CLINICAL UPDATE

IMMATURE GRANULOCYTES AS PART OF INFECTION WORKUP FOR SEPSIS

Key facts about sepsis and how a unique parameter from Sysmex assists with diagnosis

1. Sepsis is the leading cause of death in the ICU.

   “The excellent diagnostic accuracy of IGs analysis on XN-9000 may represent a valid and reliable alternative to assessment of immature leukocytes with optical microscopy for diagnosing sepsis in the ICU.”


2. Bacterial infection is the most common cause of sepsis, but up to 50% of septic patients have negative blood culture results.

   “Compared with the band count, the immature granulocyte count and the ANC were better discriminators of infected from non-infected patients with normal total leukocyte counts.”


3. Sepsis is difficult to diagnose in newborns because the symptoms are nonspecific.

   “The statistical performance of the I/T ratio and the IG%, in identifying neonates with infection, was essentially identical.”


4. Early diagnosis of sepsis is crucial to successful treatment outcomes.

   “The IG count significantly discriminates between infected and non-infected patients with a sensitivity of 89.2% and a specificity of 76.4%, particularly within the first 48 hours after SIRS onset.”


5. There is no one biomarker that is diagnostic of sepsis.

   “The specificity of high percentages of immature granulocytes (>3%) for sepsis was greater than 90%.”


www.sysmex.com/us