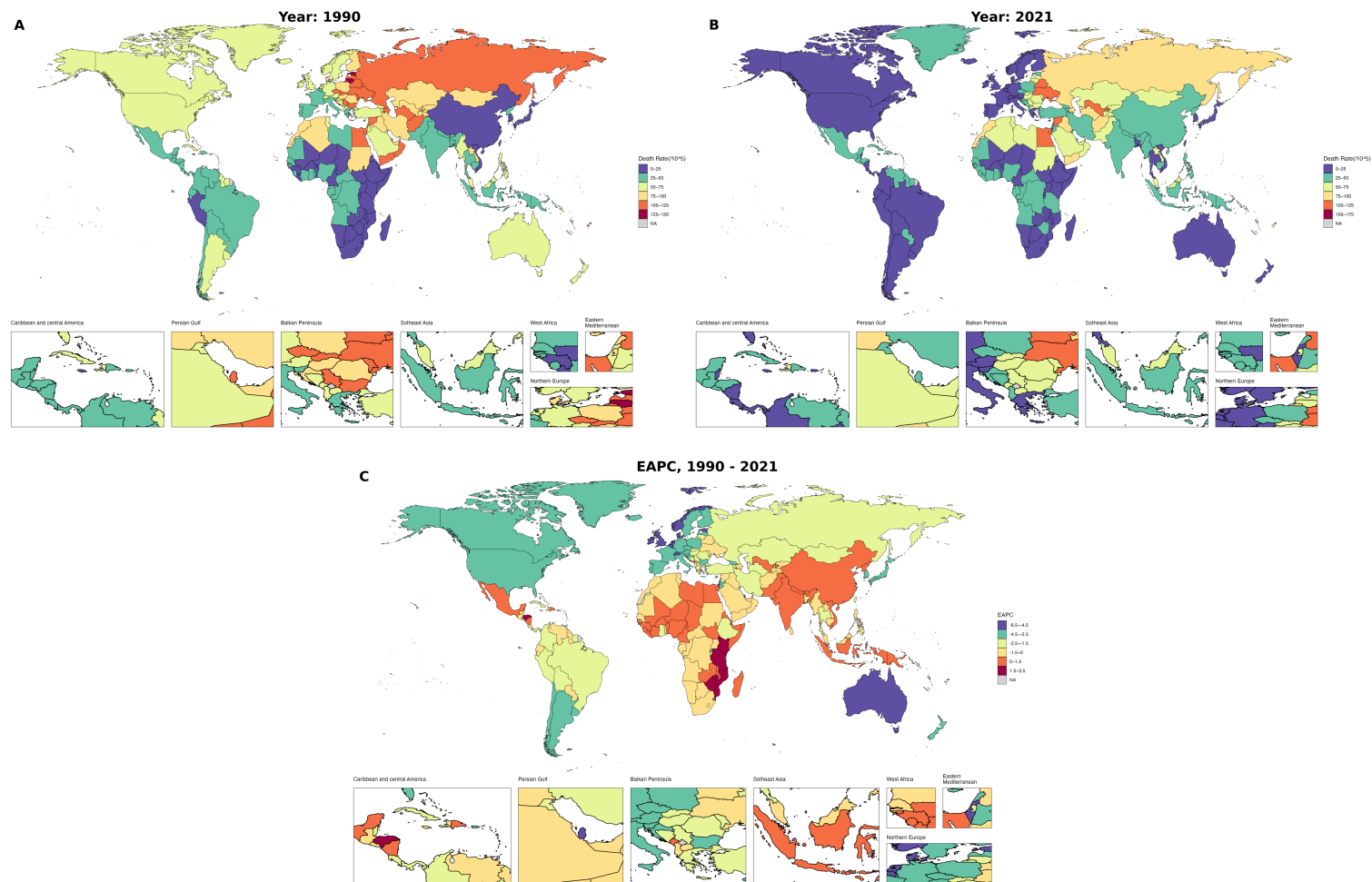


Supplementary Materials

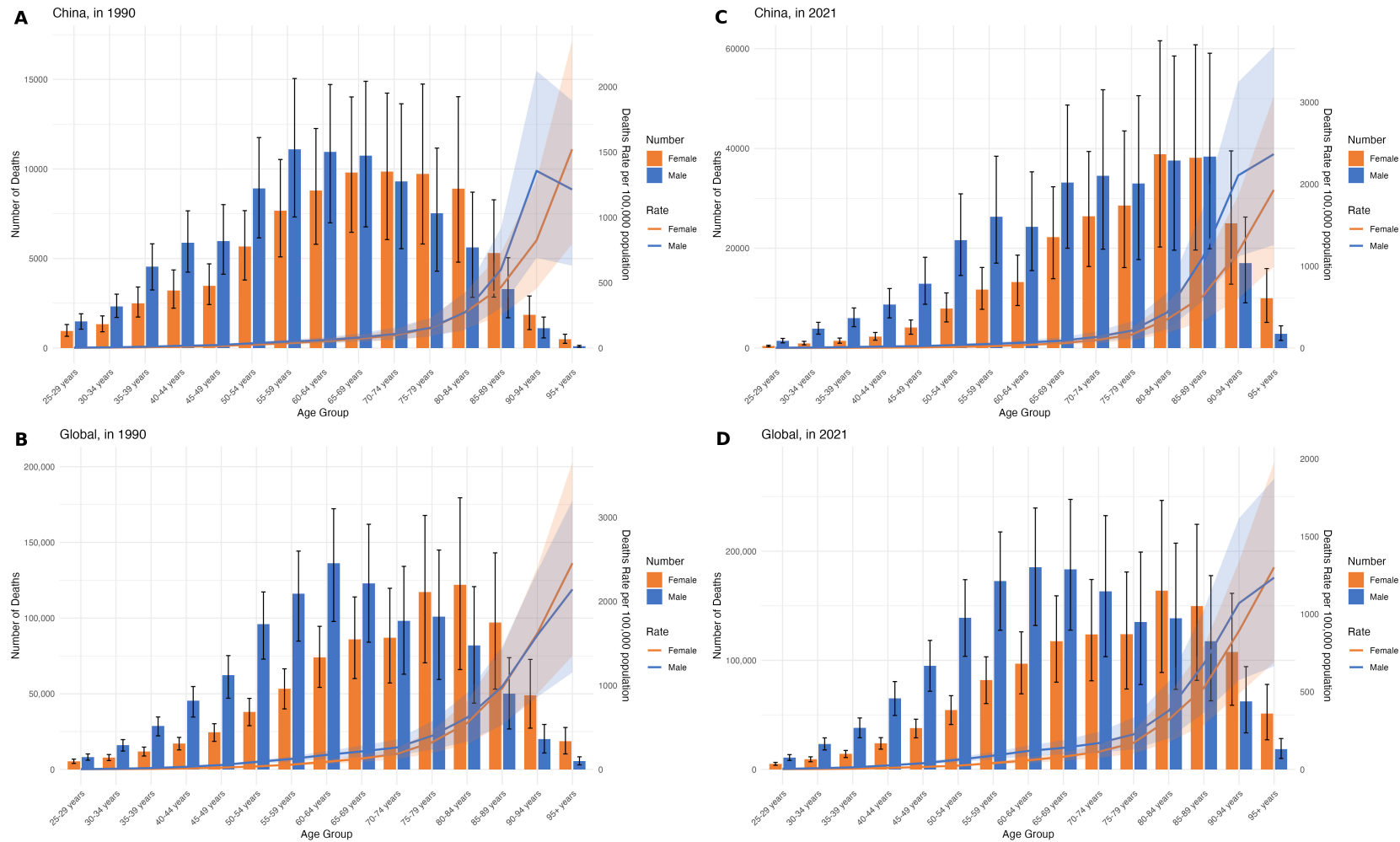
Supplementary Table 1. Number and age-standardized rates of deaths for IHD attributable to high LDL cholesterol in China and globally, 1990 and 2021.

Locations	Sex	1990		2021		1990-2021	1990-2021
		Attributed all ages number (95%UI)	Attributed age-standard rate, per 100,000 (95%UI)	Attributed all ages number (95%UI)	Attributed age-standard rate, per 100,000 (95%UI)	EAPC (95%CI)	AAPC (95%CI)
China	Male	88839 (57824,120185)	27.75 (17.54,39.45)	301637 (180257,438766)	37.61 (22.44,54.99)	1.40 (1.09, 1.71)	0.96 (0.62, 1.30)
	Female	79512 (51776,109625)	22.66 (14.23,32.21)	231194 (139881,345470)	22.58 (13.55,33.83)	0.41 (0.10, 0.72)	0.02 (-0.29, 0.32)
	Both	168351 (110405,223926)	24.87 (15.69,34.43)	532831 (328897,760814)	29.04 (18,42.02)	0.91 (0.61, 1.22)	0.47 (0.18, 0.76)
Global	Male	988681 (676242,1287137)	60.05 (39.95,80.64)	1548375 (1046343,2069235)	40.34 (26.66,54.54)	-1.38 (-1.42, -1.33)	-1.27 (-1.43, -1.11)
	Female	808827 (536103,1100827)	41.54 (27.3,56.96)	1161437 (754990,1623140)	25.01 (16.28,34.9)	-1.77 (-1.82, -1.72)	-1.63 (-1.79, -1.46)
	Both	1797508 (1209872,2401041)	50.48 (33.39,68.9)	2709813 (1803801,3683805)	32.29 (21.35,44.06)	-1.56 (-1.61, -1.51)	-1.43 (-1.59, -1.27)
High SDI	Male	333342 (229497,435536)	76.18 (51.76,100.91)	236297 (156122,321385)	25.56 (17.12,34.39)	-3.73 (-3.89, -3.57)	-3.49 (-3.60, -3.38)
	Female	270164 (174112,373081)	39.28 (25.85,53.79)	172979 (105320,247599)	12.17 (7.94,16.9)	-4.04 (-4.17, -3.92)	-3.75 (-3.90, -3.61)
	Both	603506 (405580,811417)	55.39 (37.41,74.48)	409276 (269215,567363)	18.46 (12.31,25.1)	-3.77 (-3.91, -3.63)	-3.52 (-3.66, -3.38)
High-middle SDI	Male	289540 (203067,370423)	76.1 (51.17,100.61)	398497 (270671,537522)	48.14 (32,65.69)	-1.75 (-1.99, -1.50)	-1.44 (-1.75, -1.13)
	Female	263099 (173757,359208)	51.54 (33.67,70.6)	358702 (231698,510846)	31.27 (20.26,44.31)	-1.90 (-2.13, -1.67)	-1.63 (-1.96, -1.29)
	Both	552640 (373171,728640)	63.11 (42.09,85.28)	757198 (504000,1028022)	39.27 (26.09,53.4)	-1.82 (-2.06, -1.58)	-1.51 (-1.83, -1.20)
Middle SDI	Male	195192 (133562,253936)	41.99 (27.79,56.59)	504366 (339868,674263)	42.89 (27.93,58.6)	0.14 (0.08, 0.20)	0.05 (-0.16, 0.27)
	Female	144330 (97542,194010)	31.27 (20.67,43.32)	347089 (227287,484666)	26.13 (16.9,36.76)	-0.51 (-0.56, -0.47)	-0.57 (-0.70, -0.44)
	Both	339523 (228511,449762)	36.61 (23.95,50.43)	851455 (568348,1154788)	33.99 (22.54,46.89)	-0.17 (-0.23, -0.12)	-0.24 (-0.40, -0.08)
Low-middle SDI	Male	132528 (88719,177992)	42.05 (27.32,57.72)	324705 (220066,437276)	47.25 (31.55,64.93)	0.50 (0.44, 0.57)	0.41 (0.25, 0.58)
	Female	101641 (69106,135342)	35.8 (23.65,48.62)	225004 (149691,306315)	31.59 (20.34,43.94)	-0.29 (-0.38, -0.02)	-0.36 (-0.59, -0.13)
	Both	234169 (159788,313592)	39.07 (25.54,53.89)	549709 (373305,737129)	39.18 (25.91,53.82)	0.13 (0.06, 0.19)	0.04 (-0.06, 0.14)
Low SDI	Male	36302 (23615,49353)	31.77 (20.28,44.46)	82847 (54662,115079)	34.07 (21.98,48.82)	0.26 (0.17, 0.34)	0.26 (0.04, 0.48)
	Female	28274 (18581,38812)	27.18 (17.3,38.09)	56294 (37896,76959)	23.49 (15.4,33.31)	-0.48 (-0.57, -0.39)	-0.49 (-0.68, -0.30)
	Both	64575 (43368,87753)	29.57 (19.19,41.14)	139142 (94593,189873)	28.64 (18.56,40.22)	-0.09 (-0.18, -0.01)	-0.10 (-0.29, 0.09)

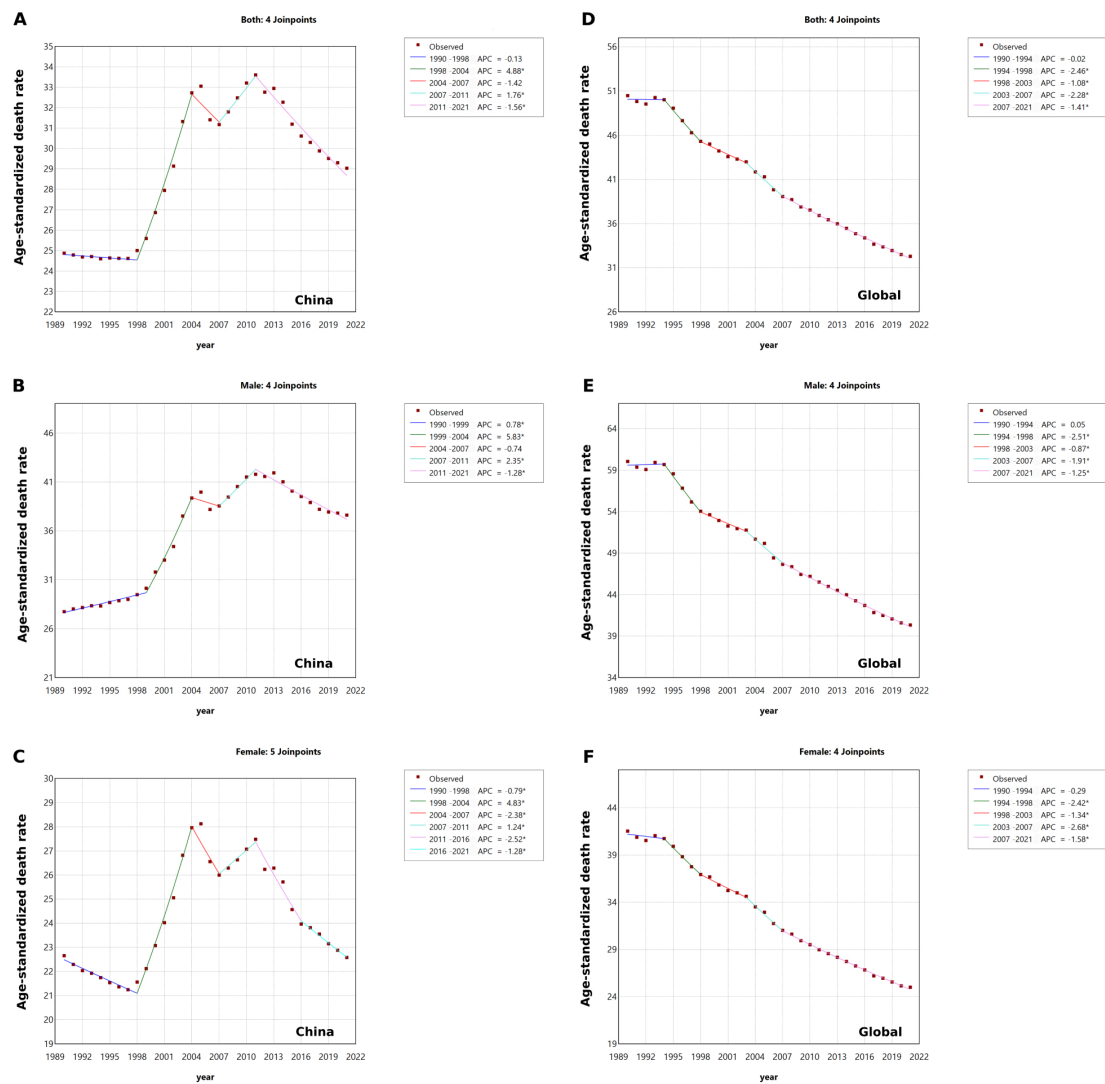
* 95% UIs: 95% uncertainty intervals; 95%CI, confidence interval; SDI, socio-demographic index; AAPC, average annual percentage change; EAPC, estimated annual percentage change



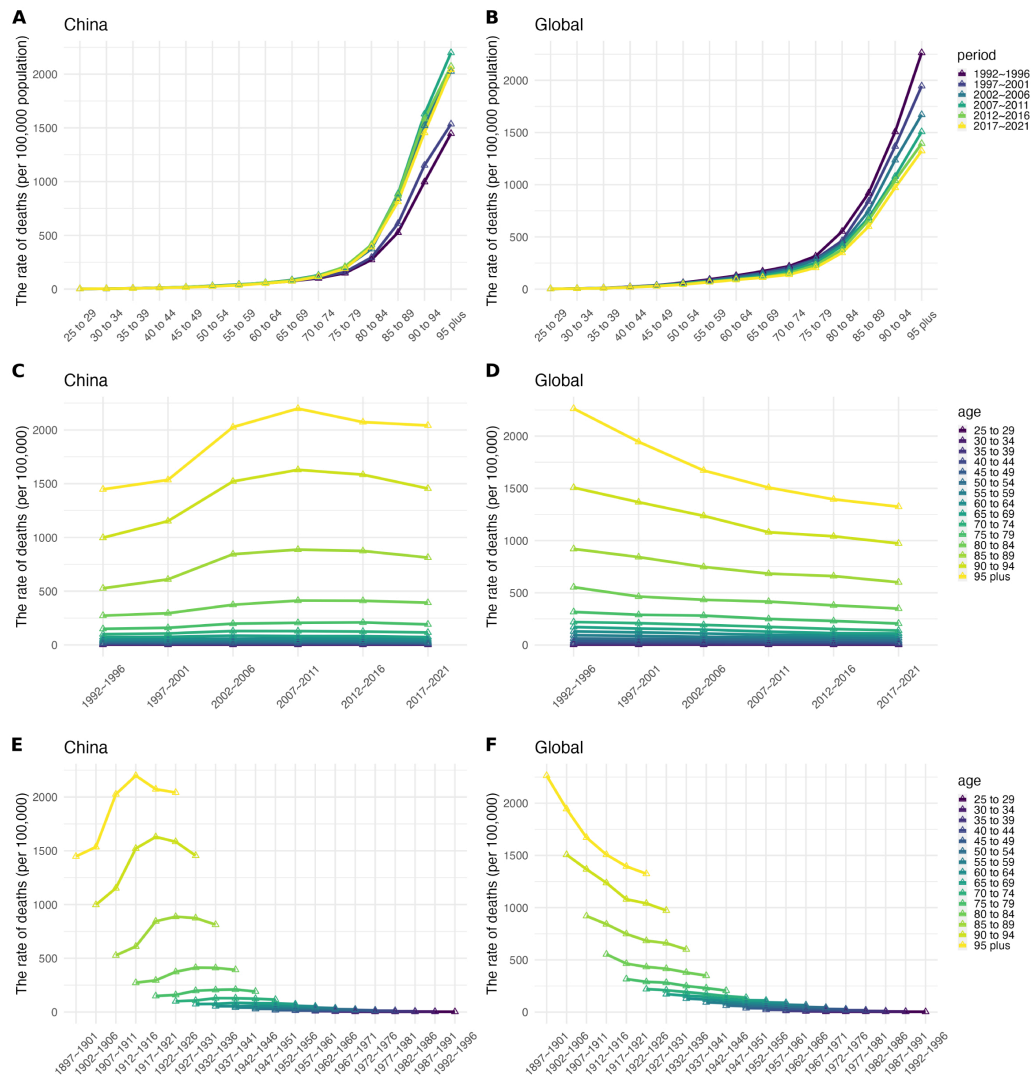
Supplementary Figure 1. Global burden of IHD attributable to high LDL cholesterol in 204 countries and territories from 1990 to 2021. (A) Age-standardized death rate (per 100,000) in 1990. (B) Age-standardized death rate (per 100,000) in 2021. (C) EAPC of age-standardized death rate from 1990 to 2021.



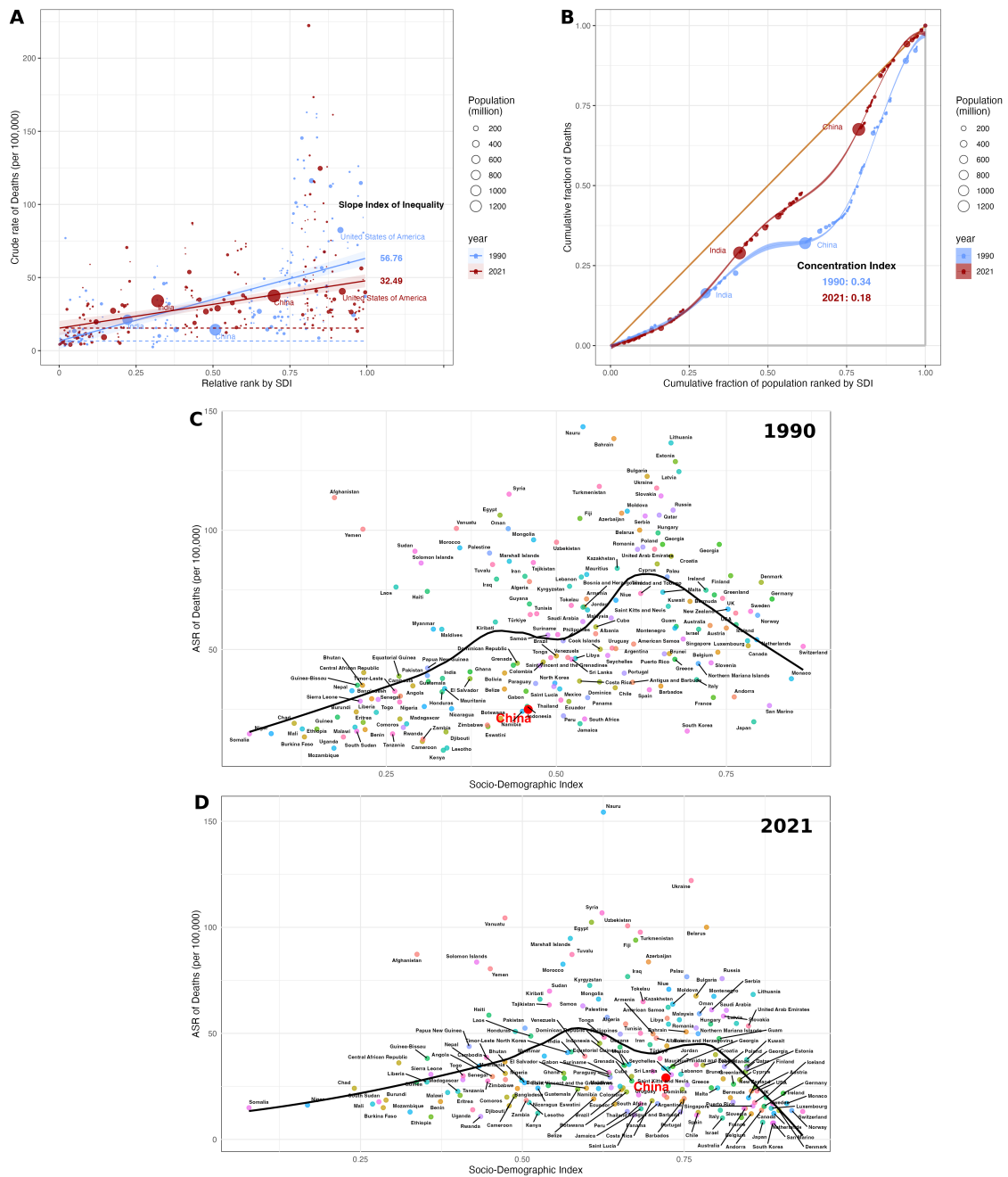
Supplementary Figure 2. Age-specific number and rates of deaths for IHD attributable to high LDL cholesterol, stratified by age and sex in China and globally, in 1990 and 2021. (A) China, 1990; (B) Global, 1990; (C) China, 2021; (D) Global, 2021.



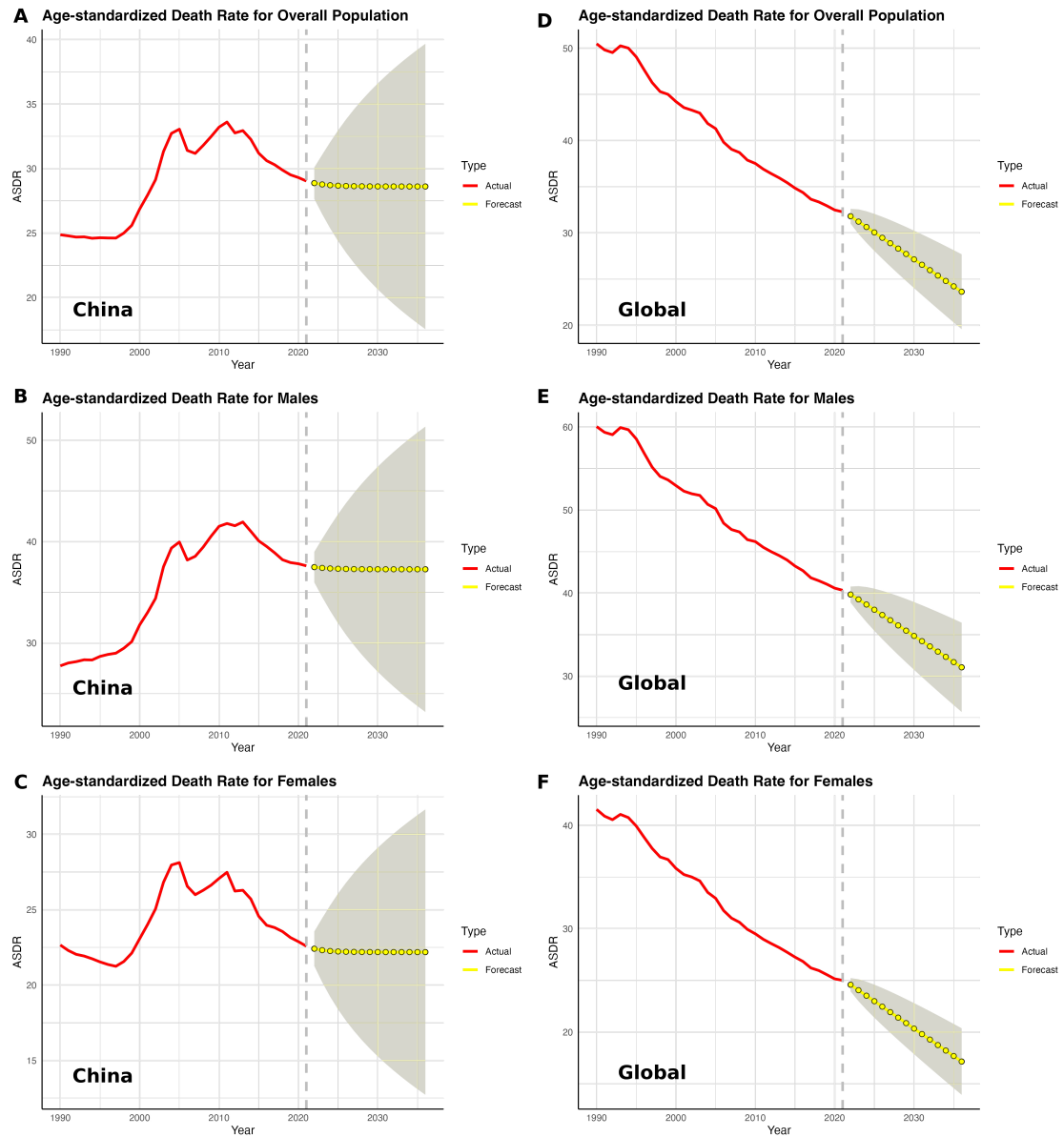
Supplementary Figure 3. Annual percent change (APC) in the age-standardized death rate for IHD attributable to high LDL cholesterol in China and globally, 1990–2021, based on Joinpoint regression analysis. (A) Overall population, China; (B) Males, China; (C) Females, China; (D) Overall population, globally; (E) Males, globally; (F) Females, globally.



Supplementary Figure 4. Trends of age-specific, period-based, and cohort-based variation of death rates for IHD attributable to high LDL cholesterol in China and globally. (A-B) Age effect: age-specific death rates by period groups; (C-D) Period effect: period-specific rates by age groups; (E-F) Cohort effect: birth cohort-specific rates by age groups.



Supplementary Figure 5. Relationship between SDI and death rate for IHD attributable to high LDL cholesterol. (A) Slope index and (B) concentration index for IHD-related deaths from 1990 to 2021, based on health inequality analysis; (C-D) Association between age-standardized death rate for IHD and SDI across 204 countries and territories in 1990 and 2021.



Supplementary Figure 6. Projected trends in age-standardized death rate of IHD attributable to high LDL cholesterol in China and globally (2022–2036).

The red line shows actual trends (1990–2021), and the yellow dotted line represents future predictions with 95% confidence intervals.