Supplementary Table S1. Platelet-rich fibrin preparation protocols and graft characteristics of the 32 included studies.

Study	Device	RCF (g)	Speed (rpm)	Time	Tube / rotor	PRF form used	Graft
Gassling 2013	NR	400	NR	12 min	Vacuette, no anticoagulant / NR	Membrane	Autologous bone + DBBM
Alhussaini 2021	NR	NR	2700 (L-PRF); 1500 (A-PRF)	12; 14 min	10 mL plain glass / NR	Clot, mixed	DBBM 0.5-1 mm
Nizam 2018	Nuve NF200	400	NR	12 min	NR	Clot + membrane	DBBM 0.25-1 mm
Dereci 2023	NR	NR	2700	12 min	10 mL dry, no anticoagulant / NR	Fragmented clot	FDBA (Maxxeus)
Seif 2024	NR	NR	1500	14 min	NR	A-PRF clot	Xenograft
Powell 2022	Versah	NR	2700	12 min	NR / NR	Clot + membrane	Allograft / xenograft
Arakji 2023	NR	NR	2700	15 min	2 x 9 mL plastic, no additive / NR	Liquid (MPM)	Xenograft
Mecit 2026	NR	NR	700	3 min	Plastic, no anticoagulant / NR	Liquid i-PRF (sticky bone)	Particulate allograft
Gadipelly 2019	NR	NR	3000	10 min	6 mL glass, no anticoagulant / NR	Clot	beta-TCP
Reis 2025	Bio-PRF (Germany)	700 (solid); 200 (liquid)	NR	8 min each	NR / horizontal	Solid membrane + liquid	DBBM (Bio-Oss Large)
Choukroun 2006	Process, Nice	~280	2500	10 min	Dried monovettes / NR	Clot	FDBA 200-800 um
Malzoni 2023	Kasvi K14-0815	400	NR	NR	4 x 10 mL glass BD / NR	Membrane	DBBM
Zhang 2012	Labofuge 300	~300	NR	10 min	BD vacutainer / NR	Clot + membrane	DBBM (Bio-Oss)
Khalfalla 2015	NR	~400	2700	12 min	10 mL dry / NR	Clot + membrane	BCP
Elsholkamy 2018	Table-top	NR	3000	10 min	10 mL dry neutral glass / NR	Clot	DBBM (Bio-Oss)
Bolukbasi 2015	Process, Nice	400	NR	12 min	Empty tubes / NR	Clot, 1:2 with graft	Bovine 0.25-1 mm
Comert Kilic 2017	NR	NR	3000	10 min	2 x 5 mL, no anticoagulant / NR	Clot	beta-TCP

Soliman 2021	NR	NR	NR	NR	NR	NR	Synthetic HA (NanoBone)
Ibrahim 2024	80-1 centrifuge	878	NR	12 min	10 mL grade-IV titanium / NR	T-PRF clot + membrane	Xenograft (control arm)
Abdelmoneim 2026	NR	NR	3300	2 min	2 x 10 mL vacutainer / NR	Flowable (sticky bone)	Allogenic + xenogenic
Abdelmoneim 2020	NR	NR	3500 (solid); 3300 (flowable)	15 min; 2 min	Plain tubes / NR	Flowable PRF	Xenograft 0.25-1 mm
Arumugam 2021	REMI Laboratories	NR	2700-3000	12 min	Vacutainer, no anticoagulant / NR	Clot + membrane	Alloplast (TCP putty) / autogenous
Barbu 2018	NR (Choukroun protocol cited)	NR	NR	NR	NR	Fragmented clot + membrane	DBBM (Bio-Oss)
Dragonas 2023	NR	NR	NR	NR	NR	A-PRF	DBBM
Francisco 2024	NR (Boca Raton, FL)	NR	2700	3 min	NR	Liquid fibrin	Synthetic HA (NanoBone)
Trimmel 2021	Duo Quattro (Process for PRF)	NR	1300	14 min	NR / NR	A-PRF clot	SACBA
Arafat 2017	Table-top	NR	3000	10 min	10 mL glass-coated plastic / NR	Clot + membrane	DBBM (Bio-Oss)
Kumar 2018	NR	NR	NR	NR	NR	Clot	DBBM (Bio-Oss)
Xie Hui 2019	NR	NR	NR	NR	NR	Liquid i-PRF	DBBM (Bio-Oss)
Tatullo 2012	NR	NR	3000	10 min	NR	Clot	DBBM (Bio-Oss)
Dereci 2022	NR	NR	2700	10 min	Dry glass, no anticoagulant / NR	Fragmented clot	FDBA (Maxxeus)
Pichotano 2019	Kasvi K14-0815	300	3000	10 min	BD vacutainer / NR	Membrane	DBBM 0.25-1 mm

NR: not reported. Across the 32 included studies, relative centrifugal force was reported in 10, rotational speed in 20, spin duration in 26, tube composition in 10, and rotor geometry in only 1 (Reis 2025, horizontal centrifugation); 5 studies reported no centrifugation parameter at all. Where a device is named but no parameter is given, the cell is marked NR rather than inferred from the manufacturer's default protocol. This incompleteness of reporting, in addition to the diversity of the protocols themselves, precludes any attempt to identify an optimal preparation protocol and is discussed as a limitation.