Two-site evaluation of high-fluorescent cells for the detection of malignant cells: the importance of clinical information

In two different hematology laboratories, 1,698 body fluids (BF) were retrospectively analyzed on the Sysmex XN BF mode to determine optimal high fluorescent cells (HF-BF) cut-offs as predictors of the presence of malignant cells. The added value of clinical information (history and/or high suspicion of a neoplastic disorder) was also evaluated.

The knowledge of clinical information prior BFs collection permit to reach a sensitivity of 100.0% (95% CI; 81.5-100.0% (cut-off = 108 HF-BF/µL; n=140) and 95% CI; 95.7-100.0% (cut-off = 45 HF-BF/µL; n=1,558) in the first and second center, respectively) when combined with HF-BF cut-off. The HF-BF cut-off alone for the detection of malignant cells is of limited value.

Reviewing all BFs microscopically for detecting malignant cells is still the most cautious approach.