

Online Resource 1: Characteristics of Patients Diagnosed with a Primary CNS Tumor (SEER 9 Registries, 1973-2009)

Cohort Characteristics		Patients, No. (%)									
		PA	A II/III	A NOS	GBM	O II/III	Ependymoma	Mixed Glioma	Glioma NOS	MPNET	Meningioma
Total Number of Patients		1,636	3,890	7,244	19,367	3,064	1,047	1,133	1,203	1,827	748
Age at Diagnosis (years)	0-19	1168 (71.4)	411 (10.6)	1090 (15)	313 (1.6)	251 (8.2)	510 (48.7)	119 (10.5)	239 (19.9)	1338 (73.2)	17 (2.3)
	20-44	359 (21.9)	1483 (38.1)	2191 (30.2)	2311 (11.9)	1526 (49.8)	286 (27.3)	591 (52.2)	300 (24.9)	399 (21.8)	113 (15.1)
	45-64	86 (5.3)	1189 (30.6)	2223 (30.7)	8779 (45.3)	993 (32.4)	196 (18.7)	324 (28.6)	368 (30.6)	77 (4.2)	293 (39.2)
	65+	23 (1.4)	807 (20.7)	1740 (24)	7964 (41.1)	294 (9.6)	55 (5.3)	99 (8.7)	296 (24.6)	13 (0.7)	325 (43.4)
Gender	Male	830 (50.7)	2209 (56.8)	4072 (56.2)	11322 (58.5)	1767 (57.7)	583 (55.7)	632 (55.8)	692 (57.5)	1118 (61.2)	324 (43.3)
	Female	806 (49.3)	1681 (43.2)	3172 (43.8)	8045 (41.5)	1297 (42.3)	464 (44.3)	501 (44.2)	511 (42.5)	709 (38.8)	424 (56.7)
Race	White	1388 (84.8)	3489 (89.7)	6503 (89.8)	17791 (91.9)	2739 (89.4)	879 (84)	1014 (89.5)	1031 (85.7)	1508 (82.5)	586 (78.3)

	Black		207	464	904	133		123			
		147 (9)	(5.3)	(6.4)	(4.7)	(4.3)	102 (9.7)	60 (5.3)	(10.2)	166 (9.1)	96 (12.8)
	Other ^d	101		277	672	192					
		(6.2)	194 (5)	(3.8)	(3.5)	(6.3)	66 (6.3)	59 (5.2)	49 (4.1)	153 (8.4)	66 (8.8)
Radiation Status	Refused/No Radiation	1341	907	2281	4545	1347		355	467	378	
		(83.1)	(23.8)	(32.4)	(24)	(45)	380 (37.3)	(32.2)	(39.7)	(21.1)	456 (61.6)
	Radiation	273	2907	4765	14401	1648		749	710	1414	
		(16.9)	(76.2)	(67.6)	(76)	(55)	638 (62.7)	(67.8)	(60.3)	(78.9)	284 (38.4)
Primary Tumor Site	Cerebral meninges (C70.0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	633 (84.6)
	Spinal meninges (C70.1)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	21 (2.8)
	Meninges, NOS (C70.9)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	77 (10.3)
	Cerebrum (C71.0)	166	307	491	847	79					
		(10.1)	(7.9)	(6.8)	(4.4)	(2.6)	32 (3.1)	46 (4.1)	108 (9)	30 (1.6)	0 (0)
	Frontal lobe (C71.1)	72	1094	1665	4671	1424					
		(4.4)	(28.1)	(23)	(24.1)	(46.5)	65 (6.2)	476 (42)	229 (19)	53 (2.9)	0 (0)
	Temporal lobe (C71.2)	107	755	1270	4438	583		222			
		(6.5)	(19.4)	(17.5)	(22.9)	(19)	42 (4)	(19.6)	192 (16)	32 (1.8)	0 (0)

	Parietal lobe (C71.3)	38 (2.3)	505 (13)	904 (12.5)	3390 (17.5)	337 (11)	54 (5.2)	133 (11.7)	121 (10.1)	31 (1.7)	0 (0)
	Occipital lobe (C71.4)	23 (1.4)	87 (2.2)	179 (2.5)	795 (4.1)	55 (1.8)	21 (2)	18 (1.6)	33 (2.7)	6 (0.3)	0 (0)
	Ventricle, NOS (C71.5)	105 (6.4)	62 (1.6)	115 (1.6)	94 (0.5)	51 (1.7)	193 (18.4)	14 (1.2)	22 (1.8)	62 (3.4)	0 (0)
	Cerebellum, NOS (C71.6)	599 (36.6)	108 (2.8)	456 (6.3)	127 (0.7)	26 (0.8)	94 (9)	14 (1.2)	25 (2.1)	1348 (73.8)	0 (0)
	Brain stem (C71.7)	200 (12.2)	137 (3.5)	283 (3.9)	124 (0.6)	15 (0.5)	293 (28)	14 (1.2)	165 (13.7)	100 (5.5)	0 (0)
	Overlapping lesion of brain (C71.8)	77 (4.7)	622 (16)	1234 (17)	3566 (18.4)	378 (12.3)	72 (6.9)	153 (13.5)	168 (14)	51 (2.8)	0 (0)
	Brain, NOS (C71.9)	249 (15.2)	213 (5.5)	647 (8.9)	1315 (6.8)	116 (3.8)	181 (17.3)	43 (3.8)	140 (11.6)	114 (6.2)	17 (2.3)
SEER	San Francisco- Oakland SMSA	223 (13.6)	776 (19.9)	844 (11.7)	3174 (16.4)	417 (13.6)	164 (15.7)	175 (15.4)	132 (11)	266 (14.6)	150 (20.1)
Location Site	Connecticut	209 (12.8)	548 (14.1)	851 (11.7)	3439 (17.8)	429 (14)	182 (17.4)	139 (12.3)	216 (18)	213 (11.7)	107 (14.3)
	Detroit (Metropolitan)	213 (13)	568 (14.6)	1701 (23.5)	2970 (15.3)	475 (15.5)	159 (15.2)	203 (17.9)	240 (20)	308 (16.9)	184 (24.6)

	Hawaii	69 (4.2)	130 (3.3)	270 (3.7)	503 (2.6)	80 (2.6)	35 (3.3)	41 (3.6)	25 (2.1)	95 (5.2)	33 (4.4)
	Iowa	239 (14.6)	556 (14.3)	1054 (14.5)	2750 (14.2)	331 (10.8)	117 (11.2)	151 (13.3)	127 (10.6)	208 (11.4)	67 (9)
	New Mexico	86 (5.3)	184 (4.7)	418 (5.8)	928 (4.8)	203 (6.6)	59 (5.6)	27 (2.4)	63 (5.2)	112 (6.1)	53 (7.1)
	Seattle (Puget Sound)	248 (15.2)	463 (11.9)	940 (13)	3078 (15.9)	634 (20.7)	149 (14.2)	235 (20.7)	191 (15.9)	277 (15.2)	75 (10)
	Utah	193 (11.8)	306 (7.9)	536 (7.4)	1169 (6)	287 (9.4)	92 (8.8)	102 (9)	85 (7.1)	198 (10.8)	26 (3.5)
	Atlanta (Metropolitan)	156 (9.5)	359 (9.2)	630 (8.7)	1356 (7)	208 (6.8)	90 (8.6)	60 (5.3)	124 (10.3)	150 (8.2)	53 (7.1)
Year of Diagnosis	1973-1979	53 (3.2)	254 (6.5)	1589 (21.9)	2658 (13.7)	188 (6.1)	145 (13.8)	51 (4.5)	184 (15.3)	264 (14.4)	109 (14.6)
	1980-1989	212 (13)	990 (25.4)	3304 (45.6)	4076 (21)	453 (14.8)	249 (23.8)	265 (23.4)	312 (25.9)	404 (22.1)	182 (24.3)
	1990-1999	567 (34.7)	1396 (35.9)	1528 (21.1)	5782 (29.9)	1156 (37.7)	297 (28.4)	348 (30.7)	341 (28.3)	580 (31.7)	234 (31.3)
	2000-2009	804 (49.1)	1250 (32.1)	823 (11.4)	6851 (35.4)	1267 (41.4)	356 (34)	469 (41.4)	366 (30.4)	579 (31.7)	223 (29.8)

Ethnicity	Non-Hispanic	1497 (91.7)	3692 (95.1)	6972 (96.4)	18582 (96.1)	2886 (94.3)	958 (91.7)	1076 (95.4)	1144 (95.3)	1635 (89.7)	701 (94.2)
	Hispanic ^b	136 (8.3)	191 (4.9)	261 (3.6)	748 (3.9)	173 (5.7)	87 (8.3)	52 (4.6)	57 (4.7)	188 (10.3)	43 (5.8)

Abbreviations: O, Observed; O/E, Observed/expected; SEER, Surveillance, Epidemiology and End Results; PA, Pilocytic Astrocytoma; A NOS, Astrocytoma Not Otherwise Specified; A II/III, Astrocytoma Grade II and III; GBM, Glioblastoma Multiforme; O II/III, Oligodendroglioma Grade II and III; M/PNET, Medulloblastoma/Primitive Neuroectodermal Tumor

^aAmerican Indian/AK Native, Asian/Pacific Islander

^bMexican including Chicano, Puerto Rican, Cuban, South or Central American excluding Brazil, Other spec. Span/Hisp. Origin including Europe excluding Dom. Rep., Spanish/Hispanic/Latino NOS, Spanish surname only, Dominican Republic