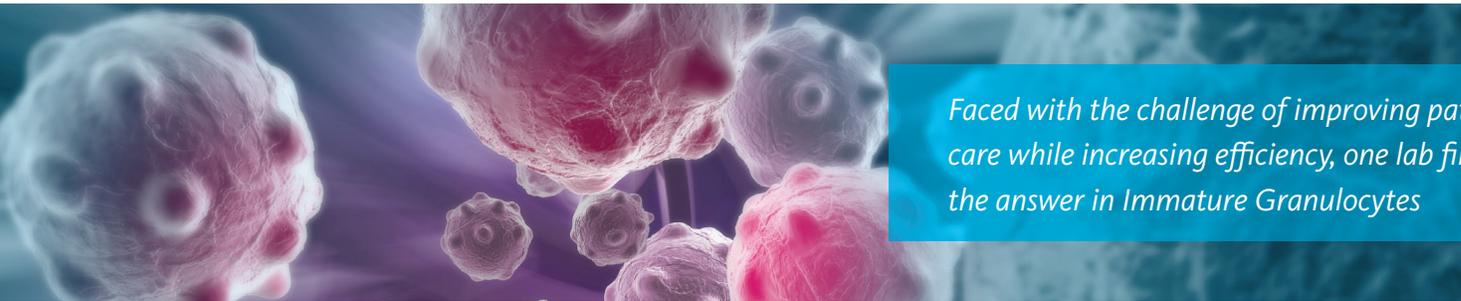


CUSTOMER PROFILE

IMMATURE GRANULOCYTES ARE KEY TO WORKFLOW OPTIMIZATION



Faced with the challenge of improving patient care while increasing efficiency, one lab finds the answer in Immature Granulocytes

Chicago's Rush University Medical Center (RUMC) is just one of the many healthcare facilities that face the increasingly difficult task of improving patient outcomes despite reductions in reimbursement. Changes in legislation have resulted in the need for clinical laboratories to operate more efficiently while contributing value to the medical chart. RUMC's laboratory identified an opportunity to decrease the number of manual smear reviews being performed and improving the patient experience at the same time.

The core laboratory at RUMC analyzes approximately 800-1000 samples per day on their Sysmex® XN-9100™ automated hematology line with WAM™ data management software. The XN-Series™ analyzers offer an automated 6-part WBC differential, which includes the Immature Granulocyte (IG) parameter, Interpretive Program (IP) messages to flag

abnormalities, and additional user defined flags with customizable limits. The customizable Sysmex WAM middleware manages rerun and reflex testing according to laboratory standard operating procedures.

As part of the smear review procedure, techs in the RUMC hematology department would manually verify diff results on all samples with an automated IG% greater than 1.5; however, the staff concluded that raising the IG review criteria to **greater than 5%** would allow for **greater efficiency** and overall **decrease in turnaround times** with no significant findings being overlooked. By raising the screening threshold for IGs to 5%, the hematology department was able to **decrease the review rate by approximately 30%** and free up over **3 hours of tech time each day** to assist in other areas of the lab.



Comparison of statistics before and after smear review threshold was changed.
*These statistics reflect cases with "IG Present" flag only or "IG Present" and "Left Shift?" flag combination.

The change in RUMC's smear review policy resulted in increased laboratory efficiency, decreased turnaround times, and cost savings from decreased reagent and glass slide usage.

Operational benefits of the Sysmex automated IG count:

- "IG Present" message alerts the operator to the presence of IG **ACCURATELY** measured by the analyzer
- Automated IG% and IG# measurement is more **rapid, reliable, and precise** than the 100-cell manual differential¹

¹Fernandes B & Hamaguchi Y. Automated Enumeration of Immature Granulocytes. Am J Clin Pathol. 2007;128:454-463