

評価対象論文リスト(要因:睡眠時間、アウトカム:死亡)

評価判定日：2023/11/20

①既存の系統的レビュー・メタ解析・統合解析

1	Svensson T, Saito E, Svensson AK, Melander O, Orho-Melander M, Mimura M, et al. Association of Sleep Duration With All- and Major-Cause Mortality Among Adults in Japan, China, Singapore, and Korea. JAMA Netw Open. 2021;4(9):e2122837. doi:10.1001/jamanetworkopen.2021.22837.
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②日本人集団の個別疫学研究

2	Ikehara S, Iso H, Date C, Kikuchi S, Watanabe Y, Wada Y, et al. Association of Sleep Duration with Mortality from Cardiovascular Disease and Other Causes for Japanese Men and Women: the JACC Study. Sleep. 2009;32(3):295-301. doi:10.1093/sleep/32.3.295.
3	Watanabe D, Yoshida T, Watanabe Y, Yamada Y, Miyachi M, Kimura M; Kyoto-Kameoka Study Group. Combined Use of Sleep Quality and Duration Is More Closely Associated With Mortality Risk Among Older Adults: A Population-based Kyoto-Kameoka Prospective Cohort Study. J Epidemiol. 2023;33(12):591-599. doi:10.2188/jea.JE20220215.
4	Amagai Y, Ishikawa S, Gotoh T, Doi Y, Kayaba K, Nakamura Y, et al. Sleep Duration and Mortality in Japan: the Jichi Medical School Cohort Study. J Epidemiol. 2004;14(4):124-128. doi:10.2188/jea.14.124.
5	Kojima M, Wakai K, Kawamura T, Tamakoshi A, Aoki R, Lin Y, et al. Sleep Patterns and Total Mortality: A 12-Year Follow-up Study in Japan. J Epidemiol. 2000;10(2):87-93. doi:10.2188/jea.10.87.
6	Sogawa R, Shimanoe C, Tanaka K, Hara M, Nishida Y, Furukawa T, et al. Sex- and age-specific all-cause mortality in insomnia with hypnotics: Findings from Japan multi-institutional Collaborative Cohort Study. Sleep Med. 2022;100:410-418. doi:10.1016/j.sleep.2022.09.020. PubMed
7	Omichi C, Koyama T, Kadotani H, Ozaki E, Tomida S, Yoshida T, et al. Irregular sleep and all-cause mortality: A large prospective cohort study. Sleep Health. 2022;8(6):678-683. doi:10.1016/j.sleh.2022.08.010.
8	Ohara T, Honda T, Hata J, Yoshida D, Mukai N, Hirakawa Y, et al. Association Between Daily Sleep Duration and Risk of Dementia and Mortality in a Japanese Community. J Am Geriatr Soc. 2018;66(10):1911-1918. doi:10.1111/jgs.15446.
9	Seki N. [Relationships between walking hours, sleeping hours, meaningfulness of life (ikigai) and mortality in the elderly: prospective cohort study]. Nihon Eiseigaku Zasshi. 2001;56(2):535-540. doi:10.1265/jjh.56.535.
10	Tamakoshi A, Ohno Y; JACC Study Group. Self-reported sleep duration as a predictor of all-cause mortality: results from the JACC study, Japan. Sleep. 2004;27(1):51-54. doi:10.1093/sleep/27.1.51.

11	Kakizaki M, Kuriyama S, Nakaya N, Sone T, Nagai M, Sugawara Y, et al. Long sleep duration and cause-specific mortality according to physical function and self-rated health: the Ohsaki Cohort Study. J Sleep Res. 2013;22(2):209-216. doi:10.1111/j.1365-2869.2012.01053.x.
12	Goto A, Yasumura S, Nishise Y, Sakihara S. Association of health behavior and social role with total mortality among Japanese elders in Okinawa, Japan. Aging Clin Exp Res. 2003;15(6):443-450. doi:10.1007/BF03327366.
13	Suzuki K; Japan Collaborative Cohort Study for Evaluation of Cancer. Health conditions and mortality in the Japan Collaborative Cohort Study for Evaluation of Cancer (JACC). Asian Pac J Cancer Prev. 2007;8 Suppl:25-34. PMID:18260704.
14	Takezaki T, Tajima K, Yoshida M, Tominaga S. [Risk of death by health habit index from a cohort study among the residents of a rural area in Aichi, Japan]. Nihon Koshu Eisei Zasshi. 1999;46(10):904-914. PMID:10565182.
15	Svensson T, Inoue M, Saito E, Sawada N, Iso H, Mizoue T, et al. The Association Between Habitual Sleep Duration and Mortality According to Sex and Age: The Japan Public Health Center-based Prospective Study. J Epidemiol. 2021;31(2):109-118. doi:10.2188/jea.JE20190210.

■コホート研究（コホートのブル解析含む）

Author	Title	Year	Study subjects							Number among cases	Relative risk (95%CI or p)	P for trend	Confounding variables considered	<u>Evaluation of the magnitude of association</u>
			Study period	Number of subjects	Source of subjects	Event followed	Number of incident cases or deaths	Participant's race	Category					
Svensson T, et al.	Association of Sleep Duration With All- and Major-Cause Mortality Among Adults in Japan, China, Singapore, and Korea	2021	1984-2002 (pooled analysis; mean follow-up men 14.0 y / women 13.4 y)	322,721 (men 144,179 / women 178,542)	9 pooled cohorts from Japan (5), China (2), Singapore (1), and Korea (1) (Asia Cohort Consortium)	All-cause mortality, CVD mortality, cancer mortality, other-cause mortality	33,187 (men 19,419 / women 13,768)	East Asian (Japanese, Chinese, Singaporean, Korean)	Sleep duration (Reference: 7 h) Short sleep: ≤5 h Long sleep: ≥10 h	Not individually reported in the main text (see eTable 2, eTable 3)	All-cause mortality, multivariable HR (95%CI) Men ≥10h: 1.34 (1.26-1.44) Women ≥10h: 1.48 (1.36-1.61) (Other categories, incl. ≤5h, reported in eTables)	Not reported	Age, marital status, study area, BMI, smoking status, alcohol consumption, physical activity, history of diabetes, history of hypertension, menopausal status (women)	Men ≥10h ↑ Women ≥10h ↑
Ikehara S, et al.	Association of Sleep Duration with Mortality from Cardiovascular Disease and Other Causes for Japanese Men and Women: the JACC Study	2009	1988-1990 (followed to 2003; median 14.3 y)	98,634 (men 41,489 / women 57,145; aged 40-79 y)	Residents in 45 communities across Japan, municipal health-screening examinees (JACC Study)	All-cause mortality, CVD mortality, CHD mortality, stroke mortality, cancer mortality, non-CVD/non-cancer mortality	All-cause deaths 14,540 (men 8,548 / women 5,992)	Japanese	Sleep duration (Reference: 7 h) Short sleep: ≤4 h Long sleep: ≥10 h	All-cause deaths Men ≤4h: 70 / ≥10h: 730 Women ≤4h: 83 / ≥10h: 414	All-cause mortality, multivariable HR (95%CI) Men ≤4h: 1.29 (1.02-1.64) Men ≥10h: 1.41 (1.29-1.54) Women ≤4h: 1.28 (1.03-1.60) Women ≥10h: 1.56 (1.40-1.75) (CHD mortality, women ≤4h: 2.32 [1.19-4.50])	Not reported	Age, BMI, history of hypertension, history of diabetes, smoking, alcohol consumption, hours of exercise, hours of walking, regular employment, perceived mental stress, depressive symptoms, education level, fresh fish intake	Men short ↑ Men long ↑ Women short ↑ Women long ↑↑
Watanabe D, et al.	Combined Use of Sleep Quality and Duration Is More Closely Associated With Mortality Risk Among Older Adults: A Population-based Kyoto-Kameoka Prospective Cohort Study	2023	2011-2012 (followed to Nov 2016; median 4.75 y)	7,668 (aged ≥65 y)	Community-dwelling older adults in Kameoka City, Kyoto Prefecture (mail-in survey)	All-cause mortality	616	Japanese	Sleep duration × sleep quality (PSQI) (Reference: OSD/NSD = optimal sleep duration [360-480 min] with no sleep disturbance) SSD/SD (short sleep duration <360 min + sleep disturbance) LSD/SD (long sleep duration >480 min + sleep disturbance)	SSD/SD: 59/701 LSD/SD: 147/919	Multivariable HR (95%CI) vs OSD/NSD SSD/SD: 1.56 (1.10-2.19) LSD/SD: 1.83 (1.37-2.45)	PSQI score, 1-point increment: P=0.045 (continuous variable)	Age, sex, population density, BMI, living alone, socioeconomic status, educational attainment, smoking status, alcohol drinker, physical activity, medication use, number of chronic diseases	Short <6h ↑↑ Long>8h ↑↑
Amagai Y, et al.	Sleep Duration and Mortality in Japan: the Jichi Medical School Cohort Study	2004	1992-1995 (followed to Dec 2001; mean 8.2 y)	11,325 (men 4,419 / women 6,906)	Participants in cardiovascular mass-screening examinations in 12 rural areas of Japan (Jichi Medical School Cohort)	All-cause mortality, heart disease mortality, stroke mortality, malignant neoplasm mortality, external-cause mortality	495 (men 289 / women 206)	Japanese	Sleep duration (Reference: 7.0-7.9 h) Short sleep: <6.0 h Long sleep: ≥9.0 h	Men <6h: 16/889 Men ≥9h: 93/898 Women <6h: 4/254 Women ≥9h: 51/800	All-cause mortality, multivariable HR (95%CI) Men <6h: 2.4 (1.3-4.2) Men ≥9h: 1.1 (0.8-1.6) Women <6h: 0.7 (0.2-2.3) Women ≥9h: 1.5 (1.0-2.4)	Not reported	Age, systolic blood pressure, total cholesterol, BMI, smoking habits, alcohol drinking habits, education, marital status	Men <6h ↑↑↑ ≥9h - Women <6h - ≥9h ↑↑
Kojima M, et al.	Sleep Patterns and Total Mortality: A 12-Year Follow-up Study in Japan	2000	1982-1986 (followed to Dec 1996; mean 11.9 y)	5,322 (men 2,438 / women 2,884)	Health check-up examinees in Shirakawa town, Gifu Prefecture	All-cause mortality	258 (men 149 / women 109)	Japanese	Sleep duration (Reference: 7-8 h) Short sleep: <7 h (-6.9 h) Long sleep: ≥10 h	Men -6.9h: 15/2375.4 person-y Men 10.0h-: 10/603.0 person-y Women -6.9h: 15/7369.4 person-y Women 10.0h-: 1/378.4 person-y	All-cause mortality, relative risk (95%CI) Men <7h: 1.90 (1.10-3.29) Men ≥10h: 1.94 (1.01-3.76) Women <7h: 0.90 (0.50-1.61), NS Women ≥10h: 0.40 (0.06-2.92), NS	Not reported	Age, present/past history of hypertension, cerebrovascular/heart/renal disease and diabetes, use of sleeping pills, smoking and drinking habits (men only)	Men <7h ↑↑ Men ≥10h ↑↑ Women <7h - Women ≥10h ↓
Sogawa R, et al.	Sex- and age-specific all-cause mortality in insomnia with hypnotics: Findings from Japan multi-institutional Collaborative Cohort Study	2022	2004-2014 (mean follow-up 8.4 y)	61,646 (aged 35-69 y)	Inhabitants of communities, health checkup examinees, and company/local-government employees in 14 cities in Japan (J-MICC Study; participants with cancer history excluded)	All-cause mortality	1,492	Japanese	Regular use of hypnotics (proxy for insomnia) (Reference: non-use of hypnotics) Sleeping hours adjusted for as a covariate	Hypnotic-use group: 98/2,568	Multivariable HR (95%CI) Overall: 1.32 (1.07-1.63) Male: 1.51 (1.15-1.96) Female: 1.09 (0.76-1.54), NS Age <60y: 1.75 (1.21-2.54) Age ≥60y: 1.16 (0.90-1.50), NS	Not reported	Age, sex, study area, physical activity, alcohol consumption, smoking habit, sleeping hours, perceived stress, BMI, history of ischemic heart disease, history of stroke, history of diabetes	insomnia with hypnotics Overall ↑ Male ↑↑ Female -

Omichi C, et al.	Irregular sleep and all-cause mortality: A large prospective cohort study	2022	2004-2014 (mean follow-up 9.1 y)	81,382 (mean age 58.1 ± 9.1 y)	Inhabitants of communities, health checkup examinees, and company/local-government employees in 13 cities in Japan (J-MICC Study)	All-cause mortality	3,376	Japanese	Sleep regularity × sleep duration (Reference: regular sleep and 6 to <8 h/day) Irregular sleep (any duration) Regular sleep + long duration (≥8 h/day)	Irregular sleep: 477/9,768 Regular + ≥8h/day: 662/11,538	Multivariable HR (95%CI) [Model 3] Irregular sleep: 1.30 (1.18-1.44) Regular + ≥8h/day: 1.14 (1.04-1.24) Irregular + ≥8h/day: 1.52 (1.18-1.96) Irregular + <6h/day: 1.21 (1.02-1.44)	Not reported	Age, sex, BMI, study city, education, physical activity, alcohol consumption, smoking status, history of ischemic heart disease, history of stroke, history of cancer	Irregular sleep ↑ Regular + ≥8h/day ↑ Irregular + ≥8h/day ↑ ↑ Irregular + <6h/day ↑
Ohara T, et al.	Association Between Daily Sleep Duration and Risk of Dementia and Mortality in a Japanese Community	2018	Baseline screening 2002 (followed to Nov 2012; mean 8.8 y)	1,517 (men 667 / women 850; aged ≥60 y, dementia-free at baseline)	Community-dwelling residents of Hisayama town, adjacent to Fukuoka metropolitan area (Hisayama Study)	Incident all-cause dementia (and subtypes: Alzheimer's disease, vascular dementia), all-cause mortality, cause-specific mortality (cardiovascular, cancer, respiratory infection, other)	All-cause dementia 294; All-cause deaths 282	Japanese	Daily sleep duration (Reference: 5.0-6.9 h) Short sleep: <5.0 h Long sleep: 8.0-9.9 h and ≥10.0 h	All-cause deaths (Persons at risk/Events) <5.0h: 32/10 5.0-6.9h(ref): 405/51 8.0-9.9h: 522/118 ≥10.0h: 92/34	All-cause mortality, Model 3 HR (95%CI) <5.0h: 2.29 (1.15-4.56) 8.0-9.9h: 1.36 (0.97-1.91), NS ≥10.0h: 1.67 (1.07-2.60) (All-cause dementia, Model 3: <5.0h 2.64 [1.38-5.05]; 8.0-9.9h 1.57 [1.15-2.16]; ≥10.0h 2.23 [1.42-3.49])	Not reported	Age, sex, education level, systolic blood pressure, use of antihypertensive agents, electrocardiographic abnormalities, diabetes mellitus, hypercholesterolemia, body mass index, history of stroke, smoking habits, alcohol intake, regular exercise, use of hypnotics (Model 3)	<5.0h ↑ ↑ ↑ ≥10.0h ↑ ↑
Seki N.	Relationships between Walking Hours, Sleeping Hours, Meaningfulness of Life (Ikigai) and Mortality in the Elderly: Prospective Cohort Study	2001	Baseline July 1990 (followed to Dec 31, 1997; 90 months / 7.5 y)	1,065 (men 440 / women 625; aged 60-74 y)	Rural Japanese community, Village A, Niigata Prefecture	All-cause mortality	123 (mortality rate 16.6/1000 person-years)	Japanese	Sleeping hours per day (Categorical reference: 7 h; dichotomized analysis reference: <7 h) Categories: <6, 6, 7, 8, ≥9 h Dichotomized: <7 h vs ≥7 h	Not individually reported by category in the main text (see Table 3); total N by category: <6h=34, 6h=170, 7h=359, 8h=407, ≥9h=95	All-cause mortality, multivariable HR (95%CI) vs 7h <6h: 1.74 (0.72-4.24), NS 6h: 2.10 (1.26-3.50) 8h: 0.99 (0.63-1.56), NS ≥9h: 0.97 (0.50-1.90), NS Dichotomized (≥7h vs <7h): HR 0.49 (0.33-0.74)	Not reported	Age, sex, and medical history (cerebrovascular disease, cardiovascular disease, hypertension, diabetes mellitus, liver disease, renal disease, malignant neoplasm)	<6h ↑ 6h ↑ ↑ 8h - ≥9h -
Tamakoshi A, Ohno Y (JACC Study Group).	Self-Reported Sleep Duration as a Predictor of All-Cause Mortality: Results from the JACC Study, Japan	2004	1988-1990 (followed to end of 1999; mean 9.9 y)	104,010 (men 43,852 / women 60,158; aged 40-79 y)	Healthy residents in 45 areas across Japan (JACC Study)	All-cause mortality	11,071 (men 6,623 / women 4,448)	Japanese	Sleep duration (Reference: 7 h) Short sleep: <4 h Long sleep: ≥10 h	Men <4h: 62/239 / ≥10h: 656/1,880 Women <4h: 79/487 / ≥10h: 359/1,416	All-cause mortality, RR (95%CI), fully adjusted (covariates other than mental conditions) Men <4h: 0.88 (0.44-1.78), NS Men ≥10h: 1.75 (1.46-2.09) Women <4h: 1.83 (1.20-2.81) Women ≥10h: 2.12 (1.67-2.68) (Age-adjusted only: Men <4h 1.62 [1.26-2.09]; Men ≥10h 1.73 [1.58-1.90]; Women <4h 1.60 [1.28-2.02]; Women ≥10h 1.92 [1.70-2.17])	Not reported	Age (5-year groups), perceived mental stress, depressive symptoms, smoking status, drinking status, physical activity, education, marital status, body mass index, past disease history (stroke, myocardial infarction, cancer)	Men ≥10h ↑ ↑ Women <4h ↑ ↑ Women ≥10h ↑ ↑ ↑
Kakizaki M, et al.	Long sleep duration and cause-specific mortality according to physical function and self-rated health: the Ohsaki Cohort Study	2013	Baseline Oct-Dec 1994 (followed to 31 Mar 2008; mean 10.8 y)	49,256 (men 23,749 / women 25,507; aged 40-79 y)	Ohsaki National Health Insurance beneficiaries, 14 municipalities, Miyagi Prefecture (Ohsaki Cohort Study)	All-cause mortality, CVD mortality (ischaemic heart disease + stroke), cancer mortality, other-cause mortality	8,447 (CVD 2,549; cancer 2,764; other 3,134)	Japanese	Sleep duration (Reference: 7 h) Short sleep: ≤6 h Long sleep: ≥10 h	All-cause deaths (person-years) ≤6h: 1,074 (83,530 person-y) ≥10h: 1,379 (37,066 person-y)	Multivariable HR (95%CI) All-cause: ≤6h 1.01 (0.93-1.09), NS / ≥10h 1.37 (1.27-1.47) Total CVD: ≥10h 1.49 (1.30-1.71) Stroke: ≥10h 1.51 (1.24-1.85) IHD: ≤6h 1.38 (1.02-1.86) Other causes: ≥10h 1.53 (1.36-1.73)	Not reported (interaction P-values reported instead, e.g. P=0.04 for sleep duration × physical function on stroke mortality)	Age, sex, total caloric intake, BMI, marital status, education, job status, history of myocardial infarction/cancer/stroke/hypertension/diabetes, smoking status, alcohol drinking, time spent walking, perceived mental stress, self-rated health, physical function	≥10h ↑ Total CVD: ≥10h ↑ Stroke: ≥10h ↑ ↑ IHD: ≤6h ↑ Other causes: ≥10h ↑ ↑

Goto A, et al.	Association of health behavior and social role with total mortality among Japanese elders in Okinawa, Japan	2003	Baseline 1987 (followed to November 1999; 12-year follow-up, survival time up to 151 months)	724 (men 251, women 473)	All residents aged 65 years and older recruited in 1987 from the village of Ohgimi, Okinawa, Japan	All-cause mortality	305 (men 139 [55.4%], women 166 [35.1%])	Japanese	Hours of sleep (Reference: 6-7 h) Short sleep: <6 h Long sleep: >7 h	Women, final model (Model 3): not individually reported as death counts by category (see Tables 4-5)	All-cause mortality, HR (95%CI) Women <6h, Model 3: 2.62 (1.36-5.07) Women >7h, Model 3: 1.40 (0.91-2.15), NS Men <6h, Model 4: 1.29 (0.50-3.34), NS Men >7h, Model 4: 1.54 (0.92-2.58), NS	Not reported	Age, sociodemographic items (spouse, education, working status), health behavior/social activity (exercise, smoking, drinking, social role), medical history (cerebrovascular disease, hypertension) [women: dropped after non-significant bivariate result], functional status (ADL, BADL), biological items (BMI, hemoglobin, serum albumin, total cholesterol, creatinine, blood pressure, electrocardiograph)	Women <6h ↑ ↑ ↑ Women >7h - Men <6h - Men >7h ↑
Suzuki K; for the JACC Study Group.	Health Conditions and Mortality in the Japan Collaborative Cohort Study for Evaluation of Cancer (JACC)	2007	JACC Study baseline 1988-1990; general health-condition questionnaire administered within 1 year prior to entry	General JACC Study cohort (overall N not explicitly stated for this sub-analysis; sample sizes vary by item, e.g. sleep-duration analysis total person-years 553,936 for men and 553,936 for women across the <7h/7-8h/≥9h categories; see Table 2)	Japan Collaborative Cohort Study for Evaluation of Cancer Risk (JACC Study), Japanese adults surveyed in multiple communities across Japan	All-cause mortality and major cause-specific mortality (including site-specific cancers, CVD/IHD), analyzed for 12 general health-condition items including sleep duration and daytime napping	Not stated as a single overall figure for this sub-analysis (varies by item/table)	Japanese	Sleep duration (Reference: 7-8 h) Short sleep: <7 h Long sleep: ≥9 h (Daytime napping also examined as a separate exposure)	Not individually reported in the text excerpts reviewed	Age- and study-area-adjusted HR Long sleep (≥9h) vs 7-8h: All-cause death – men 1.32, women 1.42; CVD death – men 1.49, women 1.37 Men ≥9h: esophageal cancer 1.83, pancreatic cancer 1.46, prostate cancer 0.54 Men <7h: stomach cancer 0.80 Women ≥9h: urothelial tract cancer 2.38, non-Hodgkin lymphoma 2.13, IHD 1.37 Women <7h: esophageal cancer 3.09, lung cancer 0.71, CVD 0.86 Napping also associated with increased total and IHD/CVD death in both sexes	Not reported	Age, study area (sex-specific models); exercise, walking, TV-watching time, and screening participation also examined as separate exposures in the same analytic framework	Long sleep (≥9h) All-cause death men ↑ women ↑ CVD death – men ↑ women ↑ Men ≥9h : esophageal cancer ↑ pancreatic cancer ↑ Women ≥9h: urothelial tract cancer ↑ non-Hodgkin lymphoma ↑ IHD ↑ Women <7h: esophageal cancer ↑
嶽崎俊郎 (Takezaki T) 、他	健康づくり努力度別にみた死亡リスクの検討—愛知県農山間部一般住民におけるコホート研究より—	1999	Baseline survey 1988; followed for death and migration from January 1, 1990 to December 31, 1997	7,662 (80.0% of the same-age population; men aged ≥40 y, women aged ≥30 y at baseline, analyzed as 40-79 y)	General residents of a rural mountainous area (A-gun) of Aichi Prefecture, Japan	All-cause mortality, cancer mortality, cardiovascular disease mortality	650 total deaths (240 cancer, 197 cardiovascular disease)	Japanese	"Adequate sleep" habit item (one of 12 health-habit index items) (Reference: always short of sleep) Categories: sometimes gets enough sleep; always gets enough sleep	Not individually reported as death counts by category in the excerpts reviewed	Age-adjusted RR (95%CI) Men, all-cause: sometimes 1.36 (0.73-2.51); always 1.25 (0.70-2.23), both NS Women, all-cause: sometimes 0.58 (0.33-1.00); always 0.63 (0.39-1.03) Women, cancer: sometimes 0.37 (0.16-0.88); always 0.55 (0.27-1.11) Multivariable analysis (age and health status adjusted) showed a similarly lower RR for women who occasionally have enough sleep	Not reported	Age, sex, self-rated health status at baseline (multivariable model); the other 11 health-habit index items (diet, physical activity, stress management, smoking, drinking, regular health check-up) analyzed in parallel	Frequency of adequate sleep (ref: always short sleep) Men, all-cause: sometimes - always - Women, all-cause: sometimes ↓ always ↓ Women, cancer: sometimes ↓ ↓ always ↓
Svensson T, et al.	The Association Between Habitual Sleep Duration and Mortality According to Sex and Age: The Japan Public Health Center-based Prospective Study	2021	JPHC Study, Cohort I started 1990 / Cohort II started 1993; baseline questionnaire returned 1990-1994; followed to December 31, 2014 (December 31, 2009 for Katsushika; December 31, 2012 for Suita)	99,860 (men 46,152, women 53,708)	Japan Public Health Center-based Prospective Study (JPHC Study), registered inhabitants aged 40-69 years in 11 public health center areas across Japan	All-cause mortality, CVD mortality, cancer mortality, other-cause mortality	Men: 11,259 all-cause deaths; Women: 6,783 all-cause deaths	Japanese	Sleep duration (Reference: 7 h) Short sleep: ≤5 h Long sleep: 8, 9, ≥10 h	All-cause deaths (Number at risk/Events) Men ≥10h: 1,395/642 Women ≥10h: 768/224 Men 8h: 17,509/4,569 Women 8h: 16,004/2,448	All-cause mortality, Model 2 HR (95%CI) Men ≥10h: 1.83 (1.33-2.52) Women 8h: 1.22 (1.08-1.37) Women ≥10h: 1.72 (1.22-2.43) (CVD mortality, Model 2: Men 9h 2.04 [1.03-4.02]; Men ≥10h 3.61 [1.46-8.94]; women showed no significant CVD association at any duration)	Interaction P-values reported instead: sleep duration × age for other-cause mortality, women: P=0.023 (significant); not significant for other outcomes/sexes	Model 2 (men): study area, alcohol intake, living alone, health check-up, hypertension, perceived stress; stratified by age, BMI, coffee consumption, physical activity, smoking status. Model 2 (women): study area, alcohol intake, smoking status, living alone, health check-up, physical activity, hypertension, stress; stratified by age, BMI, coffee consumption, green tea consumption. Model 3: sensitivity analysis excluding first 5 years of follow-up	All-cause mortality Men ≥10h ↑ ↑ Women 8h ↑ Women ≥10h ↑ ↑ CVD mortality Men 9h ↑ ↑ ↑ Men ≥10h ↑ ↑ ↑