# Appendices

Appendix 1: Search histories

**PubMed**

Search date (original): 21/09/2018

Update: 14/10/2020

|  |  |
| --- | --- |
| **ID** | **Search** |
| **Block 1 (Intervention**  **telemedicine)** | |
| #1 | Telecommunication [Mesh] |
| #2 | Telenursing [Mesh] |
| #3 | **"Computer Communication Networks"[Mesh]** |
| #4 | **(Telemedicin\*[Title/Abstract] OR tele medicin\*[Title/Abstract] OR telenurs\*[Title/Abstract] OR tele nurs\*[Title/Abstract] OR teleassist\*[Title/Abstract] OR tele assist\*[Title/Abstract] OR telebase\*[Title/Abstract] OR tele base\*[Title/Abstract] OR teleconsult\*[Title/Abstract] OR tele consult\*[Title/Abstract] OR telecouns\*[Title/Abstract] OR tele couns\*[Title/Abstract] OR telederm\*[Title/Abstract] OR tele derm\*[Title/Abstract] OR telediagnos\*[Title/Abstract] OR tele diagnos\*[Title/Abstract] OR telefollow\*[Title/Abstract] OR tele follow\*[Title/Abstract] OR teleguid\*[Title/Abstract] OR tele guid\*[Title/Abstract] OR telehealth\*[Title/Abstract] OR tele health\*[Title/Abstract] OR telehome\*[Title/Abstract] OR tele home\*[Title/Abstract] OR teleintervention\*[Title/Abstract] OR tele intervention\*[Title/Abstract] OR telemanag\*[Title/Abstract] OR tele manag\*[Title/Abstract] OR telemed\*[Title/Abstract] OR tele med\*[Title/Abstract] OR telemonitor\*[Title/Abstract] OR tele monitor\*[Title/Abstract] OR teleophthalmo\*[Title/Abstract] OR tele ophthalmo\*[Title/Abstract] OR telepatholog\*[Title/Abstract] OR tele patholog\*[Title/Abstract] OR teleprocedu\*[Title/Abstract] OR tele procedu\*[Title/Abstract] OR telerefer\*[Title/Abstract] OR tele refer\*[Title/Abstract] OR telerehab\*[Title/Abstract] OR tele rehab\*[Title/Abstract] OR teletherap\*[Title/Abstract] OR tele therap\*[Title/Abstract] OR teletreat\*[Title/Abstract] OR tele treat\*[Title/Abstract] OR telecare[Title/Abstract] OR tele care[Title/Abstract] OR telematic\*[Title/Abstract] OR tele matic\*[Title/Abstract] OR telecommunica\*[Title/Abstract] OR tele communica\*[Title/Abstract] OR telehomecare[Title/Abstract] OR tele home care[Title/Abstract] OR telehome care[Title/Abstract] OR tele homecare[Title/Abstract] OR mobile health[Title/Abstract] OR selfmonitor\*[Title/Abstract] OR self monitor\*[Title/Abstract] OR ehealth[Title/Abstract] OR digital health[Title/Abstract] OR dhealth[Title/Abstract] OR home monitor\*[Title/Abstract] OR electronic care[Title/Abstract] OR ecare[Title/Abstract] OR econsult\*[Title/Abstract] OR electronic consult\*[Title/Abstract] OR ediagnos\*[Title/Abstract] OR electronic diag\*[Title/Abstract] OR electronic health[Title/Abstract] OR emedicine[Title/Abstract] OR electronic medicine[Title/Abstract] OR enurs\*[Title/Abstract] OR electronic nurs\*[Title/Abstract] OR ephysic\*[Title/Abstract] OR electronic physic\*[Title/Abstract] OR etherap\*[Title/Abstract] OR electronic therap\*[Title/Abstract] OR electronic mail\*[Title/Abstract] OR mhealth[Title/Abstract] OR iphone\*[Title/Abstract] OR smartphone\*[Title/Abstract] OR PDA[Title/Abstract] OR Personal Digital Assistant\*[Title/Abstract] OR phone\*[Title/Abstract] OR tablet\*[Title/Abstract] OR internet[Title/Abstract] OR compute\*[Title/Abstract] OR app[Title/Abstract] OR application\*[Title/Abstract] OR digital\*[Title/Abstract] OR mobile\*[Title/Abstract] OR cellphone\*[Title/Abstract] OR telephone\*[Title/Abstract] OR remote\*[Title/Abstract] OR web base\*[Title/Abstract] OR webbase\*[Title/Abstract] OR cellular[Title/Abstract] OR landline[Title/Abstract] OR land line[Title/Abstract] OR blackberr\*[Title/Abstract] OR black berr\*[Title/Abstract] OR palmpilo\*[Title/Abstract] OR palm pilot\*[Title/Abstract] OR android[Title/Abstract] OR pocket PC\*[Title/Abstract] OR radio\*[Title/Abstract] OR walkee talkee\*[Title/Abstract])** |
| #5 | #1 OR #2 OR #3 Or #4 |
| **Block 2**  **(Patient- diabetics)** | |
| #6 | “Diabetes Mellitus”[Mesh] |
| #7 | **(diabet\*[Title/Abstract] OR DM[Title/Abstract] OR IDDM[Title/Abstract] OR NIDDM[Title/Abstract] OR MODY[Title/Abstract])** |
| #8 | #6 OR #7 |
| **Block 3**  **(Publication type - RCT)** | |
| #9 | **"Controlled Clinical Trials as Topic"[Mesh]** |
| #10 | **"Controlled Clinical Trial" [Publication Type]** |
| #11 | **((((trial\*[Title/Abstract] OR study[Title/Abstract] OR studies[Title/Abstract]))) AND random\*[Title/Abstract]) AND control\*[title/Abstract]** |
| #12 | #9 OR #10 OR #11 |
| **Limitations** | |
| **Block 3**  **(combined block searches)** | |
| #9 | #5 AND #8 AND #12 |
| #10 | #9  Filters: **Danish; English; Norwegian; Swedish** |

**Embase**

Search date (original): 25/9/2018

Updated: 14/10/2020

|  |  |
| --- | --- |
| **ID** | **Search** |
| **Block 1 (Intervention**  **telemedicine)** | |
| #1 | 'telecommunication'/exp |
| #2 | **telemedicin\*:ab,kw,ti OR 'tele medicin\*':ab,kw,ti OR telenurs\*:ab,kw,ti OR 'tele nurs\*':ab,kw,ti OR teleassist\*:ab,kw,ti OR 'tele assist\*':ab,kw,ti OR telebase\*:ab,kw,ti OR 'tele base\*':ab,kw,ti OR teleconsult\*:ab,kw,ti OR 'tele consult\*':ab,kw,ti OR telecouns\*:ab,kw,ti OR 'tele couns\*':ab,kw,ti OR telederm\*:ab,kw,ti OR 'tele derm\*':ab,kw,ti OR telediagnos\*:ab,kw,ti OR 'tele diagnos\*':ab,kw,ti OR telefollow\*:ab,kw,ti OR 'tele follow\*':ab,kw,ti OR teleguid\*:ab,kw,ti OR 'tele guid\*':ab,kw,ti OR telehealth\*:ab,kw,ti OR 'tele health\*':ab,kw,ti OR telehome\*:ab,kw,ti OR 'tele home\*':ab,kw,ti OR teleintervention\*:ab,kw,ti OR 'tele intervention\*':ab,kw,ti OR telemanag\*:ab,kw,ti OR 'tele manag\*':ab,kw,ti OR telemed\*:ab,kw,ti OR 'tele med\*':ab,kw,ti OR telemonitor\*:ab,kw,ti OR 'tele monitor\*':ab,kw,ti OR teleophthalmo\*:ab,kw,ti OR 'tele ophthalmo\*':ab,kw,ti OR telepatholog\*:ab,kw,ti OR 'tele patholog\*':ab,kw,ti OR teleprocedu\*:ab,kw,ti OR 'tele procedu\*':ab,kw,ti OR telerefer\*:ab,kw,ti OR 'tele refer\*':ab,kw,ti OR telerehab\*:ab,kw,ti OR 'tele rehab\*':ab,kw,ti OR teletherap\*:ab,kw,ti OR 'tele therap\*':ab,kw,ti OR teletreat\*:ab,kw,ti OR 'tele treat\*':ab,kw,ti OR telecare:ab,kw,ti OR 'tele care':ab,kw,ti OR telematic\*:ab,kw,ti OR 'tele matic\*':ab,kw,ti OR telecommunica\*:ab,kw,ti OR 'tele communica\*':ab,kw,ti OR telehomecare:ab,kw,ti OR 'tele home care':ab,kw,ti OR 'telehome care':ab,kw,ti OR 'tele homecare':ab,kw,ti OR 'mobile health':ab,kw,ti OR selfmonitor\*:ab,kw,ti OR 'self monitor\*':ab,kw,ti OR ehealth:ab,kw,ti OR 'digital health':ab,kw,ti OR dhealth:ab,kw,ti OR 'home monitor\*':ab,kw,ti OR 'electronic care':ab,kw,ti OR ecare:ab,kw,ti OR econsult\*:ab,kw,ti OR 'electronic consult\*':ab,kw,ti OR ediagnos\*:ab,kw,ti OR 'electronic diag\*':ab,kw,ti OR 'electronic health':ab,kw,ti OR emedicine:ab,kw,ti OR 'electronic medicine':ab,kw,ti OR enurs\*:ab,kw,ti OR 'electronic nurs\*':ab,kw,ti OR ephysic\*:ab,kw,ti OR 'electronic physic\*':ab,kw,ti OR etherap\*:ab,kw,ti OR 'electronic therap\*':ab,kw,ti OR 'electronic mail\*':ab,kw,ti OR mhealth:ab,kw,ti OR iphone\*:ab,kw,ti OR smartphone\*:ab,kw,ti OR pda:ab,kw,ti OR 'personal digital assistant\*':ab,kw,ti OR phone\*:ab,kw,ti OR tablet\*:ab,kw,ti OR internet:ab,kw,ti OR compute\*:ab,kw,ti OR app:ab,kw,ti OR application\*:ab,kw,ti OR digital\*:ab,kw,ti OR mobile\*:ab,kw,ti OR cellphone\*:ab,kw,ti OR telephone\*:ab,kw,ti OR remote\*:ab,kw,ti OR 'web base\*':ab,kw,ti OR webbase\*:ab,kw,ti OR cellular:ab,kw,ti OR landline:ab,kw,ti OR 'land line':ab,kw,ti OR blackberr\*:ab,kw,ti OR 'black berr\*':ab,kw,ti OR palmpilo\*:ab,kw,ti OR 'palm pilot\*':ab,kw,ti OR android:ab,kw,ti OR 'pocket pc\*':ab,kw,ti OR radio\*:ab,kw,ti OR 'walkee talkee\*':ab,kw,ti** |
| #3 | #1 OR #2 |
| **Block 2**  **(Patient- diabetics)** | |
| #4 | 'diabetes mellitus'/exp |
| #5 | diabet\*:ab,kw,ti OR dm:ab,kw,ti OR iddm:ab,kw,ti OR niddm:ab,kw,ti OR mody:ab,kw,ti |
| #6 | #4 or #5 |
| **Block 3 (Publication type - RCT)** | |
| #7 | **'controlled clinical trial'**/exp |
| #8 | (**trial\***:ab,kw,ti OR **study**:ab,kw,ti OR **studies**:ab,kw,ti) AND **random\***:ab,kw,ti AND **control\***:ab,kw,ti |
| #9 | #7 OR #8 |
| **Block 4**  **(combined block searches)** | |
| #10 | #3 AND #6 AND #9 |
| #11 | #3 AND #6 AND #9 AND [embase]/lim |
| #12 | #11 AND (**'article'**/it OR **'article in press'**/it OR **'conference paper'**/it) |
| #13 | #12 AND ([danish]/lim OR [english]/lim OR [norwegian]/lim OR [swedish]/lim) |

**CINAHL**

Search day (original): 24/9/2018

Updated: 14/10/2020

|  |  |
| --- | --- |
| **ID** | **Search** |
| **Block 1 (Intervention**  **telemedicine)** | |
| #1 | (MH "Telecommunications+") |
| #2 | **TI(Telemedicin\* OR tele medicin\* OR telenurs\* OR tele nurs\* OR teleassist\* OR tele assist\* OR telebase\* OR tele base\* OR teleconsult\* OR tele consult\* OR telecouns\* OR tele couns\* OR telederm\* OR tele derm\* OR telediagnos\* OR tele diagnos\* OR telefollow\* OR tele follow\* OR teleguid\* OR tele guid\* OR telehealth\* OR tele health\* OR telehome\* OR tele home\* OR teleintervention\* OR tele intervention\* OR telemanag\* OR tele manag\* OR telemed\* OR tele med\* OR telemonitor\* OR tele monitor\* OR teleophthalmo\* OR tele ophthalmo\* OR telepatholog\* OR tele patholog\* OR teleprocedu\* OR tele procedu\* OR telerefer\* OR tele refer\* OR telerehab\* OR tele rehab\* OR teletherap\* OR tele therap\* OR teletreat\* OR tele treat\* OR telecare OR tele care OR telematic\* OR tele matic\* OR telecommunica\* OR tele communica\* OR telehomecare OR tele home care OR telehome care OR tele homecare OR mobile health OR selfmonitor\* OR self monitor\* OR ehealth OR digital health OR dhealth OR home monitor\* OR electronic care OR ecare OR econsult\* OR electronic consult\* OR ediagnos\* OR electronic diag\* OR electronic health OR emedicine OR electronic medicine OR enurs\* OR electronic nurs\* OR ephysic\* OR electronic physic\* OR etherap\* OR electronic therap\* OR electronic mail\* OR mhealth OR iphone\* OR smartphone\* OR PDA OR Personal Digital Assistant\* OR phone\* OR tablet\* OR internet OR compute\* OR app OR application\* OR digital\* OR mobile\* OR cellphone\* OR telephone\* OR remote\* OR web base\* OR webbase\* OR cellular OR landline OR land line OR blackberry\* OR black berr\* OR palmpilo\* OR palm pilot\* OR android OR pocket PC\* OR radio\* OR walkee talkee\*) OR AB(Telemedicin\* OR tele medicin\* OR telenurs\* OR tele nurs\* OR teleassist\* OR tele assist\* OR telebase\* OR tele base\* OR teleconsult\* OR tele consult\* OR telecouns\* OR tele couns\* OR telederm\* OR tele derm\* OR telediagnos\* OR tele diagnos\* OR telefollow\* OR tele follow\* OR teleguid\* OR tele guid\* OR telehealth\* OR tele health\* OR telehome\* OR tele home\* OR teleintervention\* OR tele intervention\* OR telemanag\* OR tele manag\* OR telemed\* OR tele med\* OR telemonitor\* OR tele monitor\* OR teleophthalmo\* OR tele ophthalmo\* OR telepatholog\* OR tele patholog\* OR teleprocedu\* OR tele procedu\* OR telerefer\* OR tele refer\* OR telerehab\* OR tele rehab\* OR teletherap\* OR tele therap\* OR teletreat\* OR tele treat\* OR telecare OR tele care OR telematic\* OR tele matic\* OR telecommunica\* OR tele communica\* OR telehomecare OR tele home care OR telehome care OR tele homecare OR mobile health OR selfmonitor\* OR self monitor\* OR ehealth OR digital health OR dhealth OR home monitor\* OR electronic care OR ecare OR econsult\* OR electronic consult\* OR ediagnos\* OR electronic diag\* OR electronic health OR emedicine OR electronic medicine OR enurs\* OR electronic nurs\* OR ephysic\* OR electronic physic\* OR etherap\* OR electronic therap\* OR electronic mail\* OR mhealth OR iphone\* OR smartphone\* OR PDA OR Personal Digital Assistant\* OR phone\* OR tablet\* OR internet OR compute\* OR app OR application\* OR digital\* OR mobile\* OR cellphone\* OR telephone\* OR remote\* OR web base\* OR webbase\* OR cellular OR landline OR land line OR blackberry\* OR black berr\* OR palmpilo\* OR palm pilot\* OR android OR pocket PC\* OR radio\* OR walkee talkee\*)** |
| #3 | #1 OR #2 |
| **Block 2**  **(Patient- diabetics)** | |
| #4 | (MH "Diabetes Mellitus+") |
| #5 | TI (diabet\* OR dm OR iddm OR niddm OR mody) OR AB (diabet\* OR dm OR iddm OR niddm OR mody) |
| #6 | #4 OR #5 |
| **Block 3**  **(Publication type - RCT)** | |
| #9 | MH "Randomized Controlled Trials" |
| #10 | ((TI(trial\* OR study OR studies)) OR (AB(trial\* OR study OR studies))) AND (TI(random\*) OR AB(random\*)) AND (TI(control\*) OR AB(control\*)) |
| #11 | #9 OR #10 |
| **Block 3**  **(combined block searches)** | |
| #12 | #3 AND #6 AND #11 |
| #13 | #12  **Limiters** Language: Danish, English, Norwegian, Swedish |

**Cochrane Library**

Search date (original): 11/09/2018

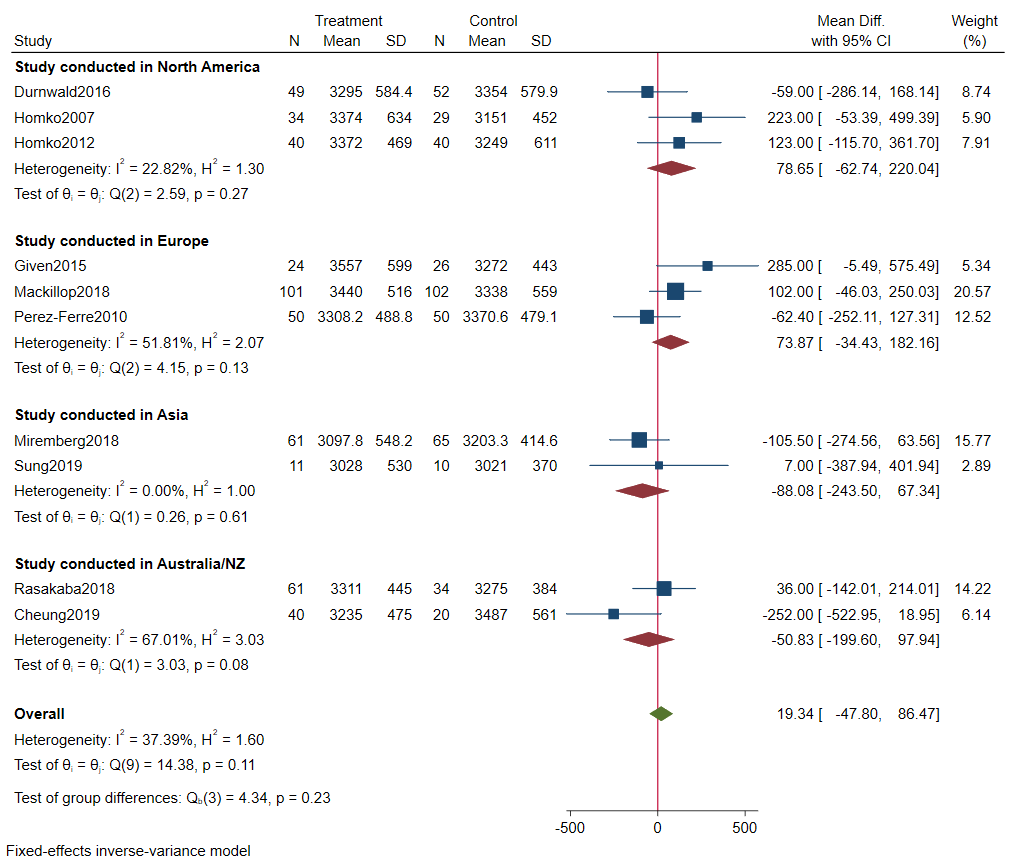
Updated: 14/10/2020

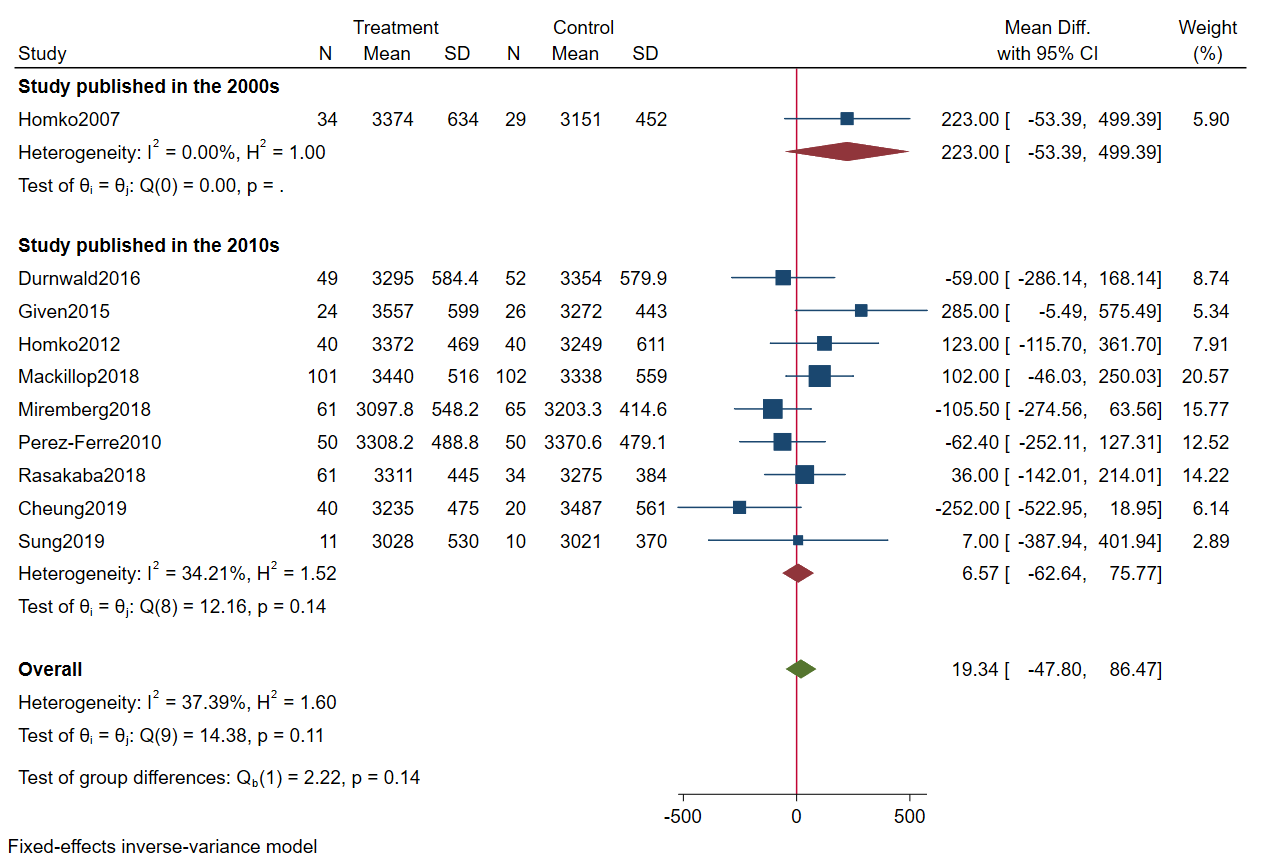
|  |  |
| --- | --- |
| **ID** | **Search** |
| **Block 1**  **(Intervention -telemedicine)** | |
| #1 | MeSH descriptor: [Telecommunications] |
| #2 | MeSH descriptor: [Telenursing] |
| #3 | **´Computer Communication Networks´[Mesh]** |
| #4 | **(Telemedicin\* OR `tele medicin\*´ OR telenurs\* OR `tele nurs\*´ OR teleassist\* OR `tele assist\*´ OR telebase\* OR `tele base\*´ OR teleconsult\* OR `tele consult\*´ OR telecouns\* OR `tele couns\*´ OR telederm\* OR `tele derm\*´ OR telediagnos\* OR `tele diagnos\*´ OR telefollow\* OR `tele follow\*´ OR teleguid\* OR `tele guid\*´ OR telehealth\* OR `tele health\*´ OR telehome\* OR `tele home\*´ OR teleintervention\* OR `tele intervention\*´ OR telemanag\* OR `tele manag\*´ OR telemed\* OR `tele med\*´ OR telemonitor\* OR `tele monitor\*´ OR teleophthalmo\* OR `tele ophthalmo\*´ OR telepatholog\* OR `tele patholog\*´ OR teleprocedu\* OR `tele procedu\*´ OR telerefer\* OR `tele refer\*´ OR telerehab\* OR `tele rehab\*´ OR teletherap\* OR `tele therap\*´ OR teletreat\* OR `tele treat\*´ OR telecare OR `tele care´ OR telematic\* OR `tele matic\*´ OR telecommunica\* OR `tele communica\*´ OR telehomecare OR `tele home care´ OR `telehome care´ OR `tele homecare´ OR `mobile health´ OR selfmonitor\* OR `self monitor\*´ OR ehealth OR `digital health´ OR dhealth OR `home monitor\*´ OR `electronic care´ OR ecare OR econsult\* OR `electronic consult\*´ OR ediagnos\* OR `electronic diag\*´ OR `electronic health´ OR emedicine OR `electronic medicine´ OR enurs\* OR `electronic nurs\*´ OR ephysic\* OR `electronic physic\*´ OR etherap\* OR `electronic therap\*´ OR `electronic mail\*´ OR mhealth OR iphone\* OR smartphone\* OR PDA OR `Personal Digital Assistant\*´ OR phone\* OR tablet\* OR internet OR compute\* OR app OR application\* OR digital\* OR mobile\* OR cellphone\* OR telephone\* OR remote\* OR `web base\*´ OR webbase\* OR cellular OR landline OR `land line´ OR blackberr\* OR `black berr\*´ OR palmpilo\* OR `palm pilot\*´ OR android OR `pocket PC\*´ OR radio\* OR `walkee talkee\*´):ti,ab,kw** |
| #5 | #1 OR #2 OR #3 OR #4 |
| **Block 2**  **(Population: diabetes)** | |
| #6 | MeSH descriptor: [Diabetes Mellitus] explode all trees |
| #7 | **(diabet\* OR DM OR IDDM OR NIDDM OR MODY):ti,ab,kw** |
| #8 | #6 OR #7 |
| **Block 3**  **(Publication type - RCT)** | |
| #9 | **MeSH descriptor: [Controlled Clinical Trials as Topic] explode all trees** |
| #10 | **MeSH descriptor: [Controlled Clinical Trial] explode all trees** |
| #11 | (trial\* OR study OR studies):ti,ab,kw AND random\*:ti,ab,kw AND control\*:ti,ab,kw |
| #12 | #9 OR #10 OR #11 |
| **Block 3**  **(combined block searches)** | |
| #13 | #5 AND #8 AND #12 |
| #14 | #13 (NOT from EMBASE and PubMed and Cinahl) |

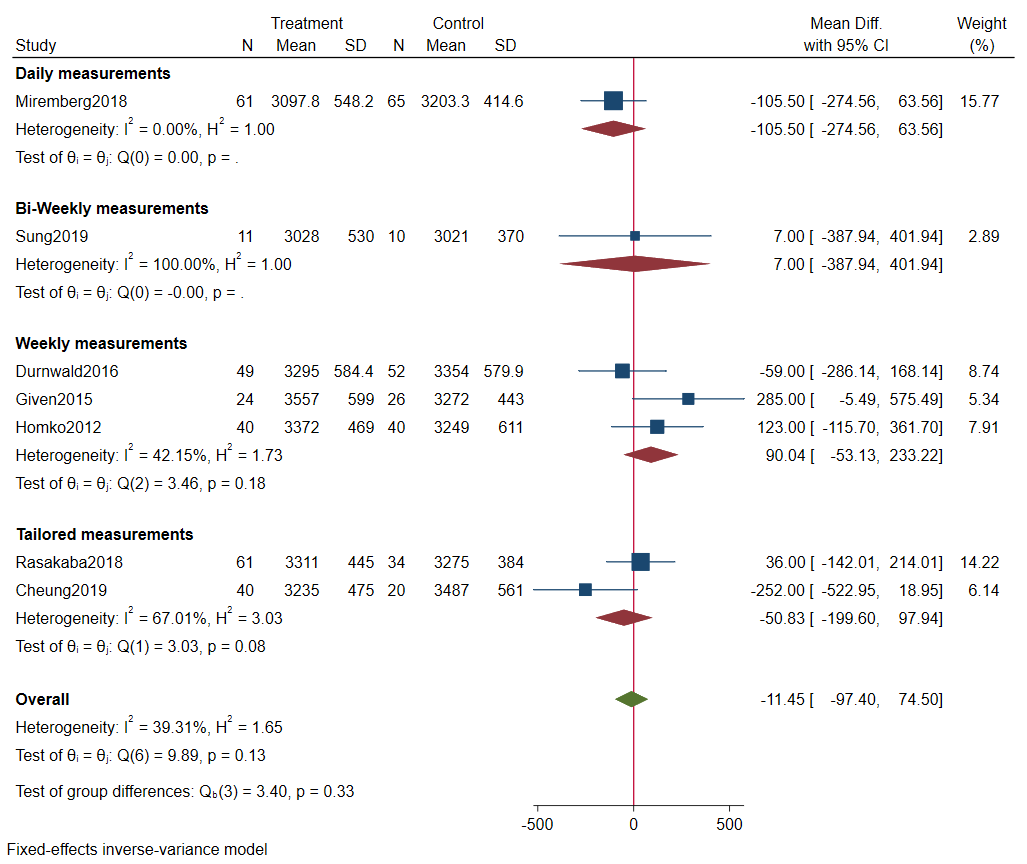
Appendix 2: Risk of bias assessment across studies

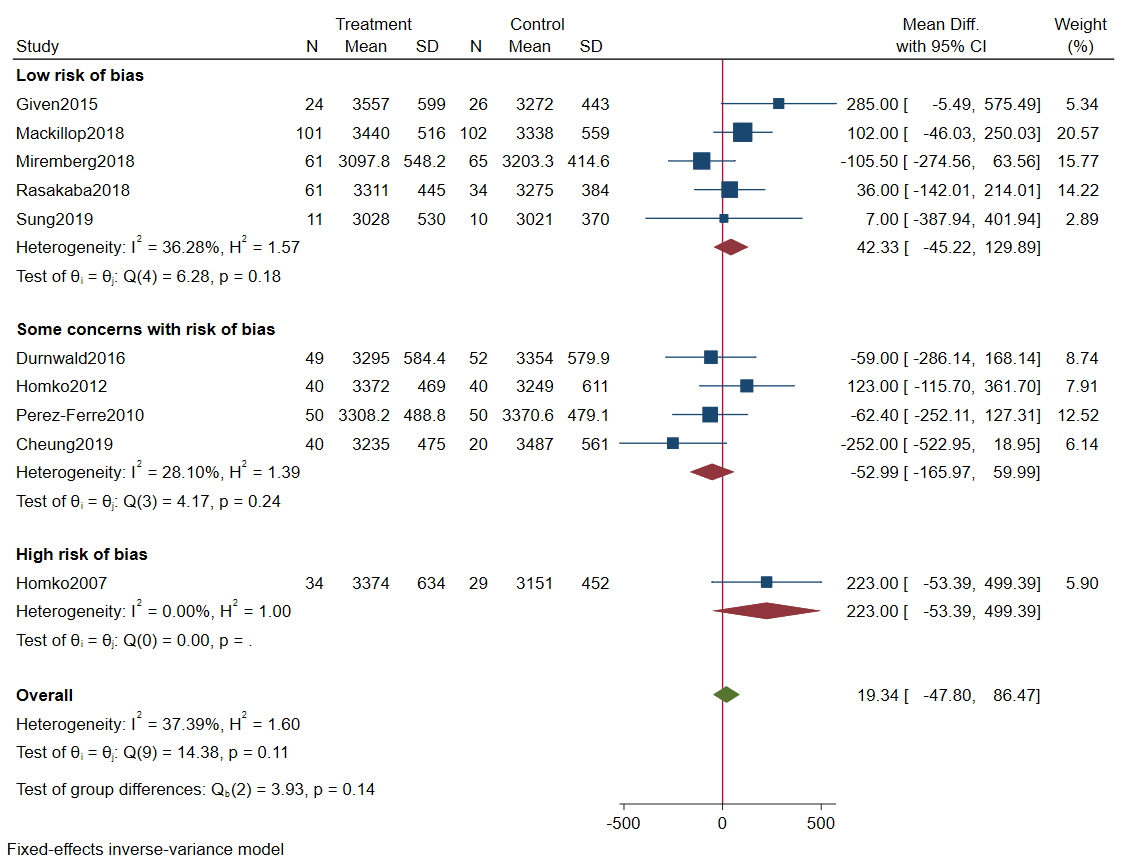
|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Study ID** | **Randomization process** | **Deviations from intended interventions** | **Mising outcome data** | **Measurement of the outcome** | **Selection of the reported result** | **Overall Bias** |
| Homko 2007 | Some concerns | High | Low | Low | Some concerns | High |
| Durnwald 2016 | Some concerns | Some concerns | Low | Low | Low | Some concerns |
| Given 2015 | Low | Low | Low | Low | Low | Low |
| Homko 2012 | Some concerns | Low | Low | Low | Some concerns | Some concerns |
| Mackillop | Low | Low | Low | Low | Low | Low |
| Miremberg 2018 | Low | Low | Low | Low | Low | Low |
| Perez-Ferre 2010 | Some concerns | Low | Low | Low | Some concerns | Some concerns |
| Raseka 2018 | Low | Low | Low | Low | Low | Low |
| Carolan-Olah 2019 | Low | Some concerns | High | Low | Low | High |
| Cheung 2019 | Low | Low | High | Low | Low | Some concerns |
| Sung 2019 | Low | Low | Low | Low | Low | Low |

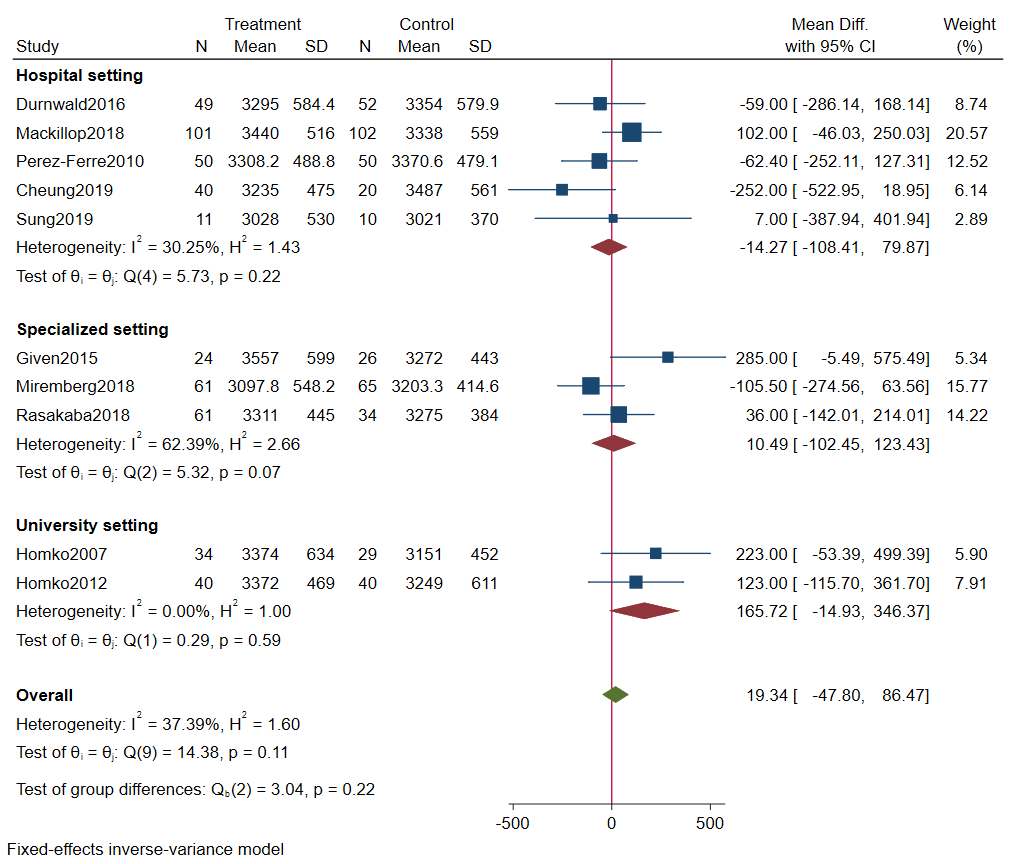
Appendix 3: Forest plots for all subgroups

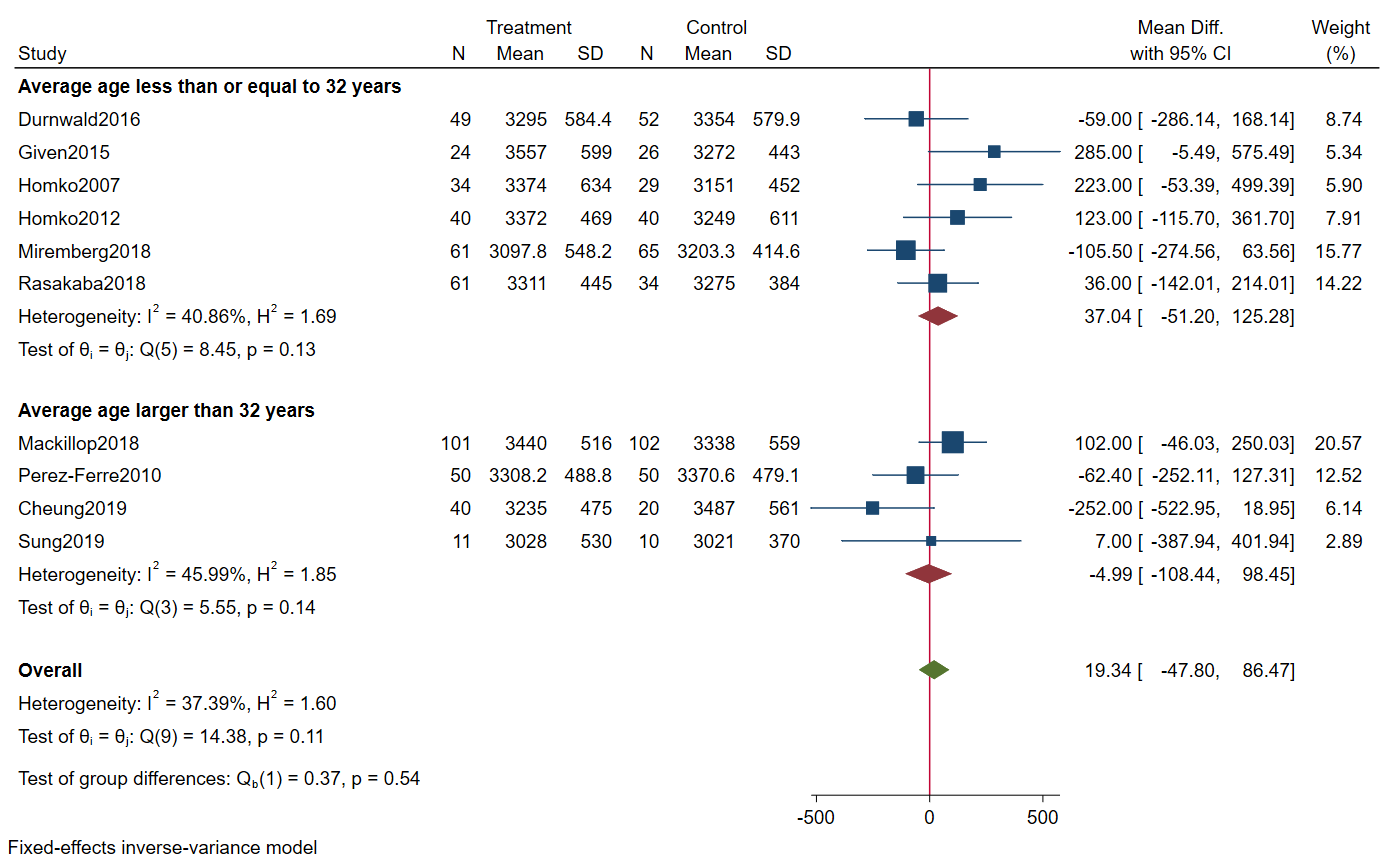


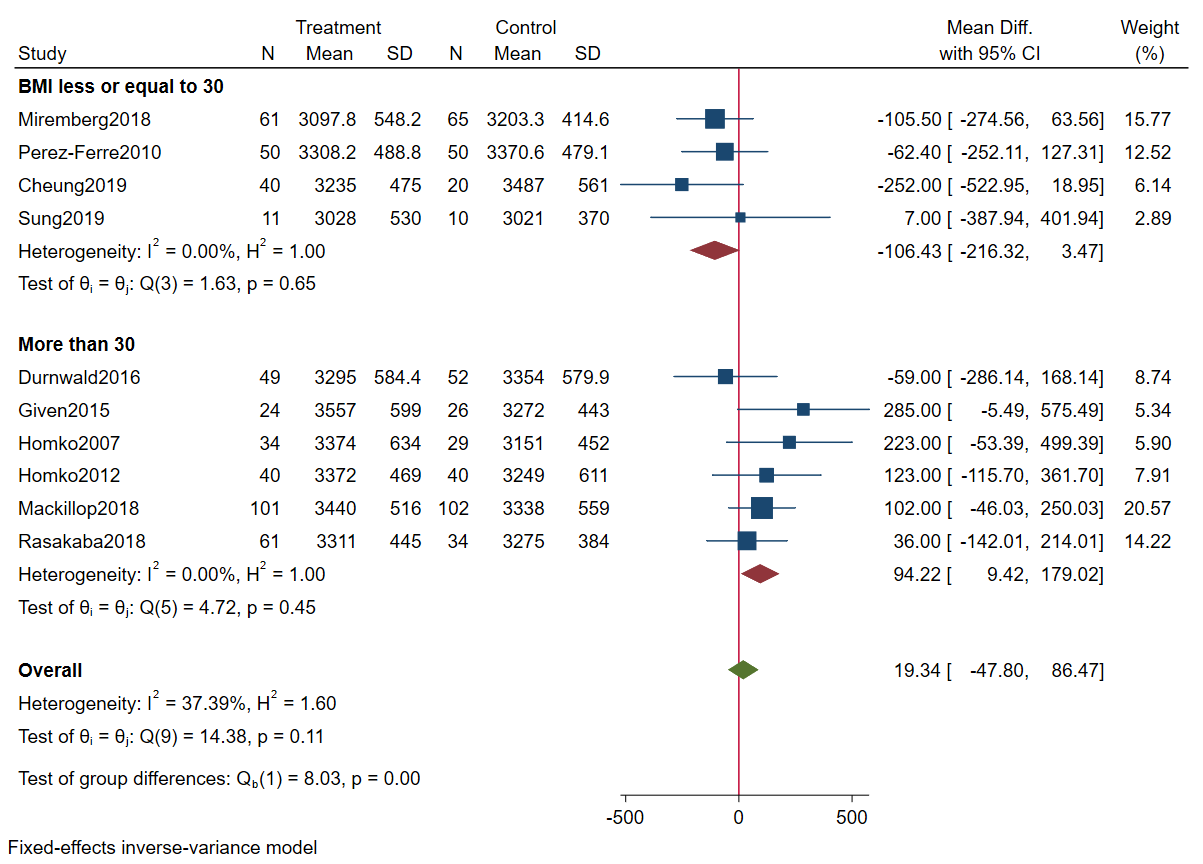


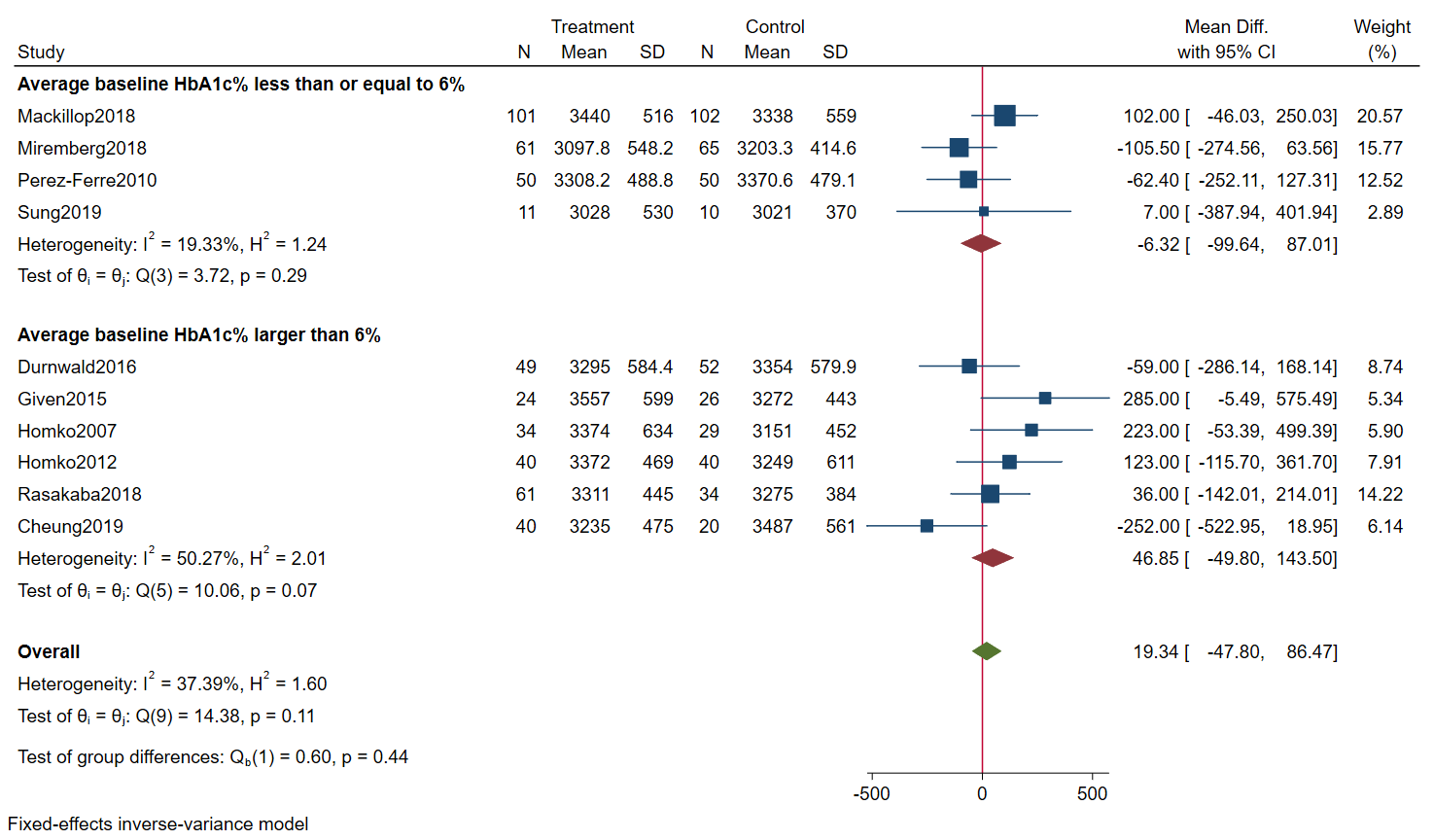


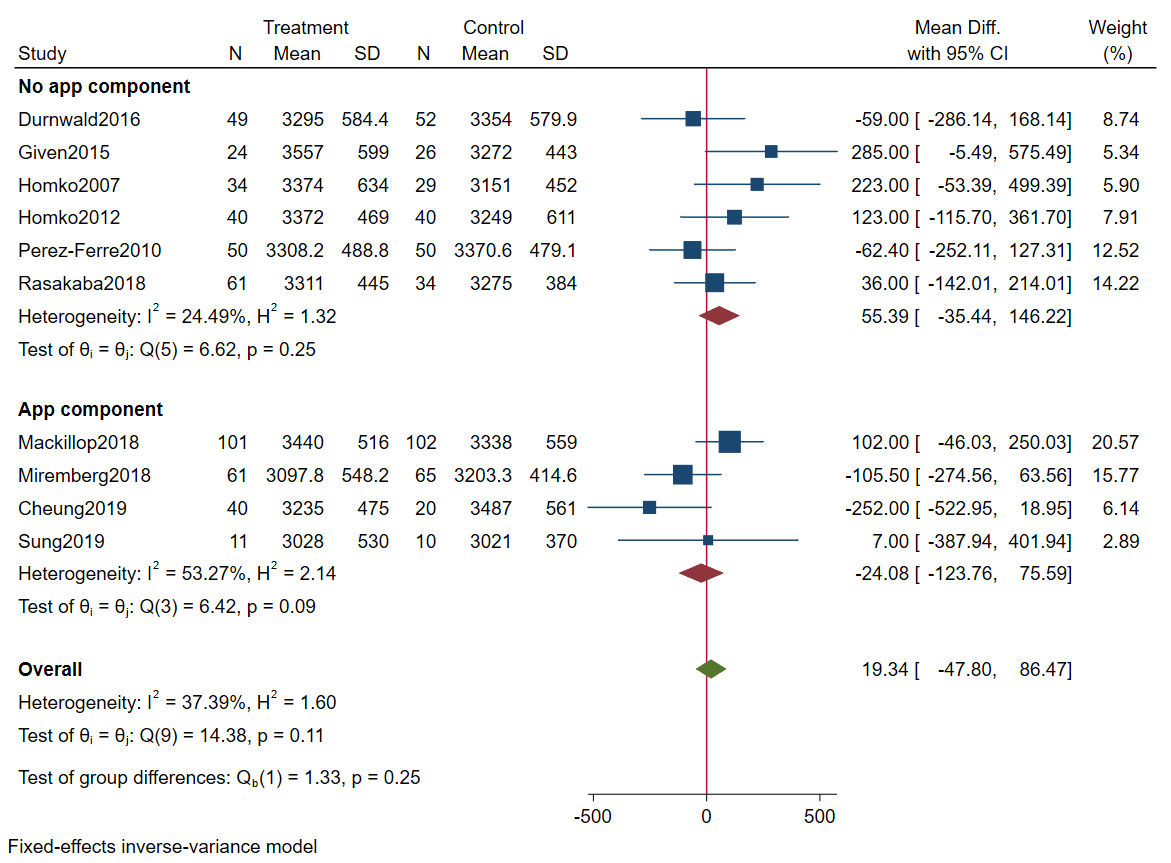


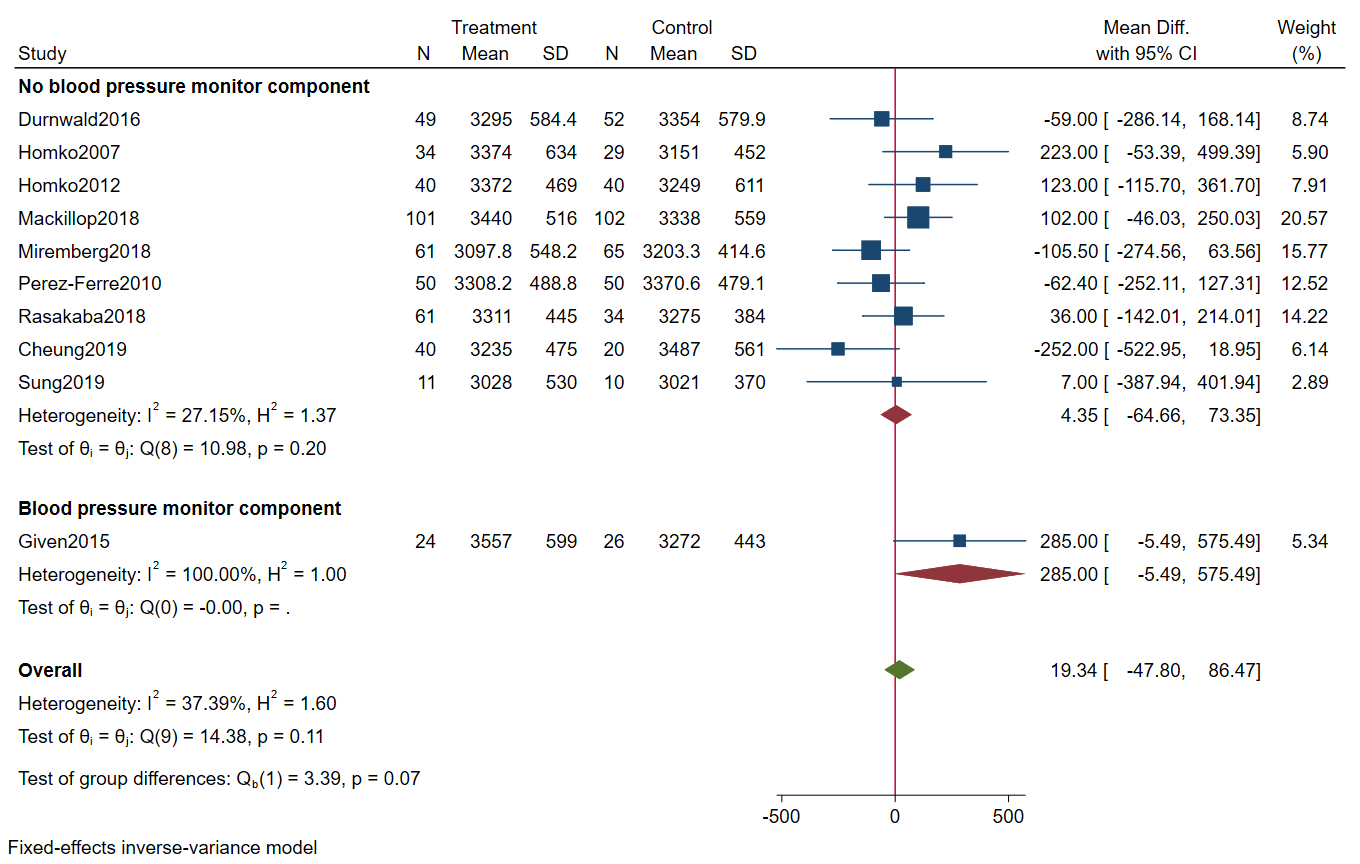


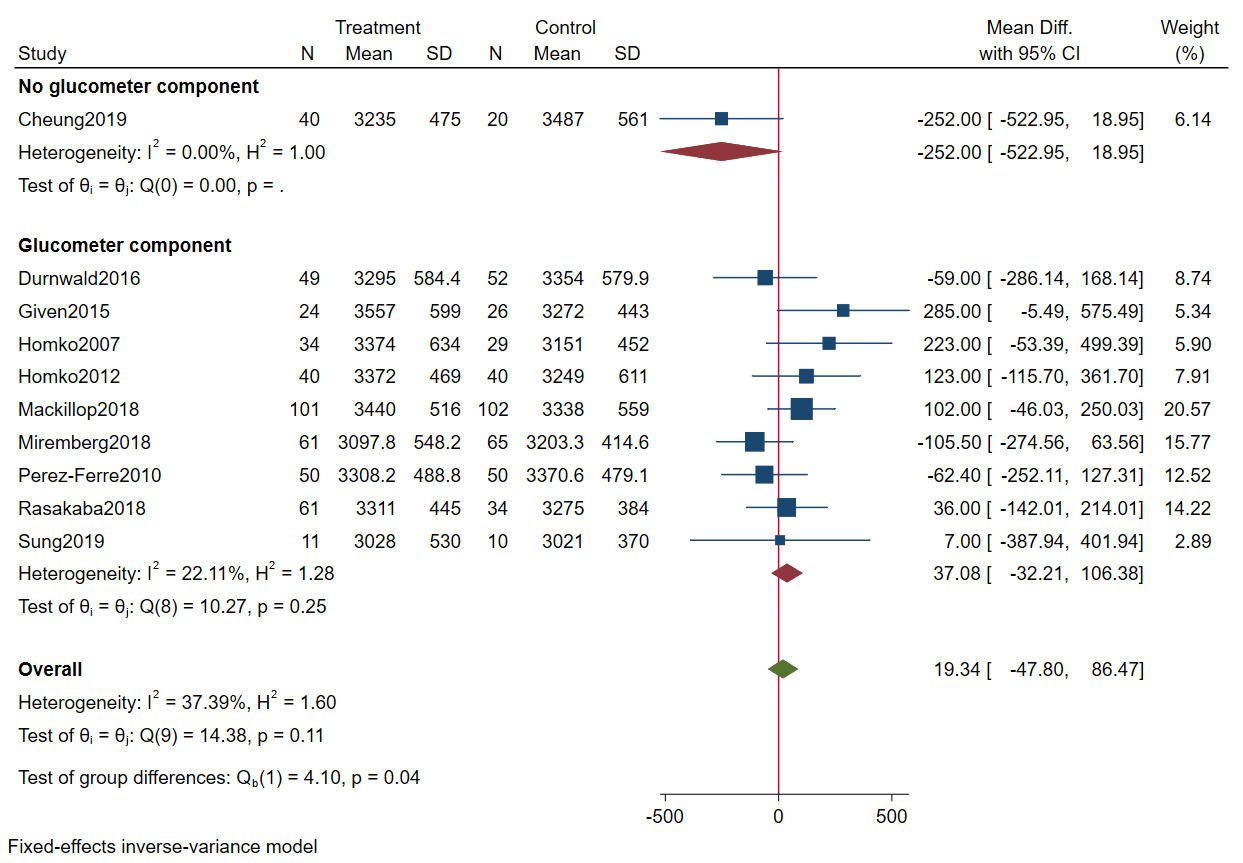


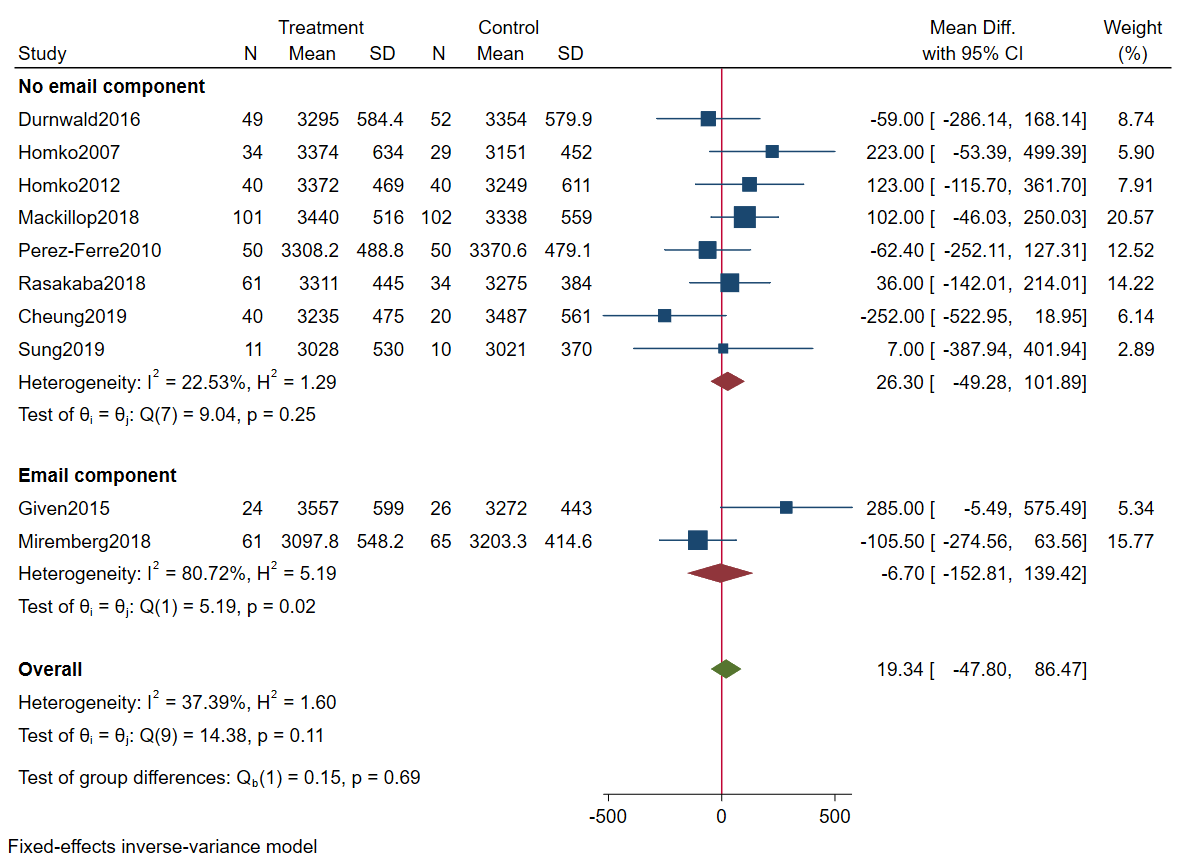


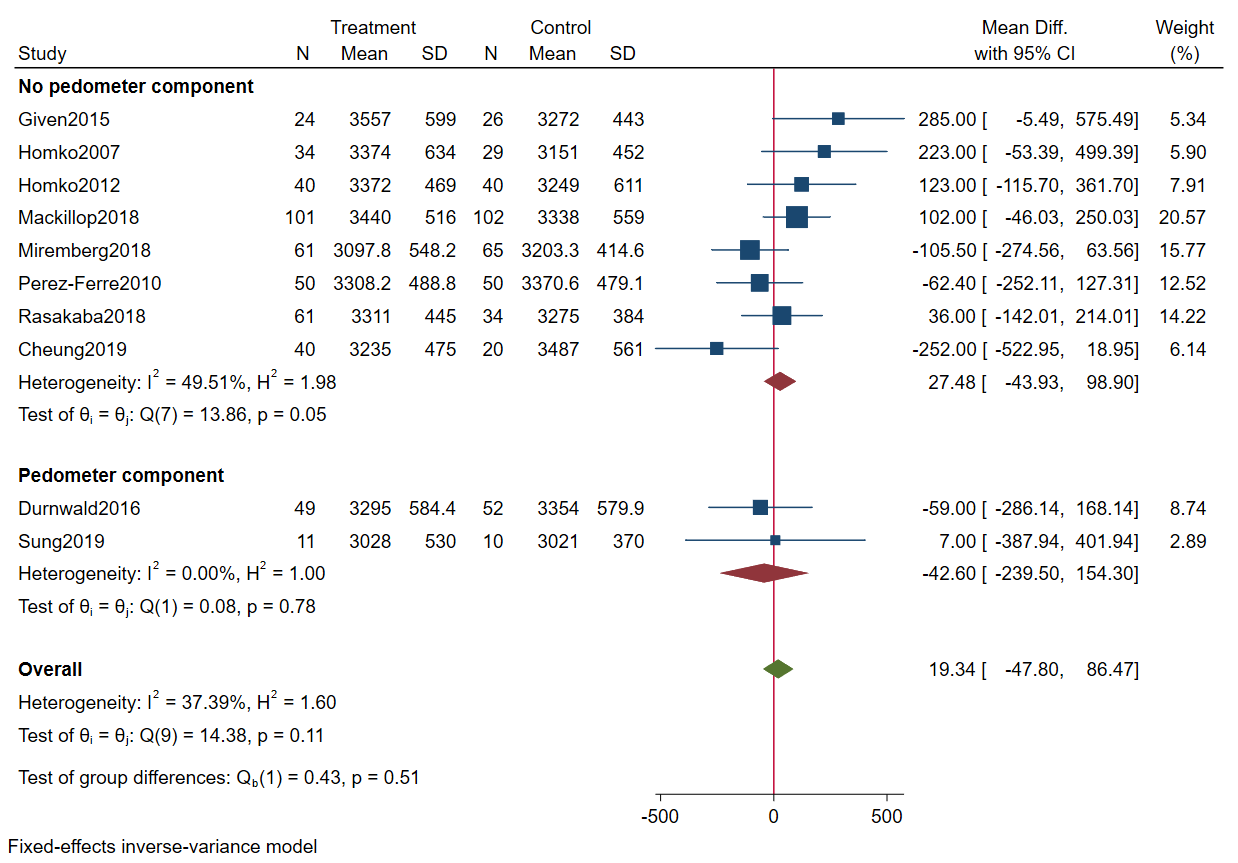


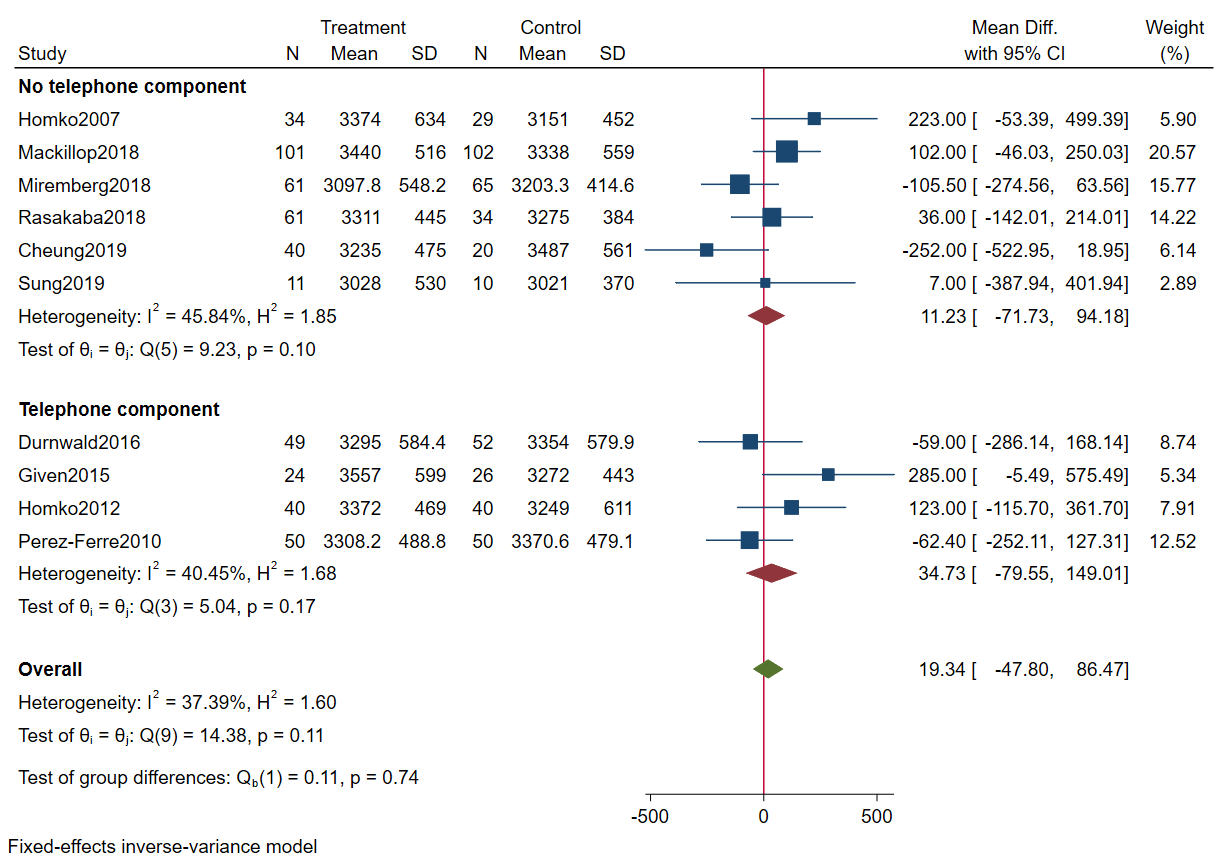


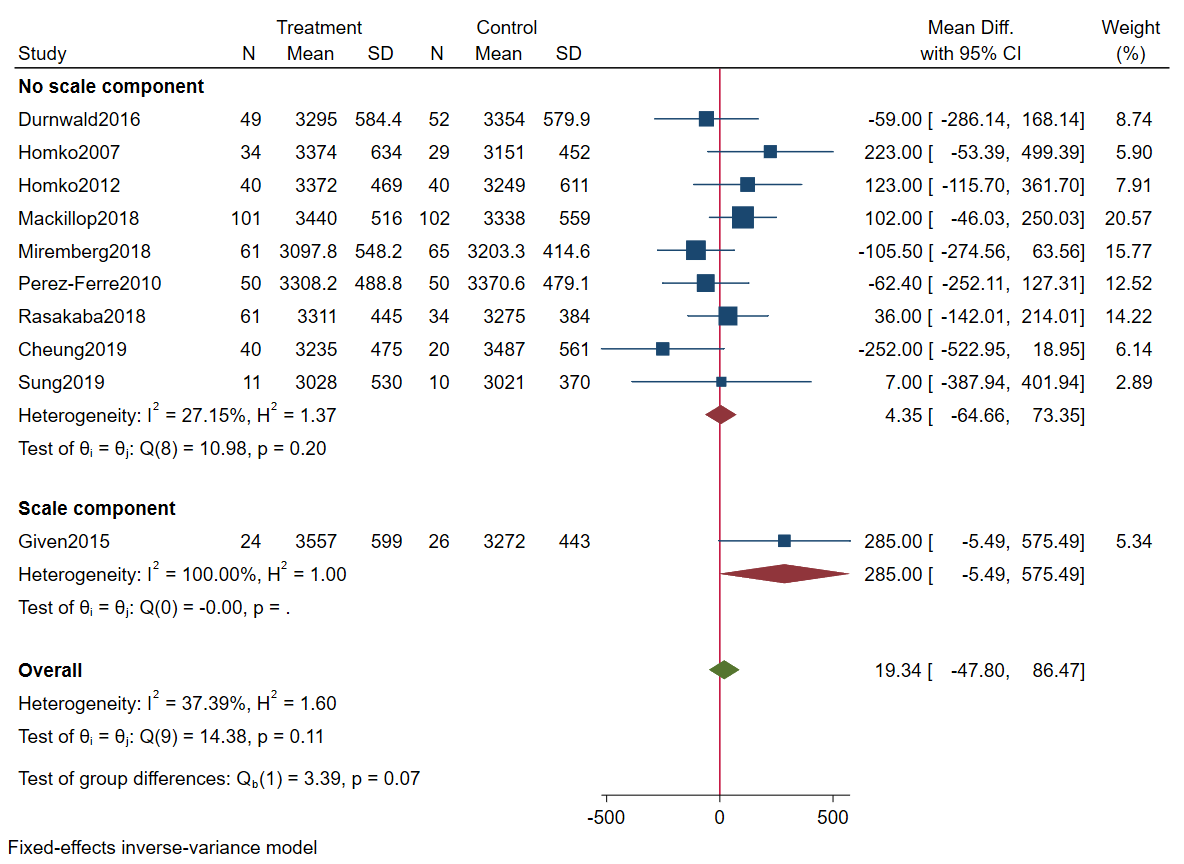


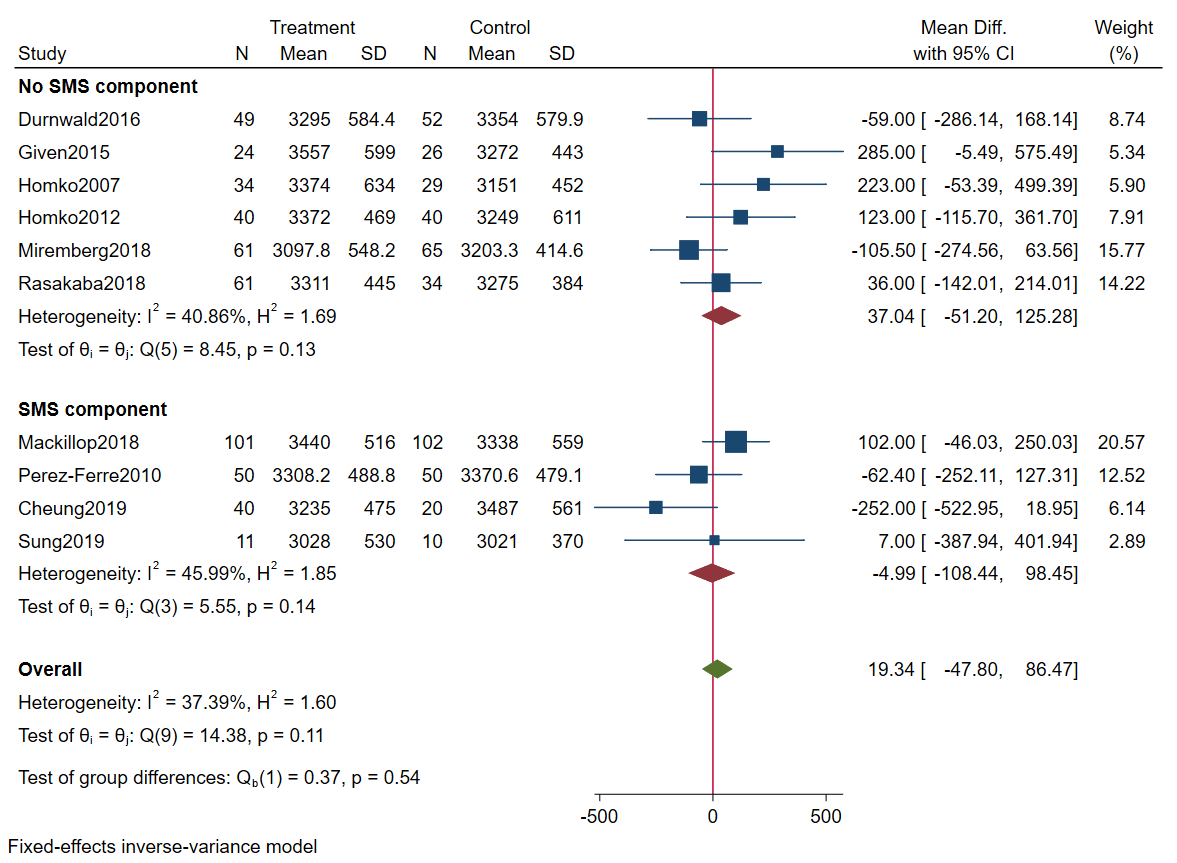


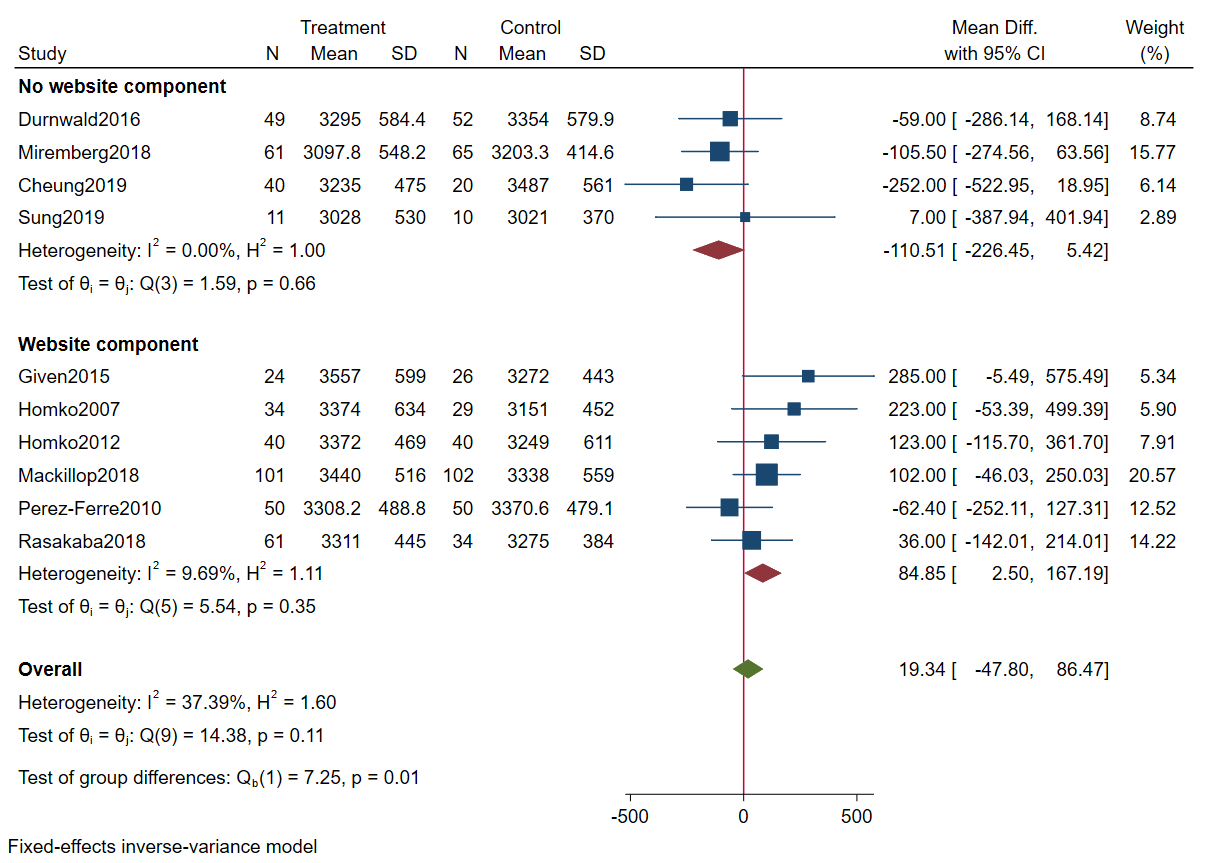


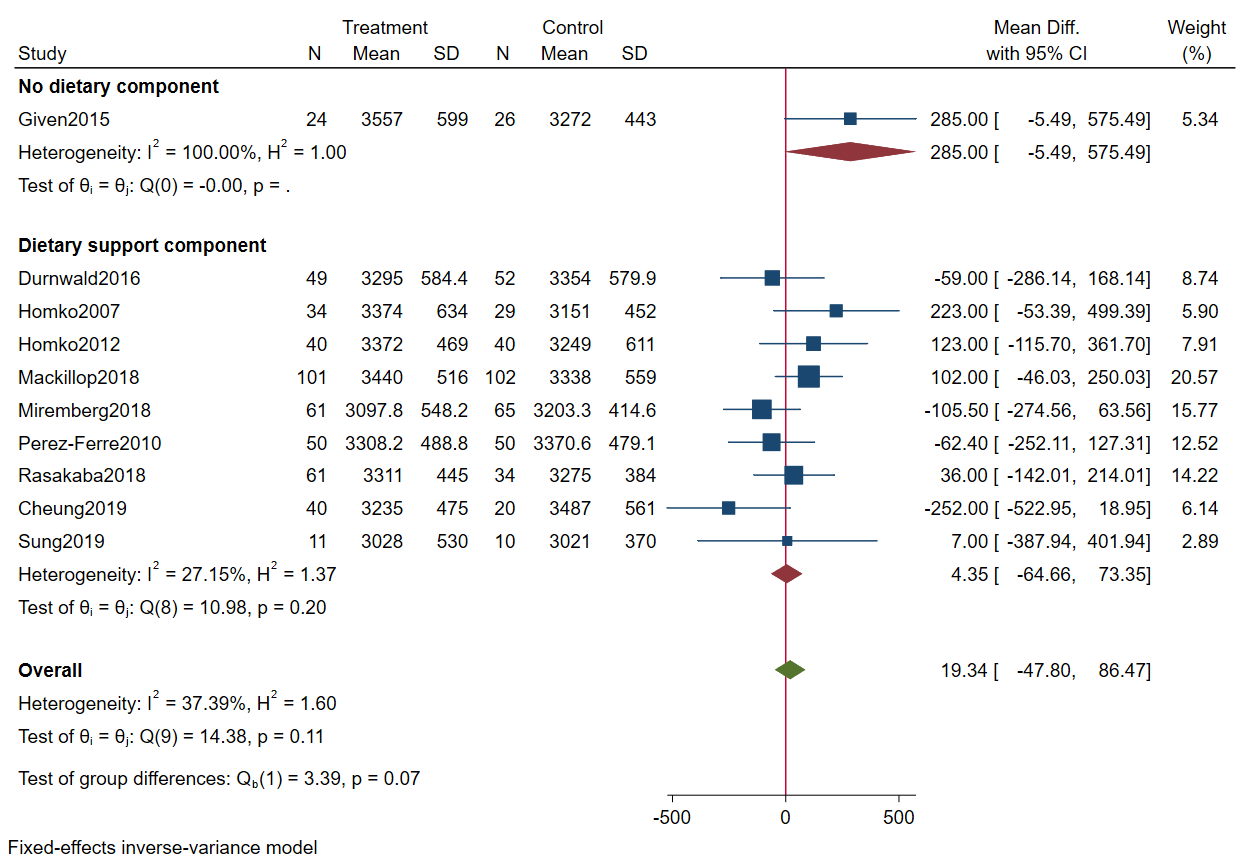


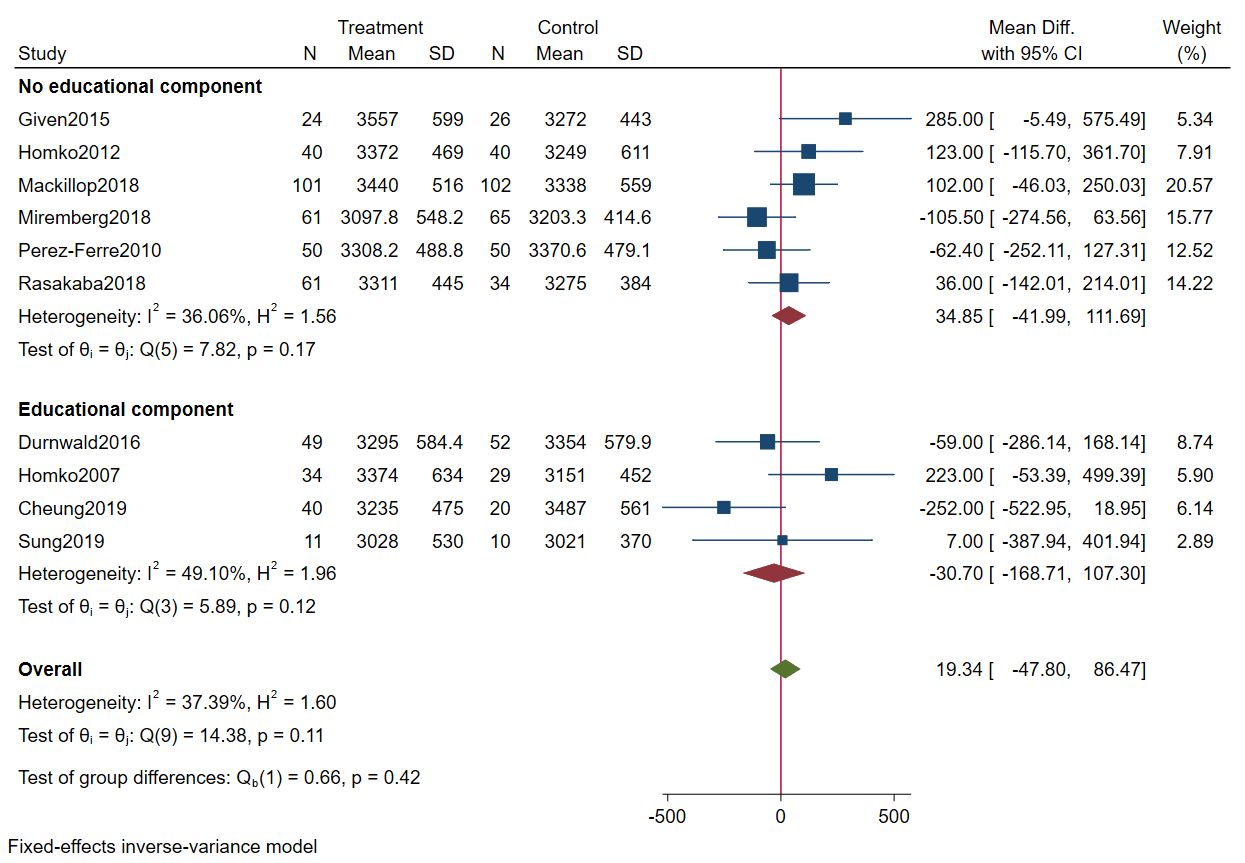


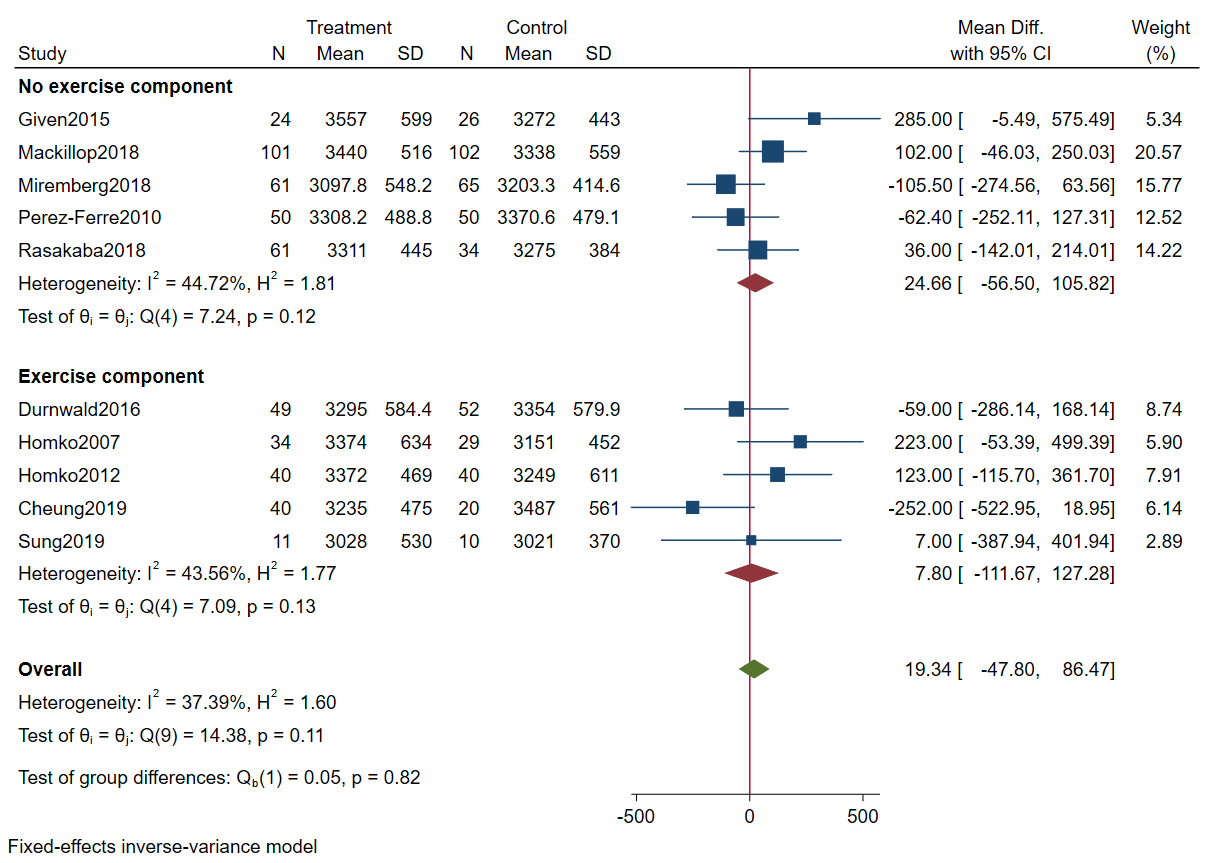


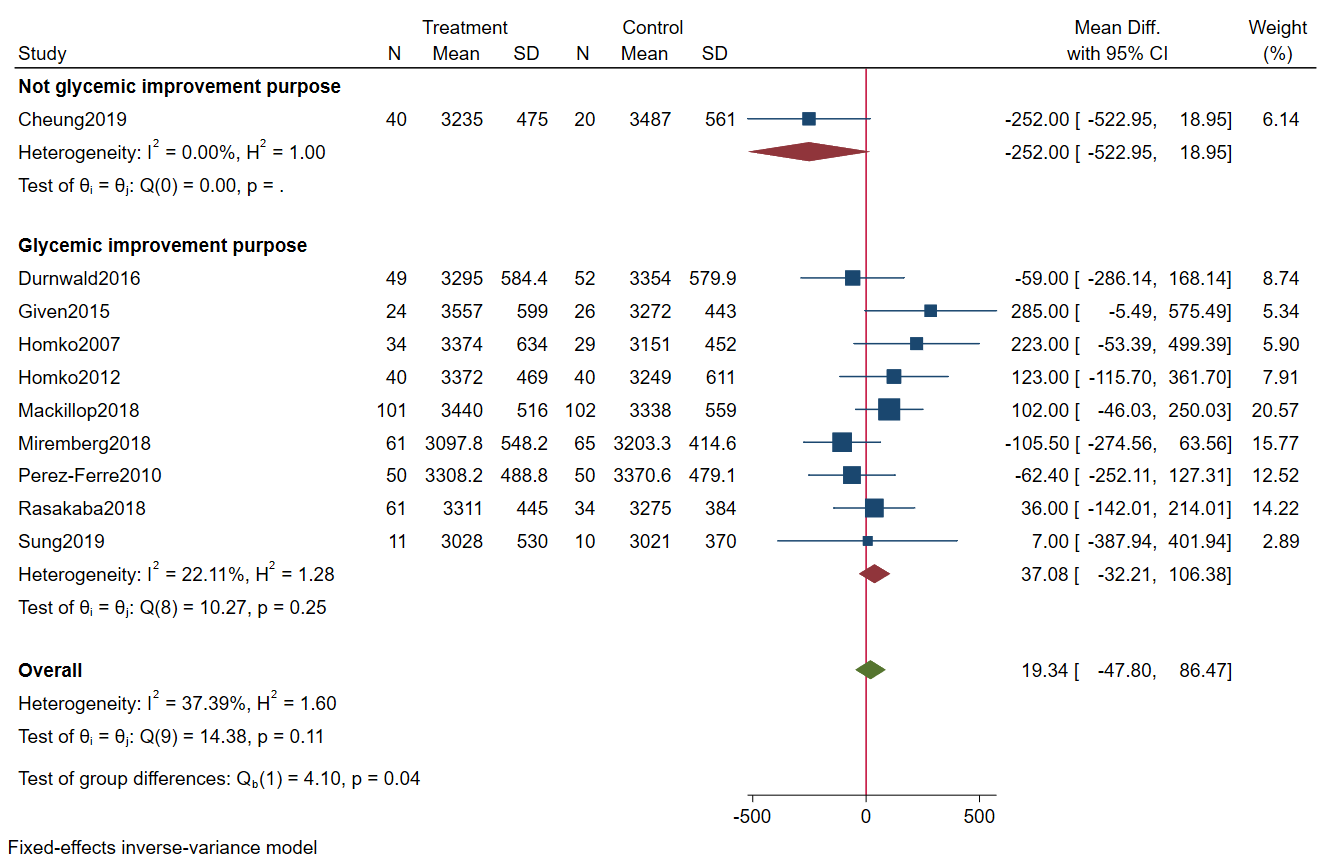


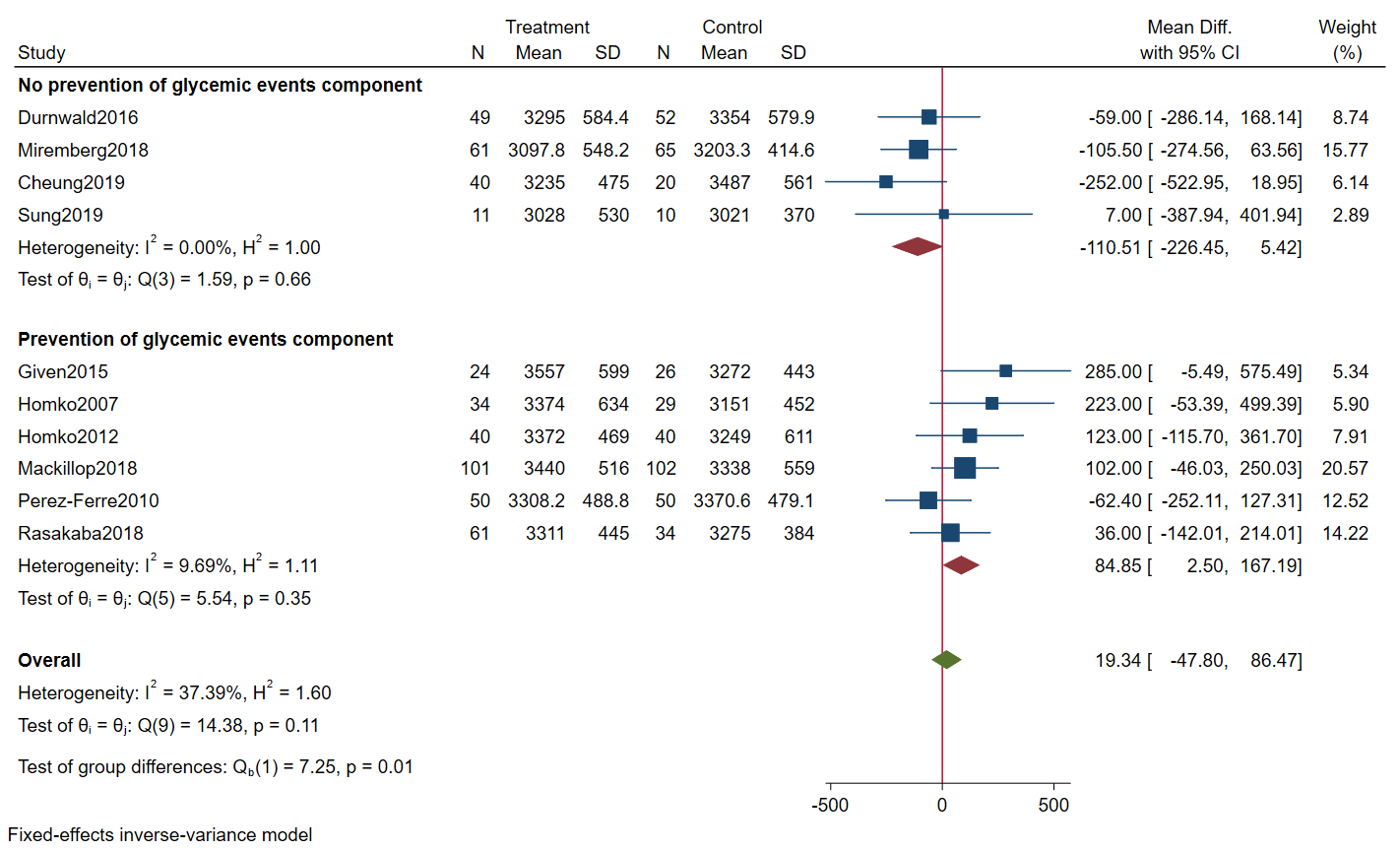


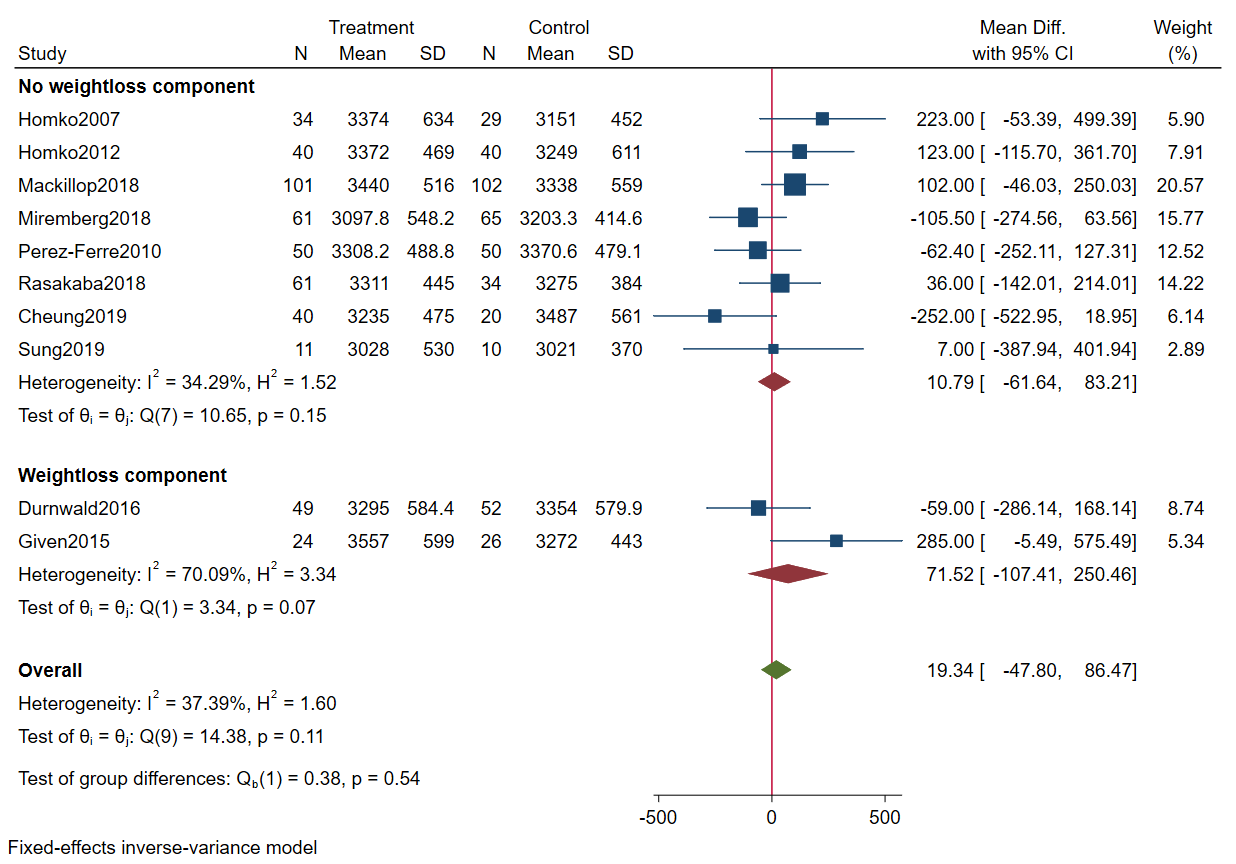




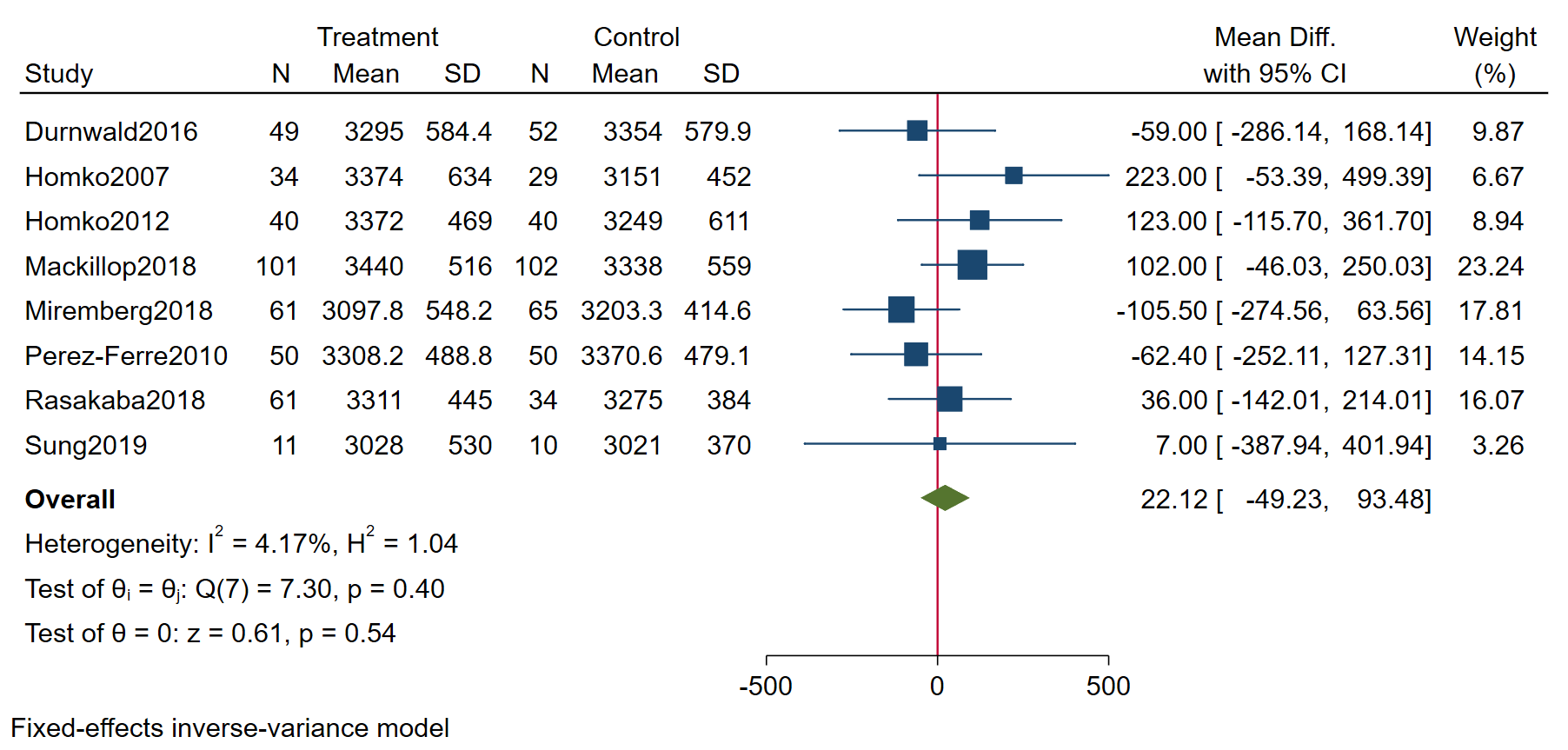




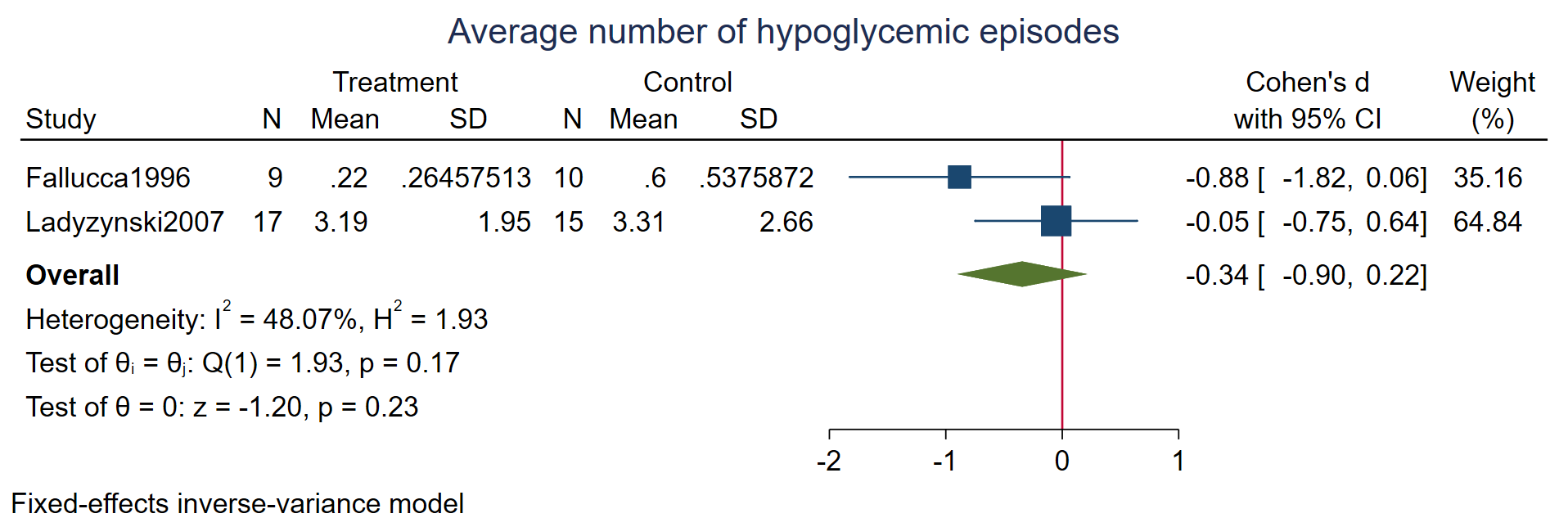


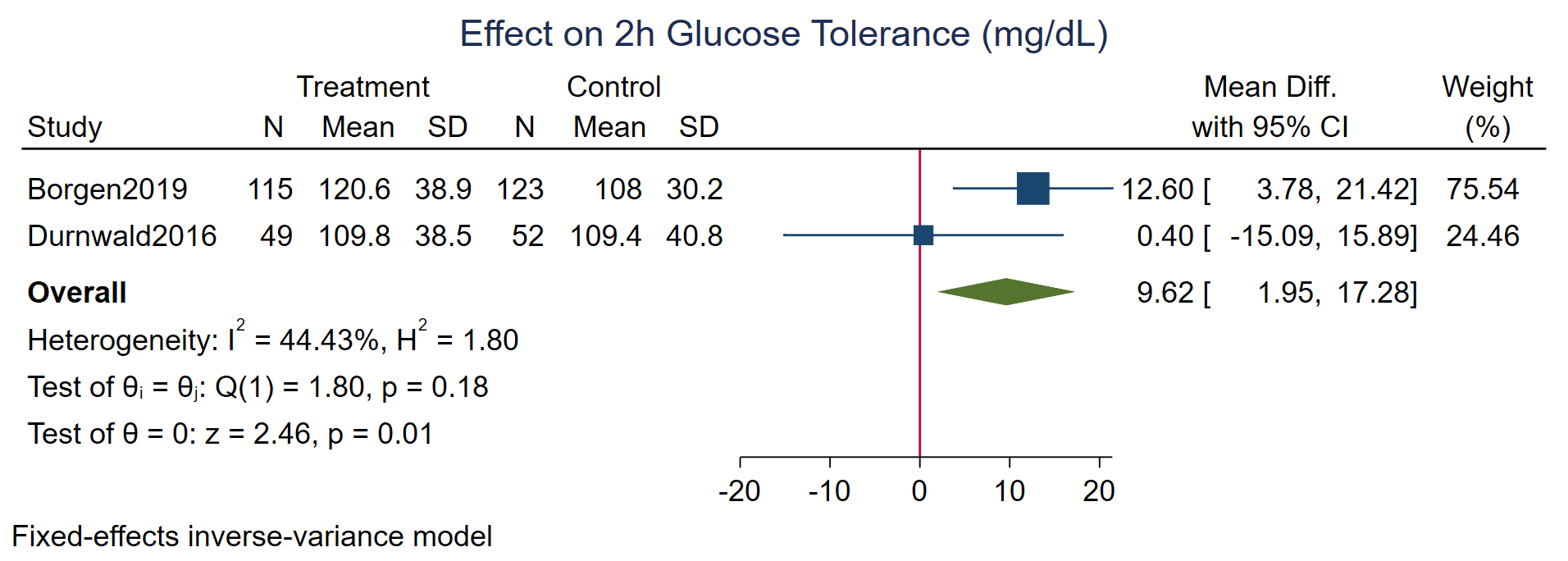


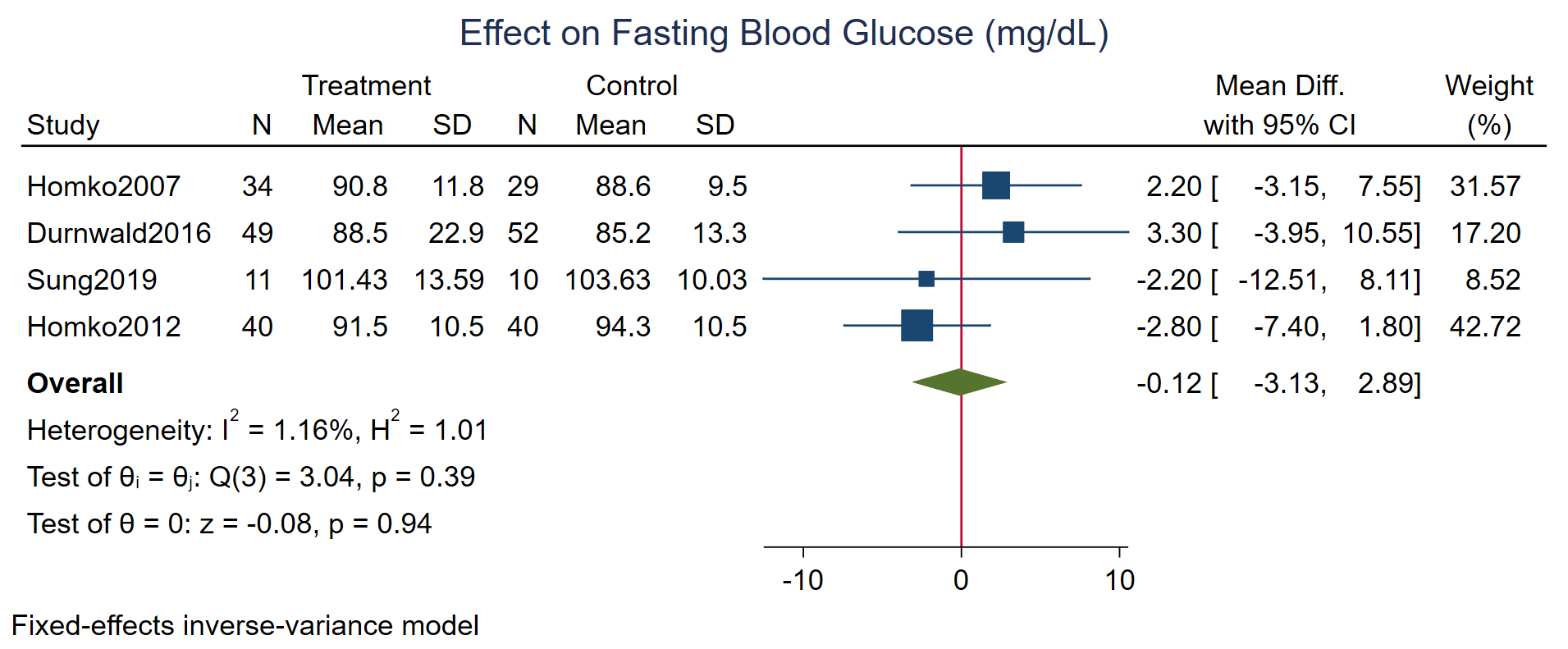
Appendix 4: Sensitivity analysis (Results excluding Given et al. and Cheung et. al.)

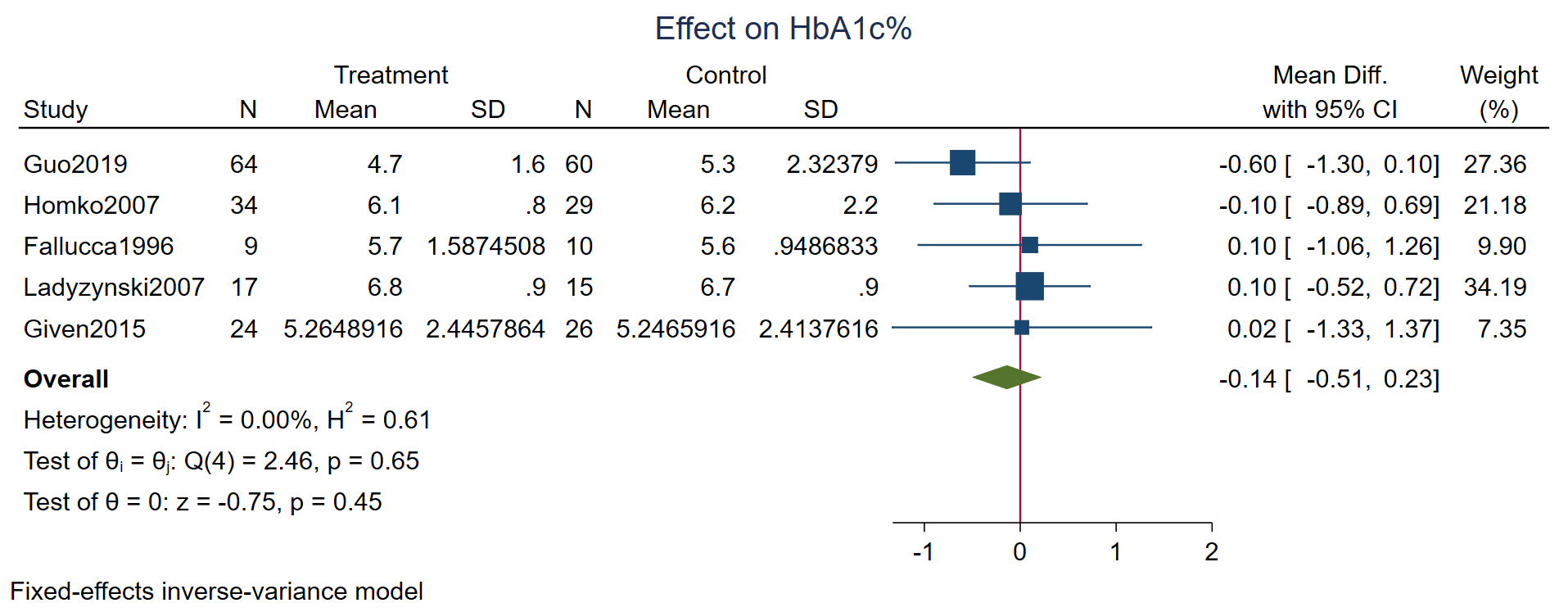


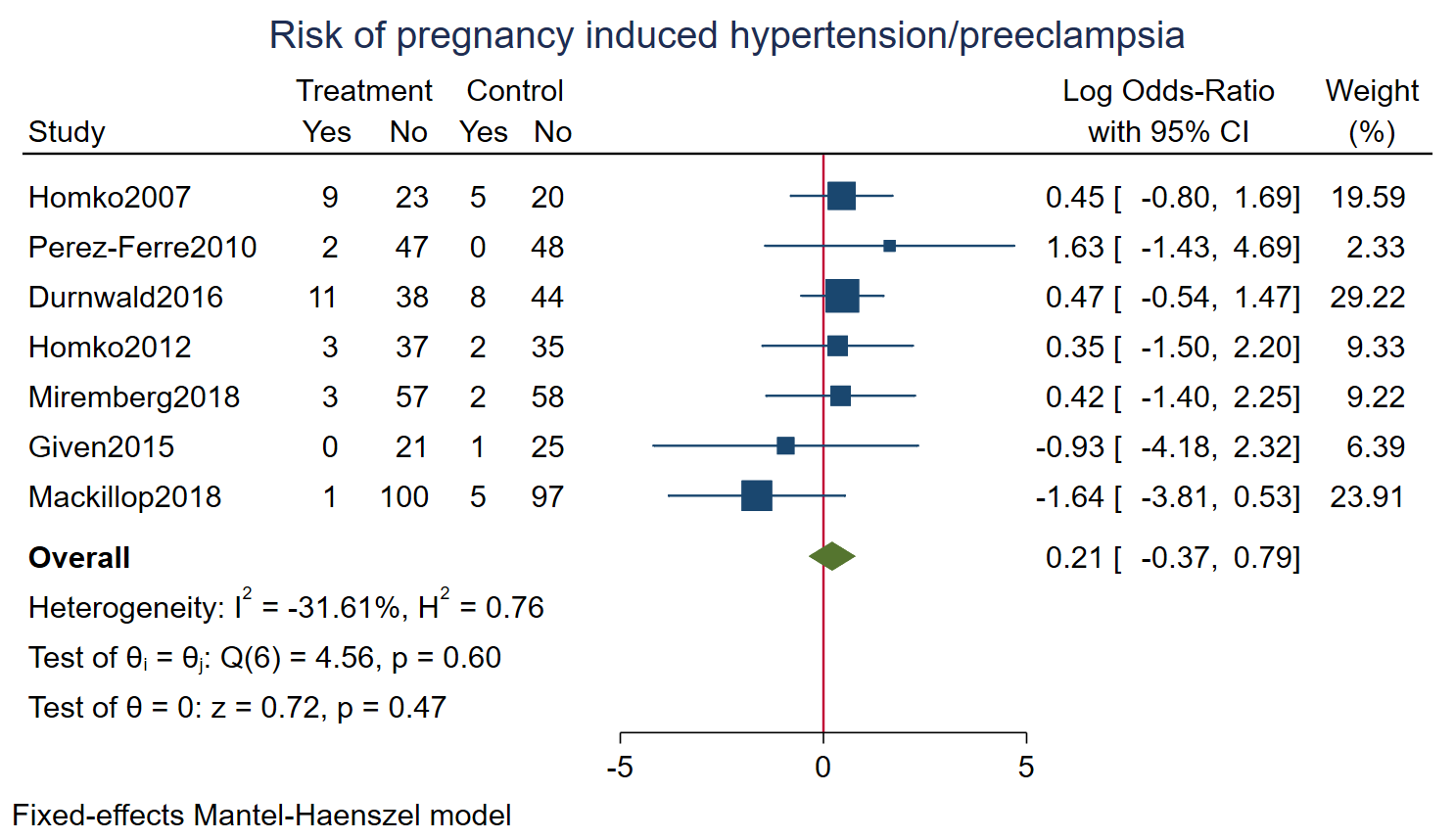
Appendix 5: Meta-analyses of secondary outcomes (maternal)

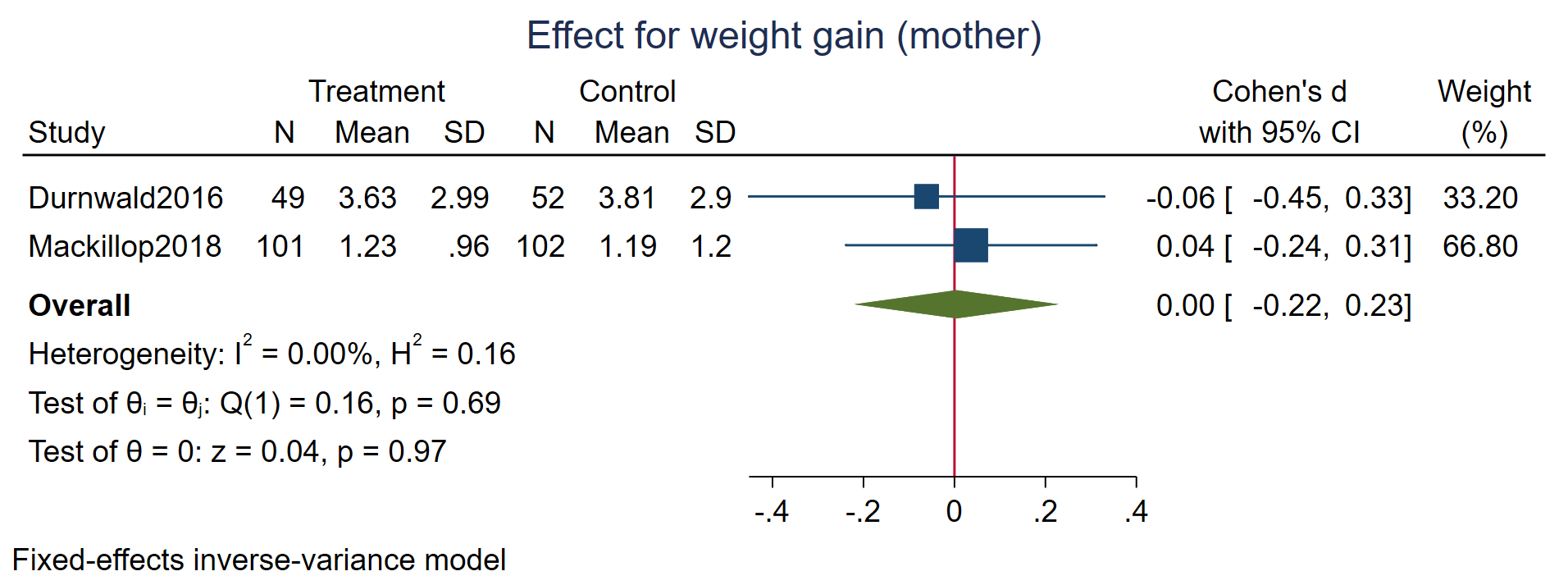




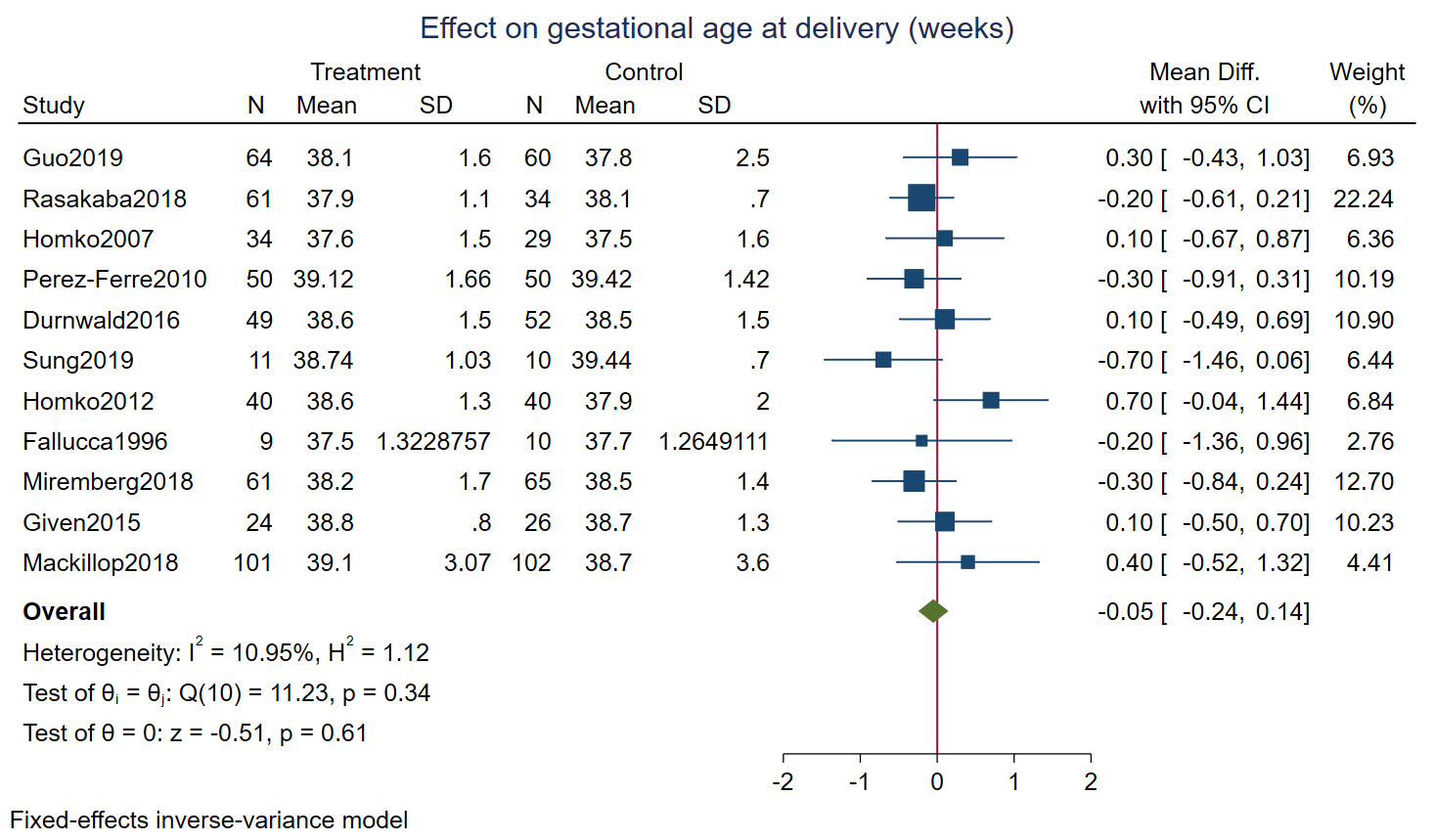


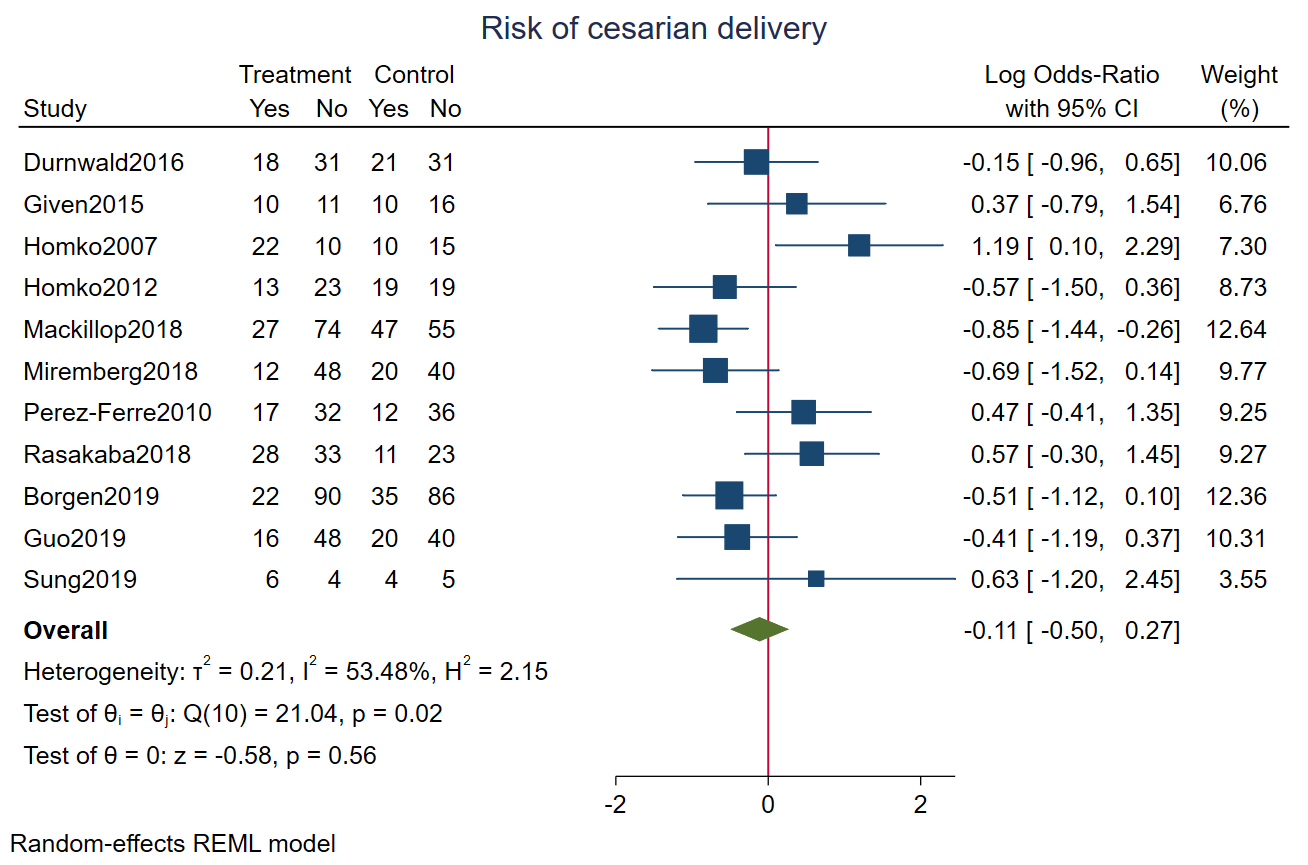


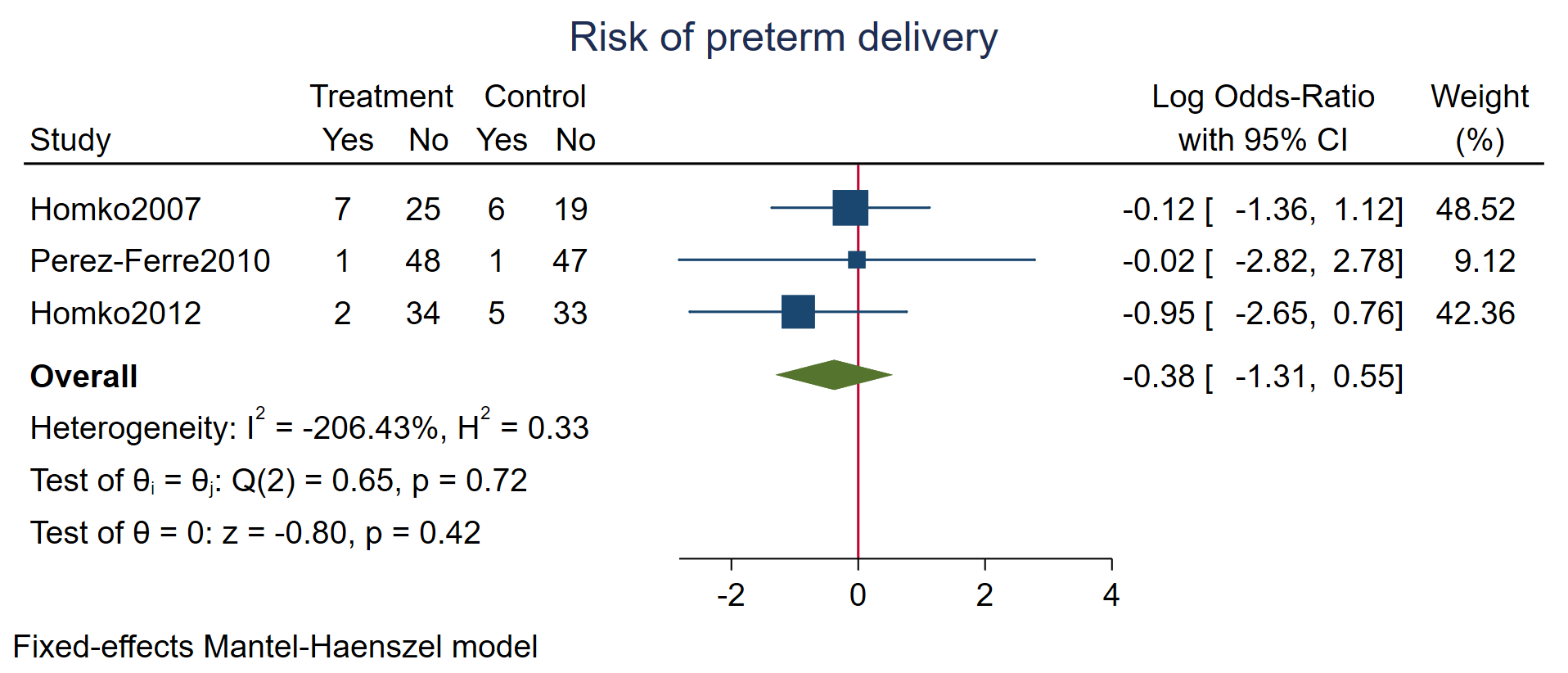
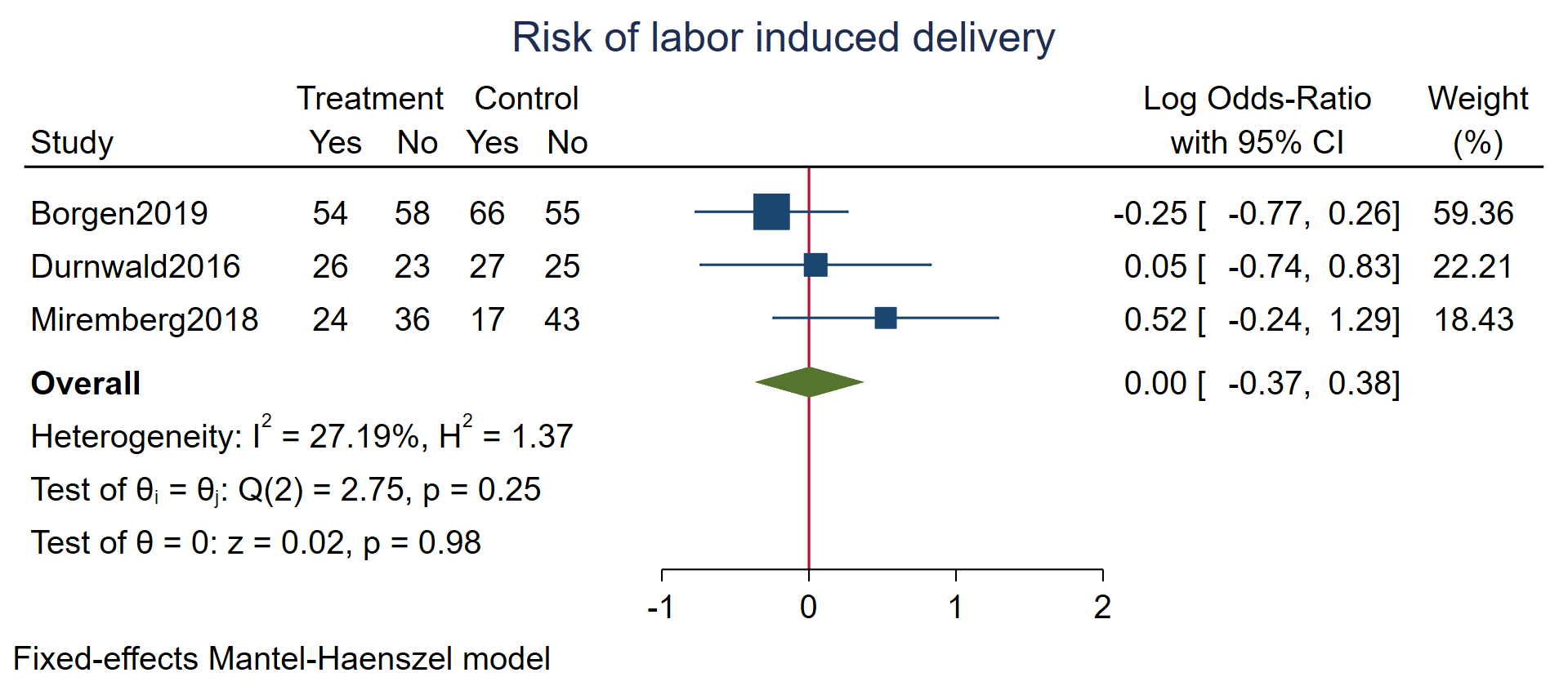


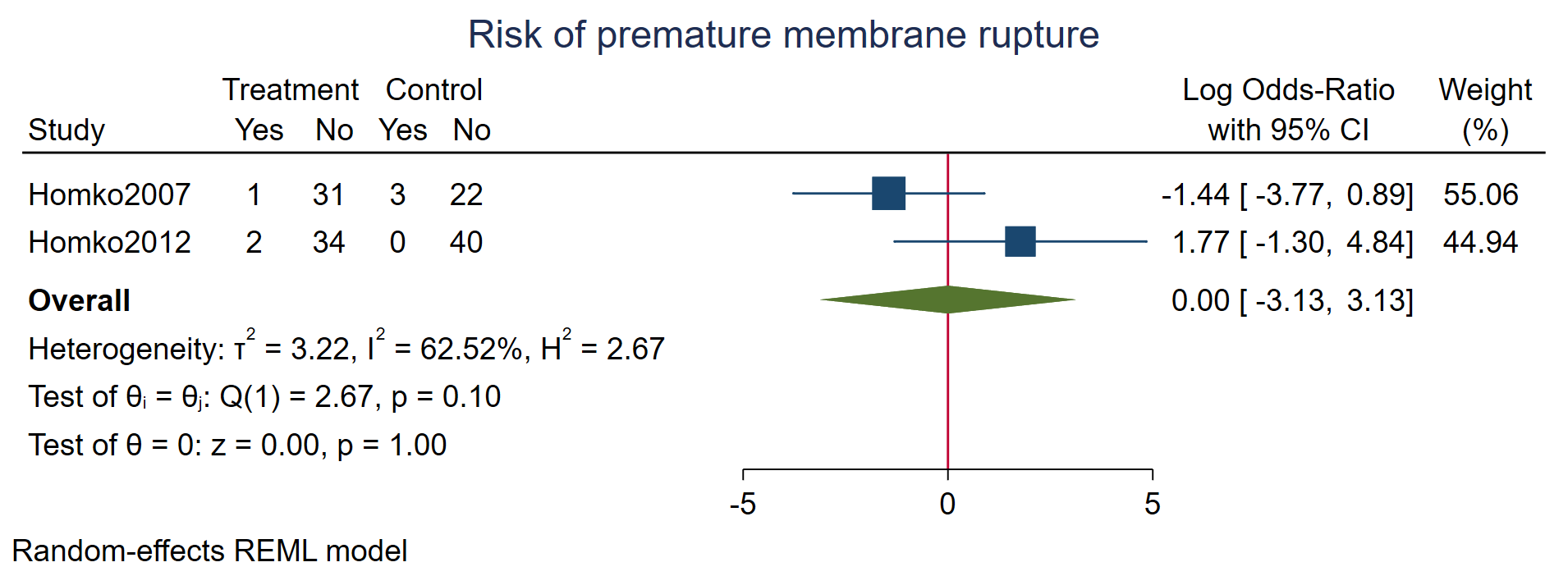


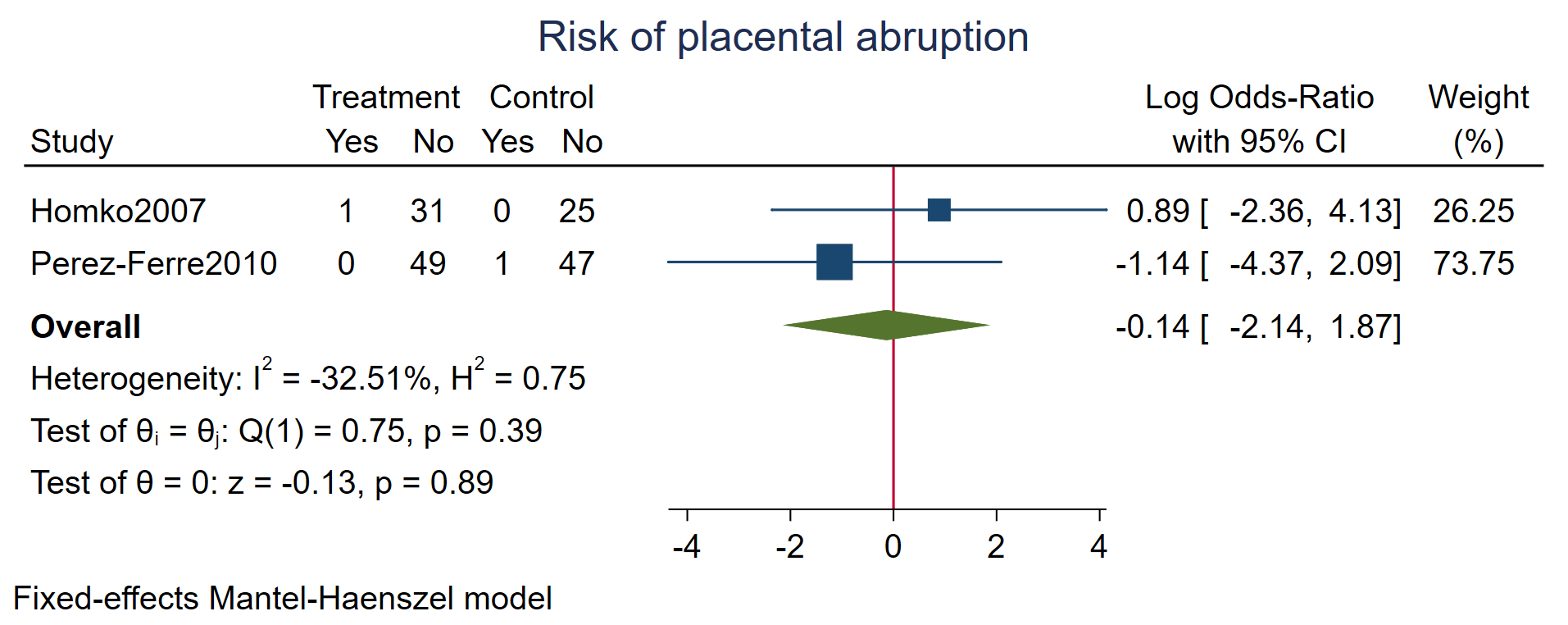
Appendix 6: Meta-analyses of secondary outcomes (delivery)











Appendix 7: Meta-analyses of secondary outcomes (neonatal)

