NKR 50 fald_PICO 1 Balancetræning

Review information

Authors

Sundhedsstyrelsen[1]

[1][Empty affiliation]

Citation example: S. NKR 50 fald_PICO 1 Balancetræning. Cochrane Database of Systematic Reviews [Year], Issue [Issue].

Characteristics of studies

Characteristics of included studies

Arantes 2015

Methods	**Study design:** Randomized controlled trial **Study grouping:** Parallel group
Participants	**Baseline Characteristics** Intervention ● *Væsentlige baselineforskelle*: - Control ● *Væsentlige baselineforskelle*: - Overall ● *Væsentlige baselineforskelle*: - **Included criteria:** +65 years, history of one ore more falls in previous year, present risk of falling, classified as prefrail, able to walk 6 m., **Excluded criteria:** Presence of cognitive impairmentPresence of neurological diseaseAcute crisis related to vestibular disease in the last monthInitiation of any other intervention in the study period **Pretreatment:** -

Interventions	**Intervention Characteristics** Intervention ● *Intervention*: Standing different foot position open/cloyed eyes, different surface. Tossing ball. Weight shift. Step over obstacle. One hour sessions 12 weeks. ? times a week Control ● *Intervention*: Stretching of cervical spine, shoulder and wrist muscels, shoulder rotation and elevation, scapular retraktion and upper limb elevation and relaxation
Outcomes	*Antal af fald (uden bevidsthedstab)* ● **Outcome type**: DichotomousOutcome ● **Scale**: 0-? ● **Direction**: Lower is better ● **Data value**: Endpoint *Antal af personer som falder (uden bevidsthedstab)* ● **Outcome type**: DichotomousOutcome ● **Reporting**: Fully reported ● **Scale**: 0-? ● **Direction**: Lower is better ● **Data value**: Endpoint *Fald med fraktur (major injury)* ● **Outcome type**: DichotomousOutcome ● **Scale**: 0-? ● **Direction**: Lower is better ● **Data value**: Endpoint *Dynamisk balance (Berg´s, BESTest, DGI, POMA)* ● **Outcome type**: ContinuousOutcome ● **Reporting**: Fully reported ● **Direction**: Lower is better ● **Data value**: Endpoint *Mobilitet (DEMMI, TUG, Ganghastighed)* ● **Outcome type**: ContinuousOutcome ● **Reporting**: Fully reported ● **Direction**: Higher is better ● **Data value**: Endpoint

	Frygt for fald (FES-I) ● **Outcome type**: ContinuousOutcome ● **Scale**: 16-64 ● **Direction**: Lower is better ● **Data value**: Endpoint *Dagligt aktivitetsniveau (accelerometer, PROM)* ● **Outcome type**: ContinuousOutcome ● **Data value**: Endpoint *Livskvalitet* ● **Outcome type**: ContinuousOutcome ● **Reporting**: Fully reported ● **Data value**: Endpoint *Utilsigtet fald under træning* ● **Outcome type**: DichotomousOutcome ● **Reporting**: Fully reported ● **Scale**: 0-? ● **Direction**: Lower is better ● **Data value**: Endpoint
Identification	**Sponsorship source:** CNPq and FAPEMIG **Country:** Brazil **Setting:** Hospital ambulant **Comments:** - **Authors name:** Paula M.M. Arantes **Institution:** Faculdade de ciencias medicas, PT department **Email:** paulamma@gmail.com **Address:** -
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Judgement Comment: "the allocation was made through a computer prgram"
Allocation concealment (selection bias)	Unclear risk	Judgement Comment: Ikke beskrevet
Blinding of participants and personnel (performance bias)	Unclear risk	Judgement Comment: CG udførte streching og andet ligegyldigt, så de kunne også være blindede, men ikke beskrevet om der blev gjort noget for at holde deltagere eller instruktør blindede
Blinding of outcome assessment (detection bias)	Low risk	Judgement Comment: The assessments were performed before and immediately after the end of intervention, always by the same evaluators, and they were blinded in all the moments of the study.
Incomplete outcome data (attrition bias)	Unclear risk	n
Selective reporting (reporting bias)	Unclear risk	n
Other bias	Low risk	Judgement Comment: intet andet

Barnett 2003

Methods	
Participants	
Interventions	
Outcomes	
Identification	
Notes	For more information, please see the following refernce: Gillespie LD, Robertson MC, Gillespie WJ, Sherrington C, Gates S, Clemson LM, Lamb SE. Interventions for preventing falls in older peple in the community. Cochrane Database Syst. Rev. 2012 Sep 12;(9): CD007146.pub3.

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Gillespie et al., 2012
Allocation concealment (selection bias)	Low risk	Gillespie et al., 2012
Blinding of participants and personnel (performance bias)	Unclear risk	Gillespie et al., 2012
Blinding of outcome assessment (detection bias)	Unclear risk	Gillespie et al., 2012
Incomplete outcome data (attrition bias)	Low risk	Gillespie et al., 2012
Selective reporting (reporting bias)	Low risk	Gillespie et al., 2012
Other bias	Low risk	Gillespie et al., 2012

Freiberger 2012

Methods	
Participants	
Interventions	
Outcomes	
Identification	
Notes	For more information, please see the following refernce: Kendrick D, Kumar A, Carpenter H, Zijlstra GA, Skelton DA, Cook JR, Stevens Z, Belcher CM, Haworth D, Gawler SJ, Gage H, Masud T, Bowling A, Pearl M, Morris RW, Iliffe S, Delbaere K. Exercise for reducing fear of falling in older people living in the community. Cochrane Database Syst Rev. 2014 Nov 28;(11):CD009848. doi: 10.1002/14651858. CD009848.pub2

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Kendrick et al., 2014
Allocation concealment (selection bias)	Unclear risk	Kendrick et al., 2014
Blinding of participants and personnel (performance bias)	High risk	Kendrick et al., 2014
Blinding of outcome assessment (detection bias)	High risk	Kendrick et al., 2014

Incomplete outcome data (attrition bias)	High risk	Kendrick et al., 2014
Selective reporting (reporting bias)	Unclear risk	Kendrick et al., 2014
Other bias	Unclear risk	Kendrick et al., 2014

Halvarsson 2013

Methods	**Study design:** Randomized controlled trial **Study grouping:** Parallel group
Participants	**Baseline Characteristics** Intervention ● *Procent kvinder*: 66% Control ● *Procent kvinder*: 81% Overall ● *Procent kvinder*: 71% **Included criteria:** The study comprised community-dwelling healthy elderly people (≥65 years old) with fear of falling and/or an experience of at least one fall during the previous 12 months. **Excluded criteria:** Ikke beskrevet **Pretreatment:** Procentvis flere kvinder i kontrolgruppen (ikke udregnet om signifikant)
Interventions	**Intervention Characteristics** Intervention ● *Beskrivelse*: rogressive and balance-specific group-based training program that includes dual- and multi-task exercises (cognitive and/or motor). The program was performed three times a weekfor 12 weeks for 45 minutes/session and was lead by experienced physiotherapists. Control ● *Beskrivelse*: Encouraged to live their regular life during the study period
Outcomes	*Antal af fald (uden bevidsthedstab)* ● **Outcome type**: DichotomousOutcome *Antal af personer som falder (uden bevidsthedstab)* ● **Outcome type**: DichotomousOutcome

	Fald med fraktur (major injury) ● **Outcome type**: DichotomousOutcome *Dynamisk balance (Berg´s, BESTest, DGI, POMA)* ● **Outcome type**: ContinuousOutcome *Mobilitet (DEMMI, TUG, Ganghastighed)* ● **Outcome type**: ContinuousOutcome ● **Direction**: Higher is better ● **Data value**: Endpoint *Frygt for fald (FES-I)* ● **Outcome type**: ContinuousOutcome ● **Direction**: Lower is better ● **Data value**: Endpoint *Dagligt aktivitetsniveau (accelerometer, PROM)* ● **Outcome type**: ContinuousOutcome *Livskvalitet* ● **Outcome type**: ContinuousOutcome
Identification	**Sponsorship source:** - **Country:** Sweden **Setting:** Department of Neurobiology **Comments:** - **Authors name:** Alexandra Halvarsson **Institution:** Movement Laboratory, Karolinska University Hospital, Stockholm, Sweden **Email:** alexandra.halvarsson@ki.se **Address:** -
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Judgement Comment: Randomization to group allocation was done in blocks, with a 2:1 ratio in favor of the intervention group, by the subjects themselves drawing a allocation slip.
Allocation concealment (selection bias)	Unclear risk	Judgement Comment: ikke beskrevet
Blinding of participants and personnel (performance bias)	High risk	Judgement Comment: Ingen blinding af inkluderede eller kontrol.Participants in the control group were offered participation in the balance training program following the study and were encouraged to live their regular life during the study period.
Blinding of outcome assessment (detection bias)	High risk	Judgement Comment: "however most of the participants did reveal which Group they belonged to at the time of the first follow-up, resulting in non-masked assessors at long-term follow-up"
Incomplete outcome data (attrition bias)	Low risk	Judgement Comment: During the follow-up period (three months to 15 months), seven subjects dropped out of the study (training group n = 4; controls n = 3) owing to hip fracture (n = 1), knee replacement (n = 1), severe body pain (n = 2), or declined participation (n = 2); one subject died
Selective reporting (reporting bias)	Low risk	Judgement Comment: samme outcomes i metode og resultater
Other bias	Low risk	Judgement Comment: intet andet

Halvarsson 2015

Methods	**Study design:** Randomized controlled trial **Study grouping:** Parallel group
Participants	**Baseline Characteristics** Intervention ● *Væsentlige baselineforskelle*: ● *Lung desease yes*: 0% ● *Cancer yes*: 12% ● *Experienced a fall during the last 12 months Yes*: 72% ● *Fear of falling Not at all/a little/quite a bit/very much*: 0%/60%/28%/12% Control ● *Væsentlige baselineforskelle*: ● *Lung desease yes*: 27% ● *Cancer yes*: 27%

	● *Experienced a fall during the last 12 months Yes*: 89% ● *Fear of falling Not at all/a little/quite a bit/very much*: 0%/31%/42%/27% Overall ● *Væsentlige baselineforskelle*: ● *Lung desease yes*: ● *Cancer yes*: ● *Experienced a fall during the last 12 months Yes*: ● *Fear of falling Not at all/a little/quite a bit/very much*: **Included criteria:** age ≥ 65 years with diagnosed osteoporosis, being afraid of falling and/or having experienced at least one fall in the last 12 months, and independence in ambulation. **Excluded criteria:** Participants were excluded if they had experienced fractures during the last year, had a Mini-Mental State Examination (MMSE) score < 24,19,20 severely decreased vision, or other diseases or con- straints that might interfere with participation in the exercise program. **Pretreatment:** Kontrolgruppe var muligvis sygere og i højere grad bange for at falde
Interventions	**Intervention Characteristics** Intervention ● *Intervention*: changes in base of support during sitting and standing, reaching/lean- ing), sensory orientation (walking/standing/sitting on uneven surfaces, eyes open/closed), gait (walk- ing at different pace and/or performing dual- and multi-task – i.e., by adding cognitive or/and motor tasks to an exercise), and postural responses (reac- tions to balance loss that will occur when the bal- ance is highly challenged). Performed in groups of six to10 participants, 45 minutes/session, and three times/week for 12 weeks. Control ● *Intervention*: encouraged to live their regular lives and were offered the same balance training at the end of the study.
Outcomes	*Antal af fald (uden bevidsthedstab)* ● **Outcome type**: DichotomousOutcome *Antal af personer som falder (uden bevidsthedstab)* ● **Outcome type**: DichotomousOutcome *Fald med fraktur (major injury)* ● **Outcome type**: DichotomousOutcome *Dynamisk balance (Berg´s, BESTest, DGI, POMA)* ● **Outcome type**: ContinuousOutcome

	● **Direction**: Lower is better ● **Data value**: Endpoint *Mobilitet (DEMMI, TUG, Ganghastighed)* ● **Outcome type**: ContinuousOutcome ● **Direction**: Higher is better ● **Data value**: Endpoint *Frygt for fald (FES-I)* ● **Outcome type**: ContinuousOutcome ● **Direction**: Lower is better ● **Data value**: Endpoint *Dagligt aktivitetsniveau (accelerometer, PROM)* ● **Outcome type**: ContinuousOutcome ● **Range**: 1-6 ● **Direction**: Higher is better ● **Data value**: Endpoint *Livskvalitet* ● **Outcome type**: ContinuousOutcome ● **Direction**: Higher is better ● **Data value**: Endpoint *Utilsigtet fald under træning* ● **Outcome type**: DichotomousOutcome
Identification	**Sponsorship source:** - **Country:** Sweden **Setting:** Karolinska Institutet, Department of Neurobiology **Comments:** - **Authors name:** Alexandra Halvarsson **Institution:** Karolinska Institutet, Department of Neurobiology, Care Sciences and Society (NVS), Division of Physiotherapy, 23100, Huddinge, SE-141 83, Sweden. **Email:** alexandra.halvarsson@ki.se **Address:** -
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Judgement Comment: the subjects were randomized in blocks of nine into three different groups: two intervention groups (Training, and Training+Physical activity), or a Control group, using Web-based software.
Allocation concealment (selection bias)	Unclear risk	Judgement Comment: ikke beskrevet
Blinding of participants and personnel (performance bias)	High risk	Judgement Comment: Ingen "sham" intervention, så ingen blinding.Participants in the Control group were encouraged to live their regular lives
Blinding of outcome assessment (detection bias)	High risk	Judgement Comment: the test leaders were blinded to group allocation at baseline; however, it was no longer possible after baseline testing, because some of the test leaders were also involved in the balance training
Incomplete outcome data (attrition bias)	High risk	Judgement Comment: High dropout!dropout intervention: 18/34 = 52,9%dropout control: 10/31= 32,3%
Selective reporting (reporting bias)	Low risk	Judgement Comment: samme outcomes i methods og results
Other bias	Low risk	Judgement Comment: intet andet

Hinman 2002

Methods	
Participants	
Interventions	
Outcomes	
Identification	
Notes	For more information, please see the following refernce: Kendrick D, Kumar A, Carpenter H, Zijlstra GA, Skelton DA, Cook JR, Stevens Z, Belcher CM, Haworth D, Gawler SJ, Gage H, Masud T, Bowling A, Pearl M, Morris RW, Iliffe S, Delbaere K. Exercise for reducing fear of falling in older people living in the community. Cochrane Database Syst Rev. 2014 Nov 28;(11):CD009848. doi: 10.1002/14651858.CD009848.pub2

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Kendrick et al., 2014
Allocation concealment (selection bias)	Unclear risk	Kendrick et al., 2014
Blinding of participants and personnel (performance bias)	High risk	Kendrick et al., 2014
Blinding of outcome assessment (detection bias)	High risk	Kendrick et al., 2014
Incomplete outcome data (attrition bias)	Low risk	Kendrick et al., 2014
Selective reporting (reporting bias)	Unclear risk	Kendrick et al., 2014
Other bias	Unclear risk	Kendrick et al., 2014

Hirase 2015

Methods	**Study design:** **Study grouping:** Parallel group
Participants	**Baseline Characteristics** Intervention ● *Væsentlige baselineforskelle*: Control ● *Væsentlige baselineforskelle*: Overall ● *Væsentlige baselineforskelle*: **Included criteria:** over the age of 65 years who were living at home, able to walk with or without a cane, and had at least 4 risk factors, as identifed using the questionnaire for fall assessment reported by Suzuki. The questionnaire consisted of 15 items, which included questions about fall history, walking ability, muscle power, medical disorders, medication, vision and hearing, and fear of falling **Excluded criteria:** Participants who had participated in exercise at least 4 times a month before the intervention, and who had mus- culoskeletal, neurological, or cardiovascular disorders that may be aggravated by exercise were excluded. Participants who were unable to respond to interview questions because of cognitive impairment were also excluded. **Pretreatment:** ingen åbenlyse

Interventions	**Intervention Characteristics** Intervention ● *Intervention*: Standing on rubber pad: attend a 60-minute weekly exercise class for 4 months that was supplemented with daily home- based exercises.The program included 10 exercises performed in a standing position as follows: double-stance standing, one-leg standing, neck hyperextension, free-leg swinging, heel and toe raises, neck and trunk rotation, touching the floor, walking in place, sideways walking, and walking Control ● *Intervention*: Participants in the control group participated in weekly social programs, including recreational activities, educa- tional programs, and tea breaks. They continued their daily activities at the day centers, but performed neither balance training nor muscle strengthening exercises at the centers or in a structured setting at home.
Outcomes	*Antal af fald (uden bevidsthedstab)* ● **Outcome type**: DichotomousOutcome *Antal af personer som falder (uden bevidsthedstab)* ● **Outcome type**: DichotomousOutcome *Fald med fraktur (major injury)* ● **Outcome type**: DichotomousOutcome *Dynamisk balance (Berg´s, BESTest, DGI, POMA)* ● **Outcome type**: ContinuousOutcome *Mobilitet (DEMMI, TUG, Ganghastighed)* ● **Outcome type**: ContinuousOutcome ● **Direction**: Lower is better ● **Data value**: Endpoint *Frygt for fald (FES-I)* ● **Outcome type**: ContinuousOutcome *Dagligt aktivitetsniveau (accelerometer, PROM)* ● **Outcome type**: ContinuousOutcome *Livskvalitet* ● **Outcome type**: ContinuousOutcome *Utilsigtet fald under træning* ● **Outcome type**: DichotomousOutcome

	● **Direction**: Lower is better ● **Data value**: Endpoint
Identification	**Sponsorship source:** - **Country:** Japan **Setting:** 7 day centers **Comments:** - **Authors name:** Tatsuya Hirase **Institution:** Department of Health Sciences, Graduate School of Biomedical Sciences, Nagasaki University, **Email:** shigeru@nagasaki-u.ac.jp **Address:** 1-7-1 Sakamoto, Nagasaki 852-8520, Japan
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Judgement Comment: ikke beskrevet sequence generation randomized into 3 groups using the sealed envelope method.
Allocation concealment (selection bias)	Low risk	Judgement Comment: randomized into 3 groups using the sealed envelope method.
Blinding of participants and personnel (performance bias)	High risk	Judgement Comment: ingen "sham" trainingParticipants in the control group participated in weekly social programs, including recreational activities, educa- tional programs, and tea breaks. They continued their daily activities at the day centers, but performed neither balance training nor muscle strengthening exercises
Blinding of outcome assessment (detection bias)	Unclear risk	Judgement Comment: Ikke beskrevet at gjort noget for at blinde assessor.Before commencing the study, the physical thera- pists received training from one of the authors (TH) on the assessment protocols. These assessments were self- administered with guidance from the care staff at the day centers as needed
Incomplete outcome data (attrition bias)	Low risk	Judgement Comment: withdraw intervention n=3withdraw control n=2

Selective reporting (reporting bias)	Unclear risk	Judgement Comment: ikke angivet slutværdier for FES-I kun at var ændret signifikant. Det er lummert! There were signi cant differences between the 3 groups in terms of the number of risk factors for falls and the FES score (P = 0.002 and P = 0.01, respectively)...men hvad var slut/change værdien hr Hirase??
Other bias	Low risk	Judgement Comment: intet andet

Karinkanta 2012a

Methods	**Study design:** Randomized controlled trial **Study grouping:** Parallel group
Participants	**Baseline Characteristics** Intervention ● *Væsentlige baselineforskelle*: Control ● *Væsentlige baselineforskelle*: Overall ● *Væsentlige baselineforskelle*: **Included criteria:** **Excluded criteria:** **Pretreatment:**
Interventions	**Intervention Characteristics** Intervention ● *Intervention*: Control ● *Intervention*:
Outcomes	*Antal af fald (uden bevidsthedstab)* ● **Outcome type**: DichotomousOutcome *Antal af personer som falder (uden bevidsthedstab)* ● **Outcome type**: DichotomousOutcome *Fald med fraktur (major injury)* ● **Outcome type**: DichotomousOutcome

	Dynamisk balance (Berg´s, BESTest, DGI, POMA) ● **Outcome type**: ContinuousOutcome *Mobilitet (DEMMI, TUG, Ganghastighed)* ● **Outcome type**: ContinuousOutcome *Frygt for fald (FES-I)* ● **Outcome type**: ContinuousOutcome ● **Scale**: VAS 10 cm ● **Direction**: Lower is better ● **Data value**: Endpoint *Dagligt aktivitetsniveau (accelerometer, PROM)* ● **Outcome type**: ContinuousOutcome *Livskvalitet* ● **Outcome type**: ContinuousOutcome *Utilsigtet fald under træning* ● **Outcome type**: DichotomousOutcome
Identification	**Sponsorship source:** **Country:** Finland **Setting:** **Comments:** **Authors name:** **Institution:** **Email:** **Address:**
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	computer ganerated list
Allocation concealment (selection bias)	Unclear risk	ikke beskrevet
Blinding of participants and personnel (performance bias)	High risk	ingen sham intervention
Blinding of outcome assessment (detection bias)	Unclear risk	ikke beskrevet
Incomplete outcome data (attrition bias)	Low risk	under 5% drop out i intervention
Selective reporting (reporting bias)	High risk	hovedoutcomes er kun angivet for samlede to grupper (intervention og kontrol blandet) kun VAS for FoF er opdelt
Other bias	Low risk	intet åbenlyst

Korpelainen 2006

Methods	**Study design:** Randomized controlled trial **Study grouping:** Parallel group
Participants	**Baseline Characteristics** Intervention ● *Væsentlige baselineforskelle*: Control ● *Væsentlige baselineforskelle*: Overall ● *Væsentlige baselineforskelle*: **Included criteria:** **Excluded criteria:** **Pretreatment:**
Interventions	**Intervention Characteristics** Intervention ● *Intervention*:

	Control ● *Intervention*:
Outcomes	*Antal af fald (uden bevidsthedstab)* ● **Outcome type**: DichotomousOutcome ● **Scale**: antal fald ● **Direction**: Lower is better ● **Data value**: Endpoint ● **Notes**: OBS: 30 mdr *Antal af personer som falder (uden bevidsthedstab)* ● **Outcome type**: DichotomousOutcome *Fald med fraktur (major injury)* ● **Outcome type**: DichotomousOutcome ● **Direction**: Lower is better ● **Data value**: Endpoint ● **Notes**: OBS: 30 mdr *Dynamisk balance (Berg´s, BESTest, DGI, POMA)* ● **Outcome type**: ContinuousOutcome *Mobilitet (DEMMI, TUG, Ganghastighed)* ● **Outcome type**: ContinuousOutcome *Frygt for fald (FES-I)* ● **Outcome type**: ContinuousOutcome *Dagligt aktivitetsniveau (accelerometer, PROM)* ● **Outcome type**: ContinuousOutcome *Livskvalitet* ● **Outcome type**: ContinuousOutcome *Utilsigtet fald under træning* ● **Outcome type**: DichotomousOutcome

Identification	**Sponsorship source:** **Country:** Finland **Setting:** **Comments:** **Authors name:** Raija Korpelainen **Institution:** **Email:** **Address:**
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	The women were randomly assigned to an exercise group (n = 84) and a control group (n = 76) using computer-generated random numbers.
Allocation concealment (selection bias)	Unclear risk	ikke beskrevet
Blinding of participants and personnel (performance bias)	High risk	ingen sham intervention i kontrol
Blinding of outcome assessment (detection bias)	Low risk	The assessors in direct contact with the participants during the study did not know to which group they had been allocated.
Incomplete outcome data (attrition bias)	Low risk	højt drop out >25%, men ITT
Selective reporting (reporting bias)	High risk	angiver: Basic mobility and dynamic balance were assessedwith the Timed Up and Go (TUG) test [15]. Time spenton a 30-m walk [16] and the distance walked in 2 min[17] were measured. ...men ikke angivet i resultater
Other bias	Low risk	intet åbenlyst

Liu-Ambrose 2004

Methods	
Participants	
Interventions	
Outcomes	
Identification	
Notes	For more information, please see the following refernce: Gillespie LD, Robertson MC, Gillespie WJ, Sherrington C, Gates S, Clemson LM, Lamb SE. Interventions for preventing falls in older peple in the community. Cochrane Database Syst. Rev. 2012 Sep 12;(9): CD007146.pub3.

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Gillespie et al., 2012
Allocation concealment (selection bias)	Unclear risk	Gillespie et al., 2012
Blinding of participants and personnel (performance bias)	Unclear risk	Gillespie et al., 2012
Blinding of outcome assessment (detection bias)	High risk	Gillespie et al., 2012
Incomplete outcome data (attrition bias)	Low risk	Gillespie et al., 2012
Selective reporting (reporting bias)	Unclear risk	Gillespie et al., 2012
Other bias	Low risk	Gillespie et al., 2012

Madureira 2010

Methods	**Study design:** Randomized controlled trial **Study grouping:** Parallel group
Participants	**Baseline Characteristics** Intervention ● *Væsentlige baselineforskelle*: ● *social interaction* : 2.69 ± 1.42

	Control ● *Væsentlige baselineforskelle*: ● *social interaction* : 3.49 ± 1.47 Overall ● *Væsentlige baselineforskelle*: ● *social interaction* : **Included criteria:** All selected patients had osteoporosis according to the previous definitions **Excluded criteria:** Exclusion criteria were secondary osteoporosis, articular involvement limiting physical activity, visual deficiency, severe auditory deficiency, severe vestibular alteration defined by impaired vision, hearing and motor coordination limiting exercise, patients require walking devices or unable to walk independently more than 10m [28]; all patients underwent cardiological evaluation, ergometric test and echocardiography and those who presented absolute or relative contraindications for exercise train- ing according to American College of Sports Medicine guidelines **Pretreatment:** the score domain for social interaction was better in BT compared to CG
Interventions	**Intervention Characteristics** Intervention ● *Intervention*: 1 h of exercises once a week for a total of 40 classes, supervised by an experienced physiotherapist, namely basic warm-up and stretching exercises (15 min of warm-up and stretching exercises and 15 min of walking) and balance training (30 min of balancing in dynamic and static positions). Additionally, the program included home-based exercises (the same exercises, repeated at home at least three times a week for 30 min) Control ● *Intervention*: without intervention. The CG-only patients received treatment for osteoporosis and instructions to prevent falls, and returned regularly (3-month follow-up) to the Osteometabolic Disease Outpatient Clinic.
Outcomes	*Antal af fald (uden bevidsthedstab)* ● **Outcome type**: ContinuousOutcome ● **Direction**: Lower is better *Antal af personer som falder (uden bevidsthedstab)* ● **Outcome type**: DichotomousOutcome *Fald med fraktur (major injury)* ● **Outcome type**: DichotomousOutcome *Dynamisk balance (Berg´s, BESTest, DGI, POMA)*

	● **Outcome type**: ContinuousOutcome ● **Direction**: Lower is better ● **Data value**: Change from baseline ● **Notes**: Berg (start - slut)!! *Mobilitet (DEMMI, TUG, Ganghastighed)* ● **Outcome type**: ContinuousOutcome ● **Direction**: Lower is better ● **Data value**: Change from baseline ● **Notes**: TUG Taget fra M. M. Madureira 2007 *Frygt for fald (FES-I)* ● **Outcome type**: ContinuousOutcome *Dagligt aktivitetsniveau (accelerometer, PROM)* ● **Outcome type**: ContinuousOutcome *Livskvalitet* ● **Outcome type**: ContinuousOutcome ● **Direction**: Higher is better ● **Data value**: Change from baseline *Utilsigtet fald under træning* ● **Outcome type**: DichotomousOutcome
Identification	**Sponsorship source:** **Country:** Brazil **Setting:** university hospital. administered in a club (Associac¸ão Atlética Acadêmica Oswaldo Cruz – AAAOC) located close to the Hospital. **Comments:** **Authors name:** Melisa M. Madureira, Eloísa Bonfá, Liliam Takayama, Rosa M.R. Pereira **Institution:** Rheumatology Division, Faculdade de Medicina da Universidade de São Paulo, Av. Dr. Arnaldo, 455, 3○ andar, Reumatologia, sala 3105, São Paulo, SP 01246903, Brazil **Email:** **Address:**
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	n
Allocation concealment (selection bias)	Unclear risk	n
Blinding of participants and personnel (performance bias)	High risk	
Blinding of outcome assessment (detection bias)	Low risk	
Incomplete outcome data (attrition bias)	Low risk	
Selective reporting (reporting bias)	Low risk	
Other bias	Low risk	

Melzer 2013

Methods	**Study design:** Randomized controlled trial **Study grouping:** Parallel group
Participants	**Baseline Characteristics** Intervention ● *Væsentlige baselineforskelle*: Control ● *Væsentlige baselineforskelle*: Overall ● *Væsentlige baselineforskelle*: **Included criteria:** 65 years or older; independently ambulatory (cane acceptable; not walker); score better than 45 on the Berg Balance Scale; Mini- Mental State Examination score higher than 24 **Excluded criteria:** no severe focal muscle weakness or visual impair- ment; no known neurological disorders (includ- ing stroke, Parkinson's disease); no metastatic cancer; no use of medication that impairs balance or strength. **Pretreatment:** ingen åbenlyse
Interventions	**Intervention Characteristics** Intervention ● *Intervention*: The intervention group received 12 weeks of bal- ance-specific training twice a week for a total of 24 one-hour sessions. different exercise balls as tools to provide a series of progressively more difficult exercises.

	The highest level also included balance-specific pertur- bation exercises to challenge automatic postural responses not under direct voluntary control as well as dual-task exercises Control ● *Intervention*: the reference group received no intervention
Outcomes	*Antal af fald (uden bevidsthedstab)* ● **Outcome type**: DichotomousOutcome *Antal af personer som falder (uden bevidsthedstab)* ● **Outcome type**: DichotomousOutcome *Fald med fraktur (major injury)* ● **Outcome type**: DichotomousOutcome *Dynamisk balance (Berg´s, BESTest, DGI, POMA)* ● **Outcome type**: ContinuousOutcome *Mobilitet (DEMMI, TUG, Ganghastighed)* ● **Outcome type**: ContinuousOutcome ● **Direction**: Lower is better ● **Data value**: Endpoint ● **Notes**: Voluntary step execution test, Step initiation phase (s) single-task *Frygt for fald (FES-I)* ● **Outcome type**: ContinuousOutcome *Dagligt aktivitetsniveau (accelerometer, PROM)* ● **Outcome type**: ContinuousOutcome *Livskvalitet* ● **Outcome type**: ContinuousOutcome *Utilsigtet fald under træning* ● **Outcome type**: DichotomousOutcome
Identification	**Sponsorship source:** **Country:** USA **Setting:** two groups at a Jewish community centre and one group at a senior housing facility, both in Brighton, MA, USA. **Comments:**

	Authors name: Lars Oddsson **Institution:** Sister Kenny Research Center, Sister Kenny Rehabilitation Institute, Minneapolis, MN 55407, USA. **Email:** **Address:**
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	n
Allocation concealment (selection bias)	Low risk	
Blinding of participants and personnel (performance bias)	High risk	
Blinding of outcome assessment (detection bias)	Low risk	
Incomplete outcome data (attrition bias)	Low risk	
Selective reporting (reporting bias)	High risk	
Other bias	Low risk	

Nitz 2004

Methods	
Participants	
Interventions	
Outcomes	
Identification	
Notes	For more information, please see the following refernce: Gillespie LD, Robertson MC, Gillespie WJ, Sherrington C, Gates S, Clemson LM, Lamb SE. Interventions for preventing falls in older peple in the community. Cochrane Database Syst. Rev. 2012 Sep 12;(9): CD007146.pub3.

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Gillespie et al., 2012
Allocation concealment (selection bias)	Unclear risk	Gillespie et al., 2012
Blinding of participants and personnel (performance bias)	Unclear risk	Gillespie et al., 2012
Blinding of outcome assessment (detection bias)	Low risk	Gillespie et al., 2012
Incomplete outcome data (attrition bias)	High risk	Gillespie et al., 2012
Selective reporting (reporting bias)	Low risk	Gillespie et al., 2012
Other bias	Low risk	Gillespie et al., 2012

Sakamoto 2013

Methods	**Study design:** Randomized controlled trial **Study grouping:** Parallel group
Participants	**Baseline Characteristics** Intervention ● *Væsentlige baselineforskelle*: ● *procentdel mænd som bruger stok*: 18.6% ● *procentdel kvinder som er uafhængige for ADL*: 95.7% Control ● *Væsentlige baselineforskelle*: ● *procentdel mænd som bruger stok*: 39.7% ● *procentdel kvinder som er uafhængige for ADL*: 91.2% Overall ● *Væsentlige baselineforskelle*: ● *procentdel mænd som bruger stok*: ● *procentdel kvinder som er uafhængige for ADL*: **Included criteria:** The subjects were men and women C75 years of age who lived at home and visited an orthopedic clinic or hospital for an orthopedic handicap and who could stand on one leg, both right and left, with the eyes open for 15 s

	Excluded criteria: People with Parkinson's disease or other conditions that made them susceptible to falls, people with artificial joints, and people with cognitive disorders were excluded. **Pretreatment:** flere mænd som brugte stok i kontrolgruppen og færre kvinder som var uafhængige for ADL i kontrolgruppen
Interventions	**Intervention Characteristics** Intervention ● *Intervention*: In the DF exercise, people with poor balance held on to a table, chair, bar, or other object while standing on one leg (when they became accustomed to this, they stood on one leg without holding on to anything). If their free leg touched the ground, they lifted it once more so the total one-leg standing time was 60 s. They stood on one leg for a total of 1min in this way 3 times a day with each leg Control ● *Intervention*: did not do this exercise
Outcomes	*Antal af fald (uden bevidsthedstab)* ● **Outcome type**: ContinuousOutcome ● **Direction**: Lower is better ● **Data value**: Endpoint ● **Notes**: Har kun taget det opgivne for kvinder med, idet der er flest og ingen samlet værdi er angivet *Antal af personer som falder (uden bevidsthedstab)* ● **Outcome type**: DichotomousOutcome ● **Direction**: Lower is better ● **Data value**: Endpoint ● **Notes**: summeret for kvinder og mænd (er kun angivet seperat) *Fald med fraktur (major injury)* ● **Outcome type**: DichotomousOutcome ● **Direction**: Lower is better ● **Data value**: Endpoint *Dynamisk balance (Berg´s, BESTest, DGI, POMA)* ● **Outcome type**: ContinuousOutcome *Mobilitet (DEMMI, TUG, Ganghastighed)* ● **Outcome type**: ContinuousOutcome *Frygt for fald (FES-I)* ● **Outcome type**: ContinuousOutcome

	Dagligt aktivitetsniveau (accelerometer, PROM) ● **Outcome type**: ContinuousOutcome *Livskvalitet* ● **Outcome type**: ContinuousOutcome *Utilsigtet fald under træning* ● **Outcome type**: DichotomousOutcome ● **Direction**: Lower is better ● **Data value**: Endpoint
Identification	**Sponsorship source:** **Country:** **Setting:** university hospital **Comments:** **Authors name:** Keizo Sakamoto ● Naoto Endo ● Atsushi Harada ● Takenori Sakada ● Kazuyo Tsushita ● Kiyoshi Kita ● Hiroshi Hagino ● Akinori Sakai ● Noriaki Yamamoto ● Tetsunori Okamoto ● Meigen Liu ● Akatsuki Kokaze ● Hiromichi Suzuki **Institution:** Department of Orthopaedic Surgery, Showa University School of Medicine, 1-5-8 Hatanodai, Shinagawa-ku, Tokyo 142-8666, Japan **Email:** **Address:**
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	
Allocation concealment (selection bias)	Low risk	
Blinding of participants and personnel (performance bias)	High risk	
Blinding of outcome assessment (detection bias)	Unclear risk	n
Incomplete outcome data (attrition bias)	Unclear risk	n
Selective reporting (reporting bias)	Unclear risk	n
Other bias	High risk	

Shigematsu 2008

Methods	**Study design:** Randomized controlled trial **Study grouping:** Parallel group
Participants	**Baseline Characteristics** Intervention ● *Væsentlige baselineforskelle*: ● *selvrapporteret syn*: 2.77(0.8) Control ● *Væsentlige baselineforskelle*: ● *selvrapporteret syn*: 3.09(0.61 Overall ● *Væsentlige baselineforskelle*: ● *selvrapporteret syn*: **Included criteria:** Persons aged 65–74 years (n ¼ 2164) were recruited fromKawage, Mie, Japan. A letter containing information regarding the schedule of the exercise sessions was sent to 700 noninstitutionalized persons **Excluded criteria:** The presence of severe neurological or cardiovascular diseases or mobility-limiting orthopedic conditions was considered as an exclusion criterion. **Pretreatment:** subsignifikant dårlige selvrapporteret syn i interventionsgruppen (p=0.08)likert scale 1=poor 5= excellent
Interventions	**Intervention Characteristics** Intervention ● *Intervention*: supervised group sessions twice a week over the 12-week period.SE was performed on a thin felt mat (100 3 250 cm) that was partitioned into 40 squares (25 cm each). The persons were instructed to walk (step) from one end of the mat to the other according to the step pattern provided (Figure 1). When the persons reached the end of the mat, they were instructed to return to their start positions by walking normally off the mat and then stand in line for the next stepping. The SSE included forward, backward, lateral, and oblique step patterns. After the persons became familiar with each of these step patterns, they were instructed to walk with their heels lifted, that is, on their toes, without treading on the frames of the squares. Each step pattern was repeated 4–10 times to ensure that the persons could complete the pattern, and was followed by the introduction of a more complex step pattern. In total, 196 step patterns were developed and categorized (based on progressively increasing levels of complexity) into 8 categories (Elementary, 1–2; Intermediate, 1–3; and Advanced, 1–3). The persons were encouraged to concentrate in order to successfully perform each progressively more complicated step pattern. Step cadence was not determined; therefore, the persons performed the pattern

	at their preferred pace. Although they required 15–20 seconds to complete each step pattern initially, they eventually completed each pattern in , 15 seconds. Control ● *Intervention*: instructed to attend an outdoor supervised walking session at the Kawage Health Center once a week for 12 weeks. These sessions were structured in a manner similar to that of the SSE sessions except that SSE was substituted with a long-distance 40- minute outdoor walking session. Furthermore, the W group was also instructed to increase the number of daily steps, particularly during long-distance walking.
Outcomes	*Antal af fald (uden bevidsthedstab)* ● **Outcome type**: DichotomousOutcome *Antal af personer som falder (uden bevidsthedstab)* ● **Outcome type**: DichotomousOutcome *Fald med fraktur (major injury)* ● **Outcome type**: DichotomousOutcome *Dynamisk balance (Berg´s, BESTest, DGI, POMA)* ● **Outcome type**: ContinuousOutcome ● **Direction**: Lower is better ● **Data value**: Endpoint ● **Notes**: Forward tandem walking, s *Mobilitet (DEMMI, TUG, Ganghastighed)* ● **Outcome type**: ContinuousOutcome ● **Direction**: Lower is better ● **Data value**: Endpoint ● **Notes**: Walking around two cones, s *Frygt for fald (FES-I)* ● **Outcome type**: ContinuousOutcome ● **Direction**: Higher is better ● **Data value**: Endpoint ● **Notes**: *Measured on a 3-point Likert scale: 1 ¼ very fearful, 2 ¼ fearful, and 3 ¼ not fearful. *Dagligt aktivitetsniveau (accelerometer, PROM)* ● **Outcome type**: ContinuousOutcome *Livskvalitet*

	● **Outcome type**: ContinuousOutcome *Utilsigtet fald under træning* ● **Outcome type**: DichotomousOutcome
Identification	**Sponsorship source:** **Country:** Japan **Setting:** Kawage Health Center **Comments:** **Authors name:** Ryosuke Shigematsu,1 Tomohiro Okura,2 Masaki Nakagaichi,3 Kiyoji Tanaka,2 Tomoaki Sakai,4 Suguru Kitazumi,1 and Taina Rantanen5 **Institution:** aculty of Education, Mie University, Japan. **Email:** **Address:**
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	
Allocation concealment (selection bias)	Unclear risk	n
Blinding of participants and personnel (performance bias)	Low risk	
Blinding of outcome assessment (detection bias)	Low risk	
Incomplete outcome data (attrition bias)	Low risk	
Selective reporting (reporting bias)	Low risk	
Other bias	Low risk	

Skelton 2005

Methods	
Participants	
Interventions	
Outcomes	
Identification	
Notes	For more information, please see the following refernce: Gillespie LD, Robertson MC, Gillespie WJ, Sherrington C, Gates S, Clemson LM, Lamb SE. Interventions for preventing falls in older peple in the community. Cochrane Database Syst. Rev. 2012 Sep 12;(9): CD007146.pub3.

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Gillespie et al., 2012
Allocation concealment (selection bias)	Unclear risk	Gillespie et al., 2012
Blinding of participants and personnel (performance bias)	Unclear risk	Gillespie et al., 2012
Blinding of outcome assessment (detection bias)	Low risk	Gillespie et al., 2012
Incomplete outcome data (attrition bias)	Unclear risk	Gillespie et al., 2012
Selective reporting (reporting bias)	Low risk	Gillespie et al., 2012
Other bias	Low risk	Gillespie et al., 2012

Smulders 2010

Methods	
Participants	
Interventions	
Outcomes	
Identification	

Notes	For more information, please see the following refernce: Gillespie LD, Robertson MC, Gillespie WJ, Sherrington C, Gates S, Clemson LM, Lamb SE. Interventions for preventing falls in older peple in the community. Cochrane Database Syst. Rev. 2012 Sep 12;(9): CD007146.pub3.

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Gillespie et al., 2012
Allocation concealment (selection bias)	Unclear risk	Gillespie et al., 2012
Blinding of participants and personnel (performance bias)	High risk	Gillespie et al., 2012
Blinding of outcome assessment (detection bias)	High risk	Gillespie et al., 2012
Incomplete outcome data (attrition bias)	Low risk	Gillespie et al., 2012
Selective reporting (reporting bias)	Low risk	Gillespie et al., 2012
Other bias	Low risk	Gillespie et al., 2012

Weerdesteyn 2006

Methods	
Participants	
Interventions	
Outcomes	
Identification	
Notes	For more information, please see the following refernce: Gillespie LD, Robertson MC, Gillespie WJ, Sherrington C, Gates S, Clemson LM, Lamb SE. Interventions for preventing falls in older peple in the community. Cochrane Database Syst. Rev. 2012 Sep 12;(9): CD007146.pub3.

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Gillespie et al., 2012
Allocation concealment (selection bias)	Unclear risk	Gillespie et al., 2012
Blinding of participants and personnel (performance bias)	Unclear risk	Gillespie et al., 2012
Blinding of outcome assessment (detection bias)	High risk	Gillespie et al., 2012
Incomplete outcome data (attrition bias)	Low risk	Gillespie et al., 2012
Selective reporting (reporting bias)	Low risk	Gillespie et al., 2012
Other bias	Low risk	Gillespie et al., 2012

Footnotes

Characteristics of excluded studies

Ashari 2016

Reason for exclusion	Wrong intervention

Bateni 2012

Reason for exclusion	Wrong intervention

Clemson 2012

Reason for exclusion	Wrong intervention

Cornillon 2002

Reason for exclusion	forkert sprog

Dunlop 2011

Reason for exclusion	Wrong intervention

El Khoury 2015

Reason for exclusion	Wrong intervention

Faren 2011

Reason for exclusion	abstract

Ferreira 2016

Reason for exclusion	abstract

Grabiner 2012

Reason for exclusion	Wrong dose

Grahn 2009

Reason for exclusion	Wrong intervention

Halvarsson 2011

Reason for exclusion	dublicate study

Halvarsson 2011a

Reason for exclusion	abstract

Halvarsson 2015a

Reason for exclusion	abstract

Jacobson 2011

Reason for exclusion	Wrong intervention

Jagdhane 2016

Reason for exclusion	Wrong dose

Joshua 2014

Reason for exclusion	Wrong comparator

Karinkanta 2012

Reason for exclusion	Wrong intervention

Korpelainen 2010

Reason for exclusion	Wrong intervention

Kovacs 2013

Reason for exclusion	Wrong intervention

Leiros Rodriguez 2014

Reason for exclusion	Wrong intervention

Lord 2003

Reason for exclusion	Wrong intervention

Luukinen 2006

Reason for exclusion	Wrong intervention

Luukinen 2007

Reason for exclusion	Wrong intervention

Madureira 2007

Reason for exclusion	dublicate study

Madureira 2009

Reason for exclusion	abstract

Mansfield 2010

Reason for exclusion	Wrong dose

Martinez Amat 2013

Reason for exclusion	Wrong intervention

Miko 2017

Reason for exclusion	Wrong intervention

Ni 2014

Reason for exclusion	Wrong comparator

Nicholson 2014

Reason for exclusion	Wrong intervention

Olson 2011

Reason for exclusion	Wrong intervention

Osmani Vllasolli 2011

Reason for exclusion	abstract

Pai 2014

Reason for exclusion	Wrong intervention

Patru 2010

Reason for exclusion	abstract

Roaldsen 2014

Reason for exclusion	Wrong outcomes

Sakamoto 2006

Reason for exclusion	dublicate study

Seo 2012

Reason for exclusion	Wrong intervention

Sherrington 2014

Reason for exclusion	Wrong intervention

Shigematsu 2008a

Reason for exclusion	Wrong comparator

Shumway Cook 2007

Reason for exclusion	Wrong intervention

Silsupadol 2006

Reason for exclusion	Wrong study design

Silsupadol 2009

Reason for exclusion	Wrong comparator

Sohn 2015

Reason for exclusion	Wrong intervention

Suzuki 2004

Reason for exclusion	Wrong intervention

Thiamwong 2014

Reason for exclusion	Wrong intervention

Yamada 2011

Reason for exclusion	Wrong intervention

Footnotes

Characteristics of studies awaiting classification

Footnotes

Characteristics of ongoing studies

Footnotes

Summary of findings tables

Additional tables

References to studies

Included studies

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[Empty]

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[Empty]

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[Empty]

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[Empty]

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[Empty]

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Studies awaiting classification

Ongoing studies

Other references

Additional references

Other published versions of this review

Data and analyses

1 Balancetræning vs ingen træning

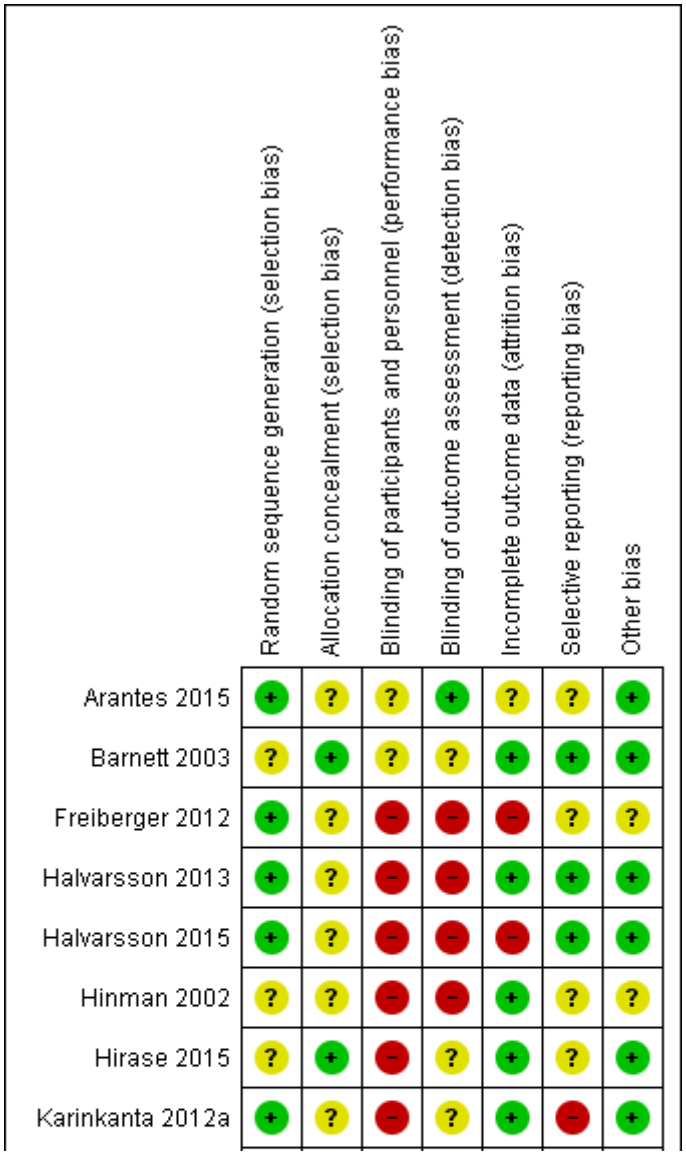
Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
1.1 Antal af fald (uden bevidsthedstab) EoT	2	925	Mean Difference (IV, Random, 95% CI)	0.16 [-0.37, 0.69]
1.1.1 Antal af fald (uden bevidsthedstab) under intervention	2	925	Mean Difference (IV, Random, 95% CI)	0.16 [-0.37, 0.69]
1.2 Antal af fald (uden bevidsthedstab) 8 month FU	1	63	Mean Difference (IV, Random, 95% CI)	-0.11 [-0.35, 0.13]
1.2.2 Antal af fald (uden bevidsthedstab) 8 måneder efter afsluttet intervention	1	63	Mean Difference (IV, Random, 95% CI)	-0.11 [-0.35, 0.13]
1.3 Antal af fald (uden bevidsthedstab)_rate EoT	4	342	Rate Ratio (IV, Random, 95% CI)	0.59 [0.43, 0.83]
1.3.1 Antal af fald under intervention	4	342	Rate Ratio (IV, Random, 95% CI)	0.59 [0.43, 0.83]
1.4 Antal af fald (uden bevidsthedstab)_6-12 month FU	2		Rate Ratio (IV, Random, 95% CI)	0.59 [0.41, 0.84]
1.4.2 Antal af fald 6-12 måneder efter afsluttet intervention	2		Rate Ratio (IV, Random, 95% CI)	0.59 [0.41, 0.84]
1.5 Antal personer som falder EoT	3	1043	Risk Ratio (IV, Random, 95% CI)	0.68 [0.54, 0.86]
1.5.1 Antal personer som falder under intervention	3	1043	Risk Ratio (IV, Random, 95% CI)	0.68 [0.54, 0.86]
1.6 Antal personer som falder 6-15 month FU	6		Risk Ratio (IV, Random, 95% CI)	0.86 [0.62, 1.19]
1.6.2 Antal personer som falder 6-15 måneder efter afsluttet intervention	6		Risk Ratio (IV, Random, 95% CI)	0.86 [0.62, 1.19]

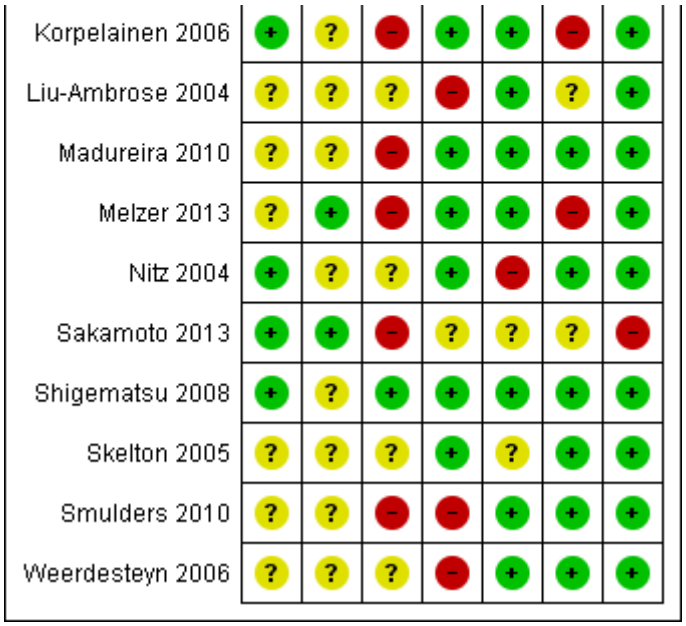
1.7 Dynamisk balance (alternate step up test, modified figure eight test, Forward tandem walking)	6	399	Std. Mean Difference (IV, Random, 95% CI)	-0.18 [-0.39, 0.02]
1.7.2 Dynamisk balance EoT eller efter 6 month	6	399	Std. Mean Difference (IV, Random, 95% CI)	-0.18 [-0.39, 0.02]
1.8 Dynamisk balance CHANGE (Berg´s)	1	60	Std. Mean Difference (IV, Fixed, 95% CI)	-1.12 [-1.67, -0.57]
1.8.2 Dynamisk balance,change	1	60	Std. Mean Difference (IV, Fixed, 95% CI)	-1.12 [-1.67, -0.57]
1.9 Mobilitet EoT eller efter 6 month (TUG, Ganghastighed, 50 foot walk test, step inition phase)	11	832	Std. Mean Difference (IV, Random, 95% CI)	-0.34 [-0.52, -0.17]
1.9.2 Mobilitet (TUG, Ganghastighed, 50 foot walk test, step inition phase), interventionsafslutning	11	832	Std. Mean Difference (IV, Random, 95% CI)	-0.34 [-0.52, -0.17]
1.10 Mobilitet change (TUG)	1	60	Std. Mean Difference (IV, Fixed, 95% CI)	-1.03 [-1.57, -0.49]
1.10.2 Mobilitet change (TUG)	1	60	Std. Mean Difference (IV, Fixed, 95% CI)	-1.03 [-1.57, -0.49]
1.11 Frygt for fald (FES-I, ABC, VAS, balance confidence) EoT	7	560	Std. Mean Difference (IV, Random, 95% CI)	-0.24 [-0.43, -0.05]
1.11.1 målt ved interventionsafslutning	7	560	Std. Mean Difference (IV, Random, 95% CI)	-0.24 [-0.43, -0.05]
1.12 Frygt for fald (FES-I, ABC, VAS, balance confidence) 12-15 month FU	3	252	Std. Mean Difference (IV, Random, 95% CI)	-0.29 [-0.56, -0.02]
1.12.2 målt 12-15 mdr efter afsluttet intervention	3	252	Std. Mean Difference (IV, Random, 95% CI)	-0.29 [-0.56, -0.02]
1.13 Frygt for fald_dicho, målt v. 6 mdr i en 12 mdr lang intervention	1	137	Odds Ratio (M-H, Fixed, 95% CI)	0.86 [0.25, 2.96]

1.14 Dagligt aktivitetsniveau EoT (physical activity scale, pedometer, Frändin-Grimbu scale)	3	254	Std. Mean Difference (IV, Random, 95% CI)	-0.08 [-0.33, 0.17]
1.14.2 Dagligt aktivitetsniveau, EoT eller efter 6 month treatment	3	254	Std. Mean Difference (IV, Random, 95% CI)	-0.08 [-0.33, 0.17]
1.15 Dagligt aktivitetsniveau 12 month FU (pedometer)	1	82	Mean Difference (IV, Random, 95% CI)	747.00 [-581.25, 2075.25]
1.15.3 Dagligt aktivitetsniveau målt 12 måneder efter interventionsafslutning	1	82	Mean Difference (IV, Random, 95% CI)	747.00 [-581.25, 2075.25]
1.16 Utilsigtet fald under træning	3	1019	Risk Ratio (IV, Random, 95% CI)	12.20 [0.68, 220.03]
1.16.1 Utilsigtet fald under træning (Under træning)	3	1019	Risk Ratio (IV, Random, 95% CI)	12.20 [0.68, 220.03]
1.17 Fald med fraktur EoT	2	1015	Risk Ratio (IV, Random, 95% CI)	0.69 [0.44, 1.09]
1.17.1 Fald med fraktur (major injury) under intervention	2	1015	Risk Ratio (IV, Random, 95% CI)	0.69 [0.44, 1.09]
1.18 Fald med fraktur 12 month FU	1	92	Risk Ratio (IV, Random, 95% CI)	0.32 [0.03, 2.96]
1.18.2 Fald med fraktur (major injury) (12 måneder efter afsluttet intervention)	1	92	Risk Ratio (IV, Random, 95% CI)	0.32 [0.03, 2.96]
1.19 Livskvalitet EoT OPAQ	1	60	Mean Difference (IV, Fixed, 95% CI)	-2.73 [-3.98, -1.48]
1.19.1 Livskvalitet, interventionsafslutning	1	60	Mean Difference (IV, Fixed, 95% CI)	-2.73 [-3.98, -1.48]
1.20 Livskvalitet 12 month FU QUALEFO	1	83	Mean Difference (IV, Fixed, 95% CI)	-1.10 [-5.78, 3.58]
1.20.2 Livskvalitet, målt 12 måneder efter interventionsafslutning	1	83	Mean Difference (IV, Fixed, 95% CI)	-1.10 [-5.78, 3.58]

Figures

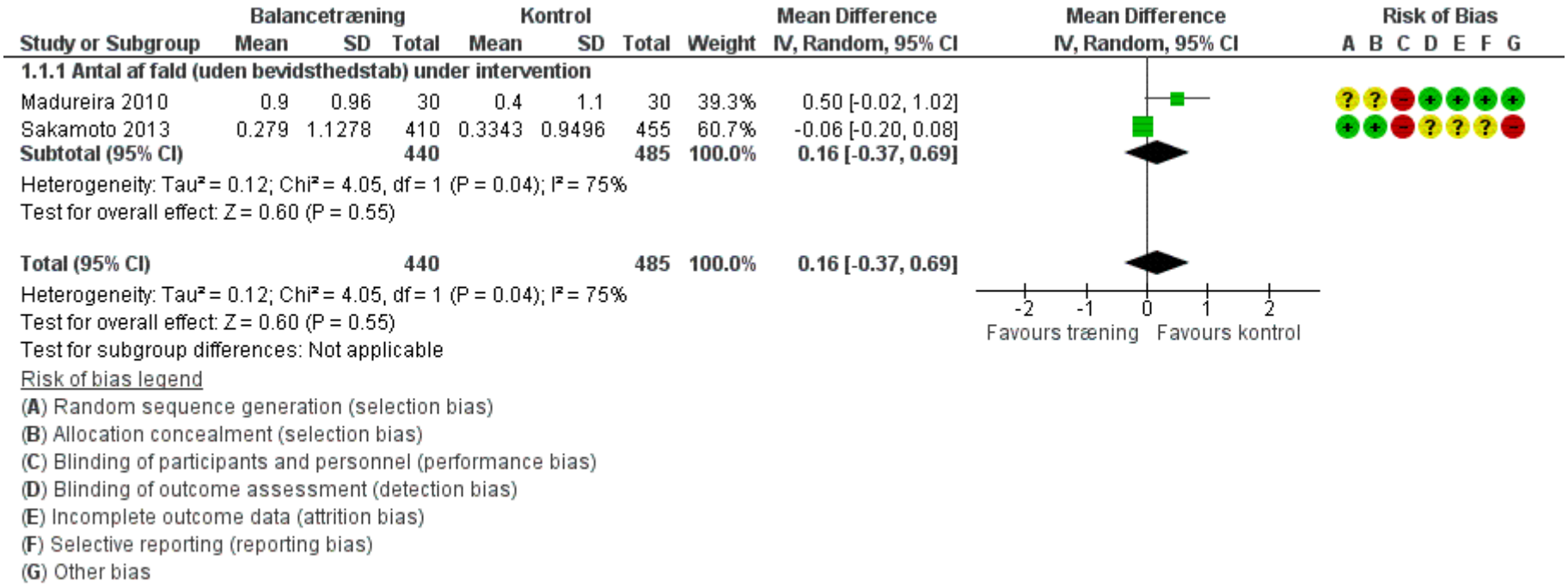
Figure 1





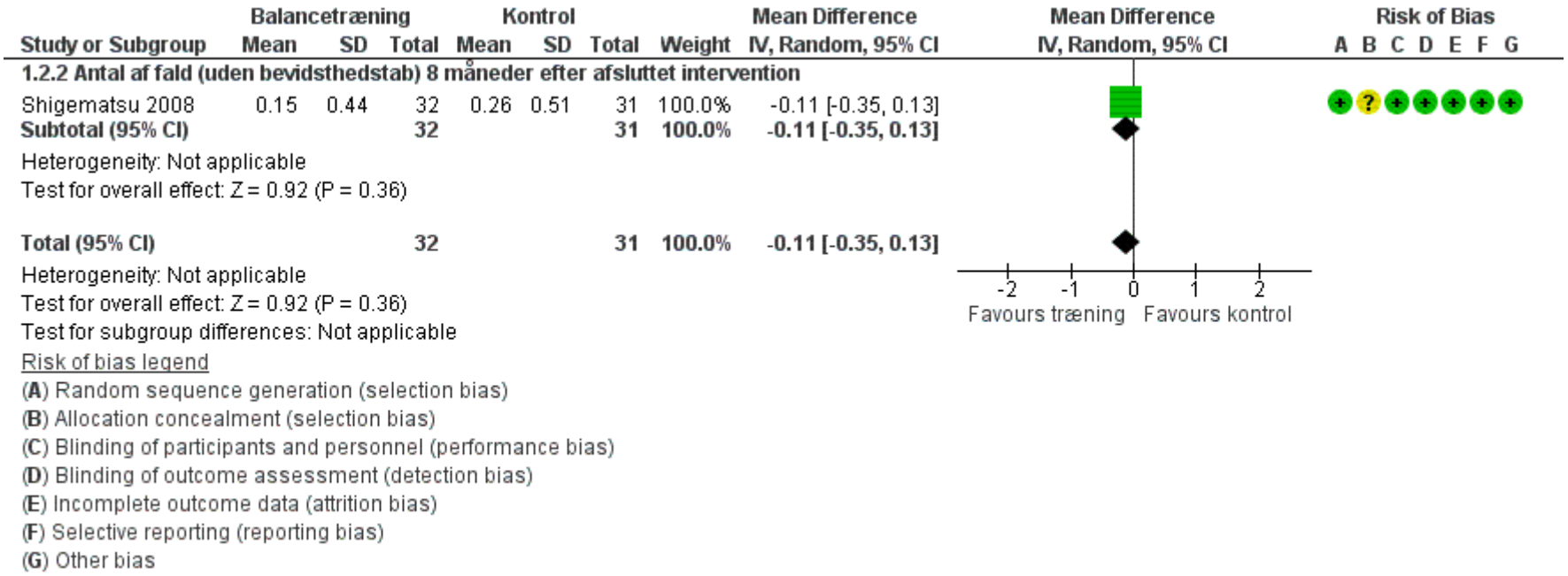
Risk of bias summary: review authors' judgements about each risk of bias item for each included study.

Figure 2 (Analysis 1.1)



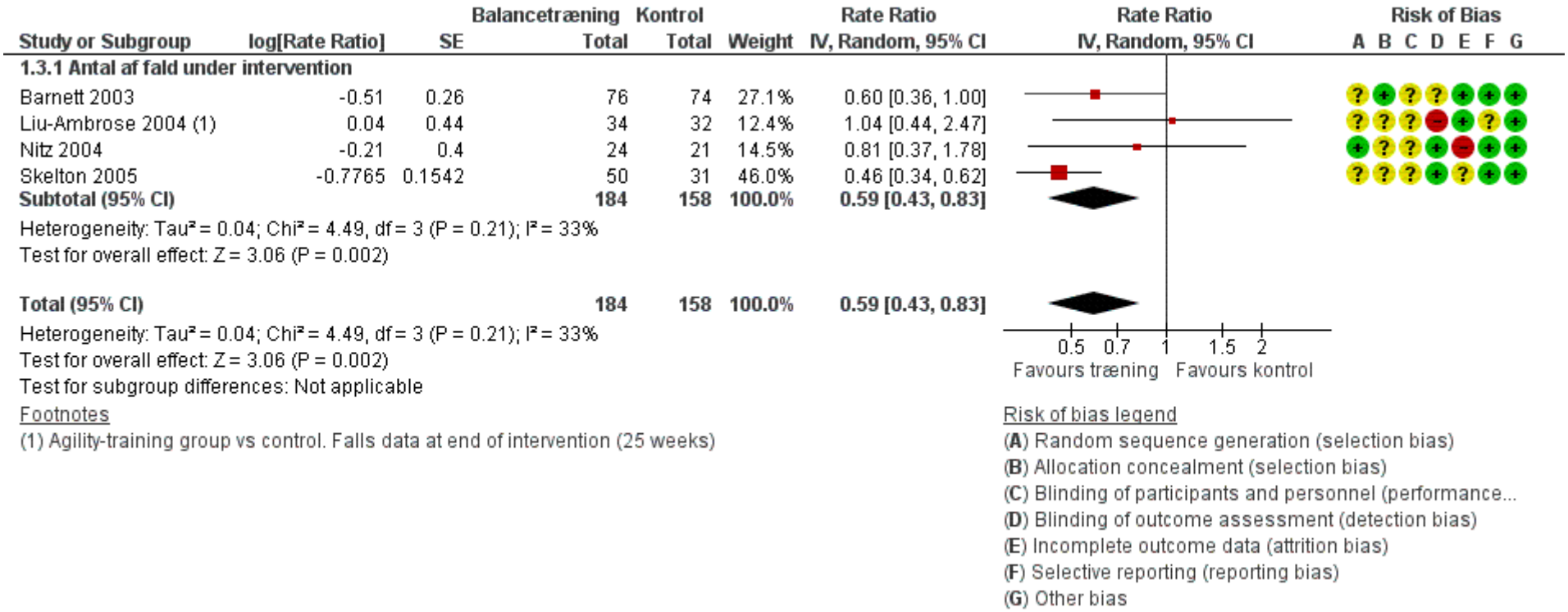
Forest plot of comparison: 1 Balancetræning vs ingen træning, outcome: 1.1 Antal af fald (uden bevidsthedstab) EoT.

Figure 3 (Analysis 1.2)



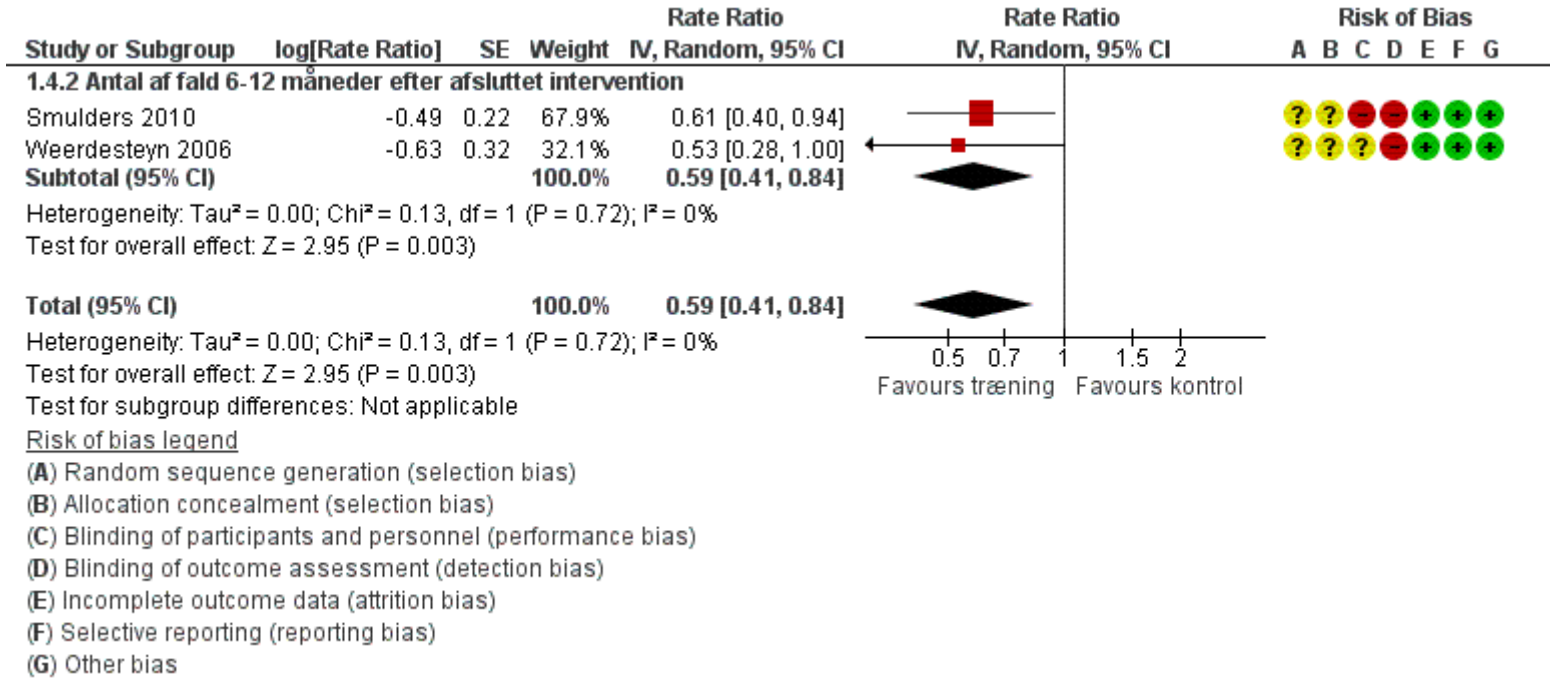
Forest plot of comparison: 1 Balancetræning vs ingen træning, outcome: 1.2 Antal af fald (uden bevidsthedstab) 8 month FU.

Figure 4 (Analysis 1.3)



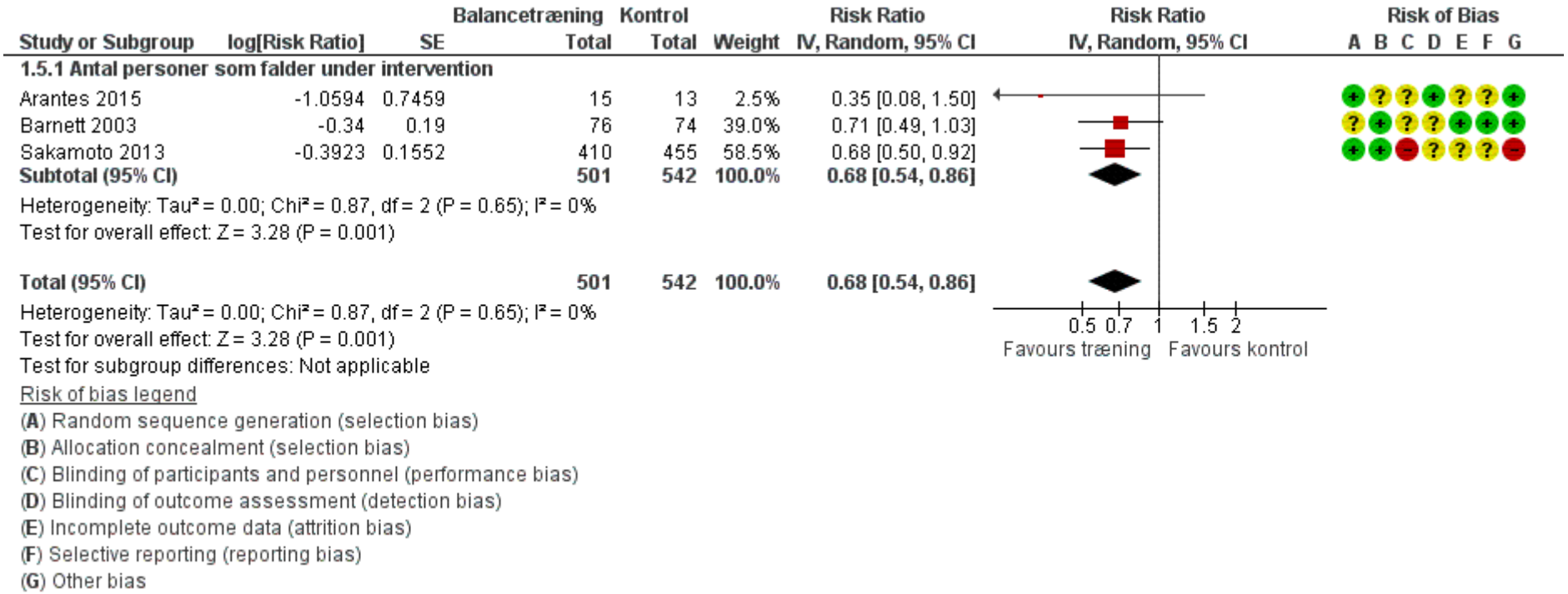
Forest plot of comparison: 1 Balancetræning vs ingen træning, outcome: 1.3 Antal af fald (uden bevidsthedstab)_rate EoT.

Figure 5 (Analysis 1.4)



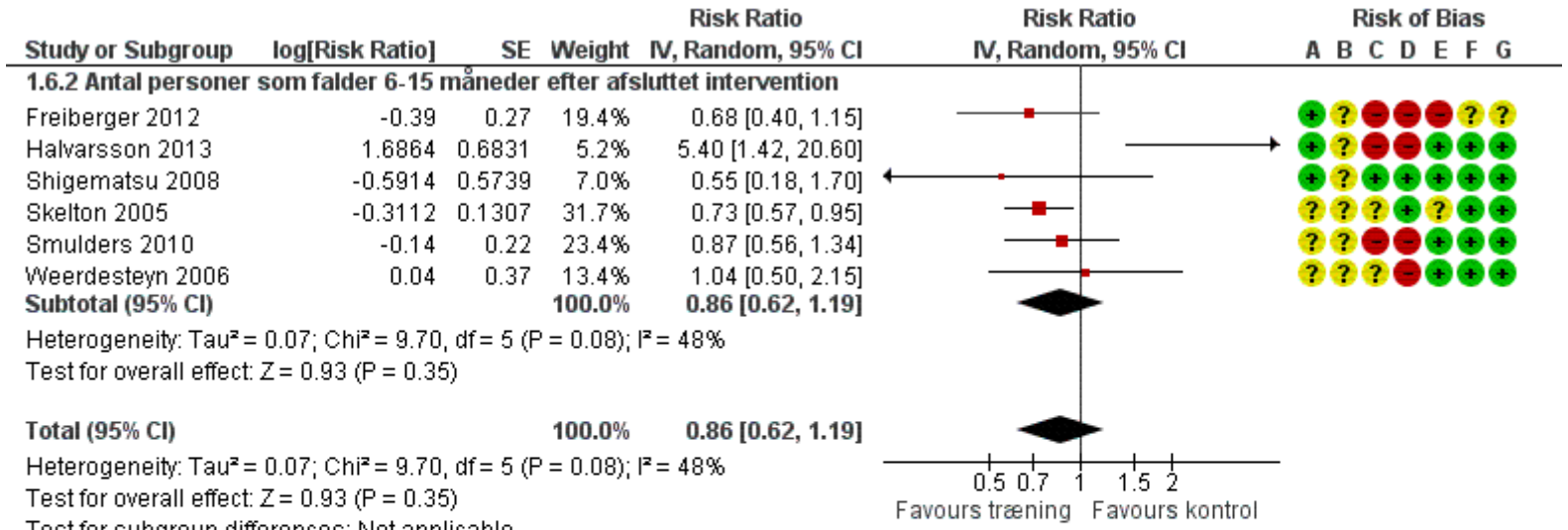
Forest plot of comparison: 1 Balancetræning vs ingen træning, outcome: 1.4 Antal af fald (uden bevidsthedstab)_6-12 month FU.

Figure 6 (Analysis 1.5)



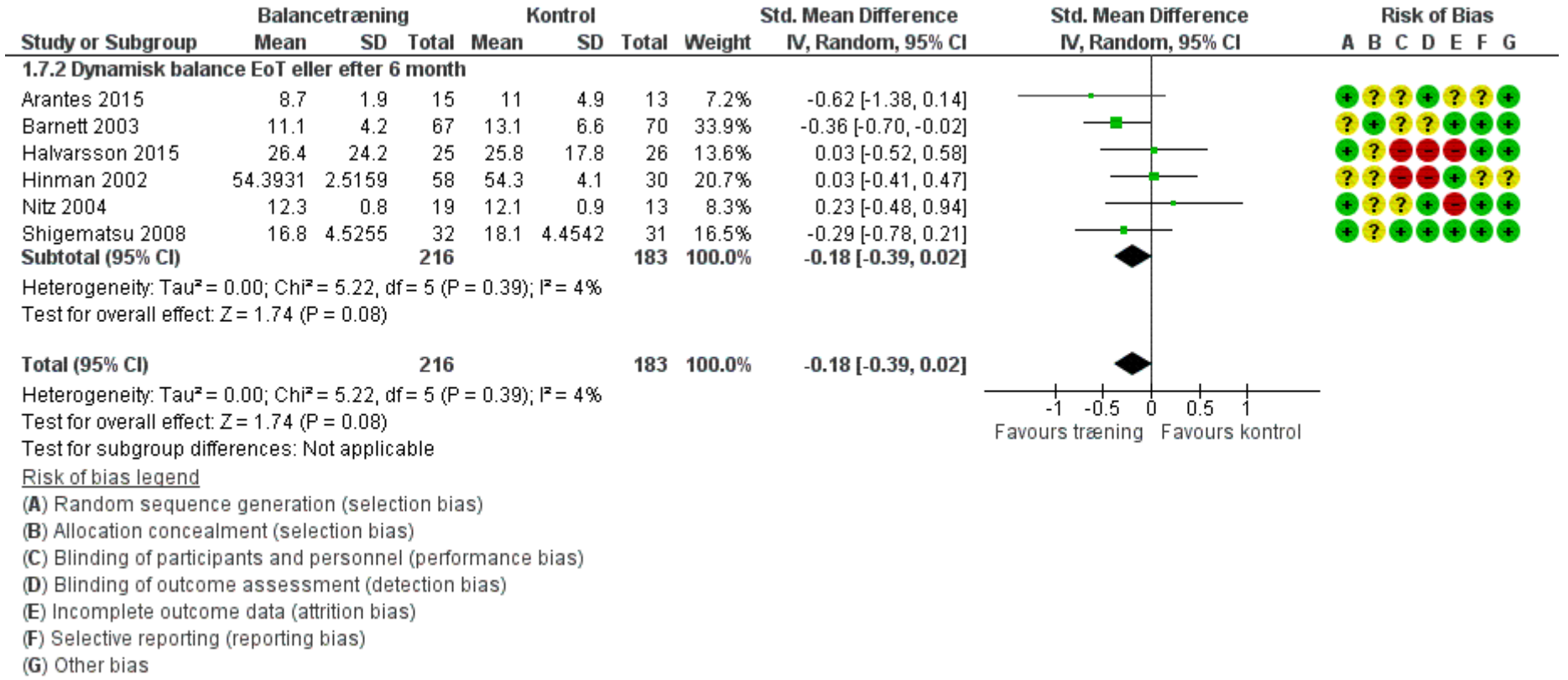
Forest plot of comparison: 1 Balancetræning vs ingen træning, outcome: 1.5 Antal personer som falder EoT.

Figure 7 (Analysis 1.6)



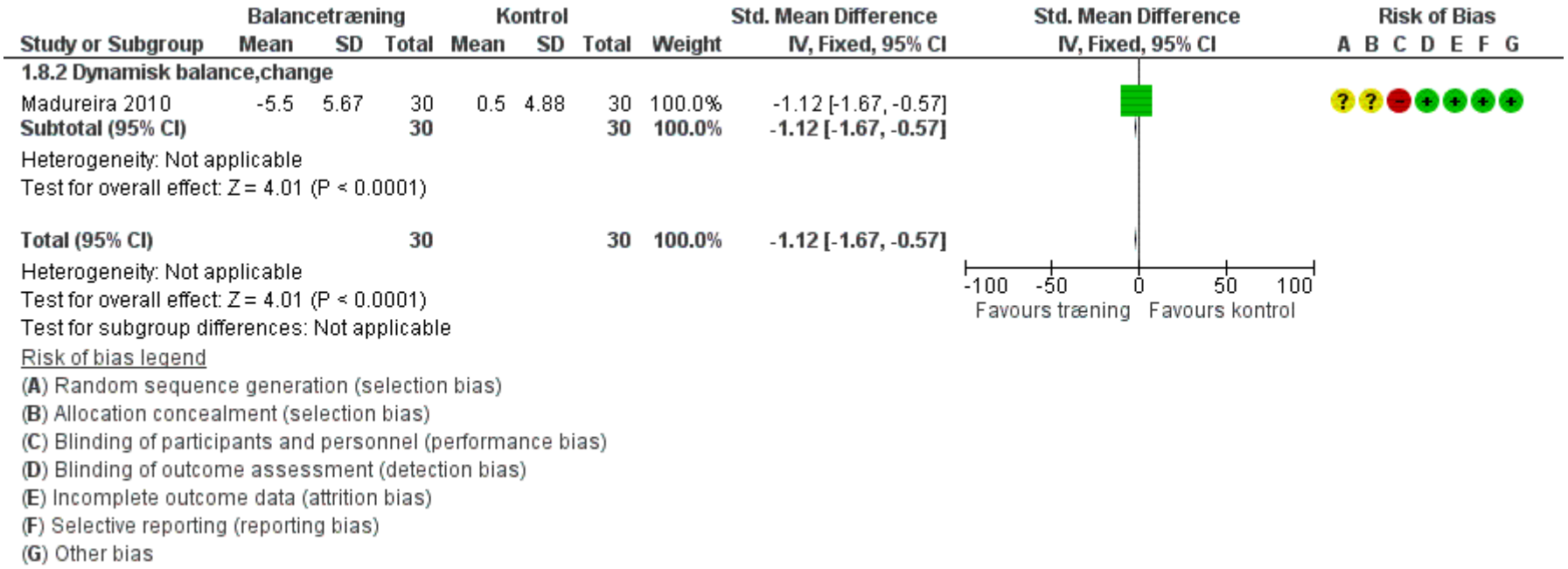
Forest plot of comparison: 1 Balancetræning vs ingen træning, outcome: 1.6 Antal personer som falder 6-15 month FU.

Figure 8 (Analysis 1.7)



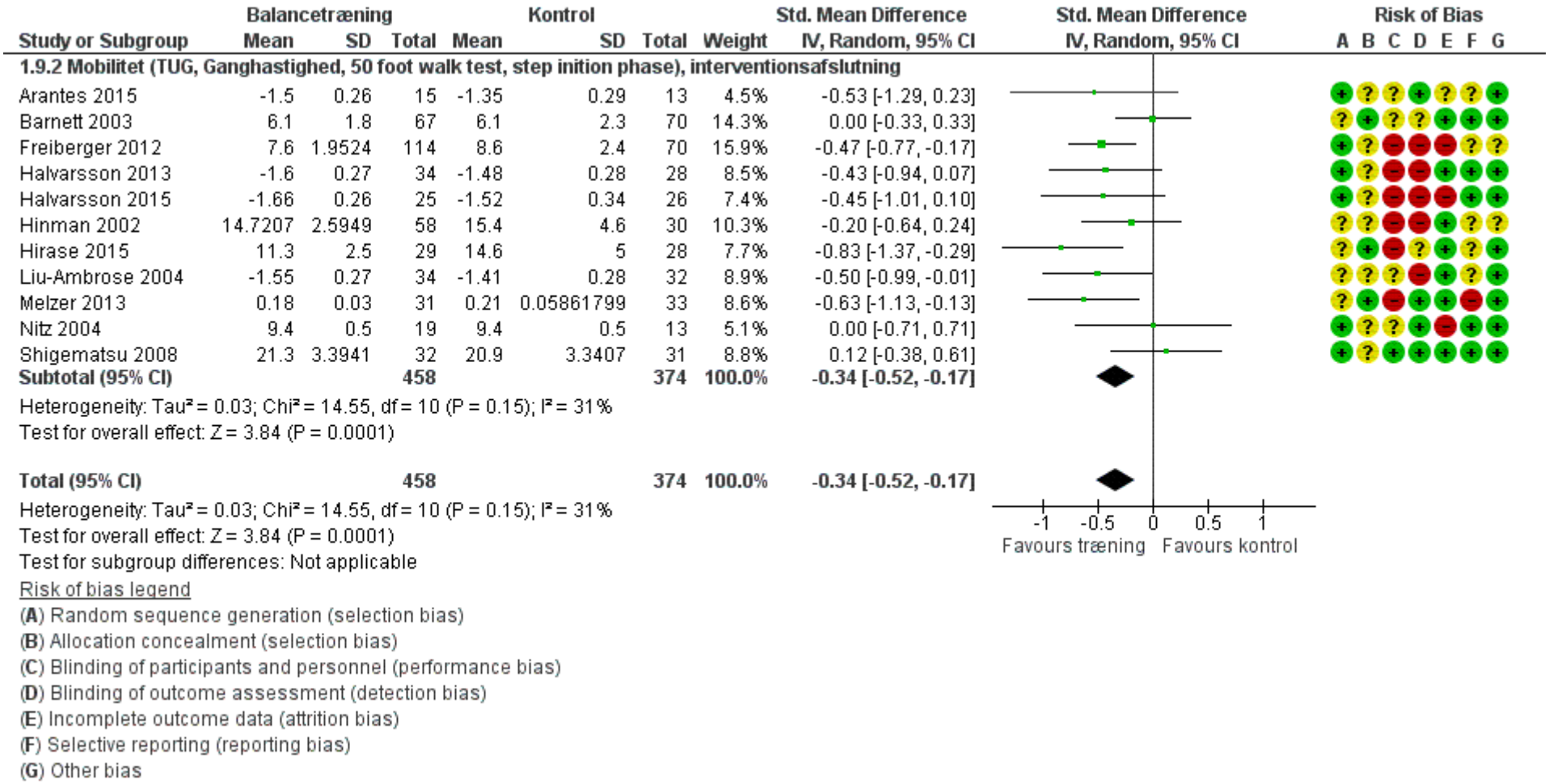
Forest plot of comparison: 1 Balancetræning vs ingen træning, outcome: 1.7 Dynamisk balance (alternate step up test, modified figure eight test, Forward tandem walking).

Figure 9 (Analysis 1.8)



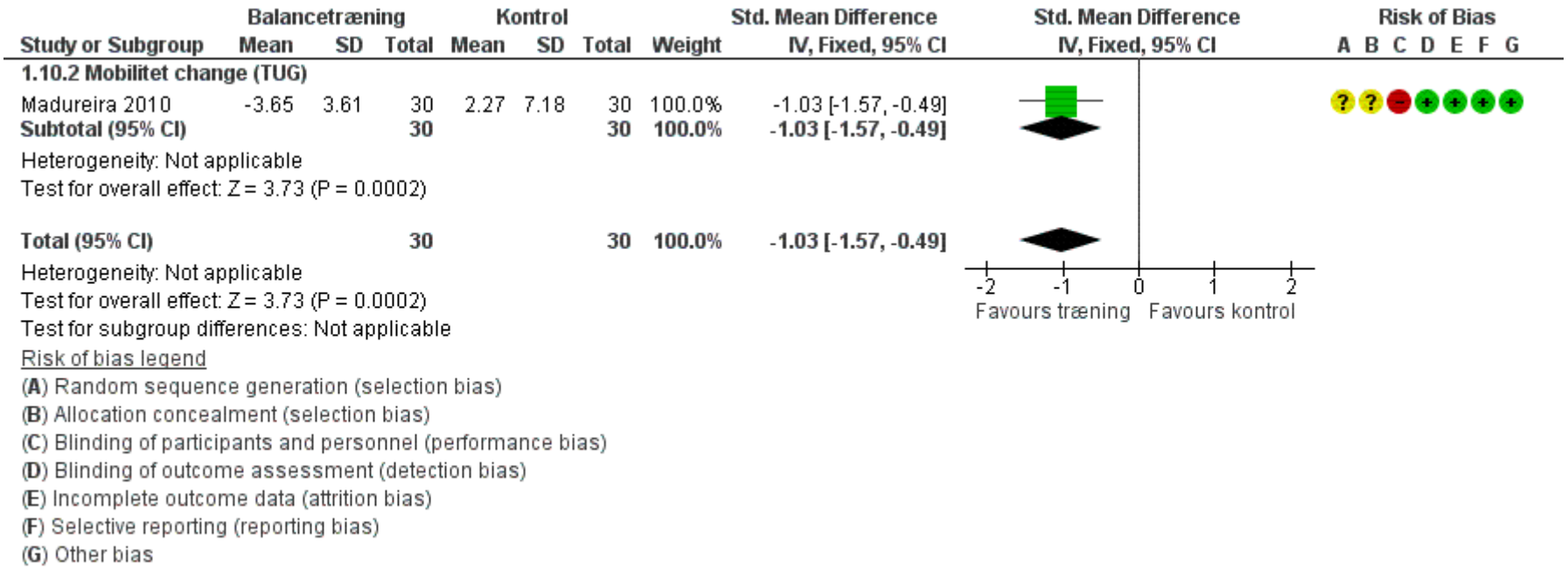
Forest plot of comparison: 1 Balancetræning vs ingen træning, outcome: 1.8 Dynamisk balance CHANGE (Berg´s).

Figure 10 (Analysis 1.9)



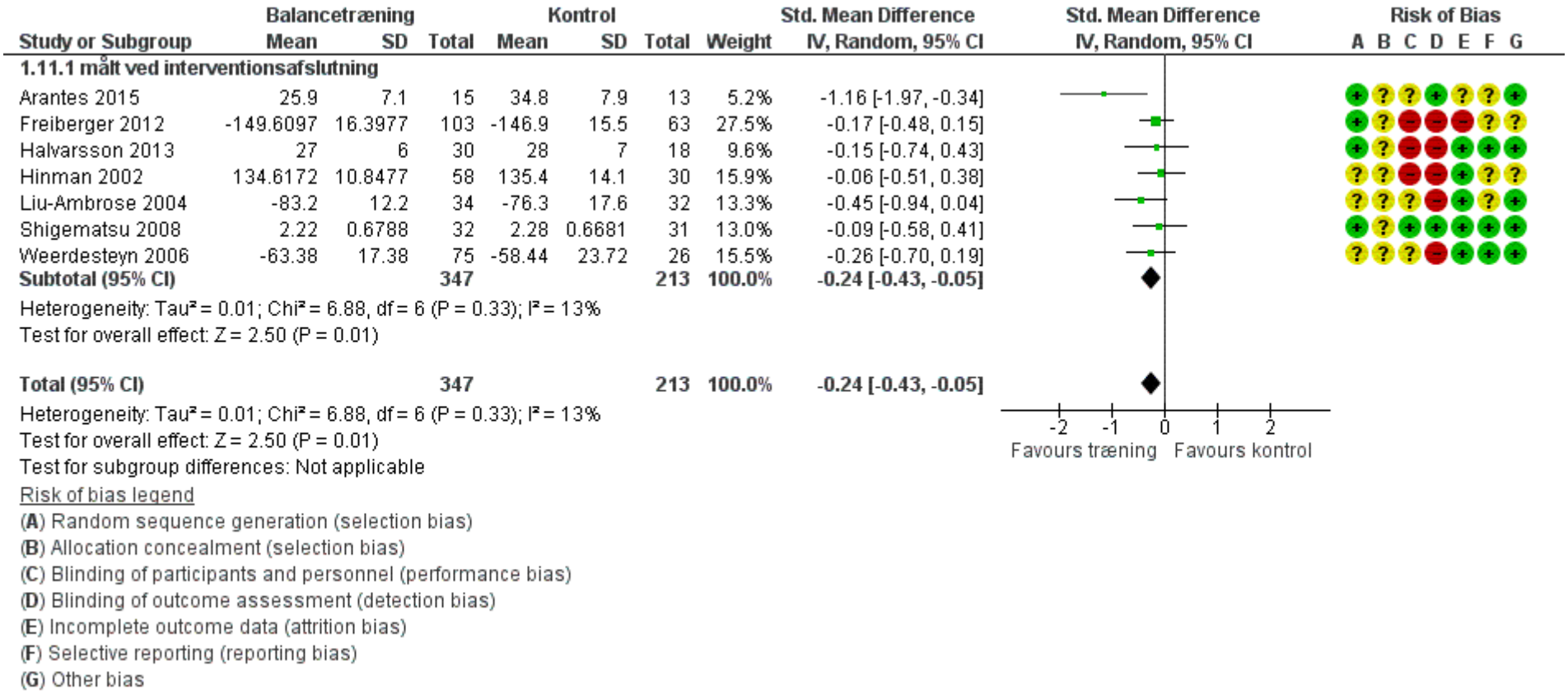
Forest plot of comparison: 1 Balancetræning vs ingen træning, outcome: 1.9 Mobilitet EoT eller efter 6 month (TUG, Ganghastighed, 50 foot walk test, step inition phase).

Figure 11 (Analysis 1.10)



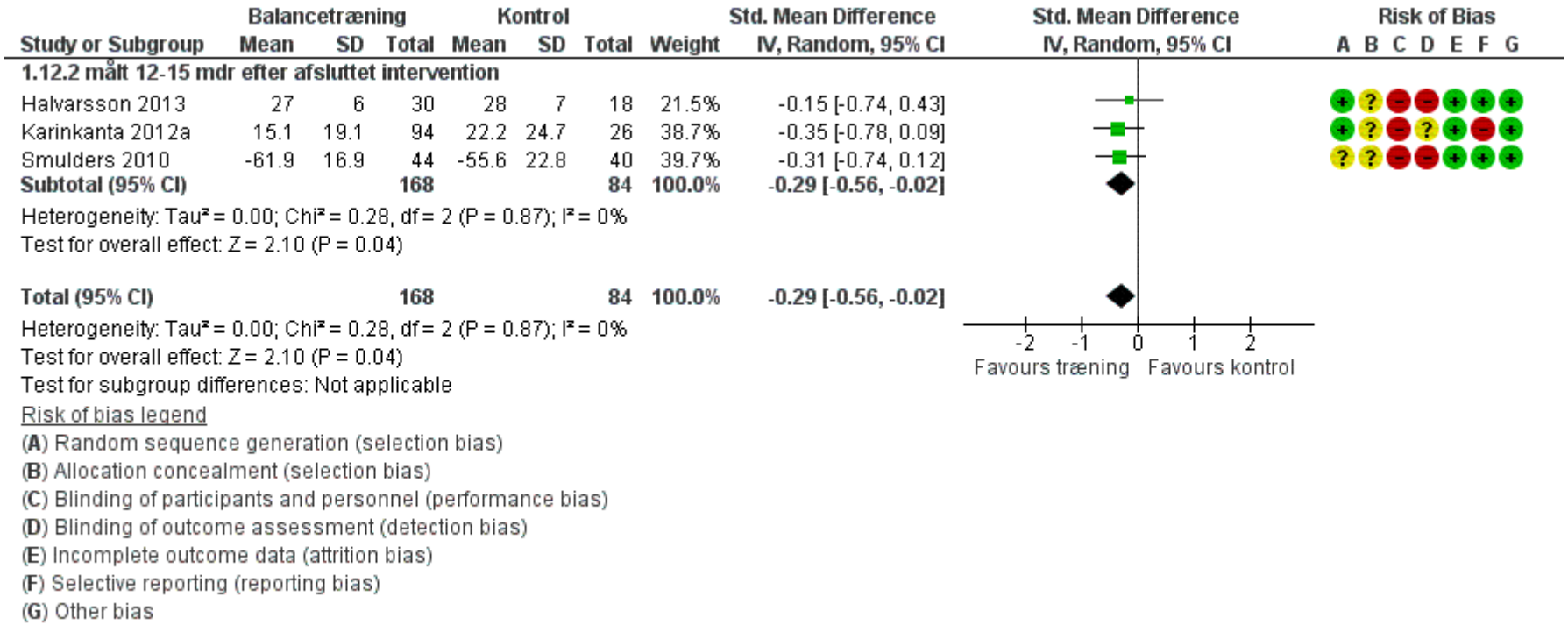
Forest plot of comparison: 1 Balancetræning vs ingen træning, outcome: 1.10 Mobilitet change (TUG).

Figure 12 (Analysis 1.11)



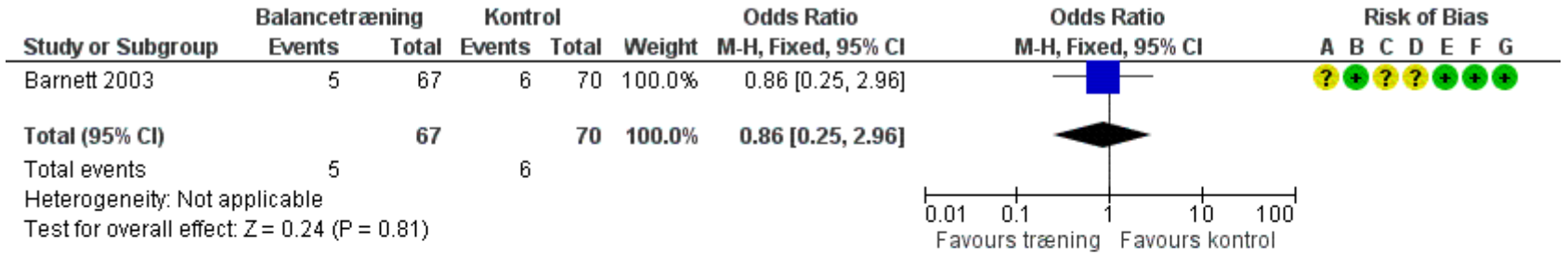
Forest plot of comparison: 1 Balancetræning vs ingen træning, outcome: 1.11 Frygt for fald (FES-I, ABC, VAS, balance confidence) EoT.

Figure 13 (Analysis 1.12)



Forest plot of comparison: 1 Balancetræning vs ingen træning, outcome: 1.12 Frygt for fald (FES-I, ABC, VAS, balance confidence) 12-15 month FU.

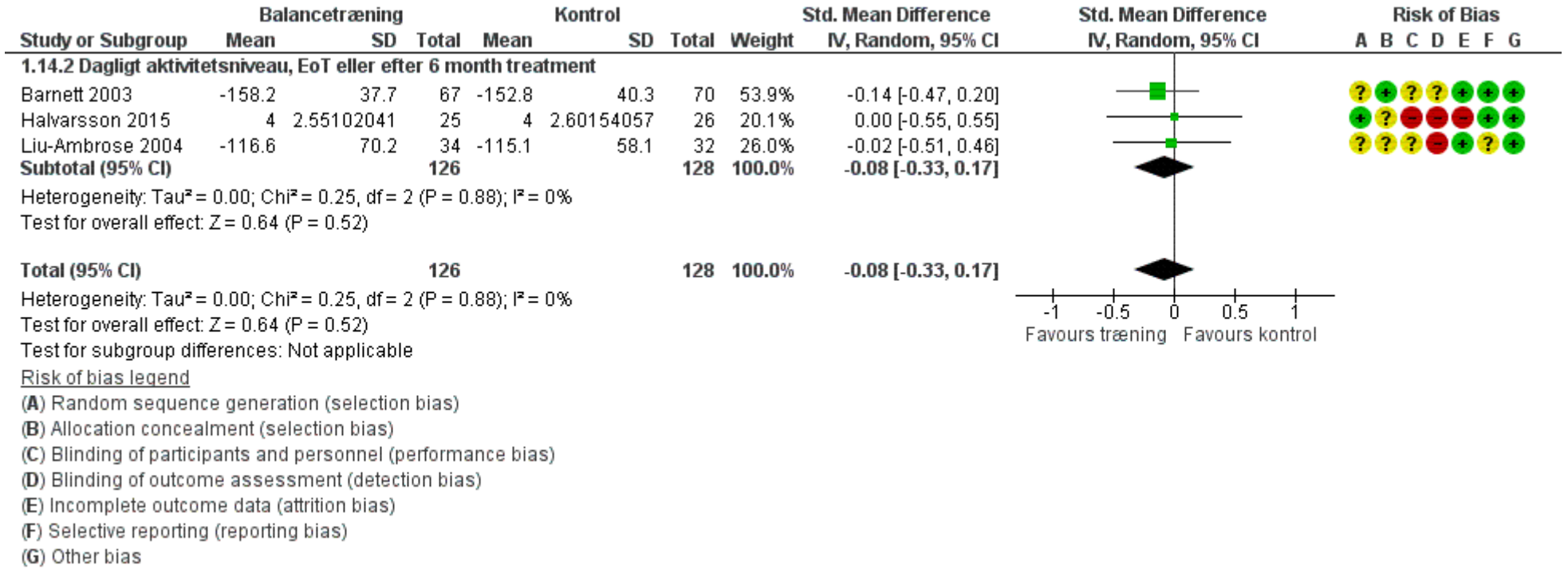
Figure 14 (Analysis 1.13)



Risk of bias legend
(**A**) Random sequence generation (selection bias)
(**B**) Allocation concealment (selection bias)
(**C**) Blinding of participants and personnel (performance bias)
(**D**) Blinding of outcome assessment (detection bias)
(**E**) Incomplete outcome data (attrition bias)
(**F**) Selective reporting (reporting bias)
(**G**) Other bias

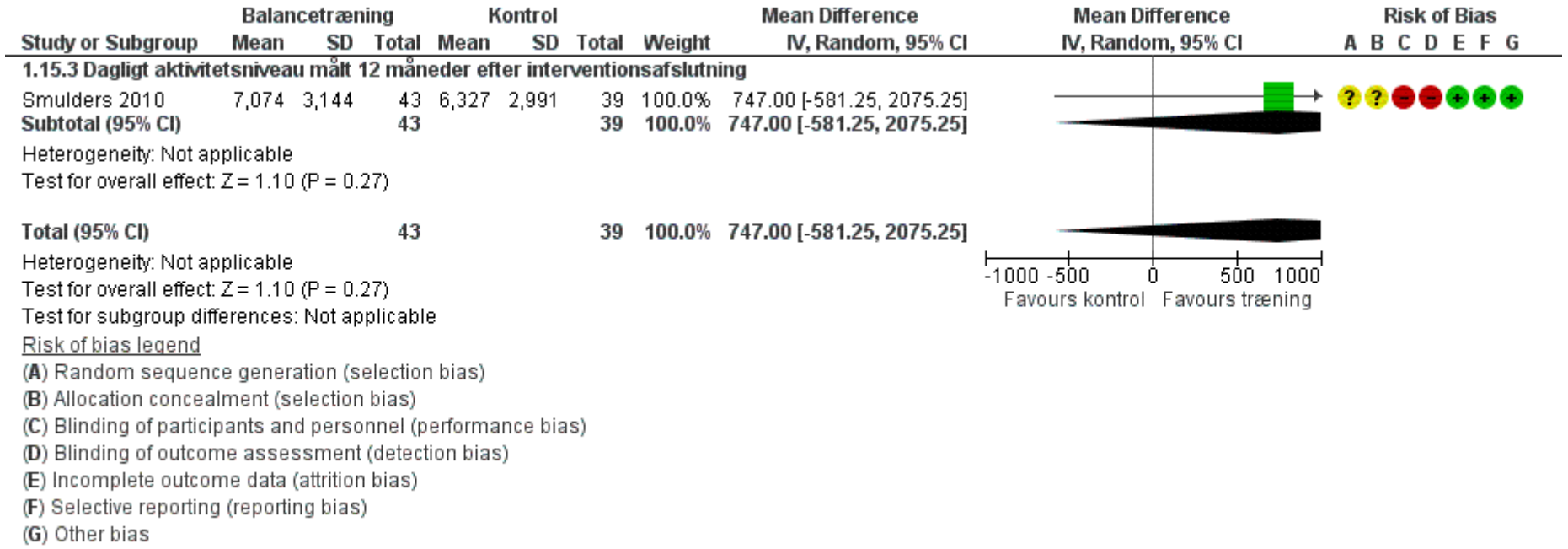
Forest plot of comparison: 1 Balancetræning vs ingen træning, outcome: 1.13 Frygt for fald_dicho, målt v. 6 mdr i en 12 mdr lang intervention.

Figure 15 (Analysis 1.14)



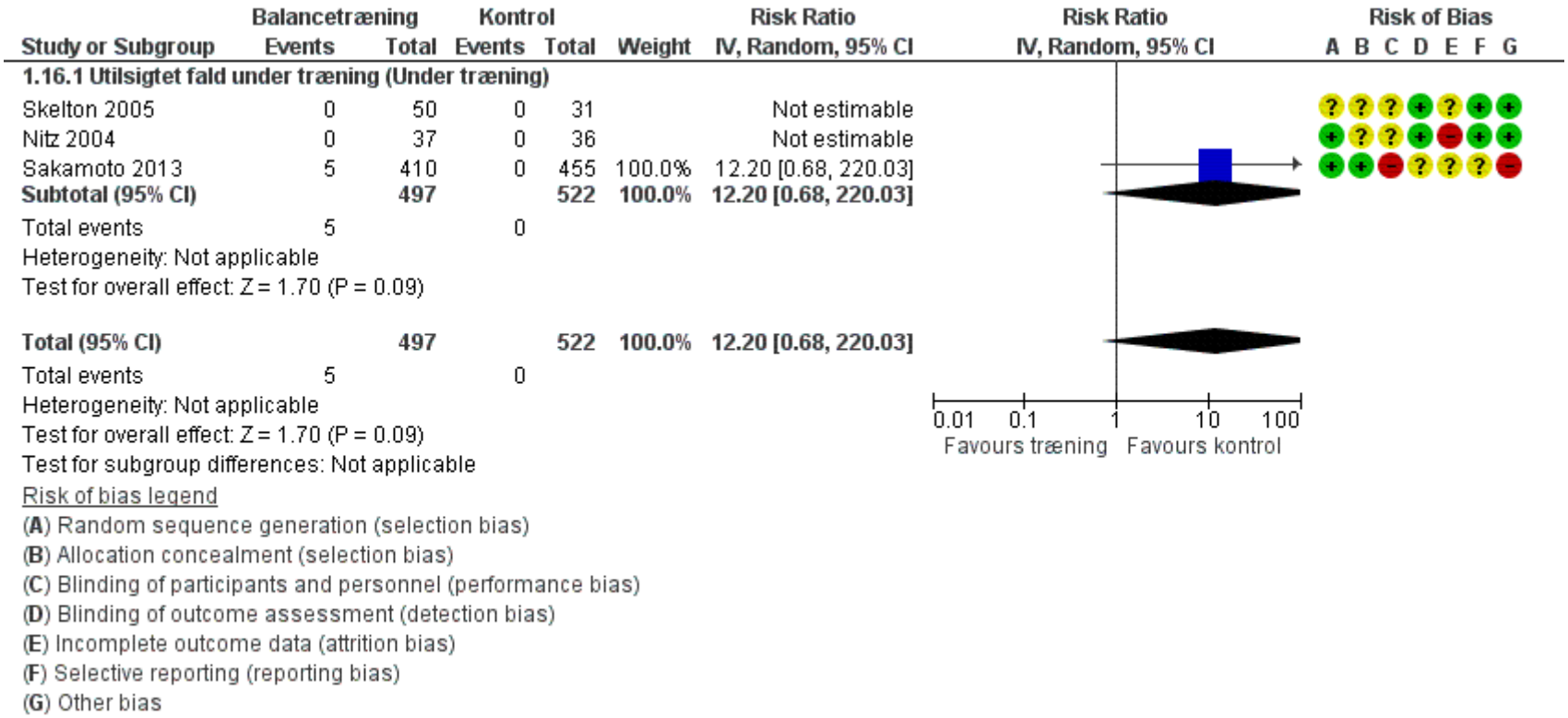
Forest plot of comparison: 1 Balancetræning vs ingen træning, outcome: 1.14 Dagligt aktivitetsniveau EoT (physical activity scale, pedometer, Frändin-Grimbu scale).

Figure 16 (Analysis 1.15)



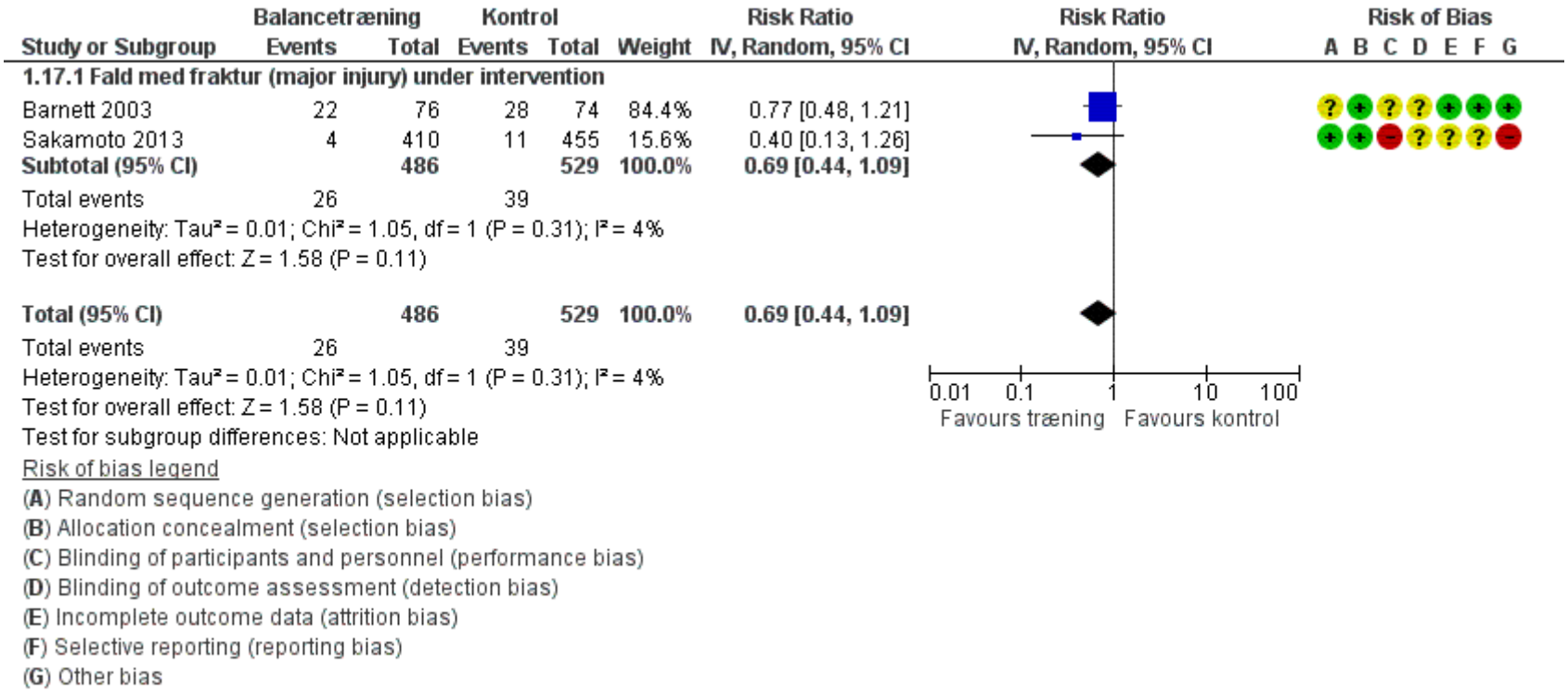
Forest plot of comparison: 1 Balancetræning vs ingen træning, outcome: 1.15 Dagligt aktivitetsniveau 12 month FU (pedometer).

Figure 17 (Analysis 1.16)



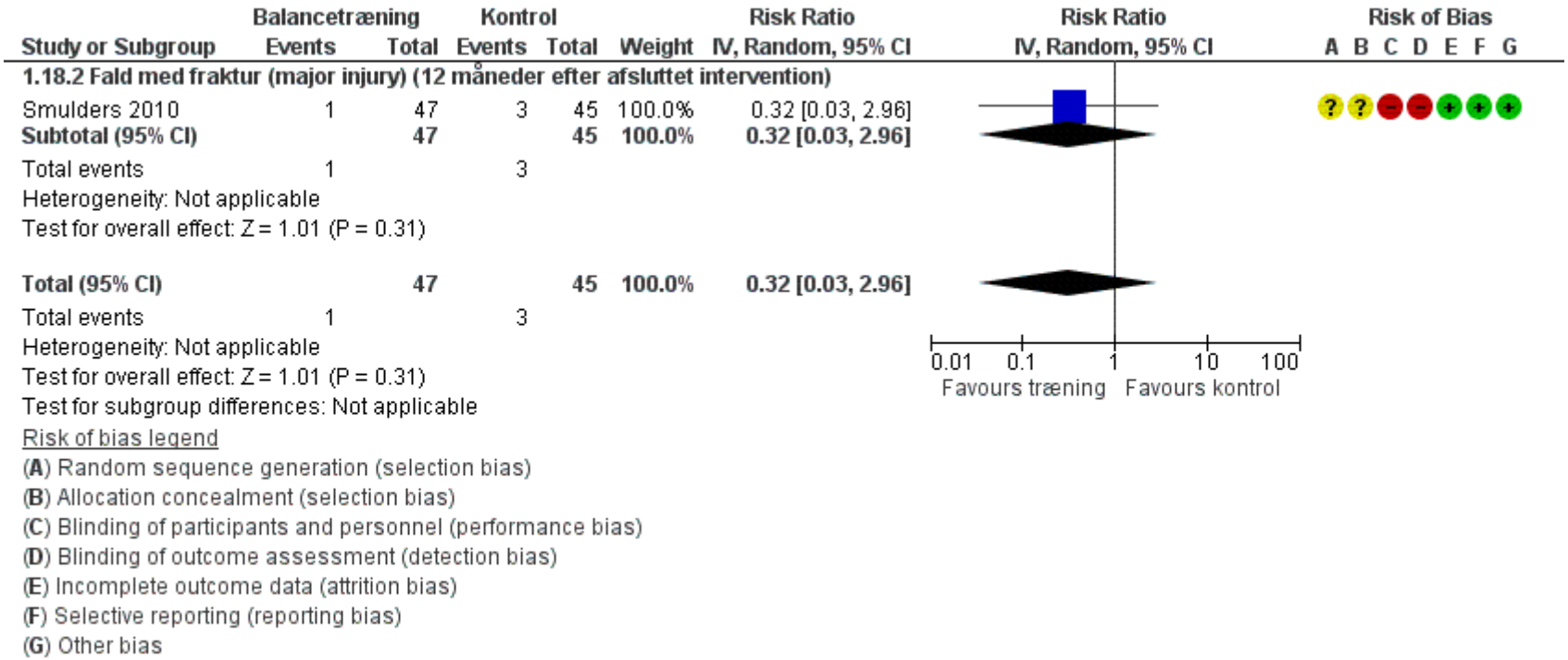
Forest plot of comparison: 1 Balancetræning vs ingen træning, outcome: 1.16 Utilsigtet fald under træning.

Figure 18 (Analysis 1.17)



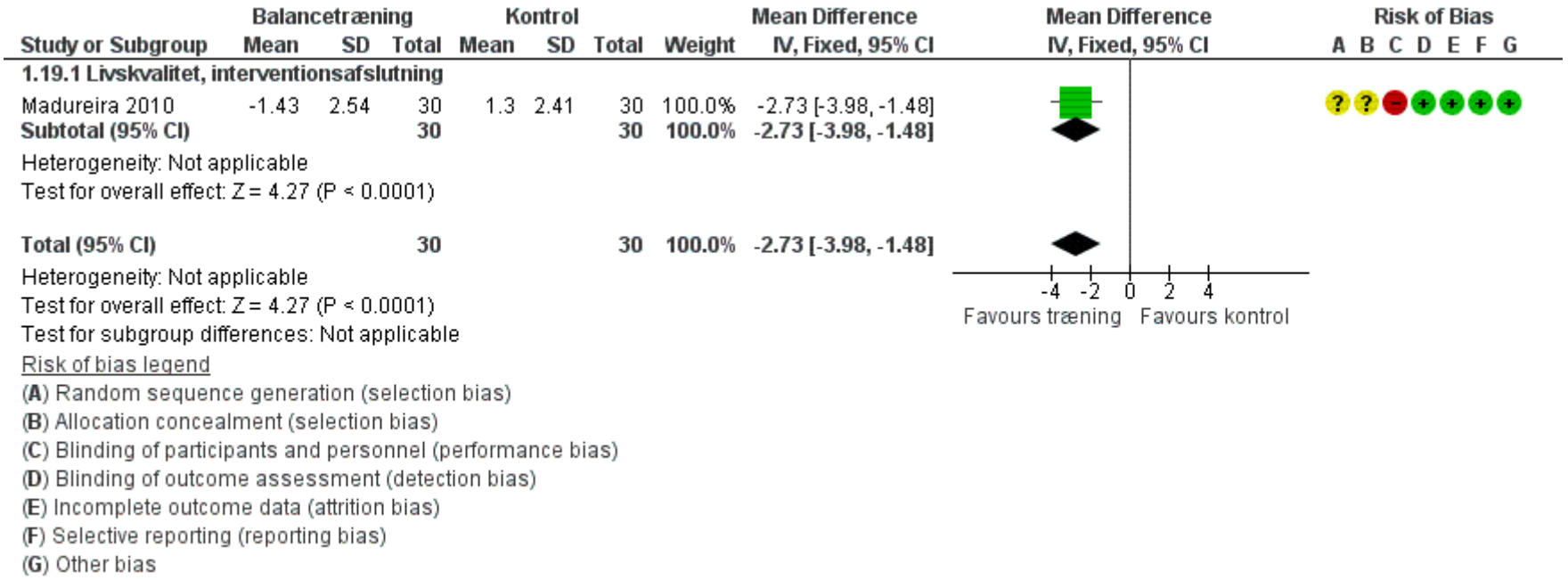
Forest plot of comparison: 1 Balancetræning vs ingen træning, outcome: 1.17 Fald med fraktur EoT.

Figure 19 (Analysis 1.18)



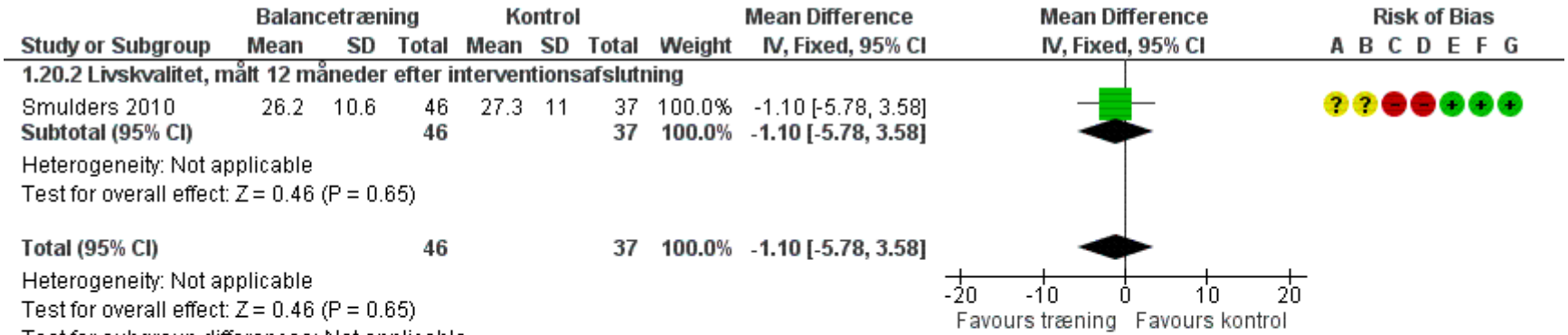
Forest plot of comparison: 1 Balancetræning vs ingen træning, outcome: 1.18 Fald med fraktur 12 month FU.

Figure 20 (Analysis 1.19)



Forest plot of comparison: 1 Balancetræning vs ingen træning, outcome: 1.19 Livskvalitet EoT OPAQ.

Figure 21 (Analysis 1.20)



Risk of bias legend
(**A**) Random sequence generation (selection bias)
(**B**) Allocation concealment (selection bias)
(**C**) Blinding of participants and personnel (performance bias)
(**D**) Blinding of outcome assessment (detection bias)
(**E**) Incomplete outcome data (attrition bias)
(**F**) Selective reporting (reporting bias)
(**G**) Other bias

Forest plot of comparison: 1 Balancetræning vs ingen træning, outcome: 1.20 Livskvalitet 12 month FU QUALEFO.