

# Resistance vessels

Resistance vessels are vessels that **regulate blood flow to tissues** and organs. They are responsible for creating up to 50% of **peripheral resistance**.

We can divide them into two groups:

- **Precapillary resistance vessels** – small arteries and arterioles with a small lumen and a thick wall containing a high proportion of smooth muscle. Thanks to the smooth muscle of these vessels, it is possible to change the lumen considerably. With this mechanism, it is almost possible to decide on the minute cardiac output and the distribution of blood between individual organs.
- **Postcapillary resistance vessels** – venules representing only a very small part of vascular resistance. The ratio between the tone of the precapillary and postcapillary vessels determines the hydrostatic pressure of the blood in the capillaries, which allows filtration and reabsorption.

## Links

### Related articles

- Tissue fluid
- Blood vessels
- Functional typology of vessels

### Source

KITTNAR, Otomar, et al. *Lékařská fyziologie*. 1. edition. Praha : Grada, 2011. 790 pp. ISBN 978-80-247-3068-4.