

MECHANICAL THROMBECTOMY/THROMBOLYSIS

Company Name	Product Name	Sheath Size (F)	Guidewire (inch)	Working Length (cm)	Mode of Operation	US FDA Indicated Use
Argon Medical Devices, Inc. (designed by Rex Medical, L.P.)	Cleaner	6	N/A	65, 135	Battery-operated, hand-held drive unit initiates the mechanical rotation of an atraumatic, wall-contact, sinusoidal vortex wire for effective thrombus maceration	Indicated for use in the mechanical declotting of synthetic dialysis grafts and native vessel fistulae
Arrow International, a division of Teleflex	Arrow-Trerotola PTD	5	None	65	Battery-operated hand-held unit rotates unique 9-mm fragmentation basket at 300 rpm, macerating clot to 1 mm; basket can be deployed/withdrawn within catheter; deployed basket can be used to pull arterial plug	Removes thrombus from both dialysis native AV fistulae and synthetic grafts walls; indicated for use in pulling the arterial plug
	Arrow-Trerotola OTW PTD	7	0.025	65, 120		
Concentric Medical, Inc. (acquired by Stryker Neurovascular)	Merci Retrieval System: X6 (3–1.5-mm diameter), L4 (2-mm diameter), L5 (2.5-mm diameter), L6 (2.7-mm diameter), V 2.0 Soft (2-mm diameter), V 2.0 Firm (2-mm diameter), V 2.5 Soft (2.5-mm diameter), V 2.5 Firm (2.5-mm diameter), V 3.0 Soft (3-mm diameter), V 3.0 Firm (3-mm diameter)	Balloon Guide Catheter (8 and 9 F)	0.014	Balloon Guide 8 and 9 F (80 and 95); MC14X, MC18L, and MC18 Plus (150); Retriever (180)	Mechanical thrombectomy with aspiration and proximal flow arrest with Balloon Guiding Catheter	Restoring blood flow in the neurovasculature by removing thrombus in patients experiencing ischemic stroke; patients who are ineligible for intravenous tissue plasminogen activator (IV tPA) or who fail IV tPA therapy are candidates for treatment; retrieval of foreign bodies misplaced during interventional radiological procedures in the neuro, peripheral, and coronary vasculature

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Covidien	Trellis-8 Peripheral Infusion System	8	0.035	80, 120 catheter length; treatment areas 15, 30	Isolated thrombolysis through introduction of lytic between two occlusion balloons; oscillation of dispersion wire increases clot surface area to enhance the speed of lysis; aspiration window facilitates removal of remaining thrombolytic and lysed debris	Controlled and selective infusion of physician-specified fluids, including thrombolytics, into the peripheral vasculature
	Trellis-6 Peripheral Infusion System	6		80, 120 catheter length; treatment areas 10, 30	Isolated thrombolysis through introduction of lytic between two occlusion balloons; oscillation of dispersion wire increases clot surface area to enhance the speed of lysis; aspiration window facilitates removal of remaining thrombolytic and lysed debris	
Ekos Corporation	EkoSonic Endovascular System With Rapid Pulse Modulation	5.4	0.035	106, 135 catheter length; treatment areas 6, 12, 18, 24, 30, 40, 50	Ultrasound-accelerated thrombolysis simultaneously delivers ultrasound and thrombolytics to target clot; high-frequency, low-power ultrasonic energy loosens and thins the clot's fibrin structure, allowing	Intended for the controlled and selective infusion of physician-specified fluids, including thrombolytics, into the peripheral vasculature; also intended for the infusion of solutions into the pulmonary arteries
	EkoSonic SV Endovascular System	3	0.014	150	thrombolytic agents to access more receptor sites; at the same time, ultrasonic pressure forces the drug deep into the clot and keeps it there so it does not escape downstream	

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Company Name	Product Name	Sheath Size (F)	Guidewire (inch)	Working Length (cm)	Mode of Operation	US FDA Indicated Use
Medrad Interventional	AngioJet Ultra Solent Omni	6	0.035	140	High-velocity water jets enclosed in catheter utilize the Bernoulli principle for capture, microfragmentation, and removal	Breaking apart and removing thrombus from upper and lower extremity peripheral arteries, upper extremity peripheral veins, iliofemoral and lower extremity peripheral veins ≥ 3 mm in diameter
	AngioJet Ultra XMI OTW	4	0.014	135		Breaking apart and removing thrombus from infrainguinal peripheral arteries ≥ 2 mm in diameter
	AngioJet Ultra Spiroflex Rapid Exchange					
	AngioJet Ultra SpiroflexVG Rapid Exchange	5	0.014	140		Breaking apart and removing thrombus from infrainguinal peripheral arteries ≥ 3 mm in diameter
	AngioJet Ultra XVG OTW					
	AngioJet Ultra Xpeedior 120 OTW	6	0.035	120		Breaking apart and removing thrombus from upper and lower extremity peripheral arteries, upper extremity peripheral veins, iliofemoral and lower extremity peripheral veins ≥ 3 mm in diameter
	AngioJet Ultra AVX OTW			50		Breaking apart and removing thrombus from AV access fistulas and synthetic conduits
	AngioJet Ultra Solent Proxi			90		Breaking apart and removing thrombus from upper and lower extremity peripheral arteries, upper extremity peripheral veins, iliofemoral and lower extremity peripheral veins ≥ 3 mm in diameter
AngioJet Ultra DVX OTW						
Penumbra, Inc.	Penumbra System Reperfusion Catheter and Separator 054, 041, 032, 026	6 (054 requires 8-F Short Sheath or 6-F Long Sheath)	0.014–0.016	Reperfusion catheter lengths 132, 137, 150	Separator-assisted clot debulking and aspiration	The Penumbra System is intended for use in the revascularization of patients with acute ischemic stroke secondary to intracranial large vessel occlusive disease within 8 hours of symptom onset
	Penumbra System Separator and Separator Flex 054, 041, 032, 026	N/A	N/A	Separator and Separator Flex length 175–200		
Spectranetics Corporation	ThromCat Thrombectomy Catheter System	6	0.014	150	High vacuum and saline jets disrupt thrombus and pulls into catheter; enclosed helix for maceration and removal	Indicated for removing thrombus from synthetic hemodialysis access grafts and native vessel dialysis fistulae

AV, arteriovenous; OTW, over the wire.