

# Combinaison de l'imagerie en flux et du machine learning pour une quantification précise des schizocytes

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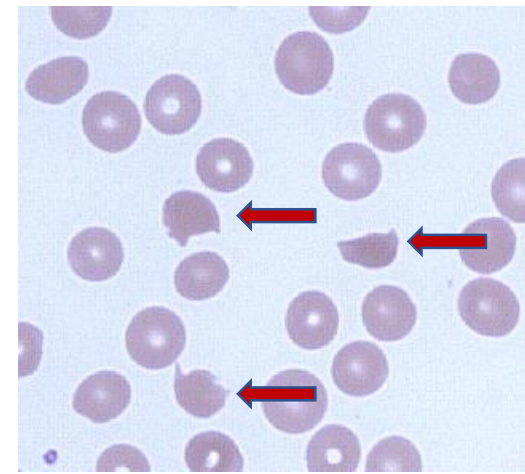
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# Quantification des schizocytes

- **Gold standard : frottis sanguin**

- Etalement et coloration
- Formation
- Chronophage

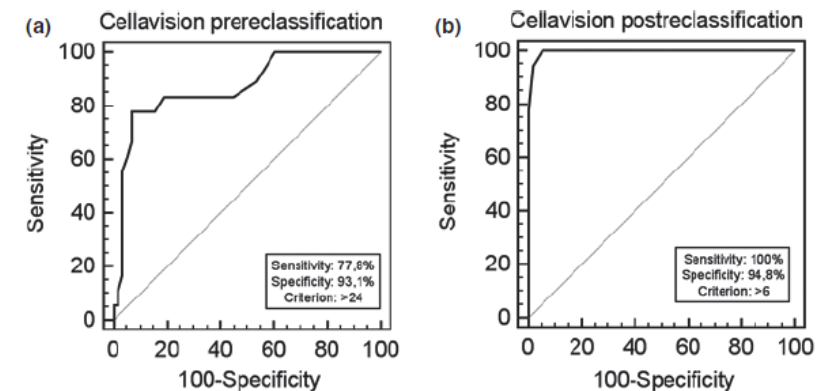


- **Indice de fragmentation des GRs**

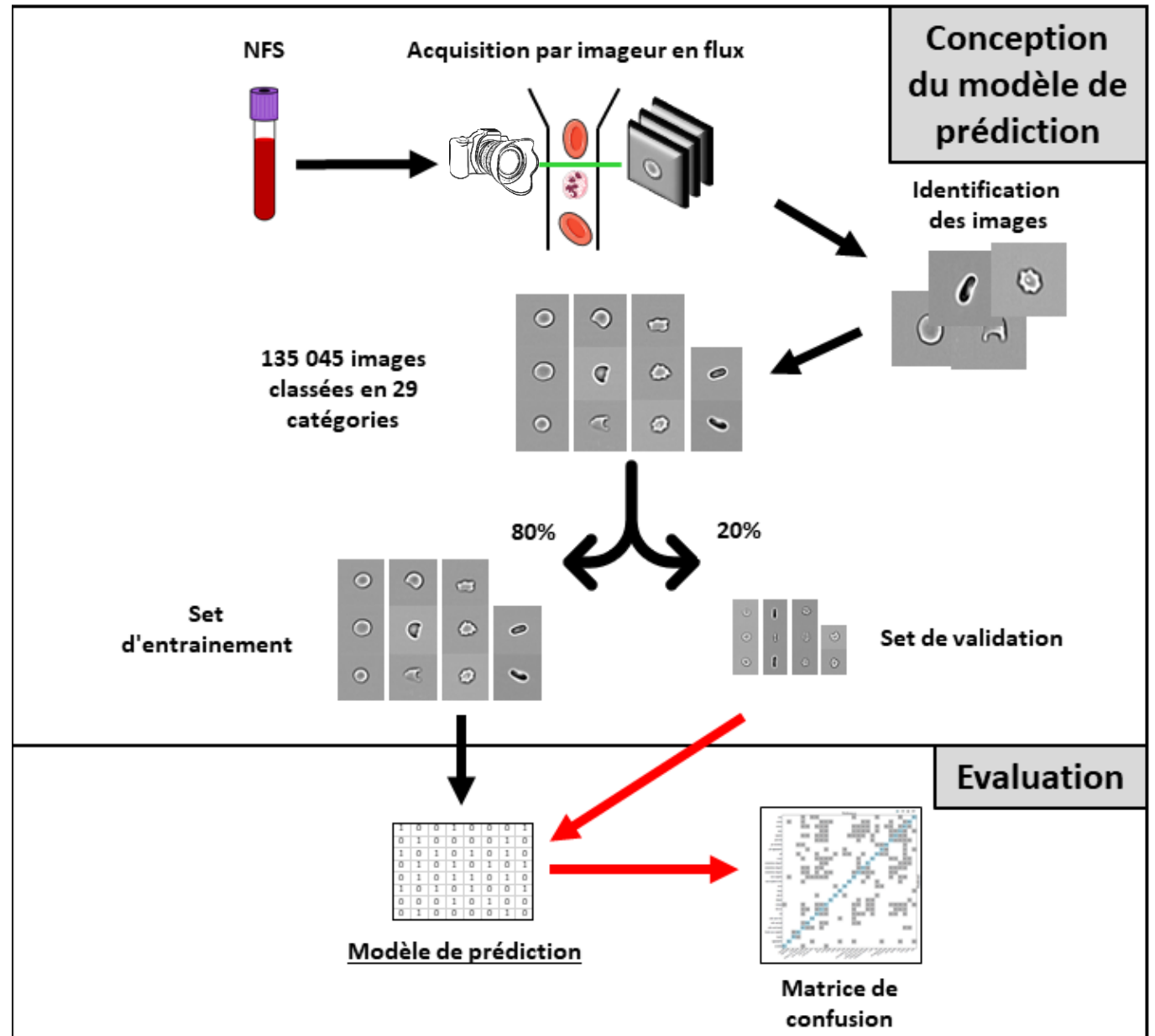
- Indépendant de la morphologie
- Sensible mais très peu spécifique (*J.F. LESESVE, Int J Lab Hematol, 2012*)

- **Analyseurs d'imagerie cellulaire automatisés**

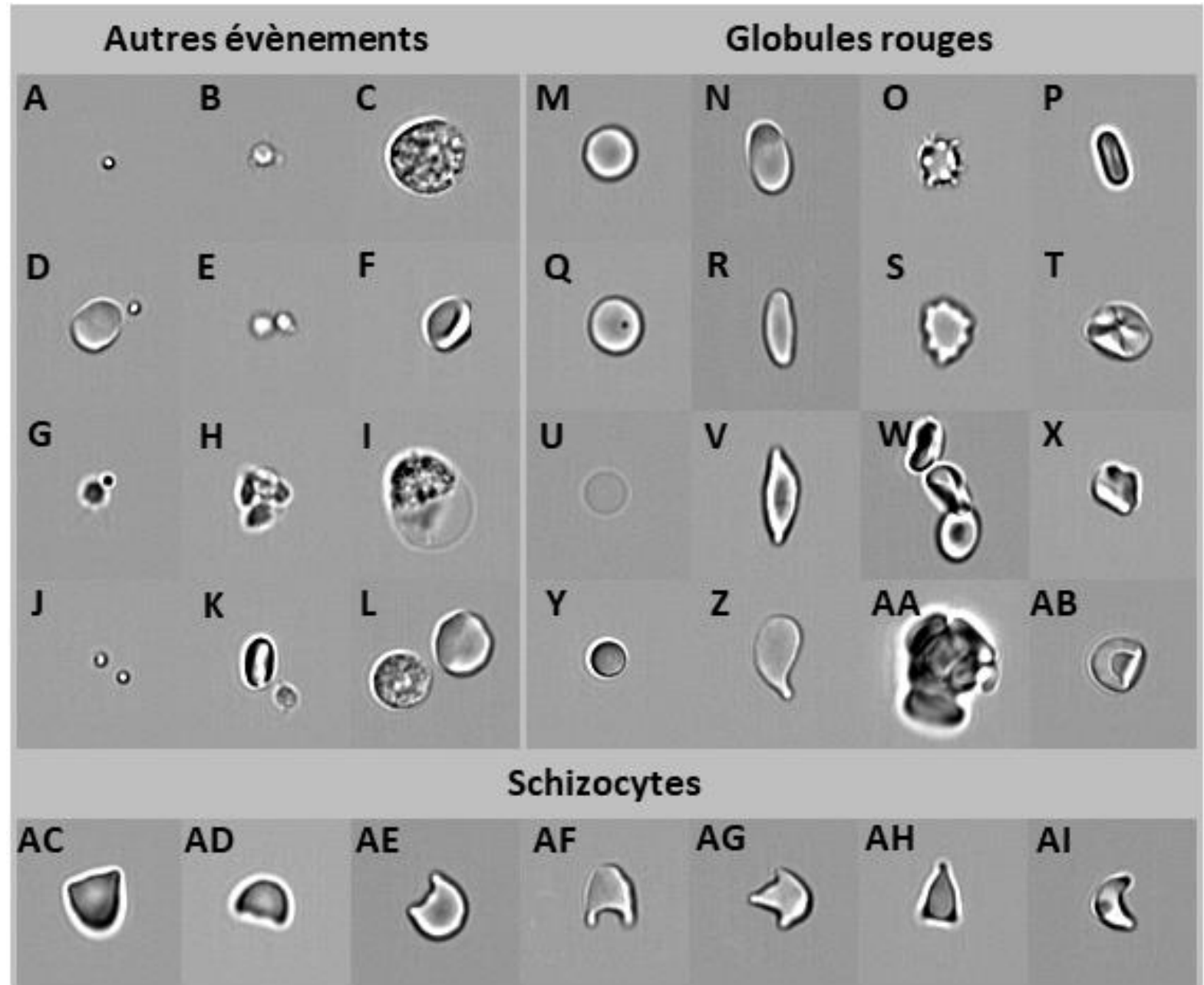
- Besoin d'un reclassement manuel (*A.S. HERVENT, Int J Lab Hematol, 2015*)



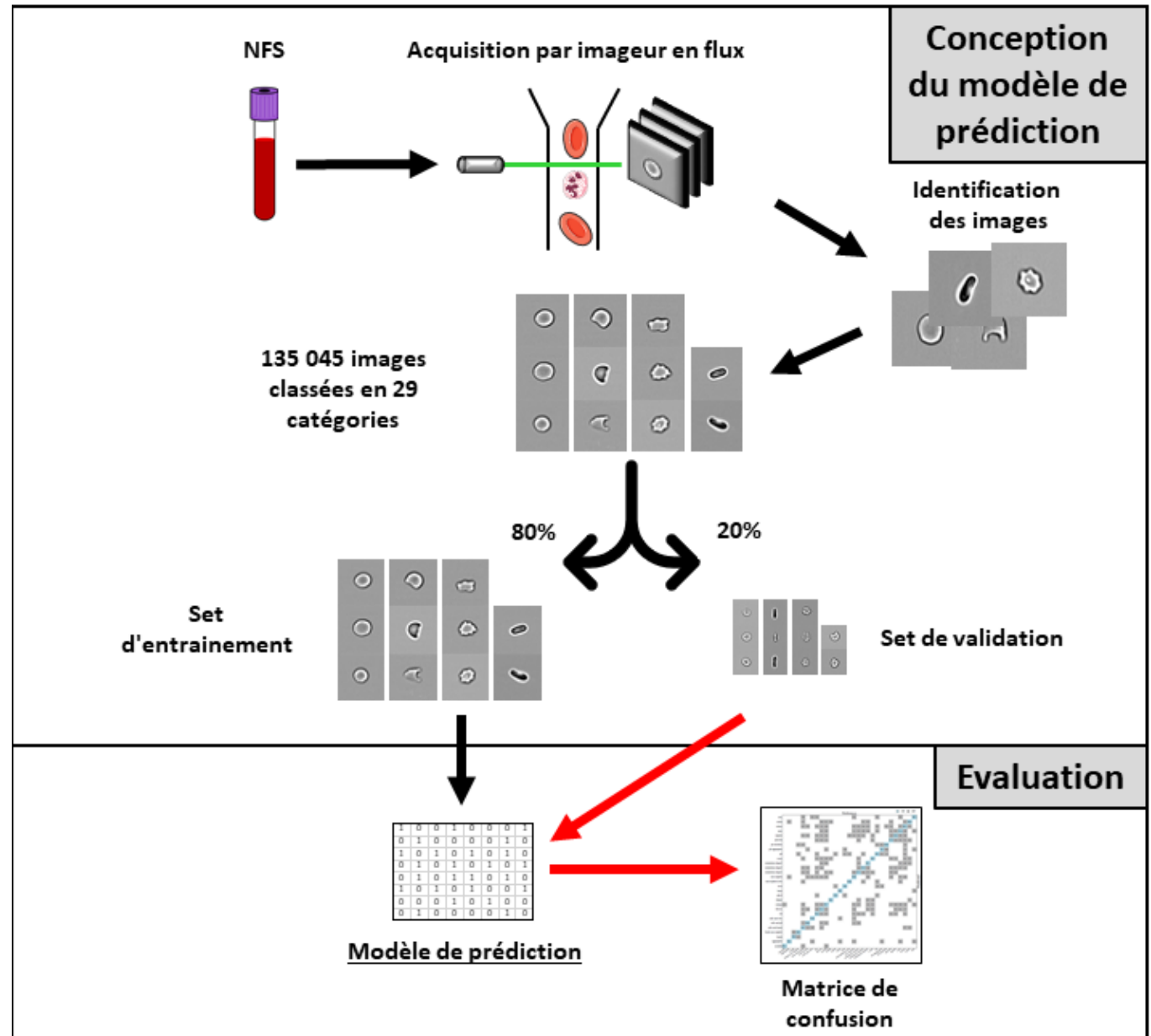
# Matériel et méthodes



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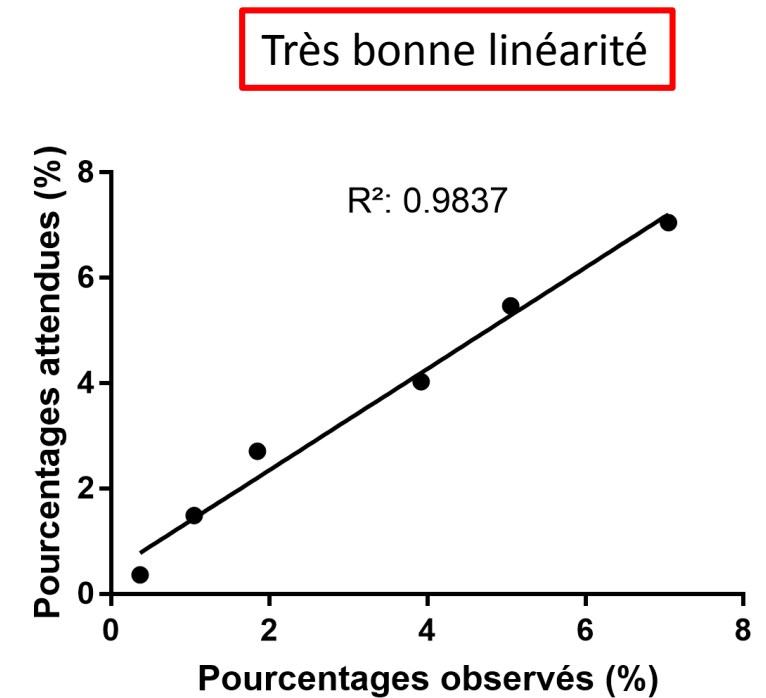
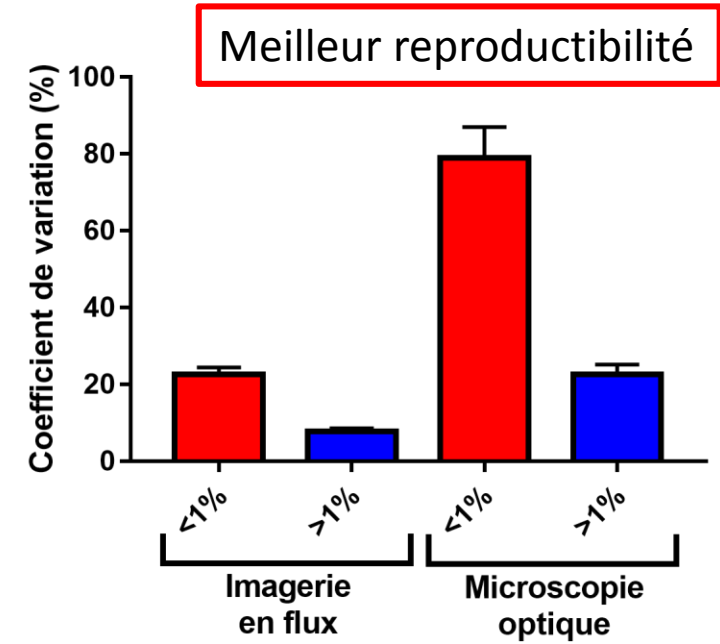
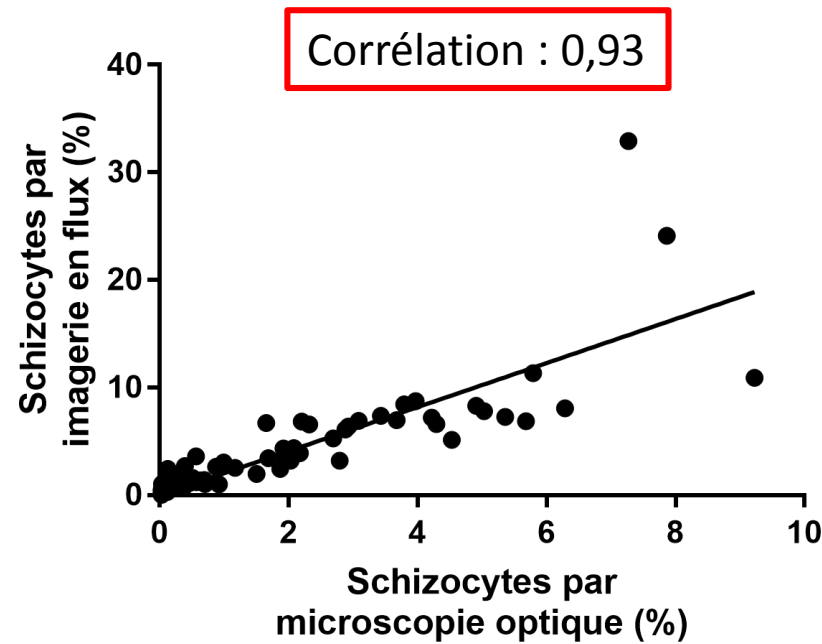
# Matériel et méthodes





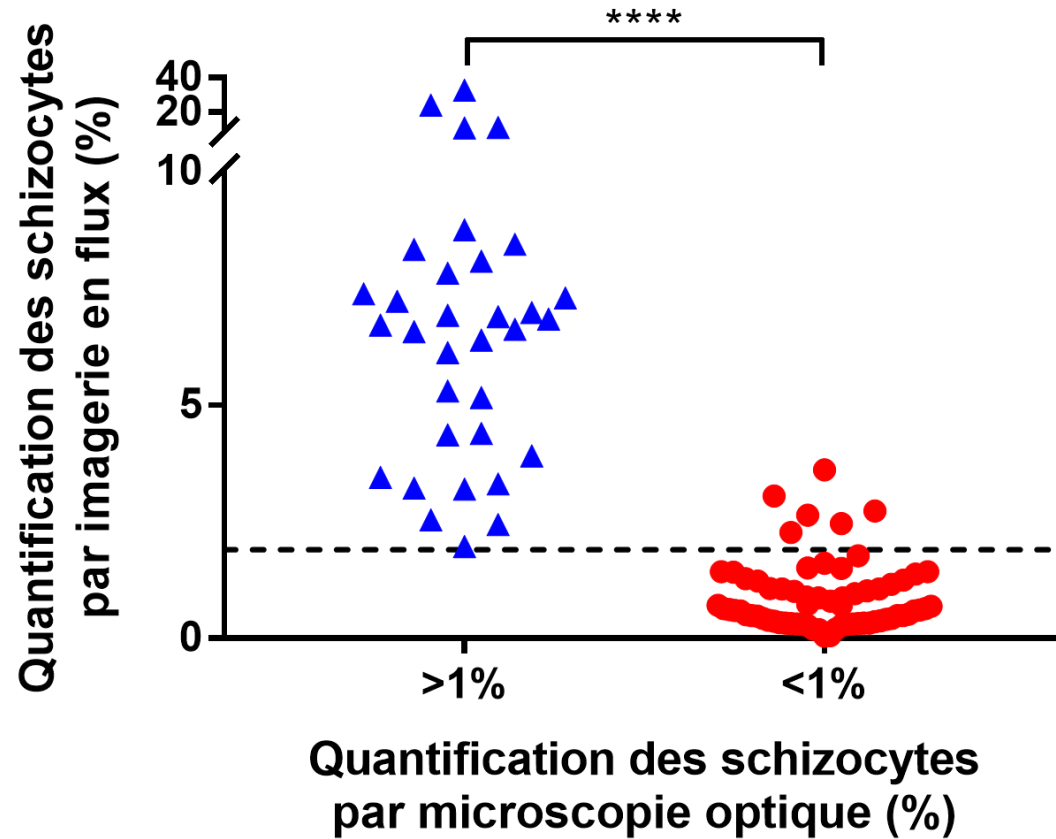
# Performances analytiques :

n=102 NFS



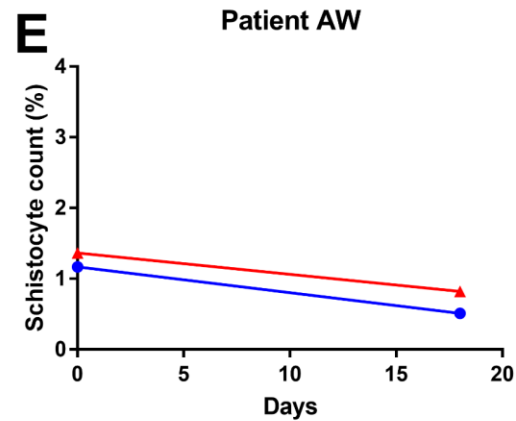
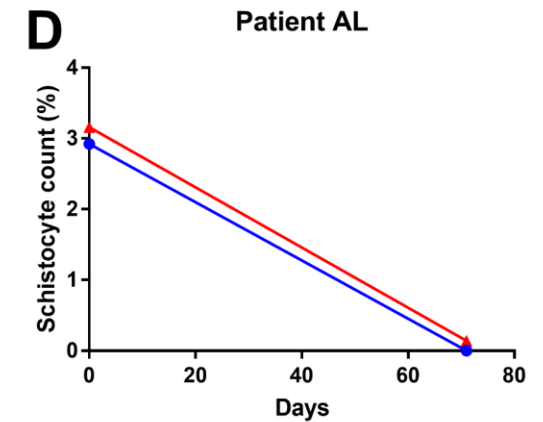
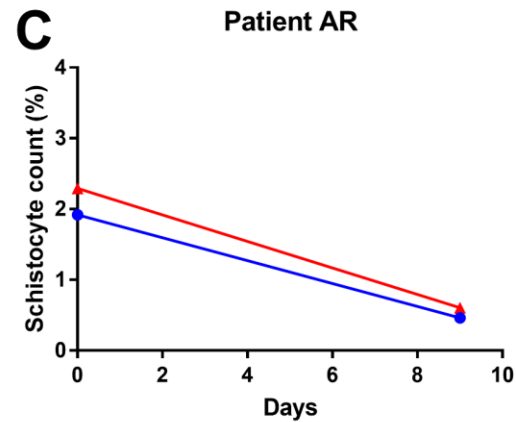
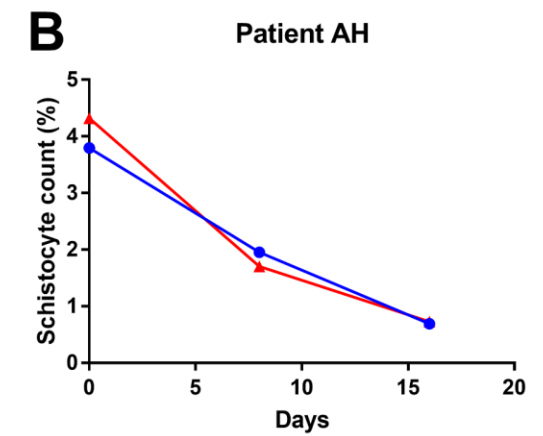
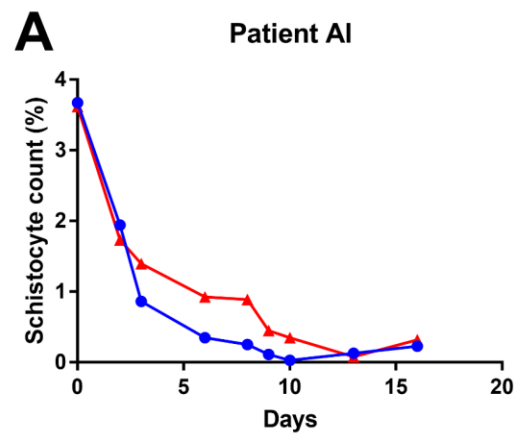
# Détection des schizocytoses >1%

**Sensibilité : 100%**  
**Spécificité : 91,3%**



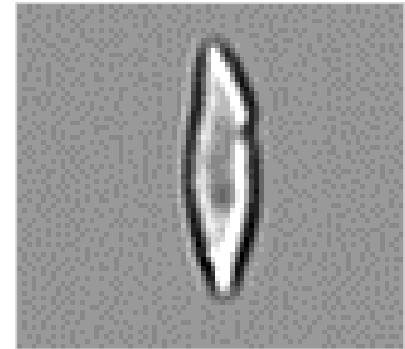
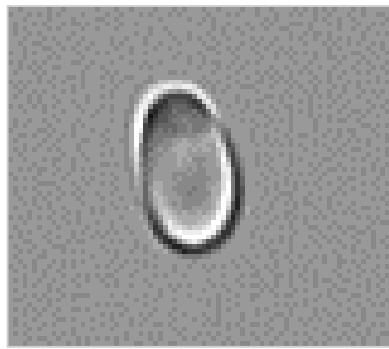
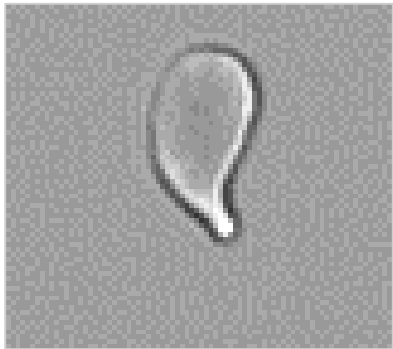


# Suivi des patients



- Mean % schistocytes count on blood smear
- ▲ %IS schistocytes convert to % schistocyte on blood smear

A bientôt pour la quantification des ...



Merci de  
votre  
attention

