Endovascular Today - US Device Guide - Mechanical Thrombectomy/Thrombolysis (Peripheral/Venous)

Company Name	Product Name	Sheath Compatibility (F)	Guidewire Compatibility (inch)	Working Length (cm)	Mode of Operation	US FDA Indicated Use
Abbott	Jeti–6 Fr	6	0.010–0.038 (OTW) or none	120	Internal saline jet just within the catheter tip breaks up thrombus and soft emboli while removing the thrombus through aspiration	For all peripheral venous and arterial vasculature
Abbott	Jeti–8 Fr	8	0.010–0.038 (OTW) or none	100	Internal saline jet just within the catheter tip breaks up thrombus and soft emboli while removing the thrombus through aspiration	For all peripheral venous and arterial vasculature
AngioDynamics	AlphaVac F18 System	22	0.038	105	Multipurpose mechanical aspiration	The F1885 cannula is indicated for the nonsurgical removal of thrombi or emboli from the vasculature; aspiration of contrast media and other fluids from the vasculature; intended for use in the venous system and for the treatment of pulmonary embolism; the handle is indicated as a vacuum source for the AlphaVac Multipurpose Mechanical Aspiration System
AngioDynamics	AlphaVac F22 System	25	0.038	77	Multipurpose mechanical aspiration	Indicated for the nonsurgical removal of thrombi or emboli from the vasculature and aspiration of contrast media and other fluids from the vasculature; the cannula is intended for use in the venous system; the AlphaVac Handle is indicated as a vacuum source for the AlphaVac Multi-purpose Mechanical Aspiration System
Argon Medical Devices, Inc.	Cleaner 15	7	–	65, 135	Battery-operated, handheld drive unit initiates the mechanical rotation of an atraumatic, wall-contacting, 15-mm sinusoidal vortex wire for effective thrombus maceration	Indicated for mechanical declotting and controlled and selective infusion of physician-specified fluids, including thrombolytics, in the peripheral vasculature; also indicated for mechanical declotting of native vessel dialysis fistulas and synthetic dialysis access grafts
Argon Medical Devices, Inc.	Cleaner Vac Thrombectomy System	18	0.038	115	Battery-operated, user-controlled power aspiration thrombectomy	Indicated for the removal of fresh, soft thrombi and emboli from the vessels of the peripheral venous vasculature, and for the infusion of physician-specified fluids, including thrombolytics
Argon Medical Devices, Inc.	Cleaner XT	6	–	65, 135	Battery-operated, handheld drive unit initiates the mechanical rotation of an atraumatic, wall-contacting, 9-mm sinusoidal vortex wire for effective thrombus maceration	Indicated for mechanical declotting and controlled and selective infusion of physician-specified fluids, including thrombolytics, in the peripheral vasculature; also indicated for mechanical declotting of native vessel dialysis fistulas and synthetic dialysis access grafts
BD Interventional	Aspirex Mechanical Aspiration Thrombectomy System	6, 8, 10	0.018, 0.025	85, 110, 135	Aspiration	Indicated for the removal of acute emboli and thrombi from vessels of the peripheral venous system

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Boston Scientific Corporation	AngioJet AVX Thrombectomy Catheter	6	0.035	50	High-velocity water jets enclosed in catheter utilize the Bernoulli principle for capture, microfragmentation, and removal	Breaking apart and removing thrombus from AV access conduits ≥ 3 mm in diameter
Boston Scientific Corporation	AngioJet Solent Dista Thrombectomy Catheter	4	0.014	145	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 ≥ 1.5 mm in diameter and for use with the AngioJet Ultra Power Pulse Kit for the control and selective infusion of physician specified fluids, including thrombolytic agents, into the peripheral vascular system
Boston Scientific Corporation	AngioJet Solent Omni Thrombectomy Catheter	6	0.035	120	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, and for use with the AngioJet Ultra Power Pulse Kit for the control and selective infusion of physician specified fluids, including thrombolytic agents, into the peripheral vascular system
Boston Scientific Corporation	AngioJet Solent Proxi Thrombectomy Catheter	6	0.035	90	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, and for use with the AngioJet Ultra Power Pulse Kit for the control and selective infusion of physician specified fluids, including thrombolytic agents, into the peripheral vascular system
Boston Scientific Corporation	AngioJet ZelanteDVT Thrombectomy Catheter	8	0.035	105	High-velocity water jets enclosed in catheter utilize the Bernoulli principle for capture, microfragmentation, and removal	The ZelanteDVT Thrombectomy System, which includes the ZelanteDVT Thrombectomy Set and the ClotHunter Helical Rotation Device, is intended for use with the AngioJet Ultra Console to break apart and remove thrombus, including deep vein thrombus (DVT), from (1) iliofemoral and lower extremity veins ≥ 6 mm in diameter and (2) upper extremity peripheral veins ≥ 6 mm in diameter; the ZelanteDVT Thrombectomy System is also intended for use with the AngioJet Ultra Power Pulse technique for the controlled and selective infusion of physician-specified fluids, including thrombolytic agents, into the peripheral vascular system
Boston Scientific Corporation	Ekos Endovascular System	6	0.035	106 (treatment areas: 6, 12, 18, 24, 30, 40, 50); 135 (treatment areas: 12, 30, 40,	The treatment offers a minimally invasive system for the acceleration of thrombus dissolution; the ultrasonic core generates a localized acoustic field that targets the entire	Indicated for the ultrasound-facilitated, controlled, and selective infusion of physician-specified fluids, including thrombolytics, into the vasculature for the treatment of pulmonary embolism and/or deep vein thrombosis; the controlled and selective infusion of physician-specified fluids, including thrombolytics,

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				50)	thrombus; this greatly accelerates lytic dispersion by driving the drug deeper into the clot and unwinding the fibrin to expose plasminogen receptor sites	into the peripheral vasculature; and the infusion of solutions into the pulmonary arteries
Boston Scientific Corporation	Ekos+ Endovascular System	8	0.035	106 (treatment areas: 8, 12, 16, 20); 135 (treatment areas: 8, 12, 16, 20)	The treatment offers a minimally invasive system for the acceleration of thrombus dissolution; the ultrasonic core generates a localized acoustic field that targets the entire thrombus; this greatly accelerates lytic dispersion by driving the drug deeper into the clot and unwinding the fibrin to expose plasminogen receptor sites	Indicated for the ultrasound-facilitated, controlled, and selective infusion of physician-specified fluids, including thrombolytics, into the vasculature for the treatment of pulmonary embolism and/or deep vein thrombosis; the controlled and selective infusion of physician-specified fluids, including thrombolytics, into the peripheral vasculature; and the infusion of solutions into the pulmonary arteries
Boston Scientific Corporation	SmartClawThrombectomy Catheter	8	0.035	145	An expandable basket loosens and removes thrombus	Indicated for the nonsurgical removal of thrombi and emboli from the peripheral vasculature
Contego Medical LLC	Excipio LV (Large Vessel)	12.6	0.035	125	The Excipio LV Thrombectomy Device is a rapid exchange catheter with an integrated nitinol braided basket designed to mechanically displace thrombus	Indicated for the nonsurgical removal of emboli and thrombi from peripheral blood vessels
Contego Medical LLC	Excipio SV (Small Vessel)	7	0.014	165	The Excipio SV Thrombectomy Device is a sterile, single-use catheter consisting of a catheter with an integrated nitinol braided basket designed to mechanically displace thrombus	Indicated for the nonsurgical removal of soft emboli and thrombi from peripheral blood vessels
Control Medical Technology	Control 11F Mechanical Thrombectomy System	11	0.035	90	Mechanical aspirator, 11-F catheter, and dilator	Indicated for the removal of fresh, soft emboli and thrombi from vessels in the peripheral vasculature
Control Medical Technology	Control 5F Mechanical Thrombectomy System	5	0.035	135	Mechanical aspirator, 5-F catheter, and dilator	Indicated for the removal of fresh, soft emboli and thrombi from vessels in the peripheral vasculature
Control Medical Technology	Control 6F Mechanical Thrombectomy System	6	0.035	135	Mechanical aspirator, 6-F catheter, and dilator	Indicated for the removal of fresh, soft emboli and thrombi from vessels in the peripheral vasculature
Control Medical Technology	Control 7F Mechanical Thrombectomy System	7	0.035	90	Mechanical aspirator, 7-F catheter, and dilator	Indicated for the removal of fresh, soft emboli and thrombi from vessels in the peripheral vasculature
Control Medical	Control 8F Mechanical	8	0.035	90	Mechanical aspirator, 8-F catheter,	Indicated for the removal of fresh, soft emboli and thrombi from

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Technology	Thrombectomy System				and dilator	vessels in the peripheral vasculature
Control Medical Technology	Control Mechanical Aspirator	Any sheath	Any wire	Any length	Mechanical thrombectomy drive unit, continuous and/or pulsed mechanical thrombectomy	Indicated to aspirate fluids from the body and the removal of fresh, soft emboli and thrombi from vessels in the peripheral and coronary vasculature
Control Medical Technology	Control RX-LP Mechanical Thrombectomy System	5-F sheath or 6-F guide catheter	0.014	136	Mechanical thrombectomy	Indicated for removal of fresh, soft emboli and thrombi from vessels in the peripheral and coronary vasculature
Cook Medical	Multi-Sideport Catheter Infusion Set	5	0.035	65, 100, 130	Manual administration of infusate	Intended to administer infusions of various therapeutic solutions and contrast media into the peripheral vasculature (refer to manufacturer's package insert for complete prescribing and dosing information)
ICHOR Vascular Inc.	ICHOR 14	14 F (part of the system)	0.035	12, 55, 100	Removal of vascular occlusions using a semicompliant balloon as the primary "wall-contact" mechanism of action (MOA) with supportive aspiration to sweep, aspirate, or snare thrombus, acute clot, subchronic, or adherent material into the extraction funnel; the "control sheath" has an occlusion balloon to arrest flow/maximize clot removal, while reducing distal embolization; the system equally has the ability to "agitate" to remove more chronic clot using the same MOA to safely remove debris	Indicated for the nonsurgical removal of emboli and thrombi from blood vessels; intended for the peripheral vasculature and is not intended for use in the coronary or neurovasculature
ICHOR Vascular Inc.	ICHOR 7	7 F (part of the system)	0.014	50, 90, 155	Removal of vascular occlusions using a compliant Rx balloon as the primary mechanism of action with supportive aspiration to sweep, aspirate or snare thrombus, acute clot, or embolic material into the extraction funnel; the "control sheath" has an occlusion balloon to arrest flow and maximize clot removal, while reducing distal embolization	Indicated for the nonsurgical removal of emboli and thrombi from blood vessels; intended for the peripheral vasculature and is not intended for use in the coronary or neurovasculature
Imperative Care (Vascular)	Prodigy Thrombectomy System - Catheter	5, 6, 8	0.014–0.035	50, 117, 137, 160	Designed to remove thrombus from the peripheral vasculature using continuous aspiration; targets aspiration from the Vascular	Indicated for the removal of fresh, soft emboli and thrombi from vessels of the peripheral arterial and venous systems; not for use in the coronaries, pulmonary vasculature, or the neurovasculature

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					generator and through the Prodigy Hotshot controller and Prodigy catheter directly to the thrombus	
Imperative Care (Vascular)	Prodigy Thrombectomy System - HotShot Controller	–	–	–	Designed to remove thrombus from the peripheral vasculature using continuous aspiration; targets aspiration from the Vascular generator and through the Prodigy Hotshot controller and Prodigy catheter directly to the thrombus; the functional window on HotShot Controller is designed to inform the operator precisely when blood or clot moves through the system	Indicated for the removal of fresh, soft emboli and thrombi from vessels of the peripheral arterial and venous systems; not for use in the coronaries, pulmonary vasculature, or the neurovasculature
Imperative Care (Vascular)	Prodigy Thrombectomy System - Twist	–	–	67, 134, 154, 177	Prodigy Twist is a mechanical tool designed to clear corked clot from the catheter tip without cycling the catheter in-and-out of the body. It does this through dual-action clot engagement (rotation) and ingestion (retraction)	Indicated for the removal of fresh, soft emboli and thrombi from vessels of the peripheral arterial and venous systems; not for use in the coronaries, pulmonary vasculature, or the neurovasculature
Imperative Care (Vascular)	Symphony Thrombectomy System - Catheter	16, 24	0.035	82, 85, 117	Designed to remove thrombus from the peripheral vasculature using powerful pulses of continuous aspiration	Indicated for the removal of fresh, soft emboli and thrombi in the peripheral vasculature and for the treatment of pulmonary embolism. The Symphony 16F 82 cm Thrombectomy System shares the same peripheral indications described herein; however, it is not for use in the pulmonary vasculature
Imperative Care (Vascular)	Symphony Thrombectomy System - ProHelix Mechanical Assist	–	0.035	102, 139	Designed to engage and retrieve emboli and thrombi from the peripheral vasculature using continuous aspiration with the Symphony catheter	Indicated for the removal of fresh, soft emboli and thrombi in the peripheral vasculature and for the treatment of pulmonary embolism
Inari Medical	Artix Thrombectomy System	8	Covered funnel catheter, 0.035-inch guidewire compatible; MT thrombectomy device, 0.014-inch guidewire compatible	Sheath: 65, 90; covered funnel catheter: 76, 101; MT thrombectomy device: 130	Dual mechanical and aspiration solution designed to address a broad spectrum of arterial thrombus cases	Two available sizes treats vessels 3–6 and 4–8 mm; the Artix Thin-Walled Sheath is indicated for: (1) the nonsurgical removal of emboli and thrombi from blood vessels; (2) injection, infusion, and/or aspiration of contrast media and other fluids into or from a blood vessel; (3) use as a conduit for endovascular devices; and (4) use in facilitating the insertion and guidance of an intravascular catheter into a selected blood vessel; the funnel provides temporary vascular occlusion during

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						these and other angiographic procedures; the Artix Thin-Walled Sheath is intended for use in the peripheral vasculature; the Artix MT thrombectomy device is indicated for: (1) the nonsurgical removal of emboli and thrombi from a blood vessel; and (2) injection, infusion, and/or aspiration of contrast media and other fluids into or from a blood vessel; the Artix MT thrombectomy device is intended for use in the peripheral vasculature; the Artix AX aspiration catheter is indicated for (1) the nonsurgical removal of emboli and thrombi from blood vessels; and (2) injection, infusion, and/or aspiration of contrast media and other fluids into or from a blood vessel; the Artix AX aspiration catheter is intended for use in the peripheral vasculature; the FlowSaver Blood Return System is used with Inari Medical catheters and sheaths for autologous blood transfusion; refer to Instructions for Use for complete indications for use, contraindications, warnings, and precautions
Inari Medical	ClotTriever Thrombectomy System	13, 16	0.035	80	Mechanical coring, collection, and retrieval of emboli and thrombi	The nonsurgical removal of thrombi and emboli from blood vessels; injection, infusion, and/or aspiration of contrast media and other fluids into or from a blood vessel; intended for use in the peripheral vasculature including deep vein thrombosis
Inari Medical	FlowTriever Catheter (disks) - FlowTriever Retrieval/Aspiration System	20, 22	0.035	115	Mechanical and aspirational disruption, fragmentation, maceration, and retrieval of emboli and thrombi	The nonsurgical removal of emboli and thrombi from blood vessels, and injection, infusion and/or aspiration of contrast media and other fluids into or from a blood vessel; the FlowTriever System is intended for use in the peripheral vasculature and for the treatment of pulmonary embolism; Triever catheters are intended for use in treating clot in transit in the right atrium, but not in conjunction with FlowTriever catheters
Inari Medical	FlowTriever2 Catheter (disks) - FlowTriever Retrieval/Aspiration System	20, 22, 24, 26	0.035	120	Mechanical and aspirational disruption, fragmentation, maceration, and retrieval of emboli and thrombi	The nonsurgical removal of emboli and thrombi from blood vessels, and injection, infusion and/or aspiration of contrast media and other fluids into or from a blood vessel; FlowTriever2 is intended for use in the peripheral vasculature
Inari Medical	Triever16 - FlowTriever Retrieval/Aspiration System	20, 22, 24	0.035	107	Mechanical and aspirational disruption, fragmentation, maceration, and retrieval of emboli and thrombi	The nonsurgical removal of emboli and thrombi from blood vessels, and injection, infusion and/or aspiration of contrast media and other fluids into or from a blood vessel; the FlowTriever System is intended for use in the peripheral vasculature and for the treatment of pulmonary embolism; Triever catheters are intended for use in treating clot in transit in the right atrium, but not in conjunction with FlowTriever

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						catheters
Inari Medical	Triever16 Curve - FlowTriever Retrieval/ Aspiration System	20, 22, 24	0.035	110	Mechanical and aspirational disruption, fragmentation, maceration, and retrieval of emboli and thrombi	The nonsurgical removal of emboli and thrombi from blood vessels, and injection, infusion and/or aspiration of contrast media and other fluids into or from a blood vessel; the FlowTriever System is intended for use in the peripheral vasculature and for the treatment of pulmonary embolism; Triever catheters are intended for use in treating clot in transit in the right atrium, but not in conjunction with FlowTriever catheters
Inari Medical	Triever20 - FlowTriever Retrieval/Aspiration System	20, 22, 24	0.035	90	Mechanical and aspirational disruption, fragmentation, maceration, and retrieval of emboli and thrombi	The nonsurgical removal of emboli and thrombi from blood vessels, and injection, infusion, and/or aspiration of contrast media and other fluids into or from a blood vessel; the FlowTriever System is intended for use in the peripheral vasculature and for the treatment of pulmonary embolism; Triever catheters are intended for use in treating clot in transit in the right atrium but not in conjunction with FlowTriever catheters
Inari Medical	Triever20 Curve - FlowTriever Retrieval/ Aspiration System	20, 22, 24	0.035	105	Mechanical and aspirational disruption, fragmentation, maceration, and retrieval of emboli and thrombi	The nonsurgical removal of emboli and thrombi from blood vessels, and injection, infusion and/or aspiration of contrast media and other fluids into or from a blood vessel; the FlowTriever System is intended for use in the peripheral vasculature and for the treatment of pulmonary embolism; Triever catheters are intended for use in treating clot in transit in the right atrium, but not in conjunction with FlowTriever catheters
Inari Medical	Triever24 - FlowTriever Retrieval/Aspiration System	24, 26	0.035	90	Mechanical and aspirational disruption, fragmentation, maceration, and retrieval of emboli and thrombi	The nonsurgical removal of emboli and thrombi from blood vessels, and injection, infusion and/or aspiration of contrast media and other fluids into or from a blood vessel; the FlowTriever System is intended for use in the peripheral vasculature and for the treatment of pulmonary embolism; Triever Catheters are intended for use in treating clot in transit in the right atrium, but not in conjunction with FlowTriever catheters
Innova Vascular, Inc.	Laguna Thrombectomy System	10, 12	0.035	140	Removal of clot using Laguna Clot Retriever and Malibu aspiration catheter	Indicated for the nonsurgical removal of emboli and thrombi from blood vessels; injection, infusion, and/or aspiration of contrast media and other fluids into or from a blood vessel; intended for use in the peripheral vasculature
Innova Vascular, Inc.	Malibu Aspiration Catheter System	20	0.035	100	Aspiration using a 60-mL syringe (supplied with the product)	Indicated for the nonsurgical removal of emboli and thrombi from blood vessels; injection, infusion, and/or aspiration of

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						contrast media and other fluids into or from a blood vessel; intended for use in the peripheral vasculature
Innova Vascular, Inc.	Malibu Aspiration Catheter System	12	0.035	115	Aspiration using a 60-mL syringe (supplied with the product)	Indicated for the nonsurgical removal of emboli and thrombi from blood vessels; injection, infusion, and/or aspiration of contrast media and other fluids into or from a blood vessel; intended for use in the peripheral vasculature
Innova Vascular, Inc.	Malibu Aspiration Catheter System	24	0.035	90	Aspiration using a 60-mL syringe (supplied with the product)	Indicated for the nonsurgical removal of emboli and thrombi from blood vessels; injection, infusion, and/or aspiration of contrast media and other fluids into or from a blood vessel; intended for use in the peripheral vasculature
Innova Vascular, Inc.	Malibu Aspiration Catheter System	16	0.035	107	Aspiration using a 60-mL syringe (supplied with the product)	Indicated for the nonsurgical removal of emboli and thrombi from blood vessels; injection, infusion, and/or aspiration of contrast media and other fluids into or from a blood vessel; intended for use in the peripheral vasculature
Liquet Medical Inc.	Versus Catheter	8	Primary catheter: 0.035; secondary catheter: 0.014	Catheter length: 110; infusion zone: 12	Employs dual lumens to facilitate hemodynamics-led thrombolysis; can be advanced over a guidewire or flow-directed balloon and provides real-time direct intracardiac and pulmonary artery pressure monitoring	The controlled and selective infusion of physician-specified fluids, including thrombolytics, into the pulmonary artery vasculature in adult patients; the assessment of a patient's hemodynamic condition through direct intracardiac and pulmonary artery pressure monitoring
Medtronic	Liberant Thrombectomy System	6	0.035	135	Mechanical aspiration	Peripheral arterial and venous systems
Medtronic	Liberant Thrombectomy System	8	0.035	50	Mechanical aspiration	Peripheral arterial and venous systems
Medtronic	Liberant Thrombectomy System	8	0.035	115	Mechanical aspiration	Peripheral arterial and venous systems
Medtronic	Liberant Thrombectomy System	12	0.035	115	Mechanical aspiration	Peripheral arterial and venous systems
Mermaid Medical	D*Clot HD Thrombectomy System	6	–	65	Disposable system consists of an outer sheath through which a rotatable radiopaque spiral shaft extends ending in an eccentric blunt distal tip; the shaft rotates at 10,000 rpm to break thrombus into smaller particles, which can be simultaneously aspirated using a dedicated vacuum syringe	Indicated for mechanical declotting of native vessel dialysis fistulae and synthetic dialysis access grafts

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Penumbra, Inc. (Peripheral Vascular)	Indigo System Catheter CAT RX	6 (guide catheter)	0.014	140	The Indigo System CAT RX is paired with the Penumbra ENGINE to provide sustained, powerful aspiration	As part of the Indigo Aspiration System, the Indigo CAT RX Aspiration Catheters and Indigo Separator 4 are indicated for the removal of fresh, soft emboli and thrombi from vessels in the coronary and peripheral vasculature
Penumbra, Inc. (Peripheral Vascular)	Indigo System Catheters: CAT7D, CAT6, and CAT RX	7 (CAT7D); 6 (CAT6); 6F guide catheter (CAT RX)	0.014–0.038	50–150	The Indigo System Catheters are paired with the Penumbra ENGINE for continuous, powerful aspiration	Indigo aspiration catheters and separators are indicated for the removal of fresh, soft emboli and thrombi from vessels of the peripheral arterial and venous systems and for the treatment of pulmonary embolism; as part of the Indigo aspiration system, the Indigo Sterile aspiration tubing is indicated to connect the Indigo aspiration catheters to the Penumbra aspiration pump; as part of the Indigo aspiration system, the Indigo CAT RX aspiration catheters and Indigo Separator 4 are indicated for the removal of fresh, soft emboli and thrombi from vessels in the coronary and peripheral vasculature
Penumbra, Inc. (Peripheral Vascular)	Indigo System Catheters: Lightning Bolt 12	12	0.014–0.038	100–115	The Lightning Bolt Aspiration Tubing (Indigo Aspiration Tubing) is designed to serve as a conduit to assist in thrombus removal, facilitating transfer of vacuum between the Penumbra Aspiration Pump and the Indigo Aspiration Catheter while providing intermittent, continuous, or modulated aspiration; modulated aspiration is provided when the Lightning Bolt Aspiration Tubing alternates between connecting the Indigo Aspiration Catheter to the Penumbra Aspiration Pump and a sterile saline intravenous bag at ambient pressure	The Indigo Aspiration Catheters and Separators are indicated for the removal of fresh, soft emboli and thrombi from vessels of the peripheral arterial and venous systems and for the treatment of pulmonary embolism; as part of the Indigo Aspiration System, the Indigo Sterile Aspiration Tubing is indicated to connect the Indigo Aspiration Catheters to the Penumbra Aspiration Pump
Penumbra, Inc. (Peripheral Vascular)	Indigo System Catheters: Lightning Bolt 6X with TraX	6	0.014	132, 150	The Lightning Bolt Aspiration Tubing (Indigo Aspiration Tubing) is designed to serve as a conduit to assist in thrombus removal, facilitating transfer of vacuum between the Penumbra Aspiration Pump and the Indigo Aspiration Catheter while providing intermittent, continuous, or modulated aspiration; modulated aspiration is provided	The Indigo Aspiration Catheters and Separators are indicated for the removal of fresh, soft emboli and thrombi from vessels of the peripheral arterial and venous systems and for the treatment of pulmonary embolism. As part of the INDIGO Aspiration System, the INDIGO Sterile Aspiration Tubing is indicated to connect the INDIGO Aspiration Catheters to the Penumbra Aspiration Pump

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					when the Lightning Bolt Aspiration Tubing alternates between connecting the Indigo Aspiration Catheter to the Penumbra Aspiration Pump and a sterile saline intravenous bag at ambient pressure	
Penumbra, Inc. (Peripheral Vascular)	Indigo System Catheters: Lightning Bolt 7	7	0.014–0.038	130	The Lightning Bolt Aspiration Tubing (Indigo Aspiration Tubing) is designed to serve as a conduit to assist in thrombus removal, facilitating transfer of vacuum between the Penumbra Aspiration Pump and the Indigo Aspiration Catheter while providing intermittent, continuous, or modulated aspiration; modulated aspiration is provided when the Lightning Bolt Aspiration Tubing alternates between connecting the Indigo Aspiration Catheter to the Penumbra Aspiration Pump and a sterile saline intravenous (IV) bag at ambient pressure	The Indigo Aspiration Catheters and Separators are indicated for the removal of fresh, soft emboli and thrombi from vessels of the peripheral arterial and venous systems and for the treatment of pulmonary embolism; as part of the INDIGO Aspiration System, the INDIGO Sterile Aspiration Tubing is indicated to connect the INDIGO Aspiration Catheters to the Penumbra Aspiration Pump
Penumbra, Inc. (Peripheral Vascular)	Indigo System Catheters: Lightning Flash 2.0 with Select +	16	0.014–0.038	80–115	Lightning Flash Aspiration Tubing facilitates the transfer of vacuum between CAT16 Aspiration Catheter and Penumbra Aspiration Pump while providing intermittent or continuous aspiration. Intended users for this device are physicians who have received appropriate training in interventional techniques .The Indigo Lightning Flash Aspiration System is kitted with the Select + Catheter. The Select + Catheter is used to aide in tracking the aspiration catheter to the site of occlusion and is removed prior to initiating aspiration with the aspiration catheter	Indicated for the removal of fresh, soft emboli and thrombi from vessels of the peripheral arterial and venous systems and for the treatment of pulmonary embolism; as part of the Indigo Aspiration System, the Indigo Sterile Aspiration Tubing is indicated to connect the Indigo Aspiration Catheters to the Penumbra Aspiration Pump
Penumbra, Inc.	Indigo System Separator	-	-	200	Separator-assisted clot debulking, if	As part of the Indigo Aspiration System, the Indigo CAT RX

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(Peripheral Vascular)	SEPC4				needed	Aspiration Catheters and Indigo Separator 4 are indicated for the removal of fresh, soft emboli and thrombi from vessels in the coronary and peripheral vasculature
Penumbra, Inc. (Peripheral Vascular)	Indigo System Separators: SEP12, SEP7, SEP7D, SEP6, SEP5, SEPC4	–	–	90–200	The device is advanced and retracted through the Indigo catheter at the proximal margin of the primary occlusion to facilitate clearing of the thrombus from the catheter tip, as needed	The Indigo aspiration catheters and separators are indicated for the removal of fresh, soft emboli and thrombi from vessels of the peripheral arterial and venous systems and for the treatment of pulmonary embolism; as part of the Indigo aspiration system, the Indigo CAT RX aspiration catheters and Indigo Separator 4 are indicated for the removal of fresh, soft emboli and thrombi from vessels in the coronary and peripheral vasculature
Philips	QuickClear mechanical thrombectomy system	6, 8, 10	0.035	130, 85	Sterile, all-in-one, single-use, aspiration catheter and battery-operated vacuum aspiration pump; 8-F and 10-F catheters are provided with an obturator that assists with the insertion of the catheter into the introducer sheath and aids the catheter to track over an 0.035-inch guidewire	Fresh, soft emboli and thrombi from the vessels of the peripheral arterial and venous systems (10 F venous only application)
Surmodics, Inc.	Pounce LP Thrombectomy System	7 (minimum)	0.018	150	Comprised of three components: a delivery catheter, a basket wire, and a funnel catheter; the basket wire is delivered distal to the location of the thrombus, deploying two nitinol self-expanding baskets; the baskets capture the clot and are retracted into a nitinol collection funnel; with the clot entrained, the system is retracted into a minimum 7-F guide sheath through which the clot is withdrawn and removed from the body	Intended for the nonsurgical removal of thrombi and emboli from the peripheral arterial vasculature; indicated for use in vessels ranging from 2 to 4 mm in diameter
Surmodics, Inc.	Pounce Thrombectomy System	7 (minimum)	0.035	135	Comprised of three components: a delivery catheter, a basket wire, and a funnel catheter; the basket wire is delivered distal to the location of the thrombus, deploying two nitinol self-expanding baskets; the baskets capture the clot and are retracted	Intended for the nonsurgical removal of thrombi and emboli from the peripheral arterial vasculature; indicated for use in vessels ranging from 3.5 to 6 mm in diameter

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					into a nitinol collection funnel; with the clot entrained, the system is retracted into a minimum 7-F guide sheath through which the clot is withdrawn and removed from the body	
Surmodics, Inc.	Pounce Venous Thrombectomy System	10	0.018	90	Dual-action mechanical thrombectomy, using an adjustable mechanical basket and a rotational extraction screw	Indicated for mechanical declotting and controlled and selective infusion of physician-specified fluids, including thrombolytics, in the peripheral vasculature
Thrombolex, Inc.	Bashir .035 Endovascular Catheter	8	0.035	92.5	Restores blood flow by expanding the 12.5-cm length infusion basket that treats vessel diameters 3 to 45 mm; physician-specified fluids, including thrombolytics, can be pulse-sprayed or infused through 48 precision-drilled holes in the basket directly into the thrombus; the basket is opened by an actuator on the handle, and infusion fluids can be administered with a syringe or infusion pump into the basket	The Bashir .035 Endovascular Catheter is a mechanical thrombolysis catheter indicated for the controlled and selective infusion of physician-specified fluids, including thrombolytics, into the pulmonary arteries for treatment of pulmonary embolism; the catheter is also indicated for infusion of physician-specified fluids, including thrombolytics, into the peripheral vasculature, enabling the restoration of blood flow in patients with venous thrombus
Thrombolex, Inc.	Bashir +10 Endovascular Catheter	7	0.018	92.5	Restores blood flow by expanding the 12.5-cm length infusion basket that treats vessel diameters 3 to 45 mm; physician-specified fluids, including thrombolytics, can be pulse-sprayed or infused through 48 precision-drilled holes in the basket directly into the thrombus; the basket is opened by an actuator on the handle, and infusion fluids can be administered with a syringe or infusion pump into the basket and along the catheter shaft	The Bashir Plus Endovascular Catheters (Bashir +10, Bashir +20, Bashir +30, Bashir +40) are intended for the controlled and selective infusion of physician-specified fluids, including thrombolytics, into the peripheral vasculature, enabling the restoration of blood flow in patients with venous thrombus
Thrombolex, Inc.	Bashir +20 Endovascular Catheter	7	0.018	92.5	Restores blood flow by expanding the 12.5-cm length infusion basket that treats vessel diameters 3 to 45 mm; physician-specified fluids, including thrombolytics, can be pulse-sprayed	The Bashir Plus Endovascular Catheters (Bashir +10, Bashir +20, Bashir +30, Bashir +40) are intended for the controlled and selective infusion of physician specified fluids, including thrombolytics, into the peripheral vasculature, enabling the restoration of blood flow in patients with venous thrombus

Company Name	Product Name	Sheath Compatibility (F)	Guidewire Compatibility (inch)	Working Length (cm)	Mode of Operation	US FDA Indicated Use
					or infused through 48 precision-drilled holes in the basket directly into the thrombus; the basket is opened by an actuator on the handle, and infusion fluids can be administered with a syringe or infusion pump into the basket and along the catheter shaft	
Thrombolex, Inc.	Bashir +30 Endovascular Catheter	7	0.018	92.5	Restores blood flow by expanding the 12.5-cm length infusion basket that treats vessel diameters 3 to 45 mm; physician-specified fluids, including thrombolytics, can be pulse-sprayed or infused through 48 precision-drilled holes in the basket directly into the thrombus; the basket is opened by an actuator on the handle, and infusion fluids can be administered with a syringe or infusion pump into the basket and along the catheter shaft	The Bashir Plus Endovascular Catheters (Bashir +10, Bashir +20, Bashir +30, Bashir +40) are intended for the controlled and selective infusion of physician-specified fluids, including thrombolytics, into the peripheral vasculature, enabling the restoration of blood flow in patients with venous thrombus
Thrombolex, Inc.	Bashir +40 Endovascular Catheter	7	0.018	92.5	Restores blood flow by expanding the 12.5-cm length infusion basket that treats vessel diameters 3 to 45 mm; physician-specified fluids, including thrombolytics, can be pulse-sprayed or infused through 48 precision-drilled holes in the basket directly into the thrombus; the basket is opened by an actuator on the handle, and infusion fluids can be administered with a syringe or infusion pump into the basket and along the catheter shaft	The Bashir Plus Endovascular Catheters (Bashir +10, Bashir +20, Bashir +30, Bashir +40) are intended for the controlled and selective infusion of physician-specified fluids, including thrombolytics, into the peripheral vasculature, enabling the restoration of blood flow in patients with venous thrombus
Thrombolex, Inc.	Bashir Endovascular Catheter	7	0.018	92.5	Restores blood flow by expanding the 12.5-cm length infusion basket that treats vessel diameters 3 to 45 mm; physician-specified fluids, including thrombolytics, can be pulse-sprayed or infused through 48 precision-	The Bashir Endovascular Catheter is a mechanical thrombolysis catheter indicated for the controlled and selective infusion of physician-specified fluids, including thrombolytics, into the pulmonary arteries for treatment of pulmonary embolism; infusion of physician-specified fluids, including thrombolytics, into the peripheral vasculature, enabling the restoration of blood

Company Name	Product Name	Sheath Compatibility (F)	Guidewire Compatibility (inch)	Working Length (cm)	Mode of Operation	US FDA Indicated Use
					drilled holes in the basket directly into the thrombus; the basket is opened by an actuator on the handle, and infusion fluids can be administered with a syringe or infusion pump into the basket	flow in patients with venous thrombus
Thrombolex, Inc.	Bashir S-B .035 Endovascular Catheter	8	0.035	92.5	Restores blood flow by expanding the 10-cm length infusion basket that treats vessel diameters 3 to 39 mm; physician-specified fluids, including thrombolytics, can be pulse-sprayed or infused through 48 precision-drilled holes in the basket directly into the thrombus; the basket is opened by an actuator on the handle, and infusion fluids can be administered with a syringe or infusion pump into the basket.	The Bashir S-B .035 Endovascular Catheter is a mechanical thrombolysis catheter indicated for the controlled and selective infusion of physician-specified fluids, including thrombolytics, into the pulmonary arteries and for treatment of pulmonary embolism; the catheter is also indicated for the infusion of physician-specified fluids, including thrombolytics, into the peripheral vasculature, enabling the restoration of blood flow in patients with venous thrombus
Thrombolex, Inc.	Bashir S-B Endovascular Catheter	7	0.018	92.5	Instantly restores blood flow by expanding the 10-cm length infusion basket that treats vessel diameters 3 to 39 mm; physician-specified fluids, including thrombolytics, can be pulse-sprayed or infused through 48 precision-drilled holes in the basket directly into the thrombus; the basket is opened by an actuator on the handle, and infusion fluids can be administered with a syringe or infusion pump into the basket	The Bashir Endovascular Catheter is a mechanical thrombolysis catheter indicated for the controlled and selective infusion of physician-specified fluids, including thrombolytics, into the pulmonary arteries for treatment of pulmonary embolism; infusion of physician-specified fluids, including thrombolytics, into the peripheral vasculature, enabling the restoration of blood flow in patients with venous thrombus
Vesalio Inc.	pVasc Thrombectomy System 4.0 x 30 mm	Can be delivered through catheters with ID as small as 0.021 inch (1.6 F); also compatible with 0.035 inch (2.67 F)	0.018	Device basket working length: 30 mm; full length: 48 mm; pusher wire length: 200 cm	Delivered via a catheter (ID can be as small as .021", also compatible with .035"); deployed at the occlusion site, on or beyond the clot, the flow restoration zone re-establishes flow to distal territory and engages softer clots; drop zones capture all clots, including organized varieties; once thrombus integrated, the closed distal tip helps retain it during	Indicated for use in vessels ≥ 2 and ≤ 3.5 mm in diameter

Company Name	Product Name	Sheath Compatibility (F)	Guidewire Compatibility (inch)	Working Length (cm)	Mode of Operation	US FDA Indicated Use
					retrieval; pVasc can be used alone or with adjunctive therapy (compatible with coaspiration); work time is not limited by blood loss	
Vesalio Inc.	pVasc Thrombectomy System 4.0 x 38 mm	Can be delivered through catheters with ID as small as 0.021 inch (1.6 F); also compatible with 0.035 inch (2.67 F)	0.018	Device basket working length: 38 mm; full length: 55 mm; pusher wire length: 200 cm	Delivered via a catheter (ID can be as small as .021 inch, also compatible with .035 inch); deployed at the occlusion site, on or beyond the clot, the flow restoration zone re-establishes flow to distal territory and engages softer clots; drop zones capture all clots, including organized varieties; once thrombus is integrated, the closed distal tip helps retain it during retrieval; pVasc can be used alone or with adjunctive therapy (compatible with coaspiration); work time is not limited by blood loss	Indicated for use in vessels ≥ 2 and ≤ 3.5 mm in diameter
Vesalio Inc.	pVasc Thrombectomy System 6.0 x 44 mm	Can be delivered through catheters with ID as small as 0.027 inch (2.06 F); also compatible with 0.035 inch (2.67 F)	0.018	Device basket working length: 44 mm; full length: 63 mm; pusher wire length: 200 cm	Delivered via a catheter (ID can be as small as .027", also compatible with .035"); deployed at the occlusion site, on or beyond the clot, the flow restoration zone re-establishes flow to distal territory and engages softer clots; drop zones capture all clots, including organized varieties; once thrombus integrated, the closed distal tip helps retain it during retrieval; pVasc can be used alone or with adjunctive therapy (compatible with coaspiration); work time is not limited by blood loss	Indicated for use in vessels ≥ 3.5 and ≤ 6 in diameter