SUPPLEMENTAL MATERIAL
Table S1. PubMed search strategy for potassium supplementation and blood pressure levels in experimental studies.

| Database | Search strategy |
|----------|-----------------|
| PubMed   | ((“blood pressure”[MeSH Term] OR “blood pressure determination”[MeSH Term] OR “arterial pressure”[MeSH Term]) OR “hypertension”[MeSH Term] OR “blood pressure”[tiab] OR “hypertension”[tiab]) AND (“potassium, dietary”[MeSH Term] OR “potassium”[MeSH Term] OR “potassium chloride”[MeSH Term] OR “potassium”[tiab] OR “potassium chloride”[tiab]) AND (“dietary supplements”[MeSH Term] OR “supplement”[tiab]) NOT (“animals”[MeSH Term] NOT “humans”[MeSH Term])) |
Table S2. Risk of bias of included studies.

| References          | Domain 1 Concerns | Domain 2 Concerns | Domain 3 Concerns | Domain 4 Concerns | Domain 5 Concerns | Domain 6 Concerns | Overall RoB Concerns |
|---------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|----------------------|
| Barden 1986        | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Low Low Low          |
| Berry 2010         | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Low Low Low          |
| Braschi 2008       | Low Low Low Low   | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Low Low Low          |
| Bulpit 1985        | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Low Low Low          |
| Chalmers 1986      | Low Low Low Low   | Low Low Low Low   | Low Low Low Low   | Low Low Low Low   | Low Low Low Low   | Low Low Low Low   | Low Low Low          |
| Forrester 1988      | High Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Low Low Low          |
| Fotherby 1992      | Low Low Low Low   | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Low Low Low          |
| Franzoni 2005      | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Low Low Low          |
| Gijsbers 2015      | Low Low Low Low   | Low Low Low Low   | Low Low Low Low   | Low Low Low Low   | Low Low Low Low   | Low Low Low Low   | Low Low Low          |
| Graham 2014        | Low Low Low Low   | Low Low Low Low   | Low Low Low Low   | Low Low Low Low   | Low Low Low Low   | Low Low Low Low   | Low Low Low          |
| Grimm 1988         | Low Low Low Low   | Low Low Low Low   | Low Low Low Low   | Low Low Low Low   | Low Low Low Low   | Low Low Low Low   | Low Low Low          |
| Grobbee 1987       | Low Low Low Low   | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Low Low Low          |
| Gu 2001            | Low Low Low Low   | Low Low Low Low   | Low Low Low Low   | Low Low Low Low   | Low Low Low Low   | Low Low Low Low   | Low Low Low          |
| He 2010            | Low Low Low Low   | Low Low Low Low   | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Low Low Low          |
| Kaplan 1985        | Low Low Low Low   | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Low Low Low          |
| Kawano 1998        | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Low Low Low          |
| MacGregor 1982     | Low Low Low Low   | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Low Low Low          |
| Matlou 1986        | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Low Low Low          |
| Matthensen 2012    | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Low Low Low          |
| Miller 1987        | High Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Low Low Low          |
| Overlack 1985      | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Low Low Low          |
| Overlack 1991      | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Low Low Low          |
| Overlack 1995      | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Low Low Low          |
| Patki 1990         | Low Low Low Low   | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Low Low Low          |
| Richards 1984      | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Low Low Low          |
| Siani 1987         | Low Low Low Low   | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Low Low Low          |
| Skrabal 1984       | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Low Low Low          |
| Smith 1985         | Low Low Low Low   | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Low Low Low          |
| Sundar 1985        | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Low Low Low          |
| Valdes 1991        | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Low Low Low          |
| Vongpatanasin 2016  | Low Low Low Low   | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Low Low Low          |
| Whelton 1995       | Low Low Low Low   | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Some Low Low Low  | Low Low Low          |

Domains are: 1) randomization process errors; (2) deviations from the intended interventions; (3) missing outcome data; (4) systematic errors in measurement of the outcome; (5) bias in selection of the reported result; (6) use of a wash-out period in cross-over study design.
Figure S1. Dose-response meta-analysis of changes in systolic blood pressure (SBP) and diastolic blood pressure (DBP) levels (as mmHg) according to differences in potassium excretion between the treatment arms at the end of the trials, and to achieved potassium excretion levels between arms at the end of the trials.

Spline curve (solid line) with 95% confidence limits (long dashed lines), and background dash-dotted line using a linear function in a dose-response meta-analysis.
Figure S2. Meta-analysis of mean difference for changes in systolic (SBP) and diastolic (DBP) blood pressure levels between potassium treated and non-treated groups considering overall studies.

| Reference        | WMD (95% CI) | Weight |
|------------------|--------------|--------|
| SBP              |              |        |
| Barlow 1996 (G-G) | 0.70 (0.78, 0.48) | 4.12 |
| Barlow 1996 (G-G) | -0.70 (0.53, 0.21) | 3.28 |
| Berry 2010       | -1.50 (4.72, 3.12) | 3.40 |
| Brancati 2010    | -4.24 (2.43, 0.95) | 4.86 |
| Brancati 2008    | -6.69 (4.80, -4.59) | 4.97 |
| Bujofil 1985     | 2.30 (10.16, 15.70) | 0.53 |
| Chairmanns 1988 | -0.50 (4.95, -5.45) | 2.59 |
| Forsman 1988     | -3.40 (10.91, 4.11) | 2.03 |
| Fichtner 1987    | -10.00 (23.43, -4.45) | 0.75 |
| Frankosco 2005   | -10.60 (10.67, -5.03) | 3.11 |
| Giordano 2015    | -2.91 (9.90, 14.00) | 2.23 |
| Graham 2014      | -5.60 (11.46, 1.08) | 2.40 |
| Green 1988       | 0.70 (3.13, -4.63) | 2.89 |
| Grobbee 1987     | 2.60 (7.24, 2.40) | 2.83 |
| Go 2001          | -3.70 (9.86, -6.54) | 4.33 |
| He 2010 (KDC)    | -3.00 (8.53, 2.04) | 2.69 |
| He 2010 (KDCO)   | -1.60 (7.00, 8.00) | 2.69 |
| Kaplan 1985      | -8.60 (18.80, 4.40) | 1.37 |
| Kanowski 1983    | -2.90 (7.48, 1.68) | 3.45 |
| Kanowski 1985    | -7.00 (13.92, 1.32) | 1.78 |
| Marko 1985       | -7.00 (16.14, 2.14) | 1.56 |
| Mattheson 2012   | 0.00 (4.84, 4.84) | 3.27 |
| Miller 1987      | -8.00 (22.02, 3.42) | 3.58 |
| Overlack 1995 (KDC) | -4.40 (4.62, -2.18) | 4.94 |
| Overlack 1995 (KDCO) | -7.00 (29.26, -4.75) | 4.92 |
| Overlack 1985    | -14.80 (20.71, -5.89) | 1.62 |
| Park 1992        | -12.10 (17.16, -7.04) | 3.15 |
| Richards 1984    | -1.90 (13.40, 9.60) | 1.10 |
| Sarni 1987       | -15.60 (24.15, -3.05) | 1.26 |
| Simpang 1984 (G-G) | -4.30 (13.76, 7.77) | 1.17 |
| Simpang 1984 (G-G) | -4.30 (21.27, 22.07) | 0.36 |
| Smith 1986       | -2.00 (13.70, 7.70) | 1.63 |
| Svanberg 1985    | -11.10 (27.80, 5.89) | 0.58 |
| Vellios 1961     | -7.00 (14.07, 7.07) | 2.21 |
| Vongpatanasin 2016 (KDC) | -2.00 (7.83, 3.83) | 2.73 |
| Vongpatanasin 2016 (KDCO) | -4.00 (10.33, 2.33) | 2.51 |
| Whelan 1995      | 0.00 (1.16, 1.20) | 5.46 |
| Overall (I-squared = 63.2%) | -3.80 (2.24, -5.56) | 100.00 |

| DBP              |              |        |
|------------------|--------------|--------|
| Barlow 1986 (G-G) | 0.80 (0.94, 0.514) | 2.69 |
| Barlow 1986 (G-G) | -0.30 (0.57, 0.47) | 2.42 |
| Berry 2010       | -0.30 (3.12, 2.92) | 0.34 |
| Brancati 2008    | -4.30 (3.36, -2.21) | 3.58 |
| Brancati 2008    | -4.26 (3.61, -2.21) | 3.60 |
| Bujofil 1985     | 4.60 (3.08, 2.18) | 1.64 |
| Chairmanns 1988 | 2.30 (10.76, 7.13) | 0.13 |
| Fichtner 1987    | -4.60 (10.81, 1.81) | 2.11 |
| Fichtner 1987    | -6.60 (17.28, 0.88) | 1.02 |
| Frankosco 2005   | -7.40 (10.00, -4.80) | 3.42 |
| Giordano 2015    | -0.69 (-3.97, 3.37) | 3.02 |
| Graham 2014      | -2.40 (8.29, 7.49) | 2.44 |
| Green 1988       | 1.40 (0.32, 3.73) | 3.51 |
| Grobbee 1987     | -5.60 (4.30, 3.70) | 2.78 |
| Go 2001          | -0.10 (0.00, 0.15) | 3.63 |
| He 2010 (KDC)    | -1.00 (4.85, 2.85) | 2.95 |
| He 2010 (KDCO)   | -1.00 (4.85, 2.85) | 2.95 |
| Kaplan 1985      | -3.80 (11.07, -5.03) | 2.42 |
| Kanowski 1998    | -1.30 (4.88, 3.34) | 3.15 |
| MacGregor 1982   | -4.00 (8.67, 0.57) | 2.68 |
| Mattheson 2012   | 3.00 (8.67, 2.67) | 2.32 |
| Miller 1987      | 1.00 (2.84, 4.94) | 2.92 |
| Overlack 1995 (KDC) | -4.50 (-0.92, -2.49) | 3.69 |
| Overlack 1995 (KDCO) | -4.10 (6.66, -2.54) | 3.75 |
| Overlack 1985    | -10.50 (16.12, -5.88) | 2.68 |
| Park 1992        | -12.10 (17.16, -7.04) | 3.15 |
| Richards 1984    | -1.00 (10.43, 8.43) | 3.13 |
| Sarni 1987       | -10.60 (17.70, -4.08) | 1.83 |
| Simpang 1984 (G-G) | 1.70 (8.11, 12.81) | 1.09 |
| Simpang 1984 (G-G) | -3.00 (16.12, 10.12) | 0.81 |
| Smith 1986       | 6.00 (8.62, 3.24) | 2.14 |
| Svanberg 1985    | -2.80 (6.44, 3.44) | 2.16 |
| Vellios 1961     | -3.00 (8.48, 2.54) | 2.33 |
| Vongpatanasin 2016 (KDC) | -1.00 (5.65, 3.65) | 2.68 |
| Vongpatanasin 2016 (KDCO) | -6.00 (-6.83, 6.31) | 2.78 |
| Whelan 1995      | -0.41 (1.37, 0.56) | 3.86 |
| Overall (I-squared = 63.3%) | -0.63 (3.76, -1.11) | 100.00 |
Figure S3. Dose-response meta-analysis of changes in systolic blood pressure (SBP) and diastolic blood pressure (DBP) levels (as mmHg) after excluding the two trials at high risk of bias according to differences in potassium excretion between the treatment arms at the end of the trials, and to achieved potassium excretion levels between arms at the end of the trials (N=30).

Spline curve (solid line) with 95% confidence limits (long dashed lines).
Figure S4. Meta-analysis of mean difference for changes in systolic (SBP) and diastolic (DBP) blood pressure levels (as mmHg) between potassium treated and non-treated groups after excluding the two studies at high risk of bias (N=30).

### SBP

| Reference          | WMD (95% CI) | Weight |
|--------------------|--------------|--------|
| Barion 1986 (S1)   | 0.70 (0.67, 0.73) | 4.34   |
| Barion 1986 (S2)   | -0.70 (0.67, 0.73) | 4.34   |
| Berry 2010         | 0.50 (0.47, 0.53)  | 5.31   |
| Brachl 2009 (S1)   | 0.50 (0.47, 0.53)  | 5.31   |
| Brachl 2009 (S2)   | -0.50 (0.47, 0.53) | 5.31   |
| Butlij 1985        | 0.50 (0.47, 0.53)  | 5.31   |
| Chalmers 1986      | 0.50 (0.47, 0.53)  | 5.31   |
| Forthor 1990       | 0.50 (0.47, 0.53)  | 5.31   |
| Frewan 2005        | 0.50 (0.47, 0.53)  | 5.31   |
| Gijon 2015         | 0.50 (0.47, 0.53)  | 5.31   |
| Graham 2014        | 0.50 (0.47, 0.53)  | 5.31   |
| Grimm 1996         | 0.50 (0.47, 0.53)  | 5.31   |
| Gnoll 1997         | 0.50 (0.47, 0.53)  | 5.31   |
| Gu 2001            | 0.50 (0.47, 0.53)  | 5.31   |
| He 2010 (S1)       | 0.50 (0.47, 0.53)  | 5.31   |
| He 2010 (S2)       | 0.50 (0.47, 0.53)  | 5.31   |
| Karan 1995         | 0.50 (0.47, 0.53)  | 5.31   |
| Karan 1996         | 0.50 (0.47, 0.53)  | 5.31   |
| MacGregor 1982     | 0.50 (0.47, 0.53)  | 5.31   |
| Matus 1996         | 0.50 (0.47, 0.53)  | 5.31   |
| Mathisen 2012      | 0.50 (0.47, 0.53)  | 5.31   |
| Overbeck 1990 (S1) | 0.50 (0.47, 0.53)  | 5.31   |
| Overbeck 1990 (S2) | 0.50 (0.47, 0.53)  | 5.31   |
| Plass 1990         | 0.50 (0.47, 0.53)  | 5.31   |
| Richards 1984      | 0.50 (0.47, 0.53)  | 5.31   |
| Smith 1987         | 0.50 (0.47, 0.53)  | 5.31   |
| Smith 1987 (S1)    | 0.50 (0.47, 0.53)  | 5.31   |
| Smith 1987 (S2)    | 0.50 (0.47, 0.53)  | 5.31   |
| Smith 1988         | 0.50 (0.47, 0.53)  | 5.31   |
| Sprock 1985        | 0.50 (0.47, 0.53)  | 5.31   |
| Vats 2001          | 0.50 (0.47, 0.53)  | 5.31   |
| Vatsch 2001        | 0.50 (0.47, 0.53)  | 5.31   |
| Overall (I² squared = 66.8%) | -0.80 (0.67, 0.93) | 5.31   |

### DBP

| Reference          | WMD (95% CI) | Weight |
|--------------------|--------------|--------|
| Barion 1986 (S1)   | -0.60 (0.59, 0.61) | 2.24   |
| Barion 1986 (S2)   | -0.60 (0.59, 0.61) | 2.24   |
| Berry 2010         | -0.60 (0.59, 0.61) | 2.24   |
| Brachl 2009 (S1)   | -0.60 (0.59, 0.61) | 2.24   |
| Brachl 2009 (S2)   | -0.60 (0.59, 0.61) | 2.24   |
| Butlij 1985        | -0.60 (0.59, 0.61) | 2.24   |
| Chalmers 1986      | -0.60 (0.59, 0.61) | 2.24   |
| Forthor 1990       | -0.60 (0.59, 0.61) | 2.24   |
| Frewan 2005        | -0.60 (0.59, 0.61) | 2.24   |
| Gijon 2015         | -0.60 (0.59, 0.61) | 2.24   |
| Graham 2014        | -0.60 (0.59, 0.61) | 2.24   |
| Grimm 1996         | -0.60 (0.59, 0.61) | 2.24   |
| Gnoll 1997         | -0.60 (0.59, 0.61) | 2.24   |
| Gu 2001            | -0.60 (0.59, 0.61) | 2.24   |
| He 2010 (S1)       | -0.60 (0.59, 0.61) | 2.24   |
| He 2010 (S2)       | -0.60 (0.59, 0.61) | 2.24   |
| Karan 1995         | -0.60 (0.59, 0.61) | 2.24   |
| Karan 1996         | -0.60 (0.59, 0.61) | 2.24   |
| MacGregor 1982     | -0.60 (0.59, 0.61) | 2.24   |
| Matus 1996         | -0.60 (0.59, 0.61) | 2.24   |
| Mathisen 2012      | -0.60 (0.59, 0.61) | 2.24   |
| Overbeck 1990 (S1) | -0.60 (0.59, 0.61) | 2.24   |
| Overbeck 1990 (S2) | -0.60 (0.59, 0.61) | 2.24   |
| Plass 1990         | -0.60 (0.59, 0.61) | 2.24   |
| Richards 1984      | -0.60 (0.59, 0.61) | 2.24   |
| Smith 1987         | -0.60 (0.59, 0.61) | 2.24   |
| Smith 1987 (S1)    | -0.60 (0.59, 0.61) | 2.24   |
| Smith 1987 (S2)    | -0.60 (0.59, 0.61) | 2.24   |
| Smith 1988         | -0.60 (0.59, 0.61) | 2.24   |
| Sprock 1985        | -0.60 (0.59, 0.61) | 2.24   |
| Vats 2001          | -0.60 (0.59, 0.61) | 2.24   |
| Vatsch 2001        | -0.60 (0.59, 0.61) | 2.24   |
| Overall (I² squared = 66.8%) | -0.80 (0.67, 0.93) | 2.24   |
Figure S5. Sensitivity analysis of mean difference for changes in systolic (SBP) blood pressure levels (as mmHg) between potassium treated and non-treated groups after removal of single study result (leave-one-out analysis).

Each given named study is omitted when computing the overall meta-analysis summary estimate.
Figure S6. Sensitivity analysis of mean difference for changes in diastolic (DBP) blood pressure levels (as mmHg) between potassium treated and non-treated groups after removal of single study result (leave-one-out analysis).

Each given named study is omitted when computing the overall meta-analysis summary estimate.
Figure S7. Dose-response meta-analysis of changes in systolic blood pressure (SBP) and diastolic blood pressure (DBP) levels (as mmHg) according to differences in potassium excretion between the treatment arms (potassium supplemented and control group) at the end of the trials.

All studies included (N=32). Sensitivity analysis of overall spline curve (black solid line) with 95% confidence limits (black dashed lines) and the study-specific trends showing the influence of variation across studies (gray solid lines).
Figure S8. Dose-response meta-analysis of changes in systolic blood pressure (SBP) and diastolic blood pressure (DBP) levels (as mmHg) according to achieved potassium excretion levels between arms (potassium supplemented and control group) at the end of the trials.

All studies included (N=32). Sensitivity analysis of overall spline curve (black solid line) with 95% confidence limits (black dashed lines) and the study-specific trends showing the influence of variation across studies (gray solid lines).
Figure S9. Meta-analysis of mean difference for changes in systolic (SBP) and diastolic (DBP) blood pressure levels (as mmHg) between potassium treated and non-treated groups in participants with hypertension and with no hypertension.

| Reference | SBP (WMD, 95% CI) | Weight |
|-----------|--------------------|--------|
| No hypertension |                    |        |
| Barden 1989 (21) | -0.72 (-2.79, 1.35) | 4.12   |
| Barden 1989 (21) | -0.70 (-0.81, 1.61) | 8.30   |
| Barden 2000 (21) | -2.24 (-4.35, 0.00) | 4.08   |
| Breslau 2002 (21) | -0.88 (-0.88, 0.43) | 4.87   |
| Mathevan 2012 | 0.08 (-0.14, 0.30) | 5.56   |
| Miller 1997 | 0.08 (-0.14, 0.21) | 5.46   |
| Subtotal (2 studies) | -0.84 (-0.47, 0.84) | 29.65  |

| Reference | DBP (WMD, 95% CI) | Weight |
|-----------|--------------------|--------|
| No hypertension |                    |        |
| Barden 1989 (21) | -0.72 (-3.94, 2.51) | 9.68   |
| Barden 1999 (27) | -0.70 (-0.97, 0.57) | 11.11  |
| Barden 2003 (27) | -0.70 (-0.97, 0.57) | 11.11  |
| Breslau 2002 (21) | -0.88 (-0.88, 0.43) | 4.87   |
| Mathevan 2012 | 0.08 (-0.14, 0.21) | 5.46   |
| Miller 1997 | 0.08 (-0.14, 0.21) | 5.46   |
| Subtotal (2 studies) | -0.84 (-0.47, 0.84) | 29.65  |

Overall (equivalent to 95% CI)

| SBP | DBP |
|-----|-----|
| -0.72 (-2.79, 1.35) | -0.84 (-0.47, 0.84) |
| 4.12 | 29.65 |

Overall (equivalent to 95% CI)
**Figure S10.** Meta-analysis of mean difference for changes in systolic (SBP) and diastolic (DBP) blood pressure levels (as mmHg) between potassium treated and non-treated groups in participants with hypertension by use of anti-hypertensive medications.

### SBP

| Reference                  | WMD (95% CI)   | Weight |
|----------------------------|----------------|--------|
| **Not using anti-hyp medications** |                |        |
| Berry 2010                 | -1.50 (-4.12, 1.12) | 4.98   |
| Chalmers 1986              | -0.50 (-4.65, 3.65)  | 3.44   |
| Forrester 1982             | -0.50 (-4.65, 3.65)  | 3.44   |
| Franchini 2005             | -1.00 (-4.43, 2.43)  | 0.82   |
| Giudici 2015               | -1.60 (-5.67, -2.67) | 4.46   |
| Graham 2014                | -2.90 (-9.40, 3.60)  | 2.85   |
| Grobbee 1987               | -2.50 (-7.24, 2.24)  | 4.83   |
| Gu 2001                    | -3.70 (-9.68, -2.98) | 7.18   |
| He 2019 (KCl)              | -3.00 (-8.43, 2.43)  | 3.95   |
| He 2010 (KCl)              | -1.00 (-5.00, 3.00)  | 3.57   |
| MacGregor 1986             | -0.70 (-5.25, 3.25)  | 2.17   |
| Mattioli 1986              | -3.00 (-14.14, 8.14) | 4.88   |
| Overlack 1985              | -4.60 (-14.00, 4.80) | 4.19   |
| Overlack 1995 (KCl)        | -3.00 (-8.43, 2.43)  | 3.95   |
| Overlack 1995 (KCl)        | -4.60 (-14.00, 4.80) | 4.19   |
| Pali 1990                  | -10.60 (-25.60, 4.40) | 5.59   |
| Richards 1984              | -3.00 (-8.43, 2.43)  | 3.95   |
| Slaten 1985                | -3.00 (-8.43, 2.43)  | 3.95   |
| Skrabal 1984 (Gr1)         | -1.00 (-4.80, 2.80)  | 3.76   |
| Smith 1985                 | -1.00 (-4.80, 2.80)  | 3.76   |
| Sunnar 1985                | -2.50 (-7.24, 2.24)  | 4.83   |
| Valda 1991                 | -3.00 (-8.43, 2.43)  | 3.95   |
| Vongpatansin 2016 (K-d)    | -3.00 (-8.43, 2.43)  | 3.95   |
| Vongpatansin 2016 (KCl)    | -1.00 (-4.80, 2.80)  | 3.76   |
| Subtotal (I-squared = 35%) | -6.19 (-9.69, -2.69) | 36.77  |

**Using anti-hyp medications**

| Reference                  | WMD (95% CI)   | Weight |
|----------------------------|----------------|--------|
| Suppitt 1985               | 2.30 (-15.18, 19.78) | 0.58   |
| Forrest 1988               | 0.40 (-10.97, 11.77) | 2.52   |
| Grims 1988                 | 0.70 (-3.10, 4.50)  | 4.08   |
| Kaplan 1985                | -1.00 (-15.00, 13.00) | 1.59   |
| Kawano 1998                | -2.50 (-7.45, -1.55) | 4.50   |
| Skrabal 1984 (Gr2)         | -0.40 (-21.27, 20.27) | 0.38   |
| Subtotal (I-squared = 35%) | -1.33 (-3.82, 1.25)  | 16.23  |
| Overall (I-squared = 35%)  | -6.42 (-9.98, -2.88) | 100.00 |

### DBP

| Reference                  | WMD (95% CI)   | Weight |
|----------------------------|----------------|--------|
| **Not using anti-hyp medications** |                |        |
| Berry 2010                 | -0.30 (-3.12, 2.52)  | 4.14   |
| Chalmers 1986              | 2.00 (-1.07, 5.07)  | 1.04   |
| Forrester 1982             | -0.00 (-1.07, 1.07)  | 4.98   |
| Franchini 2005             | -0.90 (-3.97, 2.17)  | 3.83   |
| Giudici 2015               | -2.40 (-4.29, 1.49)  | 3.74   |
| Graham 2014                | -0.60 (-4.90, 3.70)  | 0.58   |
| Grobbee 1987               | -0.10 (-2.01, 1.81)  | 4.41   |
| Gu 2001                    | -0.20 (-4.80, 4.40)  | 1.59   |
| He 2010 (KCl)              | -1.00 (-4.80, 2.80)  | 3.76   |
| He 2010 (KClO3)            | -1.00 (-4.80, 2.80)  | 3.76   |
| MacGregor 1982             | -4.00 (-9.02, 1.01)  | 3.47   |
| Mattioli 1986              | -3.00 (-8.57, 2.57)  | 3.08   |
| Overlack 1985              | -10.60 (-15.18, -6.02) | 3.45   |
| Overlack 1995 (K-d)        | -4.10 (-5.56, -2.54) | 4.51   |
| Overlack 1995 (KCl)        | -4.20 (-5.56, -2.84) | 4.47   |
| Pali 1990                  | -13.30 (-16.12, -10.48) | 4.99   |
| Richards 1984              | -1.00 (-10.43, 8.40)  | 1.98   |
| Slaten 1985                | -10.62 (-17.75, -3.48) | 2.52   |
| Skrabal 1984 (Gr1)         | 1.70 (-0.12, 3.52)  | 1.58   |
| Smith 1985                 | 0.00 (-6.12, 6.12)  | 2.88   |
| Sunnar 1985                | -2.50 (-8.44, 3.44)  | 2.91   |
| Valda 1991                 | -3.00 (-6.54, 0.40)  | 3.09   |
| Vongpatansin 2016 (K-d)    | 0.00 (-4.31, 4.31)  | 3.58   |
| Vongpatansin 2016 (KCl)    | -1.00 (-5.65, 3.65)  | 3.48   |
| Subtotal (I-squared = 64.8%) | -3.08 (-4.94, -1.22) | 62.19  |

**Using anti-hyp medications**

| Reference                  | WMD (95% CI)   | Weight |
|----------------------------|----------------|--------|
| Suppitt 1985               | 4.80 (-3.08, 12.68)  | 2.30   |
| Forrest 1988               | -4.60 (-10.81, 1.61) | 2.85   |
| Grims 1988                 | 1.40 (-3.93, 6.73)  | 4.30   |
| Kaplan 1985                | -0.80 (-11.07, 9.47) | 3.20   |
| Kawano 1998                | -1.50 (-4.04, 1.04)  | 2.05   |
| Skrabal 1984 (Gr2)         | -3.00 (-16.12, 10.12) | 1.21   |
| Subtotal (I-squared = 50.9%) | -1.16 (-4.06, 1.74)  | 17.81  |
| Overall (I-squared = 63.5%) | -2.78 (-4.43, -1.12) | 100.00 |
Figure S11. Dose-response meta-analysis of changes in systolic blood pressure (SBP) and diastolic blood pressure (DBP) levels (as mmHg) according to differences in potassium excretion between the treatment arms at the end of the trials and by study design (cross-over N=23 vs. parallel N=9).

Spline curve (solid line) with 95% confidence limits (long dashed lines).
Figure S12. Dose-response meta-analysis of changes in systolic blood pressure (SBP) and diastolic blood pressure (DBP) levels (as mmHg) according to differences in potassium excretion between the treatment arms at the end of the trials and by study design (cross-over N=23 vs. parallel N=9), in subjects with hypertension only.

Spline curve (solid line) with 95% confidence limits (long dashed lines).
Figure S13. Meta-analysis of mean difference for changes in systolic (SBP) and diastolic (DBP) blood pressure levels (as mmHg) between potassium treated and non-treated groups in all participants after stratification by study design (cross-over vs. parallel).

### SBP

| Reference | WMD (95% CI) | Weight | typ | med | hyp |
|-----------|--------------|--------|-----|-----|-----|
| Cross-over |              |        |     |     |     |
| Sanders 1996 (G1) | 0.70 (0.25, 1.14) | 4.12 | no | no |
| Sanders 1996 (G2) | -0.19 (0.61, 4.61) | 3.89 | no | no |
| Berto 1996 | 1.80 (1.12, 2.48) | 3.40 | yes | yes |
| Waddell 1998 | -0.41 (3.87, 4.17) | 2.02 | yes | yes |
| Forsythe 1994 | -0.80 (0.48, 4.48) | 0.75 | yes | yes |
| Bakker 2017 | -0.90 (0.56, 6.00) | 2.21 | yes | yes |
| Oyer 2014 | -0.00 (0.64, 5.14) | 2.40 | yes | yes |
| Han 2015 (HC) | -0.90 (0.64, 5.14) | 2.40 | yes | yes |
| Han 2015 (KIC) | -0.90 (0.64, 5.14) | 2.40 | yes | yes |
| Yashiro 1993 | -2.90 (3.93, 5.20) | 2.98 | yes | yes |
| Kawano 1998 | -2.90 (3.93, 5.20) | 2.98 | yes | yes |
| Markovitch 1992 | 0.60 (1.79, 5.06) | 0.25 | yes | yes |
| Milano 1996 | -0.90 (0.64, 5.14) | 2.40 | yes | yes |
| Mathewson 1972 | 6.00 (4.96, 8.00) | 3.27 | yes | yes |
| Yashiro 1987 | 0.60 (1.79, 5.06) | 0.25 | yes | yes |
| Oyer 2015 | -3.90 (5.23, 3.02) | 1.00 | yes | yes |
| Oyer 2015 (KIC) | 0.60 (1.79, 5.06) | 0.25 | yes | yes |
| Park 1990 | 4.10 (4.73, 7.53) | 0.13 | yes | yes |
| Rehder 1986 | -1.90 (4.52, 6.00) | 1.10 | yes | yes |
| Seissel 1994 (G1) | 4.30 (1.55, 7.47) | 1.17 | yes | yes |
| Seissel 1994 (G2) | 4.30 (1.55, 7.47) | 1.17 | yes | yes |
| Smith 1986 | 4.40 (1.27, 7.27) | 0.96 | yes | yes |
| Valdes 1991 | 7.00 (4.77, 9.17) | 2.21 | yes | yes |
| Vonpraegarten 2016 (K-0) | 2.80 (0.33, 5.19) | 2.51 | yes | yes |
| Vonpraegarten 2016 (HC) | 2.80 (0.33, 5.19) | 2.51 | yes | yes |
| Subtotal (Cross-over) | -3.70 (1.17, 7.28) | 0.28 | yes | yes |

### DBP

| Reference | WMD (95% CI) | Weight | typ | med | hyp |
|-----------|--------------|--------|-----|-----|-----|
| Cross-over |              |        |     |     |     |
| Sanders 1996 (G1) | 0.60 (0.14, 1.04) | 2.60 | no | no |
| Sanders 1996 (G2) | -0.60 (0.14, 1.04) | 2.60 | no | no |
| Berto 1996 | 0.00 (1.16, 1.76) | 0.58 | yes | yes |
| Waddell 1998 | 0.60 (0.14, 1.04) | 2.60 | no | no |
| Finscher 1986 | 0.60 (0.14, 1.04) | 2.60 | no | no |
| Finscher 1995 | 0.60 (0.14, 1.04) | 2.60 | no | no |
| Hershey 1987 | -0.90 (0.56, 3.50) | 2.35 | yes | yes |
| Hershey 1988 | -0.60 (0.26, 4.90) | 2.35 | yes | yes |
| Park 1986 | 0.60 (1.16, 1.76) | 0.58 | yes | yes |
| Park 1990 | -1.00 (1.16, 1.76) | 0.58 | yes | yes |
| Rehder 1986 | 0.60 (1.16, 1.76) | 0.58 | yes | yes |
| Seissel 1994 (G1) | 0.60 (1.16, 1.76) | 0.58 | yes | yes |
| Seissel 1994 (G2) | 0.60 (1.16, 1.76) | 0.58 | yes | yes |
| Smith 1986 | 0.70 (0.64, 3.50) | 0.49 | yes | yes |
| Smith 1990 | 0.00 (1.16, 1.76) | 0.58 | yes | yes |
| Subtotal (Cross-over) | -3.70 (1.17, 7.28) | 0.28 | yes | yes |

Overall (squared) = 85.5%
Figure S14. Meta-analysis of mean difference for changes in systolic (SBP) and diastolic (DBP) blood pressure levels (as mmHg) between potassium treated and non-treated groups after stratification by study design (cross-over vs. parallel) in subjects with hypertension only.

### SBP

| Reference | WMD (95% CI) | Weight |
|-----------|--------------|--------|
| **Cross-over** | | |
| Berry 2014 | -1.50 (-6.12, 3.12) | 4.50 |
| Foister 1988 | -3.40 (-10.87, 4.17) | 2.52 |
| Fotherby 1992 | -10.00 (-24.43, 4.43) | 0.62 |
| Gjoberi 2015 | -2.90 (9.90, -4.10) | 2.85 |
| Graham 2017 | -6.30 (-11.88, 1.68) | 3.27 |
| Grobbee 1987 | -2.50 (-7.24, 2.24) | 4.83 |
| Ha 2010 (KCl) | 0.00 (-8.60, 8.60) | 2.60 |
| Ha 2010 (KHC03) | -1.00 (-7.00, 5.00) | 3.97 |
| Kaplan 1985 | -5.60 (-19.60, 8.40) | 1.59 |
| Kawano 1998 | -2.90 (-7.45, 1.65) | 5.08 |
| MacGregor 1982 | -7.00 (-16.32, 1.23) | 2.17 |
| Matsu 1986 | -7.00 (-16.14, 2.14) | 1.86 |
| Ovaska 1985 | -14.80 (-23.71, -5.89) | 1.94 |
| Ovaska 1995 (K-) | -7.00 (-9.45, -4.75) | 8.90 |
| Ovaska 1995 (KCI) | -4.40 (-6.42, -2.18) | 8.95 |
| Parik 1990 | -12.50 (-17.16, -7.84) | 4.47 |
| Richards 1984 | -1.50 (-13.40, -9.50) | 1.25 |
| Skrabbai 1984 (Gr) | 0.00 (-13.40, 7.47) | 1.33 |
| Skrabbai 1984 (Gr2) | 0.40 (21.27, 22.07) | 0.38 |
| Smith 1986 | -2.00 (-11.70, 7.70) | 1.69 |
| Valds 1991 | -7.00 (-14.07, 0.07) | 2.81 |
| Vongpatana 2016 (K-) | -8.00 (-19.35, 3.35) | 3.91 |
| Vongpatana 2016 (KCl) | -2.00 (-7.83, 3.83) | 5.72 |
| Subtotal (I-squared = 13.3%) | -4.70 (-6.15, -3.28) | 76.18 |
| **Parallel** | | |
| Suppitt 1985 | 2.30 (-15.16, 19.78) | 0.58 |
| Chaim 1986 | -0.50 (-4.95, 4.95) | 3.44 |
| Finnish 2005 | -10.60 (-15.87, -5.30) | 4.46 |
| Gu 2001 | 0.70 (3.13, 4.53) | 6.08 |
| Sani 1987 | -3.70 (-4.86, -2.54) | 7.18 |
| Sonder 1985 | -13.00 (-24.15, -5.00) | 1.45 |
| Subtotal (I-squared = 66.3%) | -11.10 (-27.80, 5.60) | 6.62 |
| Overall (I-squared = 35.2%) | -4.62 (-6.98, -2.26) | 100.00 |

### DBP

| Reference | WMD (95% CI) | Weight |
|-----------|--------------|--------|
| **Cross-over** | | |
| Berry 2010 | -0.30 (-3.12, 2.52) | 4.14 |
| Foister 1988 | -1.50 (-10.81, 8.11) | 2.65 |
| Fotherby 1982 | -0.00 (-17.28, 8.28) | 1.49 |
| Gjoberi 2015 | -10.60 (-15.87, -5.30) | 4.46 |
| Graham 2014 | -2.40 (-4.29, 1.49) | 3.74 |
| Grobbee 1987 | -1.80 (-9.60, 6.60) | 3.58 |
| Ha 2010 (KCl) | -1.00 (-1.04, 0.04) | 3.76 |
| Ha 2010 (KHC03) | -1.00 (-2.04, 0.04) | 3.76 |
| Kaplan 1985 | -5.80 (-11.07, 0.53) | 3.20 |
| Kawano 1998 | -5.00 (-6.60, -3.40) | 3.00 |
| MacGregor 1982 | -4.00 (-8.57, 0.57) | 3.47 |
| Matsu 1986 | -3.00 (-6.07, 2.07) | 3.36 |
| Ovaska 1985 | -10.50 (-16.12, -5.88) | 4.45 |
| Ovaska 1995 (K-) | -4.10 (-5.55, -2.54) | 4.51 |
| Ovaska 1995 (KCI) | -4.20 (-5.52, -2.48) | 4.47 |
| Parik 1990 | -13.10 (-15.12, -11.08) | 4.39 |
| Richards 1984 | -1.00 (-10.43, 8.43) | 1.98 |
| Skrabbai 1984 (Gr) | 1.00 (-2.11, 2.11) | 1.58 |
| Skrabbai 1984 (Gr2) | 3.00 (-16.12, 10.12) | 1.21 |
| Smith 1985 | 0.00 (-6.12, 6.12) | 2.88 |
| Valds 1991 | -3.00 (-8.54, 3.54) | 3.09 |
| Vongpatana 2016 (K-) | 0.00 (-4.31, 4.31) | 3.58 |
| Vongpatana 2016 (KCI) | 1.00 (-6.55, 6.55) | 4.44 |
| Subtotal (I-squared = 89.9%) | -3.15 (-5.01, -0.29) | 75.40 |
| **Parallel** | | |
| Suppitt 1985 | 4.80 (-0.03, 12.68) | 2.30 |
| Chaim 1986 | 2.30 (-0.03, 5.07) | 3.94 |
| Finnish 2005 | -7.40 (-10.00, -4.80) | 4.22 |
| Finnish 2005 | 1.40 (0.99, 3.13) | 3.30 |
| Gu 2001 | -0.10 (-2.05, 1.85) | 4.41 |
| Sani 1987 | -10.90 (-17.75, -4.05) | 2.52 |
| Sonder 1985 | -2.60 (-8.64, 3.44) | 2.91 |
| Subtotal (I-squared = 85.4%) | -1.62 (-5.05, 1.80) | 24.60 |
| Overall (I-squared = 83.5%) | -2.76 (-4.43, -1.09) | 100.00 |
Figure S15. Dose-response meta-analysis of changes in systolic blood pressure (SBP) and diastolic blood pressure (DBP) levels (as mmHg) according to differences in potassium excretion between the treatment arms at the end of the trials in studies with baseline potassium excretion (uK) below 75 mmol/day (N=26), and equal or above 75 mmol/day (N=8).

Spline curve (solid line) with 95% confidence limits (long dashed lines).
Figure S16. Meta-analysis of mean difference for changes in systolic (SBP) and diastolic (DBP) blood pressure levels (as mmHg) between potassium treated and non-treated groups after stratification by baseline potassium (UK <75 mmol/day, and ≥75 mmol/day).

### SBP

| Reference                  | WMD (95% CI) | P value | Weight |
|----------------------------|--------------|---------|--------|
| Baseline UK<75 mmol/day    |              |         |        |
| Gu 2007                    | -0.45 (-0.60, -0.30) | 4.53    | 96     |
| Forman 1989                | -0.47 (-0.81, 0.47)  | 2.02    | 43     |
| Rapkin 1995                | -0.20 (-1.53, 0.99)  | 0.98    | 43     |
| Baranikova 1995            | -0.51 (-1.47, 0.46)  | 3.35    | 54     |
| Durr 2015                  | -0.21 (-1.60, 0.96)  | 1.27    | 45     |
| Sundar 1995                | -0.71 (-1.67, 0.16)  | 0.43    | 4      |
| Fildali 2016 (K-c)         | -0.71 (-1.67, 0.16)  | 0.43    | 4      |
| Fildali 2016 (K-c)         | -0.71 (-1.67, 0.16)  | 0.43    | 4      |
| Subtotal (14.87% total)    | -0.71 (-1.67, 0.16)  | 0.43    | 4      |
| Baseline UK≥75 mmol/day    |              |         |        |
| Mathewson 2012             | 0.10 (-0.25, 0.15)   | 3.63    | 96     |
| Gu 2007                    | -0.02 (-1.03, 0.90)   | 0.98    | 43     |
| Fildali 2016 (K-c)         | -0.17 (-1.54, 1.19)   | 0.09    | 4      |
| Saunders 1985              | -0.60 (-0.04, 0.59)   | 2.02    | 43     |
| Kilniss 1995               | -0.51 (-1.47, 0.46)   | 3.35    | 54     |
| Durr 2015                  | -0.21 (-1.60, 0.99)   | 0.98    | 43     |
| Sundar 1995                | -0.71 (-1.67, 0.16)   | 0.43    | 4      |
| Fildali 2016 (K-c)         | -0.71 (-1.67, 0.16)   | 0.43    | 4      |
| Gilsenan 2016 (K-c)        | -0.71 (-1.67, 0.16)   | 0.43    | 4      |
| Subtotal (14.87% total)    | -0.71 (-1.67, 0.16)   | 0.43    | 4      |

### DBP

| Reference                  | WMD (95% CI) | P value | Weight |
|----------------------------|--------------|---------|--------|
| Baseline UK<75 mmol/day    |              |         |        |
| Gu 2007                    | -0.13 (-0.25, 0.00) | 3.83    | 28     |
| Forman 1989                | -0.02 (-1.03, 0.99) | 0.98    | 43     |
| Rapkin 1995                | -0.13 (-0.25, 0.00) | 3.83    | 28     |
| Baranikova 1995            | -0.13 (-0.25, 0.00) | 3.83    | 28     |
| Durr 2015                  | -0.13 (-0.25, 0.00) | 3.83    | 28     |
| Sundar 1995                | -0.13 (-0.25, 0.00) | 3.83    | 28     |
| Fildali 2016 (K-c)         | -0.13 (-0.25, 0.00) | 3.83    | 28     |
| Gilsenan 2016 (K-c)        | -0.13 (-0.25, 0.00) | 3.83    | 28     |
| Subtotal (14.87% total)    | -0.13 (-0.25, 0.00) | 3.83    | 28     |
| Baseline UK≥75 mmol/day    |              |         |        |
| Mathewson 2012             | -0.13 (-0.25, 0.00) | 3.83    | 28     |
| Gu 2007                    | -0.13 (-0.25, 0.00) | 3.83    | 28     |
| Fildali 2016 (K-c)         | -0.13 (-0.25, 0.00) | 3.83    | 28     |
| Saunders 1985              | -0.13 (-0.25, 0.00) | 3.83    | 28     |
| Kilniss 1995               | -0.13 (-0.25, 0.00) | 3.83    | 28     |
| Durr 2015                  | -0.13 (-0.25, 0.00) | 3.83    | 28     |
| Sundar 1995                | -0.13 (-0.25, 0.00) | 3.83    | 28     |
| Fildali 2016 (K-c)         | -0.13 (-0.25, 0.00) | 3.83    | 28     |
| Gilsenan 2016 (K-c)        | -0.13 (-0.25, 0.00) | 3.83    | 28     |
| Subtotal (14.87% total)    | -0.13 (-0.25, 0.00) | 3.83    | 28     |
Figure S17. Meta-analysis of mean difference for changes in systolic (SBP) and diastolic (DBP) blood pressure levels (as mmHg) between potassium treated and non-treated groups after stratification by baseline sodium (uNa < 3 g/day, 3-4 g/day, and ≥ 4 g/day).

**SBP**

| Reference | WMD (%95 CI) | Weight | uNa baseline |
|-----------|--------------|--------|--------------|
| Smith 1985 | -0.04 (-1.6, 1.5) | 2.14 | 69 |
| Surve 1986 | 0.00 (0.2, 0.2) | 2.16 | 91 |
| Kjellstrom 1982 | 0.33 (0.2, 0.4) | 3.42 | 166 |
| Hulthen 1982 | 0.60 (0.9, 0.9) | 3.15 | 135 |
| Kjellstrom 1985 | 0.36 (0.3, 0.4) | 2.76 | 129 |
| Greenland 1987 | -0.03 (-0.5, 0.5) | 23.06 |
| Subtotal (pooled = 0.0%) | -0.03 (-0.5, 0.5) | 23.06 |

**DBP**

| Reference | WMD (%95 CI) | Weight | uNa baseline |
|-----------|--------------|--------|--------------|
| Smith 1985 | -0.43 (-0.6, -0.2) | 2.58 | 150 |
| Surve 1986 | -0.39 (-0.6, -0.1) | 2.42 | 130 |
| Kjellstrom 1982 | 0.60 (0.5, 0.7) | 3.42 | 166 |
| Hulthen 1982 | 0.60 (0.5, 0.7) | 3.42 | 166 |
| Kjellstrom 1985 | 0.36 (0.3, 0.4) | 2.76 | 129 |
| Greenland 1987 | -0.03 (-0.5, 0.5) | 23.06 |
| Subtotal (pooled = 0.0%) | -0.03 (-0.5, 0.5) | 23.06 |

Subtotal (pooled = 91.3%) | -0.52 (-0.7, -0.3) | 27.61 |
Figure S18. Meta-analysis of mean difference for changes in systolic (SBP) and diastolic (DBP) blood pressure levels (as mmHg) between potassium treated and non-treated groups by position of BP measurement (supine, standing, seated, or other).
Figure S19. Meta-analysis of mean difference for changes in systolic (SBP) and diastolic (DBP) blood pressure levels (as mmHg) between potassium treated and non-treated groups by blood pressure measurement modality (automatic vs. manual).

### SBP

| Reference | WMD (95% CI) | Weight |
|-----------|--------------|--------|
| **Automatic device** | | |
| Barden 1998 (G1) | 0.70 (0.28, 1.12) | 7.42 |
| Barden 1998 (G2) | -0.70 (0.24, 1.11) | 4.97 |
| Berry 2010 | -1.50 (-4.12, 1.12) | 0.29 |
| Branch 2006 (G1) | -6.84 (-11.03, -2.65) | 11.03 |
| Chaumet 1996 | -8.84 (-13.92, -3.76) | 11.11 |
| Glöckler 2015 | -2.82 (0.84, 4.68) | 2.81 |
| Graham 2014 | -5.80 (0.10, 11.00) | 0.28 |
| He 2010 (KCI1) | -5.82 (0.10, 11.00) | 0.28 |
| MacGinnigal 1982 | -8.82 (-14.08, -3.56) | 2.90 |
| Martin 1996 | -7.00 (-16.46, 2.46) | 1.77 |
| Mathisenhall 2012 | 0.80 (-0.88, 2.48) | 4.03 |
| Overack 1995 (K-ci) | -7.80 (-20.25, 5.65) | 10.93 |
| Richards 1981 | -4.42 (-8.28, -0.56) | 10.92 |
| Rich 1992 | -6.42 (-10.62, -2.22) | 0.17 |
| Vickers 1991 | -7.00 (-14.78, 0.78) | 2.76 |
| Vangamaniwala 2011 (K-ci) | -4.80 (-10.32, 0.72) | 0.20 |
| Vangamaniwala 2011 (K-ci) | -2.40 (-7.82, 3.02) | 3.70 |
| Subtotal (squared = 96.3%) | -0.77 (-2.84, 1.30) | 100.00 |
| **Manual device** | | |
| Subb 1995 | 3.30 (1.86, 4.74) | 1.79 |
| Forrester 1996 | -5.82 (-10.60, 4.77) | 0.99 |
| Forrester 1992 | -10.20 (-24.42, 4.02) | 2.44 |
| Forrester 2005 | -16.80 (-31.07, -2.53) | 7.64 |
| Green 1996 | -10.90 (-13.05, -8.75) | 0.95 |
| Gribble 2007 | -2.02 (-7.28, 3.24) | 8.16 |
| Gu 2015 | -2.10 (-5.23, 0.03) | 0.99 |
| Ham 1991 | -2.10 (-5.16, 0.96) | 4.13 |
| Kaplan 1985 | -2.10 (-5.16, 0.96) | 4.13 |
| Miller 1987 | -2.10 (-5.16, 0.96) | 4.13 |
| Overack 1995 | -14.80 (-20.25, -9.35) | 4.70 |
| Park 1992 | -12.10 (-17.56, -6.64) | 7.80 |
| Sandal 1994 (G1) | -12.10 (-17.56, -6.64) | 7.80 |
| Sandal 1994 (G2) | -12.10 (-17.56, -6.64) | 7.80 |
| Sander 1985 | -11.10 (-16.61, -5.59) | 1.92 |
| Wheaton 1995 | -0.82 (-1.65, 0.01) | 11.11 |
| Total (squared = 71.7%) | -4.81 (-7.82, -1.80) | 100.00 |

### DBP

| Reference | WMD (95% CI) | Weight |
|-----------|--------------|--------|
| **Automatic device** | | |
| Barden 1996 (G1) | 0.80 (0.24, 1.36) | 3.73 |
| Barden 1996 (G2) | -0.30 (-0.77, 0.17) | 0.99 |
| Berry 2010 | -0.00 (1.25, 2.25) | 0.69 |
| Branch 2006 (G1) | -6.40 (-10.32, -2.48) | 0.39 |
| Branch 2006 (G2) | -3.20 (-4.32, -2.08) | 2.71 |
| Chaumet 1996 | -2.82 (0.84, 4.68) | 5.41 |
| Glöckler 2015 | -0.30 (-0.97, 0.37) | 0.97 |
| Graham 2014 | -2.40 (-4.32, -0.48) | 4.68 |
| He 2010 (KCI1) | -1.00 (-4.68, 2.68) | 0.48 |
| MacGinnigal 1982 | -1.00 (-4.68, 2.68) | 0.48 |
| Mathisenhall 2012 | -4.00 (-6.82, -1.18) | 3.70 |
| Overack 1995 (K-ci) | -4.00 (-6.82, -1.18) | 3.70 |
| Richards 1981 | -2.00 (-3.54, -0.46) | 1.21 |
| Rich 1992 | -2.00 (-3.54, -0.46) | 1.21 |
| Vickers 1991 | -2.00 (-3.54, -0.46) | 1.21 |
| Vangamaniwala 2011 (K-ci) | 0.00 (0.43, 0.31) | 4.02 |
| Vangamaniwala 2011 (K-ci) | -1.00 (-2.38, 0.38) | 3.70 |
| Subtotal (squared = 44.4%) | -1.98 (-3.05, -0.91) | 100.00 |
| **Manual device** | | |
| Subb 1995 | 4.80 (3.08, 6.52) | 6.87 |
| Forrester 1996 | -4.80 (-10.60, 1.00) | 5.50 |
| Forrester 1992 | -6.80 (-12.78, -0.82) | 3.50 |
| Forrester 2005 | -6.80 (-12.78, -0.82) | 3.50 |
| Green 1996 | -1.40 (-3.23, 0.43) | 7.20 |
| Gribble 2007 | -2.00 (-4.32, 0.32) | 6.68 |
| Gu 2001 | -0.10 (-0.20, 0.00) | 7.45 |
| Harper 1985 | -5.80 (-10.78, -0.82) | 5.84 |
| Kaneko 1996 | -1.40 (-3.23, 0.43) | 7.20 |
| Overack 1995 | -10.50 (-16.12, -4.88) | 6.32 |
| Park 1992 | -13.60 (-19.16, -8.04) | 7.43 |
| Sandal 1994 (G1) | -13.60 (-19.16, -8.04) | 7.43 |
| Sandal 1994 (G2) | -13.60 (-19.16, -8.04) | 7.43 |
| Sander 1985 | -10.50 (-16.12, -4.88) | 6.32 |
| Wheaton 1995 | -3.60 (-6.12, -1.08) | 5.59 |
| Subtotal (squared = 91.2%) | -3.48 (-5.18, -1.78) | 100.00 |
Figure S20. Dose-response meta-analysis of changes in systolic blood pressure (SBP) and diastolic blood pressure (DBP) levels (as mmHg) according to differences in potassium excretion between the treatment arms at the end of the trials by position of BP measurement (supine N=19, standing N=11, seated N=11, or other N=9).

Spline curve (solid line) with 95% confidence limits (long dashed lines).
Figure S21. Dose-response meta-analysis of changes in systolic blood pressure (SBP) and diastolic blood pressure (DBP) levels (as mmHg) according to differences in potassium excretion between the treatment arms at the end of the trials by BP measurement modality (automatic N=15 vs. manual device N=17).

Spline curve (solid line) with 95% confidence limits (long dashed lines).
Figure S22. Dose-response meta-analysis of changes in systolic blood pressure (SBP) and diastolic blood pressure (DBP) levels (as mmHg) according to differences in potassium excretion between the treatment arms at the end of the trials with duration ≥12 weeks (N=5).

Spline curve (solid line) with 95% confidence limits (long dashed lines).
Figure S23. Funnel plots for publication bias for mean difference for changes in systolic (SBP) and diastolic (DBP) blood pressure levels (as mmHg) and its standard error (SE).