

Table s1 Classification of different countries selected in this study

Region	Country	HDI
South America	Argentina	Very high HDI
Australia/New Zealand	Australia	Very high HDI
Western Europe	Austria	Very high HDI
Caribbean	Bahamas	Very high HDI
Western Asia	Bahrain	Very high HDI
Caribbean	Barbados	Very high HDI
Eastern Europe	Belarus	Very high HDI
Western Europe	Belgium	Very high HDI
South-Eastern Asia	Brunei Darussalam	Very high HDI
Eastern Europe	Bulgaria	Very high HDI
NORTHERN AMERICA	Canada	Very high HDI
South America	Chile	Very high HDI
Southern Europe	Croatia	Very high HDI
Western Asia	Cyprus	Very high HDI
Eastern Europe	Czechia	Very high HDI
Northern Europe	Denmark	Very high HDI
Northern Europe	Estonia	Very high HDI
Northern Europe	Finland	Very high HDI
Western Europe	France	Very high HDI
Caribbean	France, Guadeloupe	Very high HDI
Eastern Africa	France, La Réunion	Very high HDI
Caribbean	France, Martinique	Very high HDI
Melanesia/Micronesia/Polynesia	France, New Caledonia	Very high HDI
Melanesia/Micronesia/Polynesia	French Polynesia	Very high HDI
Western Europe	Germany	Very high HDI
Southern Europe	Greece	Very high HDI
Melanesia/Micronesia/Polynesia	Guam	Very high HDI
Eastern Europe	Hungary	Very high HDI

Northern Europe	Iceland	Very high HDI
Northern Europe	Ireland	Very high HDI
Western Asia	Israel	Very high HDI
Southern Europe	Italy	Very high HDI
Eastern Asia	Japan	Very high HDI
South-Central Asia	Kazakhstan	Very high HDI
Eastern Asia	Korea, Republic of	Very high HDI
Western Asia	Kuwait	Very high HDI
Northern Europe	Latvia	Very high HDI
Northern Europe	Lithuania	Very high HDI
Western Europe	Luxembourg	Very high HDI
South-Eastern Asia	Malaysia	Very high HDI
Southern Europe	Malta	Very high HDI
Southern Europe	Montenegro	Very high HDI
Australia/New Zealand	New Zealand	Very high HDI
Northern Europe	Norway	Very high HDI
Western Asia	Oman	Very high HDI
Eastern Europe	Poland	Very high HDI
Southern Europe	Portugal	Very high HDI
Caribbean	Puerto Rico	Very high HDI
Western Asia	Qatar	Very high HDI
Eastern Europe	Romania	Very high HDI
Eastern Europe	Russian Federation	Very high HDI
Western Asia	Saudi Arabia	Very high HDI
South-Eastern Asia	Singapore	Very high HDI
Eastern Europe	Slovakia	Very high HDI
Southern Europe	Slovenia	Very high HDI
Southern Europe	Spain	Very high HDI
Northern Europe	Sweden	Very high HDI
Western Europe	Switzerland	Very high HDI

Western Europe	The Netherlands	Very high HDI
Western Asia	United Arab Emirates	Very high HDI
Northern Europe	United Kingdom	Very high HDI
NORTHERN AMERICA	United States of America	Very high HDI
South America	Uruguay	Very high HDI
Southern Europe	Albania	High HDI
Northern Africa	Algeria	High HDI
Western Asia	Armenia	High HDI
Western Asia	Azerbaijan	High HDI
Central America	Belize	High HDI
Southern Europe	Bosnia and Herzegovina	High HDI
Southern Africa	Botswana	High HDI
South America	Brazil	High HDI
Eastern Asia	China	High HDI
South America	Colombia	High HDI
Central America	Costa Rica	High HDI
Caribbean	Cuba	High HDI
Caribbean	Dominican Republic	High HDI
South America	Ecuador	High HDI
Melanesia/Micronesia/Polynesia	Fiji	High HDI
Middle Africa	Gabon	High HDI
Western Asia	Georgia	High HDI
South-Central Asia	Iran, Islamic Republic of	High HDI
Caribbean	Jamaica	High HDI
Western Asia	Jordan	High HDI
Western Asia	Lebanon	High HDI
Northern Africa	Libya	High HDI
South-Central Asia	Maldives	High HDI
Eastern Africa	Mauritius	High HDI
Central America	Mexico	High HDI

Eastern Asia	Mongolia	High HDI
Southern Europe	North Macedonia	High HDI
Central America	Panama	High HDI
South America	Paraguay	High HDI
South America	Peru	High HDI
Eastern Europe	Republic of Moldova	High HDI
Caribbean	Saint Lucia	High HDI
Melanesia/Micronesia/Polynesia	Samoa	High HDI
Southern Europe	Serbia	High HDI
South-Central Asia	Sri Lanka	High HDI
South America	Suriname	High HDI
South-Eastern Asia	Thailand	High HDI
Caribbean	Trinidad and Tobago	High HDI
Northern Africa	Tunisia	High HDI
Western Asia	Turkey	High HDI
South-Central Asia	Turkmenistan	High HDI
Eastern Europe	Ukraine	High HDI
South-Central Asia	Uzbekistan	High HDI
South America	Venezuela, Bolivarian Republic of	High HDI
Middle Africa	Angola	Medium HDI
South-Central Asia	Bangladesh	Medium HDI
South-Central Asia	Bhutan	Medium HDI
South America	Bolivia, Plurinational State of	Medium HDI
Western Africa	Cabo Verde	Medium HDI
South-Eastern Asia	Cambodia	Medium HDI
Middle Africa	Cameroon	Medium HDI
Middle Africa	Congo, Republic of	Medium HDI
Northern Africa	Egypt	Medium HDI
Central America	El Salvador	Medium HDI
Middle Africa	Equatorial Guinea	Medium HDI

Southern Africa	Eswatini	Medium HDI
South America	French Guiana	Medium HDI
Western Asia	Gaza Strip and West Bank	Medium HDI
Western Africa	Ghana	Medium HDI
Central America	Guatemala	Medium HDI
South America	Guyana	Medium HDI
Central America	Honduras	Medium HDI
South-Central Asia	India	Medium HDI
South-Eastern Asia	Indonesia	Medium HDI
Western Asia	Iraq	Medium HDI
Eastern Africa	Kenya	Medium HDI
South-Central Asia	Kyrgyzstan	Medium HDI
South-Eastern Asia	Lao People's Democratic Republic	Medium HDI
Northern Africa	Morocco	Medium HDI
South-Eastern Asia	Myanmar	Medium HDI
Southern Africa	Namibia	Medium HDI
South-Central Asia	Nepal	Medium HDI
Central America	Nicaragua	Medium HDI
South-Central Asia	Pakistan	Medium HDI
South-Eastern Asia	Philippines	Medium HDI
Middle Africa	Sao Tome and Principe	Medium HDI
Southern Africa	South Africa	Medium HDI
South-Central Asia	Tajikistan	Medium HDI
South-Eastern Asia	Timor-Leste	Medium HDI
Melanesia/Micronesia/Polynesia	Vanuatu	Medium HDI
South-Eastern Asia	Viet Nam	Medium HDI
Eastern Africa	Zambia	Medium HDI
South-Central Asia	Afghanistan	Low HDI
Western Africa	Benin	Low HDI
Western Africa	Burkina Faso	Low HDI

Eastern Africa	Burundi	Low HDI
Middle Africa	Central African Republic	Low HDI
Middle Africa	Chad	Low HDI
Eastern Africa	Comoros	Low HDI
Middle Africa	Congo, Democratic Republic of	Low HDI
Western Africa	Côte d'Ivoire	Low HDI
Eastern Africa	Djibouti	Low HDI
Eastern Africa	Eritrea	Low HDI
Eastern Africa	Ethiopia	Low HDI
Western Africa	Guinea	Low HDI
Western Africa	Guinea-Bissau	Low HDI
Caribbean	Haiti	Low HDI
Eastern Asia	Korea, Democratic Republic of	Low HDI
Southern Africa	Lesotho	Low HDI
Western Africa	Liberia	Low HDI
Eastern Africa	Madagascar	Low HDI
Eastern Africa	Malawi	Low HDI
Western Africa	Mali	Low HDI
Western Africa	Mauritania	Low HDI
Eastern Africa	Mozambique	Low HDI
Western Africa	Niger	Low HDI
Western Africa	Nigeria	Low HDI
Melanesia/Micronesia/Polynesia	Papua New Guinea	Low HDI
Eastern Africa	Rwanda	Low HDI
Western Africa	Senegal	Low HDI
Western Africa	Sierra Leone	Low HDI
Melanesia/Micronesia/Polynesia	Solomon Islands	Low HDI
Eastern Africa	Somalia	Low HDI
Eastern Africa	South Sudan	Low HDI
Northern Africa	Sudan	Low HDI

Western Asia	Syrian Arab Republic	Low HDI
Eastern Africa	Tanzania, United Republic of	Low HDI
Western Africa	The Republic of the Gambia	Low HDI
Western Africa	Togo	Low HDI
Eastern Africa	Uganda	Low HDI
Western Asia	Yemen	Low HDI
Eastern Africa	Zimbabwe	Low HDI

Table s2 Cancer registries selected for the calculation of average percent change

Continent	Region	Country	Cancer registry
Africa	Eastern Africa	Uganda	Uganda, Kyadondo County
Africa	Eastern Africa	Zimbabwe	Zimbabwe, Harare: African
Africa	Northern Africa	Algeria	Algeria, Setif Wilaya
America	Central America	Costa Rica	Costa Rica
America	Northern America	Canada	Canada, Alberta
America	Northern America	Canada	Canada, British Columbia
America	Northern America	Canada	Canada, Manitoba
America	Northern America	Canada	Canada, New Brunswick
America	Northern America	Canada	Canada, Northwest Territories
America	Northern America	Canada	Canada, Nova Scotia
America	Northern America	Canada	Canada, Ontario
America	Northern America	Canada	Canada, Prince Edward Island
America	Northern America	Canada	Canada, Saskatchewan
America	Northern America	Canada	Canada, Yukon
America	Northern America	USA	USA, NPCR
America	South America	Argentina	Argentina, Cordoba
America	South America	Argentina	Argentina, Mendoza
America	South America	Argentina	Argentina, Tierra del Fuego
America	South America	Brazil	Brazil, Aracaju
America	South America	Brazil	Brazil, Goiania
America	South America	Chile	Chile, Bio Bio Province
America	South America	Chile	Chile, Region of Antofagasta
America	South America	Chile	Chile, Valdivia
America	South America	Colombia	Colombia, Bucaramanga
America	South America	Colombia	Colombia, Cali
America	South America	Colombia	Colombia, Manizales
America	South America	Colombia	Colombia, Pasto
America	South America	Ecuador	Ecuador, Cuenca

America	South America	Ecuador	Ecuador, Quito
America	South America	Uruguay	Uruguay
Asia	Eastern Asia	China	China, Beijing
Asia	Eastern Asia	China	China, Cixian
Asia	Eastern Asia	China	China, Hong Kong
Asia	Eastern Asia	China	China, Jiashan
Asia	Eastern Asia	China	China, Jiaxing City
Asia	Eastern Asia	China	China, Qidong County
Asia	Eastern Asia	China	China, Shanghai
Asia	Eastern Asia	China	China, Wuhan
Asia	Eastern Asia	China	China, Yanting County
Asia	Eastern Asia	China	China, Zhongshan
Asia	Eastern Asia	Japan	Japan, Aichi Prefecture
Asia	Eastern Asia	Japan	Japan, Fukui Prefecture
Asia	Eastern Asia	Japan	Japan, Miyagi Prefecture
Asia	Eastern Asia	Japan	Japan, Nagasaki
Asia	Eastern Asia	Japan	Japan, Niigata Prefecture
Asia	Eastern Asia	Japan	Japan, Osaka Prefecture
Asia	Eastern Asia	Korea	Korea
Asia	South-Central Asia	India	India, Bangalore
Asia	South-Central Asia	India	India, Bhopal
Asia	South-Central Asia	India	India, Dindigul, Ambilikkai
Asia	South-Central Asia	India	India, Mizoram
Asia	South-Central Asia	India	India, Mumbai (Bombay)
Asia	South-Central Asia	India	India, Poona
Asia	South-Central Asia	India	India, Sikkim State
Asia	South-Central Asia	India	India, Trivandrum
Asia	South-Eastern Asia	Malaysia	Malaysia, Penang
Asia	South-Eastern Asia	Philippines	Philippines, Manila
Asia	South-Eastern Asia	Philippines	Philippines, Rizal

Asia	South-Eastern Asia	Thailand	Thailand, Bangkok
Asia	South-Eastern Asia	Thailand	Thailand, Chiang Mai
Asia	South-Eastern Asia	Thailand	Thailand, Chonburi
Asia	South-Eastern Asia	Thailand	Thailand, Khon Kaen
Asia	South-Eastern Asia	Thailand	Thailand, Lampang
Asia	South-Eastern Asia	Thailand	Thailand, Songkhla
Asia	Western Asia	Bahrain	Bahrain: Bahraini
Asia	Western Asia	Cyprus	Cyprus
Asia	Western Asia	Israel	Israel
Asia	Western Asia	Kuwait	Kuwait: Kuwaitis
Asia	Western Asia	Kuwait	Kuwait: Non-Kuwaitis
Asia	Western Asia	Qatar	Qatar: Qatari
Asia	Western Asia	Saudi Arabia	Saudi Arabia, Riyadh: Saudi
Asia	Western Asia	Turkey	Turkey, Antalya
Asia	Western Asia	Turkey	Turkey, Edirne
Asia	Western Asia	Turkey	Turkey, Izmir
Asia	Western Asia	Turkey	Turkey, Trabzon
Europe	Eastern Europe	Belarus	Belarus
Europe	Eastern Europe	Bulgaria	Bulgaria
Europe	Eastern Europe	Czech Republic	Czech Republic
Europe	Eastern Europe	Poland	Poland, Kielce
Europe	Eastern Europe	Poland	Poland, Lower Silesia
Europe	Eastern Europe	Poland	Poland, Podkarpackie
Europe	Eastern Europe	Slovakia	Slovakia
Europe	Eastern Europe	Ukraine	Ukraine
Europe	Northern Europe	Denmark	Denmark
Europe	Northern Europe	Estonia	Estonia
Europe	Northern Europe	Iceland	Iceland
Europe	Northern Europe	Ireland	Ireland
Europe	Northern Europe	Latvia	Latvia

Europe	Northern Europe	Lithuania	Lithuania
Europe	Northern Europe	Norway	Norway
Europe	Northern Europe	UK	UK, England
Europe	Northern Europe	UK	UK, Northern Ireland
Europe	Northern Europe	UK	UK, Scotland
Europe	Northern Europe	UK	UK, Wales
Europe	Southern Europe	Croatia	Croatia
Europe	Southern Europe	Italy	Italy, Biella
Europe	Southern Europe	Italy	Italy, Como
Europe	Southern Europe	Italy	Italy, Ferrara
Europe	Southern Europe	Italy	Italy, Friuli-Venezia Giulia
Europe	Southern Europe	Italy	Italy, Latina
Europe	Southern Europe	Italy	Italy, Lecco
Europe	Southern Europe	Italy	Italy, Mantua
Europe	Southern Europe	Italy	Italy, Milan
Europe	Southern Europe	Italy	Italy, Modena
Europe	Southern Europe	Italy	Italy, Naples
Europe	Southern Europe	Italy	Italy, Nuoro
Europe	Southern Europe	Italy	Italy, Palermo
Europe	Southern Europe	Italy	Italy, Parma
Europe	Southern Europe	Italy	Italy, Reggio Emilia
Europe	Southern Europe	Italy	Italy, Romagna
Europe	Southern Europe	Italy	Italy, Sassari
Europe	Southern Europe	Italy	Italy, Sondrio
Europe	Southern Europe	Italy	Italy, South Tyrol
Europe	Southern Europe	Italy	Italy, Syracuse
Europe	Southern Europe	Italy	Italy, Trento
Europe	Southern Europe	Italy	Italy, Turin
Europe	Southern Europe	Italy	Italy, Umbria
Europe	Southern Europe	Italy	Italy, Varese

Europe	Southern Europe	Italy	Italy, Veneto
Europe	Southern Europe	Malta	Malta
Europe	Southern Europe	Portugal	Portugal, Azores
Europe	Southern Europe	Slovenia	Slovenia
Europe	Southern Europe	Spain	Spain, Albacete
Europe	Southern Europe	Spain	Spain, Asturias
Europe	Southern Europe	Spain	Spain, Basque Country
Europe	Southern Europe	Spain	Spain, Canary Islands
Europe	Southern Europe	Spain	Spain, Ciudad Real
Europe	Southern Europe	Spain	Spain, Cuenca
Europe	Southern Europe	Spain	Spain, Girona
Europe	Southern Europe	Spain	Spain, Granada
Europe	Southern Europe	Spain	Spain, La Rioja
Europe	Southern Europe	Spain	Spain, Mallorca
Europe	Southern Europe	Spain	Spain, Murcia
Europe	Southern Europe	Spain	Spain, Navarra
Europe	Southern Europe	Spain	Spain, Tarragona
Europe	Western Europe	Austria	Austria
Europe	Western Europe	Belgium	Belgium
Europe	Western Europe	France	France, Bas-Rhin
Europe	Western Europe	France	France, Calvados
Europe	Western Europe	France	France, Doubs
Europe	Western Europe	France	France, Haut-Rhin
Europe	Western Europe	France	France, Herault
Europe	Western Europe	France	France, Isere
Europe	Western Europe	France	France, Loire-Atlantique
Europe	Western Europe	France	France, Manche
Europe	Western Europe	France	France, Martinique
Europe	Western Europe	France	France, Somme
Europe	Western Europe	France	France, Tarn

Europe	Western Europe	France	France, Vendee
Europe	Western Europe	Germany	Germany, Bremen
Europe	Western Europe	Germany	Germany, Hamburg
Europe	Western Europe	Germany	Germany, Munich
Europe	Western Europe	Germany	Germany, Saarland
Europe	Western Europe	Germany	Germany, Schleswig-Holstein
Europe	Western Europe	Switzerland	Switzerland, Geneva
Europe	Western Europe	Switzerland	Switzerland, Graubunden
Europe	Western Europe	Switzerland	Switzerland, Neuchatel
Europe	Western Europe	Switzerland	Switzerland, St Gall-Appenzell
Europe	Western Europe	Switzerland	Switzerland, Ticino
Europe	Western Europe	Switzerland	Switzerland, Valais
Europe	Western Europe	Switzerland	Switzerland, Vaud
Europe	Western Europe	Switzerland	Switzerland, Zurich
Europe	Western Europe	The Netherlands	The Netherlands
Oceania	Australia/New Zealand	Australia	Australia, New South Wales
Oceania	Australia/New Zealand	Australia	Australia, Northern Territory
Oceania	Australia/New Zealand	Australia	Australia, Queensland
Oceania	Australia/New Zealand	Australia	Australia, South
Oceania	Australia/New Zealand	Australia	Australia, Tasmania
Oceania	Australia/New Zealand	Australia	Australia, Victoria
Oceania	Australia/New Zealand	Australia	Australia, Western
Oceania	Australia/New Zealand	New Zealand	New Zealand

Supplementary Table 3: Estimated population of male and female in different age groups, 2020-2040.

Region	Year	Age < 40 years				40 years≤Age < 65 years				Age≥65 years			
		Total		Male	Female	Total		Male	Female	Total		Male	Female
		Case	%	Case	Case	Case	%	Case	Case	Case	%	Case	Case
World	2020	26,191	2.40	12550	13641	421467	38.70	288154	133313	641445	58.90	418819	222626
	2030	27,310	1.92	13138	14172	493450	34.63	337946	155504	904093	63.45	588145	315947
	2040	28,577	1.58	13772	14805	546763	30.31	376213	170550	1228470	68.10	801431	427039
Very High HDI regions	2020	3963	1.16	1683	2280	87897	25.83	59945	27952	248450	73.01	159188	89262
	2030	3735	0.95	1606	2129	89928	22.86	61846	28082	299780	76.19	193271	106508
	2040	3490	0.80	1517	1973	88285	20.35	61059	27226	341982	78.84	221424	120558
High HDI regions	2020	11,399	1.94	5139	6260	253530	43.20	177625	75905	321969	54.86	215256	106713
	2030	10,078	1.28	4532	5546	288682	36.60	202285	86396	490092	62.13	319283	170810
	2040	9319	0.94	4305	5014	272217	27.55	191815	80402	706627	71.51	461258	245370
Midium HDI regions	2020	8737	6.78	4580	4157	64599	50.09	41693	22906	55623	43.13	35680	19943
	2030	9792	5.66	5162	4630	80800	46.66	51925	28875	82562	47.68	52492	30071
	2040	10291	4.53	5471	4820	99546	43.80	64045	35501	117418	51.67	74420	42998
Low HDI regions	2020	1994	7.08	1110	884	13940	49.46	8009	5931	12249	43.46	6763	5486
	2030	2717	6.79	1507	1210	19249	48.14	10993	8256	18022	45.07	10426	7596
	2040	3488	6.27	1926	1562	25987	46.71	14607	11380	26164	47.02	15250	10914
North America	2020	930	3.12	447	483	10064	33.81	6288	3776	18770	63.06	11435	7335
	2030	982	2.69	473	510	10006	27.39	6232	3775	25547	69.92	15774	9773
	2040	992	2.34	475	517	10591	24.94	6618	3973	30883	72.72	19123	11760
Eastern Asia	2020	8421	1.29	3851	4570	247673	37.99	176568	71105	395770	60.71	269218	126552
	2030	7127	0.84	3252	3876	276607	32.77	197486	79121	560261	66.38	373948	186313
	2040	6340	0.63	3005	3335	247579	24.58	178368	69211	753438	74.79	503642	249796
Eastern Africa	2020	1044	10.49	629	415	4961	49.87	2373	2588	3943	39.64	1911	2032

Middle Africa	2030	1406	9.68	837	570	7222	49.70	3436	3786	5902	40.62	2908	2994
	2040	1785	8.48	1057	729	10490	49.80	4986	5504	8789	41.72	4368	4421
	2020	178	5.32	85	93	1616	48.31	929	687	1551	46.37	717	834
Northern Africa	2030	248	5.17	118	130	2337	48.64	1332	1005	2220	46.19	1034	1186
	2040	344	5.02	162	182	3287	47.98	1874	1413	3220	47.00	1499	1721
	2020	781	8.33	389	392	4315	46.01	2487	1828	4283	45.67	2526	1757
Southern Africa	2030	836	6.65	426	410	5787	46.00	3352	2435	5958	47.36	3472	2486
	2040	934	5.45	478	456	7186	41.97	4178	3008	9001	52.58	5230	3771
	2020	109	5.89	57	52	894	48.32	578	316	847	45.78	461	386
Western Africa	2030	111	4.52	59	53	1141	46.35	736	406	1210	49.13	596	614
	2040	112	3.41	59	53	1437	43.96	949	488	1721	52.62	891	830
	2020	525	6.69	268	257	4211	53.65	2383	1828	3113	39.66	1689	1424
Caribbean	2030	715	6.34	374	341	6022	53.42	3462	2560	4536	40.24	2472	2064
	2040	977	6.07	516	461	8529	53.02	4942	3587	6580	40.90	3611	2968
	2020	125	3.03	69	56	1465	35.56	934	531	2530	61.41	1471	1059
Central America	2030	135	2.72	75	60	1722	34.78	1101	622	3095	62.50	1753	1342
	2040	135	2.17	75	60	1915	30.80	1225	690	4168	67.03	2335	1832
	2020	819	5.92	369	450	5453	39.44	2934	2519	7553	54.63	4167	3386
South-Eastern Asia	2030	895	4.86	409	485	6876	37.34	3754	3122	10641	57.80	5782	4859
	2040	907	3.65	416	491	8357	33.62	4634	3723	15596	62.73	8377	7219
	2020	1570	3.95	754	816	20009	50.32	12800	7209	18184	45.73	10588	7596
South-Central Asia	2030	1620	2.99	787	832	23527	43.45	15229	8298	28998	53.56	17121	11877
	2040	1560	2.25	767	793	26896	38.75	17560	9335	40956	59.00	24278	16678
	2020	7001	6.82	3704	3297	49350	48.06	32545	16805	46325	45.12	31452	14873
	2030	7767	5.51	4128	3639	62257	44.16	40726	21531	70966	50.33	46276	24689
	2040	8140	4.31	4380	3760	77970	41.32	51123	26847	102593	54.37	66281	36312

Western Asia	2020	996	4.68	457	539	9153	43.01	5965	3188	11130	52.31	6883	4247
	2030	1073	3.71	487	586	12112	41.88	8014	4097	15734	54.41	9782	5952
	2040	1141	2.84	512	629	14561	36.21	9616	4946	24511	60.95	15644	8867
Eastern Europe	2020	885	1.35	320	565	23874	36.44	16390	7484	40757	62.21	23215	17542
	2030	681	0.94	255	426	22714	31.29	15760	6954	49189	67.77	28707	20482
	2040	630	0.79	237	393	24518	30.79	17308	7210	54490	68.42	32278	22213
Northern Europe	2020	181	1.58	83	98	2649	23.15	1712	937	8611	75.26	5445	3166
	2030	175	1.30	82	93	2692	19.95	1751	942	10627	78.75	6853	3774
	2040	168	1.09	78	90	2658	17.20	1739	919	12623	81.71	8240	4383
Southern Europe	2020	292	0.96	128	164	7334	24.12	4791	2543	22782	74.92	13623	9159
	2030	258	0.75	115	143	7431	21.55	4914	2517	26789	77.70	16312	10477
	2040	240	0.61	106	134	6587	16.82	4404	2183	32323	82.56	19868	12455
Western Europe	2020	427	1.50	217	210	8031	28.20	5508	2523	20021	70.30	12168	7853
	2030	408	1.26	209	200	7579	23.43	5205	2374	24354	75.30	15116	9238
	2040	377	1.04	190	186	7141	19.69	4920	2221	28757	79.28	18011	10746
Australia/New Zealand	2020	70	2.62	36	34	791	29.56	551	240	1815	67.83	1212	603
	2030	78	2.27	41	37	862	25.05	600	262	2501	72.68	1672	830
	2040	76	1.82	39	36	959	23.05	672	287	3127	75.13	2071	1056
South America	2020	1705	3.44	629	1076	17856	36.04	11376	6480	29986	60.52	18515	11471
	2030	1760	2.73	656	1104	21388	33.13	13736	7652	41420	64.15	25583	15837
	2040	1679	1.97	636	1043	24898	29.22	16128	8770	58633	68.81	36158	22475
Melanesia/Micronesia/Poly nesia	2020	34	5.48	20	14	267	43.00	160	107	320	51.53	191	129
	2030	45	4.84	26	19	376	40.43	226	151	509	54.73	311	199
	2040	53	4.02	31	22	474	36.16	281	193	785	59.82	447	338

Table s4 Average percent change(%) calculated by different region and age group.

Region	sex	0_39	40-44	45-49	50-54	55-59	60-64	65-69	70+	ASR
World	Male	-2.13	-0.78	-0.90	-0.30	-0.29	-0.81	-1.17	-0.15	-0.57
World	Female	-1.53	0.08	-0.42	0.27	-0.27	-1.19	-1.50	-0.48	-0.65
Very high HDI	Male	-2.14	-0.30	-0.53	0.15	-0.12	-0.72	-0.86	0.10	-0.32
Very high HDI	Female	-1.82	0.58	0.05	0.73	-0.10	-1.08	-1.02	-0.28	-0.37
High HDI	Male	-1.05	-2.28	-1.95	-1.52	-1.10	-0.82	-1.54	-1.33	-1.34
High HDI	Female	0.33	-1.17	-1.54	-0.95	-1.05	-1.12	-1.90	-1.49	-1.28
Medium HDI	Male	-1.84	-0.27	-0.45	-2.03	-1.58	-1.23	-1.18	-1.07	-7.40
Medium HDI	Female	1.43	-0.44	-1.90	-0.39	-2.04	-0.58	-1.74	-0.47	-5.28
Low HDI	Male	-9.83	2.02	3.04	2.14	3.67	1.89	-0.17	-2.35	0.41
Low HDI	Female	-9.42	-2.91	-3.82	4.24	-5.56	-3.92	-1.49	-1.89	-1.88
Asia	Male	-3.01	-0.86	-1.06	0.12	-0.50	-0.19	-0.07	0.28	-0.20
Asia	Female	-2.11	0.05	-0.41	0.56	-0.84	-0.71	-0.28	-0.25	-0.44
America	Male	-0.28	0.19	0.00	0.00	-0.61	-0.90	-1.16	-0.84	-0.70
America	Female	0.61	1.09	0.43	0.62	-0.21	-1.12	-1.10	-0.88	-0.45

Africa	Male	-2.90	-0.94	1.61	-0.72	-0.09	3.28	-0.01	0.54	-1.21
Africa	Female	-2.32	-5.32	-6.03	-0.33	-3.50	-2.64	0.75	-1.50	-2.80
Europe	Male	-1.62	-2.06	-1.74	-1.77	-0.49	-1.64	-2.18	-1.24	-1.49
Europe	Female	-1.52	-1.43	-1.49	-0.81	-0.11	-1.44	-2.31	-1.27	-1.31
Oceania	Male	-1.10	1.31	-0.18	-0.15	-0.22	-0.26	-1.08	-0.91	-0.66
Oceania	Female	-2.06	-0.86	0.02	-0.51	0.05	-1.67	-0.72	-0.67	-0.68
Eastern Africa	Male	-9.83	2.02	3.04	2.14	3.67	1.89	-0.17	-2.35	0.41
Eastern Africa	Female	-9.42	-2.91	-3.82	4.24	-5.56	-3.92	-1.49	-1.89	-1.88
Northern Africa	Male	11.24	-7.76	-0.14	-4.78	-4.10	5.09	-1.96	1.66	-0.06
Northern Africa	Female	10.08	-17.75	-8.16	-5.99	-0.40	-3.86	-0.09	-5.02	-3.44
Central America	Male	-5.06	0.85	-1.69	-1.75	-1.50	-3.84	-2.64	-2.19	-2.32
Central America	Female	-1.87	-0.76	-1.50	0.24	-0.89	-2.05	-2.46	-1.70	-1.62
Northern America	Male	0.04	0.29	0.06	0.16	-0.58	-0.64	-0.96	-0.68	-0.53
Northern America	Female	0.62	1.30	0.36	0.76	0.04	-0.80	-0.78	-0.75	-0.26
South America	Male	-0.85	-1.40	-0.70	-1.26	-1.01	-2.27	-1.99	-2.29	-1.92
South America	Female	2.35	-0.07	1.32	-0.72	-2.66	-2.86	-2.91	-2.85	-2.09
Eastern Asia	Male	-2.35	-0.45	-0.80	0.21	-0.40	-0.15	0.04	0.36	-0.05

Eastern Asia	Female	-1.64	0.43	-0.08	0.64	-0.80	-0.64	-0.15	-0.05	-0.27
South-Central Asia	Male	-1.17	-0.81	0.48	-0.28	-0.58	-0.70	-0.44	-0.76	-0.63
South-Central Asia	Female	2.57	0.15	-0.54	0.62	-0.19	1.08	-0.42	-0.07	0.03
South-Eastern Asia	Male	-3.20	0.33	-1.85	-4.94	-2.47	-0.34	-3.16	-2.16	-2.25
South-Eastern Asia	Female	-0.70	-0.52	-0.82	-1.75	-2.47	-3.42	-2.47	-0.68	-1.53
Western Asia	Male	0.20	-0.91	-1.05	0.13	-0.28	0.43	-0.45	-4.75	-9.02
Western Asia	Female	1.02	-0.32	-1.80	0.05	0.51	-0.45	0.21	-5.61	-9.80
Eastern Europe	Male	-1.27	-2.17	-1.65	-1.70	-0.79	-1.09	-1.63	-0.94	-1.22
Eastern Europe	Female	-0.85	-1.35	-1.77	-1.18	-0.54	-1.20	-1.84	-1.19	-1.20
Northern Europe	Male	0.36	-1.33	-1.32	-1.03	-1.00	-2.58	-2.52	-1.39	-1.71
Northern Europe	Female	-1.69	-0.84	-0.22	-0.10	-0.46	-2.17	-3.06	-1.44	-1.52
Southern Europe	Male	-0.61	-1.77	-1.02	-2.28	-1.24	-1.75	-1.08	-1.11	-1.37
Southern Europe	Female	-2.39	-0.50	-0.99	-0.45	0.18	-0.59	-1.07	-1.12	-0.96
Western Europe	Male	-3.92	-0.73	-0.18	-0.53	0.14	-1.03	-0.68	-1.36	-0.95
Western Europe	Female	-0.92	-1.26	-0.25	0.85	0.03	-0.90	-0.48	-1.34	-0.75
Australia/New Zealand	Male	-1.10	1.31	-0.18	-0.15	-0.22	-0.26	-1.08	-0.91	-0.66
Australia/New Zealand	Female	-2.06	-0.86	0.02	-0.51	0.05	-1.67	-0.72	-0.67	-0.68

Table s5 Predicted age-standardized incidence rates from 2020 to 2040 per 100 000 population.

	Both sexes				Male				Female		
	2020	2030	2040		2020	2030	2040		2020	2030	2040
World	11.09	10.44	9.90		15.79	14.94	14.16		6.98	6.52	6.12
Very high HDI	10.45	10.19	9.97		15.18	14.76	14.39		6.51	6.25	6.03
High HDI	16.53	14.41	12.73		23.73	20.79	18.24		10.08	8.84	7.78
Medium HDI	5.03	4.50	4.07		6.64	5.88	5.22		3.53	3.27	3.05
Low HDI	5.32	5.01	5.15		6.55	6.75	7.41		4.30	3.49	3.10
Northern America	4.17	4.03	3.89		5.39	5.12	4.87		3.10	3.04	3.00
Eastern Asia	22.74	22.50	22.58		33.08	33.16	33.30		13.37	13.09	12.85
Eastern Africa	4.50	4.14	4.20		4.86	4.97	5.46		4.23	3.43	3.09
Middle Africa	4.16	4.02	4.04		4.55	4.90	5.38		3.79	3.24	2.84
Northern Africa	4.39	4.21	4.23		5.36	5.70	6.19		3.53	2.90	2.46
Southern Africa	3.33	3.20	3.33		4.68	5.02	5.49		2.36	1.97	1.69
Western Africa	4.08	3.97	4.02		4.79	5.16	5.68		3.46	2.89	2.50
Caribbean	6.87	6.43	6.06		9.02	8.41	7.85		5.00	4.74	4.52
Central America	7.28	5.96	4.94		8.68	6.86	5.49		6.12	5.24	4.52
South-Eastern Asia	5.50	4.53	3.80		7.32	5.88	4.81		3.97	3.38	2.91
South-Central Asia	5.51	5.32	5.22		7.40	6.99	6.61		3.68	3.80	3.95

Western Asia	8.52	7.24	6.49		11.37	9.52	8.35		6.05	5.09	4.56
Eastern Europe	11.26	10.05	9.02		17.37	15.38	13.63		7.08	6.24	5.51
Northern Europe	4.56	3.90	3.36		6.19	5.25	4.47		3.13	2.70	2.34
Southern Europe	7.41	6.62	5.93		10.18	8.93	7.85		5.05	4.62	4.24
Western Europe	5.86	5.42	5.02		8.16	7.45	6.83		3.83	3.57	3.34
Australia/New Zealand	4.51	4.23	3.99		6.38	6.01	5.68		2.79	2.58	2.40
South America	8.74	7.26	6.15		12.08	9.99	8.29		6.05	5.08	4.43
Melanesia/Micronesia/Polynesia	7.92	7.43	6.88		9.95	9.33	8.76		6.08	5.65	5.27

Table s6 Predicted age-standardized mortality rates from 2020 to 2040 per 100 000 population.

	Both sexes				Male				Female		
	2020	2030	2040		2020	2030	2040		2020	2030	2040
World	7.73	7.27	6.90		10.97	10.39	9.87		4.91	4.59	4.30
Very high HDI	4.82	4.70	4.60		6.89	6.71	6.55		3.13	3.00	2.90
High HDI	12.81	11.14	9.82		18.47	16.19	14.20		7.82	6.83	5.98
Medium HDI	4.36	3.90	3.52		5.84	5.17	4.58		2.99	2.76	2.57
Low HDI	4.67	4.38	4.48		5.74	5.87	6.41		3.78	3.07	2.72
Northern America	1.76	1.70	1.64		2.30	2.18	2.08		1.30	1.27	1.25
Eastern Asia	14.81	14.70	14.79		21.43	21.57	21.73		8.90	8.73	8.57
Eastern Africa	3.99	3.64	3.66		4.29	4.35	4.72		3.75	3.04	2.71
Middle Africa	3.72	3.60	3.61		4.09	4.40	4.82		3.39	2.90	2.55
Northern Africa	3.62	3.49	3.51		4.48	4.77	5.18		2.86	2.37	2.02
Southern Africa	2.86	2.76	2.88		4.15	4.46	4.88		1.95	1.63	1.41
Western Africa	3.68	3.58	3.63		4.34	4.67	5.12		3.10	2.61	2.26
Caribbean	5.37	5.01	4.72		7.27	6.77	6.31		3.73	3.53	3.36
Central America	5.63	4.59	3.79		6.95	5.48	4.37		4.55	3.88	3.33
South-Eastern Asia	4.54	3.75	3.15		6.18	4.97	4.06		3.20	2.74	2.36
South-Central Asia	4.83	4.66	4.55		6.57	6.21	5.87		3.14	3.24	3.35

Western Asia	7.11	5.94	5.25		9.73	8.01	6.94		4.87	4.00	3.52
Eastern Europe	8.33	7.44	6.69		13.09	11.61	10.31		5.12	4.51	3.99
Northern Europe	2.86	2.45	2.11		3.89	3.30	2.81		1.98	1.70	1.48
Southern Europe	4.80	4.29	3.85		6.74	5.93	5.22		3.18	2.90	2.66
Western Europe	3.28	3.02	2.78		4.63	4.21	3.84		2.11	1.95	1.81
Australia/New Zealand	2.07	1.94	1.82		2.73	2.56	2.41		1.48	1.37	1.28
South America	6.78	5.59	4.70		9.57	7.89	6.52		4.55	3.77	3.24
Melanesia/Micronesia/Polynesia	6.30	5.91	5.44		7.98	7.45	6.96		4.81	4.47	4.17

Table s7 Predicted number of new GC cancer cases changes between 2020 and 2040 apportioned into changes because of risk and demographics by gender.

Population	Sex	Changes between 2020 and 2030 (%)						Changes between 2020 and 2040 (%)				
		Total change	Change due to Risk	Change due to demographic	Change due to age structure	Change due to population size		Total change	Change due to Risk	Change due to demographic	Change due to age structure	Change due to population size
World	Both sexes	23.90	-6.99	30.89	21.26	9.64		49.76	-14.99	64.74	46.87	17.88
World	Male	24.25	-6.29	30.53	21.42	9.12		51.38	-14.20	65.58	48.53	17.05
World	Female	23.23	-8.17	31.40	21.23	10.17		46.59	-19.11	65.70	46.98	18.72
Very high HDI	Both sexes	17.45	-1.47	18.92	16.59	2.33		34.15	-2.32	36.47	33.08	3.39
Very high HDI	Male	19.81	-1.89	21.71	19.41	2.30		38.90	-3.35	42.26	38.82	3.44
Very high HDI	Female	13.08	-4.26	17.33	14.97	2.37		25.37	-9.11	34.48	31.13	3.35
High HDI	Both sexes	16.98	-17.55	34.52	33.23	1.29		28.13	-39.79	67.92	66.52	1.40
High HDI	Male	15.83	-16.21	32.04	31.40	0.64		27.23	-38.53	65.76	65.36	0.40
High HDI	Female	19.40	-17.84	37.24	35.28	1.96		30.03	-42.68	72.72	70.30	2.42
Medium HDI	Both sexes	21.42	-13.98	35.40	22.67	12.72		44.85	-33.59	78.45	55.30	23.14
Medium HDI	Male	18.49	-15.39	33.88	22.03	11.85		38.82	-37.94	76.76	55.03	21.73
Medium HDI	Female	26.52	-9.91	36.43	22.80	13.63		55.38	-24.26	79.63	55.02	24.61
Low HDI	Both sexes	32.55	-8.75	41.30	9.98	31.33		95.36	-4.93	100.29	37.13	63.16
Low HDI	Male	48.02	5.87	42.15	10.89	31.26		136.37	34.10	102.27	39.30	62.97
Low HDI	Female	12.59	-28.11	40.70	9.30	31.40		42.40	-56.43	98.84	35.48	63.36

Table s8 Predicted GC cancer deaths changes between 2020 and 2040 apportioned into changes because of risk and demographics by gender.

Population	Sex	Changes between 2020 and 2030 (%)						Changes between 2020 and 2040 (%)				
		Total change	Change due to Risk	Change due to demographic	Change due to age structure	Change due to population size		Total change	Change due to Risk	Change due to demographic	Change due to age structure	Change due to population size
World	Both sexes	25.11	-6.93	32.04	22.40	9.64		53.07	-14.97	68.04	50.16	17.88
World	Male	25.47	-6.16	31.63	22.51	9.12		54.72	-14.02	68.74	51.69	17.05
World	Female	24.44	-8.21	32.65	22.48	10.17		49.97	-19.44	69.41	50.69	18.72
Very high HDI	Both sexes	19.34	-1.25	20.59	18.26	2.33		40.26	-1.98	42.24	38.85	3.39
Very high HDI	Male	22.10	-1.57	23.67	21.37	2.30		45.67	-2.62	48.30	44.86	3.44
Very high HDI	Female	14.85	-4.13	18.98	16.61	2.37		31.43	-9.14	40.57	37.22	3.35
High HDI	Both sexes	20.35	-18.35	38.70	37.41	1.29		35.81	-42.68	78.49	77.09	1.40
High HDI	Male	19.08	-16.73	35.81	35.17	0.64		34.84	-40.98	75.82	75.42	0.40
High HDI	Female	22.98	-18.84	41.82	39.87	1.96		37.81	-46.27	84.08	81.66	2.42
Medium HDI	Both sexes	21.93	-14.30	36.23	23.50	12.72		46.43	-34.53	80.96	57.82	23.14
Medium HDI	Male	19.01	-15.56	34.57	22.72	11.85		40.35	-38.63	78.98	57.25	21.73
Medium HDI	Female	27.18	-10.24	37.41	23.78	13.63		57.38	-25.17	82.56	57.94	24.61
Low HDI	Both sexes	32.17	-9.19	41.36	10.03	31.33		93.89	-6.70	100.59	37.43	63.16
Low HDI	Male	47.28	5.06	42.22	10.96	31.26		133.99	31.38	102.61	39.64	62.97
Low HDI	Female	12.79	-27.95	40.74	9.34	31.40		42.48	-56.64	99.12	35.76	63.36

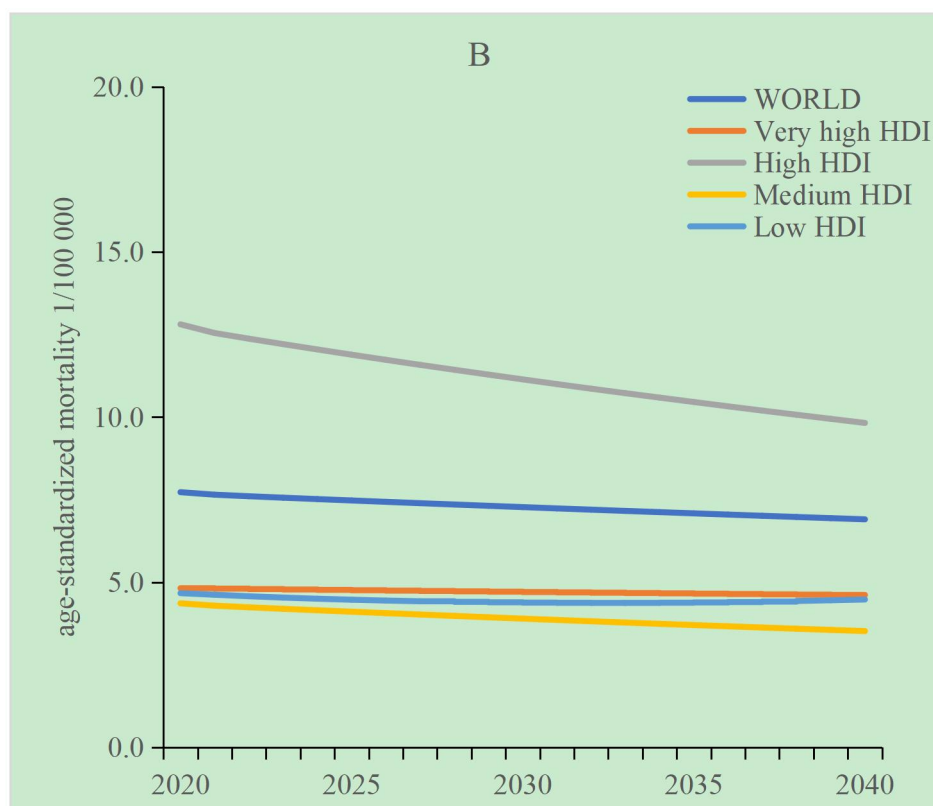
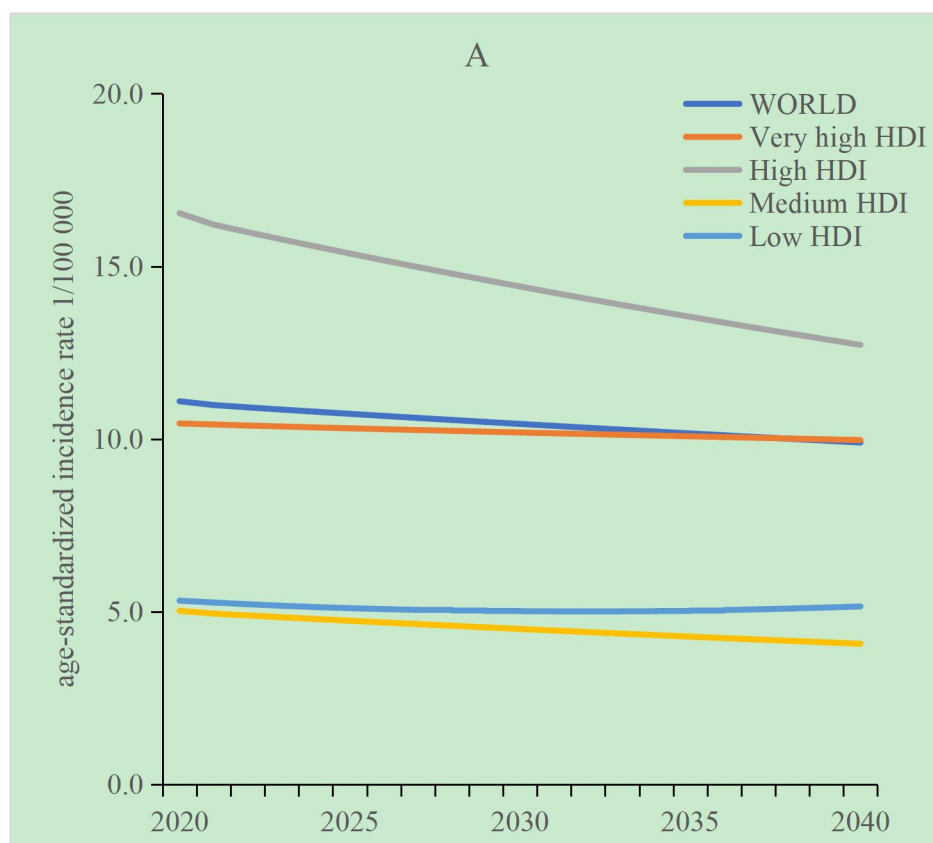


Figure S1 Trends for age-standardized incidence and mortality rates during 2020 to 2040. (A) incidence (B)Mortality

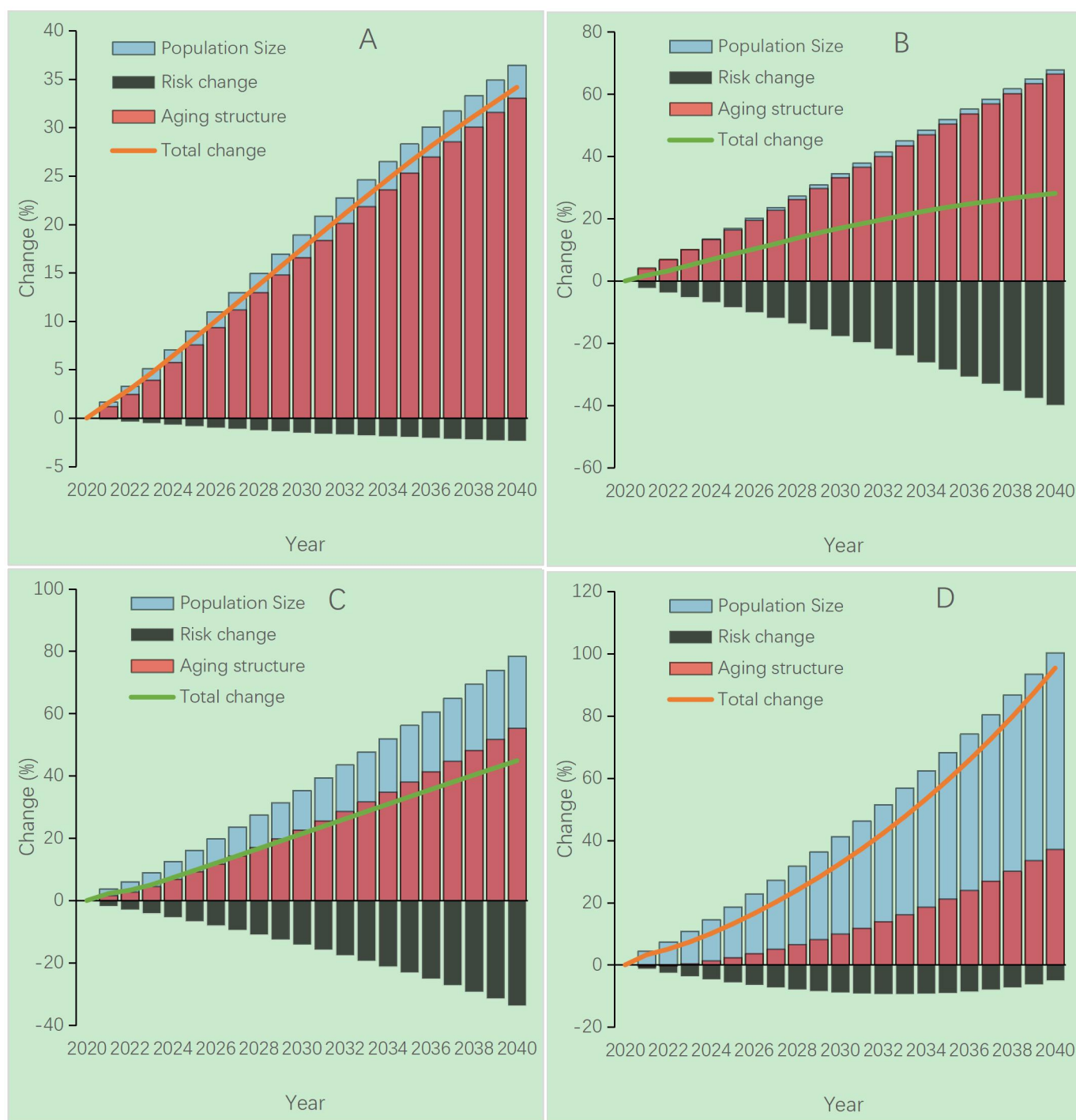


Figure S2 Apportioned predicted stomach cases into the contribution from the change of risk and change of population. (A) Very high HDI (B)High HDI (C)Medium HDI (D)Low HDI

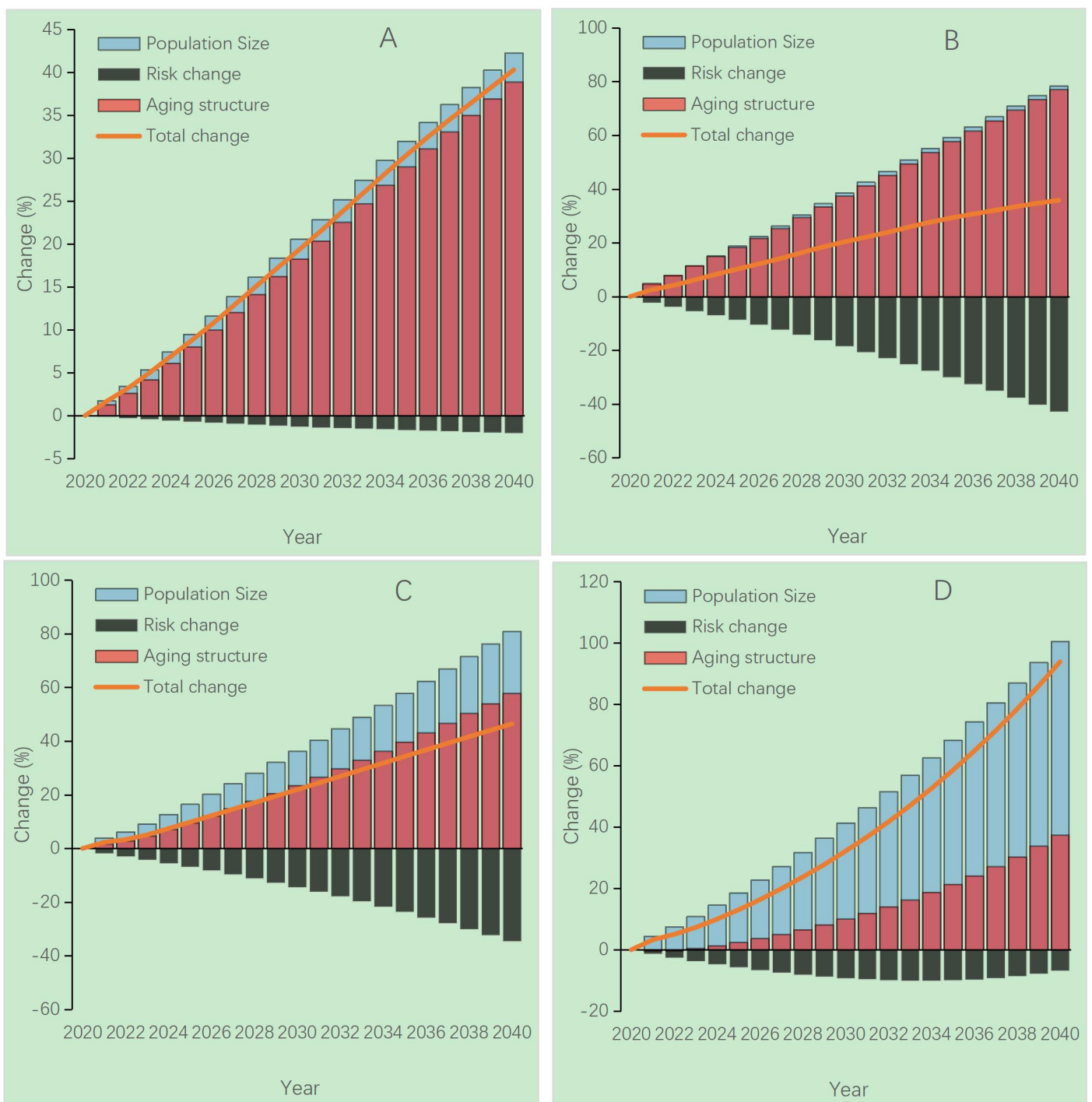


Figure S3 Apportioned predicted stomach deaths into the contribution from the change of risk and change of population. (A) Very high HDI (B)High HDI (C)Medium HDI (D)Low HDI