

S3 Table. Age-standardized incidence rates for Korean adolescents and young adults according to the time period of cancer diagnosis with annual percent change: female

Site group	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	APC	p-value
All cancers	522.4	507.0	563.7	578.1	645.1	703.4	738.8	805.8	890.5	1,026.6	1,131.0	1,236.2	1,312.1	1,359.1	1,351.6	1,201.2	1,078.0	1,160.9	9.2	*
All cancers (excluding thyroid carcinoma)	440.2	425.2	453.0	450.2	467.2	472.3	476.5	485.9	499.1	515.2	522.6	543.4	553.7	549.3	543.9	579.6	563.3	590.9	5.8	-
1 Leukemias	22.9	24.1	25.8	24.4	21.9	23.5	21.8	25.1	25.6	25.8	25.2	24.7	23.2	24.2	21.6	23.3	23.5	26.1	6.1	-
1.1 Acute lymphoid leukemia	5.3	6.6	6.0	5.1	5.1	5.0	4.2	6.3	6.0	5.2	6.1	5.8	5.6	5.8	5.4	4.7	5.7	6.0	7.9	-
1.2 Acute myeloid leukemia	11.2	10.0	12.6	14.1	11.8	11.5	12.3	11.8	12.1	13.4	11.1	11.1	12.1	11.3	11.0	11.8	10.8	11.8	4.2	-
1.3 Chronic myeloid leukemia	3.1	4.8	3.9	3.0	3.1	3.4	2.8	3.6	4.9	3.9	4.3	4.1	3.5	4.6	3.1	4.7	5.1	5.2	2.3	-
1.4 Other and unspecified leukemia	3.3	2.8	3.3	2.2	1.9	3.6	2.5	3.3	2.5	3.4	3.8	3.6	2.0	2.5	2.2	2.1	2.0	3.1	1.4	-
2 Lymphomas	17.0	15.2	16.8	18.5	24.2	24.6	21.2	24.2	23.5	29.1	26.9	27.8	33.6	32.2	31.6	30.7	28.9	35.7	14.4	*
2.1 Non-Hodgkin lymphoma	14.7	13.3	13.9	14.9	21.3	20.7	18.3	20.5	18.7	23.9	23.0	23.2	27.5	26.3	25.4	24.3	22.6	28.6	13.9	*
2.2 Hodgkin lymphoma	2.2	1.9	2.9	3.6	2.9	4.0	2.8	3.8	4.8	5.1	3.9	4.6	6.1	5.9	6.2	6.4	6.2	7.1	6.4	*
3 CNS and other intracranial and intraspinal neoplasms	12.9	13.0	12.3	12.9	15.4	16.4	15.2	13.8	15.8	18.1	13.1	15.5	12.0	14.4	13.2	12.3	15.1	16.6	-1.5	-
3.1. Astrocytoma	5.8	4.7	4.7	5.0	5.7	7.3	6.1	5.0	7.5	7.9	5.3	6.0	6.0	7.1	5.3	4.1	5.4	8.4	-1.1	-
3.1.1 Specified low-grade astrocytic tumors	0.8	0.5	0.9	0.3	0.4	0.9	0.9	0.8	0.7	1.3	0.4	0.7	1.5	1.0	0.4	0.6	0.3	0.6	-3.2	-
3.1.2 Glioblastoma and anaplastic astrocytoma	3.4	2.7	2.3	3.2	3.9	4.8	3.3	2.8	5.0	5.4	3.6	3.3	3.4	4.5	3.9	2.9	3.2	5.4	-1.5	-
3.1.3 Astrocytoma, NOS	1.6	1.5	1.5	1.5	1.4	1.6	1.9	1.4	1.9	1.2	1.2	2.0	1.1	1.6	1.1	0.6	1.9	2.4	-5.2	-
3.2 Other glioma	1.4	1.9	2.8	2.9	3.4	3.9	3.3	3.5	3.2	4.1	3.6	4.6	2.7	4.2	3.6	4.7	4.8	4.2	1.0	-
3.3 Ependymoma	0.5	1.0	1.3	1.0	1.1	0.7	0.8	0.9	1.3	1.7	0.4	1.7	1.3	1.2	1.4	0.9	2.2	1.5	0.1	-
3.4. Medulloblastoma and other PNET	0.8	1.4	1.2	1.0	1.5	1.5	1.2	1.8	1.1	1.6	1.2	0.6	0.2	0.5	1.2	0.9	0.5	0.6	-6.4	*
3.4.1 Medulloblastoma	0.2	0.6	0.7	0.2	0.9	0.9	0.4	0.4	0.6	0.4	0.7	0.6	0.1	0.1	0.4	0.1	0.3	0.1	-5.6	*
3.4.2 Supratentorial PNET	0.6	0.9	0.5	0.8	0.6	0.7	0.8	1.4	0.6	1.2	0.5	0.0	0.1	0.4	0.8	0.7	0.1	0.6	-5.7	*

3.5 Other specified intracranial and intraspinal neoplasms	0.4	0.7	0.3	0.3	0.9	0.4	0.3	0.3	0.5	0.7	0.5	0.2	0.3	0.4	0.3	0.3	0.6	0.3	-4.7	*
3.6 Unspecified intracranial and intraspinal neoplasms	3.9	3.3	2.0	2.6	2.7	2.6	3.4	2.2	2.1	2.1	2.1	2.4	1.5	1.1	1.4	1.4	1.7	1.6	-5.5	*
4 Osseous and chondromatous neoplasms	6.4	5.7	7.7	6.5	7.5	6.9	5.2	5.4	6.9	7.4	5.8	8.2	7.9	7.0	7.3	9.9	9.5	7.4	5.4	-
4.1 Osteosarcoma	3.1	2.8	4.5	3.3	3.5	4.0	1.9	2.8	3.1	3.0	2.4	3.5	3.0	4.0	3.0	5.1	4.1	2.6	2.4	-
4.2 Chondrosarcoma	1.2	1.0	0.8	1.2	1.5	1.1	1.2	0.5	1.4	1.9	1.7	2.4	2.5	1.7	1.7	2.2	2.9	2.1	0.7	-
4.3 Ewing tumor	0.6	0.2	1.3	1.0	1.3	0.5	0.7	0.9	0.8	1.2	0.5	1.5	1.4	0.5	1.2	0.7	1.3	1.9	-0.3	-
4.4 Other specified and unspecified bone tumors	1.5	1.7	1.1	1.1	1.1	1.2	1.4	1.2	1.6	1.3	1.2	0.9	1.0	0.9	1.3	2.0	1.3	0.8	-1.5	-
5 Soft tissue sarcomas	10.7	11.2	12.7	12.1	12.4	13.4	13.0	14.8	14.5	14.3	14.3	17.0	15.1	20.2	17.1	21.2	19.0	17.7	9.1	*
5.1 Fibromatous neoplasms	1.7	2.0	2.4	2.7	3.5	3.8	3.5	4.4	2.9	4.6	4.4	5.5	4.5	5.7	5.0	6.5	5.8	7.2	3.1	-
5.2 Rhabdomyosarcoma	0.8	1.2	0.9	0.8	0.3	1.5	0.9	1.4	1.3	0.5	1.0	1.0	0.8	1.6	1.0	2.2	1.0	0.8	-1.4	-
5.3 Other soft tissue sarcoma	8.2	8.0	9.4	8.5	8.6	8.2	8.5	9.0	10.4	9.1	9.0	10.5	9.8	12.9	11.1	12.4	12.2	9.7	7.3	*
5.3.1 Specified soft tissue sarcoma	6.2	6.8	8.1	7.1	7.5	5.4	7.1	6.3	8.7	7.7	7.2	8.9	8.0	10.8	8.6	9.5	9.0	8.0	6.5	*
5.3.2 Unspecified soft tissue sarcoma	2.0	1.2	1.3	1.4	1.1	2.8	1.4	2.7	1.7	1.5	1.7	1.6	1.8	2.2	2.6	2.9	3.2	1.7	-0.8	-
6 Germ cell and trophoblastic neoplasms	13.6	12.7	14.3	11.4	12.2	10.8	13.1	12.1	13.9	13.3	11.9	14.3	13.4	13.2	16.6	15.0	13.8	13.2	4.6	-
6.1 Germ cell and trophoblastic neoplasms of gonads	10.2	8.6	9.7	8.2	9.0	7.8	9.6	8.5	9.8	9.7	8.1	10.3	10.0	10.1	14.1	10.8	9.9	9.8	2.1	-
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	3.4	4.1	4.6	3.2	3.2	3.0	3.5	3.6	4.1	3.6	3.8	4.1	3.4	3.1	2.5	4.2	3.9	3.4	-1.3	-
6.2.1 Intracranial	0.5	0.8	0.5	0.4	0.3	0.4	1.2	1.0	1.5	0.5	1.1	0.4	0.9	0.9	0.9	1.4	0.9	0.4	-3.8	-
6.2.2 Other nongonadal	2.9	3.3	4.1	2.8	2.9	2.6	2.3	2.7	2.6	3.2	2.7	3.6	2.5	2.3	1.7	2.8	2.9	3.0	-2.0	-

7 Melanoma and skin carcinomas	3.6	3.0	3.4	2.7	2.5	3.8	5.9	4.8	4.6	5.5	6.0	5.7	6.6	4.0	4.9	6.3	4.6	5.9	1.6	-
7.1 Melanoma	2.1	1.8	1.6	1.4	1.1	2.0	2.8	2.2	1.3	2.9	3.1	2.6	2.9	1.3	2.4	2.9	1.9	2.8	0.9	-
7.2 Skin carcinomas	1.5	1.2	1.8	1.3	1.4	1.8	3.2	2.6	3.3	2.6	2.8	3.1	3.6	2.7	2.5	3.4	2.8	3.1	-0.7	-
8 Carcinomas	392.2	384.7	437.6	458.9	517.0	570.8	613.6	677.8	759.4	883.3	996.8	1,091.7	1,166.7	1,214.0	1,209.6	1,045.1	925.4	1,008.2	9.3	*
8.1 Thyroid carcinoma	82.2	81.8	110.7	127.9	177.8	231.1	262.2	319.9	391.4	511.4	608.4	692.8	758.4	809.8	807.7	621.6	514.7	570.1	12.9	*
8.2 Other carcinoma of head and neck	7.1	7.7	7.7	9.0	7.7	8.0	8.4	9.1	8.9	8.6	10.2	9.8	11.7	10.1	12.8	11.4	11.5	11.4	5.6	-
8.2.1 Nasopharyngeal carcinoma	1.2	2.3	1.2	1.8	1.4	1.4	1.1	1.7	1.8	1.2	1.3	1.8	1.4	1.4	2.0	0.9	1.3	1.3	-3.0	-
8.2.2 Other sites in lip, oral cavity and pharynx	5.0	4.8	5.6	6.1	5.4	5.6	6.6	6.4	6.2	6.5	7.7	7.0	9.2	7.6	9.8	9.6	9.5	9.9	3.7	-
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	0.8	0.6	0.9	1.1	0.9	0.9	0.8	1.0	0.9	0.8	1.2	1.0	1.2	1.1	0.9	1.0	0.6	0.3	-2.6	-
8.3 Carcinoma of trachea, bronchus, and lung	8.2	6.5	8.1	7.1	7.8	9.6	9.8	10.6	8.7	9.5	11.1	10.4	9.2	9.0	10.5	12.2	11.1	12.1	1.2	-
8.4 Carcinoma of breast	98.4	96.0	113.4	124.4	124.8	131.1	137.7	135.2	148.4	150.1	156.9	164.0	171.7	170.1	174.7	184.1	175.1	202.1	3.3	-
8.5 Carcinoma of genitourinary tract	99.3	95.5	99.3	95.3	98.3	91.7	91.5	97.5	97.9	100.9	101.0	108.7	110.8	109.8	108.3	119.3	118.2	123.0	7.1	-
8.5.1 Carcinoma of kidney	3.3	2.5	3.3	3.6	5.1	4.9	3.9	5.0	5.0	7.0	6.7	7.1	8.9	7.3	8.1	7.9	8.9	9.7	2.8	-
8.5.2 Carcinoma of bladder	1.3	1.1	1.6	1.5	2.0	1.6	1.7	1.0	1.6	1.4	1.1	1.3	0.7	1.7	0.9	0.9	2.1	1.7	-4.7	-
8.5.3 Carcinoma of gonads	16.2	16.7	15.7	16.1	18.0	16.0	18.5	18.1	21.2	17.7	17.8	19.8	21.7	20.2	17.8	24.0	19.8	22.6	8.6	*
8.5.4 Carcinoma of cervix and uterus	77.9	74.2	77.4	73.1	72.1	67.9	66.1	72.5	68.5	74.2	74.1	79.6	78.3	79.4	80.8	85.3	86.4	87.7	4.2	-
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	0.6	0.9	1.3	1.0	1.0	1.2	1.3	0.9	1.6	0.7	1.3	1.0	1.2	1.2	0.7	1.2	1.0	1.3	-2.3	-
8.6 Carcinoma of gastrointestinal tract	92.0	91.8	93.2	92.0	97.1	95.5	100.3	100.6	99.1	99.2	104.9	101.8	101.3	101.3	91.5	92.0	90.1	83.8	3.5	-

8.6.1 Carcinoma of colon and rectum	22.1	21.4	20.3	20.7	23.8	22.3	24.5	28.7	26.6	32.0	33.6	31.7	34.6	38.7	31.5	33.2	33.9	27.6	8.7	*
8.6.2 Carcinoma of stomach	56.3	58.1	59.5	58.9	60.7	60.6	60.5	59.3	59.0	54.5	57.1	58.1	53.7	50.3	46.6	45.9	43.8	42.1	7.4	-
8.6.3 Carcinoma of liver and intrahepatic bile ducts	10.4	8.7	9.2	9.0	8.1	7.4	9.7	8.8	8.7	8.3	8.0	6.8	7.8	7.5	7.6	7.3	6.8	6.3	0.6	-
8.6.4 Carcinoma of pancreas	1.0	1.5	1.4	1.3	1.5	2.4	2.4	1.4	1.9	2.1	2.8	3.1	3.1	2.3	3.7	3.4	4.0	5.7	3.3	-
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	2.2	2.1	2.7	2.1	3.1	2.8	3.1	2.3	2.8	2.3	3.5	2.1	2.1	2.5	2.2	2.3	1.6	2.2	-0.8	-
8.7 Carcinoma of other and ill-defined sites	5.0	5.4	5.3	3.1	3.5	3.9	3.7	4.9	5.1	3.5	4.3	4.2	3.6	3.9	4.0	4.4	4.8	5.7	0.7	-
8.7.1 Adrenocortical carcinoma	0.2	0.5	0.4	0.4	0.2	0.1	0.2	0.7	0.8	0.4	0.4	0.2	0.2	0.2	0.7	0.6	0.3	0.8	0.5	-
8.7.2 Carcinoma of other and ill-defined sites, NOS	4.8	5.0	4.9	2.7	3.4	3.8	3.5	4.2	4.2	3.2	3.9	4.0	3.3	3.7	3.3	3.8	4.5	4.9	-0.2	-
9 Miscellaneous specified neoplasms, NOS	7.5	8.1	7.2	9.7	11.8	12.7	12.7	12.5	13.2	16.6	16.4	16.9	18.1	18.3	16.4	19.3	19.3	20.0	7.5	*
9.1 Other pediatric and embryonal tumors, NOS	0.8	1.4	0.5	1.0	0.9	0.7	1.1	0.7	0.7	1.5	0.7	1.1	1.0	0.5	1.0	0.4	0.8	1.4	-2.4	-
9.1.1 Wilms tumor	0.2	0.3	0.3	0.2	0.3	0.0	0.3	0.0	0.0	0.5	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	-1.7	-
9.1.2 Neuroblastoma	0.2	0.0	0.0	0.2	0.0	0.1	0.3	0.1	0.3	0.3	0.3	0.4	0.0	0.1	0.4	0.3	0.5	0.1	0.4	-
9.1.3 Other pediatric and embryonal tumors, NOS	0.3	1.0	0.3	0.5	0.6	0.5	0.5	0.6	0.5	0.7	0.2	0.8	0.7	0.3	0.6	0.1	0.4	1.3	-3.3	-
9.2 Other specified and embryonal tumors, NOS	6.7	6.8	6.6	8.8	10.9	12.0	11.7	11.8	12.5	15.1	15.7	15.7	17.1	17.9	15.5	18.9	18.5	18.6	7.9	*
9.2.1 Paraganglioma and glomus tumors	0.2	0.3	0.3	0.4	0.5	0.7	0.1	0.1	0.3	0.4	0.9	0.3	0.3	0.2	0.2	0.7	0.5	0.9	-0.2	-
9.2.2 Other specified gonadal tumors	1.5	1.0	1.1	1.4	0.6	1.2	1.0	1.3	0.8	1.4	0.8	1.0	1.9	1.8	0.4	1.8	0.9	1.4	-1.4	-
9.2.3 Myeloma, mast cell,	1.1	0.6	0.6	0.7	0.5	0.8	1.1	1.0	1.4	1.7	0.9	1.8	1.3	3.1	1.3	2.3	2.4	1.8	5.4	*

miscellaneous lymphoreticular neoplasms, NOS																					
9.2.4 Other specified neoplasms, NOS	3.9	4.8	4.7	6.3	9.2	9.3	9.5	9.4	10.0	11.6	13.1	12.6	13.6	12.8	13.5	14.1	14.7	14.5	6.7	*	
10 Unspecified malignant neoplasms	35.6	29.2	25.9	21.1	20.2	20.4	17.0	15.3	13.2	13.3	14.7	14.4	15.6	11.5	13.3	18.2	18.9	10.2	-0.8	-	

APC, annual percent change; CNS, central nervous system; NOS, not otherwise specified; PNET, primitive neuroectodermal tumor. *p < 0.05.