Table 19. Ambulatory (nighttime) vs. office, fatal and nonfatal CV events, results of included studies for Key Question 3a

| BP | Outcome | Study, Quality | Country | N BL | # of Events | % HTN at BL, % Treated | Mean BL Office SBP/DBP(mm Hg) | Mean follow-up (y) | Cox regression model, BP variable increment§ | ABPM (night)HR (95% CI) | ABPM (night)HR (95% CI), adj. for OBPM | OBPMHR (95% CI) | OBPMHR (95% CI), adj. for ABPM (night) | Addtl. model covariates‡ |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Systolic | MI or stroke, fatal and nonfatal | Clement, 2003115Good | Belgium | 1963 | 77 | 100 100 | 155.01/93.06 | 5 | 10 mm Hg | 1.30 (1.03 to 1.65) | 1.25 (0.97 to 1.62) | 1.22 (0.95 to 1.59) | NR | BMI, smoking, DM, cholesterol, use of lipid-lowering drugs, CV complications at entry |
| Major CV events | Fagard, 2005117Good | Belgium | 391 | 86 | 61.89 32.23 | 142.8/77.5 | 10.9 | 1 SD | 1.42 (1.16 to 1.74) | 1.43 (1.13 to 1.80) | 1.13 (0.88 to 1.45) | 0.96 (0.72 to 1.29) | BMI, smoking, DM, anti-HTN treatment, smoking, serum TC |
| Hermida, 2011120Good | Spain | 3344 | NR | NR NR | 150.8/85.9 | 5.6 | 10 mm Hg | 1.84 (1.60 to 2.11) | 1.69 (1.43 to 2.01) | 1.68 (1.41 to 2.00) | NR | DM |
| CV mortality | Dolan, 2005116Fair | Ireland | 5292 | 389 | 100 0 | 162.3/93.1 | 7.9 | 10 mm Hg | 1.21 (1.16 to 1.27) | 1.21 (1.15 to 1.27) | 1.06 (1.02 to 1.10) | NR | BMI, smoking, DM, history of CV events |
| Hansen, 2005119Fair | Denmark | 1700 | 63 | NR 9.41 | 128/82 | 9.5 | 10 mm Hg | 1.41 (1.23 to 1.62)\* | NR | 1.25 (1.10 to 1.42) | NR | NR |
| Ohkubo, 2005125Good | Japan | 1332 | 67 | 15.17 30.41 | 131.2/74.1 | 10.2 | 10 mm Hg | NR | 1.33 (1.11 to 1.58) | NR | 1.05 (0.92 to 1.20) | Smoking, DM, history of CVD, anti-HTN treatment, hyperchol-esterolemia |
| Staessen,1999126Good | Multi-national (western and eastern Europe) | 808 | 36 | 100 42.6 | 173.3/86.0 | 4.4 | 10 mm Hg | 1.23 (1.03 to 1.46) | 1.18 (0.98 to 1.42) | 1.32 (1.03 to 1.68) | NR | Smoking, previous CV complications, residence in western Europe |
| Diastolic | MI or stroke, fatal and nonfatal | Clement, 2003115Good | Belgium | 1963 | 77 | 100 100 | 155.01/93.06 | 5 | 5 mm Hg | 1.28 (0.99 to 1.65) | 1.25 (0.96 to 1.64) | 1.14 (0.86 to 1.52) | NR | BMI, smoking, DM, cholesterol, use of lipid-lowering drugs, CV complications at entry |
| Major CV events | Fagard, 2005117Good | Belgium | 391 | 86 | 61.89 32.23 | 142.8/77.5 | 10.9 | 1 SD | 1.40 (1.12 to 1.75) | 1.49 (1.16 to 1.92) | 1.04 (0.82 to 1.34) | 0.81 (0.60 to 1.07) | BMI, smoking, DM, anti-HTN treatment, smoking, serum TC |
| Hermida, 2011120Good | Spain | 3344 | NR | NR NR | 150.8/85.9 | 5.6 | 5 mm Hg | 1.65 (1.38 to 1.98) | 1.61 (1.31 to 1.99) | 1.35 (1.12 to 1.64) | NR | DM |
| CV mortality | Dolan, 2005116Fair | Ireland | 5292 | 389 | 100 0 | 162.3/93.1 | 7.9 | 5 mm Hg | 1.09 (1.05 to 1.13) | 1.09 (1.04 to 1.13) | 1.03 (1.00 to 1.07) | NR | BMI, smoking, DM, history of CV events |
| Hansen, 2005119Fair | Denmark | 1700 | 63 | NR 9.41 | 128/82 | 9.5 | 5 mm Hg | 1.36 (1.22 to 1.51) | NR | 1.21 (1.08 to 1.35) | NR | NR |
| Ohkubo, 2005125Good | Japan | 1332 | 67 | 15.17 30.41 | 131.2/74.1 | 10.2 | 10 mm Hg | NR | 1.45 (1.05 to 1.99) | NR | 0.99 (0.80 to 1.23) | Smoking, DM, history of CVD, anti-HTN treatment, hyperchol-esterolemia |

\*Relative risk

‡All adjusted for age and sex. All covariates are from the model adjusted for ABPM (nighttime) or OBPM.

**Abbreviations**: ABPM = ambulatory blood pressure measurement; addtl = additional; adj = adjusted; BL = baseline; BMI = body mass index; BP = blood pressure; CI = confidence interval; CV = cardiovascular; DBP = diastolic blood pressure; DM = diabetes mellitus; HTN = hypertension; HR = hazard ratio; MI = myocardial infarction; mm Hg = millimeters of mercury; night = nighttime; NR = not reported; OBPM = office blood pressure measurement; SBP = systolic blood pressure