## Supplementary material

Gastric cancer incidence, mortality, and burden in adolescents and young adults: A time-trend analysis and comparison among China, South Korea,

Japan and the USA

Supplementary Table 1. Disability-adjusted life years and its age-standardized rate of gastric cancer in adolescents and young adults, and percentage changes from 1990 to 2019 in China, South Korea, Japan and the USA.

Supplementary Figure 1. Rank changes in disability-adjusted life years attributable to cancers in adolescents and young adults in China, South Korea, Japan and the USA from 1990 to 2019.

Supplementary Figure 2. The temporal trends of the mortality-to-incidence ratio (MIR) for gastric cancer in adolescents and young adults in China, South Korea, Japan and the USA from 1990 to 2019.

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

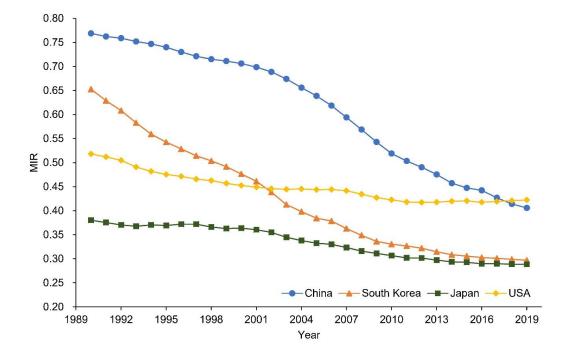
Supplementary Table 1. Disability-adjusted life years and its age-standardized rate of gastric cancer in adolescents and young adults, and percentage changes from 1990 to 2019 in China, South Korea, Japan and the USA.

		DALYs			ASDR		
Country	Sex	1990	2019	1990-2019 change (%)	1990	2019	1990-2019 change (%)
China	Both	779 909	475 977	-38.97	155.81	84.68	-45.65
	Male	416 551	308 971	-25.83	160.93	107.71	-49.77
	Female	363 358	167 005	-50.04	150.31	60.78	-59.56
Korea	Both	71 475	13 267	-81.44	355.99	66.67	-81.27
	Male	32 299	5 667	-82.45	317.60	53.75	-83.08
	Female	39 176	7 600	-80.60	395.55	81.26	-79.44
Japan	Both	68 962	15 367	-77.71	150.80	41.67	-72.37
	Male	30 060	7 399	-75.39	129.57	39.53	-69.49
	Female	38 903	7 969	-75.92	172.44	43.88	-74.55
USA	Both	22 359	19 233	-13.98	20.53	16.85	-17.92
	Male	12 413	9 778	-21.23	22.80	17.09	-25.35
	Female	9 946	9 455	-4.93	18.28	16.62	-9.08

Abbreviations: ASDR, age-standardized DALYs rate; DALYs, disability-adjusted life years.

	China 1990		China 2019			South Korea 1990		South Korea 20	19
ank	Cancer type		Cancer type	Change	Rank	Cancer type		Cancer type	Chan
	Liver cancer	-	Leukemia	-43.35%	1	Stomach cancer		Stomach cancer	-81
	Leukemia		Liver cancer	-58.76%	2	Leukemia	_	Leukemia	-68
	Stomach cancer	_	Tracheal, bronchus, and lung cancer	-11.12%	3	Tracheal, bronchus, and lung cancer	_	Liver cancer	-19
	Tracheal, bronchus, and lung cancer	-	Colon and rectum cancer	21.07%	4	Brain and central nervous system cancer	1	Breast cancer	-14
	Brain and central nervous system cancer	_	Stomach cancer	-38,97%	5	Colon and rectum cancer	-	Colon and rectum cancer	-35
	Colon and rectum cancer		Brain and central nervous system cancer	-13,19%	6	Liver cancer		Brain and central nervous system cancer	-44
	Breast cancer		Breast cancer	0.27%	7	Breast cancer		Tracheal, bronchus, and lung cancer	-56
	Nasopharynx cancer	_	Non-Hodgkin lymphoma	9.66%	8	Non-Hodgkin lymphoma		Non-Hodgkin lymphoma	-48
	Non-Hodgkin lymphoma		Cervical cancer	-1.61%	0	Cervical cancer		Cervical cancer	-6.
	Cervical cancer		Pancreatic cancer	59.32%	10	Pancreatic cancer		Pancreatic cancer	-3
		_ >							
	Esophageal cancer	-	Nasopharynx cancer	-48.79%	11	Gallbladder and biliary tract cancer	-	Ovarian cancer	-1
	Pancreatic cancer		Esophageal cancer	-39.08%	12	Ovarian cancer		Gallbladder and biliary tract cancer	-6
	Hodgkin lymphoma	1	Ovarian cancer	1.36%	13	Uterine cancer	1	Kidney cancer	2
	Ovarian cancer	1	Kidney cancer	103.02%	14	Esophageal cancer		/Thyroid cancer	9
	Uterine cancer	1	Lip and oral cavity cancer	-8.01%	15	Lip and oral cavity cancer	1	Lip and oral cavity cancer	-1
	Bladder cancer	1	Gallbladder and biliary tract cancer	-10.20%	16	Nasopharynx cancer	X /	/Malignant skin melanoma	
	Lip and oral cavity cancer	1	-Bladder cancer	-30.63%	17	Kidney cancer	1	Nasopharynx cancer	-4
	Gallbladder and biliary tract cancer	1	Uterine cancer	-44.69%	18	Larynx cancer		Hodgkin lymphoma	-2
	Kidney cancer		Multiple myeloma	82.61%	19	Non-melanoma skin cancer	1//>	Uterine cancer	-7
	Malignant skin melanoma		Malignant skin melanoma	-12.38%	20	Malignant skin melanoma	X	Esophageal cancer	-7
	Larynx cancer	X	-Testicular cancer	-2.82%	21	Hodgkin lymphoma	X	Testicular cancer	-2
	Testicular cancer	1		6.00%	22				
	Thyroid cancer	X	Non-melanoma skin cancer			Bladder cancer	1	Bladder cancer	
		1	Hodgkin lymphoma	-72.84%	23	Thyroid cancer		Multiple myeloma	
	Non-melanoma skin cancer	1	Thyroid cancer	-19.49%	24	Testicular cancer		Non-melanoma skin cancer	- 4
	Multiple myeloma		Larynx cancer	-45.66%	25	Multiple myeloma		Prostate cancer	
	Other pharynx cancer	\	Mesothelioma	6.49%	26	Prostate cancer	-	Larynx cancer	-
	Prostate cancer		Prostate cancer	-6.89%	27	Mesothelioma	_	Other pharynx cancer	
	Mesothelioma		Other pharynx cancer	-43.39%	28	Other pharynx cancer	-	Mesothelioma	
			Other pharynx cancer  Japan 2019		28	Other pharynx cancer USA 1990			-10
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Supplementary Figure 1. Rank changes in disability-adjusted life years attributable to cancers in adolescents and young adults in China, South Korea, Japan and the USA from 1990 to 2019.



Supplementary Figure 2. The temporal trends of the mortality-to-incidence ratio (MIR) for gastric cancer in adolescents and young adults in China, South Korea, Japan and the USA from 1990 to 2019.