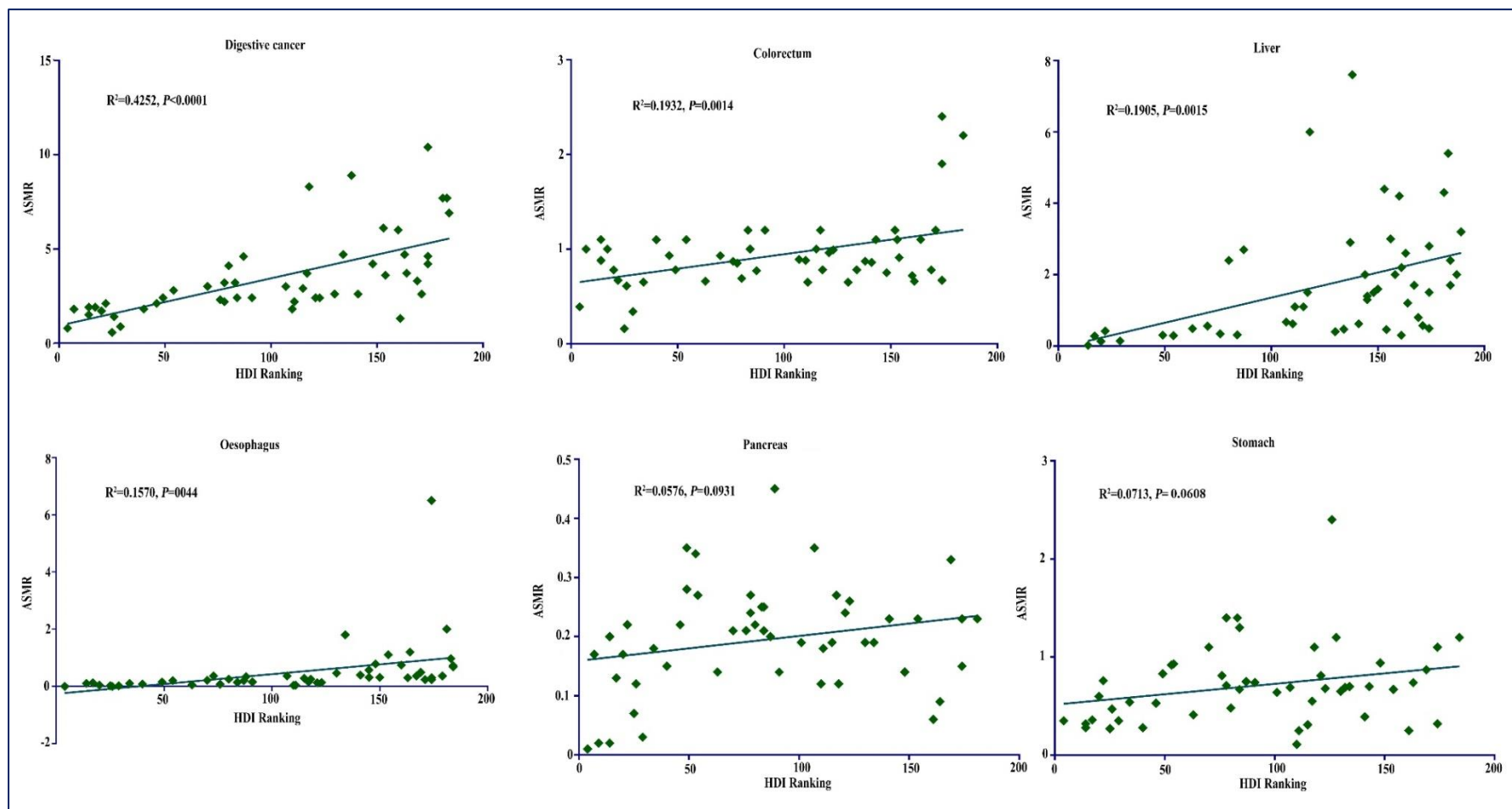


**Supplementary Figure 1** The association between human development index rankings and the age-standardized incidence rate of digestive cancer and its five subtype cancers.



Supplementary Figure 2 The association between human development index rankings and the ASMR of digestive cancer and its five subtype cancers.

**Supplementary Table 1 Estimated new cases, deaths, age-standardized incidence rate, age-standardized mortality rate and mortality-to-incidence ratio of six digestive cancers among 20- to 39-year-olds worldwide in 2020 by world area**

World areas	Gallbladder cancer							Colorectal cancer						
	Incidence		Mortality					Incidence		Mortality				
	Cases	%	ASIR	Deaths	%	ASMR	MI R	Cases	%	ASIR	Deaths	%	ASMR	MI R
Asia														
Eastern Asia	357	10.38	0.07	228	9.70	0.04	0.64	11118	21.81	2.2	4301	20.69	0.78	0.39
South-Central Asia	2333	67.84	0.33	1783	75.84	0.26	0.76	10384	20.37	1.5	4957	23.85	0.72	0.48
South-Eastern Asia	134	3.90	0.06	71	3.02	0.03	0.53	4972	9.76	2.2	1743	8.39	0.77	0.35
Western Asia	44	1.28	0.04	12	0.51	0.01	0.27	2145	4.21	2.1	959	4.61	0.95	0.45
Americas and Caribbean														
Northern America	62	1.80	0.06	15	0.64	0.01	0.24	4659	9.14	4.2	1114	5.36	1	0.24
South America	153	4.45	0.1	59	2.51	0.04	0.39	3300	6.47	2.3	1372	6.60	0.94	0.42
Central America	42	1.22	0.07	15	0.64	0.03	0.36	1225	2.40	2.1	533	2.56	0.9	0.44
Caribbean	15	0.44	0.11	3	0.13	0.02	0.20	220	0.43%	1.6	105	0.51	0.78	0.48
Europe														

Central and Eastern Europe	26	0.76	0.03	12	0.51	0.01	0.46	1609	3.16	1.8	720	3.46	0.74	0.45	
Western Europe	19	0.55	0.03	3	0.13	0.01	0.16	1712	3.36	3.2	248	1.19	0.44	0.14	
Southern Europe	3	0.09	0.01	0	0.00	0	0.00	736	1.44	1.7	159	0.76	0.37	0.22	
Northern Europe	8	0.23	0.02	0	0.00	0	0.00	976	1.92	3.2	274	1.32	0.88	0.28	
Africa															
Eastern Africa	69	2.01	0.06	56	2.38	0.05	0.81	2633	5.17	2.1	1708	8.22	1.4	0.65	
Northern Africa	65	1.89	0.08	17	0.72	0.02	0.26	1996	3.92	2.5	930	4.47	1.2	0.47	
Western Africa	78	2.27	0.07	65	2.76	0.06	0.83	1479	2.90	1.4	908	4.37	0.84	0.61	
Middle Africa	7	0.20	0.02	6	0.26	0.01	0.86	622	1.22	1.3	389	1.87	0.8	0.63	
Southern Africa	18	0.52	0.08	6	0.26	0.02	0.33	572	1.12	2.3	239	1.15	0.97	0.42	
Oceania															
Australia and New Zealand	4	0.12	0.04	0	0.00	0	0.00	578	1.13	6.2	96	0.46	1	0.17	
Melanesia	2	0.06	0.05	0	0.00	0	0.00	27	0.05	0.78	12	0.06	0.34	0.44	
Polynesia	0	0.00	0	0	0.00	0	0.00	3	0.01	1.5	1	0.00	0.59	0.33	
Micronesia	0	0.00	0	0	0.00	0	0.00	0	0.00	0	0	0.00	0	0.00	
World areas		Gastric cancer							Liver cancer						

	Incidence		Mortality				MIR	Incidence		Mortality				MIR
	Cases	%	ASIR	Deaths	%	ASMR		Cases	%	ASIR	Deaths	%	ASMR	
Asia														
Eastern Asia	8355	33.29	0.26	3865	25.12	0.2	0.46	17922	51.10	3.3	13439	46.84	2.4	0.75
South-Central Asia	6758	26.93	0.2	4733	30.76	0.2	0.70	2945	8.40	0.43	2979	10.38	0.43	1.01
South-Eastern Asia	1505	6.00	0.23	969	6.30	0.14	0.64	4465	12.73	2	4174	14.55	1.8	0.93
Western Asia	965	3.84	0.22	580	3.77	0.18	0.60	328	0.94	0.33	247	0.86	0.24	0.75
Americas and Caribbean														
Northern America	911	3.63	0.44	384	2.50	0.13	0.42	442	1.26	0.41	321	1.12	0.29	0.73
South America	1625	6.47	0.31	1227	7.98	0.23	0.76	527	1.50	0.37	464	1.62	0.32	0.88
Central America	794	3.16	0.27	512	3.33	0.22	0.64	293	0.84	0.5	241	0.84	0.41	0.82
Caribbean	114	0.45	0.32	83	0.54	0.24	0.73	72	0.21	0.54	58	0.20	0.44	0.81
Europe														
Central and Eastern Europe	866	3.45	0.39	712	4.63	0.29		343	0.98	0.38	279	0.97	0.3	0.81
Western Europe	416	1.66	0.31	196	1.27	0.05	0.47	120	0.34	0.24	66	0.23	0.12	0.55

Southern Europe	285	1.14	0.26	168	1.09	0.1	0.59	153	0.44	0.37	53	0.18	0.13	0.35
Northern Europe	180	0.72	0.24	97	0.63	0.04	0.54	91	0.26	0.3	14	0.05	0.04	0.15
Africa														
Eastern Africa	825	3.29	0.19	723	4.70	0.17	0.88	2376	6.77	1.9	1965	6.85	1.5	0.83
Northern Africa	671	2.67	0.26	491	3.19	0.2	0.73	594	1.69	0.75	613	2.14	0.77	1.03
Western Africa	460	1.83	0.11	377	2.45	0.1	0.82	2428	6.92	2.2	2072	7.22	1.9	0.85
Middle Africa	161	0.64	0.15	147	0.96	0.14	0.91	1500	4.28	3.1	1323	4.61	2.8	0.88
Southern Africa	107	0.43	0.23	77	0.50	0.18	0.72	284	0.81	1.2	260	0.91	1.1	0.92
Oceania														
Australia and New Zealand	66	0.26	0.41	27	0.18	0.18		26	0.07	0.27	20	0.07	0.22	0.77
Melanesia	32	0.13	0.14	15	0.10	0.09	0.47	161	0.46	4.7	102	0.36	3	0.63
Polynesia	2	0.01	0	2	0.01	0	1.00	0	0.00	0	0	0.00	0	0.00
Micronesia	0	0.00	0	0	0.00	0	0.00	3	0.01	2	0	0.00	0	0.00
World areas														
Esophageal cancer														
Pancreatic cancer														
Incidence														
Mortality														
Incidence														
Mortality														
Case	%	ASI	Death	%	ASM	MIR	Case	%	ASI	Death	%	ASM	MIR	
s		R	s		R		s		R	s		R		

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Asia														
Eastern Asia	1795	21.03	0.33	1076	13.80	0.2	0.60	1419	23.04	0.26	1097	23.73	0.2	0.77
South-Central Asia	5273	61.77	0.76	4226	54.19	0.61	0.80	1407	22.84	0.2	1367	29.58	0.2	0.97
South-Eastern Asia	470	5.51	0.21	357	4.58	0.15	0.76	502	8.15	0.23	325	7.03	0.14	0.65
Western Asia	212	2.48	0.21	143	1.83	0.14	0.67	225	3.65	0.22	182	3.94	0.18	0.81
Americas	and													
Caribbean														
Northern America	135	1.58	0.12	134	1.72	0.12	0.99	481	7.81	0.44	150	3.25	0.13	0.31
South America	258	3.02	0.17	157	2.01	0.11	0.61	458	7.44	0.31	347	7.51	0.23	0.76
Central America	54	0.63	0.09	41	0.53	0.07	0.76	162	2.63	0.27	130	2.81	0.22	0.80
Caribbean	20	0.23	0.14	11	0.14	0.08	0.55	44	0.71	0.32	33	0.71	0.24	0.75
Europe														
Central and Eastern	158	1.85	0.15	117	1.50	0.11	0.74	372	6.04	0.39	296	6.40	0.29	0.80
Europe														
Western Europe	84	0.98	0.15	4	0.05	0.01	0.05	162	2.63	0.31	32	0.69	0.05	0.20
Southern Europe	56	0.66	0.13	19	0.24	0.04	0.34	111	1.80	0.26	42	0.91	0.1	0.38
Northern Europe	23	0.27	0.07	3	0.04	0.01	0.13	78	1.27	0.24	12	0.26	0.04	0.15
Africa														

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Eastern Africa	1231	14.42	0.99	1057	13.55	0.85	0.86	244	3.96	0.19	215	4.65	0.17	0.88
Northern Africa	186	2.18	0.24	117	1.50	0.15	0.63	210	3.41	0.26	160	3.46	0.2	0.76
Western Africa	190	2.23	0.17	159	2.04	0.15	0.84	116	1.88	0.11	105	2.27	0.1	0.91
Middle Africa	123	1.44	0.27	109	1.40	0.24	0.89	70	1.14	0.15	63	1.36	0.14	0.90
Southern Africa	55	0.64	0.22	63	0.81	0.26	1.15	56	0.91	0.23	46	1.00	0.18	0.82
Oceania														
Australia and New Zealand	9	0.11	0.09	5	0.06	0.05	0.56	38	0.62	0.41	17	0.37	0.18	0.45
Melanesia	0	0.00	0	0	0.00	0	0.00	5	0.08	0.14	3	0.06	0.09	0.60
Polynesia	0	0.00	0	0	0.00	0	0.00	0	0.00	0	0	0.00	0	0.00
Micronesia	0	0.00	0	0	0.00	0	0.00	0	0.00	0	0	0.00	0	0.00



**Supplementary Table 2 Estimated new cases, deaths, age-standardized incidence rate, age-standardized mortality rate and mortality-to-incidence ratio of colorectal cancer among 20- to 39-year-olds worldwide in 2020 by country**

Country	Incidence		Mortality			MIR	HDI	HDI ranking	
	Cases	%	ASIR	Deaths	%				ASMR
China	9200	18.05	2.1	3788	18.24	0.77	0.41	0.761	87
India	6514	12.78	1.4	3085	14.85	0.65	0.47	0.645	130
United States of America	4243	8.33	4.3	1012	4.87	1	0.24	0.926	17
Indonesia	2214	4.34	2.4	804	3.87	0.88	0.36	0.718	110
Brazil	1917	3.76	2.6	753	3.63	1	0.39	0.765	84
Pakistan	1442	2.83	2.1	641	3.09	0.91	0.44	0.557	154
Ethiopia	1167	2.29	3.5	796	3.83	2.4	0.68	0.485	174
Mexico	938	1.84	2.2	366	1.76	0.87	0.39	0.779	76
Germany	924	1.81	4.1	96	0.46	0.39	0.10	0.947	4
Japan	869	1.71	2.8	240	1.16	0.78	0.28	0.919	20
Bangladesh	862	1.69	1.5	453	2.18	0.78	0.53	0.632	134
Russian Federation	801	1.57	1.7	380	1.83	0.78	0.47	0.824	49
Egypt	776	1.52	2.4	399	1.92	1.2	0.51	0.707	117

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Viet Nam	761	1.49	2.3	274	1.32	0.78	0.36	0.704	118
Philippines	747	1.47	2.1	229	1.10	0.65	0.31	0.718	111
United Kingdom	742	1.46	3.7	227	1.09	1.1	0.31	0.932	14
Iran, Islamic Republic of	722	1.42	2.1	321	1.55	0.93	0.44	0.783	70
Turkey	680	1.33	2.4	293	1.41	1.1	0.43	0.82	54
Korea, Republic of	637	1.25	4	104	0.50	0.67	0.16	0.916	22
Nigeria	594	1.17	1.1	366	1.76	0.66	0.62	0.539	161
Australia	528	1.04	6.7	83	0.40	1	0.16	0.944	7
South Africa	524	1.03	2.4	219	1.05	1	0.42	0.709	115
Algeria	481	0.94	3	182	0.88	1.2	0.38	0.748	91
France	436	0.86	2.5	110	0.53	0.61	0.25	0.901	26
Colombia	430	0.84	2.5	207	1.00	1.2	0.48	0.767	83
Canada	416	0.82	3.6	102	0.49	0.88	0.25	0.929	14
Thailand	415	0.81	2.1	143	0.69	0.69	0.34	0.777	80
Saudi Arabia	394	0.77	2.6	169	0.81	1.1	0.43	0.854	40
Argentina	374	0.73	2.7	130	0.63	0.93	0.35	0.845	46
Myanmar	365	0.72	2.1	136	0.65	0.75	0.37	0.583	148

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Tanzania, United Republic of	288	0.57	1.7	183	0.88	1.1	0.64	0.529	164
Sudan	273	0.54	2.2	151	0.73	1.2	0.55	0.51	171
Morocco	270	0.53	2.2	114	0.55	0.96	0.42	0.686	121
Spain	268	0.53	2.1	24	0.12	0.16	0.09	0.904	25
Iraq	261	0.51	2.1	121	0.58	0.99	0.46	0.674	123
Kenya	244	0.48	1.4	145	0.70	0.86	0.59	0.601	141
Congo, Democratic Republic of	240	0.47	1	156	0.75	0.67	0.65	0.48	174
Ukraine	223	0.44	1.6	126	0.61	0.85	0.57	0.779	78
Malaysia	222	0.44	1.9	82	0.39	0.66	0.37	0.81	63
Poland	202	0.40	1.7	84	0.40	0.65	0.42	0.88	34
Uzbekistan	196	0.38	1.6	108	0.52	0.89	0.55	0.72	107
Italy	191	0.37	1.1	56	0.27	0.34	0.29	0.892	29
Nepal	182	0.36	2	101	0.49	1.1	0.55	0.602	143
Ghana	162	0.32	1.7	83	0.40	0.87	0.51	0.611	138
Mali	162	0.32	3.2	110	0.53	2.2	0.68	0.434	184
Afghanistan	160	0.31	1.5	85	0.41	0.78	0.53	0.511	169

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Syrian	Arab	154	0.30	2.4	76	0.37	1.2	0.49	0.567	152
Republic										
Cameroon		149	0.29	1.9	87	0.42	1.1	0.58	0.563	153
Malawi		145	0.28	2.7	98	0.47	1.9	0.68	0.483	174
Uganda		143	0.28	1.2	87	0.42	0.72	0.61	0.544	160

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**Supplementary Table 3 Estimated new cases, deaths, age-standardized incidence rate, age-standardized mortality rate and mortality-to-incidence ratio of liver cancer among 20- to 39-year-olds worldwide in 2020 by country**

Country	Incidence			Mortality			MIR	HDI	HDI ranking
	Cases	%	ASIR	Deaths	%	ASMR			
China	17197	49.03	3.6	13017	45.37	2.7	0.76	0.761	87
Viet Nam	1930	5.50	5.5	2162	7.54	6	1.12	0.704	118
India	1855	5.29	0.39	1893	6.60	0.4	1.02	0.645	130
Ghana	894	2.55	9.4	717	2.50	7.6	0.80	0.611	138
Indonesia	819	2.34	0.89	579	2.02	0.62	0.71	0.718	110
Congo, Democratic Republic of	739	2.11	3.2	634	2.21	2.8	0.86	0.48	174
Uganda	642	1.83	5.2	517	1.80	4.2	0.81	0.544	160
Thailand	574	1.64	2.7	506	1.76	2.4	0.88	0.777	80
Philippines	488	1.39	1.4	370	1.29	1.1	0.76	0.718	111
Mozambique	455	1.30	5.3	371	1.29	4.3	0.82	0.456	181
Egypt	429	1.22	1.3	478	1.67	1.5	1.11	0.707	117
United States of America	405	1.15	0.42	274	0.96	0.28	0.68	0.926	17

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Cameroon	377	1.07	4.8	347	1.21	4.4	0.92	0.563	153
Burkina Faso	319	0.91	5.7	303	1.06	5.4	0.95	0.452	183
Pakistan	314	0.90	0.45	320	1.12	0.46	1.02	0.557	154
Myanmar	308	0.88	1.7	281	0.98	1.5	0.91	0.583	148
Brazil	272	0.78	0.38	223	0.78	0.31	0.82	0.765	84
Bangladesh	272	0.78	0.46	276	0.96	0.47	1.01	0.632	134
Madagascar	254	0.72	3.2	210	0.73	2.6	0.83	0.528	163
South Africa	252	0.72	1.2	232	0.81	1.1	0.92	0.709	115
Tanzania, United Republic of	214	0.61	1.3	201	0.70	1.2	0.94	0.529	164
Nigeria	203	0.58	0.36	170	0.59	0.3	0.84	0.539	161
Niger	201	0.57	3.8	171	0.60	3.2	0.85	0.394	189
Côte d'Ivoire	198	0.56	2.7	161	0.56	2.2	0.81	0.538	161
Ethiopia	195	0.56	0.59	162	0.56	0.49	0.83	0.485	174
Iran, Islamic Republic of	182	0.52	0.59	172	0.60	0.56	0.95	0.783	70
Cambodia	180	0.51	2.6	139	0.48	2	0.77	0.594	144
Mexico	171	0.49	0.41	141	0.49	0.34	0.82	0.779	76

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Russian Federation	162	0.46	0.33	147	0.51	0.3	0.91	0.824	49
Korea, Republic of	147	0.42	0.85	69	0.24	0.42	0.47	0.916	22
Mali	147	0.42	2.9	124	0.43	2.4	0.84	0.434	184
Papua New Guinea	142	0.40	5.1	83	0.29	3	0.58	0.555	156
Angola	137	0.39	1.6	123	0.43	1.4	0.90	0.581	145
Kenya	130	0.37	0.78	104	0.36	0.62	0.80	0.601	141
Turkey	107	0.31	0.39	83	0.29	0.29	0.78	0.82	54
Japan	104	0.30	0.39	40	0.14	0.13	0.38	0.919	20
Chad	100	0.29	2.4	84	0.29	2	0.84	0.398	187
Malawi	93	0.27	1.7	80	0.28	1.5	0.86	0.483	174
Afghanistan	91	0.26	0.82	89	0.31	0.8	0.98	0.511	169
Italy	87	0.25	0.54	21	0.07	0.14	0.24	0.892	29
Lao									
People's									
Democratic	87	0.25	3.6	69	0.24	2.9	0.79	0.613	137
Republic									
Senegal	84	0.24	1.8	80	0.28	1.7	0.95	0.512	167
Zambia	83	0.24	1.7	68	0.24	1.3	0.82	0.584	145
Benin	82	0.23	2.5	65	0.23	2	0.79	0.545	158

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Zimbabwe	79	0.23	1.9	67	0.23	1.6	0.85	0.571	150
Burundi	78	0.22	2.2	61	0.21	1.7	0.78	0.433	184
Uzbekistan	76	0.22	0.63	79	0.28	0.67	1.04	0.72	107
Sudan	75	0.21	0.63	68	0.24	0.57	0.91	0.51	171
United Kingdom	65	0.19	0.32	4	0.01	0.02	0.06	0.932	14
Malaysia	64	0.18	0.53	61	0.21	0.49	0.95	0.81	63

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**Supplementary Table 4 Estimated new cases, deaths, age-standardized incidence rate, age-standardized mortality rate and mortality-to-incidence ratio of esophageal cancer among 20- to 39-year-olds worldwide in 2020 by country**

Country	Incidence			Mortality			MIR	HDI	HDI ranking
	Cases	%	ASIR	Deaths	%	ASMR			
India	2810	0.27	0.59	2194	28.14	0.46	0.78	0.645	130
China	1544	0.15	0.33	957	12.27	0.2	0.62	0.761	87
Bangladesh	1229	0.12	2.1	1042	13.36	1.8	0.85	0.632	134
Pakistan	942	0.09	1.4	754	9.67	1.1	0.80	0.557	154
Malawi	391	0.04	7.5	341	4.37	6.5	0.87	0.483	174
Brazil	207	0.02	0.27	113	1.45	0.14	0.55	0.765	84
Tanzania, United Republic of	204	0.02	1.3	194	2.49	1.2	0.95	0.529	164
Mozambique	192	0.02	2.3	163	2.09	2	0.85	0.456	181
Myanmar	153	0.01	0.84	143	1.83	0.78	0.93	0.583	148
United States of America	116	0.01	0.12	122	1.56	0.12	1.05	0.926	17
Iran, Islamic Republic of	109	0.01	0.31	73	0.94	0.21	0.67	0.783	70
Russian Federation	101	0.01	0.19	79	1.01	0.15	0.78	0.824	49
Viet Nam	99	0.01	0.27	89	1.14	0.25	0.90	0.704	118
Ethiopia	92	0.01	0.27	80	1.03	0.23	0.87	0.485	174

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Kenya	92	0.01	0.55	66	0.85	0.39	0.72	0.601	141
Uganda	90	0.01	0.77	86	1.10	0.74	0.96	0.544	160
Indonesia	84	0.01	0.09	32	0.41	0.03	0.38	0.718	110
Congo, Democratic Republic of	73	0.01	0.33	67	0.86	0.3	0.92	0.48	174
Turkey	71	0.01	0.25	56	0.72	0.2	0.79	0.82	54
Burkina Faso	64	0.01	1.1	57	0.73	0.97	0.89	0.452	183
Afghanistan	63	0.01	0.58	54	0.69	0.49	0.86	0.511	169
Thailand	62	0.01	0.29	54	0.69	0.25	0.87	0.777	80
Egypt	62	0.01	0.21	44	0.56	0.15	0.71	0.707	117
South Africa	51	0.00	0.23	62	0.80	0.28	1.22	0.709	115
Uzbekistan	47	0.00	0.39	44	0.56	0.36	0.94	0.72	107
Mali	46	0.00	0.92	36	0.46	0.72	0.78	0.434	184
Yemen	46	0.00	0.48	34	0.44	0.36	0.74	0.47	179
Algeria	45	0.00	0.27	24	0.31	0.15	0.53	0.748	91
Zambia	41	0.00	0.81	29	0.37	0.57	0.71	0.584	145
Sudan	40	0.00	0.32	29	0.37	0.23	0.73	0.51	171
Japan	39	0.00	0.12	14	0.18	0.04	0.36	0.919	20
Philippines	34	0.00	0.1	14	0.18	0.04	0.41	0.718	111

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Germany	33	0.00	0.13	0	0.00	0	0.00	0.947	4
Mexico	32	0.00	0.08	28	0.36	0.07	0.88	0.779	76
Angola	31	0.00	0.37	26	0.33	0.31	0.84	0.581	145
Madagascar	29	0.00	0.38	23	0.29	0.3	0.79	0.528	163
France	29	0.00	0.16	0	0.00	0	0.00	0.901	26
Morocco	28	0.00	0.22	15	0.19	0.12	0.54	0.686	121
Burundi	27	0.00	0.8	23	0.29	0.68	0.85	0.433	184
Zimbabwe	26	0.00	0.63	13	0.17	0.31	0.50	0.571	150
Iraq	26	0.00	0.21	16	0.21	0.13	0.62	0.674	123
Sri Lanka	26	0.00	0.39	24	0.31	0.36	0.92	0.782	73
Saudi Arabia	22	0.00	0.15	13	0.17	0.08	0.59	0.854	40
Italy	20	0.00	0.12	4	0.05	0.02	0.20	0.892	29
Senegal	20	0.00	0.43	17	0.22	0.36	0.85	0.512	167
Poland	19	0.00	0.14	13	0.17	0.1	0.68	0.88	34
Canada	19	0.00	0.16	12	0.15	0.1	0.63	0.929	14
Azerbaijan	19	0.00	0.52	13	0.17	0.34	0.68	0.756	88
Spain	18	0.00	0.13	3	0.04	0.02	0.17	0.904	25
Malaysia	17	0.00	0.14	7	0.09	0.05	0.41	0.81	63

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**Supplementary Table 5 Estimated new cases, deaths, age-standardized incidence rate, age-standardized mortality rate and mortality-to-incidence ratio of pancreatic cancer among 20- to 39-year-olds worldwide in 2020 by country**

Country	Incidence		Mortality			MIR	HDI	HDI ranking	
	Cases	%	ASIR	Deaths	%				ASMR
China	1251	20.31	0.26	967	20.92	0.2	0.77	0.761	87
India	917	14.89	0.19	896	19.39	0.19	0.98	0.645	130
United States of America	436	7.08	0.45	126	2.73	0.13	0.29	0.926	17
Brazil	272	4.42	0.37	187	4.05	0.25	0.69	0.765	84
Russian Federation	209	3.39	0.43	180	3.89	0.35	0.86	0.824	49
Indonesia	157	2.55	0.17	114	2.47	0.12	0.73	0.718	110
Pakistan	147	2.39	0.21	156	3.38	0.23	1.06	0.557	154
Mexico	134	2.18	0.32	90	1.95	0.21	0.67	0.779	76
Egypt	117	1.90	0.36	91	1.97	0.27	0.78	0.707	117
Bangladesh	111	1.80	0.19	110	2.38	0.19	0.99	0.632	134
Philippines	103	1.67	0.29	63	1.36	0.18	0.61	0.718	111
Ethiopia	97	1.57	0.27	83	1.80	0.23	0.86	0.485	174
Iran, Islamic	88	1.43	0.26	72	1.56	0.21	0.82	0.783	70

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Republic of									
Viet Nam	84	1.36	0.27	41	0.89	0.12	0.49	0.704	118
Turkey	74	1.20	0.26	79	1.71	0.27	1.07	0.82	54
France	74	1.20	0.46	22	0.48	0.12	0.30	0.901	26
Thailand	68	1.10	0.33	47	1.02	0.22	0.69	0.777	80
Japan	63	1.02	0.21	56	1.21	0.17	0.89	0.919	20
South Africa	52	0.84	0.24	42	0.91	0.19	0.81	0.709	115
Uzbekistan	49	0.80	0.39	44	0.95	0.35	0.90	0.72	107
Ukraine	48	0.78	0.33	38	0.82	0.24	0.79	0.779	78
United Kingdom	47	0.76	0.22	5	0.11	0.02	0.11	0.932	14
Iraq	45	0.73	0.36	32	0.69	0.26	0.71	0.674	123
Canada	45	0.73	0.38	24	0.52	0.2	0.53	0.929	14
Colombia	45	0.73	0.25	44	0.95	0.25	0.98	0.767	83
Korea, Republic of	44	0.71	0.3	36	0.78	0.22	0.82	0.916	22
Kenya	43	0.70	0.27	38	0.82	0.23	0.88	0.601	141
Argentina	42	0.68	0.3	31	0.67	0.22	0.74	0.845	46
Spain	41	0.67	0.31	11	0.24	0.07	0.27	0.904	25
Germany	40	0.65	0.16	3	0.06	0.01	0.08	0.947	4

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Congo, Democratic Republic of	37	0.60	0.17	33	0.71	0.15	0.89	0.48	174
Afghanistan	36	0.58	0.33	36	0.78	0.33	1.00	0.511	169
Morocco	36	0.58	0.29	30	0.65	0.24	0.83	0.686	121
Nigeria	35	0.57	0.06	33	0.71	0.06	0.94	0.539	161
Myanmar	34	0.55	0.19	25	0.54	0.14	0.74	0.583	148
Australia	34	0.55	0.43	14	0.30	0.17	0.41	0.944	7
Algeria	33	0.54	0.21	23	0.50	0.14	0.70	0.748	91
Poland	33	0.54	0.27	24	0.52	0.18	0.73	0.88	34
Saudi Arabia	32	0.52	0.21	22	0.48	0.15	0.69	0.854	40
Peru	30	0.49	0.26	31	0.67	0.27	1.03	0.777	78
Malaysia	29	0.47	0.23	17	0.37	0.14	0.59	0.81	63
Kazakhstan	26	0.42	0.42	21	0.45	0.34	0.81	0.825	53
Romania	26	0.42	0.48	16	0.35	0.28	0.62	0.828	49
Venezuela, Bolivarian Republic of	26	0.42	0.3	17	0.37	0.19	0.65	0.711	101
Ecuador	21	0.34	0.37	12	0.26	0.21	0.57	0.759	84

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Mozambique	20	0.32	0.24	19	0.41	0.23	0.95	0.456	181
Italy	20	0.32	0.12	5	0.11	0.03	0.25	0.892	29
Dominican Republic	19	0.31	0.54	16	0.35	0.45	0.84	0.756	89
Tanzania, United Republic of	17	0.28	0.1	15	0.32	0.09	0.88	0.529	164
The Netherlands	17	0.28	0.37	1	0.02	0.02	0.06	0.944	9

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**Supplementary Table 6 Estimated new cases, deaths, age-standardized incidence rate, age-standardized mortality rate and mortality-to-incidence ratio of gastric cancer among 20- to 39-year-olds worldwide in 2020 by country**

Country	Incidence		Mortality			MIR	HDI	HDI ranking	
	Cases	%	ASIR	Deaths	%				ASMR
China	7233	28.82	1.5	3421	22.24	0.75	0.47	0.761	87
India	4357	17.36	0.92	3068	19.94	0.65	0.70	0.645	130
United States of America	814	3.24	0.84	352	2.29	0.36	0.43	0.926	17
Pakistan	755	3.01	1.1	469	3.05	0.67	0.62	0.557	154
Brazil	678	2.70	0.92	505	3.28	0.67	0.74	0.765	84
Bangladesh	658	2.62	1.1	410	2.66	0.7	0.62	0.632	134
Viet Nam	552	2.20	1.6	379	2.46	1.1	0.69	0.704	118
Korea, Republic of	552	2.20	3.4	123	0.80	0.76	0.22	0.916	22
Mexico	519	2.07	1.2	341	2.22	0.81	0.66	0.779	76
Turkey	501	2.00	1.8	257	1.67	0.93	0.51	0.82	54
Russian Federation	451	1.80	0.98	400	2.60	0.83	0.89	0.824	49
Iran, Islamic Republic of	394	1.57	1.2	350	2.27	1.1	0.89	0.783	70



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Ethiopia	388	1.55	1.2	372	2.42	1.1	0.96	0.485	174
Colombia	347	1.38	2	251	1.63	1.4	0.72	0.767	83
Japan	344	1.37	1.1	182	1.18	0.6	0.53	0.919	20
Myanmar	259	1.03	1.4	167	1.09	0.94	0.64	0.583	148
Egypt	245	0.98	0.75	181	1.18	0.55	0.74	0.707	117
Peru	194	0.77	1.7	156	1.01	1.4	0.80	0.777	78
Germany	185	0.74	0.76	85	0.55	0.35	0.46	0.947	4
Thailand	179	0.71	0.87	99	0.64	0.48	0.55	0.777	80
Algeria	167	0.67	1.1	113	0.73	0.74	0.68	0.748	91
Indonesia	157	0.63	0.17	101	0.66	0.11	0.64	0.718	110
Nigeria	153	0.61	0.28	137	0.89	0.25	0.90	0.539	161
Philippines	151	0.60	0.43	88	0.57	0.25	0.58	0.718	111
Ukraine	141	0.56	0.99	103	0.67	0.71	0.73	0.779	78
France	136	0.54	0.78	83	0.54	0.47	0.61	0.901	26
Morocco	136	0.54	1.1	99	0.64	0.81	0.73	0.686	121
Afghanistan	124	0.49	1.1	96	0.62	0.87	0.77	0.511	169
Uzbekistan	118	0.47	0.97	83	0.54	0.69	0.70	0.72	107
United Kingdom	115	0.46	0.56	64	0.42	0.32	0.56	0.932	14

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Iraq	115	0.46	0.94	84	0.55	0.68	0.73	0.674	123
Nepal	114	0.45	1.3	62	0.40	0.7	0.54	0.602	143
Italy	106	0.42	0.72	52	0.34	0.35	0.49	0.892	29
Argentina	101	0.40	0.73	75	0.49	0.53	0.74	0.845	46
Canada	97	0.39	0.84	32	0.21	0.28	0.33	0.929	14
South Africa	96	0.38	0.44	69	0.45	0.31	0.72	0.709	115
Poland	95	0.38	0.77	71	0.46	0.54	0.75	0.88	34
Ecuador	93	0.37	1.6	73	0.47	1.3	0.78	0.759	84
Kenya	92	0.37	0.54	67	0.44	0.39	0.73	0.601	141
Mali	89	0.35	1.8	60	0.39	1.2	0.67	0.434	184
Guatemala	82	0.33	1.4	68	0.44	1.2	0.83	0.663	128
Congo, Democratic Republic of	80	0.32	0.34	74	0.48	0.32	0.93	0.48	174
Tajikistan	78	0.31	2.6	71	0.46	2.4	0.91	0.668	126
Malaysia	73	0.29	0.59	51	0.33	0.41	0.70	0.81	63
Honduras	71	0.28	2.1	23	0.15	0.69	0.32	0.634	132
Kazakhstan	69	0.27	1.1	56	0.36	0.92	0.81	0.825	53
Madagascar	68	0.27	0.88	57	0.37	0.74	0.84	0.528	163

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Venezuela, Bolivarian Republic	67	0.27	0.78	55	0.36	0.64	0.82	0.711	101
of Spain	65	0.26	0.54	38	0.25	0.27	0.58	0.904	25
Saudi Arabia	65	0.26	0.48	40	0.26	0.28	0.62	0.854	40

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