint Cancers	18,881	14,185	75%	3,709	20%	8,125	43%	137	1%	62	0%

 Table 6A.B.1.9: Bone and Joint Cancer Tumors Treatment and Surgical Approaches, United States 2004-2015

## Bone and Joint Tumors Surgical Approaches

		Cases
Surgical Approach	N Cases	Treated
Data N/A: item was first used for 2010 diagnoses	7,485	52.8%
Endoscopic or laparoscopic converted to open.	14	0.1%
Endoscopic or laparoscopic	237	1.7%
No surgical procedure of primary site at this facility	985	6.9%
Open or approach unspecified	5,448	38.4%
Robotic assisted	16	0.1%
Total (ALL)	14,185	100.0%

Source: The National Cancer Data Base (NCDB) of the American College of Surgeons (ACS), 2004-2015.