

Cerebral Blood Flow (CBF)

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- Volume of blood flow per unit of brain tissue per minute
- Gray matter = **60 ml / 100g / min**
- White matter = 25 ml / 100g / min
- **< 30 % Flow relative to normal brain = infarct**

Cerebral Blood flow

- Decreased CBF relative to normal brain tissue (rCBF) most consistently and accurately identifies the ischemic core.
- A **rCBF threshold of <30%** has been extensively validated.
- Validated CBF thresholds may overestimate ischemic core if perfusion imaging is acquired very early after symptom onset.
- Similarly, the ischemic core may be overestimated if rapid reperfusion is achieved.

Other

- Lacunar or small subcortical infarcts are usually not detected using CTP thresholds
- But visual inspection of mean transit time, time-to-peak, and time-to-drain maps has a high specificity but moderate sensitivity for detection of these infarcts