Table 24. Ambulatory (daytime) 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 (day)  HR  (95% CI) | ABPM (day)  HR (95% CI), adj. for OBPM | OBPM  HR  (95% CI) | OBPM  HR (95% CI), adj. for ABPM (day) | Addtl. model covariates‡ |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Systolic | MI or stroke, fatal or nonfatal | Clement, 2003115  Good | Belgium | 1963 | 77 | 100  100 | 155.01/93.06 | 5 | 1 SD | 1.54 (1.21 to 1.96) | 1.56 (1.19 to 2.05) | 1.22 (0.95 to 1.59) | NR | BMI, smoking, DM, cholesterol, use of lipid-lowering drugs, CV complications at entry |
| Major CV events | Celis, 2002114  Fair | Belgium | 419 | 20 | 100  0 | 164.7/103.4 | 5.3 | 10 mm Hg | 1.51 (1.19 to 1.88) | 1.51 (1.13 to 2.01) | 1.17 (0.94 to 1.42) | NR | Smoking, anti-HTN treatment |
| Fagard, 2005117  Good | Belgium | 391 | 86 | 61.89  32.23 | 142.8/77.5 | 10.9 | 1 SD | 1.33 (1.07 to 1.64) | 1.40 (1.07 to 1.82) | 1.13 (0.88 to 1.45) | 0.92 (0.72 to 1.34) | BMI, smoking, DM, anti-HTN treatment, smoking, serum TC |
| Hermida, 2011120  Good | Spain | 3344 | NR | NR  NR | 150.8/85.9 | 5.6 | 1 SD | 1.61 (1.39 to 1.88) | 1.36 (1.12 to 1.65) | 1.68 (1.41 to 2.00) | NR | DM |
| CV mortality | Dolan, 2005116  Fair | Ireland | 5292 | 389 | 100  0 | 162.3/93.1 | 7.9 | 10 mm Hg | 1.15 (1.10 to 1.21) | 1.12 (1.06 to 1.18) | 1.06 (1.02 to 1.10) | NR | BMI, smoking, DM, history of CV events |
| Hansen, 2005119  Fair | Denmark | 1700 | 63 | NR  9.41 | 128/82 | 9.5 | 10 mm Hg | 1.50 (1.27 to 1.76)\* | NR | 1.25 (1.10 to 1.42)\* | NR | NR |
| Ohkubo, 2005125  Good | Japan | 1332 | 67 | 15.17  30.41 | 131.2/74.1 | 10.2 | 10 mm Hg | NR | 1.17 (0.97 to 1.41) | NR | 1.06 (0.93 to 1.21) | Smoking, DM, history of CVD, anti-HTN treatment, hypercholesterolemia |
| Staessen, 1999126  Good | Multi-national (western and eastern Europe) | 808 | 36 | 100  42.6 | 173.3/86.0 | 4.4 | 10 mm Hg | 1.17 (0.96 to 1.44) | 1.07 (0.85 to 1.34) | 1.32 (1.03 to 1.68) | NR | Smoking, previous CV complications, residence in western Europe |
| Diastolic | MI or stroke, fatal or nonfatal | Clement, 2003115  Good | Belgium | 1963 | 77 | 100  100 | 155.01/93.06 | 5 | 1 SD | 1.45 (1.13 to 1.86) | 1.46 (1.11 to 1.92) | 1.14 (0.86 to 1.52) | NR | BMI, smoking, DM, cholesterol, use of lipid-lowering drugs, CV complications at entry, OBPM |
| Major CV events | Celis, 2002114  Fair | Belgium | 419 | 20 | 100  0 | 164.7/103.4 | 5.3 | 5 mm Hg | 1.28 (1.07 to 1.53) | 1.34 (1.07 to 1.68) | 1.09 (0.87 to 1.36) | NR | Smoking, anti-HTN treatment |
| Fagard, 2005117  Good | Belgium | 391 | 86 | 61.89  32.23 | 142.8/77.5 | 10.9 | 1 SD | 1.26 (1.00 to 1.59) | 1.44 (1.10 to 1.89) | 1.04 (0.82 to 1.34) | 0.81 (0.61 to 1.08) | BMI, smoking, DM, anti-HTN treatment, smoking, serum TC |
| Hermida, 2011120  Good | Spain | 3344 | NR | NR  NR | 150.8/85.9 | 5.6 | 1 SD | 1.37 (1.11 to 1.69) | 1.19 (0.91 to 1.56) | 1.35 (1.12 to 1.64) | NR | DM |
| CV mortality | Dolan, 2005116  Fair | Ireland | 5292 | 389 | 100  0 | 162.3/93.1 | 7.9 | 5 mm Hg | 1.04 (1.00 to 1.08) | 1.03 (0.99 to 1.07) | 1.03 (1.00 to 1.07) | NR | BMI, smoking, DM, history of CV events |
| Hansen, 2005119  Fair | Denmark | 1700 | 63 | NR  9.41 | 128/82 | 9.5 | 5 mm Hg | 1.40 (1.24 to 1.58)\* | NR | 1.21 (1.08 to 1.35)\* | NR | NR |
| Ohkubo, 2005125  Good | Japan | 1332 | 67 | 15.17  30.41 | 131.2/74.1 | 10.2 | 10 mm Hg | NR | 1.14 (0.83 to 1.58) | NR | 1.02 (0.81 to 1.27) | Smoking, DM, history of CVD, anti-HTN treatment, hypercholesterolemia |

\*Relative risk

‡All adjusted for age and sex. All covariates are from the model adjusted for ABPM (daytime) 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; day = daytime; DBP = diastolic blood pressure; DM = diabetes mellitus; HTN = hypertension; HR = hazard ratio; MI = myocardial infarction; mm Hg = millimeters of mercury; NR = not reported; OBPM = office blood pressure measurement; SBP = systolic blood pressure