

Illumina expands collaboration with Janssen to advance molecular residual disease cancer test

05 January 2024 | News

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American firm Illumina Inc., a global leader in DNA sequencing and array-based technologies, has signed an agreement with Janssen Research & Development, LLC (Janssen). This collaboration will be the first relating to the development of Illumina's novel molecular residual disease (MRD) assay, a whole-genome sequencing (WGS) multi-cancer research solution that detects circulating tumor DNA (ctDNA) to better understand the persistence or recurrence of disease following clinical intervention.

In oncology, MRD testing is increasingly being used as a prognostic indicator of disease recurrence after treatment by helping clinicians assess the effectiveness of a patient's current course of clinical intervention and guide their decisions about precision therapy. MRD testing for solid tumours shows promise for improving the standard of care where current disease-monitoring tools fall short in accurately identifying patients' response to treatment.

The Illumina WGS MRD assay, which is currently in development, will detect ctDNA for MRD assessment in research settings that evaluate samples from patients previously diagnosed with cancer across multiple solid tumour indications. In contrast with existing MRD solutions with complex workflows, Illumina plans to develop a research solution that will provide a cost-effective, highly sensitive, and automated workflow, with the potential to achieve a turnaround time of five to seven days.

Illumina intends to collaborate with other leaders in pharma to help further develop and expand the utility of its WGS MRD assay.