How Does Sight OLO® See Cells?



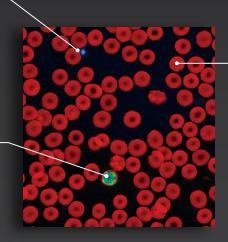
Digitizing Blood

OLO utilizes a fully automated brightfield and fluorescent microscope to provide rapid high quality images that are processed by algorithms to detect and analyze blood components. The hemoglobin measurement is based on an absorbance optical measurement through a small volume cavity with a short light path. The other CBC parameters are derived from a combination of multi wavelength brightfield images as well as fluorescence images.

6GB of data and 1,000+ multispectral micrographs are captured by OLO from each sample.

The **Blue** color is the emission of staining of the RNA and the lysosome. Those are found in cytoplasm of platelets and white blood cells, as well as the RNA in younger RBCs (reticulocytes).

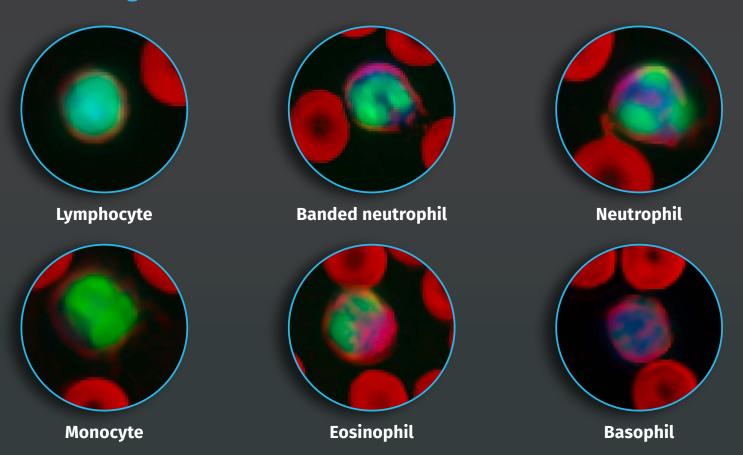
The **Green** color is the emission from staining of DNA, found in the nucleus. In the peripheral blood, typically only the WBCs have nuclei.



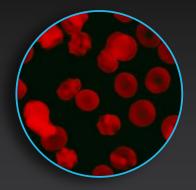
The **Red** color represents the HGB absorption, the hemoglobin found in RBCs, and to a much less extent also the refraction and the reflectance from the other cells (mainly in the cell circumference).

Note: Normal RBCs have a central thinner area, which appear here as dark (resembles the shape of a doughnut).

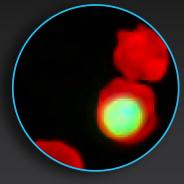
How OLO Digitizes White Blood Cells



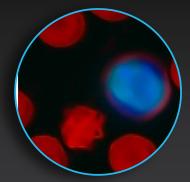
How OLO Digitizes Abnormal Cells



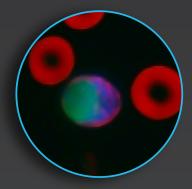
RBC agglutination



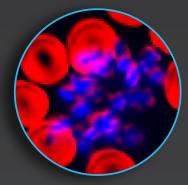
nRBC



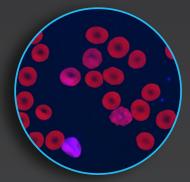
Blast cells



Immature granulocytes

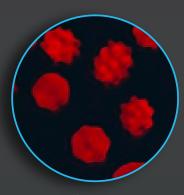


Platelet clumps



Reticulocytes





Echinocytes

sight

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Contact sales@sightdx.com or visit sightdx.com to learn more about how OLO digitizes blood.