

MICROSCOPIC BLOOD VESSEL STRUCTURE

VESSEL TYPE	TUNICA LAYERS	STRUCTURAL CHARACTERISTICS
Arteries	Tunica Interna Tunica Media Tunica Externa	Thickest walls; high elastic fiber content in Tunica Media to withstand high pressure. Narrow lumen.
Arterioles	Reduced Media Endothelium	Primary site of vascular resistance. Thin muscular walls controlled by the autonomic nervous system.
Capillaries	Tunica Interna Only	Microscopic diameter (single RBC width). Basement membrane and endothelial cells only. Ideal for diffusion.
Venules	Thin Externa Endothelium	Collect blood from capillary beds. Minimal smooth muscle; extremely porous for white blood cell emigration.
Veins	Tunica Interna Thin Media Thick Externa	Large, collapsible lumen. Contain valves to prevent backflow. Function as blood reservoirs.