

SCOPE

This glossary applies to the Vascular Anatomy, Disease, Procedures, and Products.

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DEFINITIONS

<i>Term</i>	<i>Definition</i>
Heart Vascular Anatomies	
Aorta	The largest artery in the body, originating from the left ventricle, and carrying oxygenated blood to the rest of the body
Coronary Arteries	Blood vessels that supply the heart muscle with oxygen and nutrients
Myocardium	The muscular middle layer of the heart wall responsible for contracting and pumping blood
Endocardium	The innermost layer of the heart wall, consisting of endothelial tissue
Pericardium	A double-layered sac surrounding the heart, providing protection and preventing friction as the heart beats
Atria (Atrium - singular)	The upper chambers of the heart that receive blood from the veins
Left Ventricles	The lower chambers of the heart that pump blood into the arteries
Tricuspid Valve	The valve between the right atrium and right ventricle
Aortic Valve	The valve between the left ventricle and the aorta, directing blood to the rest of the body
Mitral (Bicuspid) Valve	The valve between the left atrium and left ventricle
Pulmonary Valve	The valve between the right ventricle and the pulmonary artery, directing blood to the lungs
Chordae Tendineae	Fibrous cords that connect the atrioventricular valves to the papillary muscles in the ventricles
Papillary Muscles	Muscular projections in the ventricles that are attached to the chordae tendineae
Sinoatrial (SA) Node	The natural pacemaker of the heart, initiating electrical impulses for each heartbeat
Atrioventricular (AV) Node	A group of cells that delay and relay electrical impulses from the atria to the ventricles
Electrocardiogram (ECG or EKG)	A test that records the electrical activity of the heart over time
Cardiac Cycle	The sequence of events in one complete heartbeat, including systole and diastole
Cardiac Output	The amount of blood the heart pumps per minute. Understanding these terms is crucial for healthcare professionals involved in the assessment and treatment of heart-related
Peripheral Vascular Anatomies	Specifically focusing on the superficial femoral artery (SFA), anterior tibial artery (ATA), posterior tibial artery (PTA), and popliteal artery (POP)
Superficial Femoral Artery (SFA)	The major artery that supplies blood to the thigh and knee region, extending from the common femoral artery
Common Femoral Artery	The large artery that is a continuation of the external iliac artery and gives rise to the SFA
Anterior Tibial Artery (ATA)	The artery that runs down the front of the leg, originating from the popliteal artery and supplying blood to the anterior compartment of the leg
Posterior Tibial Artery (PTA)	The artery that runs down the back of the leg, originating from the popliteal artery and supplying blood to the posterior compartment of the leg
Popliteal Artery (POP)	The artery located behind the knee, branching into the ATA and PTA
Anatomy	The structure and organization of tissues, organs, and blood vessels within the body
Arterial Bifurcation	The division of an artery into two branches, often referring to the point where a larger artery splits into smaller ones
Vasculature	The arrangement of blood vessels within a particular organ or tissue
Collateral Circulation	The alternative pathways for blood flow that develop to compensate for the blockage or narrowing of a blood vessel
Vascular Anastomosis	The connection between blood vessels, either naturally occurring or surgically created
Peripheral Artery Disease (PAD)	A condition characterized by the narrowing or blockage of arteries outside the heart and brain, often affecting the SFA and other peripheral arteries
Aneurysm	A bulging and weakened area in the wall of an artery, which can occur in peripheral arteries

Thrombosis	The formation of a blood clot (thrombus) within a blood vessel, potentially leading to reduced blood flow
Embolism	The obstruction of a blood vessel by an embolus, which is a detached clot or foreign material.
Stenosis	Abnormal narrowing of a blood vessel, limiting blood flow
Cardiovascular Diseases (CVD)	Encompasses a broad category of conditions that affect the heart and blood vessels
Coronary Artery Disease (CAD)	CAD is a common heart vascular disease characterized by the buildup of plaque in the coronary arteries, which supply blood to the heart muscle
Heart Attack (Myocardial Infarction)	A heart attack occurs when blood flow to a part of the heart is blocked, usually by a blood clot. The lack of blood flow can damage or destroy part of the heart muscle
Heart Failure	Heart failure is a condition where the heart is unable to pump blood effectively, leading to insufficient oxygen and nutrients reaching the body's tissues. It can result from various heart conditions
Hypertension (High Blood Pressure)	Persistent high blood pressure can damage the arteries over time, increasing the risk of heart disease and other complications
Stroke	While not exclusively a heart disease, strokes can result from vascular issues, including those affecting the heart. Ischemic strokes, caused by a blockage in a blood vessel leading to the brain, are often related to cardiovascular conditions
Arrhythmias	Arrhythmias are abnormal heart rhythms. They can range from harmless to life-threatening and may be associated with other heart conditions
Valvular Heart Diseases	Conditions affecting the heart valves, such as stenosis (narrowing) or regurgitation (leaking), can impact the heart's ability to pump blood effectively
Peripheral Vascular Disease (PVD)	A condition characterized by the narrowing or blockage of blood vessels outside the heart and brain
Claudication	Pain or cramping in the legs during physical activity due to inadequate blood flow
Intermittent Claudication	Claudication that occurs during physical activity and resolves with rest
Rest Pain	Pain or discomfort in the legs or feet that occurs at rest, often indicative of severe peripheral artery disease
Ischemia	Insufficient blood supply to a part of the body, leading to reduced oxygen delivery to tissues
Atherosclerosis	Buildup of plaques consisting of cholesterol, fatty deposits, and cellular debris in the arteries, a common cause of PVD
Peripheral Artery Disease (PAD)	A type of PVD caused by atherosclerosis, resulting in reduced blood flow to the extremities
Arterial Ulcer	A chronic wound on the skin caused by reduced blood flow to the affected area
Critical Limb Ischemia (CLI)	An advanced stage of PAD characterized by severe blockages and a risk of limb loss
Peripheral Venous Disease	Conditions affecting the veins in the legs, such as venous insufficiency or varicose veins
Venous Ulcer	A chronic wound on the skin caused by poor venous circulation, often located on the lower leg
Raynaud's Disease	Condition characterized by spasms in small arteries, typically in the fingers and toes, causing them to turn white or blue
Thromboangiitis Obliterans (Buerger's Disease)	Inflammatory condition causing blood vessel blockages, primarily affecting small and medium-sized arteries and veins
Ankle-Brachial Index (ABI)	Ratio of the blood pressure at the ankle to the blood pressure in the upper arm, used to assess peripheral arterial disease
Endarterectomy	Surgical removal of the inner lining of an artery to remove plaques and restore blood flow
Vascular Procedures	

Angiography	Medical imaging technique that visualizes blood vessels and the blood flow within them, typically using contrast media.
Percutaneous Transluminal Angioplasty (PTA)	Procedure to widen narrowed or obstructed arteries using a balloon catheter
Stent Placement	Implantation of a small, mesh-like tube into a blood vessel to keep it open
Atherectomy	Removal of atherosclerotic plaque from blood vessels, often using a specialized catheter
Thrombectomy	Surgical or interventional removal of an embolus (clot or foreign material) from a blood vessel
Vascular Access	Creating an entry point into the bloodstream for medical procedures, often involving catheterization.
Peripheral Vascular Intervention	Procedures to treat blood vessel issues outside the heart, such as in the legs or neck
Endovascular Aneurysm Repair (EVAR)	Minimally invasive procedure to treat an aortic aneurysm using a stent graft
Venous Ablation	Procedure to treat varicose veins or venous insufficiency by closing or removing problematic veins
Arterial Bypass Surgery	Surgical procedure to redirect blood flow around a blocked or narrowed artery
Hemodialysis Access Creation	Surgical procedure to establish a vascular access point that allows blood to be efficiently withdrawn from the body, filtered through a hemodialysis machine, and then return to the circulation. There are three types of hemodialysis access: Arteriovenous Fistula (AVF), Arteriovenous Graft (AVG), and Central Venous Catheter (CVC).
Central Venous Catheter Placement	Insertion of a catheter into a large vein, typically in the neck, chest, or groin, for various medical treatments
Port Placement	Surgical or interventional procedure to implant a port under the skin for repeated access to the bloodstream
Vein Stripping	Surgical procedure to remove or tie off varicose veins to improve blood circulation
Laser Ablation	Procedure that uses laser energy to treat conditions like varicose veins by closing off abnormal veins
Vena Cava Filter Placement	Placement of a filter in the vena cava to prevent blood clots from reaching the lungs
Vascular Access Procedure	
Vascular Access	The entry point into the bloodstream for medical procedures, often involving the insertion of a catheter or needle
Central Venous Catheter (CVC)	A catheter placed into a large vein, typically in the neck, chest, or groin, for various medical treatments
Peripheral Intravenous (PIV) Line	A short catheter inserted into a peripheral vein, usually in the arm, for intravenous therapy
Arteriovenous Fistula (AVF)	A surgically created connection between an artery and a vein, commonly used for hemodialysis access
Arteriovenous Graft (AVG)	A synthetic tube used to connect an artery and a vein when a natural fistula is not feasible for hemodialysis
Hemodialysis Catheter	A catheter specifically designed for vascular access during hemodialysis
Percutaneous Transluminal Angioplasty (PTA)	A procedure to widen narrowed or blocked blood vessels, often used in vascular access interventions
Catheter-Related Bloodstream Infection (CRBSI)	Infection associated with the presence of a catheter in the bloodstream, a potential complication of vascular access
Tunneled Central Venous Catheter	A central venous catheter that is tunneled under the skin to reduce the risk of infection
Peripherally Inserted Central Catheter (PICC)	A long catheter inserted through a peripheral vein, typically in the arm, with the tip positioned in a large central vein
Guidewire-Assisted Vascular Access	The use of guidewires to assist in navigating and placing catheters during vascular access procedures
Radial Access Procedure	Adopting radial access has become increasingly popular due to potential benefits such as reduced bleeding complications and increased patient comfort compared to other access sites

Radial Access	One of the major arteries in the forearm, and the primary site for radial access procedures
Radial Artery	One of the major arteries in the forearm, and the primary site for radial access procedures
Catheterization	The insertion of a catheter, a thin tube, into a blood vessel for diagnostic or interventional purposes
Transradial Catheterization	A procedure where catheters are introduced through the radial artery for various medical interventions
Sheath	A tubular introducer device used to provide access to blood vessels and accommodate the passage of other devices during catheterization
Guidewire	A thin, flexible wire used to guide and position catheters during medical procedures
Hemostasis	The process of stopping bleeding or preventing hemorrhage after the removal of catheters or sheaths
Vascular Complications	Potential issues related to blood vessels, such as bleeding or injury, that may occur during or after radial access procedures
Vascular Complications	Potential issues related to blood vessels, such as bleeding or injury, that may occur during or after radial access procedures
Radial Spasm	Constriction or spasm of the radial artery, which may occur during or after catheterization
Allen's Test	A test performed before radial access to assess the collateral circulation of the hand and ensure adequate blood supply
Radial Artery Occlusion	Closure or blockage of the radial artery, which can occur as a complication of radial access procedures
Radial Artery Patency	The openness and unobstructed flow of the radial artery after catheterization
Ultrasound-Guided Radial Access	Using ultrasound imaging to guide the insertion of catheters and sheaths into the radial artery
Compression Band	A device applied to the wrist after radial access to achieve hemostasis and prevent bleeding
Transradial Angiography	Angiography procedures performed through the radial artery, commonly used for cardiac and peripheral interventions
Radial Lounge Position	A patient positioning method where the arm is extended and externally rotated to facilitate radial access
Radial-to-Peripheral Artery Switch	A technique where the radial artery is used as a conduit for bypass surgery in the lower extremities
Radial-first Approach	A strategy where radial access is the preferred and primary approach for cardiac catheterization
Iliac Procedure	Iliac procedures typically involve interventions in the iliac arteries
Iliac Arteries	The major arteries that supply blood to the pelvis and lower limbs, including the common iliac, internal iliac, and external iliac arteries
Iliac Stenosis	Narrowing of the iliac arteries, often caused by atherosclerosis, which can lead to reduced blood flow
Common Iliac Artery	The large artery formed by the bifurcation of the abdominal aorta, giving rise to the internal and external iliac arteries
External Iliac Artery	The artery that continues from the common iliac artery, supplying blood to the lower limbs
Internal Iliac Artery	The artery that supplies blood to the pelvic organs and structures
Iliac Aneurysm	An abnormal dilation or bulging of the iliac artery, which can be a serious medical condition
Iliac Occlusion	Complete blockage or closure of the iliac arteries, preventing normal blood flow
Iliac Angiography	Imaging technique that uses contrast media to visualize the blood vessels in the iliac region
Iliac Stent Placement	Implantation of a stent in the iliac arteries to keep them open and improve blood flow
Endovascular Iliac Intervention	Minimally invasive procedures performed inside the blood vessels to treat iliac artery conditions
Aortoiliac Disease	Vascular disease affecting both the abdominal aorta and iliac arteries
Iliac Atherectomy	Removal of atherosclerotic plaque from the iliac arteries using a specialized catheter
Pelvic Angioplasty	A procedure to widen narrowed or blocked blood vessels in the pelvic region, often including the iliac arteries
Bifurcation Lesion	A condition where a blood vessel, such as the common iliac artery, divides into two branches, and there's a blockage at that point
Iliofemoral Arteries	Arteries that include the common iliac, external iliac, and common femoral arteries, collectively supplying blood to the lower limbs

Iliac Duplex Ultrasound	A diagnostic imaging technique using ultrasound to assess blood flow and detect abnormalities in the iliac arteries
Iliac Vein Compression Syndrome	A condition where compression of the iliac veins by the iliac arteries leads to impaired blood flow from the legs
Aneurysmectomy	Surgical removal of an aneurysm, which can be performed on iliac aneurysms
Venous Procedure	A medical procedure involving the veins, which are blood vessels that carry blood toward the heart
Venous Access	Creating an entry point into a vein, often for the purpose of administering medications, fluids, or withdrawing blood
Central Venous Catheter (CVC)	A catheter inserted into a large vein, typically in the neck, chest, or groin, used for various medical treatments
Peripheral Venous Catheter	A catheter inserted into a smaller vein, usually in the arm or hand, for short-term medical treatments
Venipuncture	The process of puncturing a vein with a needle for the purpose of drawing blood or administering medications
Phlebotomy	The practice of drawing blood from veins for diagnostic testing or blood donation
Venous Thrombosis	The formation of a blood clot (thrombus) within a vein
Deep Vein Thrombosis (DVT)	Formation of a blood clot in a deep vein, commonly in the legs
Superficial Vein Thrombosis	Formation of a blood clot in a deep vein, commonly in the legs
Venous Stasis	Reduced blood flow in the veins, often leading to pooling of blood and potential clot formation
Varicose Veins	Enlarged and twisted veins, usually occurring in the legs, due to weakened vein walls
Chronic Venous Insufficiency (CVI)	Condition where veins are unable to adequately return blood to the heart, leading to poor circulation
Compression Stockings	Elastic garments worn on the legs to improve venous circulation and reduce symptoms of venous insufficiency
Venous Ulcer	A chronic wound on the skin caused by poor venous circulation, often located on the lower leg
Sclerotherapy	A medical procedure involving the injection of a solution into veins to close or eliminate them, often used for treating varicose veins
Vein Stripping	Surgical procedure to remove or tie off varicose veins to improve blood circulation
Venous Angiography	Imaging technique used to visualize veins, often involving the injection of contrast media
Venous Doppler Ultrasound	Diagnostic imaging technique using ultrasound to assess blood flow and detect abnormalities in veins
Vein Ligation	Surgical procedure involving the tying off or closure of a vein, often performed to address varicose veins
Below the Knee (BTK) Procedure	Medical interventions or procedures performed on the arteries or veins in the lower leg
Peripheral Arterial Disease (PAD)	A condition characterized by the narrowing or blockage of arteries outside the heart, often affecting the lower extremities
Critical Limb Ischemia (CLI)	An advanced stage of PAD characterized by severe blockages and a risk of limb loss
Atherectomy	Removal of atherosclerotic plaque from blood vessels using a specialized catheter
Balloon Angioplasty	A procedure in which a balloon catheter is used to widen narrowed or blocked blood vessels
Stent Placement	Implantation of a stent to keep a blood vessel open after angioplasty
Popliteal Artery	The artery located behind the knee, branching into the anterior and posterior tibial arteries
Anterior Tibial Artery (ATA)	The artery that runs down the front of the leg, supplying blood to the anterior compartment of the leg
Posterior Tibial Artery (PTA)	The artery that runs down the back of the leg, supplying blood to the posterior compartment of the leg
Tibial Arteries	A group of arteries including the anterior and posterior tibial arteries, which supply blood to the lower leg and foot
Vein Bypass Graft	A surgical procedure in which a graft is used to reroute blood around a blocked or narrowed vein
Peripheral Vascular Intervention (PVI)	Minimally invasive procedures to treat vascular issues in peripheral arteries, often involving BTK interventions

Intravascular Ultrasound (IVUS)	A diagnostic imaging technique using ultrasound within blood vessels to assess the extent of blockages
Chronic Total Occlusion (CTO)	A complete blockage of a blood vessel persisting for an extended period
Laser Atherectomy	Arteries supplying blood to the foot, including the dorsalis pedis and plantar arteries
Toe-Brachial Index (TBI)	The ratio of blood pressure at the toe to the blood pressure in the arm, used to assess blood flow to the toes
Introducer Kit	A collection of medical devices assembled for introducing and accessing blood vessels during various procedures
Sheath	A tubular introducer device used to provide access to blood vessels and accommodate the passage of other devices
Guidewire	A thin, flexible wire used to guide and position catheters during medical procedures, often part of introducer kits
Hemostatic Valve	A valve integrated into the introducer sheath, allowing for the passage of devices while minimizing blood loss
Obturator	A removable device used to facilitate the introduction of the guidewire into the sheath
Introducer Needle	A sharp needle used to puncture the skin and access blood vessels, often used in conjunction with the sheath
Dilator	A tapered device used to enlarge the access site before inserting the sheath
Y-Adapter	A component of the introducer kit that allows for the simultaneous connection of multiple devices
Arterial Introducer	A type of introducer kit designed for accessing arteries, often used in arterial catheterization procedures
Venous Introducer	A type of introducer kit designed for accessing veins, commonly used in venous catheterization procedures
Radiopaque Marker	A visible marker on the introducer devices that is visible under medical imaging to aid in proper placement
Introducer Catheter	A catheter used for introducing other catheters or devices through the vascular access site
Flush Device	A component of the introducer kit used for flushing and maintaining the patency of the vascular access
Puncture Site Closure Device	A device used to close the puncture site in the vessel after the completion of the procedure
Guidewires	Thin, flexible wire used to guide and position catheters during medical procedures
Percutaneous Transluminal Coronary Angioplasty (PTCA) Guidewire	Guidewire designed specifically for use in angioplasty procedures
Core Wire	The central wire within a guidewire that provides strength, support, and flexibility
Coil Reinforcement	A spiral winding of wire around the core to enhance the torque control and support of the guidewire
Hydrophilic Coating	A lubricious coating on the guidewire to reduce friction and facilitate smooth navigation through vessels
Various Tip Configurations	Shapable guidewires may come in different tip configurations, such as J-shaped, angled, or angled-tip shapes, to accommodate various procedural requirements
J-tip (or J-shaped Tip)	The curved or hook-shaped tip of some guidewires to aid in steering through vessels
Preshaped Guidewire	A guidewire with a preformed curve or shape to facilitate navigation through specific anatomical structures
Shapable Tip	The tip of the guidewire can be manipulated or shaped by the medical professional during the procedure
Floppy-Tip Guidewire	Guidewire with a flexible, floppy tip for navigating tortuous or challenging anatomy
Super-Stiff Guidewire	Guidewire with increased stiffness for better support, often used in challenging cases
Steerable Guidewire	Guidewire that can be directed or steered by the operator to navigate through vessels
Hypotube Guidewire	Guidewire with a hollow tube (hypotube) providing additional support and flexibility
Exchange Length Guidewire	Longer guidewire designed for exchanging catheters or introducing additional devices
Dilatation Guidewire	Guidewire designed for passing through narrowed segments to facilitate balloon dilation
Flexibility	The tip of the guidewire is designed to be highly flexible, allowing it to bend and adapt to the shape of the blood vessels. This flexibility is crucial for navigating through complex anatomical structures

Steerability	Shapable guidewires often have a steering mechanism that allows the physician to control the direction of the guidewire tip. This is essential for navigating through vessels with multiple branches and curves
Torquability	The ability of a guidewire to transmit and maintain torque, or rotational force, from one end to the other
Torque Transmission	A guidewire with good torquability can effectively transmit torque along its length. This allows the healthcare provider to precisely control the orientation of the tip of the guidewire, facilitating navigation through blood vessels
Pushability	Ability of a guidewire to advance through the vascular system with sufficient force
Force Transmission	Pushability is a measure of how effectively a guidewire can transmit force from its proximal end (outside the body) to its distal end (inside the body). The ability to transmit force is essential for advancing the guidewire through vessels with varying levels of resistance
Lesion Crossability	Lesions, such as narrowed or blocked segments of blood vessels, may pose resistance to the advancement of the guidewire. A guidewire with good pushability can overcome such resistance, aiding in the successful crossing of lesions
Radiopacity	Many guidewires have radiopaque markers or coatings that make them visible under fluoroscopy or other imaging techniques. This helps the healthcare provider track the position of the guidewire within the body
Frontline/Workhorse Guidewires	A versatile and commonly used guidewire that serves as the primary tool for navigating the coronary vasculature during various cardiac procedures
Versatility	Frontline guidewires are designed to be versatile and adaptable to different clinical situations. They can be used in a variety of coronary interventions, including angioplasty, stenting, and other procedures
Balanced Performance	These guidewires typically offer a balanced combination of characteristics such as pushability, torqueability, and flexibility. The goal is to have a guidewire that can effectively navigate through the vasculature, provide support during interventions, and overcome obstacles encountered in the arteries
Standard Tip Configurations	Frontline guidewires often come with standard tip configurations, such as straight or J-shaped tips. These tips are designed for general use and can be effective in navigating through a variety of vessel anatomies
CTO (Chronic Total Occlusion) Guidewires	A CTO occurs when a coronary artery is completely blocked, typically by a hardened or calcified plaque. Unlike a partial blockage, which may still allow some blood flow, a CTO presents a complete obstruction
Guidewires for CTO	Guidewires used in CTO interventions are specifically designed to address the unique challenges presented by total occlusions. These guidewires are engineered to provide enhanced capabilities for crossing the CTO and reaching the distal vessel
Enhanced Tip Design	CTO guidewires often have specialized tip designs, such as tapered or blunt tips, to facilitate entry into the occluded segment and improve navigation
Advanced Materials	These guidewires may be constructed from advanced materials like nitinol, which combines flexibility with shape memory, allowing the wire to navigate through complex anatomies
High pushability and Torquability	CTO guidewires typically exhibit high pushability to help overcome resistance within the occluded vessel and torquability for precise steering through tortuous pathways
Steering and Navigation	Successful CTO interventions require the ability to navigate the guidewire through the occluded vessel, often characterized by challenging anatomical features and calcifications. The guidewire must be steerable and flexible while maintaining adequate pushability
Crossability	Crossability refers to the ability of the guidewire to cross the CTO and reach the distal vessel. CTO guidewires are optimized for effective and successful crossing, allowing subsequent interventional devices, such as balloons and stents, to be delivered to the target site
Hydrophilic-Coated Guidewires	Designed for smooth navigation through blood vessels, particularly in situations where low friction is crucial
Features	Have a hydrophilic coating that reduces friction and enhances trackability
Coronary Guidewires	Used in coronary interventions, such as angioplasty and stenting
Features	Optimized for navigating through coronary arteries, with varying lengths and tip configurations
Diagnostic Guidewires	Used for diagnostic procedures, such as angiography
Features	Designed for easy and precise placement to help guide diagnostic catheters
Pediatric Guidewires	Specially designed for pediatric patients, considering their smaller vascular anatomy

Features	Smaller in diameter and length to suit the needs of pediatric interventions
Neurovascular Guidewires	Used in neurovascular procedures, such as those involving the brain and spinal cord
Features	Often have a specialized design to navigate through the intricate vessels of the nervous system
Selection of Guidewires	depends on the specific clinical scenario, the anatomy of the patient, and the procedural requirements. Interventionalists may choose different guidewires based on factors such as lesion characteristics, vessel size, and the complexity of the intervention
PTA Balloons	
Plain Balloon Catheter	Basic balloon catheter without additional features, used for standard angioplasty
Drug-Coated Balloon (DCB)	Balloon coated with medication to help prevent restenosis (re-narrowing) of the treated vessel
Cutting Balloon	Balloon with small blades or microsurgical elements that are used to make controlled incisions in plaque during angioplasty
High-Pressure Balloon	Balloon designed to withstand and deliver higher inflation pressures during angioplasty
Low-Profile Balloon	Balloon with a compact design for use in vessels with limited space or challenging anatomy
Non-Compliant Balloon	Balloon designed to resist changes in shape when inflated, allowing for higher pressure dilation
Compliant Balloon	Balloon designed to conform to the shape of the vessel when inflated, providing more uniform dilation
Tapered Balloon	Balloon with a gradual reduction in diameter towards the catheter tip, enhancing flexibility and maneuverability
Long Balloon	Balloon with an extended length, suitable for treating longer segments of blood vessels
Focal Balloon	Balloon designed for precise treatment of a localized area or lesion within a blood vessel
Rapid Exchange (RX) Balloon	Balloon catheter design allowing for quicker exchange of the balloon over the guidewire
Scoring Balloon	Balloon with a scoring element or surface, used to disrupt calcified plaque during angioplasty
Peripheral Balloon	Peripheral Balloon
Chocolate Balloon	Balloon with a unique coating designed to minimize friction during inflation and enhance deliverability
Valvuloplasty Balloon	Balloon used in valvuloplasty procedures to treat stenotic heart valves
Stents	A stent is a medical device designed to provide support to a tubular structure, such as a blood vessel or a duct, to maintain its patency (openness) and allow the unobstructed flow of fluids
Bare-Metal Stent (BMS)	A stent without a coating, designed solely to provide structural support to the vessel
Drug-Eluting Stent (DES)	A stent coated with medication to help prevent the re-narrowing of the treated vessel, often used in coronary interventions
Biodegradable Stent	A stent made of materials that can be absorbed by the body over time, leaving only the natural vessel
Bioabsorbable Vascular Scaffold (BVS)	Similar to a biodegradable stent, a BVS provides temporary support to the vessel and then gradually dissolves
Self-Expanding Stent	A stent that expands on its own to fit the vessel wall when deployed, often used in peripheral vascular interventions
Balloon-Expandable Stent	A stent that is expanded using a balloon catheter during deployment
Covered Stent	A stent with an additional covering, often used to seal perforations or treat aneurysms
Nitinol Stent	A stent made of nitinol, a nickel-titanium alloy known for its flexibility and shape memory
Radioactive Stent	A stent coated with a radioactive substance to prevent restenosis by inhibiting cell growth
Absorbable Metal Stent	A stent made of a metal that can be absorbed by the body over time, reducing the long-term presence of a foreign object
Drug-Coated Balloon (DCB)	A balloon catheter coated with medication, often used as an alternative to stent placement
Resorbable Stent	A stent designed to be gradually absorbed by the body, eliminating the need for a permanent implant
Radiopaque Stent	A stent with markers visible under medical imaging to aid in proper placement and assessment

Peripheral Stent	A stent designed for use in arteries and vessels outside the coronary arteries, often in the legs or neck
Aspiration Devices	These devices are commonly used in medical procedures and interventions to clear unwanted materials or substances from a targeted space
Aspiration	The process of withdrawing fluids or materials from a body cavity using suction
Aspiration Device	Aspiration devices typically consist of a suction source, a tubing system, and a collection container or reservoir. The suction source creates negative pressure, and the tubing directs the flow of aspirated material into the collection container
Aspiration Catheter	A catheter with a suction capability, used for removing blood clots, debris, or fluids from vessels or organs
Thrombectomy	The removal of blood clots, often performed using an aspiration device, to restore blood flow
Embolectomy	The removal of an embolus (clot or foreign material) from a blood vessel, typically using aspiration devices
Mechanical Aspiration Device	A device that employs mechanical means, such as a pump or suction system, to aspirate fluids or materials
Manual Aspiration Device	A device operated manually by healthcare professionals to create suction for aspiration
Vacuum Aspiration	Aspiration method that utilizes negative pressure, creating a vacuum to withdraw fluids
Continuous Aspiration System	A system that provides continuous suction during a medical procedure, often used in surgical settings
Intracranial Aspiration Device	Device designed specifically for the removal of blood clots or other materials from within the brain
PleurX System	A tunneled catheter system used for long-term pleural drainage, often involving aspiration of fluid
Bone Marrow Aspiration Needle	A specialized needle used to withdraw bone marrow for diagnostic or therapeutic purposes
Endometrial Aspiration	Procedure involving the use of an aspiration device to sample cells from the endometrium for diagnostic purposes
Peritoneal Aspiration	Aspiration of fluid from the peritoneal cavity, often performed for diagnostic or therapeutic reasons
Liposuction Aspiration	A cosmetic procedure that involves the removal of excess fat through suction using specialized cannulas