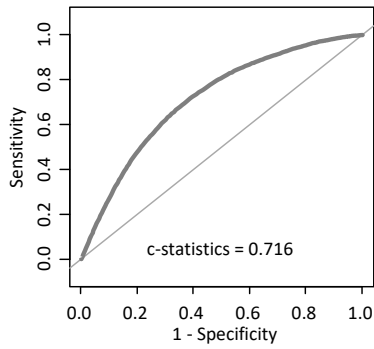


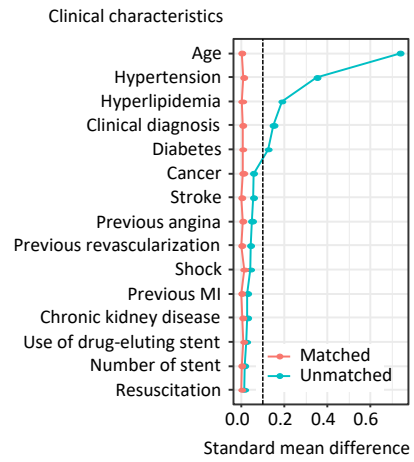
Supplementary Data

Supplementary Figure 1. Age group-stratified balancing of clinical characteristics between males and females

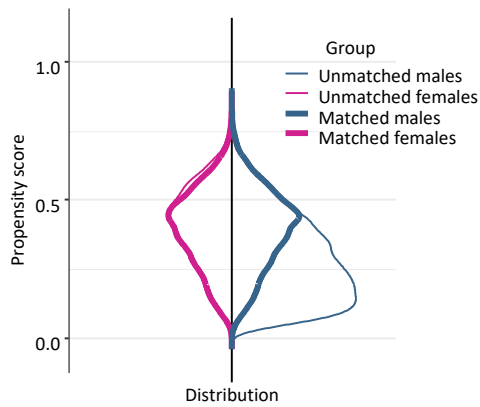
A



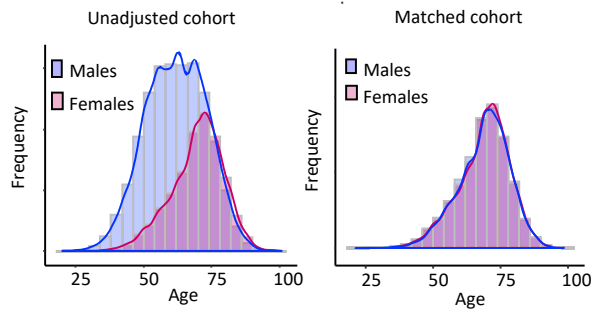
B



C



D



Panel A: An age group-stratified clinical characteristics-matched cohort was generated using the propensity score from the following parameters: age, hypertension, diabetes, hyperlipidemia, chronic kidney disease, neoplasm, prior medical history of stroke, MI, revascularization, resuscitation, shock, stent materials (bare metal, first generation, or second generation drug-eluting stent) and numbers, and diagnosis including angina, non ST-elevation myocardial infarction (NSTEMI), or ST-elevation myocardial infarction (STEMI). This propensity score showed moderate predicting performance (c-statistics = 0.716).

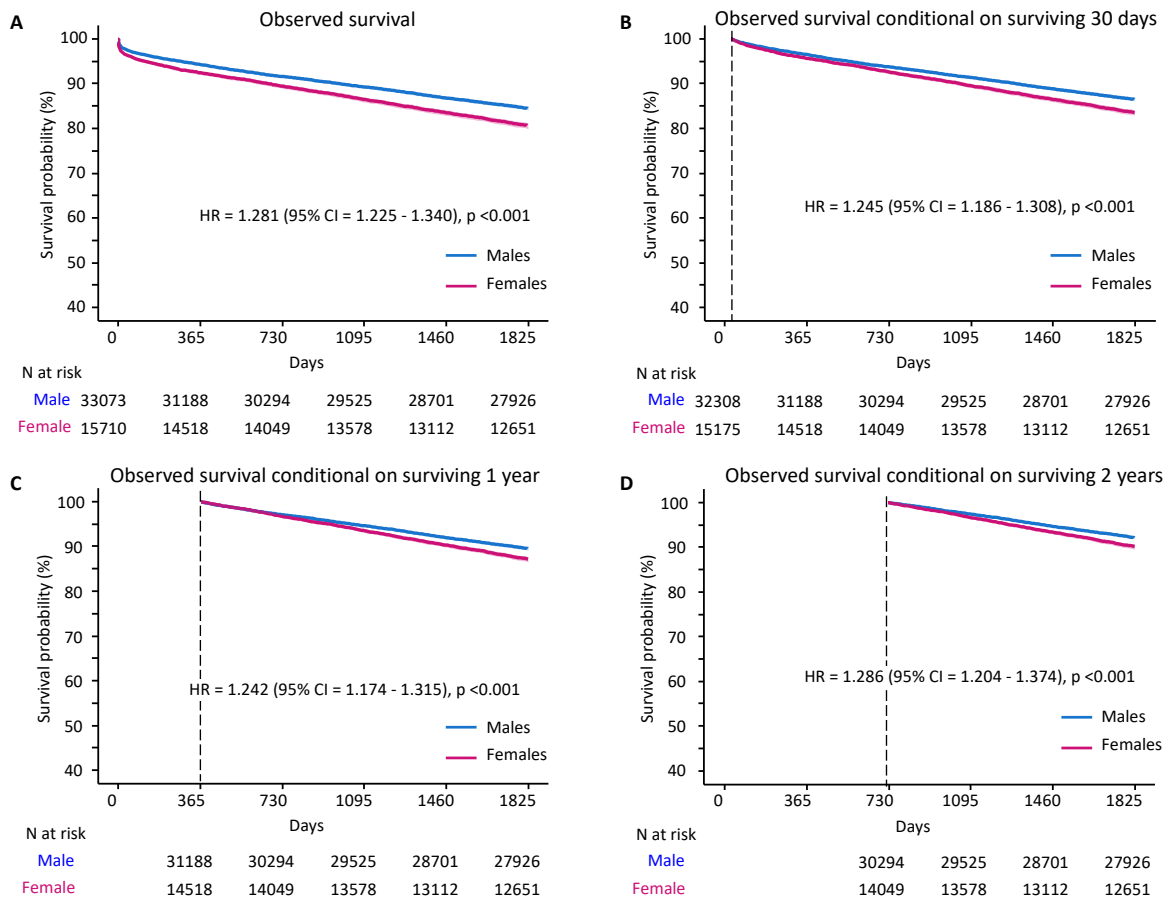
Panel B: Love plot showing that variables between males and females were balanced (standard mean difference < 0.1) after matching of propensity for clinical characteristics.

Panel C: Unlike unmatched cohort (thin lines), distribution of propensity score is symmetrical in matched cohort (thick lines).

Panel D: Distribution of age between male and female was equalized in matched cohort.

Note that most of excluded patients were young males.

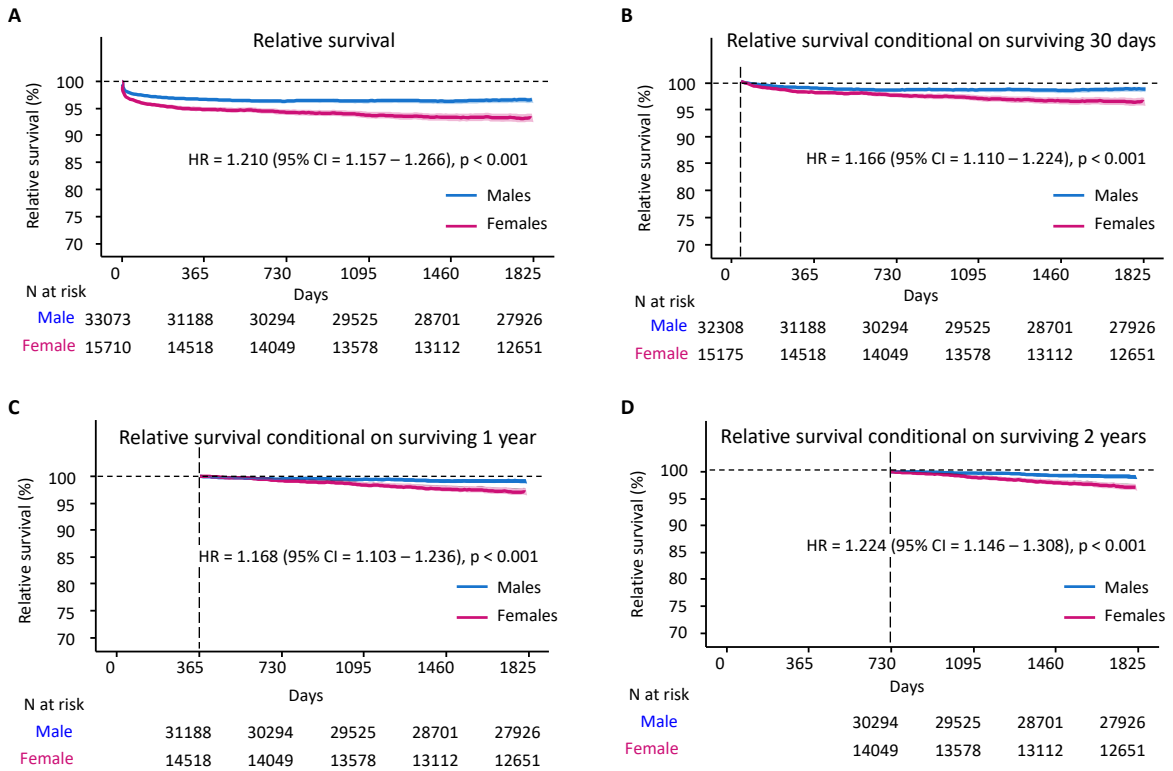
Supplementary Figure 2. Observed survival conditional on surviving 0 days, 30 days, 1 year, and 2 years



Kaplan-Meier survival plots of male and female undergoing PCI. Hazard ratios (95% confidence interval) are shown using Cox model.

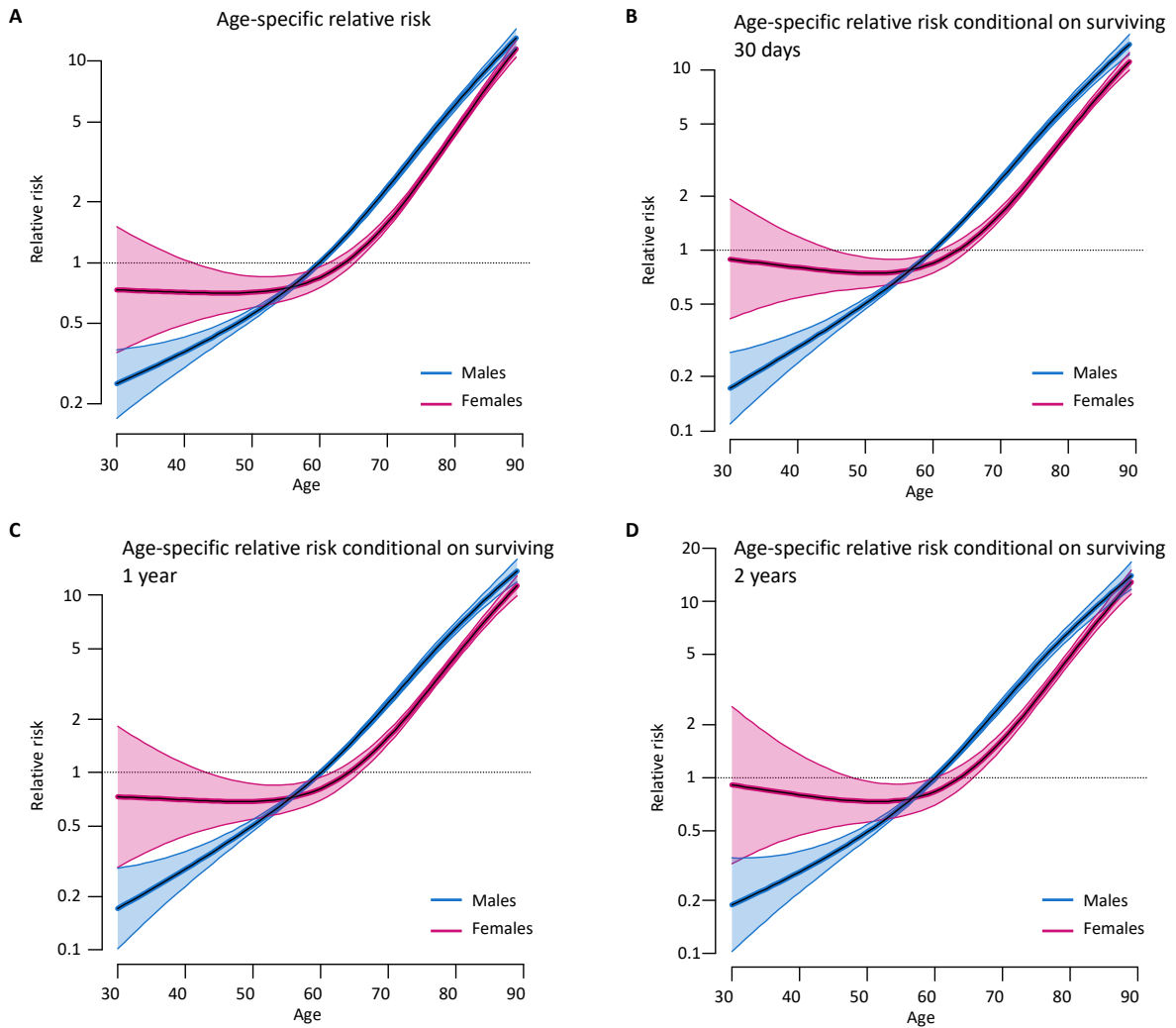
Kaplan-Meier survival plots of male and female undergoing PCI. Hazard ratios (95% confidence interval) are shown using Cox model.

Supplementary Figure 3. Relative survival conditional on surviving 0 days, 30 days, 1 year, and 2 years



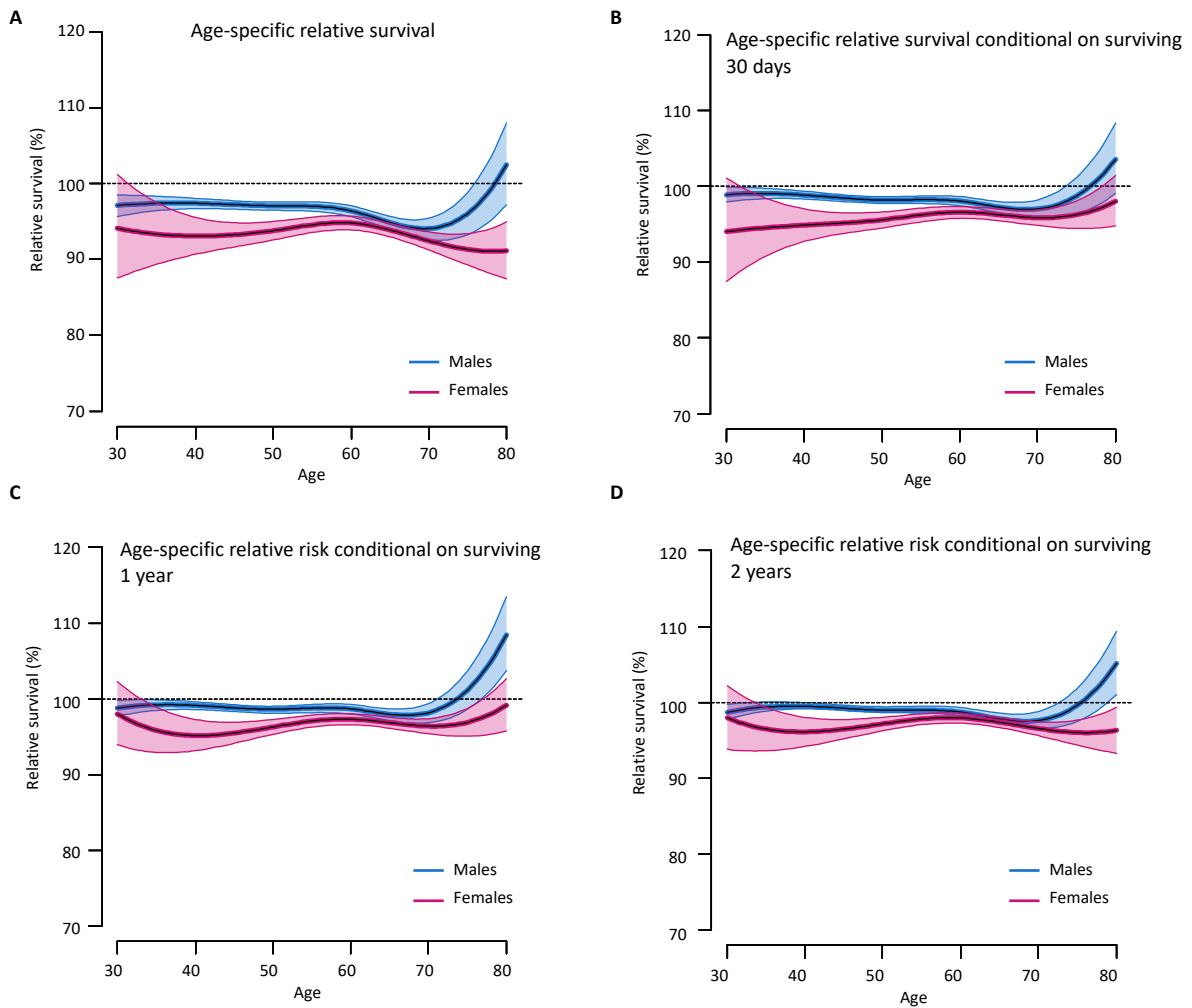
Relative survival between groups was compared using a Cox model in transformed time. Relative survival is the ratio of observed crude survival in the cohort of interest and age- and sex-matched expected survival in the corresponding general population, and may exceed 100%.

Supplementary Figure 4. Age-specific relative risk of observed survival of males and females conditional on surviving 0 days, 30 days, 1 year, and 2 years



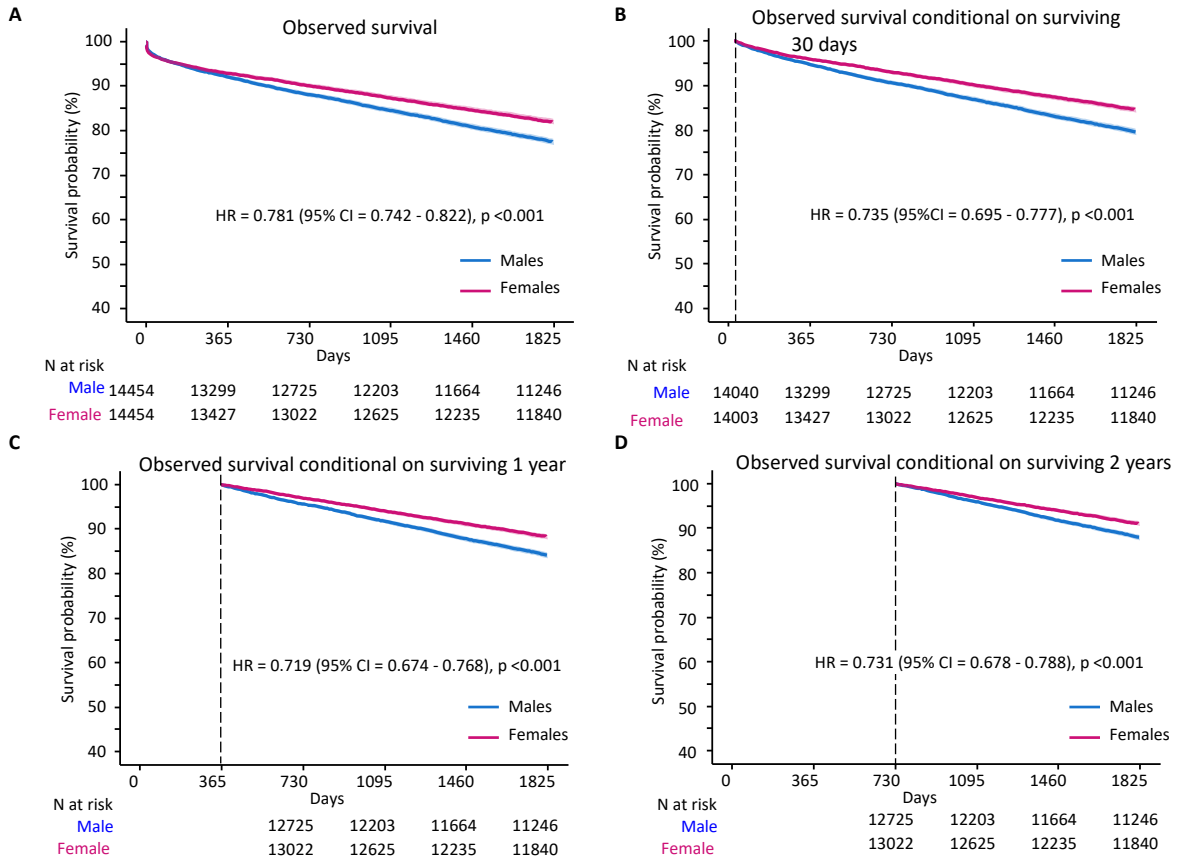
The relative risk of observed survival according to age was shown with a restricted penalized spline model using the survival of 60-year-old males as the reference. Relative risks and 95% CIs are indicated by thick solid lines and shaded areas, respectively.

Supplementary Figure 5. Age-specific relative survival of males and females conditional on surviving 0 days, 30 days, 1 year, and 2 years

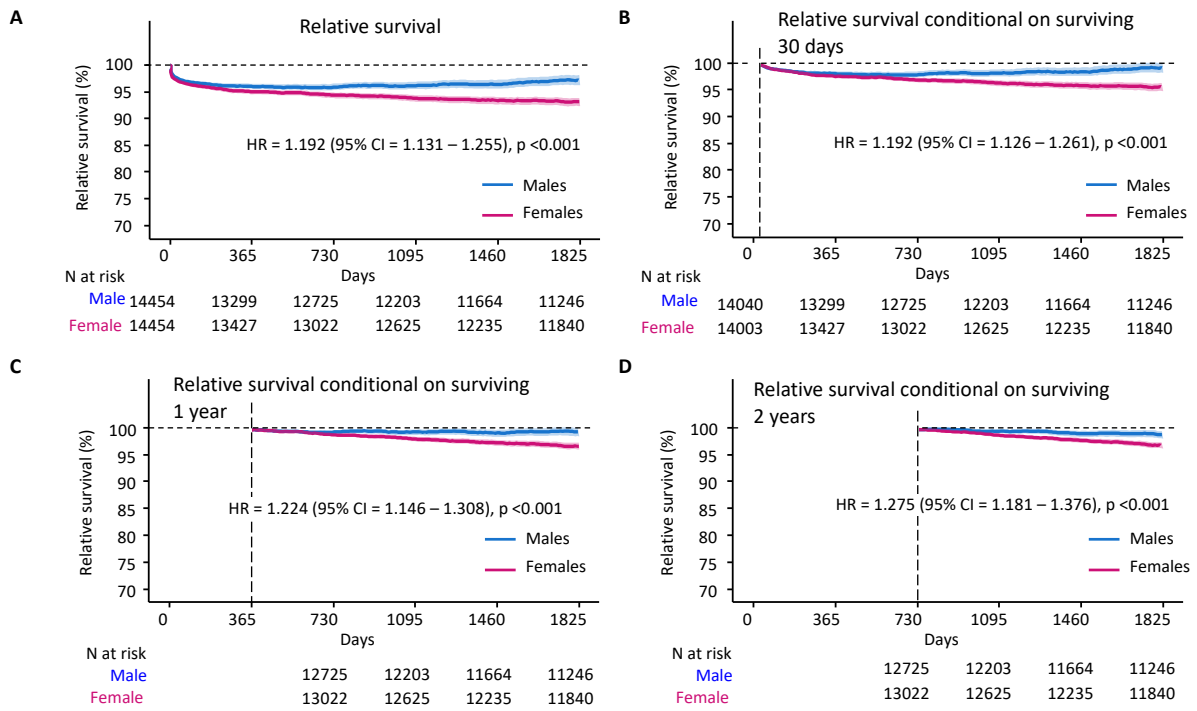


The relative survival according to age was shown using an interpolated cubic spline fitting of age group-specific relative survivals. Relative survival and 95% confidence interval are indicated by thick solid lines and shaded areas, respectively.

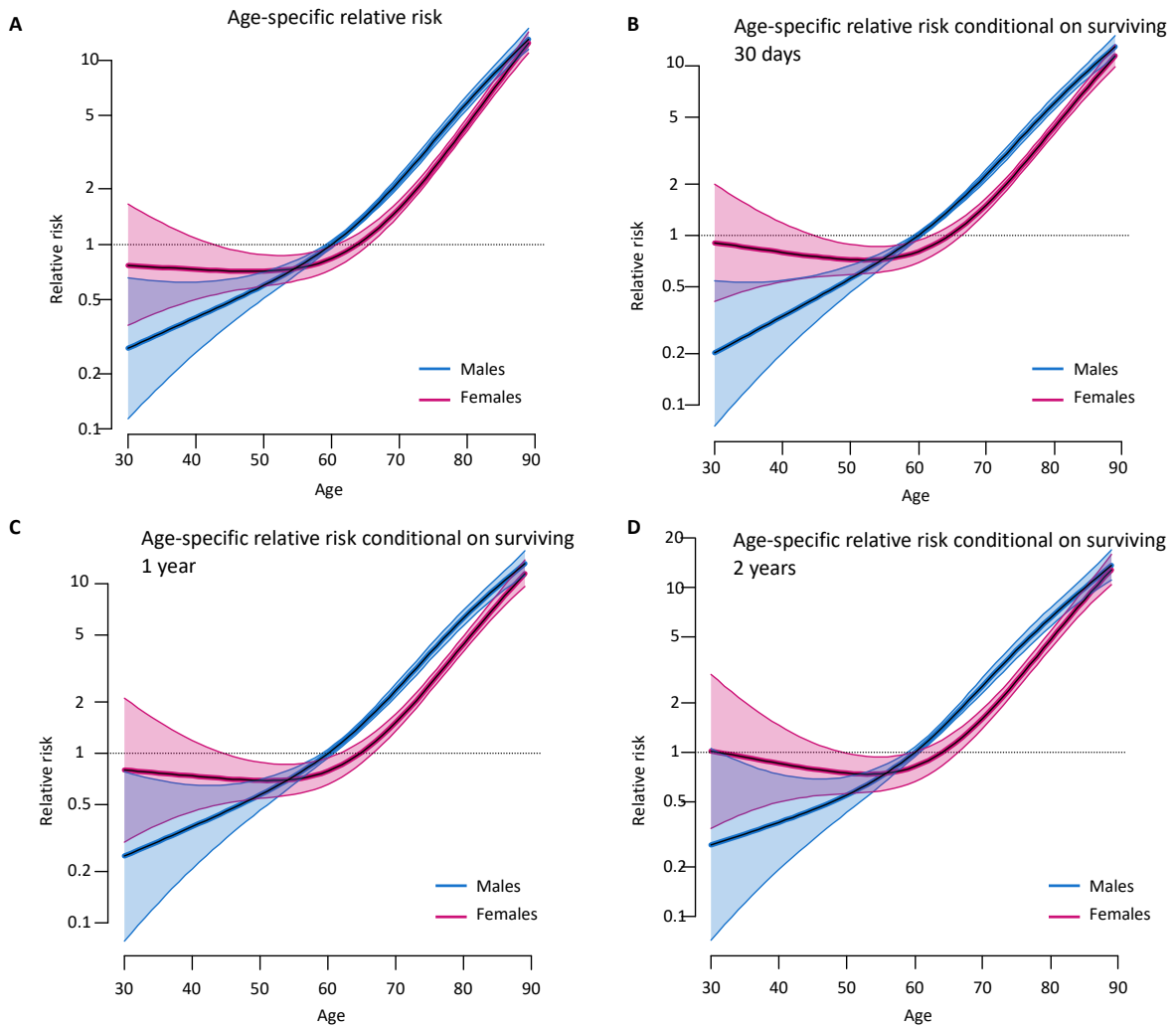
Supplementary Figure 6. Observed survival of males and females conditional on surviving 0 days, 30 days, 1 year, and 2 years, matched by propensity for clinical characteristics



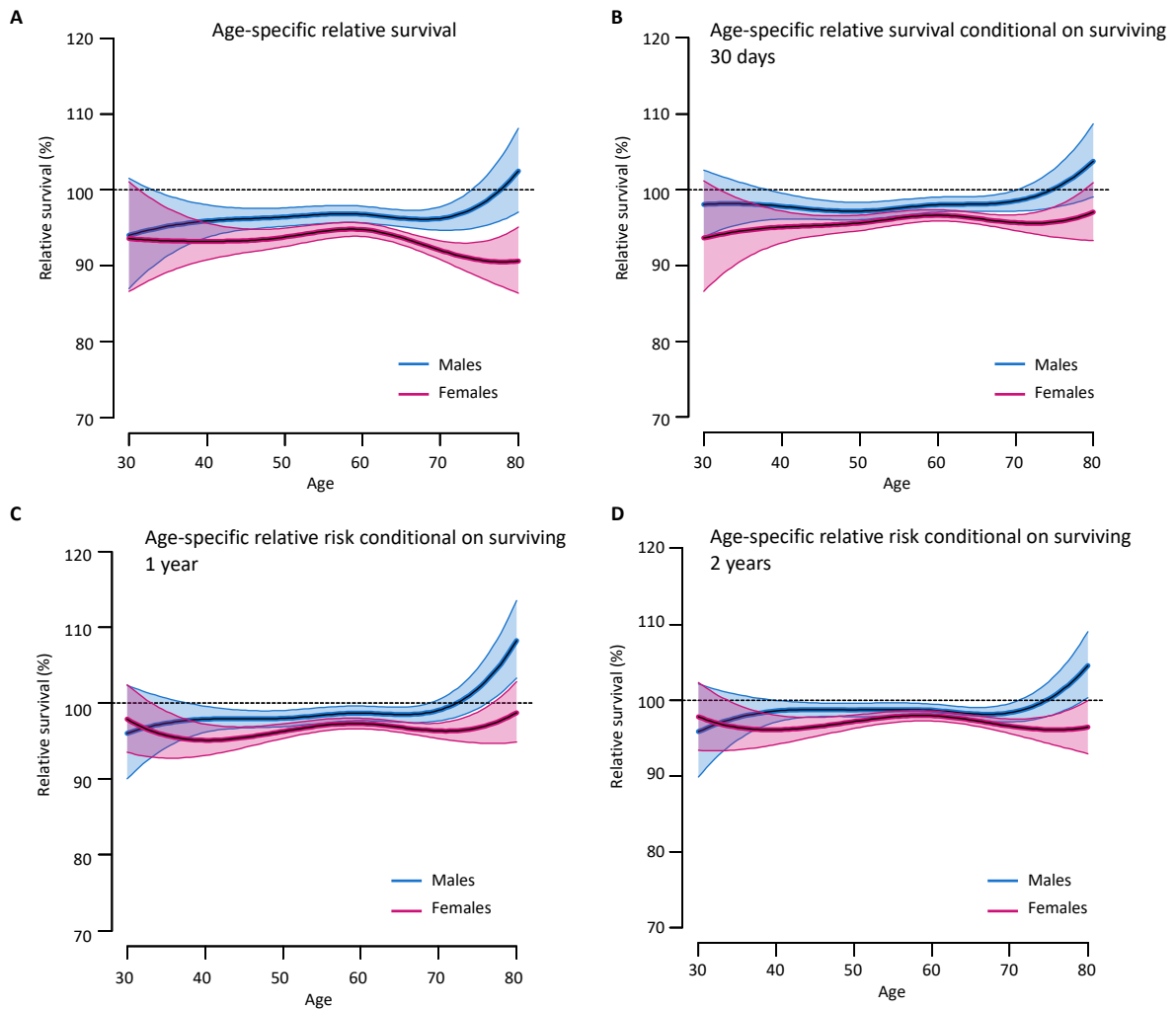
Supplementary Figure 7. Relative survival of males and females conditional on surviving 0 days, 30 days, 1 year, and 2 years, matched by propensity for clinical characteristics



Supplementary Figure 8. Age-specific relative risk of observed survival of males and females conditional on surviving 0 days, 30 days, 1 year, and 2 years, matched by propensity for clinical characteristics



Supplementary Figure 9. Age-specific relative survival of males and females conditional on surviving 0 days, 30 days, 1 year, and 2 years, matched by propensity for clinical characteristics



Supplementary Table 1. Age-specific relative survival of males and females conditional on surviving 0 days, 30 days, 1 year, and 2 years

	Age group	≤ 30s	40s	50s	60s	70s	≥ 80s
	N of males	686	3,832	9,332	10,293	7,213	1,717
	N of females	48	461	1,905	4,551	6,505	2,240
Relative survival (%)	Males	97.0 (95.6 - 98.5)	97.4 (96.8 - 98.1)	97.1 (96.5 - 97.6)	96.4 (95.7 - 97.1)	94.1 (92.7 - 95.5)	102.5 (97.3 - 108.0)
	Females	94.0 (87.5 - 101.1)	93.1 (90.7 - 95.5)	93.8 (92.6 - 95.0)	94.8 (93.9 - 95.7)	92.5 (91.3 - 93.6)	91.1 (87.4 - 94.9)
Relative survival conditional on surviving 30 days (%)	Males	98.9 (98.0 - 99.9)	98.9 (98.4 - 99.4)	98.2 (97.8 - 98.7)	98.1 (97.5 - 98.7)	97.1 (95.8 - 98.3)	103.6 (99.1 - 108.3)
	Females	94.0 (87.5 - 101.1)	94.9 (92.8 - 97.0)	95.6 (94.6 - 96.6)	96.6 (95.8 - 97.4)	95.9 (94.9 - 96.9)	98.1 (94.8 - 101.4)
Relative survival conditional on surviving 1 year (%)	Males	98.7 (97.7 - 99.8)	99.1 (98.6 - 99.6)	98.6 (98.1 - 99.0)	98.6 (98.0 - 99.2)	98.1 (96.9 - 99.4)	108.5 (103.7 - 113.5)
	Females	98.0 (93.9 - 102.3)	95.2 (93.1 - 97.3)	96.3 (95.3 - 97.3)	97.3 (96.6 - 98.1)	96.4 (95.4 - 97.4)	99.2 (95.8 - 102.7)
Relative survival conditional on surviving 2 years (%)	Males	99.2 (98.5 - 100.0)	99.8 (99.5 - 100.1)	99.2 (98.9 - 99.5)	99.2 (98.8 - 99.7)	98.4 (97.5 - 99.2)	101.9 (98.8 - 105.1)
	Females	98.0 (93.9 - 102.2)	97.6 (96.1 - 99.1)	97.9 (97.2 - 98.7)	98.6 (98.0 - 99.1)	97.9 (97.2 - 98.7)	96.5 (94.2 - 99.0)

Supplementary Table 2. Age-specific relative survival of males and females conditional on surviving 0 days, 30 days, 1 year, and 2 years, matched by propensity for clinical characteristics

	Age group	≤ 30s	40s	50s	60s	70s	≥ 80s
	N of males	45	457	1905	4544	5900	1603
	N of females	45	457	1905	4544	5900	1603
Relative survival (%)	Males	91.8 (83.9 - 100.5)	96.5 (94.5 - 98.6)	96.1 (94.8 - 97.3)	96.3 (95.2 - 97.4)	95.9 (94.4 - 97.5)	103.0 (97.6 - 108.7)
	Females	93.6 (86.7 - 101.1)	93.2 (90.8 - 95.7)	93.8 (92.6 - 95.0)	94.8 (93.9 - 95.7)	92.1 (90.9 - 93.3)	90.7 (86.5 - 95.1)
Relative survival conditional on surviving 30 days (%)	Males	93.6 (86.6 - 101.1)	95.0 (93.0 - 97.2)	95.6 (94.6 - 96.6)	96.6 (95.8 - 97.3)	95.6 (94.6 - 96.7)	97.0 (93.3 - 100.9)
	Females	93.6 (86.6 - 101.1)	95.0 (93.0 - 97.2)	95.6 (94.6 - 96.6)	96.6 (95.8 - 97.3)	95.6 (94.6 - 96.7)	97.0 (93.3 - 100.9)
Relative survival conditional on surviving 1 year (%)	Males	93.7 (86.6 - 101.4)	98.0 (96.4 - 99.7)	97.8 (96.7 - 98.8)	98.1 (97.2 - 99.1)	98.9 (97.6 - 100.3)	108.9 (103.9 - 114.0)
	Females	97.9 (93.5 - 102.4)	95.2 (93.1 - 97.3)	96.3 (95.3 - 97.3)	97.3 (96.6 - 98.1)	96.4 (95.3 - 97.4)	98.8 (94.8 - 102.8)
Relative survival conditional on surviving 2 years (%)	Males	95.7 (89.8 - 102.0)	99.5 (98.6 - 100.5)	98.8 (98.0 - 99.6)	98.8 (98.2 - 99.5)	98.8 (97.9 - 99.8)	102.2 (99.0 - 105.6)
	Females	97.8 (93.5 - 102.4)	97.6 (96.0 - 99.1)	97.9 (97.2 - 98.7)	98.6 (98.0 - 99.1)	97.9 (97.2 - 98.6)	97.0 (94.3 - 99.8)

Operational definitions using diagnosis code (International Classification of Disease, ICD-10th revision code) or Korea national health insurance code (KNHI code):

- Hypertension (ICD-10 I10.x, I11.x, I12.x, I13.x, I14.x, I15.x)
- Hyperlipidemia (ICD-10 E78.x)
- Diabetes mellitus (ICD-10 E10.x, E11.x, E12.x, E13.x, E14.x)
- Chronic kidney disease (ICD-10 I12.0, I13.1, N03.2-N03.7, N05.2-N05.7, N19.x, N25.0, Z49.0-Z49.2, Z94.0, Z99.2, N18.x, N19.x)
- Chronic kidney disease, dialysis (code: V00.1, V00.3)
- Angina (ICD-10 I20.x)
- Myocardial Infarction (ICD-10 I21.x, I22.x, I25.2)
- STEMI (code: I219)
- NSTEMI (code: I214)
- Cancer (KNHIS cancer patient registration code for the insurance coverage exemptions: V027, V193, V194; Malignancy: ICD-10 C80.x)
- Stroke* (ICD-10 I60.x, I61.x, I62.x, I63.x)

*Stroke diagnosed and hospitalized undergoing brain magnetic resonance imaging or computer tomography test (KNHIS code HA441, HA451, HA461, HA471, HA401-A416, HE101, HE201, HE301, HE401, HE501, HE135, HE235, HE535)