

Mechanical Thrombectomy Device Update

Company	Device	Sheath Size (F)	Guidewire (in)	Working Length (cm)	
Arrow International, Inc	Arrow-Terrotola PTD (Percutaneous Thrombolytic Device)	5	None	65	
	Arrow-Terrotola Over-The-Wire (OTW) PTD (Percutaneous Thrombolytic Device)	7	.025	65, 120	
Bacchus Vascular	Trellis-8 Peripheral Infusion Catheter	8	.035	80-cm or 120-cm catheter length with 15-cm or 30-cm treatment areas	
Boston Scientific	Oasis Thrombectomy System	6	.018	65, 100	
Cordis Endovascular, a division of Cordis Corporation	Hydrolyser Percutaneous Thrombectomy Catheter	6	.018	65, 100	
Concentric Medical, Inc.	Merci Retrieval System	8, 9	.014	Balloon Guide - 95 Microcatheter - 150 Retriever - 180	
Datascope	ProLumen	6	None	65	
EKOS Corporation	Lysus Infusion System	5, 3	.035, .014	106, 150	
ev3	X-Sizer Catheter System	6, 7	.014	135	
	Helix Clot Buster Thrombectomy Device (Amplatz Device)	7	None	75, 120	
	Castaneda Over-The-Wire Brush	6	.035	65	
IDev Technologies, Inc.	AKónya Eliminator	6	None	60	
	AKónya Eliminator Plus	6	.018	60	
Kerberos Proximal Solutions	Peripheral Rinspiration System (7F Sheath Compatible)	7	.014	65, 135	
	Rinspiration System (6F Guide Compatible)	5	.014	135	
	Rinspiration System (7F Guide Compatible)	6	.014	135	
Kensey Nash Corporation	ThromCat Thrombectomy Catheter System	6	.014	150	
OmniSonics Medical Technologies, Inc.	Resolution Endovascular System	5	None	60	
Possis	XMI	4	.014	135	
	XMI-RX	4	.014	135	
	Spiroflex Rapid Exchange	4	.014	135	
	XVG	5	.014	140	
	Xpeedior 120	6	.035	120	
	AVX	6	.035	50	
	XMI-RX+	4	.014	135	
	DVX	6	.035	90	
Straub Medical	Rotarex Catheter	6, 8	.018	86, 110	
	Aspirex Catheter	6, 8	.018	86, 110	

Mode of Operation		CE Mark	FDA Indicated Use
	Mechanical thrombectomy	Yes	Used in combination with the rotator drive, permits mechanical de clotting of native arteriovenous fistulae and synthetic dialysis grafts
	Mechanical thrombectomy	Yes	Used in combination with the rotator drive, permits mechanical de clotting of native arterio-venous fistulae and synthetic dialysis grafts
	Isolated thrombolysis	Yes	Controlled and selective infusion of physcain-specified fluids, including thrombolytics, into the peripheral vasculature
	Venturi effect with fragmentation	Yes	AV grafts
	Conventional contrast power injector is used to inject saline solution through the injection lumen. Resultant pressure reduction at the tip nozzle creates a 360-degree vortex that fragments and aspirates thrombus into the exhaust lumen. Thrombolytic material is discharged through the exhaust lumen into a collection bag.	Yes	Indicated to percutaneously remove soft, newly formed (less than 5 days old) thrombus from dialysis shunts of 3 to 6 mm
50	Mechanical thrombectomy with aspiration and proximal flow arrest	Yes	Restoring blood flow in the neurovasculature by removing thrombus in patients experiencing ischemic stroke. Patients who are ineligible for intravenous tissue plasminogen activator (IV t-PA) or who fail IV t-PA therapy are candidates for treatment. Retrieval of foreign bodies misplaced during interventional radiological procedures in the neuro, peripheral and coronary vasculature.
	Wall contact with clot maceration properties	No	AV grafts
	Accelerate thrombolysis by delivery of high-frequency, low-power ultrasound to temporarily loosen fibrin matrix to increase clot permeability and drive the lytic agent deep into the clot for better lytic agent binding	Yes	Intended for the controlled and selective infusion of physician-specified fluids, including thrombolytics, into the peripheral vasculature
	Enclosed cutter with aspiration	Yes	Dialysis grafts
	Wall washing impeller technology for clot fragmentation	Yes	Dialysis graft and native fistulae
	Wall contact with rotating brush	Yes	Synthetic AV grafts
	Combination of manual driven axial, rotational, and/or pulsatile motion	Yes	Indicated for use in the mechanical de clotting of synthetic dialysis grafts
	Combination of manual driven axial, rotational, and/or pulsatile motion	Yes	Indicated for use in the mechanical de clotting of synthetic dialysis grafts and native AV fistulae
	Hand-held fluidic debris removal. Simultaneous rinsing to wash vessel walls and aspiration to evacuate debris.	No	Indicated to infuse physician specified fluid and remove/aspirate fluid, fresh, soft emboli and thrombi from the peripheral vasculature
	Hand-held fluidic debris removal. Simultaneous rinsing to wash vessel walls and aspiration to evacuate debris.	Yes	Indicated to infuse physician specified fluid and remove/aspirate fluid, fresh, soft emboli and thrombi from the coronary and peripheral vasculature
	Hand-held fluidic debris removal. Simultaneous rinsing to wash vessel walls and aspiration to evacuate debris.	Yes	Indicated to infuse physician specified fluid and remove/aspirate fluid, fresh, soft emboli and thrombi from the coronary and peripheral vasculature
	High vacuum and saline jets disrupt thrombus and pulls into catheter. Enclosed helix for maceration and removal.	Pending	Indicated for removing thrombus from synthetic hemodialysis access grafts and native vessel dialysis fistulae
	Ultrasonic energy	No	Synthetic dialysis access grafts
	High-velocity water jets enclosed in catheter utilize Bernoulli principle for capture, microfragmentation, and removal	Yes	Removing thrombus in the treatment of patients with symptomatic coronary artery or saphenous vein graft lesions in vessels ≥ 2 mm in diameter prior to balloon angioplasty or stent placement
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	High-velocity water jets enclosed in catheter utilize Bernoulli principle for capture, microfragmentation, and removal	No	Breaking apart and removing thrombus from infrainguinal peripheral arteries ≥ 2 mm in diameter
	High-velocity water jets enclosed in catheter utilize Bernoulli principle for capture, microfragmentation, and removal	Yes	Breaking apart and removing thrombus from infrainguinal peripheral arteries ≥ 3 mm in diameter
	High-velocity water jets enclosed in catheter utilize Bernoulli principle for capture, microfragmentation, and removal	Yes	Breaking apart and removing thrombus from infrainguinal peripheral arteries ≥ 3 mm in diameter
	High-velocity water jets enclosed in catheter utilize Bernoulli principle for capture, microfragmentation, and removal	Yes	Breaking apart and removing thrombus from AV access conduits
	High-velocity water jets enclosed in catheter utilize Bernoulli principle for capture, microfragmentation, and removal	Yes	Breaking apart and removing thrombus from infrainguinal peripheral arteries ≥ 2 mm in diameter
	High-velocity water jets enclosed in catheter utilize Bernoulli principle for capture, microfragmentation, and removal	Yes	Breaking apart and removing thrombus from infrainguinal peripheral arteries ≥ 3 mm in diameter
	Detachment, suction, fragmentation and transport	Yes	No
	Suction, fragmentation, and transport	Yes	No