The internal organization of ischemic stroke thrombi on a molecular and cellular level

Ischemic stroke thrombus

Histological assessment of 188 thrombi from endovascularly treated ischemic stroke patients

Bright field and fluorescence microscopy

Two main types of areas

- **Red blood cell-rich areas**: limited complexity
  - red blood cells
  - meshwork of thin fibrin

- **Platelet-rich areas**: increased complexity
  - leukocytes
  - DNA
  - von Willebrand factor
  - dense fibrin structures
  - platelets

These findings are important to better understand why platelet-rich thrombi are resistant to thrombolysis and difficult to retrieve via thrombectomy and can guide further improvements of acute ischemic stroke therapy

Staessens et al. Haematologica, 2020