8. Risk of bias details of included studies

We judged three of included studies as having overall high risk of bias (ATTRACT; Rossi et al.; Zhang et al.) and only CAVA as having overall low risk of bias. The other three studies were judged as unclear.

Allocation (selection bias)

Three studies reported the randomisation methods and allocation concealment, and we rated it as having a low risk of bias (ATTRACT; CAVA; Rossi et al.). Zhang et al. reported the randomisation methods but did not mention the allocation concealment, and we rated it as having a low and unclear risk of bias, respectively. The other three studies did not report sufficient detail for both randomisation and allocation concealment, and we rated them as having an unclear risk of bias (Cakir et al.; Jiang et al.; Meng et al.).

Blinding (performance bias and detection bias)

Cakir et al., Jiang et al., Meng et al. and Zhang et al. did not mention the blinding of participants and personnel. Although CAVA and Rossi et al. detailed the blinding of participants, there is no detail about blinding the personnel. ATTRACT did not perform any participants or personnel blinding. There is an additional difficulty with performing the blinding of personnel in this type of intervention, so we rated this as having a high risk of bias for all of the included studies.

Cakir et al., CAVA, Jiang et al. and Meng et al. did not mention the blinding of outcome assessment, and we rated these studies as having an unclear risk of bias. We rated ATTRACT, Rossi et al. and Zhang et al. as having a low risk of bias, as they guaranteed the blinding of outcome assessment.

Incomplete outcome data (attrition bias)

ATTRACT reported data for 500 of 692 randomised participants. There was a loss of 176 of 692 (25.4%) participants at 24 months of follow-up due to withdrawn consent or loss of follow-up. Fifteen other participants died. Intervention crossover was done in 16 participants (11 participants in experimental and 5 participants in comparator group). We rated this study as high risk of bias.

There were no losses described during the follow-up of 12 months in Cakir et al. and we rated this study as low risk of bias.

CAVA described that "before the start of assigned treatment, ten patients were excluded because they did not meet inclusion criteria (ie, they were misclassified during screening; and 22 patients withdrew informed consent. The modified intention-to-treat analysis comprised 152
patients. Treatment groups were similar regarding observed baseline characteristics and anticoagulant treatment." Therefore, we rated this study as low risk of bias.

The follow-up time of each outcome assessment was not clearly defined and there is no mention of losses after randomisation in Jiang et al.. However, the study authors apparently provided results for all 66 randomised participants, and we rated this study as having an unclear risk of bias.

Meng et al. described five losses/withdrawals of follow-up in the experimental (40/45 [89%] completed) and 2 in the control group (27/29 [93%] completed). Therefore, the missing outcome data were balanced in numbers across intervention groups, with similar reasons for missing data across the groups; therefore, we rated Meng et al. as having a low risk of bias.

Rossi et al. apparently evaluated all outcomes described in their protocol and mentioned that there were no losses after randomisation. However, the trial protocol was registered only a few months before the study closed. Adverse outcomes are not presented in their protocol and are reported without a clear division by group. There is conflicting information, because Rossi 2015 define VAS > 5 as an inclusion criterion and Rossi 2018b define VAS > 3 as an inclusion criterion for the same trial. The trial authors did not clarify when asked, so we rated this as having a high risk of bias.

Missing outcome data balanced in numbers across intervention groups, with similar reasons for missing data across groups, but with a greater number of losses (more than 20% in each group) in Zhang et al.. The trial authors reported that, for acute DVT (until 14 days), 63 of the 81 subjects (78%) in the experimental and 56 of the 83 subjects (68%) in the control group completed the study (Zhang et al.). Therefore, we rated this study as having a high risk of bias.

Selective reporting (reporting bias)

All prespecified outcomes were reported in ATTRACT and CAVA. The protocol violations were reported and treated in an ITT analysis. Therefore, we rated these studies as having a low risk of bias in this domain.

Although Jiang et al. reported the total number of haemorrhages and recurrence of DVT, they did not provide the number of events in each group separately. The protocol used by Jiang et al. is not available, and there is no available online register (e.g. ClinicalTrials.gov). We rated this as an unclear risk of bias.

The study protocol of three included trials are not available and there are no available online registers (e.g. ClinicalTrials.gov) (Cakir et al.; Meng et al.; Zhang et al.). However, apparently all of the pre-specified (in study methods report) outcomes that are of interest in the review have been reported as foreseen, so we rated this as an unclear risk of bias (Cakir et al.; Meng et al.; Zhang et al.).

In one included study, the outcomes are reported only as 'change from baseline'; however, after requesting information, the real mean and SD values for continuous variables were kindly provided (Rossi et al.). Rossi et al. has conflicting information because they include the same 51 total randomised limbs and 22 limbs with DVT in personal communication data. However,
the trial authors reported only 16 limbs with DVT in their most recent article without a clear reason (Rossi et al.). Therefore, we rated this as having a high risk of bias.

**Other potential sources of bias**

We judged that Cakir et al. and CAVA had no other potential source of bias and rated these studies as low risk of bias in this domain.

All other included studies were rated as having a high risk of bias for different reasons in this domain, as detailed below.

ATTRACT have a mixed population in the experimental group: 184 out of 297 (62%) participants received venous angioplasty, 82 out of 297 (28%) received stenting and 183 out of 297 (62%) received at least one form of thrombectomy.

There is an imbalance in sample size of the apparently randomised groups in Jiang et al.: 1) the control group (n = 27) has less than 70% of the experimental (n = 39) participants; and 2) 89% of the control group participants and only 64% of the experimental participants have their left limb affected by DVT. Meng et al. also has an imbalance in sample size of the apparently randomised groups (control group, n = 29, has less than 65% of the experimental, n = 45, participants). Although Meng et al. refers to elastic stocking use in about 20% of the experimental and 10% of the control group, there was no mention of regular compression stocking therapy after DVT. Although Jiang et al. stated that they are reporting the mid-term results of Meng et al., we considered these data as two different studies because all of the participants in Jiang et al. are different, with differences in intervention performance, from those in Meng et al..

Although Rossi et al. provided the DVT participant data, they did not provide clarification when questioned about the inconsistencies. The trial protocol has a more comprehensive list of exclusion criteria than the published article (Rossi et al.).

Zhang et al. reported 45 losses to follow-up in the acute DVT subgroup, which represents more than 27% of all initial participants. There was no mention of previous stenosis before the moment of randomisation. The study left cases of untreated stenosis in the control group and participants without stenosis treated in the intervention group. Zhang et al. tried to streamline this, performing stenting for residual stenosis > 30%, but there is no plausible reason to place a stent with a residual stenosis of > 30%. The significant haemodynamic effect is observed in stenosis of 50% or more. Zhang et al. did not mention how many patients had a significant stenosis in both groups for the subacute subgroup. After CDT, patients with May–Thurner syndrome in the two groups underwent angioplasty and stenting (47.9% of patients in the control group and 46.2% of patients in intervention group). In effect, because of the May–Thurner syndrome, there was an almost 50% crossover from the control arm to the treatment arm of this study, which forms a potential risk of bias (Zhang et al.).