

Supplementary Table S1. Comparison of disease burden of pancreatic cancer attributed to HFPG in China between 1990 and 2021

Gender	Deaths (95% UI)		ASMR (1/100,000)		DALYs (95% UI)		ASDR (1/100,000)	
	1990	2021	1990	2021	1990	2021	1990	2021
Male	4,015 (424–8,067)	15,775 (1,707–31,553)	1.11 (0.12–2.20)	1.61 (0.17–3.21)	109,332.10 (11,437.00–219,856.40)	380,260.00 (41,823.76–761,270.90)	25.58 (2.70–51.36)	36.37 (3.98–72.72)
	2,976 (340–6,036)	10,481 (1,134–21,427)	0.75 (0.09–1.52)	0.94 (0.10–1.92)	71,795.72 (8,157.71–145,937.50)	225,026.00 (24,304.51–460,523.90)	16.61 (1.89–33.73)	19.90 (2.14–40.76)
Female	6,991 (785–13,950)	26,256 (2,945–50,078)	0.91 (0.10–1.80)	1.25 (0.14–2.39)	181,127.90 (20,150.38–364,389.60)	605,286.10 (2.35–42.23)	20.98 (3.16–53.41)	27.88 (3.6–53.41)

Note. ASMR, age-standardized mortality rate; ASDR, age-standardized DALY rate; DALYs, disability-adjusted life years; UI, uncertainty interval; HFPG, high fasting plasma glucose.

Supplementary Table S2. Total AAPCs and APCs of ASDR and ASMR due to pancreatic cancer attributed to HFPG in China from 1990 to 2021

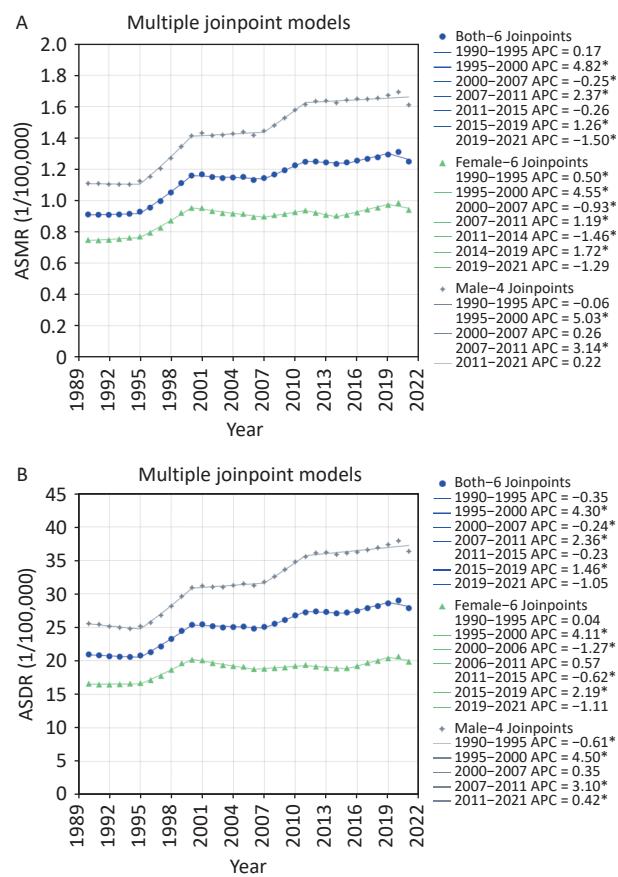
Sex	ASMR (1/100,000)			ASDR (1/100,000)		
	Period	APC (95% CI)	AAPC (95% CI)	Period	APC (95% CI)	AAPC (95% CI)
Both	1990–1995	0.17 (−0.17 to 0.50)		1990–1995	−0.35 (−0.70 to 0)	
	1995–2000	4.82 [*] (4.51 to 5.12)		1995–2000	4.30 [*] (3.99 to 4.64)	
	2000–2007	−0.25 [*] (−0.52 to −0.02)		2000–2007	−0.24 [*] (−0.56 to −0.01)	
	2007–2011	2.37 [*] (1.68 to 3.19)	1.07 [*] (1.01–1.13)	2007–2011	2.36 [*] (1.71 to 3.19)	0.96 [*] (0.90–1.02)
	2011–2015	−0.26 (−1.02 to 0.26)		2011–2015	−0.23 (−1.00 to 0.30)	
	2015–2019	1.26 [*] (0.84 to 2.06)		2015–2019	1.46 [*] (1.03 to 2.26)	
	2019–2021	−1.50 [*] (−2.48 to −0.35)		2019–2021	−1.05 (−2.06 to 0.11)	
Female	1990–1995	0.50 [*] (0.15 to 0.87)		1990–1995	0.04 (−0.59 to 0.46)	
	1995–2000	4.55 [*] (4.27 to 4.90)		1995–2000	4.11 [*] (3.67 to 4.56)	
	2000–2007	−0.93 [*] (−1.23 to −0.73)		2000–2006	−1.27 [*] (−1.80 to −0.84)	
	2007–2011	1.19 [*] (0.69 to 1.98)	0.79 [*] (0.73–0.86)	2006–2011	0.57 (−0.60 to 1.49)	0.63 [*] (0.56–0.69)
	2011–2014	−1.46 [*] (−1.98 to −0.58)		2011–2015	−0.62 [*] (−1.45 to −0.02)	
	2014–2019	1.72 [*] (1.45 to 2.53)		2015–2019	2.19 [*] (1.76 to 3.09)	
	2019–2021	−1.29 (−2.27 to 0.02)		2019–2021	−1.11 (−2.24 to 0.10)	
Male	1990–1995	−0.06 (−1.02 to 0.52)		1990–1995	−0.61 [*] (−1.08 to −0.13)	
	1995–2000	5.03 [*] (4.31 to 6.06)		1995–2000	4.50 [*] (3.96 to 5.25)	
	2000–2007	0.26 (−0.53 to 0.62)	1.32 [*] (1.25–1.39)	2000–2007	0.35 (−0.20 to 0.64)	1.22 [*] (1.16–1.29)
	2007–2011	3.14 [*] (2.24 to 4.25)		2007–2011	3.10 [*] (2.33 to 4.09)	
	2011–2021	0.22 (−0.04 to 0.43)		2011–2021	0.42 [*] (0.20 to 0.60)	

Note. APC, annual percent changes; AAPC, average annual percent changes; ASMR, age-standardized mortality rate; ASDR, age-standardized DALY rate; DALYs, disability-adjusted life years; CI, confidence interval; HFPG, high fasting plasma glucose; *Indicates that the APC and AAPC are significantly different from zero at the alpha = 0.05 level.

Supplementary Table S3. Age-period-cohort model analysis of the mortality rate and DALY rate of pancreatic cancer attributed to HFPG in China, 1990–2021

Variable	DALYs		Deaths		Variable	DALYs		Deaths	
	Coef (95% CI)	SE	Coef (95% CI)	SE		Coef (95% CI)	SE	Coef (95% CI)	SE
Age					Cohort				
25–29	-3.37 (-3.41 to -3.34)*	0.02	-3.97 (-4.21 to -3.73)*	0.12	1897–1901	1.13 (0.88 to 1.39)*	0.13	1.52 (0.77 to 2.28)*	0.38
30–34	-2.28 (-2.30 to -2.25)*	0.01	-2.85 (-2.98 to -2.71)*	0.07	1902–1906	0.97 (0.89 to 1.06)*	0.04	1.36 (1.11 to 1.61)*	0.13
35–39	-1.34 (-1.36 to -1.32)*	0.01	-1.86 (-1.95 to -1.77)*	0.05	1907–1911	0.78 (0.72 to 0.83)*	0.03	1.12 (0.97 to 1.28)*	0.08
40–44	-0.68 (-0.70 to -0.66)*	0.01	-1.15 (-1.22 to -1.07)*	0.04	1912–1916	0.67 (0.62 to 0.71)*	0.02	0.96 (0.83 to 1.09)*	0.06
45–49	-0.21 (-0.22 to -0.20)*	0.01	-0.62 (-0.68 to -0.56)*	0.03	1917–1921	0.56 (0.52 to 0.59)*	0.02	0.81 (0.70 to 0.92)*	0.06
50–54	0.29 (0.28 to 0.30)*	0.00	-0.04 (-0.09 to 0.01)	0.02	1922–1926	0.47 (0.44 to 0.51)*	0.02	0.68 (0.58 to 0.77)*	0.05
55–59	0.67 (0.67 to 0.68)*	0.00	0.43 (0.39 to 0.47)*	0.02	1927–1931	0.39 (0.36 to 0.42)*	0.01	0.55 (0.46–0.63)*	0.05
60–64	0.93 (0.92 to 0.93)*	0.00	0.79 (0.76 to 0.83)*	0.02	1932–1936	0.28 (0.26 to 0.31)*	0.01	0.39 (0.31 to 0.47)*	0.04
65–69	1.08 (1.07–1.09)*	0.00	1.07 (1.04–1.11)*	0.02	1937–1941	0.15 (0.13 to 0.18)*	0.01	0.22 (0.14 to 0.29)*	0.04
70–74	1.23 (1.22 to 1.24)*	0.01	1.38 (1.34 to 1.41)*	0.02	1942–1946	0.02 (0.00 to 0.04)*	0.01	0.04 (-0.03 to 0.10)	0.03
75–79	1.15 (1.14 to 1.16)*	0.01	1.47 (1.43 to 1.51)*	0.02	1947–1951	-0.07 (-0.09 to -0.06)*	0.01	-0.10 (-0.16 to -0.04)*	0.03
80–84	0.97 (0.96–0.99)*	0.01	1.49 (1.44 to 1.54)*	0.03	1952–1956	-0.21 (-0.22 to -0.19)*	0.01	-0.27 (-0.33 to -0.21)*	0.03
85–89	0.87 (0.85 to 0.89)*	0.01	1.57 (1.51 to 1.63)*	0.03	1957–1961	-0.32 (-0.33 to -0.31)*	0.01	-0.43 (-0.49 to -0.37)*	0.03
90–94	0.57 (0.55 to 0.60)*	0.01	1.36 (1.28 to 1.45)*	0.04	1962–1966	-0.48 (-0.49 to -0.47)*	0.00	-0.63 (-0.70 to -0.57)*	0.03
95–99	0.11 (0.06 to 0.16)*	0.03	0.91 (0.75 to 1.06)*	0.08	1967–1971	-0.56 (-0.57 to -0.55)*	0.00	-0.76 (-0.83 to -0.69)*	0.03
Period					1972–1976				
1992–1996	-0.47 (-0.48 to -0.46)*	0.00	-0.59 (-0.63 to -0.56)*	0.02	1977–1981	-0.74 (-0.75 to -0.72)*	0.01	-1.01 (-1.12 to -0.91)*	0.05
1997–2001	-0.22 (-0.22 to -0.21)*	0.00	-0.28 (-0.30 to -0.25)*	0.01	1982–1986	-0.76 (-0.78 to -0.74)*	0.01	-1.08 (-1.22 to -0.94)*	0.07
2002–2006	-0.07 (-0.07 to -0.06)*	0.00	-0.08 (-0.10 to -0.07)*	0.01	1987–1991	-0.76 (-0.79 to -0.73)*	0.02	-1.13 (-1.35 to -0.92)*	0.11
2007–2011	0.09 (0.09–0.10)*	0.00	0.12 (0.11–0.14)*	0.01	1992–1996	-0.84 (-0.91 to -0.77)*	0.04	-1.29 (-1.84 to -0.75)*	0.28
2012–2016	0.25 (0.25–0.26)*	0.00	0.32 (0.30–0.35)*	0.01					
2017–2021	0.41 (0.40–0.41)*	0.00	0.51 (0.48–0.54)*	0.02					

Note. DALYs, disability-adjusted life years; CI, confidence interval; Coef, cohort effect coefficient; SE, Standard Error; HFPG, high fasting plasma glucose; * Indicates that the cohort effect coefficient is significantly different from zero at the alpha = 0.05 level.



Supplementary Figure S1. Joinpoint regression analysis of ASMR (A) and ASDR (B) of pancreatic cancer attributed to HFPGL in China from 1990 to 2021 by gender. ASMR, age-standardized mortality rate; ASDR, age-standardized DALY rate; DALYs, disability-adjusted life years; HFPGL, high fasting plasma glucose;

*Indicates that the annual percent change (APC) is significantly different from zero at the alpha = 0.05 level.