

Supplementary Table 1: Age-specific incidence, mortality, and prevalence rates of MM by age and sex in 2019 (per 100,000).

Age groups (year)	Incidence		Mortality		Prevalence	
	Male	Female	Male	Female	Male	Female
0	0.00	0.00	0.00	0.00	0.00	0.00
1–4	0.00	0.00	0.00	0.00	0.00	0.00
5–9	0.00	0.00	0.00	0.00	0.00	0.00
10–14	0.00	0.00	0.00	0.00	0.00	0.00
15–19	0.00	0.00	0.00	0.00	0.00	0.00
20–24	0.28 (0.10–0.42)	0.14 (0.05–0.22)	0.12 (0.05–0.19)	0.07 (0.02–0.10)	1.31 (0.49–2.01)	0.60 (0.21–0.95)
25–29	0.26 (0.11–0.38)	0.11 (0.04–0.17)	0.12 (0.05–0.18)	0.06 (0.02–0.09)	1.17 (0.49–1.72)	0.44 (0.16–0.69)
30–34	0.24 (0.13–0.32)	0.13 (0.06–0.20)	0.13 (0.07–0.17)	0.08 (0.03–0.12)	0.99 (0.54–1.36)	0.52 (0.21–0.80)
35–39	0.39 (0.22–0.52)	0.21 (0.10–0.31)	0.22 (0.12–0.29)	0.13 (0.06–0.18)	1.50 (0.84–2.05)	0.77 (0.36–1.13)
40–44	0.59 (0.37–0.79)	0.35 (0.19–0.48)	0.35 (0.22–0.47)	0.22 (0.13–0.31)	2.18 (1.34–2.97)	1.19 (0.63–1.72)
45–49	0.92 (0.61–1.28)	0.55 (0.33–0.75)	0.53 (0.34–0.74)	0.34 (0.20–0.46)	3.54 (2.31–5.01)	1.99 (1.15–2.78)
50–54	1.70 (1.13–2.38)	1.10 (0.69–1.47)	0.98 (0.62–1.38)	0.68 (0.45–0.91)	6.49 (4.27–9.25)	3.93 (2.39–5.41)
55–59	2.77 (1.84–3.93)	1.85 (1.24–2.52)	1.66 (1.09–2.34)	1.18 (0.80–1.56)	10.18 (6.69–14.39)	6.49 (4.17–8.93)
60–64	4.09 (2.69–5.65)	2.68 (1.77–3.58)	2.67 (1.67–3.73)	1.87 (1.28–2.49)	13.32 (8.66–18.61)	8.19 (5.29–11.05)
65–69	5.50 (3.58–7.51)	3.83 (2.66–5.00)	3.82 (2.43–5.17)	2.90 (2.08–3.79)	15.94 (10.05–21.86)	10.18 (6.71–13.73)
70–74	7.30 (4.74–9.93)	5.10 (3.57–6.85)	5.39 (3.43–7.17)	4.06 (2.92–5.39)	20.03 (12.56–27.64)	12.61 (8.56–17.12)
75–79	7.48 (5.02–9.84)	5.26 (3.78–7.00)	6.22 (4.09–8.14)	4.81 (3.48–6.30)	16.10 (10.49–21.59)	10.02 (7.06–13.58)
>80	8.87 (6.01–11.34)	3.94 (2.86–5.32)	8.16 (5.46–10.35)	3.93 (2.91–5.24)	15.52 (10.19–20.36)	6.16 (4.33–8.46)

Data in parentheses are 95% UIs. MM: Multiple myeloma; UI: Uncertainty interval.

Supplementary Table 2: DALYs of MM by different provinces in 2019.

Province	DALYs	
	Number	ASR
Anhui	13,313.56 (9745.38–17,664.83)	14.48 (10.62–18.93)
Beijing	7151.03 (2770.45–9662.73)	20.85 (7.95–28.29)
Chongqing	7145.39 (5247.86–9478.25)	17.19 (12.52–22.61)
Fujian	7847.33 (5327.78–10,421.09)	14.82 (9.95–19.47)
Gansu	5609.05 (4369.34–7003.00)	15.52 (12.11–19.33)
Guangdong	20,934.91 (12,446.21–27,163.58)	14.84 (8.91–19.11)
Guangxi	9908.05 (7394.01–12,865.19)	15.87 (11.85–20.61)
Guizhou	6991.56 (4945.62–9464.25)	15.36 (10.90–20.72)
Hainan	1701.66 (1226.85–2254.50)	14.32 (10.43–18.93)
Hebei	18,750.66 (13,256.46–28,503.13)	17.31 (12.30–26.06)
Heilongjiang	10,698.23 (8063.20–15,205.54)	16.54 (12.61–22.94)
Henan	18,859.25 (13,581.71–27,815.08)	14.54 (10.49–21.25)
Hubei	15,030.48 (10,433.90–19,234.19)	16.90 (11.52–21.46)
Hunan	19,967.12 (12,828.55–26,471.91)	20.29 (12.72–27.01)
Inner Mongolia	6558.83 (4696.69–9611.39)	17.17 (12.39–24.70)
Jiangsu	22,125.98 (12,612.74–29,698.57)	16.58 (9.29–22.44)
Jiangxi	10,340.90 (6607.03–13,151.28)	17.16 (10.91–21.93)
Jilin	8037.99 (5964.84–10,570.98)	17.73 (12.93–22.84)
Liaoning	14,428.43 (9951.44–19,366.04)	18.31 (12.36–24.33)
Ningxia	1436.60 (1020.48–1946.60)	17.39 (12.49–23.49)
Qinghai	1330.34 (961.99–2031.19)	18.21 (13.39–27.75)
Shaanxi	9581.82 (6871.73–12492.44)	16.90 (12.11–21.93)
Shandong	22,275.12 (15,767.83–33,108.08)	14.27 (10.15–20.97)
Shanghai	10,210.37 (3059.74–14,771.63)	23.73 (7.01–34.38)
Shanxi	8237.63 (5847.96–12,078.07)	15.71 (11.26–22.83)
Sichuan	25,766.45 (18,132.37–33,041.89)	19.47 (13.41–25.09)

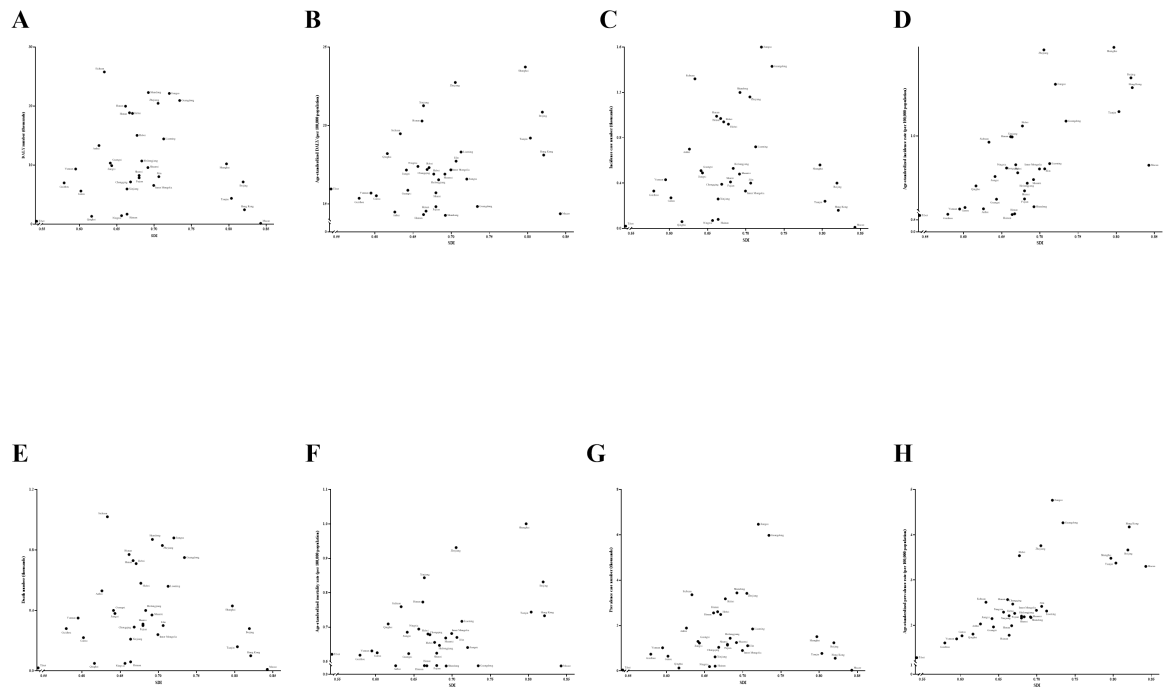
Tianjin	4372.66 (2513.66–5753.79)	19.20 (10.96–25.22)
Tibet	496.03 (358.83–774.79)	15.95 (11.61–24.68)
Xinjiang	5962.12 (3746.14–9518.61)	21.26 (13.50–33.86)
Yunnan	9341.51 (7169.48–12,851.15)	15.69 (12.20–21.33)
Zhejiang	20,461.23 (7455.54–29,148.30)	22.75 (8.13–32.44)
Hong Kong*	2436.31 (1081.44–3602.85)	18.11 (8.03–26.76)
Macao*	144.70 (72.01–231.10)	14.37 (7.20–22.81)

ASR: Age-standardized rate (per 100,000 population); MM: Multiple myeloma; UI: Uncertainty interval. Data in parentheses are 95% UIs. *Special administrative regions.

Supplementary Table 3: Trends in disease burden of MM from 1990 to 2019.

Variable	Trend 1		Trend 2		Trend 3	
	Year	APC	Year	APC	Year	APC
Number						
Incidence	1990–1994	2.74*	1994–2006	3.78*	2006–2019	4.59*
Mortality	1990–1992	1.72*	1992–2007	2.92*	2007–2019	3.84*
Prevalence	1990–2003	4.85*	2003–2011	6.54*	2011–2019	5.20*
YLLs	1990–2000	3.10*	2000–2006	1.92*	2006–2019	3.43*
YLDs	1990–1994	3.27*	1994–2001	4.61*	2001–2019	5.53*
DALYs	1990–2000	3.12*	2000–2006	2.01*	2006–2019	3.49*
ASR						
Incidence	1990–2007	0.70*	2007–2010	2.34*	2010–2019	1.18*
Mortality	1990–2008	-0.07*	2008–2011	1.02	2011–2019	0.41*
Prevalence	1990–2002	2.01*	2002–2011	3.36*	2011–2019	2.33*
YLLs	1990–2001	0.21*	2001–2007	-0.68*	2007–2019	0.68*
YLDs	1990–1999	1.16*	1999–2012	2.51*	2012–2019	1.98*
DALYs	1990–2001	0.24*	2001–2007	-0.60*	2007–2019	0.72*

APC: Annual percentage change; ASR: Age-standardized rate; DALYs: Disability-adjusted life years; MM: Multiple myeloma; YLDs: Years lived with disability; YLLs: Years of life lost. *APC is significantly different from zero.



Supplementary Figure 1. Relationship between disease burden of multiple myeloma and sociodemographic index (SDI) at the provincial level (A) number of disability-adjusted life years (DALYs) vs. SDI, (B) age-standardized DALYs vs. SDI, (C) incidence case number vs. SDI, (D) age-standardized incidence rate vs. SDI, (E) death number vs. SDI, (F) age-standardized mortality rate vs. SDI, (G) prevalence case number vs. SDI, (H) age-standardized prevalence rate vs. SDI