

## Recent advances in diagnosis of acute myeloid leukaemia : a review.

### ABSTRACT

Acute Myeloid Leukaemia is one of the commonest blood cancer in Malaysia. Recent advancements in molecular genetics have led to better understanding of AML pathogenesis which is crucial for patient stratification and therapeutic options. The advent of next generation sequencing (NGS) is now the vogue to interrogate acute myeloid leukaemia (AML) genome at single base pair resolution. In this review, we will discuss current approaches in the diagnosis of AML and the role of NGS in elucidation of genomic aberrations. Although NGS is anticipated to impact the new era of AML diagnosis, there are challenges in understanding mutations found in an AML genome and how this technology will be implemented in a diagnostic setting. NGS will pave the way for personalized medicine approach, with the hope of better response to tailored treatment regimen.

**Keyword:** Genomics of AML; Next Generation Sequencing.