

Supplementary table 2:Age-Standardised Incidence rates of Leukemia for Both sex
by Country, 2021

	location	val	upper	lower	Rate_2021	
1	Philippines	4.36	5.24	3.68	4.36	(3.68–5.24)
2	China	7.21	9.05	4.93	7.21	(4.93–9.05)
	Micronesia					
3	(Federated States of)	4.36	5.97	2.98	4.36	(2.98–5.97)
4	Azerbaijan	4.03	5.72	2.82	4.03	(2.82–5.72)
5	Thailand	6.07	7.92	3.73	6.07	(3.73–7.92)
6	Samoa	5.16	7.03	3.89	5.16	(3.89–7.03)
7	Indonesia	4.76	6.21	3.86	4.76	(3.86–6.21)
8	Viet Nam	2.91	3.9	2.19	2.91	(2.19–3.9)
9	Malaysia	5.07	6.56	4.25	5.07	(4.25–6.56)
10	Tonga	3.01	4.03	2.15	3.01	(2.15–4.03)
11	Myanmar	4.99	6.5	3.82	4.99	(3.82–6.5)
12	Fiji	4.95	6.78	2.76	4.95	(2.76–6.78)
13	Marshall Islands	4.13	5.7	2.75	4.13	(2.75–5.7)
	Taiwan					
14	(Province of China)	5.15	5.64	4.67	5.15	(4.67–5.64)
	Democratic					
15	People's Republic of	4.89	6.8	3.5	4.89	(3.5–6.8)
	Korea					
16	Armenia	4.93	5.54	4.37	4.93	(4.37–5.54)
17	Sri Lanka	3.65	5.12	2.46	3.65	(2.46–5.12)
18	Uzbekistan	3.31	4	2.73	3.31	(2.73–4)
19	Timor-Leste	4.42	5.79	3.3	4.42	(3.3–5.79)
20	Cambodia	5.97	7.77	4.45	5.97	(4.45–7.77)
21	Kazakhstan	3.39	3.87	2.98	3.39	(2.98–3.87)
22	Solomon Islands	4.15	5.65	2.61	4.15	(2.61–5.65)
23	Papua New Guinea	3.17	4.87	1.77	3.17	(1.77–4.87)
24	Georgia	5.56	6.2	5.01	5.56	(5.01–6.2)
25	Albania	4.32	6.35	3.04	4.32	(3.04–6.35)
26	Belarus	8.09	9.79	6.63	8.09	(6.63–9.79)
27	Maldives	2.92	3.78	2.09	2.92	(2.09–3.78)
	Lao People's					
28	Democratic Republic	5.09	6.69	3.73	5.09	(3.73–6.69)
29	Kiribati	3.07	4.15	1.83	3.07	(1.83–4.15)

30	Vanuatu	3.51	4.55	2.32	3.51 (2.32–4.55)
31	Turkmenistan	3.19	3.99	2.56	3.19 (2.56–3.99)
32	Hungary	8.28	9.92	6.94	8.28 (6.94–9.92)
33	Latvia	7.99	9.4	6.76	7.99 (6.76–9.4)
34	Slovakia	7.45	9.48	5.39	7.45 (5.39–9.48)
35	Bulgaria	5.81	6.98	4.72	5.81 (4.72–6.98)
36	Brunei Darussalam	4.81	5.79	3.46	4.81 (3.46–5.79)
37	Estonia	8.85	10.19	7.45	8.85 (7.45–10.19)
38	Tajikistan	2.74	4.04	1.82	2.74 (1.82–4.04)
39	Montenegro	6.88	9.23	5.2	6.88 (5.2–9.23)
40	Romania	5.76	6.52	4.95	5.76 (4.95–6.52)
41	Czechia	8.92	10.4	7.54	8.92 (7.54–10.4)
42	Republic of Moldova	3.71	4.25	3.27	3.71 (3.27–4.25)
43	Lithuania	7.89	8.93	6.74	7.89 (6.74–8.93)
44	Ukraine	5.3	6.84	4	5.3 (4–6.84)
45	Republic of Korea	4.76	6.15	2.9	4.76 (2.9–6.15)
46	Poland	7.64	8.37	6.95	7.64 (6.95–8.37)
47	Kyrgyzstan	2.9	3.41	2.39	2.9 (2.39–3.41)
48	Bosnia and Herzegovina	5.2	6.69	3.76	5.2 (3.76–6.69)
49	Mongolia	2.65	3.34	1.98	2.65 (1.98–3.34)
50	Japan	5.69	6.02	5.28	5.69 (5.28–6.02)
51	Slovenia	11.06	13.1	9.24	11.06 (9.24–13.1)
52	North Macedonia	6.17	7.96	4.55	6.17 (4.55–7.96)
53	Russian Federation	5.98	6.42	5.57	5.98 (5.57–6.42)
54	Singapore	5.07	5.56	4.6	5.07 (4.6–5.56)
55	Croatia	9.39	11.15	7.95	9.39 (7.95–11.15)
56	Serbia	6.53	8.15	4.92	6.53 (4.92–8.15)
57	Australia	10.72	11.73	9.79	10.72 (9.79–11.73)
58	Ireland	7.88	8.7	7.18	7.88 (7.18–8.7)
59	Italy	10.99	11.83	10.17	10.99 (10.17–11.83)
60	Sweden	8.26	9.2	7.35	8.26 (7.35–9.2)
61	Portugal	8.05	8.94	7.17	8.05 (7.17–8.94)
62	Finland	7.75	8.45	7.07	7.75 (7.07–8.45)

63	Germany	9.68	10.51	8.88	9.68 (8.88–10.51)
64	Spain	9.29	10.23	8.3	9.29 (8.3–10.23)
65	Malta	7.93	9.06	6.81	7.93 (6.81–9.06)
66	Andorra	10.98	15.56	7.33	10.98 (7.33–15.56)
67	Iceland	8.82	9.85	7.83	8.82 (7.83–9.85)
68	Greece	11.53	12.3	10.66	11.53 (10.66–12.3)
69	Israel	9.84	10.77	8.89	9.84 (8.89–10.77)
70	Netherlands	7.89	8.58	7.14	7.89 (7.14–8.58)
71	New Zealand	9.98	10.72	9.19	9.98 (9.19–10.72)
72	Norway	8.13	8.7	7.46	8.13 (7.46–8.7)
73	Belgium	9.67	10.77	8.55	9.67 (8.55–10.77)
74	Austria	9.3	10.2	8.22	9.3 (8.22–10.2)
75	Cyprus	10.45	12.96	7.02	10.45 (7.02–12.96)
76	Denmark	10.97	11.96	9.87	10.97 (9.87–11.96)
77	France	10.35	11.5	9.21	10.35 (9.21–11.5)
78	Switzerland	10.28	11.46	9.05	10.28 (9.05–11.46)
79	Luxembourg	10.19	11.48	9.14	10.19 (9.14–11.48)
80	Argentina	5.18	5.61	4.79	5.18 (4.79–5.61)
81	United Kingdom	8.78	9.14	8.3	8.78 (8.3–9.14)
82	Canada	9.76	10.55	8.97	9.76 (8.97–10.55)
83	Jamaica	4.16	5.4	3.24	4.16 (3.24–5.4)
84	Belize	3.31	3.71	2.93	3.31 (2.93–3.71)
85	Haiti	5.89	8.38	3.82	5.89 (3.82–8.38)
86	Chile	4.85	5.26	4.45	4.85 (4.45–5.26)
87	Dominican Republic	3.46	4.52	2.59	3.46 (2.59–4.52)
88	Antigua and Barbuda	4.47	4.76	4.17	4.47 (4.17–4.76)
89	Bahamas	4.06	4.96	3.26	4.06 (3.26–4.96)
90	Guyana	3.46	4.45	2.68	3.46 (2.68–4.45)
91	Barbados	5.6	7.02	4.43	5.6 (4.43–7.02)

92	Grenada	5.27	5.9	4.6	5.27 (4.6–5.9)
93	Dominica	6.21	7.87	4.62	6.21 (4.62–7.87)
94	Cuba	5.29	6.1	4.58	5.29 (4.58–6.1)
95	Bolivia (Plurinational State of)	6.61	8.82	4.61	6.61 (4.61–8.82)
96	United States of America	9.81	10.22	9.11	9.81 (9.11–10.22)
97	Saint Lucia Saint Vincent	4.09	4.98	3.38	4.09 (3.38–4.98)
98	and the Grenadines	4.91	5.62	4.3	4.91 (4.3–5.62)
99	Uruguay	7.37	7.98	6.76	7.37 (6.76–7.98)
100	Colombia	5.35	6.36	4.48	5.35 (4.48–6.36)
101	Suriname	3.58	4.61	2.68	3.58 (2.68–4.61)
102	Ecuador	5.8	7.03	4.75	5.8 (4.75–7.03)
103	Costa Rica	7.46	8.3	6.64	7.46 (6.64–8.3)
104	Peru	5.56	7.28	3.52	5.56 (3.52–7.28)
105	Trinidad and Tobago	4.37	5.53	3.38	4.37 (3.38–5.53)
106	Honduras	4.98	6.68	3.6	4.98 (3.6–6.68)
107	Algeria	2.94	3.81	2.12	2.94 (2.12–3.81)
108	Brazil	4.28	4.49	4.05	4.28 (4.05–4.49)
109	El Salvador	5.74	7.14	4.12	5.74 (4.12–7.14)
110	Guatemala Venezuela	4.33	5.03	3.75	4.33 (3.75–5.03)
111	(Bolivarian Republic of)	4.89	6.4	3.64	4.89 (3.64–6.4)
112	Panama	5.56	6.69	4.6	5.56 (4.6–6.69)
113	Mexico	5.17	5.68	4.66	5.17 (4.66–5.68)
114	Nicaragua	3.79	4.62	2.76	3.79 (2.76–4.62)
115	Paraguay	5.27	6.8	3.86	5.27 (3.86–6.8)
116	Afghanistan	9.95	14.56	5.88	9.95 (5.88–14.56)
117	Bahrain	5.64	7.3	4.1	5.64 (4.1–7.3)
118	Lebanon	6.96	9	5.13	6.96 (5.13–9)
119	Jordan	6.45	8.34	4.61	6.45 (4.61–8.34)
120	Syrian Arab Republic	7.84	10.58	5.6	7.84 (5.6–10.58)
121	Morocco	1.24	1.58	0.85	1.24 (0.85–1.58)
122	Kuwait	4.51	5.39	3.68	4.51 (3.68–5.39)
123	Nepal	2.94	4	2.18	2.94 (2.18–4)
124	Yemen	5.94	8.67	3.21	5.94 (3.21–8.67)
125	Egypt	7.22	9.06	5.07	7.22 (5.07–9.06)

126	Palestine	7.13	9	5.74	7.13 (5.74-9)
127	Tunisia	3.56	4.88	2.4	3.56 (2.4-4.88)
128	India	2.71	3.28	2.18	2.71 (2.18-3.28)
129	Türkiye	7.28	8.99	5.5	7.28 (5.5-8.99)
130	Iraq	7.28	9.31	5.46	7.28 (5.46-9.31)
131	Saudi Arabia	4.81	7.31	3.55	4.81 (3.55-7.31)
132	Qatar	6.17	8.34	4.06	6.17 (4.06-8.34)
133	Libya	7.9	10.54	5.65	7.9 (5.65-10.54)
134	Bhutan	2.97	4.48	1.98	2.97 (1.98-4.48)
135	United Arab Emirates	6.52	8.54	4.88	6.52 (4.88-8.54)
136	Bangladesh	2.85	3.89	1.99	2.85 (1.99-3.89)
137	Oman	3.93	5.12	2.89	3.93 (2.89-5.12)
138	Iran (Islamic Republic of)	6.77	8.18	4.16	6.77 (4.16-8.18)
139	Congo	2.26	3.18	1.45	2.26 (1.45-3.18)
140	Pakistan	3.65	4.87	2.8	3.65 (2.8-4.87)
141	Angola	2.09	3.17	1.23	2.09 (1.23-3.17)
142	Comoros	2.75	3.86	1.89	2.75 (1.89-3.86)
143	Burundi	2.51	3.75	1.5	2.51 (1.5-3.75)
144	Equatorial Guinea	2.14	3.5	1.14	2.14 (1.14-3.5)
145	Djibouti	2.72	4.25	1.6	2.72 (1.6-4.25)
146	Democratic Republic of the Congo Central	1.97	3	1.17	1.97 (1.17-3)
147	African Republic	2.33	3.16	1.49	2.33 (1.49-3.16)
148	Gabon	2.29	3.33	1.41	2.29 (1.41-3.33)
149	Botswana	2.97	4.21	2.04	2.97 (2.04-4.21)
150	Eritrea	2.88	3.89	1.85	2.88 (1.85-3.89)
151	Ethiopia	7.09	10.99	5.01	7.09 (5.01-10.99)
152	Kenya	2.16	2.88	1.59	2.16 (1.59-2.88)
153	Seychelles	5.45	6.61	4.36	5.45 (4.36-6.61)
154	Rwanda	2.7	3.99	1.73	2.7 (1.73-3.99)
155	Mozambique	3.81	5.2	2.74	3.81 (2.74-5.2)
156	Malawi	0.82	1.21	0.5	0.82 (0.5-1.21)
157	Somalia	2.91	4.06	1.93	2.91 (1.93-4.06)
158	Madagascar	2.11	2.91	1.37	2.11 (1.37-2.91)
159	Namibia	2.39	3.29	1.71	2.39 (1.71-3.29)
160	Zambia	2.8	3.79	1.82	2.8 (1.82-3.79)
161	Mauritius	3.71	3.92	3.46	3.71 (3.46-3.92)

	United				
162	Republic of Tanzania	2.67	3.84	1.72	2.67 (1.72–3.84)
163	Zimbabwe	4.26	5.54	3.14	4.26 (3.14–5.54)
164	Lesotho	4.35	5.78	3.19	4.35 (3.19–5.78)
165	Uganda	1.99	2.76	1.28	1.99 (1.28–2.76)
166	South Africa	3.71	4.28	2.57	3.71 (2.57–4.28)
167	Burkina Faso	1.4	1.91	0.68	1.4 (0.68–1.91)
168	Benin	1.34	1.88	0.67	1.34 (0.67–1.88)
169	Cameroon	1.47	2.18	0.73	1.47 (0.73–2.18)
170	Cabo Verde	3.45	4.39	2.55	3.45 (2.55–4.39)
171	Eswatini	4.06	6.01	2.76	4.06 (2.76–6.01)
172	Chad	1.4	1.98	0.74	1.4 (0.74–1.98)
173	Ghana	1.43	2.08	1.04	1.43 (1.04–2.08)
174	Guinea-Bissau	1.63	2.21	0.92	1.63 (0.92–2.21)
175	Gambia	0.61	0.79	0.42	0.61 (0.42–0.79)
176	Guinea	0.42	0.64	0.25	0.42 (0.25–0.64)
177	Côte d'Ivoire	0.86	1.23	0.51	0.86 (0.51–1.23)
178	Mali	0.83	1.14	0.54	0.83 (0.54–1.14)
179	Niger	1.23	1.96	0.58	1.23 (0.58–1.96)
180	Sao Tome and Principe	0.75	1.03	0.55	0.75 (0.55–1.03)
181	Togo	1.4	1.97	0.69	1.4 (0.69–1.97)
182	Liberia	1.4	1.99	0.66	1.4 (0.66–1.99)
183	Bermuda	5.5	6.77	4.5	5.5 (4.5–6.77)
184	Sierra Leone	1.33	1.87	0.64	1.33 (0.64–1.87)
185	Mauritania	1.31	1.84	0.68	1.31 (0.68–1.84)
186	Guam	3.15	3.83	2.47	3.15 (2.47–3.83)
187	Senegal	1.38	2.02	0.72	1.38 (0.72–2.02)
188	American Samoa	3.82	4.76	2.89	3.82 (2.89–4.76)
189	Cook Islands	1.34	1.75	0.95	1.34 (0.95–1.75)
190	Greenland	2.86	3.79	2.12	2.86 (2.12–3.79)
191	Nigeria	1.1	1.46	0.63	1.1 (0.63–1.46)
192	Puerto Rico	5.93	6.91	4.92	5.93 (4.92–6.91)
193	Monaco	25.09	32.83	18.21	25.09 (18.21–32.83)
194	Niue	5.71	7.06	4.22	5.71 (4.22–7.06)
195	San Marino	13.01	18.52	8.21	13.01 (8.21–18.52)
196	Tuvalu	3.81	4.82	2.57	3.81 (2.57–4.82)
197	Palau	2.57	3.16	1.94	2.57 (1.94–3.16)
198	Nauru	5.2	7.45	3.43	5.2 (3.43–7.45)
199	Saint Kitts and	4.02	4.72	3.37	4.02 (3.37–4.72)

Nevis

200	Tokelau	6.26	9.04	3.87	6.26 (3.87–9.04)
201	United States Virgin Islands	3.58	4.72	2.57	3.58 (2.57–4.72)
202	Northern Mariana Islands	3.83	4.49	2.89	3.83 (2.89–4.49)
203	South Sudan	3.15	4.34	2.07	3.15 (2.07–4.34)
204	Sudan	6.22	8.91	3.85	6.22 (3.85–8.91)
	The average ASIR	5.16504902	6.405	4.034901961	5.17 (4.03–6.41)