

## Appendix 1

Table S1 The search strategy

Search	PubMed
#1	Erectile Dysfunction [MeSH]
#2	(((((Erectile Dysfunction) OR (Dysfunction, Erectile)) OR (Male Impotence)) OR (Impotence, Male)) OR (Male Sexual Impotence)) OR (Impotence, Male Sexual)) OR (Sexual Impotence, Male)) OR (Impotence)
#3	#1 OR #2
#4	Platelet-Rich Plasma [MeSH]
#5	((Platelet Rich Plasma) OR (Plasma, Platelet-Rich)) OR (Platelet Rich Plasma)
#6	#4 OR #5
#7	#3 AND #6

## Appendix 2

Table S2 Characteristics of PRP studies included in the study

Study	Methodology for injection		
	PRP machine	Injection site	Injection volume
Francomano <i>et al.</i> , 2023	RegenLab <sup>®</sup> , en Budron b2, 1052 le Mont-sur-lausanne, Swiss	Corpus cavernosum: two different lateral sites, 1 cm distal to mid-penile shaft	5 mL PRP
Taş <i>et al.</i> , 2021	NA	Corpus cavernosum: vary by 1 cm in the mid-penile region	3 mL PRP
Schirmann <i>et al.</i> , 2022	NA	Corpus cavernosum	6 mL PRP
Zaghloul <i>et al.</i> , 2021	NA	Corpus cavernosum	0.5 mL PRP
Wong <i>et al.</i> , 2021	NA	Corpus cavernosum	1–2 mL PRP
Raia <i>et al.</i> , 2019	NA	Corpus cavernosum	1 mL PRP
Zaghloul <i>et al.</i> , 2022	RegenKit Platelets (RegenLab <sup>®</sup> )	Corpus cavernosum: four injection points, two on each side of the penis (one in the proximal third and one in the middle third)	9 mL PRP
Poulios <i>et al.</i> , 2021	Magellan Autologous Platelet Separator; Arteriocyte Medical Systems, Hopkinton, MA, USA	Corpus cavernosum	5 mL PRP or saline
Shaher <i>et al.</i> , 2023	NA	Corpus cavernosa at three different sites: 1 cm proximal to the corona, 1 cm distal to the root of the penis, and at the mid-penile shaft	3 mL PRP or saline
Masterson <i>et al.</i> , 2023	Arthrex Angel PRP System	Corpus cavernosum	5 mL PRP or saline

PRP, platelet-rich plasma; NA, not applicable.

### Appendix 3

**Table S3** MINORS scale for included non-randomized studies

Study	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	Total
Single-arm													
Francomano <i>et al.</i> , 2023	2	2	2	2	0	1	2	2	–	–	–	–	13
Taş <i>et al.</i> , 2021	2	2	2	2	0	2	2	2	–	–	–	–	14
Schirmann <i>et al.</i> , 2022	2	2	2	2	1	2	2	2	–	–	–	–	15
Zaghloul <i>et al.</i> , 2021	2	2	2	2	0	2	2	2	–	–	–	–	14
Wong <i>et al.</i> , 2021	2	2	2	2	1	2	2	2	–	–	–	–	15
Raaia <i>et al.</i> , 2019	2	2	1	2	0	2	2	2	–	–	–	–	13
Double-arm													
Zaghloul <i>et al.</i> , 2022	2	2	2	2	1	2	2	2	2	2	1	2	22

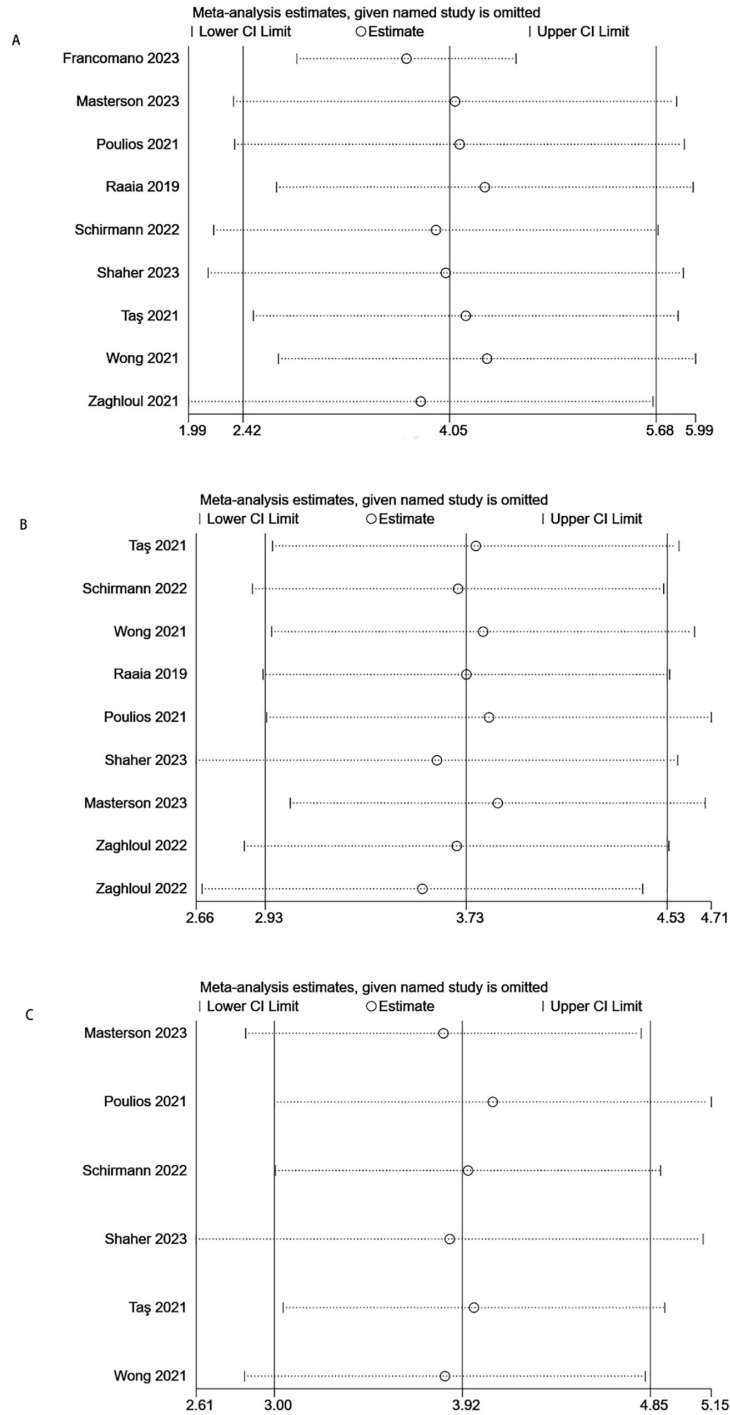
Numbers I–XII in heading signified: I: a clearly stated aim; II: inclusion of consecutive patients; III: prospective collection of data; IV: endpoints appropriate to the aim of the study; V: unbiased assessment of the study endpoint; VI: follow-up period appropriate to the aim of the study; VII: loss of follow up less than 5%; VIII: prospective calculation of the study size; IX: an adequate control group; X: contemporary groups; XI: baseline equivalence of groups; XII: adequate statistical analyses. MINORS, Methodological Index for Non-Randomized Studies.

**Table S4** Modified Jadad scale for included RCT studies

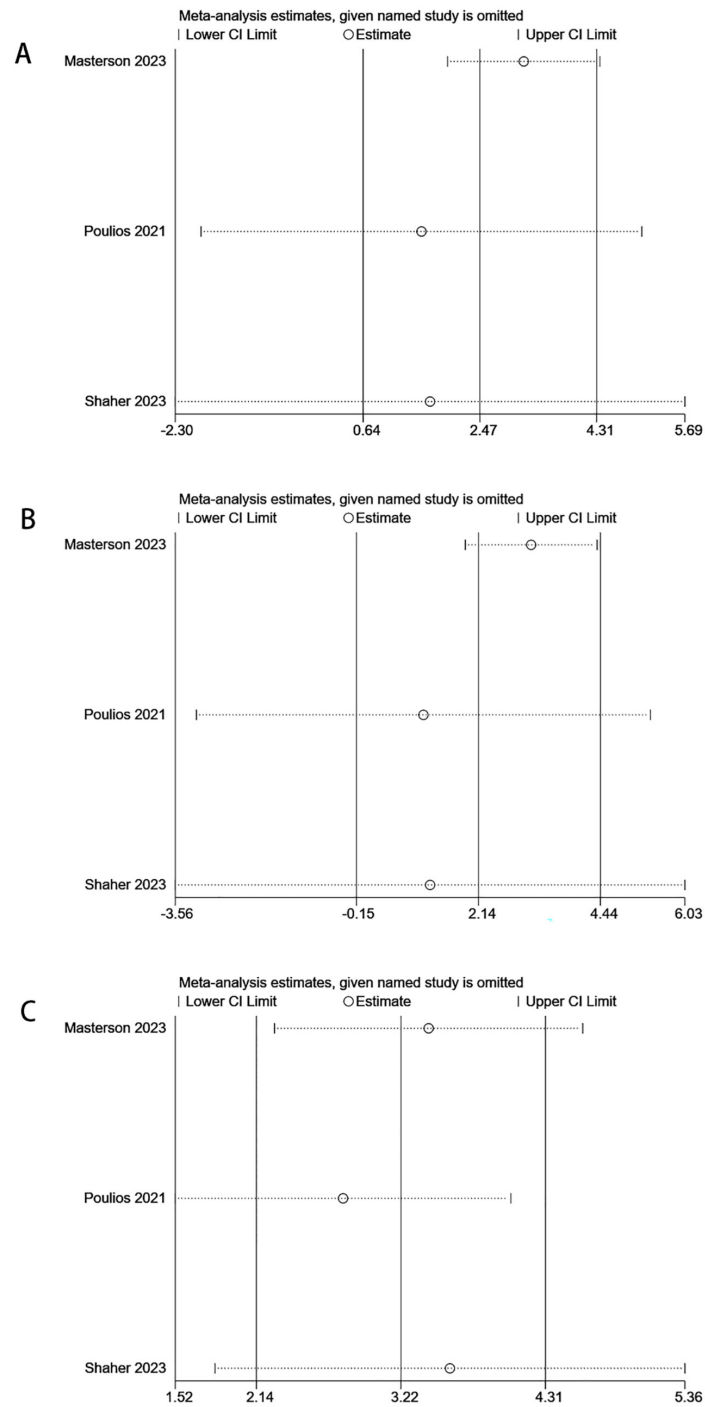
Study	Randomization	Concealment of allocation	Double blinding	Withdrawals and dropouts	Total
Poulios <i>et al.</i> , 2021	2	2	2	1	7
Shaher <i>et al.</i> , 2023	1	2	2	1	6
Masterson <i>et al.</i> , 2023	2	1	2	1	6

RCT, randomized controlled trial.

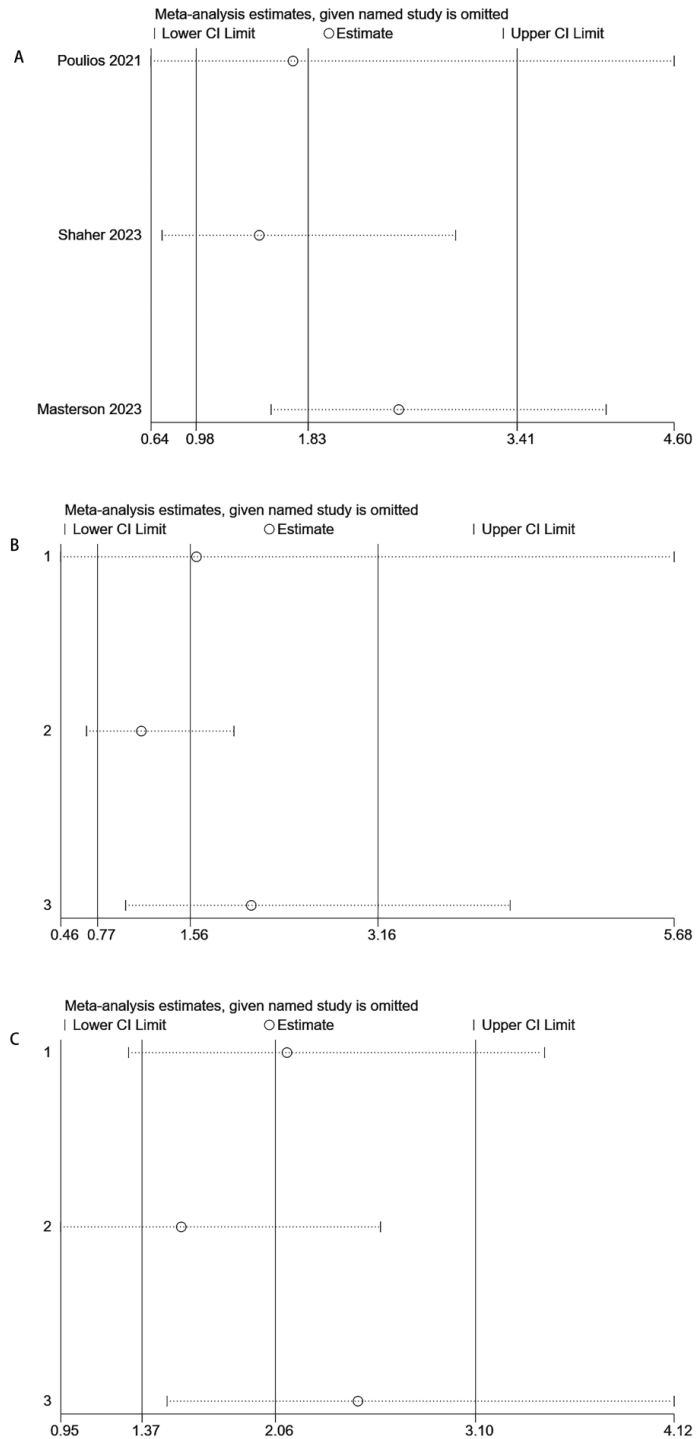
## Appendix 4



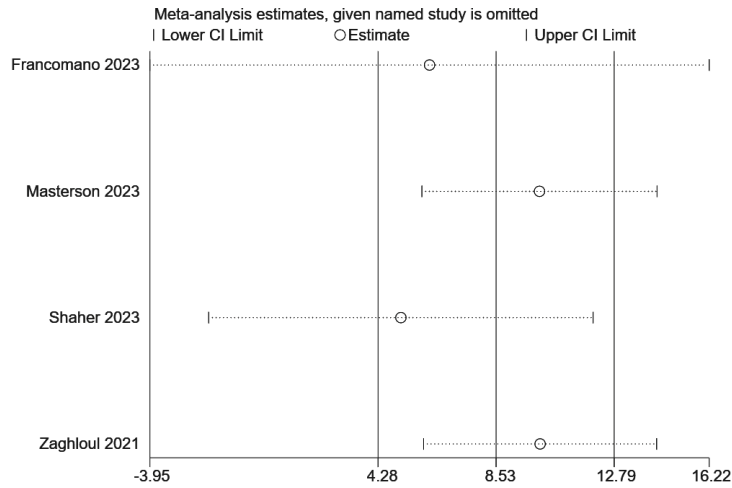
**Figure S1** Sensitivity analysis of IIEF-EF in single-arm studies. (A) IIEF-EF score after 1 month of PRP treatment; (B) IIEF-EF score after 3 months of PRP treatment; (C) IIEF-EF score after 6 months of PRP treatment. CI, confidence interval; IIEF-EF, International Index of Erectile Function-Erectile Function; PRP, platelet-rich plasma.



**Figure S2** Sensitivity analysis of IIEF-EF in two-arm studies. (A) IIEF-EF score after 1 month of PRP treatment; (B) IIEF-EF score after 3 months of PRP treatment; (C) IIEF-EF score after 6 months of PRP treatment. CI, confidence interval; IIEF-EF, International Index of Erectile Function-Erectile Function; PRP, platelet-rich plasma.

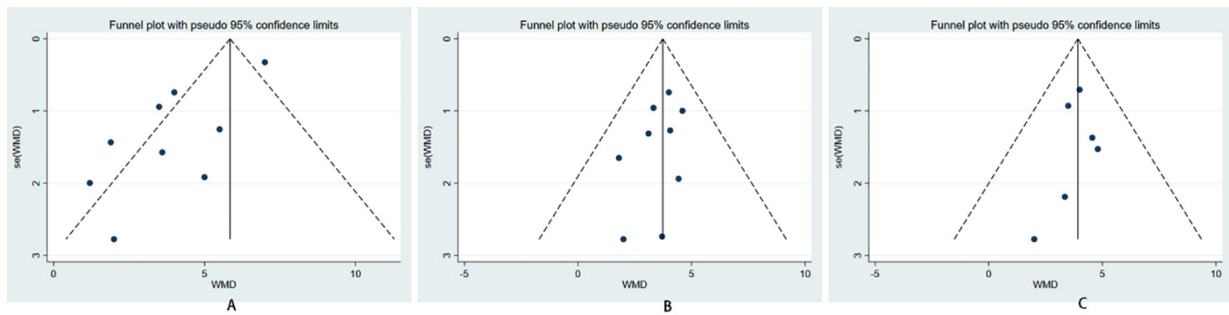


**Figure S3** Sensitivity analysis of MCID in double-arm studies. (A) MCID after 1 month of PRP treatment; (B) MCID score after 3 months of PRP treatment; (C) MCID score after 6 months of PRP treatment. CI, confidence interval; MCID, minimal clinically important difference; PRP, platelet-rich plasma.

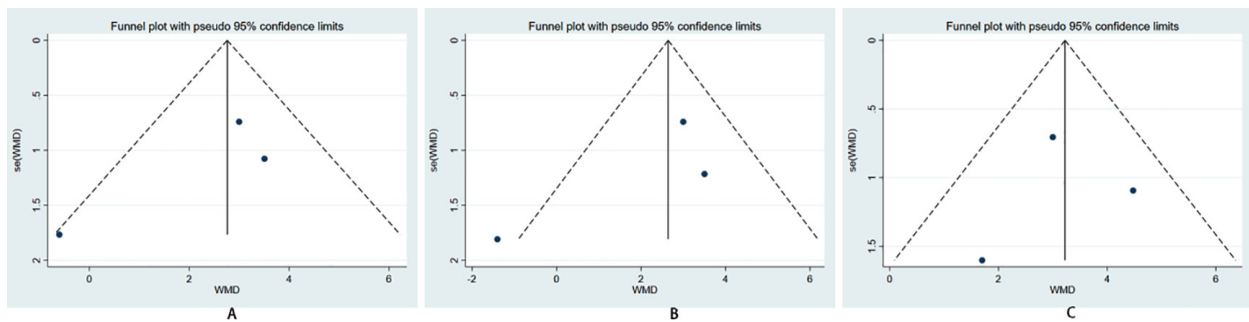


**Figure S4** Sensitivity analysis of PSV in single-arm studies. PSV, peak systolic velocity.

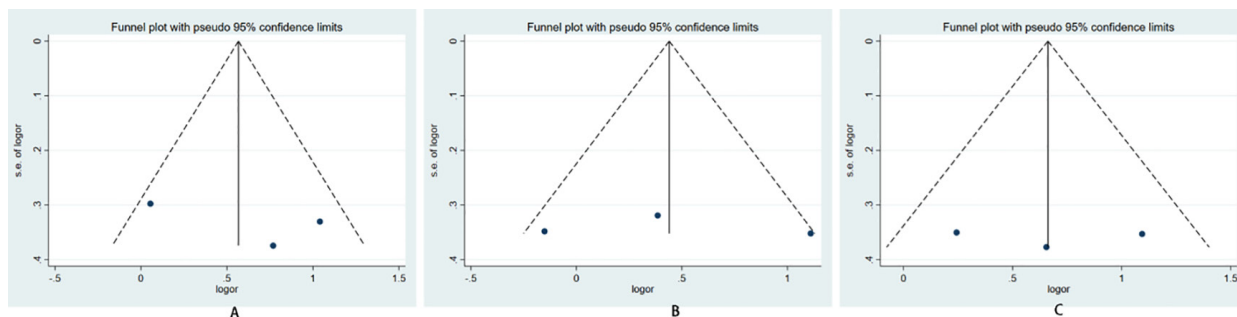
## Appendix 5



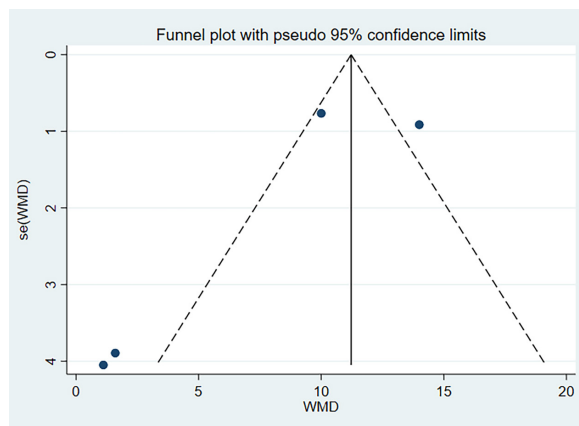
**Figure S5** The funnel plot of IIEF-EF in single-arm studies. (A) IIEF-EF score after 1 month of PRP treatment; (B) IIEF-EF score after 3 months of PRP treatment; (C) IIEF-EF score after 6 months of PRP treatment. WMD, weighted mean difference; se, standard error; IIEF-EF, International Index of Erectile Function-Erectile Function; PRP, platelet-rich plasma.



**Figure S6** The funnel plot of IIEF-EF in double-arm studies. (A) IIEF-EF score after 1 month of PRP treatment; (B) IIEF-EF score after 3 months of PRP treatment; (C) IIEF-EF score after 6 months of PRP treatment. WMD, weighted mean difference; se, standard error; IIEF-EF, International Index of Erectile Function-Erectile Function; PRP, platelet-rich plasma.



**Figure S7** The funnel plot of MCID in double-arm studies. (A) MCID after 1 month of PRP treatment; (B) MCID score after 3 months of PRP treatment; (C) MCID score after 6 months of PRP treatment. MCID, minimal clinically important difference; PRP, platelet-rich plasma.



**Figure S8** The funnel plot of PSV in single-arm studies. WMD, weighted mean difference; se, standard error; PSV, peak systolic velocity.

**Table S5** P value for Egger's test for publication bias in single-arm studies

Outcomes	P for Egger's test
IIEF-EF post-treatment (months)	
1	0.006
3	0.267
6	0.661
PSV (cm/s)	0.351

IIEF-EF, International Index of Erectile Function-Erectile Function; PSV, peak systolic velocity

**Table S6** P value for Egger's test for publication bias in double-arm studies

Outcomes	P for Egger's test
IIEF-EF (months)	
1	0.428
3	0.475
6	0.903
MCID (months)	
1	0.521
3	0.881
6	0.948

IIEF-EF, International Index of Erectile Function-Erectile Function; MCID, minimal clinically important difference.