

## Chemotherapy agents - All Others: All cancers

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			m-AMSA		AZQ		Cycloctyindine		Deoxycoformycin		Homoharringtonine		Hydrea		L-Asparaginase		Mithramycin		Myeleran		Retinoic acid		
			All cases	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Both sexes	All cases		12596	42	0.3	19	0.2	16	0.1	10	0.1	1	0.0	512	4.1	3940	31.3	4	0.0	14	0.1	6	0.0
	Age at baseline	<18	3606	15	0.4	11	0.3	9	0.2	5	0.1	.	.	167	4.6	1551	43.0	2	0.1	3	0.1	4	0.1
		18-19	1112	6	0.5	1	0.1	2	0.2	1	0.1	.	.	54	4.9	486	43.7	.	.	2	0.2	.	.
		20-24	2665	8	0.3	4	0.2	3	0.1	3	0.1	.	.	101	3.8	925	34.7	.	.	5	0.2	1	0.0
		25-29	2406	7	0.3	3	0.1	2	0.1	.	.	.	.	110	4.6	617	25.7	1	0.0	2	0.1	.	.
		30-34	1697	3	0.2	.	.	.	.	1	0.1	.	.	59	3.5	273	16.1	.	.	2	0.1	1	0.1
		35+	1110	3	0.3	.	.	.	.	.	.	1	0.1	21	1.9	88	8.0	1	0.1	.	.	.	.
	Years since diagnosis	5-9	1932	16	0.8	9	0.5	6	0.3	6	0.3	.	.	135	7.0	740	38.3	1	0.1	7	0.4	2	0.1
		10-14	4649	23	0.5	9	0.2	6	0.1	3	0.1	.	.	192	4.1	1619	34.9	1	0.0	7	0.2	4	0.1
		15-19	3456	3	0.1	1	0.0	4	0.1	1	0.0	1	0.0	111	3.2	1032	29.9	1	0.0	.	.	.	.
		20+	2559	.	.	.	.	.	.	.	.	.	.	74	2.9	549	21.5	1	0.0	.	.	.	.
	Age at diagnosis	<1	882	3	0.3	1	0.1	1	0.1	.	.	.	.	24	2.7	55	6.2	1	0.1	.	.	1	0.1
		1-4	4186	8	0.2	9	0.2	11	0.3	3	0.1	.	.	145	3.5	2015	48.1	1	0.0	2	0.0	2	0.0
		5-9	2777	8	0.3	5	0.2	1	0.0	2	0.1	.	.	149	5.4	1055	38.0	1	0.0	2	0.1	2	0.1
		10-14	2531	10	0.4	2	0.1	1	0.0	4	0.2	.	.	130	5.1	566	22.4	.	.	4	0.2	.	.
		15-20	2220	13	0.6	2	0.1	2	0.1	1	0.0	1	0.0	64	2.9	249	11.3	1	0.0	6	0.3	1	0.0
	Treatment	Chemotherapy, no radiation	3091	21	0.7	1	0.0	8	0.3	1	0.0	1	0.0	126	4.1	1158	37.5	.	.	7	0.2	1	0.0
		Chemotherapy and radiation	7024	21	0.3	18	0.3	8	0.1	9	0.1	.	.	384	5.5	2769	39.4	4	0.1	6	0.1	5	0.1
Males	All cases		6650	20	0.3	15	0.2	10	0.2	6	0.1	.	.	312	4.7	2094	31.5	2	0.0	5	0.1	3	0.0
	Age at baseline	<18	1919	6	0.3	10	0.5	5	0.3	3	0.2	.	.	103	5.4	844	44.0	1	0.1	1	0.1	2	0.1
		18-19	606	3	0.5	1	0.2	1	0.2	.	.	.	.	35	5.8	270	44.6	.	.	1	0.2	.	.
		20-24	1380	7	0.5	2	0.1	2	0.1	2	0.1	.	.	52	3.8	456	33.1	.	.	2	0.1	1	0.1
		25-29	1331	3	0.2	2	0.2	2	0.2	.	.	.	.	79	5.9	344	25.9	.	.	1	0.1	.	.
		30-34	886	1	0.1	.	.	.	.	1	0.1	.	.	33	3.7	137	15.5	.	.	.	.	.	.
		35+	528	.	.	.	.	.	.	.	.	.	.	10	1.9	43	8.2	1	0.2	.	.	.	.
	Years since diagnosis	5-9	1073	12	1.1	8	0.7	5	0.5	4	0.4	.	.	82	7.6	425	39.6	1	0.1	3	0.3	1	0.1
		10-14	2495	8	0.3	7	0.3	3	0.1	1	0.0	.	.	122	4.9	876	35.1	.	.	2	0.1	2	0.1
		15-19	1764	.	.	.	.	2	0.1	1	0.1	.	.	64	3.6	511	29.0	1	0.1	.	.	.	.
		20+	1318	.	.	.	.	.	.	.	.	.	.	44	3.4	282	21.5	.	.	.	.	.	.
	Age at diagnosis	<1	446	1	0.2	1	0.2	1	0.2	.	.	.	.	12	2.7	25	5.6	.	.	.	.	1	0.2
		1-4	2174	3	0.1	8	0.4	5	0.2	2	0.1	.	.	88	4.0	1063	48.9	.	.	.	.	.	.
		5-9	1548	4	0.3	3	0.2	1	0.1	.	.	.	.	96	6.2	568	36.7	1	0.1	2	0.1	2	0.1
		10-14	1315	6	0.5	1	0.1	1	0.1	3	0.2	.	.	84	6.4	290	22.1	.	.	2	0.2	.	.
		15-20	1167	6	0.5	2	0.2	2	0.2	1	0.1	.	.	32	2.8	148	12.7	1	0.1	1	0.1	.	.
	Treatment	Chemotherapy, no radiation	1570	10	0.6	.	.	5	0.3	.	.	.	.	70	4.5	546	34.8	.	.	4	0.3	.	.
		Chemotherapy and radiation	3810	10	0.3	15	0.4	5	0.1	6	0.2	.	.	241	6.3	1540	40.4	2	0.1	1	0.0	3	0.1
Females	All cases		5946	22	0.4	4	0.1	6	0.1	4	0.1	1	0.0	200	3.4	1846	31.1	2	0.0	9	0.2	3	0.1
	Age at baseline	<18	1687	9	0.5	1	0.1	4	0.2	2	0.1	.	.	64	3.8	707	41.9	1	0.1	2	0.1	2	0.1
		18-19	506	3	0.6	.	.	1	0.2	1	0.2	.	.	19	3.8	216	42.8	.	.	1	0.2	.	.
		20-24	1285	1	0.1	2	0.2	1	0.1	1	0.1	.	.	49	3.8	469	36.5	.	.	3	0.2	.	.
		25-29	1075	4	0.4	1	0.1	.	.	.	.	.	.	31	2.9	273	25.4	1	0.1	1	0.1	.	.
		30-34	811	2	0.2	.	.	.	.	.	.	.	.	26	3.2	136	16.8	.	.	2	0.2	1	0.1
		35+	582	3	0.5	.	.	.	.	.	.	1	0.2	11	1.9	45	7.8	.	.	.	.	.	.

	<b>Years since diagnosis</b>	5-9	859	4	0.5	1	0.1	1	0.1	2	0.2	.	.	53	6.2	315	36.7	.	.	4	0.5	1	0.1
		10-14	2154	15	0.7	2	0.1	3	0.1	2	0.1	.	.	70	3.3	743	34.5	1	0.0	5	0.2	2	0.1
		15-19	1692	3	0.2	1	0.1	2	0.1	.	.	1	0.1	47	2.8	521	30.8	.	.	.	.	.	.
		20+	1241	.	.	.	.	.	.	.	.	.	.	30	2.4	267	21.6	1	0.1	.	.	.	.
	<b>Age at diagnosis</b>	<1	436	2	0.5	.	.	.	.	.	.	.	.	12	2.8	30	6.9	1	0.2	.	.	.	.
		1-4	2012	5	0.2	1	0.0	6	0.3	1	0.0	.	.	57	2.8	952	47.3	1	0.0	2	0.1	2	0.1
		5-9	1229	4	0.3	2	0.2	.	.	2	0.2	.	.	53	4.3	487	39.7	.	.	.	.	.	.
		10-14	1216	4	0.3	1	0.1	.	.	1	0.1	.	.	46	3.8	276	22.7	.	.	2	0.2	.	.
		15-20	1053	7	0.7	.	.	.	.	.	.	1	0.1	32	3.1	101	9.6	.	.	5	0.5	1	0.1
	<b>Treatment</b>	Chemotherapy, no radiation	1521	11	0.7	1	0.1	3	0.2	1	0.1	1	0.1	56	3.7	612	40.2	.	.	3	0.2	1	0.1
		Chemotherapy and radiation	3214	11	0.3	3	0.1	3	0.1	3	0.1	.	.	143	4.4	1229	38.2	2	0.1	5	0.2	2	0.1

CCSS data from February 2006 data freeze-all % based on denominator with non-missing values

Data for patients with medical records abstraction

Chemotherapy initiated more than 5 years post-diagnosis is not included.

## Chemotherapy agents - All Others: All leukemias

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			m-AMSA		AZQ		Cycloctyindine		Deoxycoformycin		Homoharringtonine		Hydrea		L-Aspariginase		Mithramycin		Myeleran		Retinoic acid		
			All cases	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b>Both sexes</b>	<b>All cases</b>		<b>4276</b>	<b>39</b>	<b>0.9</b>	<b>8</b>	<b>0.2</b>	<b>13</b>	<b>0.3</b>	<b>8</b>	<b>0.2</b>	<b>1</b>	<b>0.0</b>	<b>192</b>	<b>4.5</b>	<b>3639</b>	<b>85.1</b>	<b>3</b>	<b>0.1</b>	<b>13</b>	<b>0.3</b>	<b>3</b>	<b>0.1</b>
	<b>Age at baseline</b>	<18	1636	14	0.9	6	0.4	7	0.4	5	0.3	.	.	66	4.0	1500	91.7	1	0.1	3	0.2	2	0.1
		18-19	503	5	1.0	1	0.2	2	0.4	1	0.2	.	.	19	3.8	451	89.7	.	.	2	0.4	.	.
		20-24	999	8	0.8	.	.	2	0.2	2	0.2	.	.	33	3.3	866	86.7	.	.	5	0.5	1	0.1
		25-29	714	7	1.0	1	0.1	2	0.3	.	.	.	.	50	7.0	546	76.5	1	0.1	1	0.1	.	.
		30-34	309	3	1.0	.	.	.	.	.	.	.	.	18	5.8	208	67.3	.	.	2	0.6	.	.
		35+	115	2	1.7	.	.	.	.	.	.	1	0.9	6	5.2	68	59.1	1	0.9	.	.	.	.
	<b>Years since diagnosis</b>	5-9	784	14	1.8	4	0.5	5	0.6	6	0.8	.	.	60	7.7	694	88.5	.	.	7	0.9	1	0.1
		10-14	1679	23	1.4	4	0.2	5	0.3	2	0.1	.	.	64	3.8	1507	89.8	1	0.1	6	0.4	2	0.1
		15-19	1096	2	0.2	.	.	3	0.3	.	.	1	0.1	26	2.4	932	85.0	1	0.1	.	.	.	.
		20+	717	.	.	.	.	.	.	.	.	.	.	42	5.9	506	70.6	1	0.1	.	.	.	.
	<b>Age at diagnosis</b>	<1	87	3	3.4	.	.	.	.	.	.	.	.	5	5.7	53	60.9	1	1.1	.	.	.	.
		1-4	2204	7	0.3	6	0.3	10	0.5	3	0.1	.	.	74	3.4	1963	89.1	1	0.0	2	0.1	1	0.0
		5-9	1109	8	0.7	1	0.1	1	0.1	2	0.2	.	.	49	4.4	964	86.9	.	.	2	0.2	2	0.2
		10-14	592	9	1.5	1	0.2	.	.	3	0.5	.	.	43	7.3	469	79.2	.	.	4	0.7	.	.
		15-20	284	12	4.2	.	.	2	0.7	.	.	1	0.4	21	7.4	190	66.9	1	0.4	5	1.8	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	1302	21	1.6	1	0.1	6	0.5	1	0.1	1	0.1	60	4.6	1081	83.0	.	.	7	0.5	1	0.1
		Chemotherapy and radiation	2955	18	0.6	7	0.2	7	0.2	7	0.2	.	.	131	4.4	2545	86.1	3	0.1	5	0.2	2	0.1
<b>Males</b>	<b>All cases</b>		<b>2221</b>	<b>19</b>	<b>0.9</b>	<b>7</b>	<b>0.3</b>	<b>7</b>	<b>0.3</b>	<b>4</b>	<b>0.2</b>	<b>.</b>	<b>.</b>	<b>113</b>	<b>5.1</b>	<b>1901</b>	<b>85.6</b>	<b>1</b>	<b>0.0</b>	<b>5</b>	<b>0.2</b>	<b>2</b>	<b>0.1</b>
	<b>Age at baseline</b>	<18	882	6	0.7	5	0.6	3	0.3	3	0.3	.	.	41	4.6	808	91.6	.	.	1	0.1	1	0.1
		18-19	268	2	0.7	1	0.4	1	0.4	.	.	.	.	11	4.1	245	91.4	.	.	1	0.4	.	.
		20-24	485	7	1.4	.	.	1	0.2	1	0.2	.	.	13	2.7	417	86.0	.	.	2	0.4	1	0.2
		25-29	383	3	0.8	1	0.3	2	0.5	.	.	.	.	36	9.4	298	77.8	.	.	1	0.3	.	.
		30-34	153	1	0.7	.	.	.	.	.	.	.	.	11	7.2	101	66.0	.	.	.	.	.	.
		35+	50	.	.	.	.	.	.	.	.	.	.	1	2.0	32	64.0	1	2.0	.	.	.	.
	<b>Years since diagnosis</b>	5-9	441	11	2.5	4	0.9	4	0.9	4	0.9	.	.	34	7.7	389	88.2	.	.	3	0.7	1	0.2
		10-14	888	8	0.9	3	0.3	2	0.2	.	.	.	.	41	4.6	803	90.4	.	.	2	0.2	1	0.1
		15-19	534	.	.	.	.	1	0.2	.	.	.	.	15	2.8	455	85.2	1	0.2	.	.	.	.
		20+	358	.	.	.	.	.	.	.	.	.	.	23	6.4	254	70.9	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	38	1	2.6	.	.	.	.	.	.	.	.	2	5.3	25	65.8	.	.	.	.	.	.
		1-4	1149	3	0.3	5	0.4	4	0.3	2	0.2	.	.	42	3.7	1025	89.2	.	.	.	.	.	.
		5-9	583	4	0.7	1	0.2	1	0.2	.	.	.	.	35	6.0	509	87.3	.	.	2	0.3	2	0.3
		10-14	278	5	1.8	1	0.4	.	.	2	0.7	.	.	23	8.3	224	80.6	.	.	2	0.7	.	.
		15-20	173	6	3.5	.	.	2	1.2	.	.	.	.	11	6.4	118	68.2	1	0.6	1	0.6	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	598	10	1.7	.	.	3	0.5	.	.	.	.	34	5.7	495	82.8	.	.	4	0.7	.	.
		Chemotherapy and radiation	1611	9	0.6	7	0.4	4	0.2	4	0.2	.	.	79	4.9	1398	86.8	1	0.1	1	0.1	2	0.1
<b>Females</b>	<b>All cases</b>		<b>2055</b>	<b>20</b>	<b>1.0</b>	<b>1</b>	<b>0.0</b>	<b>6</b>	<b>0.3</b>	<b>4</b>	<b>0.2</b>	<b>1</b>	<b>0.0</b>	<b>79</b>	<b>3.8</b>	<b>1738</b>	<b>84.6</b>	<b>2</b>	<b>0.1</b>	<b>8</b>	<b>0.4</b>	<b>1</b>	<b>0.0</b>
	<b>Age at baseline</b>	<18	754	8	1.1	1	0.1	4	0.5	2	0.3	.	.	25	3.3	692	91.8	1	0.1	2	0.3	1	0.1
		18-19	235	3	1.3	.	.	1	0.4	1	0.4	.	.	8	3.4	206	87.7	.	.	1	0.4	.	.
		20-24	514	1	0.2	.	.	1	0.2	1	0.2	.	.	20	3.9	449	87.4	.	.	3	0.6	.	.
		25-29	331	4	1.2	.	.	.	.	.	.	.	.	14	4.2	248	74.9	1	0.3	.	.	.	.
		30-34	156	2	1.3	.	.	.	.	.	.	.	.	7	4.5	107	68.6	.	.	2	1.3	.	.
		35+	65	2	3.1	.	.	.	.	.	.	1	1.5	5	7.7	36	55.4	.	.	.	.	.	.

	<b>Years since diagnosis</b>	5-9	343	3	0.9	.	.	1	0.3	2	0.6	.	.	26	7.6	305	88.9	.	.	4	1.2	.	.
		10-14	791	15	1.9	1	0.1	3	0.4	2	0.3	.	.	23	2.9	704	89.0	1	0.1	4	0.5	1	0.1
		15-19	562	2	0.4	.	.	2	0.4	.	.	1	0.2	11	2.0	477	84.9	.	.	.	.	.	.
		20+	359	.	.	.	.	.	.	.	.	.	.	19	5.3	252	70.2	1	0.3	.	.	.	.
	<b>Age at diagnosis</b>	<1	49	2	4.1	.	.	.	.	.	.	.	.	3	6.1	28	57.1	1	2.0	.	.	.	.
		1-4	1055	4	0.4	1	0.1	6	0.6	1	0.1	.	.	32	3.0	938	88.9	1	0.1	2	0.2	1	0.1
		5-9	526	4	0.8	.	.	.	.	2	0.4	.	.	14	2.7	455	86.5	.	.	.	.	.	.
		10-14	314	4	1.3	.	.	.	.	1	0.3	.	.	20	6.4	245	78.0	.	.	2	0.6	.	.
		15-20	111	6	5.4	.	.	.	.	.	.	1	0.9	10	9.0	72	64.9	.	.	4	3.6	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	704	11	1.6	1	0.1	3	0.4	1	0.1	1	0.1	26	3.7	586	83.2	.	.	3	0.4	1	0.1
		Chemotherapy and radiation	1344	9	0.7	.	.	3	0.2	3	0.2	.	.	52	3.9	1147	85.3	2	0.1	4	0.3	.	.

CCSS data from February 2006 data freeze-all % based on denominator with non-missing values

Data for patients with medical records abstraction

Chemotherapy initiated more than 5 years post-diagnosis is not included.

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			m-AMSA		AZQ		Cycloctyindine		Deoxycoformycin		Homoharringtonine		Hydrea		L-Aspariginase		Mithramycin		Myeleran		Retinoic acid		
			All cases	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b>Both sexes</b>	<b>All cases</b>		<b>3657</b>	<b>11</b>	<b>0.3</b>	<b>5</b>	<b>0.1</b>	<b>8</b>	<b>0.2</b>	<b>7</b>	<b>0.2</b>	.	.	<b>129</b>	<b>3.5</b>	<b>3366</b>	<b>92.0</b>	<b>2</b>	<b>0.1</b>	.	.	<b>1</b>	<b>0.0</b>
	<b>Age at baseline</b>	<18	1428	5	0.4	4	0.3	4	0.3	5	0.4	.	.	45	3.2	1380	96.6	.	.	.	.	1	0.1
		18-19	436	.	.	1	0.2	2	0.5	1	0.2	.	.	11	2.5	421	96.6	.	.	.	.	.	.
		20-24	863	2	0.2	.	.	2	0.2	1	0.1	.	.	19	2.2	800	92.7	.	.	.	.	.	.
		25-29	600	2	0.3	.	.	.	.	.	.	.	.	41	6.8	512	85.3	1	0.2	.	.	.	.
		30-34	248	1	0.4	.	.	.	.	.	.	.	.	9	3.6	193	77.8	.	.	.	.	.	.
		35+	82	1	1.2	.	.	.	.	.	.	.	.	4	4.9	60	73.2	1	1.2	.	.	.	.
	<b>Years since diagnosis</b>	5-9	649	3	0.5	3	0.5	3	0.5	5	0.8	.	.	33	5.1	623	96.0	.	.	.	.	1	0.2
		10-14	1456	6	0.4	2	0.1	2	0.1	2	0.1	.	.	45	3.1	1408	96.7	.	.	.	.	.	.
		15-19	937	2	0.2	.	.	3	0.3	.	.	.	.	17	1.8	871	93.0	1	0.1	.	.	.	.
		20+	615	.	.	.	.	.	.	.	.	.	.	34	5.5	464	75.4	1	0.2	.	.	.	.
	<b>Age at diagnosis</b>	<1	51	.	.	.	.	.	.	.	.	.	.	3	5.9	44	86.3	.	.	.	.	.	.
		1-4	1949	4	0.2	5	0.3	8	0.4	3	0.2	.	.	50	2.6	1817	93.2	1	0.1	.	.	.	.
		5-9	998	1	0.1	.	.	.	.	2	0.2	.	.	42	4.2	908	91.0	.	.	.	.	1	0.1
		10-14	464	3	0.6	.	.	.	.	2	0.4	.	.	27	5.8	423	91.2	.	.	.	.	.	.
		15-20	195	3	1.5	.	.	.	.	.	.	.	.	7	3.6	174	89.2	1	0.5	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	1069	2	0.2	.	.	1	0.1	1	0.1	.	.	40	3.7	994	93.0	.	.	.	.	.	.
		Chemotherapy and radiation	2573	9	0.3	5	0.2	7	0.3	6	0.2	.	.	89	3.5	2359	91.7	2	0.1	.	.	1	0.0
<b>Males</b>	<b>All cases</b>		<b>1914</b>	<b>3</b>	<b>0.2</b>	<b>5</b>	<b>0.3</b>	<b>4</b>	<b>0.2</b>	<b>3</b>	<b>0.2</b>	.	.	<b>84</b>	<b>4.4</b>	<b>1761</b>	<b>92.0</b>	<b>1</b>	<b>0.1</b>	.	.	<b>1</b>	<b>0.1</b>
	<b>Age at baseline</b>	<18	774	2	0.3	4	0.5	2	0.3	3	0.4	.	.	33	4.3	745	96.3	.	.	.	.	1	0.1
		18-19	238	.	.	1	0.4	1	0.4	.	.	.	.	8	3.4	231	97.1	.	.	.	.	.	.
		20-24	418	1	0.2	.	.	1	0.2	.	.	.	.	6	1.4	387	92.6	.	.	.	.	.	.
		25-29	326	.	.	.	.	.	.	.	.	.	.	30	9.2	277	85.0	.	.	.	.	.	.
		30-34	121	.	.	.	.	.	.	.	.	.	.	6	5.0	93	76.9	.	.	.	.	.	.
		35+	37	.	.	.	.	.	.	.	.	.	.	1	2.7	28	75.7	1	2.7	.	.	.	.
	<b>Years since diagnosis</b>	5-9	366	2	0.5	3	0.8	2	0.5	3	0.8	.	.	23	6.3	351	95.9	.	.	.	.	1	0.3
		10-14	780	1	0.1	2	0.3	1	0.1	.	.	.	.	32	4.1	752	96.4	.	.	.	.	.	.
		15-19	457	.	.	.	.	1	0.2	.	.	.	.	10	2.2	424	92.8	1	0.2	.	.	.	.
		20+	311	.	.	.	.	.	.	.	.	.	.	19	6.1	234	75.2	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	24	.	.	.	.	.	.	.	.	.	.	1	4.2	21	87.5	.	.	.	.	.	.
		1-4	1023	2	0.2	5	0.5	4	0.4	2	0.2	.	.	33	3.2	954	93.3	.	.	.	.	.	.
		5-9	525	.	.	.	.	.	.	.	.	.	.	29	5.5	479	91.2	.	.	.	.	1	0.2
		10-14	220	1	0.5	.	.	.	.	1	0.5	.	.	15	6.8	200	90.9	.	.	.	.	.	.
		15-20	122	.	.	.	.	.	.	.	.	.	.	6	4.9	107	87.7	1	0.8	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	495	.	.	.	.	.	.	.	.	.	.	24	4.8	458	92.5	.	.	.	.	.	.
		Chemotherapy and radiation	1410	3	0.2	5	0.4	4	0.3	3	0.2	.	.	60	4.3	1295	91.8	1	0.1	.	.	1	0.1
<b>Females</b>	<b>All cases</b>		<b>1743</b>	<b>8</b>	<b>0.5</b>	.	.	<b>4</b>	<b>0.2</b>	<b>4</b>	<b>0.2</b>	.	.	<b>45</b>	<b>2.6</b>	<b>1605</b>	<b>92.1</b>	<b>1</b>	<b>0.1</b>	.	.	.	.
	<b>Age at baseline</b>	<18	654	3	0.5	.	.	2	0.3	2	0.3	.	.	12	1.8	635	97.1	.	.	.	.	.	.
		18-19	198	.	.	.	.	1	0.5	1	0.5	.	.	3	1.5	190	96.0	.	.	.	.	.	.
		20-24	445	1	0.2	.	.	1	0.2	1	0.2	.	.	13	2.9	413	92.8	.	.	.	.	.	.
		25-29	274	2	0.7	.	.	.	.	.	.	.	.	11	4.0	235	85.8	1	0.4	.	.	.	.
		30-34	127	1	0.8	.	.	.	.	.	.	.	.	3	2.4	100	78.7	.	.	.	.	.	.
		35+	45	1	2.2	.	.	.	.	.	.	.	.	3	6.7	32	71.1	.	.	.	.	.	.

	<b>Years since diagnosis</b>	5-9	283	1	0.4	.	.	1	0.4	2	0.7	.	.	10	3.5	272	96.1	.	.	.	.	.	.
		10-14	676	5	0.7	.	.	1	0.1	2	0.3	.	.	13	1.9	656	97.0	.	.	.	.	.	.
		15-19	480	2	0.4	.	.	2	0.4	.	.	.	.	7	1.5	447	93.1	.	.	.	.	.	.
		20+	304	.	.	.	.	.	.	.	.	.	.	15	4.9	230	75.7	1	0.3	.	.	.	.
	<b>Age at diagnosis</b>	<1	27	.	.	.	.	.	.	.	.	.	.	2	7.4	23	85.2	.	.	.	.	.	.
		1-4	926	2	0.2	.	.	4	0.4	1	0.1	.	.	17	1.8	863	93.2	1	0.1	.	.	.	.
		5-9	473	1	0.2	.	.	.	.	2	0.4	.	.	13	2.7	429	90.7	.	.	.	.	.	.
		10-14	244	2	0.8	.	.	.	.	1	0.4	.	.	12	4.9	223	91.4	.	.	.	.	.	.
		15-20	73	3	4.1	.	.	.	.	.	.	.	.	1	1.4	67	91.8	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	574	2	0.3	.	.	1	0.2	1	0.2	.	.	16	2.8	536	93.4	.	.	.	.	.	.
		Chemotherapy and radiation	1163	6	0.5	.	.	3	0.3	3	0.3	.	.	29	2.5	1064	91.5	1	0.1	.	.	.	.

CCSS data from February 2006 data freeze-all % based on denominator with non-missing values

Data for patients with medical records abstraction

Chemotherapy initiated more than 5 years post-diagnosis is not included.

## Chemotherapy agents - All Others: AML

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			m-AMSA		AZQ		Cycloctyindine		Deoxycoformycin		Homoharringtonine		Hydrea		L-Aspariginase		Mithramycin		Myeleran		Retinoic acid		
			All cases	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b>Both sexes</b>	<b>All cases</b>		<b>322</b>	<b>28</b>	<b>8.7</b>	<b>2</b>	<b>0.6</b>	<b>3</b>	<b>0.9</b>	<b>1</b>	<b>0.3</b>			<b>12</b>	<b>3.7</b>	<b>74</b>	<b>23.0</b>					<b>2</b>	<b>0.6</b>
	<b>Age at baseline</b>	<18	103	9	8.7	1	1.0	2	1.9	.	.	.	.	2	1.9	36	35.0	.	.	.	.	1	1.0
		18-19	40	5	12.5	.	.	.	.	.	.	.	.	2	5.0	10	25.0	.	.	.	.	.	.
		20-24	62	6	9.7	.	.	.	.	1	1.6	.	.	3	4.8	14	22.6	.	.	.	.	1	1.6
		25-29	66	5	7.6	1	1.5	1	1.5	.	.	.	.	3	4.5	8	12.1	.	.	.	.	.	.
		30-34	35	2	5.7	.	.	.	.	.	.	.	.	1	2.9	4	11.4	.	.	.	.	.	.
		35+	16	1	6.3	.	.	.	.	.	.	.	.	1	6.3	2	12.5	.	.	.	.	.	.
	<b>Years since diagnosis</b>	5-9	70	11	15.7	.	.	.	.	1	1.4	.	.	3	4.3	30	42.9	.	.	.	.	.	.
		10-14	127	17	13.4	2	1.6	3	2.4	.	.	.	.	2	1.6	28	22.0	.	.	.	.	2	1.6
		15-19	86	.	.	.	.	.	.	.	.	.	.	.	.	5	5.8	.	.	.	.	.	.
		20+	39	.	.	.	.	.	.	.	.	.	.	7	17.9	11	28.2	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	28	3	10.7	.	.	.	.	.	.	.	.	1	3.6	5	17.9	.	.	.	.	.	.
		1-4	106	3	2.8	1	0.9	2	1.9	.	.	.	.	5	4.7	36	34.0	.	.	.	.	1	0.9
		5-9	57	7	12.3	.	.	.	.	.	.	.	.	2	3.5	13	22.8	.	.	.	.	1	1.8
		10-14	74	6	8.1	1	1.4	.	.	1	1.4	.	.	3	4.1	13	17.6	.	.	.	.	.	.
		15-20	57	9	15.8	.	.	1	1.8	.	.	.	.	1	1.8	7	12.3	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	166	19	11.4	1	0.6	3	1.8	.	.	.	.	8	4.8	52	31.3	.	.	.	.	1	0.6
		Chemotherapy and radiation	155	9	5.8	1	0.6	.	.	1	0.6	.	.	4	2.6	22	14.2	.	.	.	.	1	0.6
<b>Males</b>	<b>All cases</b>		<b>153</b>	<b>16</b>	<b>10.5</b>	<b>1</b>	<b>0.7</b>	<b>1</b>	<b>0.7</b>	<b>1</b>	<b>0.7</b>			<b>7</b>	<b>4.6</b>	<b>36</b>	<b>23.5</b>					<b>1</b>	<b>0.7</b>
	<b>Age at baseline</b>	<18	52	4	7.7	.	.	.	.	.	.	.	.	2	3.8	17	32.7	.	.	.	.	.	.
		18-19	19	2	10.5	.	.	.	.	.	.	.	.	1	5.3	6	31.6	.	.	.	.	.	.
		20-24	32	6	18.8	.	.	.	.	1	3.1	.	.	2	6.3	6	18.8	.	.	.	.	1	3.1
		25-29	27	3	11.1	1	3.7	1	3.7	.	.	.	.	2	7.4	4	14.8	.	.	.	.	.	.
		30-34	18	1	5.6	.	.	.	.	.	.	.	.	.	.	2	11.1	.	.	.	.	.	.
		35+	5	.	.	.	.	.	.	.	.	.	.	.	.	1	20.0	.	.	.	.	.	.
	<b>Years since diagnosis</b>	5-9	41	9	22.0	.	.	.	.	1	2.4	.	.	2	4.9	13	31.7	.	.	.	.	.	.
		10-14	58	7	12.1	1	1.7	1	1.7	.	.	.	.	2	3.4	16	27.6	.	.	.	.	1	1.7
		15-19	39	.	.	.	.	.	.	.	.	.	.	.	.	2	5.1	.	.	.	.	.	.
		20+	15	.	.	.	.	.	.	.	.	.	.	3	20.0	5	33.3	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	11	1	9.1	.	.	.	.	.	.	.	.	1	9.1	3	27.3	.	.	.	.	.	.
		1-4	52	1	1.9	.	.	.	.	.	.	.	.	3	5.8	16	30.8	.	.	.	.	.	.
		5-9	29	4	13.8	.	.	.	.	.	.	.	.	2	6.9	7	24.1	.	.	.	.	1	3.4
		10-14	27	4	14.8	1	3.7	.	.	1	3.7	.	.	1	3.7	5	18.5	.	.	.	.	.	.
		15-20	34	6	17.6	.	.	1	2.9	.	.	.	.	.	.	5	14.7	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	71	10	14.1	.	.	1	1.4	.	.	.	.	4	5.6	22	31.0	.	.	.	.	.	.
		Chemotherapy and radiation	81	6	7.4	1	1.2	.	.	1	1.2	.	.	3	3.7	14	17.3	.	.	.	.	1	1.2
<b>Females</b>	<b>All cases</b>		<b>169</b>	<b>12</b>	<b>7.1</b>	<b>1</b>	<b>0.6</b>	<b>2</b>	<b>1.2</b>					<b>5</b>	<b>3.0</b>	<b>38</b>	<b>22.5</b>					<b>1</b>	<b>0.6</b>
	<b>Age at baseline</b>	<18	51	5	9.8	1	2.0	2	3.9	.	.	.	.	.	.	19	37.3	.	.	.	.	1	2.0
		18-19	21	3	14.3	.	.	.	.	.	.	.	.	1	4.8	4	19.0	.	.	.	.	.	.
		20-24	30	.	.	.	.	.	.	.	.	.	.	1	3.3	8	26.7	.	.	.	.	.	.
		25-29	39	2	5.1	.	.	.	.	.	.	.	.	1	2.6	4	10.3	.	.	.	.	.	.
		30-34	17	1	5.9	.	.	.	.	.	.	.	.	1	5.9	2	11.8	.	.	.	.	.	.
		35+	11	1	9.1	.	.	.	.	.	.	.	.	1	9.1	1	9.1	.	.	.	.	.	.

	<b>Years since diagnosis</b>	5-9	29	2	6.9	.	.	.	.	.	.	1	3.4	17	58.6	.	.	.	.	.	.
		10-14	69	10	14.5	1	1.4	2	2.9	.	.	.	.	12	17.4	.	.	.	.	1	1.4
		15-19	47	.	.	.	.	.	.	.	.	.	.	3	6.4	.	.	.	.	.	.
		20+	24	.	.	.	.	.	.	.	.	4	16.7	6	25.0	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	17	2	11.8	.	.	.	.	.	.	.	.	2	11.8	.	.	.	.	.	.
		1-4	54	2	3.7	1	1.9	2	3.7	.	.	2	3.7	20	37.0	.	.	.	.	1	1.9
		5-9	28	3	10.7	.	.	.	.	.	.	.	.	6	21.4	.	.	.	.	.	.
		10-14	47	2	4.3	.	.	.	.	.	.	2	4.3	8	17.0	.	.	.	.	.	.
		15-20	23	3	13.0	.	.	.	.	.	.	1	4.3	2	8.7	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	95	9	9.5	1	1.1	2	2.1	.	.	4	4.2	30	31.6	.	.	.	.	1	1.1
		Chemotherapy and radiation	74	3	4.1	.	.	.	.	.	.	1	1.4	8	10.8	.	.	.	.	.	.

CCSS data from February 2006 data freeze-all % based on denominator with non-missing values

Data for patients with medical records abstraction

Chemotherapy initiated more than 5 years post-diagnosis is not included.



## Chemotherapy agents - All Others: All CNS

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			m-AMSA		AZQ		Cycloctyindine		Deoxycoformycin		Homoharringtonine		Hydrea		L-Aspariginase		Mithramycin		Myeleran		Retinoic acid		
			All cases	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b>Both sexes</b>	<b>All cases</b>		<b>1663</b>	.	.	<b>8</b>	<b>0.5</b>	<b>1</b>	<b>0.1</b>	.	.	.	.	<b>117</b>	<b>7.1</b>	<b>3</b>	<b>0.2</b>	.	.	.	.	<b>1</b>	<b>0.1</b>
	<b>Age at baseline</b>	<18	503	.	.	4	0.8	1	0.2	.	.	.	.	65	12.9	.	.	.	.	.	.	1	0.2
		18-19	142	.	.	.	.	.	.	.	.	.	.	11	7.8	1	0.7	.	.	.	.	.	.
		20-24	381	.	.	3	0.8	.	.	.	.	.	.	24	6.3	1	0.3	.	.	.	.	.	.
		25-29	339	.	.	1	0.3	.	.	.	.	.	.	15	4.5	.	.	.	.	.	.	.	.
		30-34	209	.	.	.	.	.	.	.	.	.	.	2	1.0	1	0.5	.	.	.	.	.	.
		35+	89	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Years since diagnosis</b>	5-9	298	.	.	2	0.7	1	0.3	.	.	.	.	52	17.4	1	0.3	.	.	.	.	.	.
		10-14	663	.	.	5	0.8	.	.	.	.	.	.	54	8.2	2	0.3	.	.	.	.	1	0.2
		15-19	408	.	.	1	0.2	.	.	.	.	.	.	11	2.7	.	.	.	.	.	.	.	.
		20+	294	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	87	.	.	1	1.1	.	.	.	.	.	.	9	10.3	.	.	.	.	.	.	1	1.1
		1-4	485	.	.	2	0.4	.	.	.	.	.	.	32	6.6	.	.	.	.	.	.	.	.
		5-9	496	.	.	4	0.8	.	.	.	.	.	.	43	8.7	1	0.2	.	.	.	.	.	.
		10-14	412	.	.	.	.	1	0.2	.	.	.	.	23	5.6	1	0.2	.	.	.	.	.	.
		15-20	183	.	.	1	0.6	.	.	.	.	.	.	10	5.5	1	0.6	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	29	.	.	.	.	.	.	.	.	.	.	3	10.3	.	.	.	.	.	.	.	.
		Chemotherapy and radiation	472	.	.	8	1.7	1	0.2	.	.	.	.	114	24.2	3	0.6	.	.	.	.	1	0.2
<b>Males</b>	<b>All cases</b>		<b>912</b>	.	.	<b>6</b>	<b>0.7</b>	<b>1</b>	<b>0.1</b>	.	.	.	.	<b>74</b>	<b>8.2</b>	<b>2</b>	<b>0.2</b>	.	.	.	.	<b>1</b>	<b>0.1</b>
	<b>Age at baseline</b>	<18	275	.	.	4	1.5	1	0.4	.	.	.	.	44	16.0	.	.	.	.	.	.	1	0.4
		18-19	79	.	.	.	.	.	.	.	.	.	.	6	7.6	1	1.3	.	.	.	.	.	.
		20-24	203	.	.	2	1.0	.	.	.	.	.	.	13	6.4	1	0.5	.	.	.	.	.	.
		25-29	192	.	.	.	.	.	.	.	.	.	.	11	5.8	.	.	.	.	.	.	.	.
		30-34	115	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		35+	48	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Years since diagnosis</b>	5-9	169	.	.	2	1.2	1	0.6	.	.	.	.	33	19.5	1	0.6	.	.	.	.	.	.
		10-14	361	.	.	4	1.1	.	.	.	.	.	.	36	10.0	1	0.3	.	.	.	.	1	0.3
		15-19	226	.	.	.	.	.	.	.	.	.	.	5	2.2	.	.	.	.	.	.	.	.
		20+	156	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	51	.	.	1	2.0	.	.	.	.	.	.	8	15.7	.	.	.	.	.	.	1	2.0
		1-4	255	.	.	2	0.8	.	.	.	.	.	.	20	7.8	.	.	.	.	.	.	.	.
		5-9	275	.	.	2	0.7	.	.	.	.	.	.	24	8.8	1	0.4	.	.	.	.	.	.
		10-14	228	.	.	.	.	1	0.4	.	.	.	.	16	7.0	1	0.4	.	.	.	.	.	.
		15-20	103	.	.	1	1.0	.	.	.	.	.	.	6	5.9	.	.	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	16	.	.	.	.	.	.	.	.	.	.	1	6.3	.	.	.	.	.	.	.	.
		Chemotherapy and radiation	284	.	.	6	2.1	1	0.4	.	.	.	.	73	25.7	2	0.7	.	.	.	.	1	0.4
<b>Females</b>	<b>All cases</b>		<b>751</b>	.	.	<b>2</b>	<b>0.3</b>	.	.	.	.	.	.	<b>43</b>	<b>5.7</b>	<b>1</b>	<b>0.1</b>	.	.	.	.	.	.
	<b>Age at baseline</b>	<18	228	.	.	.	.	.	.	.	.	.	.	21	9.2	.	.	.	.	.	.	.	.
		18-19	63	.	.	.	.	.	.	.	.	.	.	5	8.1	.	.	.	.	.	.	.	.
		20-24	178	.	.	1	0.6	.	.	.	.	.	.	11	6.2	.	.	.	.	.	.	.	.
		25-29	147	.	.	1	0.7	.	.	.	.	.	.	4	2.7	.	.	.	.	.	.	.	.
		30-34	94	.	.	.	.	.	.	.	.	.	.	2	2.1	1	1.1	.	.	.	.	.	.
		35+	41	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

	<b>Years since diagnosis</b>	5-9	129	.	.	.	.	.	.	.	.	19	14.7	.	.	.	.	.	.	.
		10-14	302	.	.	1	0.3	.	.	.	.	18	6.0	1	0.3	.	.	.	.	.
		15-19	182	.	.	1	0.6	.	.	.	.	6	3.3	.	.	.	.	.	.	.
		20+	138	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	36	.	.	.	.	.	.	.	.	1	2.8	.	.	.	.	.	.	.
		1-4	230	.	.	.	.	.	.	.	.	12	5.2	.	.	.	.	.	.	.
		5-9	221	.	.	2	0.9	.	.	.	.	19	8.6	.	.	.	.	.	.	.
		10-14	184	.	.	.	.	.	.	.	.	7	3.8	.	.	.	.	.	.	.
		15-20	80	.	.	.	.	.	.	.	.	4	5.0	1	1.3	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	13	.	.	.	.	.	.	.	.	2	15.4	.	.	.	.	.	.	.
		Chemotherapy and radiation	188	.	.	2	1.1	.	.	.	.	41	21.8	1	0.5	.	.	.	.	.

CCSS data from February 2006 data freeze-all % based on denominator with non-missing values

Data for patients with medical records abstraction

Chemotherapy initiated more than 5 years post-diagnosis is not included.

## Chemotherapy agents - All Others: Astrocytomas

[Click here to see the Medical Records Abstraction Form for Survivors](#)

			m-AMSA		AZQ		Cycloctyindine		Deoxycoformycin		Homoharringtonine		Hydrea		L-Aspariginase		Mithramycin		Myeleran		Retinoic acid		
			All cases	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b>Both sexes</b>	<b>All cases</b>		<b>1055</b>	.	.	<b>6</b>	<b>0.6</b>	.	.	.	.	.	.	<b>46</b>	<b>4.4</b>	<b>2</b>	<b>0.2</b>	.	.	.	.	.	.
	<b>Age at baseline</b>	<18	305	.	.	4	1.3	.	.	.	.	.	.	24	7.9	.	.	.	.	.	.	.	.
		18-19	89	.	.	.	.	.	.	.	.	.	.	3	3.4	.	.	.	.	.	.	.	.
		20-24	247	.	.	2	0.8	.	.	.	.	.	.	8	3.3	1	0.4	.	.	.	.	.	.
		25-29	217	.	.	.	.	.	.	.	.	.	.	10	4.7	.	.	.	.	.	.	.	.
		30-34	135	.	.	.	.	.	.	.	.	.	.	1	0.7	1	0.7	.	.	.	.	.	.
		35+	62	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Years since diagnosis</b>	5-9	164	.	.	1	0.6	.	.	.	.	.	.	15	9.1	.	.	.	.	.	.	.	.
		10-14	427	.	.	5	1.2	.	.	.	.	.	.	26	6.1	2	0.5	.	.	.	.	.	.
		15-19	247	.	.	.	.	.	.	.	.	.	.	5	2.0	.	.	.	.	.	.	.	.
		20+	217	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	62	.	.	1	1.6	.	.	.	.	.	.	6	9.7	.	.	.	.	.	.	.	.
		1-4	325	.	.	2	0.6	.	.	.	.	.	.	7	2.2	.	.	.	.	.	.	.	.
		5-9	295	.	.	3	1.0	.	.	.	.	.	.	16	5.5	1	0.3	.	.	.	.	.	.
		10-14	262	.	.	.	.	.	.	.	.	.	.	13	5.0	.	.	.	.	.	.	.	.
		15-20	111	.	.	.	.	.	.	.	.	.	.	4	3.6	1	0.9	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	17	.	.	.	.	.	.	.	.	.	.	1	5.9	.	.	.	.	.	.	.	.
		Chemotherapy and radiation	200	.	.	6	3.0	.	.	.	.	.	.	45	22.5	2	1.0	.	.	.	.	.	.
<b>Males</b>	<b>All cases</b>		<b>561</b>	.	.	<b>5</b>	<b>0.9</b>	.	.	.	.	.	.	<b>36</b>	<b>6.5</b>	<b>1</b>	<b>0.2</b>	.	.	.	.	.	.
	<b>Age at baseline</b>	<18	161	.	.	4	2.5	.	.	.	.	.	.	20	12.4	.	.	.	.	.	.	.	.
		18-19	51	.	.	.	.	.	.	.	.	.	.	3	5.9	.	.	.	.	.	.	.	.
		20-24	121	.	.	1	0.8	.	.	.	.	.	.	5	4.2	1	0.8	.	.	.	.	.	.
		25-29	128	.	.	.	.	.	.	.	.	.	.	8	6.3	.	.	.	.	.	.	.	.
		30-34	68	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		35+	32	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Years since diagnosis</b>	5-9	90	.	.	1	1.1	.	.	.	.	.	.	11	12.2	.	.	.	.	.	.	.	.
		10-14	230	.	.	4	1.7	.	.	.	.	.	.	22	9.6	1	0.4	.	.	.	.	.	.
		15-19	127	.	.	.	.	.	.	.	.	.	.	3	2.4	.	.	.	.	.	.	.	.
		20+	114	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	33	.	.	1	3.0	.	.	.	.	.	.	6	18.2	.	.	.	.	.	.	.	.
		1-4	169	.	.	2	1.2	.	.	.	.	.	.	7	4.1	.	.	.	.	.	.	.	.
		5-9	158	.	.	2	1.3	.	.	.	.	.	.	11	7.1	1	0.6	.	.	.	.	.	.
		10-14	140	.	.	.	.	.	.	.	.	.	.	10	7.2	.	.	.	.	.	.	.	.
		15-20	61	.	.	.	.	.	.	.	.	.	.	2	3.3	.	.	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		Chemotherapy and radiation	122	.	.	5	4.1	.	.	.	.	.	.	36	29.5	1	0.8	.	.	.	.	.	.
<b>Females</b>	<b>All cases</b>		<b>494</b>	.	.	<b>1</b>	<b>0.2</b>	.	.	.	.	.	.	<b>10</b>	<b>2.0</b>	<b>1</b>	<b>0.2</b>	.	.	.	.	.	.
	<b>Age at baseline</b>	<18	144	.	.	.	.	.	.	.	.	.	.	4	2.8	.	.	.	.	.	.	.	.
		18-19	38	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20-24	126	.	.	1	0.8	.	.	.	.	.	.	3	2.4	.	.	.	.	.	.	.	.
		25-29	89	.	.	.	.	.	.	.	.	.	.	2	2.2	.	.	.	.	.	.	.	.
		30-34	67	.	.	.	.	.	.	.	.	.	.	1	1.5	1	1.5	.	.	.	.	.	.
		35+	30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

	<b>Years since diagnosis</b>	5-9	74	.	.	.	.	.	.	.	.	.	.	4	5.4	.	.	.	.	.	.	.	.
		10-14	197	.	.	1	0.5	.	.	.	.	.	.	4	2.0	1	0.5	.	.	.	.	.	.
		15-19	120	.	.	.	.	.	.	.	.	.	.	2	1.7	.	.	.	.	.	.	.	.
		20+	103	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	29	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		1-4	156	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		5-9	137	.	.	1	0.7	.	.	.	.	.	.	5	3.6	.	.	.	.	.	.	.	.
		10-14	122	.	.	.	.	.	.	.	.	.	.	3	2.5	.	.	.	.	.	.	.	.
		15-20	50	.	.	.	.	.	.	.	.	.	.	2	4.0	1	2.0	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	9	.	.	.	.	.	.	.	.	.	.	1	11.1	.	.	.	.	.	.	.	.
		Chemotherapy and radiation	78	.	.	1	1.3	.	.	.	.	.	.	9	11.5	1	1.3	.	.	.	.	.	.

CCSS data from February 2006 data freeze-all % based on denominator with non-missing values

Data for patients with medical records abstraction

Chemotherapy initiated more than 5 years post-diagnosis is not included.

## Chemotherapy agents - All Others: Medulloblastoma/PNET

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			m-AMSA		AZQ		Cycloctyindine		Deoxycyformycin		Homoharringtonine		Hydrea		L-Aspariginase		Mithramycin		Myeleran		Retinoic acid		
			All cases	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b>Both sexes</b>	<b>All cases</b>		<b>344</b>	.	.	<b>1</b>	<b>0.3</b>	<b>1</b>	<b>0.3</b>	.	.	.	.	<b>54</b>	<b>15.8</b>	.	.	.	.	.	.	<b>1</b>	<b>0.3</b>
	<b>Age at baseline</b>	<18	123	.	.	.	.	1	0.8	.	.	.	.	31	25.2	.	.	.	.	.	.	1	0.8
		18-19	27	.	.	.	.	.	.	.	.	.	.	5	19.2	.	.	.	.	.	.	.	.
		20-24	85	.	.	.	.	.	.	.	.	.	.	13	15.3	.	.	.	.	.	.	.	.
		25-29	69	.	.	1	1.5	.	.	.	.	.	.	5	7.4	.	.	.	.	.	.	.	.
		30-34	33	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		35+	7	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Years since diagnosis</b>	5-9	74	.	.	.	.	1	1.4	.	.	.	.	24	32.4	.	.	.	.	.	.	.	.
		10-14	127	.	.	.	.	.	.	.	.	.	.	24	19.0	.	.	.	.	.	.	1	0.8
		15-19	107	.	.	1	0.9	.	.	.	.	.	.	6	5.7	.	.	.	.	.	.	.	.
		20+	36	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	10	.	.	.	.	.	.	.	.	.	.	2	20.0	.	.	.	.	.	.	1	10.0
		1-4	103	.	.	.	.	.	.	.	.	.	.	19	18.4	.	.	.	.	.	.	.	.
		5-9	137	.	.	1	0.7	.	.	.	.	.	.	22	16.2	.	.	.	.	.	.	.	.
		10-14	70	.	.	.	.	1	1.4	.	.	.	.	8	11.6	.	.	.	.	.	.	.	.
		15-20	24	.	.	.	.	.	.	.	.	.	.	3	12.5	.	.	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	6	.	.	.	.	.	.	.	.	.	.	1	16.7	.	.	.	.	.	.	.	.
		Chemotherapy and radiation	196	.	.	1	0.5	1	0.5	.	.	.	.	53	27.0	.	.	.	.	.	.	1	0.5
<b>Males</b>	<b>All cases</b>		<b>203</b>	.	.	.	.	<b>1</b>	<b>0.5</b>	.	.	.	.	<b>32</b>	<b>15.8</b>	.	.	.	.	.	.	<b>1</b>	<b>0.5</b>
	<b>Age at baseline</b>	<18	76	.	.	.	.	1	1.3	.	.	.	.	22	28.9	.	.	.	.	.	.	1	1.3
		18-19	15	.	.	.	.	.	.	.	.	.	.	1	6.7	.	.	.	.	.	.	.	.
		20-24	50	.	.	.	.	.	.	.	.	.	.	6	12.0	.	.	.	.	.	.	.	.
		25-29	38	.	.	.	.	.	.	.	.	.	.	3	7.9	.	.	.	.	.	.	.	.
		30-34	20	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		35+	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Years since diagnosis</b>	5-9	48	.	.	.	.	1	2.1	.	.	.	.	16	33.3	.	.	.	.	.	.	.	.
		10-14	68	.	.	.	.	.	.	.	.	.	.	14	20.6	.	.	.	.	.	.	1	1.5
		15-19	67	.	.	.	.	.	.	.	.	.	.	2	3.0	.	.	.	.	.	.	.	.
		20+	20	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	9	.	.	.	.	.	.	.	.	.	.	2	22.2	.	.	.	.	.	.	1	11.1
		1-4	59	.	.	.	.	.	.	.	.	.	.	12	20.3	.	.	.	.	.	.	.	.
		5-9	83	.	.	.	.	.	.	.	.	.	.	11	13.3	.	.	.	.	.	.	.	.
		10-14	38	.	.	.	.	1	2.6	.	.	.	.	5	13.2	.	.	.	.	.	.	.	.
		15-20	14	.	.	.	.	.	.	.	.	.	.	2	14.3	.	.	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	3	.	.	.	.	.	.	.	.	.	.	1	33.3	.	.	.	.	.	.	.	.
		Chemotherapy and radiation	124	.	.	.	.	1	0.8	.	.	.	.	31	25.0	.	.	.	.	.	.	1	0.8
<b>Females</b>	<b>All cases</b>		<b>141</b>	.	.	<b>1</b>	<b>0.7</b>	.	.	.	.	.	.	<b>22</b>	<b>15.8</b>	.	.	.	.	.	.	.	.
	<b>Age at baseline</b>	<18	47	.	.	.	.	.	.	.	.	.	.	9	19.1	.	.	.	.	.	.	.	.
		18-19	12	.	.	.	.	.	.	.	.	.	.	4	36.4	.	.	.	.	.	.	.	.
		20-24	35	.	.	.	.	.	.	.	.	.	.	7	20.0	.	.	.	.	.	.	.	.
		25-29	31	.	.	1	3.3	.	.	.	.	.	.	2	6.7	.	.	.	.	.	.	.	.
		30-34	13	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		35+	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

	<b>Years since diagnosis</b>	5-9	26	.	.	.	.	.	.	.	.	8	30.8	.	.	.	.	.	.	.	.	.	.
		10-14	59	.	.	.	.	.	.	.	.	10	17.2	.	.	.	.	.	.	.	.	.	.
		15-19	40	.	.	1	2.6	.	.	.	.	4	10.3	.	.	.	.	.	.	.	.	.	.
		20+	16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		1-4	44	.	.	.	.	.	.	.	.	7	15.9	.	.	.	.	.	.	.	.	.	.
		5-9	54	.	.	1	1.9	.	.	.	.	11	20.8	.	.	.	.	.	.	.	.	.	.
		10-14	32	.	.	.	.	.	.	.	.	3	9.7	.	.	.	.	.	.	.	.	.	.
		15-20	10	.	.	.	.	.	.	.	.	1	10.0	.	.	.	.	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		Chemotherapy and radiation	72	.	.	1	1.4	.	.	.	.	22	30.6	.	.	.	.	.	.	.	.	.	.

CCSS data from February 2006 data freeze-all % based on denominator with non-missing values

Data for patients with medical records abstraction

Chemotherapy initiated more than 5 years post-diagnosis is not included.

## Chemotherapy agents - All Others: Hodgkin

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			m-AMSA		AZQ		Cycloctyindine		Deoxycyformycin		Homoharringtonine		Hydrea		L-Aspariginase		Mithramycin		Myeleran		Retinoic acid				
			All cases	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%		
<b>Both sexes</b>	<b>All cases</b>		<b>1675</b>	<b>1</b>	<b>0.1</b>	<b>1</b>	<b>0.1</b>	.	.	<b>1</b>	<b>0.1</b>	.	.	<b>1</b>	<b>0.1</b>	.	.	.	<b>1</b>	<b>0.1</b>	<b>1</b>	<b>0.1</b>	<b>1</b>	<b>0.1</b>	
	<b>Age at baseline</b>	<18	44	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		18-19	38	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		20-24	226	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		25-29	422	.	.	1	0.2	.	.	.	.	.	.	.	.	.	.	.	1	0.2	.	.	.	.	
		30-34	474	.	.	.	.	.	.	1	0.2	.	.	.	.	.	.	.	.	.	.	1	0.2	.	
		35+	471	1	0.2	.	.	.	.	.	.	.	1	0.2	.	.	.	.	.	.	.	.	.	.	
	<b>Years since diagnosis</b>	5-9	193	.	.	1	0.5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		10-14	523	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	0.2	1	0.2	.	
		15-19	492	1	0.2	.	.	.	.	1	0.2	.	.	.	.	.	.	.	.	.	.	.	.	.	
		20+	467	.	.	.	.	.	.	.	.	.	1	0.2	.	.	.	.	.	.	.	.	.	.	
	<b>Age at diagnosis</b>	1-4	47	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		5-9	211	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		10-14	577	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		15-20	840	1	0.1	1	0.1	.	.	1	0.1	.	.	1	0.1	.	.	.	1	0.1	1	0.1	1	0.1	
	<b>Treatment</b>	Chemotherapy, no radiation	98	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		Chemotherapy and radiation	1024	1	0.1	1	0.1	.	.	1	0.1	.	.	1	0.1	.	.	.	1	0.1	1	0.1	1	0.1	
<b>Males</b>	<b>All cases</b>		<b>891</b>	.	.	<b>1</b>	<b>0.1</b>	.	.	<b>1</b>	<b>0.1</b>	.	.	<b>1</b>	<b>0.1</b>	.	.	.	.	.	.	.	.	.	
	<b>Age at baseline</b>	<18	34	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		18-19	31	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		20-24	144	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		25-29	244	.	.	1	0.4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		30-34	237	.	.	.	.	.	.	1	0.4	.	.	.	.	.	.	.	.	.	.	.	.	.	
		35+	201	.	.	.	.	.	.	.	.	.	1	0.5	.	.	.	.	.	.	.	.	.	.	
	<b>Years since diagnosis</b>	5-9	115	.	.	1	0.9	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		10-14	281	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		15-19	270	.	.	.	.	.	.	1	0.4	.	.	.	.	.	.	.	.	.	.	.	.	.	
		20+	225	.	.	.	.	.	.	.	.	.	1	0.4	.	.	.	.	.	.	.	.	.	.	
	<b>Age at diagnosis</b>	1-4	36	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		5-9	156	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		10-14	297	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		15-20	402	.	.	1	0.2	.	.	1	0.2	.	.	1	0.2	.	.	.	.	.	.	.	.	.	
	<b>Treatment</b>	Chemotherapy, no radiation	52	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
		Chemotherapy and radiation	552	.	.	1	0.2	.	.	1	0.2	.	.	1	0.2	.	.	.	.	.	.	.	.	.	
<b>Females</b>	<b>All cases</b>		<b>784</b>	<b>1</b>	<b>0.1</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	<b>1</b>	<b>0.1</b>	<b>1</b>	<b>0.1</b>	<b>1</b>	<b>0.1</b>
	<b>Age at baseline</b>	<18	10	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		18-19	7	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20-24	82	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		25-29	178	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	0.6	.	.	.	.
		30-34	237	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	0.4	.	.
		35+	270	1	0.4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
	<b>Years since diagnosis</b>	5-9	78	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

		10-14	242	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	0.4	1	0.4
		15-19	222	1	0.5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20+	242	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at diagnosis</b>	1-4	11	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		5-9	55	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		10-14	280	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		15-20	438	1	0.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	0.2	1	0.2
	<b>Treatment</b>	Chemotherapy, no radiation	46	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		Chemotherapy and radiation	472	1	0.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	0.2	1	0.2

CCSS data from February 2006 data freeze-all % based on denominator with non-missing values

Data for patients with medical records abstraction

Chemotherapy initiated more than 5 years post-diagnosis is not included.



## Chemotherapy agents - All Others: NHL

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			m-AMSA		AZQ		Cycloctyndine		Deoxycoformycin		Homoharringtonine		Hydrea		L-Aspariginase		Mithramycin		Myeleran		Retinoic acid		
			All cases	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b>Both sexes</b>	<b>All cases</b>		<b>925</b>	.	.	<b>1</b>	<b>0.1</b>	.	.	.	.	.	.	<b>187</b>	<b>20.2</b>	<b>298</b>	<b>32.3</b>	.	.	.	.	.	.
	<b>Age at baseline</b>	<18	144	.	.	.	.	.	.	.	.	.	.	26	18.1	51	35.4	.	.	.	.	.	.
		18-19	76	.	.	.	.	.	.	.	.	.	.	24	31.6	34	44.7	.	.	.	.	.	.
		20-24	198	.	.	<b>1</b>	<b>0.5</b>	.	.	.	.	.	.	40	20.2	58	29.3	.	.	.	.	.	.
		25-29	227	.	.	.	.	.	.	.	.	.	.	45	19.8	71	31.3	.	.	.	.	.	.
		30-34	182	.	.	.	.	.	.	.	.	.	.	38	20.9	64	35.2	.	.	.	.	.	.
		35+	98	.	.	.	.	.	.	.	.	.	.	14	14.4	20	20.6	.	.	.	.	.	.
	<b>Years since diagnosis</b>	5-9	110	.	.	<b>1</b>	<b>0.9</b>	.	.	.	.	.	.	20	18.2	45	40.9	.	.	.	.	.	.
		10-14	358	.	.	.	.	.	.	.	.	.	.	67	18.7	110	30.7	.	.	.	.	.	.
		15-19	278	.	.	.	.	.	.	.	.	.	.	72	25.9	100	36.0	.	.	.	.	.	.
		20+	179	.	.	.	.	.	.	.	.	.	.	28	15.7	43	24.2	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	8	.	.	.	.	.	.	.	.	.	.	2	25.0	2	25.0	.	.	.	.	.	.
		1-4	150	.	.	.	.	.	.	.	.	.	.	35	23.3	52	34.7	.	.	.	.	.	.
		5-9	280	.	.	.	.	.	.	.	.	.	.	56	20.0	90	32.1	.	.	.	.	.	.
		10-14	282	.	.	<b>1</b>	<b>0.4</b>	.	.	.	.	.	.	63	22.3	96	34.0	.	.	.	.	.	.
		15-20	205	.	.	.	.	.	.	.	.	.	.	31	15.2	58	28.4	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	276	.	.	.	.	.	.	.	.	.	.	54	19.6	77	27.9	.	.	.	.	.	.
		Chemotherapy and radiation	598	.	.	<b>1</b>	<b>0.2</b>	.	.	.	.	.	.	132	22.1	221	37.0	.	.	.	.	.	.
<b>Males</b>	<b>All cases</b>		<b>645</b>	.	.	.	.	.	.	.	.	.	.	<b>120</b>	<b>18.6</b>	<b>191</b>	<b>29.7</b>	.	.	.	.	.	.
	<b>Age at baseline</b>	<18	101	.	.	.	.	.	.	.	.	.	.	17	16.8	36	35.6	.	.	.	.	.	.
		18-19	61	.	.	.	.	.	.	.	.	.	.	18	29.5	24	39.3	.	.	.	.	.	.
		20-24	136	.	.	.	.	.	.	.	.	.	.	24	17.6	38	27.9	.	.	.	.	.	.
		25-29	162	.	.	.	.	.	.	.	.	.	.	32	19.8	46	28.4	.	.	.	.	.	.
		30-34	122	.	.	.	.	.	.	.	.	.	.	21	17.2	36	29.5	.	.	.	.	.	.
		35+	63	.	.	.	.	.	.	.	.	.	.	8	12.9	11	17.7	.	.	.	.	.	.
	<b>Years since diagnosis</b>	5-9	84	.	.	.	.	.	.	.	.	.	.	14	16.7	35	41.7	.	.	.	.	.	.
		10-14	254	.	.	.	.	.	.	.	.	.	.	45	17.7	72	28.3	.	.	.	.	.	.
		15-19	177	.	.	.	.	.	.	.	.	.	.	43	24.3	56	31.6	.	.	.	.	.	.
		20+	130	.	.	.	.	.	.	.	.	.	.	18	14.0	28	21.7	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		1-4	103	.	.	.	.	.	.	.	.	.	.	25	24.3	38	36.9	.	.	.	.	.	.
		5-9	204	.	.	.	.	.	.	.	.	.	.	37	18.1	58	28.4	.	.	.	.	.	.
		10-14	202	.	.	.	.	.	.	.	.	.	.	44	21.8	65	32.2	.	.	.	.	.	.
		15-20	133	.	.	.	.	.	.	.	.	.	.	14	10.6	30	22.7	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	205	.	.	.	.	.	.	.	.	.	.	33	16.1	51	24.9	.	.	.	.	.	.
		Chemotherapy and radiation	401	.	.	.	.	.	.	.	.	.	.	86	21.4	140	34.9	.	.	.	.	.	.
<b>Females</b>	<b>All cases</b>		<b>280</b>	.	.	<b>1</b>	<b>0.4</b>	.	.	.	.	.	.	<b>67</b>	<b>23.9</b>	<b>107</b>	<b>38.2</b>	.	.	.	.	.	.
	<b>Age at baseline</b>	<18	43	.	.	.	.	.	.	.	.	.	.	9	20.9	15	34.9	.	.	.	.	.	.
		18-19	15	.	.	.	.	.	.	.	.	.	.	6	40.0	10	66.7	.	.	.	.	.	.
		20-24	62	.	.	<b>1</b>	<b>1.6</b>	.	.	.	.	.	.	16	25.8	20	32.3	.	.	.	.	.	.
		25-29	65	.	.	.	.	.	.	.	.	.	.	13	20.0	25	38.5	.	.	.	.	.	.
		30-34	60	.	.	.	.	.	.	.	.	.	.	17	28.3	28	46.7	.	.	.	.	.	.
		35+	35	.	.	.	.	.	.	.	.	.	.	6	17.1	9	25.7	.	.	.	.	.	.

	<b>Years since diagnosis</b>	5-9	26	.	.	1	3.8	.	.	.	.	.	6	23.1	10	38.5	.	.	.	.	.	.
		10-14	104	.	.	.	.	.	.	.	.	.	22	21.2	38	36.5	.	.	.	.	.	.
		15-19	101	.	.	.	.	.	.	.	.	.	29	28.7	44	43.6	.	.	.	.	.	.
		20+	49	.	.	.	.	.	.	.	.	.	10	20.4	15	30.6	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	5	.	.	.	.	.	.	.	.	.	2	40.0	2	40.0	.	.	.	.	.	.
		1-4	47	.	.	.	.	.	.	.	.	.	10	21.3	14	29.8	.	.	.	.	.	.
		5-9	76	.	.	.	.	.	.	.	.	.	19	25.0	32	42.1	.	.	.	.	.	.
		10-14	80	.	.	1	1.3	.	.	.	.	.	19	23.8	31	38.8	.	.	.	.	.	.
		15-20	72	.	.	.	.	.	.	.	.	.	17	23.6	28	38.9	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	71	.	.	.	.	.	.	.	.	.	21	29.6	26	36.6	.	.	.	.	.	.
		Chemotherapy and radiation	197	.	.	1	0.5	.	.	.	.	.	46	23.4	81	41.1	.	.	.	.	.	.

CCSS data from February 2006 data freeze-all % based on denominator with non-missing values

Data for patients with medical records abstraction

Chemotherapy initiated more than 5 years post-diagnosis is not included.

## Chemotherapy agents - All Others: Wilms

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			m-AMSA		AZQ		Cycloctyindine		Deoxycyformycin		Homoharringtonine		Hydrea		L-Aspariginase		Mithramycin		Myeleran		Retinoic acid		
			All cases	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b>Both sexes</b>	<b>All cases</b>		<b>1088</b>	<b>1</b>	<b>0.1</b>	<b>1</b>	<b>0.1</b>	.	.	<b>1</b>	<b>0.1</b>	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at baseline</b>	<18	523	1	0.2	1	0.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		18-19	131	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20-24	249	.	.	.	.	.	.	<b>1</b>	<b>0.4</b>	.	.	.	.	.	.	.	.	.	.	.	.
		25-29	149	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		30-34	28	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		35+	8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Years since diagnosis</b>	5-9	145	<b>1</b>	<b>0.7</b>	<b>1</b>	<b>0.7</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		10-14	436	.	.	.	.	.	.	<b>1</b>	<b>0.2</b>	.	.	.	.	.	.	.	.	.	.	.	.
		15-19	279	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20+	228	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	162	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		1-4	659	<b>1</b>	<b>0.2</b>	<b>1</b>	<b>0.2</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		5-9	225	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		10-14	30	.	.	.	.	.	.	<b>1</b>	<b>3.3</b>	.	.	.	.	.	.	.	.	.	.	.	.
		15-20	12	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	369	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		Chemotherapy and radiation	701	<b>1</b>	<b>0.1</b>	<b>1</b>	<b>0.1</b>	.	.	<b>1</b>	<b>0.1</b>	.	.	.	.	.	.	.	.	.	.	.	.
<b>Males</b>	<b>All cases</b>		<b>502</b>	.	.	<b>1</b>	<b>0.2</b>	.	.	<b>1</b>	<b>0.2</b>	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at baseline</b>	<18	253	.	.	<b>1</b>	<b>0.4</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		18-19	58	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20-24	105	.	.	.	.	.	.	<b>1</b>	<b>1.0</b>	.	.	.	.	.	.	.	.	.	.	.	.
		25-29	75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		30-34	9	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		35+	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Years since diagnosis</b>	5-9	62	.	.	<b>1</b>	<b>1.6</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		10-14	207	.	.	.	.	.	.	<b>1</b>	<b>0.5</b>	.	.	.	.	.	.	.	.	.	.	.	.
		15-19	122	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20+	111	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	87	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		1-4	309	.	.	<b>1</b>	<b>0.3</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		5-9	90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		10-14	12	.	.	.	.	.	.	<b>1</b>	<b>8.3</b>	.	.	.	.	.	.	.	.	.	.	.	.
		15-20	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	179	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		Chemotherapy and radiation	315	.	.	<b>1</b>	<b>0.3</b>	.	.	<b>1</b>	<b>0.3</b>	.	.	.	.	.	.	.	.	.	.	.	.
<b>Females</b>	<b>All cases</b>		<b>586</b>	<b>1</b>	<b>0.2</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at baseline</b>	<18	270	<b>1</b>	<b>0.4</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		18-19	73	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20-24	144	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		25-29	74	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		30-34	19	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		35+	6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

	<b>Years since diagnosis</b>	5-9	83	1	1.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		10-14	229	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		15-19	157	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20+	117	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		1-4	350	1	0.3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		5-9	135	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		10-14	18	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		15-20	8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	190	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		Chemotherapy and radiation	386	1	0.3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

CCSS data from February 2006 data freeze-all % based on denominator with non-missing values

Data for patients with medical records abstraction

Chemotherapy initiated more than 5 years post-diagnosis is not included.

## Chemotherapy agents - All Others: Neuroblastoma

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			m-AMSA		AZQ		Cycloctyindine		Deoxycoformycin		Homoharringtonine		Hydrea		L-Aspariginase		Mithramycin		Myeleran		Retinoic acid		
			All cases	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b>Both sexes</b>	<b>All cases</b>		<b>833</b>	.	.	.	.	.	.	.	.	.	11	1.3	.	.	.	.	.	.	.	1	0.1
	<b>Age at baseline</b>	<18	480	.	.	.	.	.	.	.	.	.	8	1.7	.	.	.	.	.	.	.	1	0.2
		18-19	96	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20-24	177	.	.	.	.	.	.	.	.	.	3	1.7	.	.	.	.	.	.	.	.	.
		25-29	59	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		30-34	19	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		35+	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Years since diagnosis</b>	5-9	98	.	.	.	.	.	.	.	.	.	2	2.0	.	.	.	.	.	.	.	1	1.0
		10-14	296	.	.	.	.	.	.	.	.	.	5	1.7	.	.	.	.	.	.	.	.	.
		15-19	249	.	.	.	.	.	.	.	.	.	1	0.4	.	.	.	.	.	.	.	.	.
		20+	190	.	.	.	.	.	.	.	.	.	3	1.6	.	.	.	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	457	.	.	.	.	.	.	.	.	.	8	1.8	.	.	.	.	.	.	.	.	.
		1-4	301	.	.	.	.	.	.	.	.	.	2	0.7	.	.	.	.	.	.	.	1	0.3
		5-9	57	.	.	.	.	.	.	.	.	.	1	1.8	.	.	.	.	.	.	.	.	.
		10-14	12	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		15-20	6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	220	.	.	.	.	.	.	.	.	.	8	3.6	.	.	.	.	.	.	.	.	.
		Chemotherapy and radiation	273	.	.	.	.	.	.	.	.	.	3	1.1	.	.	.	.	.	.	.	1	0.4
<b>Males</b>	<b>All cases</b>		<b>388</b>	.	.	.	.	.	.	.	.	.	<b>3</b>	<b>0.8</b>	.	.	.	.	.	.	.	.	.
	<b>Age at baseline</b>	<18	223	.	.	.	.	.	.	.	.	.	1	0.5	.	.	.	.	.	.	.	.	.
		18-19	43	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20-24	84	.	.	.	.	.	.	.	.	.	2	2.4	.	.	.	.	.	.	.	.	.
		25-29	26	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		30-34	11	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		35+	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Years since diagnosis</b>	5-9	45	.	.	.	.	.	.	.	.	.	1	2.2	.	.	.	.	.	.	.	.	.
		10-14	140	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		15-19	111	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20+	92	.	.	.	.	.	.	.	.	.	2	2.2	.	.	.	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	232	.	.	.	.	.	.	.	.	.	2	0.9	.	.	.	.	.	.	.	.	.
		1-4	123	.	.	.	.	.	.	.	.	.	1	0.8	.	.	.	.	.	.	.	.	.
		5-9	24	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		10-14	6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		15-20	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	101	.	.	.	.	.	.	.	.	.	2	2.0	.	.	.	.	.	.	.	.	.
		Chemotherapy and radiation	126	.	.	.	.	.	.	.	.	.	1	0.8	.	.	.	.	.	.	.	.	.
<b>Females</b>	<b>All cases</b>		<b>445</b>	.	.	.	.	.	.	.	.	.	<b>8</b>	<b>1.8</b>	.	.	.	.	.	.	.	<b>1</b>	<b>0.2</b>
	<b>Age at baseline</b>	<18	257	.	.	.	.	.	.	.	.	.	7	2.7	.	.	.	.	.	.	.	1	0.4
		18-19	53	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20-24	93	.	.	.	.	.	.	.	.	.	1	1.1	.	.	.	.	.	.	.	.	.
		25-29	33	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		30-34	8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		35+	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

	<b>Years since diagnosis</b>	5-9	53	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1.9	.	.	.	.	.	.	.	.	.	.	.	1	1.9		
		10-14	156	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	5	3.2	.	.	.	.	.	.	.	.	.	.	.	.		
		15-19	138	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	0.7	.	.	.	.	.	.	.	.	.	.	.	.	
		20+	98	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1.0	.	.	.	.	.	.	.	.	.	.	.	.	
	<b>Age at diagnosis</b>	<1	225	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	6	2.7	.	.	.	.	.	.	.	.	.	.	.	.	
		1-4	178	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	0.6	.	.	.	.	.	.	.	.	.	.	1	0.6	
		5-9	33	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	3.1	.	.	.	.	.	.	.	.	.	.	.	.	
		10-14	6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		15-20	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	119	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	6	5.0	.	.	.	.	.	.	.	.	.	.	.	.	.
		Chemotherapy and radiation	147	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	1.4	.	.	.	.	.	.	.	.	.	.	1	0.7

CCSS data from February 2006 data freeze-all % based on denominator with non-missing values

Data for patients with medical records abstraction

Chemotherapy initiated more than 5 years post-diagnosis is not included.

### Chemotherapy agents - All Others: STS

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			m-AMSA		AZQ		Cycloctyindine		Deoxycoformycin		Homoharringtonine		Hydrea		L-Aspariginase		Mithramycin		Myeleran		Retinoic acid		
			All cases	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b>Both sexes</b>	<b>All cases</b>		<b>1092</b>	<b>1</b>	<b>0.1</b>	.	.	<b>2</b>	<b>0.2</b>	.	.	.	.	<b>3</b>	<b>0.3</b>	.	.	<b>1</b>	<b>0.1</b>	.	.	.	.
	<b>Age at baseline</b>	<18	229	.	.	.	.	1	0.4	.	.	.	.	2	0.9	.	.	1	0.4	.	.	.	.
		18-19	83	1	1.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20-24	224	.	.	.	.	1	0.4	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		25-29	230	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		30-34	191	.	.	.	.	.	.	.	.	.	.	1	0.5	.	.	.	.	.	.	.	.
		35+	135	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Years since diagnosis</b>	5-9	152	1	0.7	.	.	.	.	.	.	.	.	.	.	.	.	1	0.7	.	.	.	.
		10-14	337	.	.	.	.	1	0.3	.	.	.	.	2	0.6	.	.	.	.	.	.	.	.
		15-19	323	.	.	.	.	1	0.3	.	.	.	.	1	0.3	.	.	.	.	.	.	.	.
		20+	280	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	80	.	.	.	.	1	1.3	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		1-4	305	.	.	.	.	1	0.3	.	.	.	.	2	0.7	.	.	.	.	.	.	.	.
		5-9	223	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	0.4	.	.	.	.
		10-14	231	1	0.4	.	.	.	.	.	.	.	.	1	0.4	.	.	.	.	.	.	.	.
		15-20	253	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	230	.	.	.	.	2	0.9	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		Chemotherapy and radiation	631	1	0.2	.	.	.	.	.	.	.	.	3	0.5	.	.	1	0.2	.	.	.	.
<b>Males</b>	<b>All cases</b>		<b>563</b>	<b>1</b>	<b>0.2</b>	.	.	<b>2</b>	<b>0.4</b>	.	.	.	.	<b>1</b>	<b>0.2</b>	.	.	<b>1</b>	<b>0.2</b>	.	.	.	.
	<b>Age at baseline</b>	<18	127	.	.	.	.	1	0.8	.	.	.	.	.	.	.	.	1	0.8	.	.	.	.
		18-19	42	1	2.4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20-24	124	.	.	.	.	1	0.8	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		25-29	112	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		30-34	96	.	.	.	.	.	.	.	.	.	.	1	1.1	.	.	.	.	.	.	.	.
		35+	62	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Years since diagnosis</b>	5-9	80	1	1.3	.	.	.	.	.	.	.	.	.	.	.	.	1	1.3	.	.	.	.
		10-14	176	.	.	.	.	1	0.6	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		15-19	157	.	.	.	.	1	0.6	.	.	.	.	1	0.6	.	.	.	.	.	.	.	.
		20+	150	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	34	.	.	.	.	1	2.9	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		1-4	183	.	.	.	.	1	0.5	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		5-9	120	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	0.8	.	.	.	.
		10-14	114	1	0.9	.	.	.	.	.	.	.	.	1	0.9	.	.	.	.	.	.	.	.
		15-20	112	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	127	.	.	.	.	2	1.6	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		Chemotherapy and radiation	331	1	0.3	.	.	.	.	.	.	.	.	1	0.3	.	.	1	0.3	.	.	.	.
<b>Females</b>	<b>All cases</b>		<b>529</b>	.	.	.	.	.	.	.	.	.	.	<b>2</b>	<b>0.4</b>	.	.	.	.	.	.	.	.
	<b>Age at baseline</b>	<18	102	.	.	.	.	.	.	.	.	.	.	2	2.0	.	.	.	.	.	.	.	.
		18-19	41	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20-24	100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		25-29	118	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		30-34	95	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		35+	73	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

	<b>Years since diagnosis</b>	5-9	72	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		10-14	161	.	.	.	.	.	.	.	.	2	1.2	.	.	.	.	.	.	.	.
		15-19	166	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20+	130	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	46	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		1-4	122	.	.	.	.	.	.	.	.	2	1.6	.	.	.	.	.	.	.	.
		5-9	103	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		10-14	117	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		15-20	141	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	103	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		Chemotherapy and radiation	300	.	.	.	.	.	.	.	.	2	0.7	.	.	.	.	.	.	.	.

*CCSS data from February 2006 data freeze-all % based on denominator with non-missing values*

*Data for patients with medical records abstraction*

*Chemotherapy initiated more than 5 years post-diagnosis is not included.*



## Chemotherapy agents - All Others: All bone

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			m-AMSA		AZQ		Cycloctyindine		Deoxycoformycin		Homoharringtonine		Hydrea		L-Aspariginase		Mithramycin		Myeleran		Retinoic acid		
			All cases	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b>Both sexes</b>	<b>All cases</b>		<b>1044</b>	.	.	.	.	.	.	.	.	.	.	<b>1</b>	<b>0.1</b>	.	.	.	.	.	.	.	.
	<b>Age at baseline</b>	<18	47	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		18-19	43	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20-24	211	.	.	.	.	.	.	.	.	.	.	<b>1</b>	<b>0.5</b>	.	.	.	.	.	.	.	.
		25-29	266	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		30-34	285	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		35+	192	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Years since diagnosis</b>	5-9	152	.	.	.	.	.	.	.	.	.	.	<b>1</b>	<b>0.7</b>	.	.	.	.	.	.	.	.
		10-14	357	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		15-19	331	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20+	204	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		1-4	35	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		5-9	176	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		10-14	395	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		15-20	437	.	.	.	.	.	.	.	.	.	.	<b>1</b>	<b>0.2</b>	.	.	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	567	.	.	.	.	.	.	.	.	.	.	<b>1</b>	<b>0.2</b>	.	.	.	.	.	.	.	.
		Chemotherapy and radiation	370	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<b>Males</b>	<b>All cases</b>		<b>528</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at baseline</b>	<18	24	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		18-19	24	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20-24	99	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		25-29	137	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		30-34	143	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		35+	101	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Years since diagnosis</b>	5-9	77	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		10-14	188	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		15-19	167	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20+	96	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		1-4	16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		5-9	96	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		10-14	178	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		15-20	237	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	292	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		Chemotherapy and radiation	190	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<b>Females</b>	<b>All cases</b>		<b>516</b>	.	.	.	.	.	.	.	.	.	.	<b>1</b>	<b>0.2</b>	.	.	.	.	.	.	.	.
	<b>Age at baseline</b>	<18	23	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		18-19	19	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20-24	112	.	.	.	.	.	.	.	.	.	.	<b>1</b>	<b>0.9</b>	.	.	.	.	.	.	.	.
		25-29	129	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		30-34	142	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		35+	91	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.



## Chemotherapy agents - All Others: Ewings

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			m-AMSA		AZQ		Cycloctyindine		Deoxycoformycin		Homoharringtonine		Hydrea		L-Aspariginase		Mithramycin		Myeleran		Retinoic acid		
			All cases	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b>Both sexes</b>	<b>All cases</b>		<b>360</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at baseline</b>	<18	31	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		18-19	23	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20-24	94	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		25-29	91	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		30-34	81	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		35+	40	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Years since diagnosis</b>	5-9	67	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		10-14	126	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		15-19	107	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20+	60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		1-4	23	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		5-9	95	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		10-14	132	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		15-20	109	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	70	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		Chemotherapy and radiation	288	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<b>Males</b>	<b>All cases</b>		<b>186</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at baseline</b>	<18	15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		18-19	14	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20-24	50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		25-29	44	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		30-34	42	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		35+	21	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Years since diagnosis</b>	5-9	38	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		10-14	62	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		15-19	56	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20+	30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at diagnosis</b>	<1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		1-4	12	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		5-9	50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		10-14	68	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		15-20	55	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	39	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		Chemotherapy and radiation	146	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<b>Females</b>	<b>All cases</b>		<b>174</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at baseline</b>	<18	16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		18-19	9	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20-24	44	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		25-29	47	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		30-34	39	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		35+	19	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.



## Chemotherapy agents - All Others: Osteosarcoma

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			m-AMSA		AZQ		Cycloctyindine		Deoxycoformycin		Homoharringtonine		Hydrea		L-Aspariginase		Mithramycin		Myeleran		Retinoic acid		
			All cases	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b>Both sexes</b>	<b>All cases</b>		<b>638</b>	.	.	.	.	.	.	.	.	.	1	0.2	.	.	.	.	.	.	.	.	.
	<b>Age at baseline</b>	<18	14	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		18-19	18	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20-24	110	.	.	.	.	.	.	.	.	.	1	0.9	.	.	.	.	.	.	.	.	.
		25-29	166	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		30-34	192	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		35+	138	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Years since diagnosis</b>	5-9	79	.	.	.	.	.	.	.	.	.	1	1.3	.	.	.	.	.	.	.	.	.
		10-14	215	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		15-19	213	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20+	131	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at diagnosis</b>	1-4	10	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		5-9	72	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		10-14	254	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		15-20	302	.	.	.	.	.	.	.	.	.	1	0.3	.	.	.	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	492	.	.	.	.	.	.	.	.	.	1	0.2	.	.	.	.	.	.	.	.	.
		Chemotherapy and radiation	74	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<b>Males</b>	<b>All cases</b>		<b>320</b>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at baseline</b>	<18	9	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		18-19	8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20-24	46	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		25-29	88	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		30-34	94	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		35+	75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Years since diagnosis</b>	5-9	37	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		10-14	119	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		15-19	104	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20+	60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Age at diagnosis</b>	1-4	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		5-9	39	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		10-14	108	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		15-20	170	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Treatment</b>	Chemotherapy, no radiation	251	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		Chemotherapy and radiation	41	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<b>Females</b>	<b>All cases</b>		<b>318</b>	.	.	.	.	.	.	.	.	.	1	0.3	.	.	.	.	.	.	.	.	.
	<b>Age at baseline</b>	<18	5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		18-19	10	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		20-24	64	.	.	.	.	.	.	.	.	.	1	1.6	.	.	.	.	.	.	.	.	.
		25-29	78	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		30-34	98	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		35+	63	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	<b>Years since diagnosis</b>	5-9	42	.	.	.	.	.	.	.	.	.	1	2.4	.	.	.	.	.	.	.	.	.

