**Supplemental Table 1.** STROBE (Strengthening the Reporting of Observational Studies in Epidemiology) guideline

| | Item No | Recommendation | Reported on page number |
|---|---|---|---|
| **Title and abstract** | 1 | (*a*) Indicate the study's design with a commonly used term in the title or the abstract | 1 |
| | | (*b*) Provide in the abstract an informative and balanced summary of what was done and what was found | 4 |
| **Introduction** | | | |
| Background/rationale | 2 | Explain the scientific background and rationale for the investigation being reported | 5 |
| Objectives | 3 | State specific objectives, including any prespecified hypotheses | 5 |
| **Methods** | | | |
| Study design | 4 | Present key elements of study design early in the paper | 6 |
| Setting | 5 | Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection | 6 |
| Participants | 6 | (*a*) Give the eligibility criteria, and the sources and methods of selection of participants | 6 |
| Variables | 7 | Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable | 7 |
| Data sources/ measurement | 8* | For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group | - |
| Bias | 9 | Describe any efforts to address potential sources of bias | - |
| Study size | 10 | Explain how the study size was arrived at | 6 |
| Quantitative variables | 11 | Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why | 8 |
| Statistical methods | 12 | (*a*) Describe all statistical methods, including those used to control for confounding | 8 |
| | | (*b*) Describe any methods used to examine subgroups and interactions | 8 |
| | | (*c*) Explain how missing data were addressed | - |
| | | (*d*) If applicable, describe analytical methods taking account of sampling strategy | - |
| | | (*e*) Describe any sensitivity analyses | - |

| | | | |
|---|---|---|---|
| **Results** | | | |
| Participants | 13* | (a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed | 9 |
| | | (b) Give reasons for non-participation at each stage | - |
| | | (c) Consider use of a flow diagram | - |
| Descriptive data | 14* | (a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders | 9 |
| | | (b) Indicate number of participants with missing data for each variable of interest | 9 |
| Outcome data | 15* | Report numbers of outcome events or summary measures | 9-10 |
| Main results | 16 | (*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included | - |
| | | (*b*) Report category boundaries when continuous variables were categorized | - |
| | | (*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period | - |
| Other analyses | 17 | Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses | 11 |
| **Discussion** | | | |
| Key results | 18 | Summarise key results with reference to study objectives | 11 |
| Limitations | 19 | Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias | 14 |
| Interpretation | 20 | Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence | 14 |
| Generalisability | 21 | Discuss the generalisability (external validity) of the study results | 14 |
| **Other information** | | | |
| Funding | 22 | Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based | - |

**Supplemental Table 2.** Demographic characteristics of the CBCT images included, organized by country

| Country | Gender | | Age |
|---|---|---|---|
| | Female | Male | Median (IQR) |
| **Africa** | | | |
| Egypt (n=300) | 145.0 (48.3%) | 155.0 (51.7%) | 37 (30, 45) |
| Libya (n=300) | 203.0 (67.7%) | 97.0 (32.3%) | 36 (28, 45) |
| South Africa (n=300) | 181.0 (60.3%) | 119.0 (39.7%) | 27 (22, 41) |
| **Asia** | | | |
| India (n=300) | 143.0 (47.7%) | 157.0 (52.3%) | 32 (24, 40) |
| Jordan (n=300) | 170.0 (56.7%) | 130.0 (43.3%) | 34 (25, 42) |
| Kazakhstan (n=300) | 153.0 (51.0%) | 147.0 (49.0%) | 25 (19, 31) |
| Saudi Arabia (n=300) | 184.0 (61.3%) | 116.0 (38.7%) | 35 (28, 45) |
| Singapore (n=300) | 131.0 (43.7%) | 169.0 (56.3%) | 39 (25, 56) |
| Syria (n=300) | 164.0 (54.7%) | 136.0 (45.3%) | 26 (22, 33) |
| Uzbekistan (n=300) | 177.0 (59.0%) | 123.0 (41.0%) | 32 (25, 44) |
| Yemen (n=300) | 187.0 (62.3%) | 113.0 (37.7%) | 24 (19, 29) |
| **Australia** | | | |
| Australia (n=300) | 150.0 (50.0%) | 150.0 (50.0%) | 49 (41, 57) |
| **Europe** | | | |
| Croatia (n=300) | 182.0 (60.7%) | 118.0 (39.3%) | 36 (30, 51) |
| Germany (n=300) | 155.0 (51.7%) | 145.0 (48.3%) | 41 (31, 52) |
| Greece (n=300) | 185.0 (61.7%) | 115.0 (38.3%) | 60 (49, 70) |
| Poland (n=300) | 189.0 (63.0%) | 111.0 (37.0%) | 24 (16, 29) |
| Portugal (n=300) | 178.0 (59.3%) | 122.0 (40.7%) | 31 (23, 43) |
| Spain (n=300) | 163.0 (54.3%) | 137.0 (45.7%) | 43 (30, 54) |
| Turkiye (n=300) | 153.0 (51.0%) | 147.0 (49.0%) | 32 (20, 42) |
| **North America** | | | |
| U.S.A (n=300) | 160.0 (53.3%) | 140.0 (46.7%) | 56 (42, 64) |
| **South America** | | | |
| Colombia (n=300) | 148.0 (49.3%) | 152.0 (50.7%) | 42 (29, 54) |
| Ecuador (n=300) | 176.0 (58.7%) | 124.0 (41.3%) | 33 (24, 43) |
| **Total (n=6600)** | 3677.0 (55.7%) | 2923.0 (44.3%) | 34 (25, 48) |

**Supplemental Table 3.** Pooled estimates of the prevalence of the ten most common root canal configurations in maxillary right first premolar teeth, based on the Ahmed classification

| | $^{1}MP^{1}$ | $^{1}MP^{1-2-1}$ | $^{1}MP^{1-2-2}$ | $^{1}MP^{2-1-1}$ | $^{1}MP^{2-1-2}$ | $^{1}MP^{2-2-1}$ | $^{1}MP^{2}$ | $^{2}MP\ B^{1}\ P^{1}$ | $^{2}MP\ B^{2-1}\ P^{1}$ | $^{3}MP\ MB^{1}\ DB^{1}\ P^{1}$ |
|---|---|---|---|---|---|---|---|---|---|---|
| **Africa** | | | | | | | | | | |
| Egypt | 0.21 [0.16, 0.26] | 0.14 [0.10, 0.18] | 0.02 [0.00, 0.03] | 0.02 [0.01, 0.04] | 0.01 [0.00, 0.03] | Not estimable | 0.04 [0.02, 0.06] | 0.53 [0.47, 0.58] | Not estimable | 0.03 [0.01, 0.05] |
| Libya | 0.04 [0.02, 0.06] | 0.01 [-0.00, 0.02] | 0.01 [0.00, 0.03] | 0.15 [0.11, 0.19] | 0.03 [0.01, 0.04] | Not estimable | 0.13 [0.09, 0.17] | 0.61 [0.55, 0.67] | Not estimable | 0.01 [0.00, 0.03] |
| South Africa | 0.06 [0.04, 0.09] | 0.02 [0.00, 0.03] | 0.02 [0.01, 0.04] | 0.07 [0.04, 0.10] | 0.03 [0.01, 0.05] | Not estimable | 0.10 [0.07, 0.14] | 0.61 [0.55, 0.66] | 0.02 [0.00, 0.04] | 0.02 [0.01, 0.04] |
| Subtotal (95% CI) | 0.10 [0.02, 0.18] | 0.05 [0.01, 0.09] | 0.02 [0.01, 0.03] | 0.08 [0.01, 0.15] | 0.02 [0.01, 0.03] | Not estimable | 0.09 [0.03, 0.15] | 0.58 [0.53, 0.63] | 0.02 [0.00, 0.04] | 0.02 [0.01, 0.03] |
| Heterogeneity | $I^2$=95% | $I^2$=95% | $I^2$= 0% | $I^2$=94% | $I^2$=21% | Not applicable | $I^2$=90% | $I^2$=63% | Not applicable | $I^2$= 9% |
| Test for overall effect | P = 0.01 | P = 0.03 | P < 0.0001 | P = 0.02 | P < 0.0001 | Not applicable | P = 0.002 | P < 0.00001 | P = 0.01 | P < 0.0001 |
| **Asia** | | | | | | | | | | |
| India | Not estimable | 0.05 [0.03, 0.07] | 0.09 [0.05, 0.12] | Not estimable | Not estimable | Not estimable | Not estimable | 0.85 [0.81, 0.89] | Not estimable | 0.01 [-0.00, 0.02] |
| Jordan | 0.06 [0.03, 0.08] | 0.16 [0.12, 0.20] | 0.17 [0.13, 0.21] | 0.01 [-0.00, 0.02] | 0.00 [-0.00, 0.01] | 0.01 [-0.00, 0.02] | 0.02 [0.00, 0.04] | 0.54 [0.49, 0.60] | Not estimable | 0.02 [0.00, 0.04] |
| Kazakhstan | 0.06 [0.04, 0.09] | 0.17 [0.13, 0.21] | 0.12 [0.09, 0.16] | 0.12 [0.08, 0.16] | 0.00 [-0.00, 0.01] | Not estimable | Not estimable | 0.42 [0.36, 0.47] | 0.08 [0.05, 0.11] | 0.00 [-0.00, 0.01] |
| Saudi Arabia | 0.05 [0.03, 0.07] | 0.01 [0.00, 0.03] | 0.02 [0.00, 0.04] | 0.01 [-0.00, 0.02] | 0.01 [-0.00, 0.02] | 0.18 [0.13, 0.22] | 0.06 [0.03, 0.08] | 0.61 [0.56, 0.67] | 0.01 [-0.00, 0.02] | 0.03 [0.01, 0.04] |
| Singapore | 0.17 [0.12, 0.21] | 0.21 [0.16, 0.25] | 0.09 [0.05, 0.12] | 0.03 [0.01, 0.05] | Not estimable | Not estimable | Not estimable | 0.49 [0.44, 0.55] | 0.00 [-0.00, 0.01] | 0.01 [0.00, 0.03] |
| Syria | 0.01 [-0.00, 0.02] | Not estimable | Not estimable | 0.09 [0.06, 0.12] | 0.08 [0.05, 0.11] | 0.09 [0.06, 0.12] | 0.10 [0.07, 0.13] | 0.60 [0.55, 0.66] | Not estimable | 0.01 [0.00, 0.03] |
| Uzbekistan | 0.06 [0.04, 0.09] | 0.17 [0.13, 0.21] | 0.12 [0.09, 0.16] | 0.12 [0.08, 0.16] | 0.00 [-0.00, 0.01] | Not estimable | Not estimable | 0.42 [0.36, 0.47] | 0.08 [0.05, 0.11] | 0.00 [-0.00, 0.01] |
| Yemen | 0.05 [0.03, 0.07] | 0.16 [0.12, 0.20] | 0.17 [0.13, 0.21] | 0.04 [0.02, 0.06] | 0.00 [-0.00, 0.01] | Not estimable | 0.02 [0.00, 0.03] | 0.49 [0.43, 0.54] | Not estimable | 0.01 [-0.00, 0.02] |
| Subtotal (95% CI) | 0.06 [0.03, 0.09] | 0.13 [0.07, 0.20] | 0.11 [0.06, 0.16] | 0.05 [0.03, 0.08] | 0.01 [0.00, 0.01] | 0.09 [-0.01, 0.19] | 0.04 [0.02, 0.07] | 0.55 [0.44, 0.67] | 0.04 [0.01, 0.06] | 0.01 [0.00, 0.01] |
| Heterogeneity | $I^2$=91% | $I^2$=97% | $I^2$=94% | $I^2$=93% | $I^2$=80% | $I^2$=97% | $I^2$=88% | $I^2$=97% | $I^2$=94% | $I^2$=39% |
| Test for overall effect | P < 0.0001 | P < 0.0001 | P < 0.00001 | P < 0.0001 | P = 0.05 | P = 0.07 | P = 0.003 | P < 0.00001 | P = 0.005 | P = 0.0002 |
| **Australia** | | | | | | | | | | |
| Australia | 0.16 [0.12, 0.21] | 0.11 [0.08, 0.15] | 0.18 [0.13, 0.22] | 0.15 [0.11, 0.19] | Not estimable | Not estimable | Not estimable | 0.38 [0.32, 0.43] | 0.01 [-0.00, 0.02] | 0.01 [-0.00, 0.02] |
| Subtotal (95% CI) | 0.16 [0.12, 0.21] | 0.11 [0.08, 0.15] | 0.18 [0.13, 0.22] | 0.15 [0.11, 0.19] | Not estimable | Not estimable | Not estimable | 0.38 [0.32, 0.43] | 0.01 [-0.00, 0.02] | 0.01 [-0.00, 0.02] |
| Heterogeneity | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| Test for overall effect | P < 0.00001 | P < 0.00001 | P < 0.00001 | P < 0.00001 | Not applicable | Not applicable | Not applicable | P < 0.00001 | P = 0.08 | P = 0.08 |
| **Europe** | | | | | | | | | | |
| Croatia | 0.02 [0.01, 0.04] | 0.00 [-0.00, 0.01] | 0.01 [0.00, 0.03] | 0.02 [0.00, 0.04] | 0.01 [-0.00, 0.02] | Not estimable | 0.03 [0.01, 0.05] | 0.89 [0.85, 0.92] | 0.00 [-0.00, 0.01] | 0.01 [-0.00, 0.02] |
| Germany | 0.05 [0.03, 0.08] | 0.00 [-0.00, 0.01] | 0.01 [-0.00, 0.02] | 0.21 [0.17, 0.26] | 0.01 [-0.00, 0.02] | Not estimable | 0.12 [0.09, 0.16] | 0.56 [0.50, 0.62] | Not estimable | 0.01 [0.00, 0.03] |
| Greece | 0.04 [0.02, 0.07] | 0.00 [-0.00, 0.01] | Not estimable | 0.02 [0.00, 0.03] | 0.01 [-0.00, 0.02] | 0.15 [0.11, 0.19] | 0.09 [0.06, 0.13] | 0.68 [0.63, 0.74] | Not estimable | 0.01 [-0.00, 0.02] |
| Poland | 0.09 [0.05, 0.12] | 0.12 [0.08, 0.16] | 0.06 [0.03, 0.09] | 0.08 [0.05, 0.11] | Not estimable | Not estimable | 0.08 [0.05, 0.11] | 0.57 [0.51, 0.62] | Not estimable | 0.01 [-0.00, 0.02] |
| Portugal | 0.07 [0.04, 0.10] | Not estimable | 0.01 [-0.00, 0.02] | 0.01 [-0.00, 0.02] | Not estimable | 0.12 [0.08, 0.16] | 0.09 [0.06, 0.12] | 0.66 [0.61, 0.71] | 0.00 [-0.00, 0.01] | 0.03 [0.01, 0.05] |
| Spain | 0.11 [0.07, 0.15] | 0.06 [0.04, 0.09] | 0.01 [0.00, 0.03] | 0.09 [0.06, 0.13] | 0.06 [0.03, 0.08] | 0.06 [0.03, 0.08] | 0.15 [0.11, 0.19] | 0.41 [0.35, 0.46] | Not estimable | 0.01 [-0.00, 0.02] |
| Turkiye | 0.09 [0.06, 0.13] | 0.14 [0.10, 0.18] | 0.04 [0.02, 0.07] | 0.03 [0.01, 0.04] | 0.01 [0.00, 0.03] | 0.03 [0.01, 0.05] | 0.06 [0.03, 0.09] | 0.53 [0.47, 0.58] | Not estimable | 0.01 [0.00, 0.03] |
| Subtotal (95% CI) | 0.07 [0.04, 0.09] | 0.04 [0.02, 0.06] | 0.02 [0.01, 0.03] | 0.06 [0.03, 0.09] | 0.01 [0.00, 0.02] | 0.09 [0.04, 0.14] | 0.09 [0.06, 0.12] | 0.61 [0.48, 0.75] | 0.00 [-0.00, 0.01] | 0.01 [0.01, 0.01] |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Heterogeneity | $I^2$=82% | $I^2$=95% | $I^2$=73% | $I^2$=94% | $I^2$=70% | $I^2$=91% | $I^2$=84% | $I^2$=98% | $I^2$= 0% | $I^2$= 0% |
| Test for overall effect | P < 0.00001 | P < 0.0001 | P = 0.0004 | P = 0.0001 | P = 0.007 | P = 0.0006 | P < 0.00001 | P < 0.00001 | P = 0.16 | P < 0.00001 |
| **North America** | | | | | | | | | | |
| U.S.A | 0.08 [0.05, 0.11] | 0.06 [0.03, 0.08] | Not estimable | 0.11 [0.07, 0.14] | 0.04 [0.02, 0.07] | Not estimable | Not estimable | 0.59 [0.53, 0.64] | Not estimable | 0.06 [0.03, 0.08] |
| Subtotal (95% CI) | 0.08 [0.05, 0.11] | 0.06 [0.03, 0.08] | Not estimable | 0.11 [0.07, 0.14] | 0.04 [0.02, 0.07] | Not estimable | Not estimable | 0.59 [0.53, 0.64] | Not estimable | 0.06 [0.03, 0.08] |
| Heterogeneity | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| Test for overall effect | P < 0.00001 | P < 0.0001 | Not applicable | P < 0.00001 | P = 0.0002 | Not applicable | Not applicable | P < 0.00001 | Not applicable | P < 0.0001 |
| **South America** | | | | | | | | | | |
| Colombia | 0.28 [0.23, 0.33] | 0.03 [0.01, 0.04] | 0.01 [-0.00, 0.02] | 0.01 [0.00, 0.03] | 0.02 [0.01, 0.04] | 0.15 [0.11, 0.19] | 0.13 [0.09, 0.17] | 0.34 [0.28, 0.39] | Not estimable | 0.02 [0.00, 0.03] |
| Ecuador | 0.26 [0.21, 0.31] | 0.24 [0.19, 0.29] | 0.07 [0.04, 0.10] | 0.09 [0.06, 0.13] | 0.01 [-0.00, 0.02] | Not estimable | 0.04 [0.02, 0.06] | 0.24 [0.19, 0.29] | 0.01 [-0.00, 0.02] | 0.01 [-0.00, 0.02] |
| Subtotal (95% CI) | 0.27 [0.24, 0.31] | 0.13 [-0.08, 0.35] | 0.04 [-0.03, 0.10] | 0.05 [-0.03, 0.13] | 0.01 [-0.00, 0.03] | 0.15 [0.11, 0.19] | 0.08 [-0.01, 0.17] | 0.29 [0.20, 0.38] | 0.01 [-0.00, 0.02] | 0.01 [0.00, 0.02] |
| Heterogeneity | $I^2$= 0% | $I^2$=99% | $I^2$=94% | $I^2$=95% | $I^2$=65% | Not applicable | $I^2$=94% | $I^2$=84% | Not applicable | $I^2$= 0% |
| Test for overall effect | P < 0.00001 | P = 0.22 | P = 0.24 | P = 0.19 | P = 0.10 | P < 0.00001 | P = 0.08 | P < 0.00001 | P = 0.16 | P = 0.006 |
| **Total (95% CI)** | 0.09 [0.07, 0.12] | 0.09 [0.07, 0.10] | 0.06 [0.04, 0.07] | 0.06 [0.05, 0.08] | 0.01 [0.01, 0.02] | 0.10 [0.05, 0.14] | 0.08 [0.06, 0.10] | 0.55 [0.47, 0.62] | 0.01 [0.01, 0.02] | 0.01 [0.01, 0.02] |
| **Heterogeneity** | $I^2$=94% | $I^2$=97% | $I^2$=94% | $I^2$=94% | $I^2$=76% | $I^2$=96% | $I^2$=90% | $I^2$=98% | $I^2$=85% | $I^2$=46% |
| **Test for overall effect** | P < 0.00001 | P < 0.00001 | P < 0.00001 | P < 0.00001 | P < 0.00001 | P < 0.0001 | P < 0.00001 | P < 0.00001 | P = 0.0008 | P < 0.00001 |
| **Test for subgroup differences** | P < 0.00001 | P = 0.004 | P < 0.00001 | P = 0.002 | P = 0.03 | P = 0.12 | P = 0.19 | P < 0.00001 | P = 0.03 | P = 0.007 |

**Supplemental Table 4.** Pooled estimates of the prevalence of the ten most common root canal configurations in maxillary left first premolar teeth, based on the Ahmed classification

| | $^{1}MP^{1}$ | $^{1}MP^{1-2-1}$ | $^{1}MP^{1-2-2}$ | $^{1}MP^{2-1-1}$ | $^{1}MP^{2-1-2}$ | $^{1}MP^{2-2-1}$ | $^{1}MP^{2}$ | $^{2}MP\ B^{1}\ P^{1}$ | $^{2}MP\ B^{2-1}\ P^{1}$ | $^{3}MP\ MB^{1}\ DB^{1}\ P^{1}$ |
|---|---|---|---|---|---|---|---|---|---|---|
| **Africa** | | | | | | | | | | |
| Egypt | 0.09 [0.05, 0.12] | 0.03 [0.01, 0.05] | Not estimable | 0.08 [0.05, 0.11] | 0.03 [0.01, 0.05] | Not estimable | 0.06 [0.03, 0.08] | 0.44 [0.38, 0.50] | Not estimable | Not estimable |
| Libya | 0.04 [0.02, 0.06] | 0.01 [0.00, 0.03] | 0.01 [0.00, 0.03] | 0.15 [0.11, 0.19] | 0.02 [0.01, 0.04] | Not estimable | 0.13 [0.09, 0.16] | 0.61 [0.55, 0.66] | Not estimable | 0.01 [0.00, 0.03] |
| South Africa | 0.06 [0.03, 0.09] | 0.03 [0.01, 0.04] | 0.03 [0.01, 0.04] | 0.09 [0.05, 0.12] | 0.02 [0.00, 0.03] | Not estimable | 0.11 [0.07, 0.15] | 0.60 [0.55, 0.66] | 0.01 [0.00, 0.03] | 0.02 [0.00, 0.04] |
| Subtotal (95% CI) | 0.06 [0.03, 0.09] | 0.02 [0.01, 0.03] | 0.02 [0.01, 0.03] | 0.10 [0.06, 0.15] | 0.02 [0.01, 0.03] | Not estimable | 0.10 [0.05, 0.14] | 0.55 [0.44, 0.66] | 0.01 [0.00, 0.03] | 0.02 [0.01, 0.03] |
| Heterogeneity | $I^2$=71% | $I^2$=36% | $I^2$=27% | $I^2$=79% | $I^2$= 0% | Not applicable | $I^2$=82% | $I^2$=91% | Not applicable | $I^2$= 0% |
| Test for overall effect | P < 0.0001 | P = 0.0003 | P = 0.004 | P < 0.00001 | P < 0.00001 | Not applicable | P < 0.0001 | P < 0.00001 | P = 0.04 | P = 0.002 |
| **Asia** | | | | | | | | | | |
| India | Not estimable | 0.07 [0.04, 0.10] | 0.04 [0.02, 0.06] | Not estimable | Not estimable | Not estimable | Not estimable | 0.87 [0.83, 0.91] | Not estimable | 0.02 [0.00, 0.04] |
| Jordan | 0.08 [0.05, 0.11] | 0.17 [0.12, 0.21] | 0.22 [0.17, 0.27] | 0.00 [-0.00, 0.01] | 0.01 [-0.00, 0.02] | 0.01 [-0.00, 0.02] | 0.04 [0.02, 0.06] | 0.43 [0.38, 0.49] | Not estimable | 0.01 [0.00, 0.03] |
| Kazakhstan | 0.06 [0.04, 0.09] | 0.17 [0.12, 0.21] | 0.13 [0.09, 0.16] | 0.12 [0.09, 0.16] | 0.00 [-0.00, 0.01] | Not estimable | Not estimable | 0.42 [0.36, 0.47] | 0.08 [0.05, 0.11] | 0.00 [-0.00, 0.01] |
| Saudi Arabia | 0.06 [0.03, 0.08] | 0.01 [0.00, 0.03] | 0.02 [0.00, 0.03] | Not estimable | 0.01 [0.00, 0.03] | 0.18 [0.14, 0.23] | 0.05 [0.03, 0.08] | 0.60 [0.54, 0.66] | Not estimable | 0.03 [0.01, 0.05] |
| Singapore | 0.18 [0.13, 0.22] | 0.23 [0.18, 0.27] | 0.10 [0.06, 0.13] | 0.03 [0.01, 0.05] | Not estimable | Not estimable | Not estimable | 0.45 [0.40, 0.51] | 0.01 [-0.00, 0.02] | 0.01 [-0.00, 0.02] |
| Syria | 0.03 [0.01, 0.04] | Not estimable | Not estimable | 0.07 [0.04, 0.10] | 0.10 [0.06, 0.13] | 0.11 [0.07, 0.15] | 0.10 [0.07, 0.14] | 0.57 [0.52, 0.63] | Not estimable | 0.01 [-0.00, 0.02] |
| Uzbekistan | 0.07 [0.04, 0.09] | 0.17 [0.12, 0.21] | 0.13 [0.09, 0.17] | 0.12 [0.09, 0.16] | 0.00 [-0.00, 0.01] | Not estimable | Not estimable | 0.41 [0.36, 0.47] | 0.08 [0.05, 0.11] | 0.00 [-0.00, 0.01] |
| Yemen | 0.05 [0.03, 0.08] | 0.19 [0.14, 0.23] | 0.20 [0.15, 0.25] | 0.03 [0.01, 0.05] | 0.00 [-0.00, 0.01] | Not estimable | 0.01 [-0.00, 0.02] | 0.41 [0.35, 0.46] | Not estimable | 0.01 [0.00, 0.03] |
| Subtotal (95% CI) | 0.07 [0.04, 0.10] | 0.14 [0.07, 0.21] | 0.12 [0.06, 0.17] | 0.06 [0.02, 0.10] | 0.01 [0.00, 0.02] | 0.10 [-0.01, 0.21] | 0.05 [0.01, 0.08] | 0.52 [0.39, 0.65] | 0.05 [-0.00, 0.11] | 0.01 [0.00, 0.01] |
| Heterogeneity | $I^2$=86% | $I^2$=97% | $I^2$=96% | $I^2$=95% | $I^2$=84% | $I^2$=97% | $I^2$=91% | $I^2$=98% | $I^2$=95% | $I^2$=44% |
| Test for overall effect | P < 0.00001 | P < 0.0001 | P < 0.0001 | P = 0.0008 | P = 0.02 | P = 0.07 | P = 0.007 | P < 0.00001 | P = 0.07 | P = 0.0002 |
| **Australia** | | | | | | | | | | |
| Australia | 0.17 [0.13, 0.21] | 0.11 [0.08, 0.15] | 0.18 [0.13, 0.22] | 0.13 [0.09, 0.17] | 0.01 [-0.00, 0.02] | Not estimable | Not estimable | 0.37 [0.32, 0.43] | Not estimable | 0.02 [0.00, 0.03] |
| Subtotal (95% CI) | 0.17 [0.13, 0.21] | 0.11 [0.08, 0.15] | 0.18 [0.13, 0.22] | 0.13 [0.09, 0.17] | 0.01 [-0.00, 0.02] | Not estimable | Not estimable | 0.37 [0.32, 0.43] | Not estimable | 0.02 [0.00, 0.03] |
| Heterogeneity | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| Test for overall effect | P < 0.00001 | P < 0.00001 | P < 0.00001 | P < 0.00001 | P = 0.16 | Not applicable | Not applicable | P < 0.00001 | Not applicable | P = 0.02 |
| **Europe** | | | | | | | | | | |
| Croatia | 0.01 [-0.00, 0.02] | 0.00 [-0.00, 0.01] | 0.02 [0.01, 0.04] | 0.02 [0.01, 0.04] | Not estimable | Not estimable | 0.04 [0.02, 0.06] | 0.88 [0.85, 0.92] | Not estimable | 0.02 [0.00, 0.04] |
| Germany | 0.04 [0.02, 0.06] | 0.00 [-0.00, 0.01] | 0.01 [-0.00, 0.02] | 0.24 [0.19, 0.28] | 0.03 [0.01, 0.04] | Not estimable | 0.11 [0.07, 0.14] | 0.52 [0.47, 0.58] | 0.00 [-0.00, 0.01] | 0.03 [0.01, 0.04] |
| Greece | 0.05 [0.02, 0.07] | 0.00 [-0.00, 0.01] | Not estimable | Not estimable | 0.01 [-0.00, 0.02] | 0.16 [0.12, 0.21] | 0.10 [0.07, 0.14] | 0.66 [0.60, 0.71] | Not estimable | 0.01 [-0.00, 0.02] |
| Poland | 0.08 [0.05, 0.11] | 0.11 [0.07, 0.15] | 0.11 [0.08, 0.15] | 0.06 [0.04, 0.09] | Not estimable | Not estimable | 0.11 [0.07, 0.14] | 0.52 [0.46, 0.57] | Not estimable | 0.01 [-0.00, 0.02] |
| Portugal | 0.06 [0.04, 0.09] | 0.00 [-0.00, 0.01] | 0.01 [0.00, 0.03] | 0.01 [-0.00, 0.02] | Not estimable | 0.13 [0.09, 0.17] | 0.07 [0.04, 0.10] | 0.68 [0.63, 0.73] | Not estimable | 0.03 [0.01, 0.04] |
| Spain | 0.08 [0.05, 0.11] | 0.06 [0.03, 0.09] | 0.08 [0.05, 0.11] | 0.29 [0.24, 0.34] | 0.02 [0.00, 0.04] | Not estimable | 0.06 [0.04, 0.09] | 0.36 [0.31, 0.42] | Not estimable | 0.01 [-0.00, 0.02] |
| Turkey | 0.11 [0.07, 0.15] | 0.09 [0.06, 0.13] | 0.06 [0.03, 0.08] | 0.04 [0.02, 0.06] | 0.02 [0.00, 0.04] | 0.04 [0.02, 0.06] | 0.05 [0.03, 0.08] | 0.51 [0.45, 0.57] | Not estimable | 0.02 [0.00, 0.04] |
| Subtotal (95% CI) | 0.06 [0.03, 0.09] | 0.03 [0.01, 0.04] | 0.05 [0.02, 0.07] | 0.10 [0.05, 0.16] | 0.02 [0.01, 0.02] | 0.11 [0.03, 0.19] | 0.08 [0.05, 0.10] | 0.59 [0.45, 0.73] | 0.00 [-0.00, 0.01] | 0.01 [0.01, 0.02] |

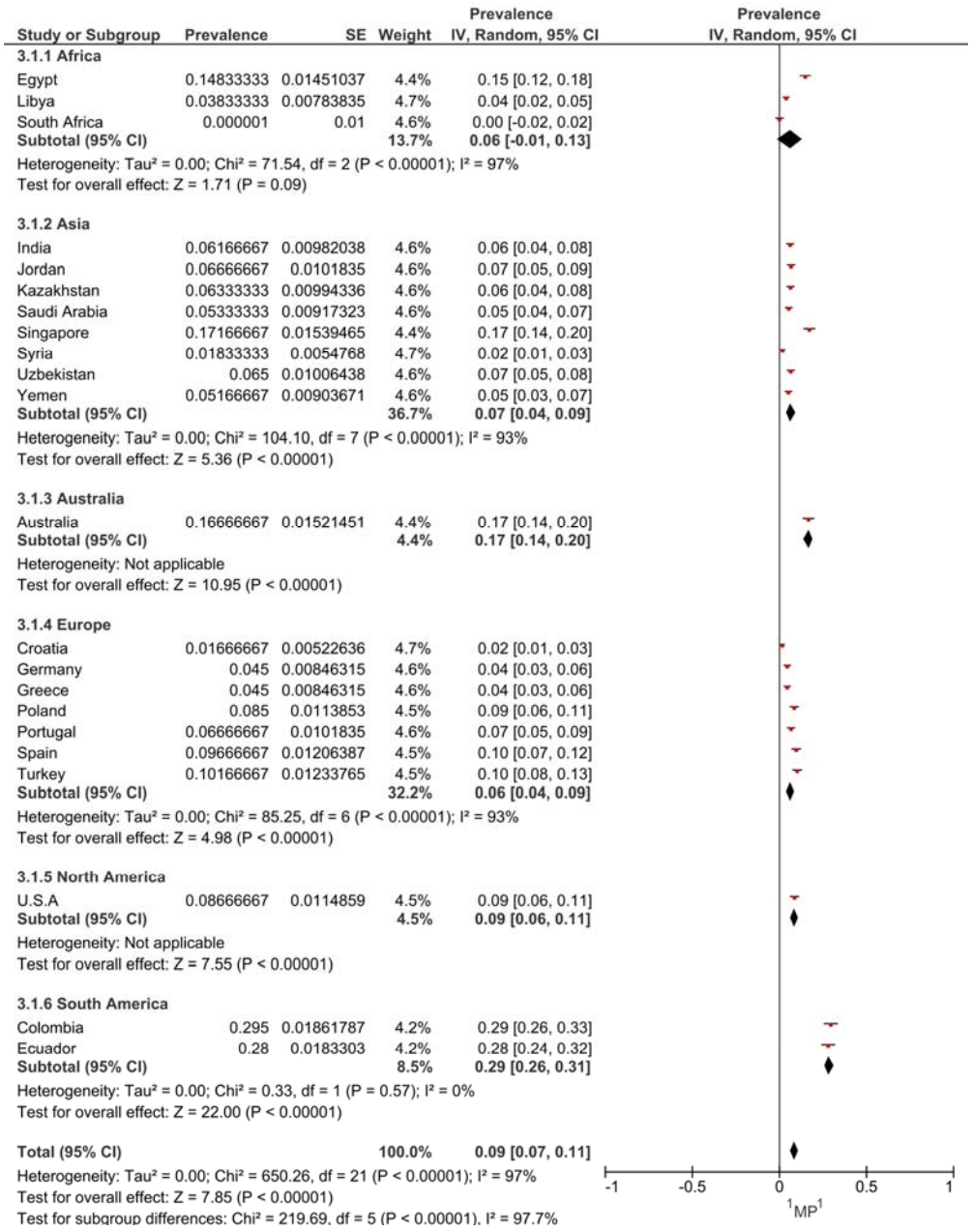
| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Heterogeneity | $I^2$=90% | $I^2$=92% | $I^2$=91% | $I^2$=98% | $I^2$= 0% | $I^2$=95% | $I^2$=74% | $I^2$=98% | Not applicable | $I^2$=38% |
| Test for overall effect | P < 0.0001 | P = 0.0001 | P = 0.0004 | P = 0.0002 | P < 0.00001 | P = 0.01 | P < 0.00001 | P < 0.00001 | P = 0.32 | P < 0.0001 |
| **North America** | | | | | | | | | | |
| U.S.A | 0.09 [0.06, 0.13] | 0.03 [0.01, 0.05] | Not estimable | 0.22 [0.17, 0.27] | 0.03 [0.01, 0.05] | Not estimable | Not estimable | 0.44 [0.39, 0.50] | 0.06 [0.04, 0.09] | 0.07 [0.04, 0.10] |
| Subtotal (95% CI) | 0.09 [0.06, 0.13] | 0.03 [0.01, 0.05] | Not estimable | 0.22 [0.17, 0.27] | 0.03 [0.01, 0.05] | Not estimable | Not estimable | 0.44 [0.39, 0.50] | 0.06 [0.04, 0.09] | 0.07 [0.04, 0.10] |
| Heterogeneity | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| Test for overall effect | P < 0.00001 | P = 0.002 | Not applicable | P < 0.00001 | P = 0.001 | Not applicable | Not applicable | P < 0.00001 | P < 0.00001 | P < 0.00001 |
| **South America** | | | | | | | | | | |
| Colombia | 0.31 [0.25, 0.36] | 0.01 [0.00, 0.03] | 0.00 [-0.00, 0.01] | 0.01 [-0.00, 0.02] | 0.02 [0.01, 0.04] | 0.17 [0.13, 0.22] | 0.08 [0.05, 0.11] | 0.36 [0.31, 0.41] | Not estimable | 0.01 [0.00, 0.03] |
| Ecuador | 0.30 [0.25, 0.35] | 0.24 [0.19, 0.29] | 0.07 [0.04, 0.09] | 0.11 [0.07, 0.14] | 0.01 [-0.00, 0.02] | Not estimable | 0.02 [0.01, 0.04] | 0.23 [0.19, 0.28] | 0.01 [-0.00, 0.02] | 0.00 [-0.00, 0.01] |
| Subtotal (95% CI) | 0.30 [0.27, 0.34] | 0.13 [-0.10, 0.35] | 0.03 [-0.03, 0.10] | 0.06 [-0.04, 0.15] | 0.02 [0.00, 0.03] | 0.17 [0.13, 0.22] | 0.05 [-0.01, 0.11] | 0.30 [0.17, 0.42] | 0.01 [-0.00, 0.02] | 0.01 [-0.00, 0.02] |
| Heterogeneity | $I^2$= 0% | $I^2$=99% | $I^2$=95% | $I^2$=96% | $I^2$=39% | Not applicable | $I^2$=90% | $I^2$=91% | Not applicable | $I^2$=45% |
| Test for overall effect | P < 0.00001 | P = 0.27 | P = 0.29 | P = 0.24 | P = 0.02 | P < 0.00001 | P = 0.08 | P < 0.00001 | P = 0.16 | P = 0.16 |
| **Total (95% CI)** | 0.09 [0.07, 0.11] | 0.07 [0.06, 0.09] | 0.07 [0.05, 0.09] | 0.09 [0.07, 0.11] | 0.02 [0.01, 0.02] | 0.11 [0.06, 0.17] | 0.07 [0.05, 0.09] | 0.52 [0.44, 0.60] | 0.03 [0.01, 0.04] | 0.01 [0.01, 0.02] |
| **Heterogeneity** | $I^2$=94% | $I^2$=96% | $I^2$=95% | $I^2$=96% | $I^2$=74% | $I^2$=97% | $I^2$=89% | $I^2$=98% | $I^2$=90% | $I^2$=59% |
| **Test for overall effect** | P < 0.00001 | P < 0.00001 | P < 0.00001 | P < 0.00001 | P < 0.00001 | P < 0.0001 | P < 0.00001 | P < 0.00001 | P = 0.0002 | P < 0.00001 |
| **Test for subgroup differences** | P < 0.00001 | P < 0.00001 | P < 0.00001 | P < 0.00001 | P = 0.10 | P = 0.23 | P = 0.34 | P = 0.001 | P = 0.0004 | P = 0.002 |

**Supplemental Table 5.** The rate of bilateral symetry in teeth and Cramer's V Score

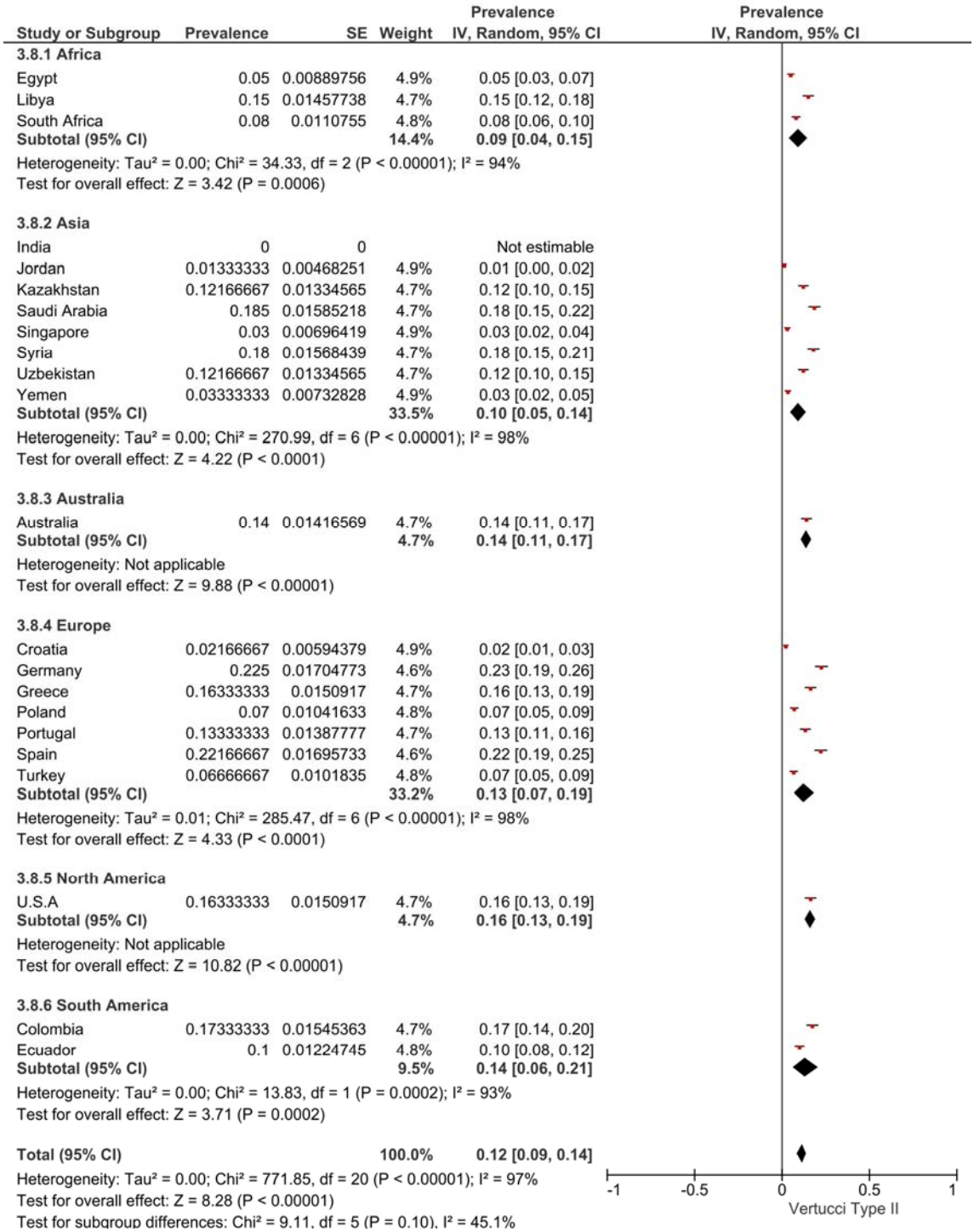
| | Ahmed's classification | Vertucci classification |
|---|---|---|
| Similarity between left and right | 75.52% | 79.17% |
| Cramer's V Score | 0.535 | 0.553 |

weak: >0.05; moderate: >0.10; strong: >0.15; and very strong: >0.25.

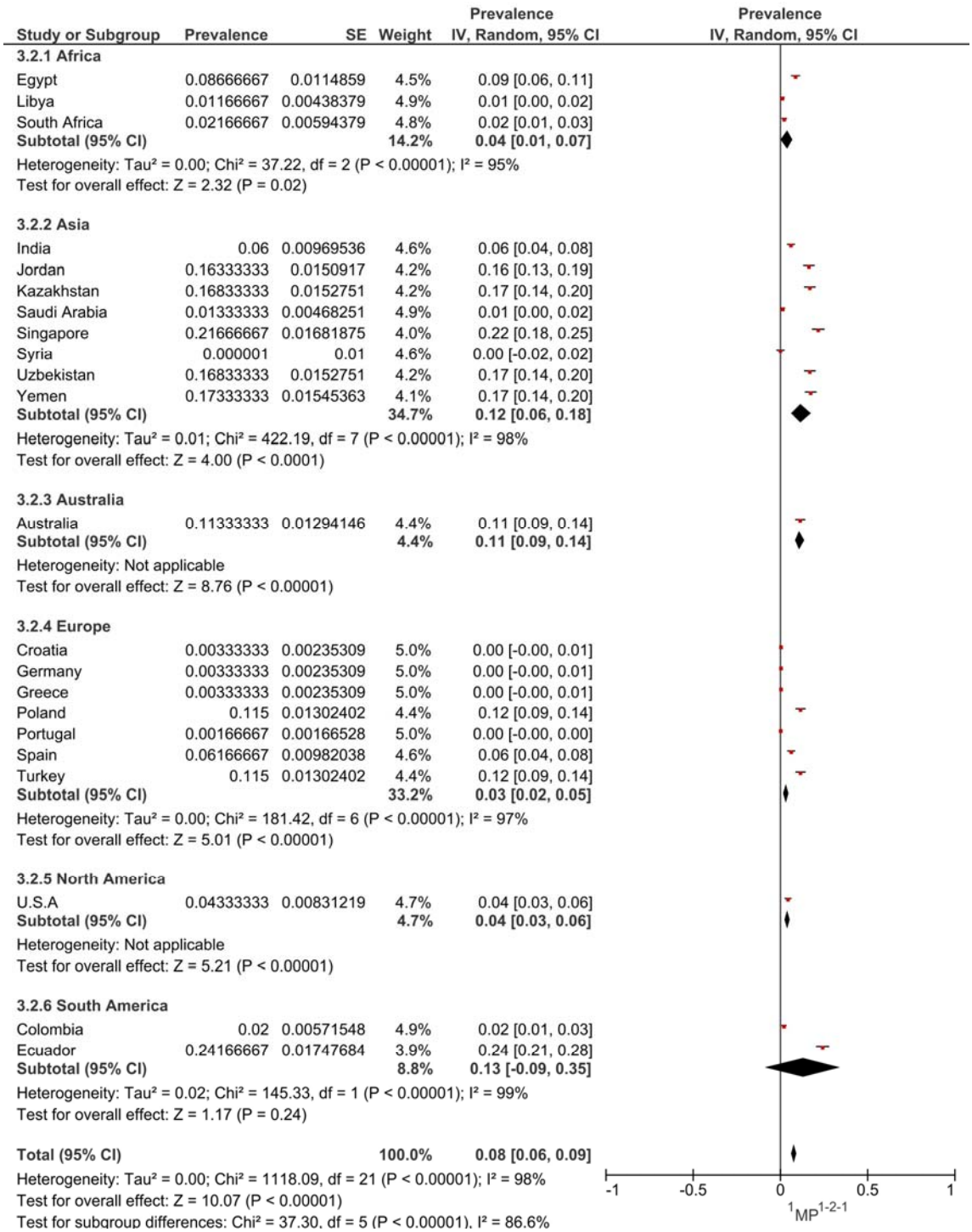
**Supplemental Figure 1.** Forest plot presentation of the prevalence of Vertucci Type I and [1]MP[1]



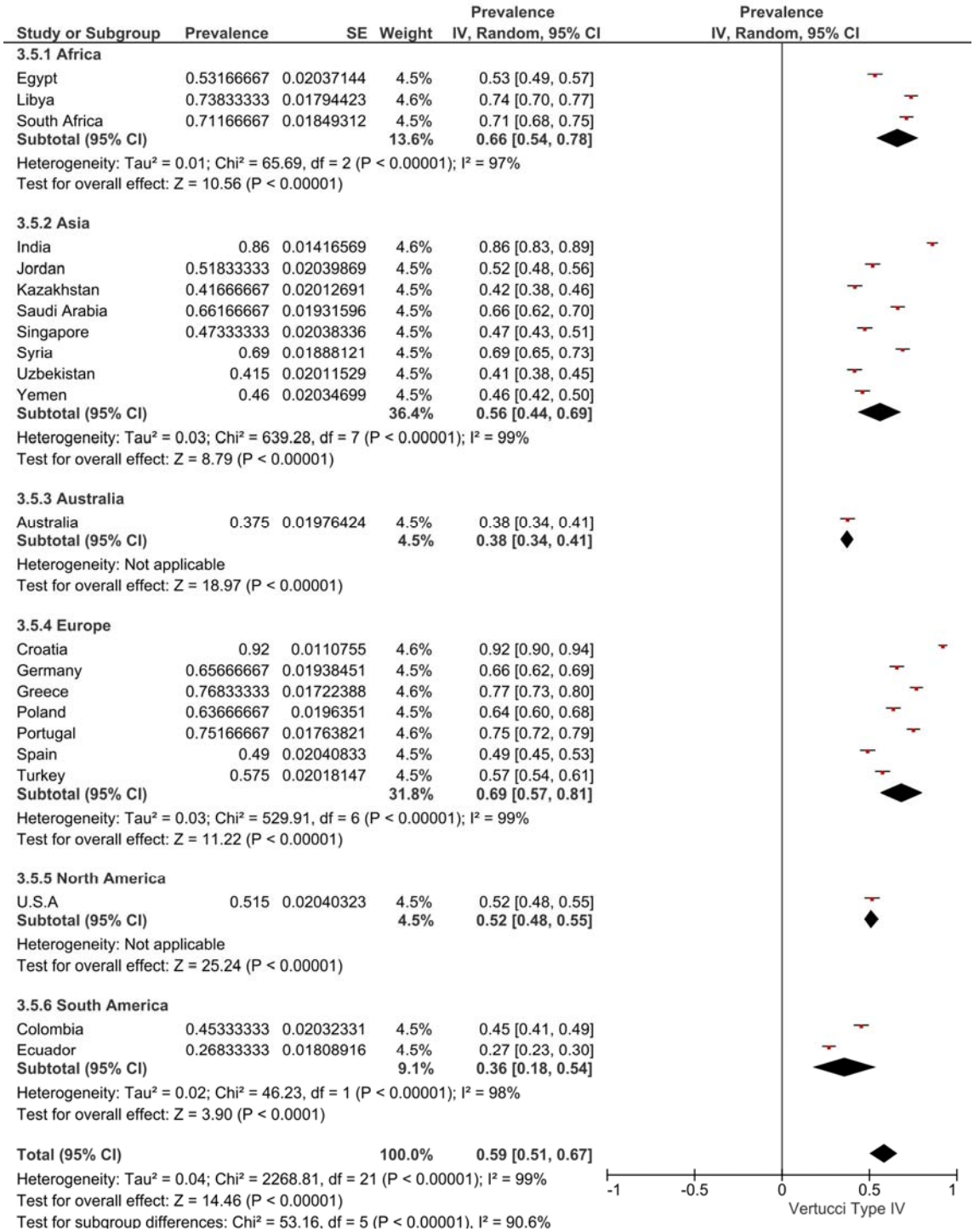
**Supplemental Figure 2.** Forest plot presentation of the prevalence of Vertucci Type II



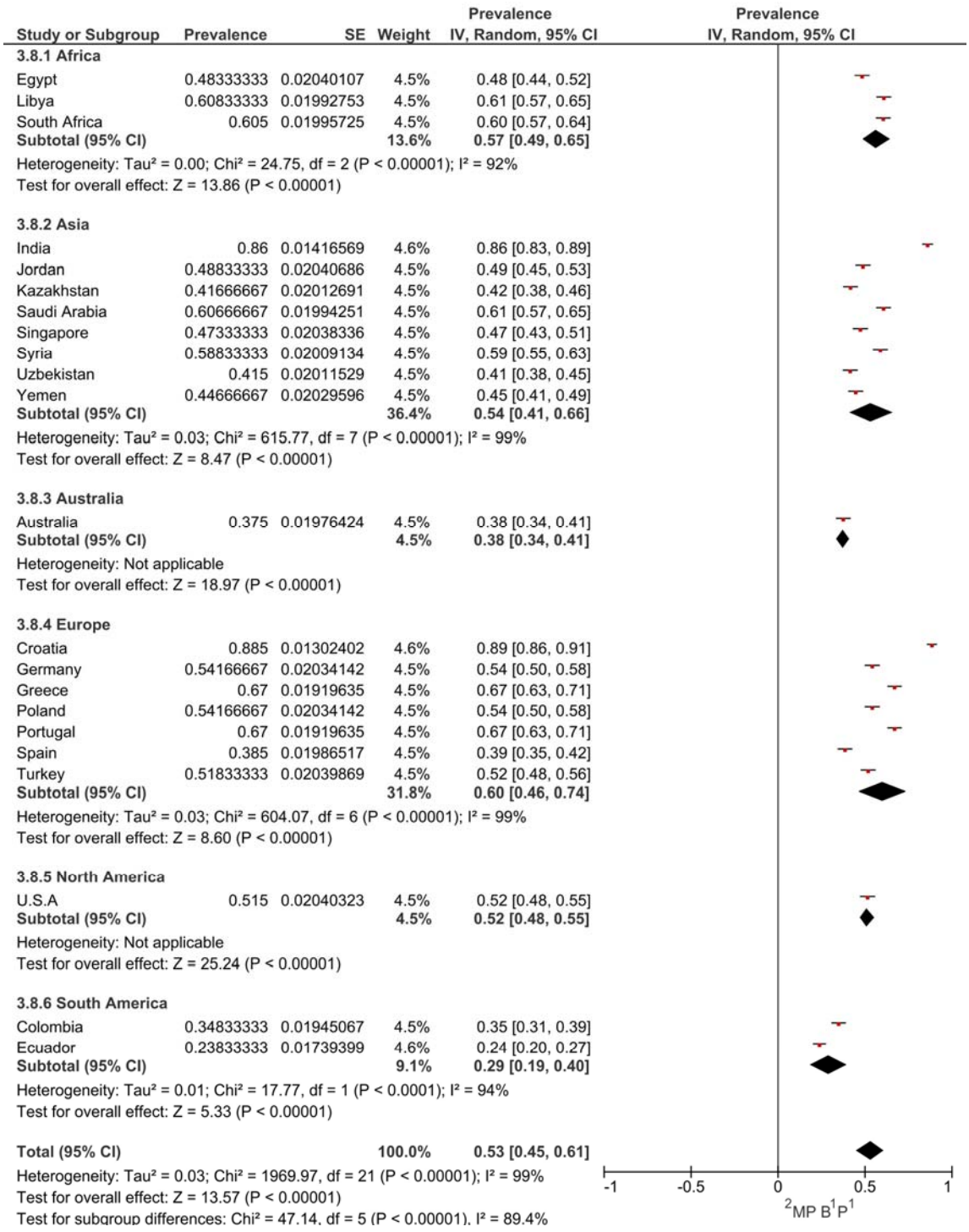
**Supplemental Figure 3.** Forest plot presentation of the prevalence of Vertucci Type III and $^{1}MP^{1-2-1}$



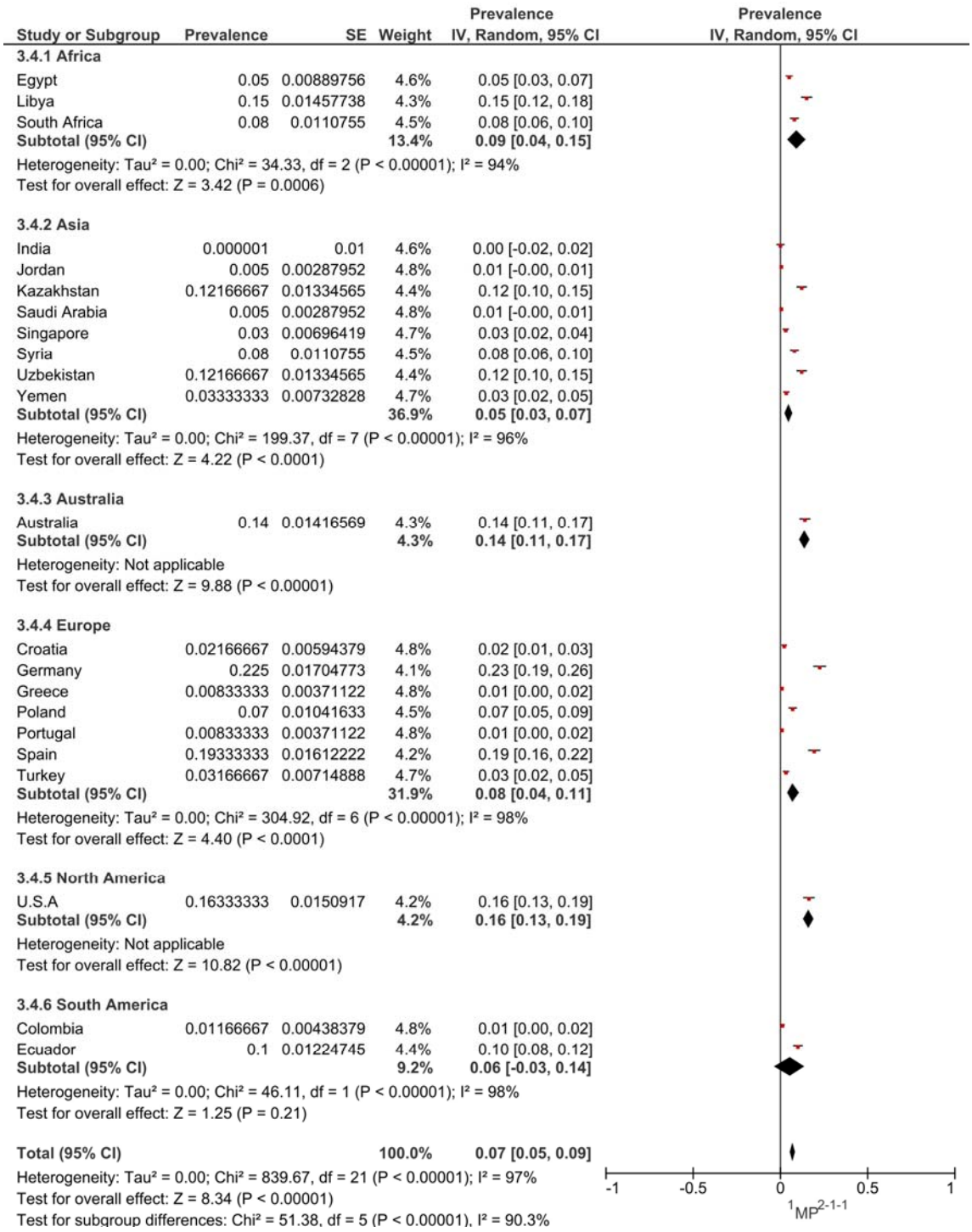
**Supplemental Figure 4.** Forest plot presentation of the prevalence of Vertucci Type IV



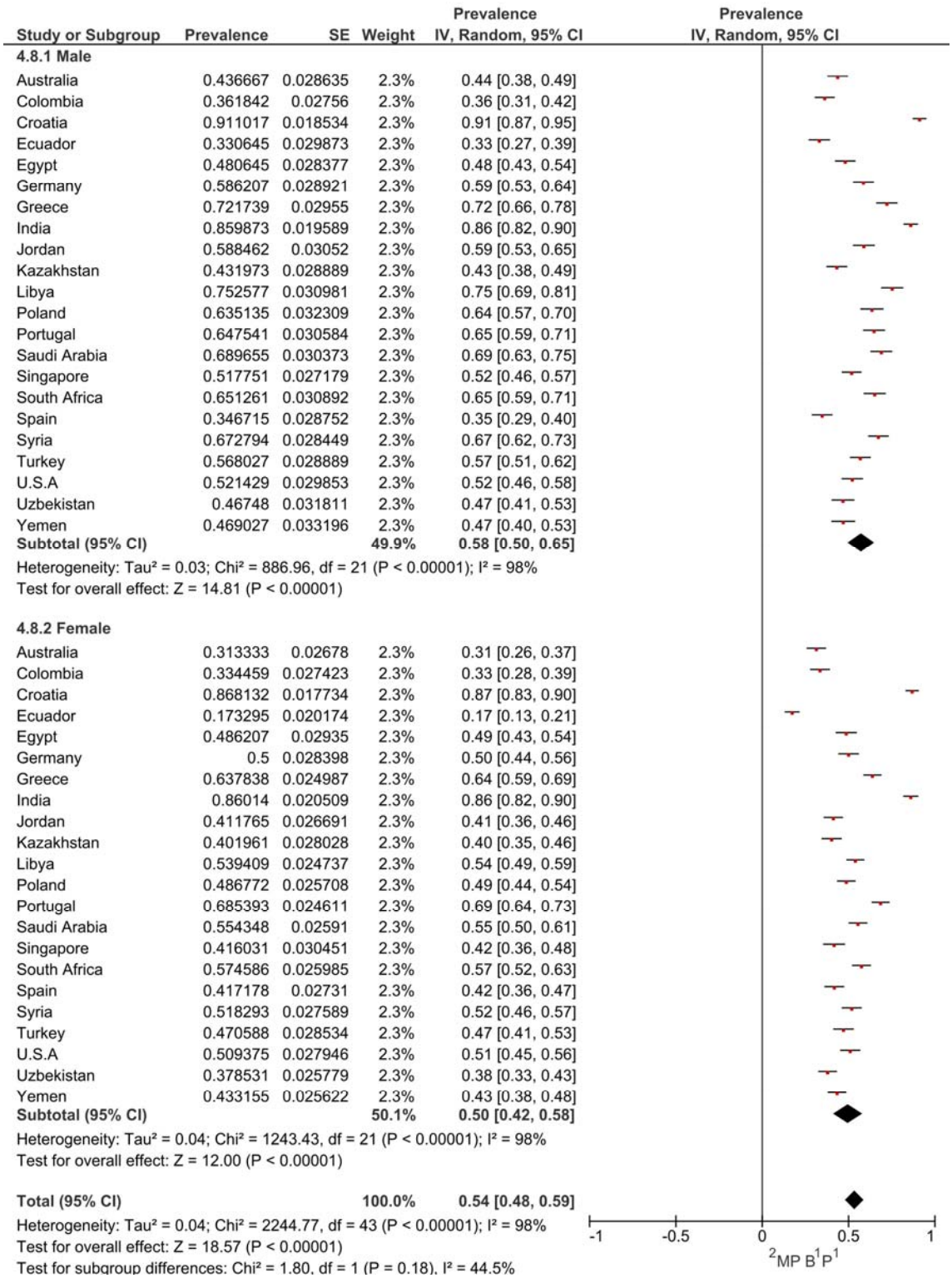
**Supplemental Figure 5.** Forest plot presentation of the prevalence of $^{2}$MP B$^{1}$ P$^{1}$



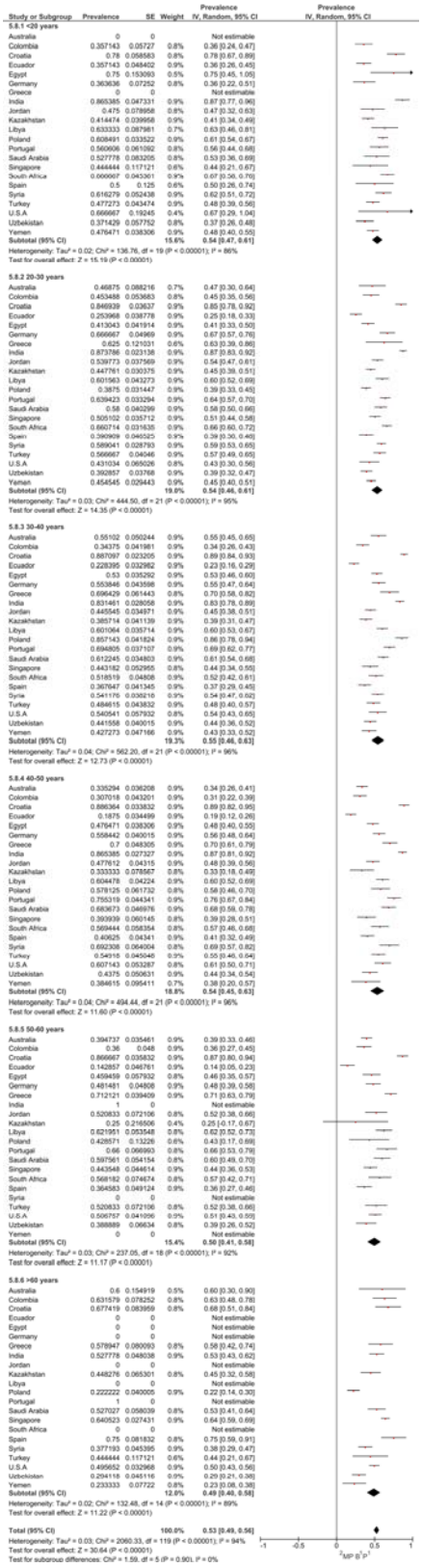
**Supplemental Figure 6.** Forest plot presentation of the prevalence of $^{1}MP^{2\text{-}1\text{-}1}$



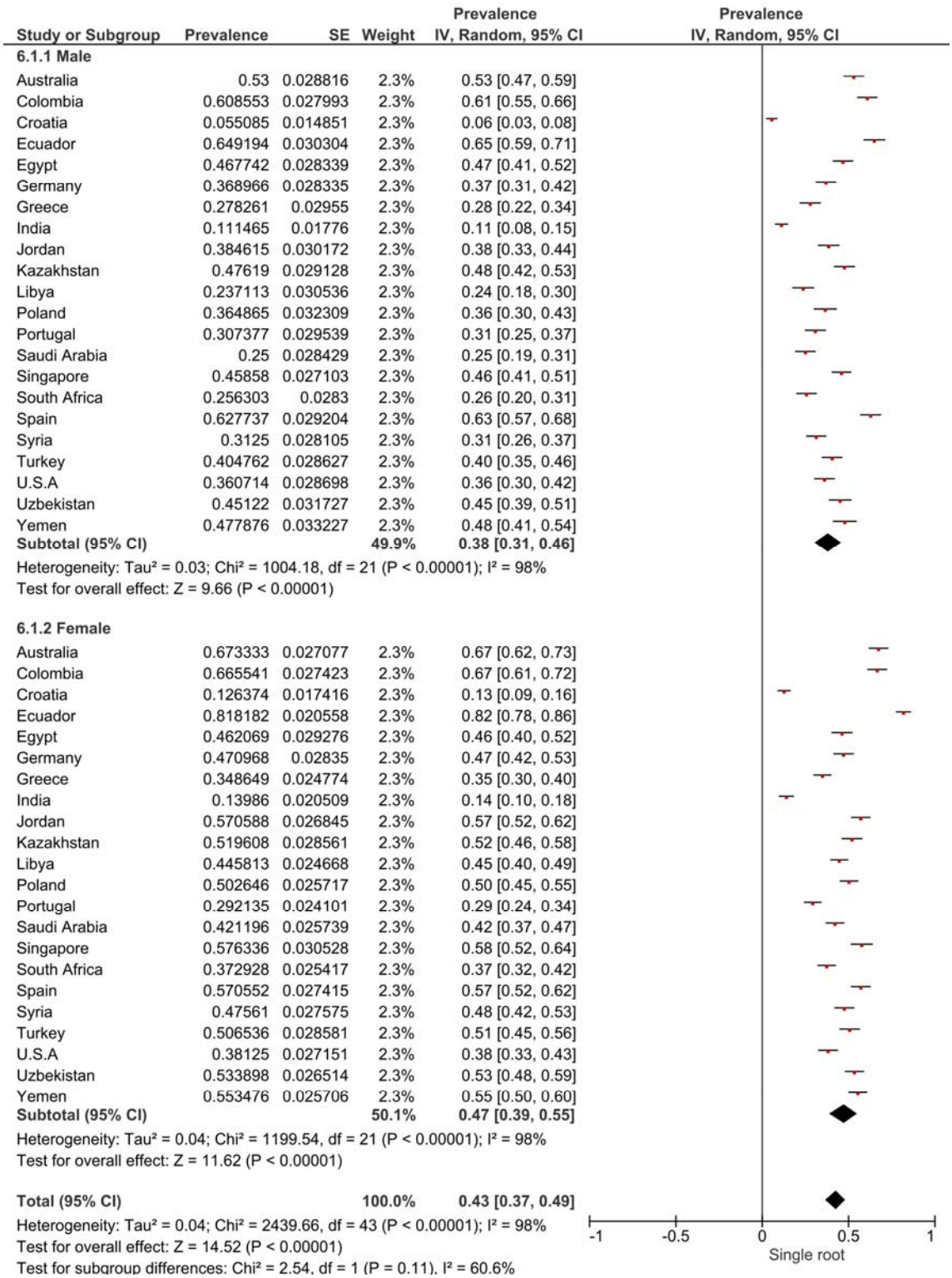
**Supplemental Figure 7.** Forest plot presentation of the prevalence of [1]MP B[1] P[1] according to gender



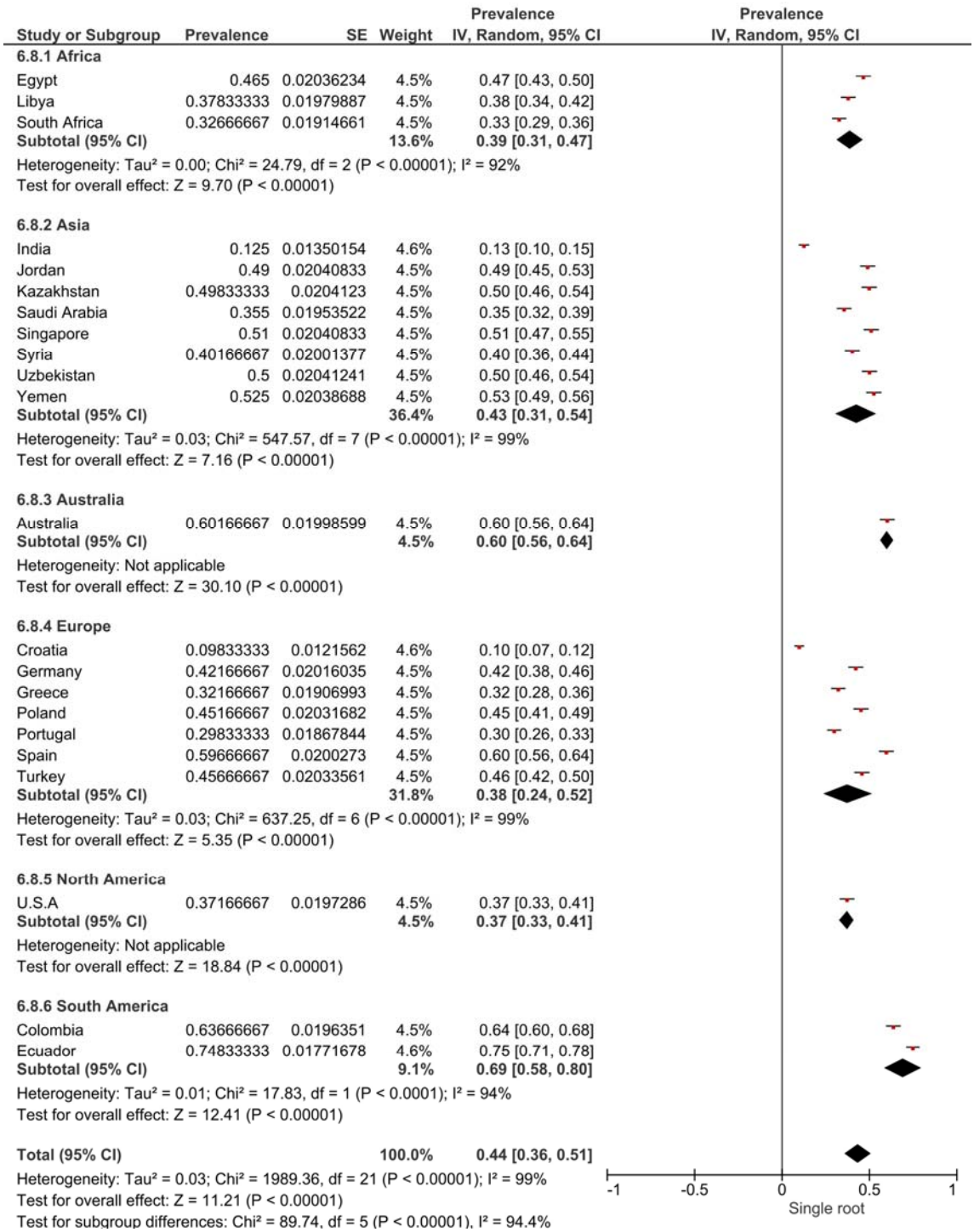
**Supplemental Figure 8.** Forest plot presentation of the prevalence of [1]MP B[1] P[1] according to age range



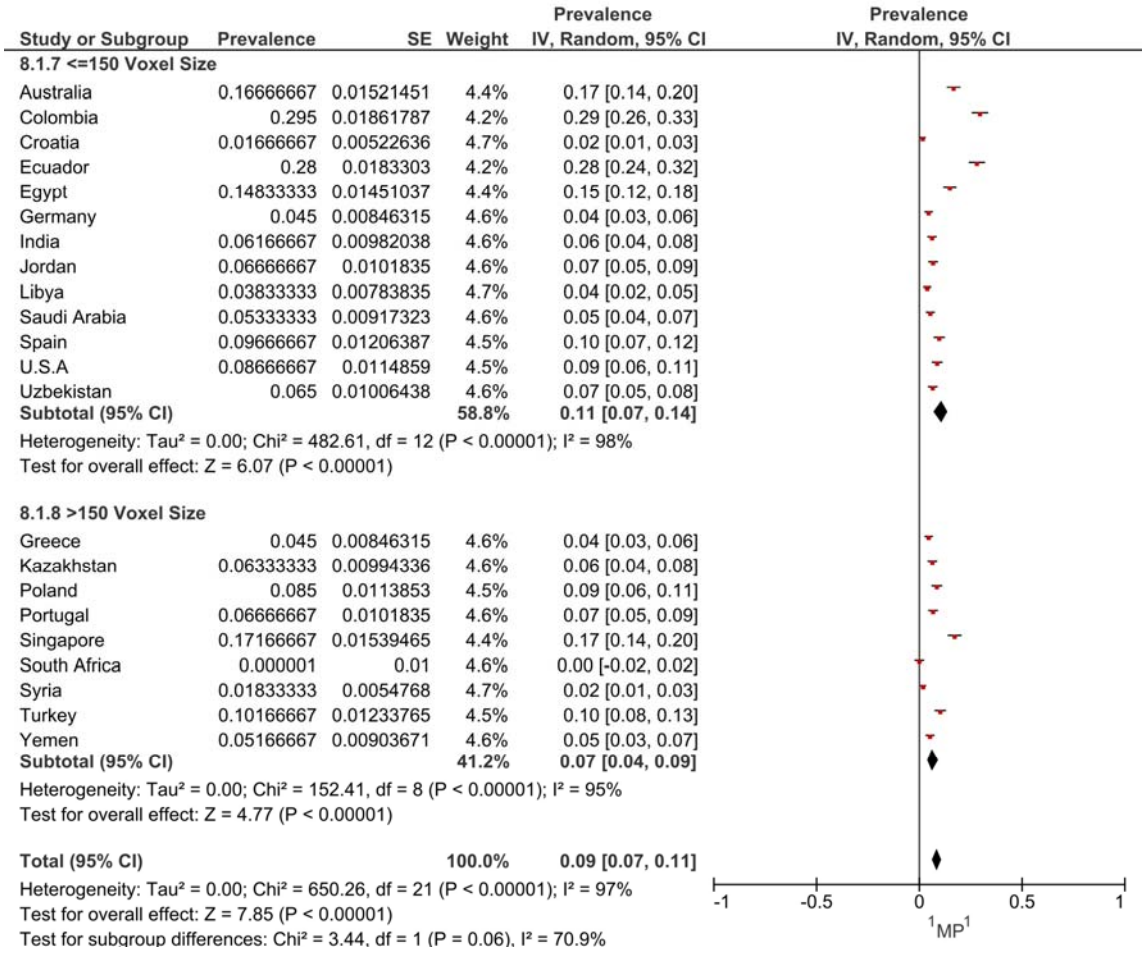
**Supplemental Figure 9.** Forest plot presentation of the prevalence of single root according to gender



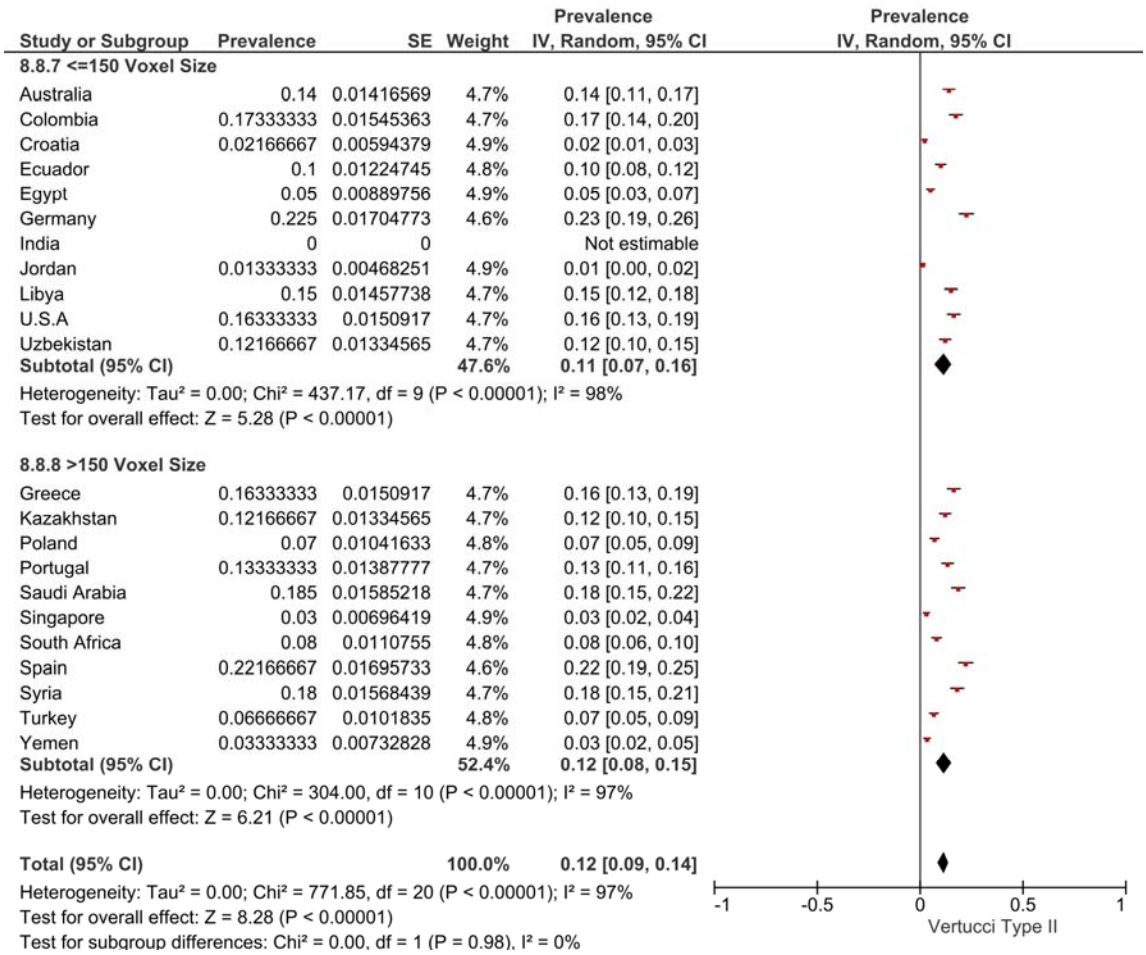
**Supplemental Figure 10.** Forest plot presentation of the prevalence of single root according to continents



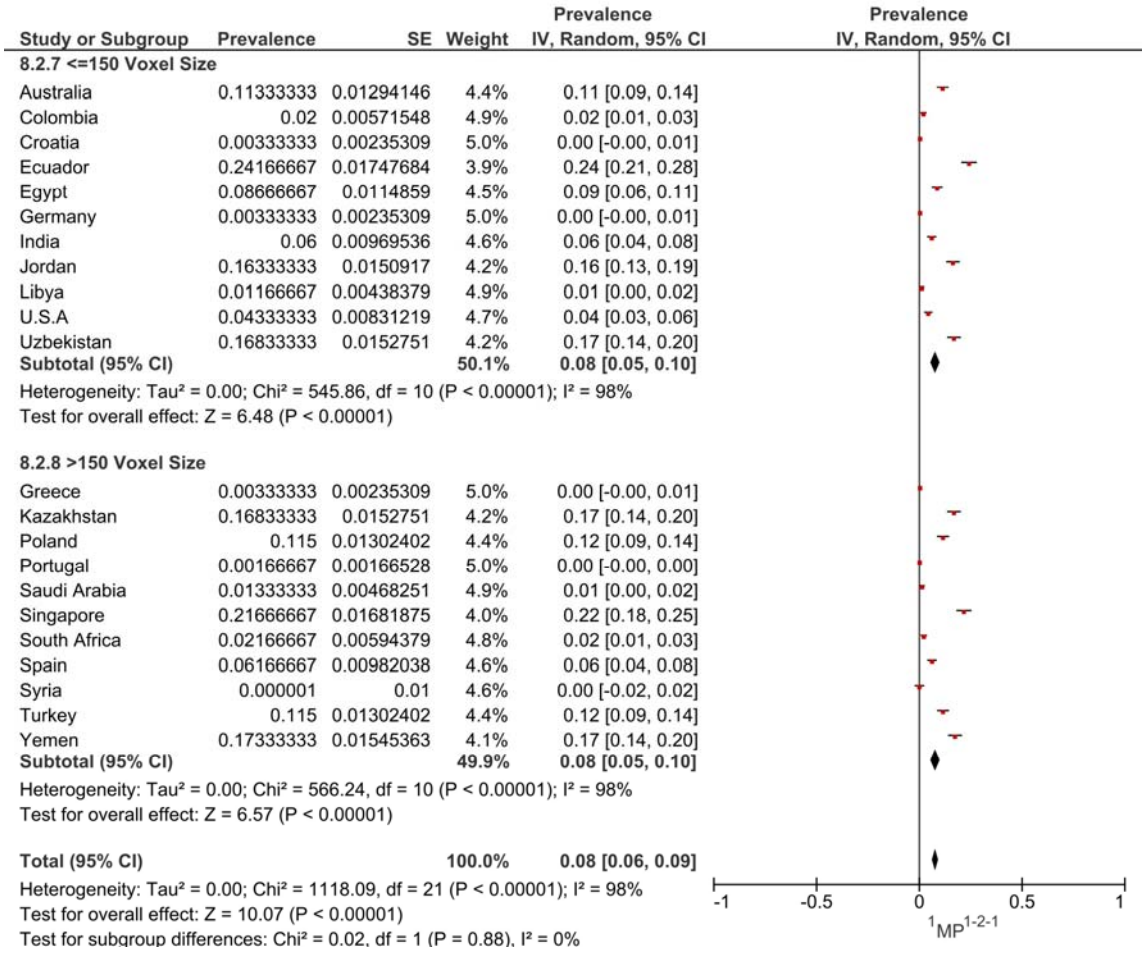
**Supplemental Figure 11.** Forest plot presentation of the prevalence of Vertucci Type I and [1]MP[1] according to Voxel Size



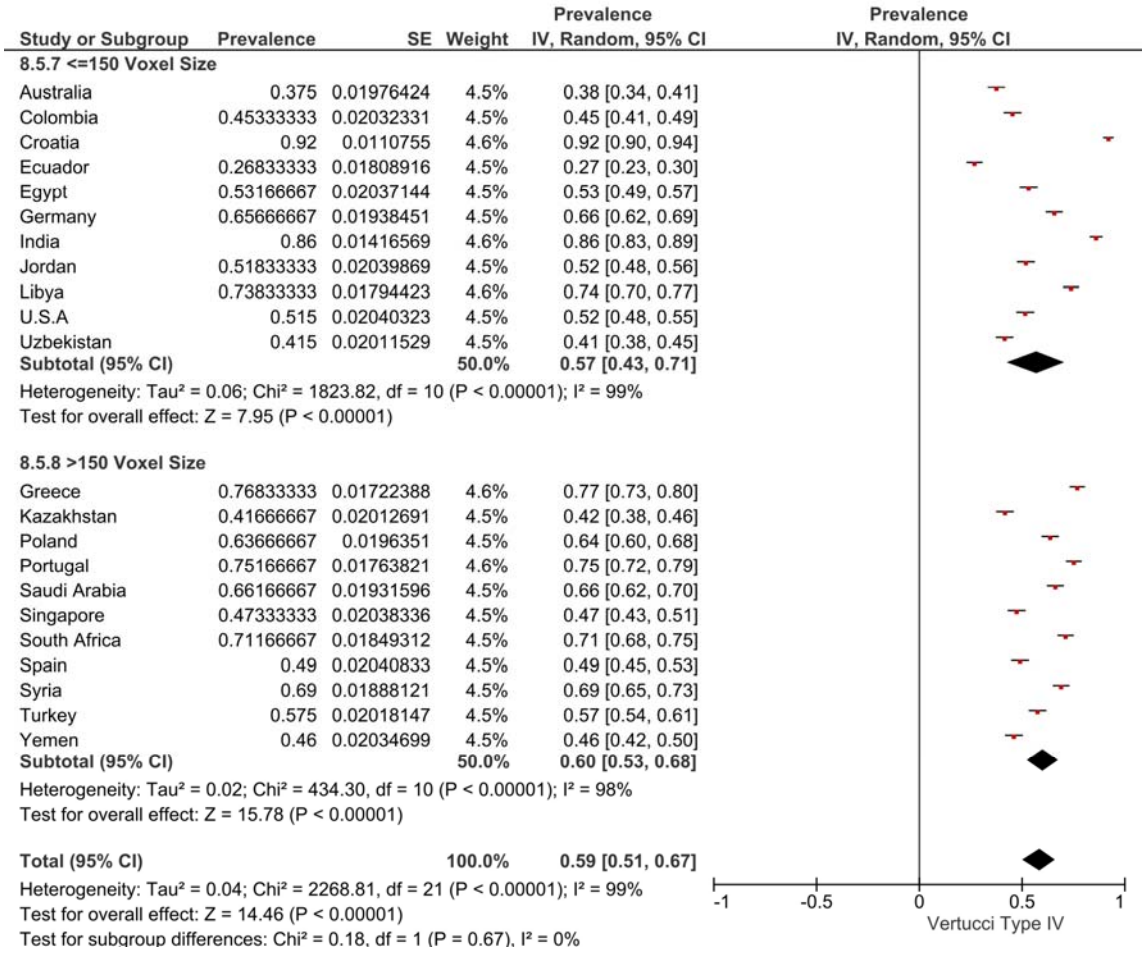
**Supplemental Figure 12.** Forest plot presentation of the prevalence of Vertucci Type II according to Voxel Size



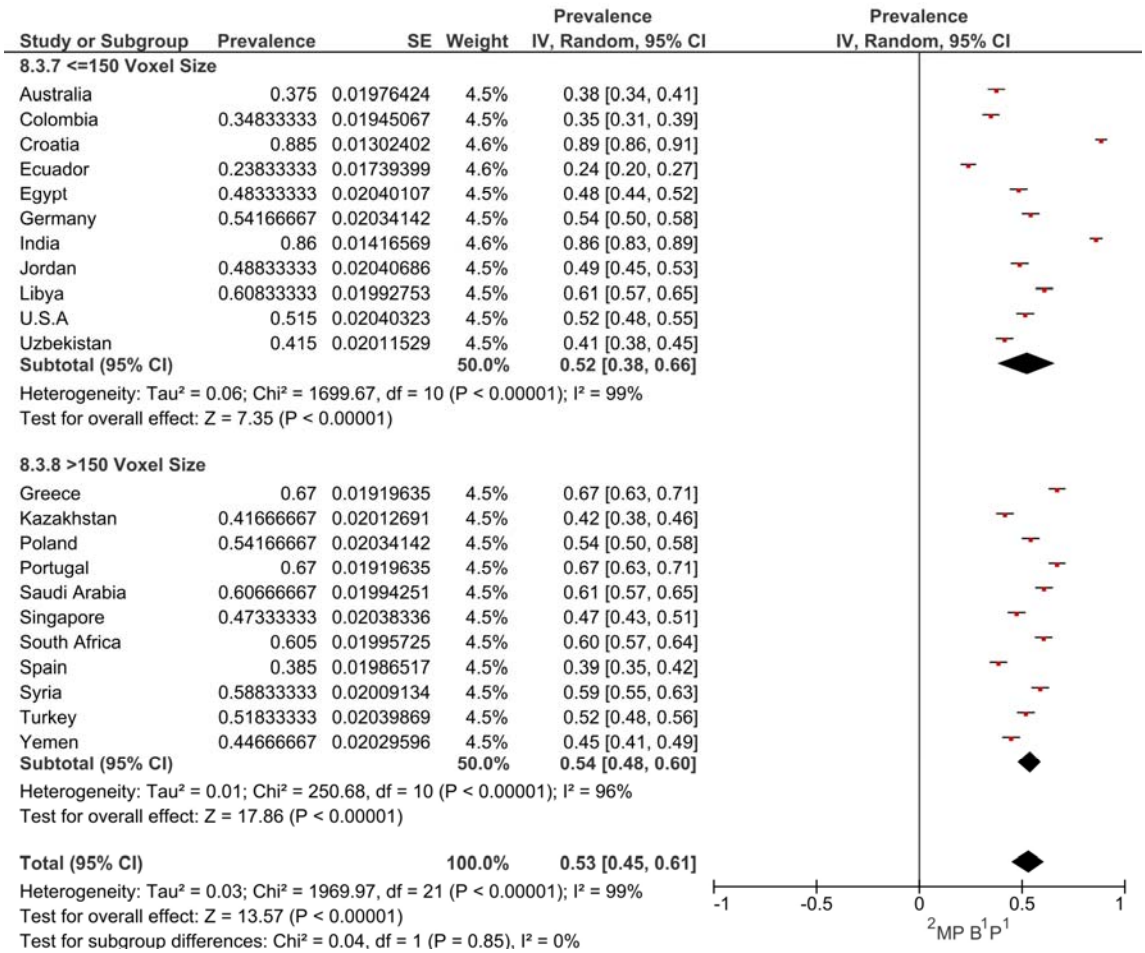
**Supplemental Figure 13.** Forest plot presentation of the prevalence of Vertucci Type III and $^{1}MP^{1-2-1}$ according to Voxel Size



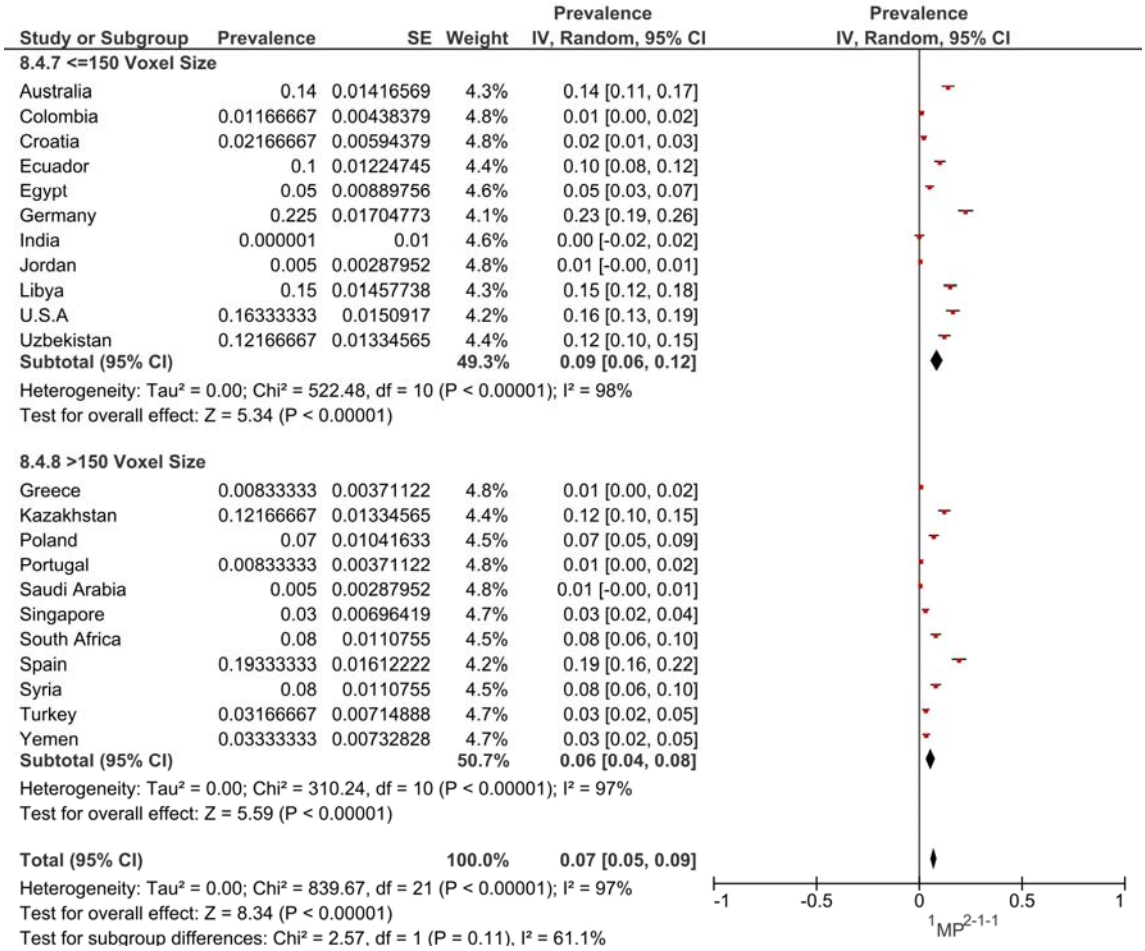
**Supplemental Figure 14.** Forest plot presentation of the prevalence of Vertucci Type IV according to Voxel Size



**Supplemental Figure 15.** Forest plot presentation of the prevalence of $^{2}$MP B$^{1}$P$^{1}$ according to Voxel Size



**Supplemental Figure 16.** Forest plot presentation of the prevalence of $^{1}MP^{2\text{-}1\text{-}1}$ according to Voxel S

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