

AUTHOR'S REPLY

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Dear Sir,

I would like to thank Yasri and Wiwanitkit⁽¹⁾ for their interest in my paper.⁽²⁾ In Singapore, clinicians who order laboratory tests must comply with the Ministry of Health's regulations that the laboratory they use is properly accredited by recognised bodies (Regulation 44 under the Private Hospitals and Medical Clinics Regulations), a concern that Yasri and Wiwanitkit have rightly emphasised. Quality standards generally address work compliance to standard operating procedures. In the case of quantitative testing, such compliance guarantees result accuracy and test reliability. For qualitative testing, however, it is difficult for external bodies to measure test accuracy and reliability.

The reading and report of the peripheral blood smear (PBS) is a qualitative test. From my experience, there are two approaches to the reporting of the PBS, a carpet approach versus a target approach. In the carpet approach, the person reading the PBS does not need to know why the PBS is relevant to a particular patient. He or she just needs to be encyclopaedic and be able to detect any anomalies or abnormalities that are present. The target approach focuses on the specific clinical scenario and reports on the relevant aspect of the PBS, which could be either positive or negative findings. A common example in paediatrics is isolated thrombocytopenia, one of the indications for PBS review, in which the clinician often asks if it is a case of immune thrombocytopenia (ITP). The commonly used carpet approach would report a normal blood smear with perhaps a remark of critically low platelet count. This report is of no use to the clinician. A target approach would report the absence of blasts, atypical lymphocytosis, neutrophil Döhle bodies, Pelger-Huet anomaly, fragmented red cells, malaria and small platelets. All these specifically noted negative findings satisfy the American Society of Hematology's guidelines for the clinical diagnosis of ITP, in which thrombocytopenia occurs in the absence of other causes or disorders that may be associated with thrombocytopenia.⁽³⁾

In practice, it is unreasonable to expect an average laboratory staff member to be completely fluent with a standard haematology atlas, and the commonly adopted carpet approach is of little relevance to the clinicians. Rather, we should rethink how PBS should be reported. By categorising the various indications, the article has provided a starting point to develop a target approach that answers clinical needs.

Yours sincerely,

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