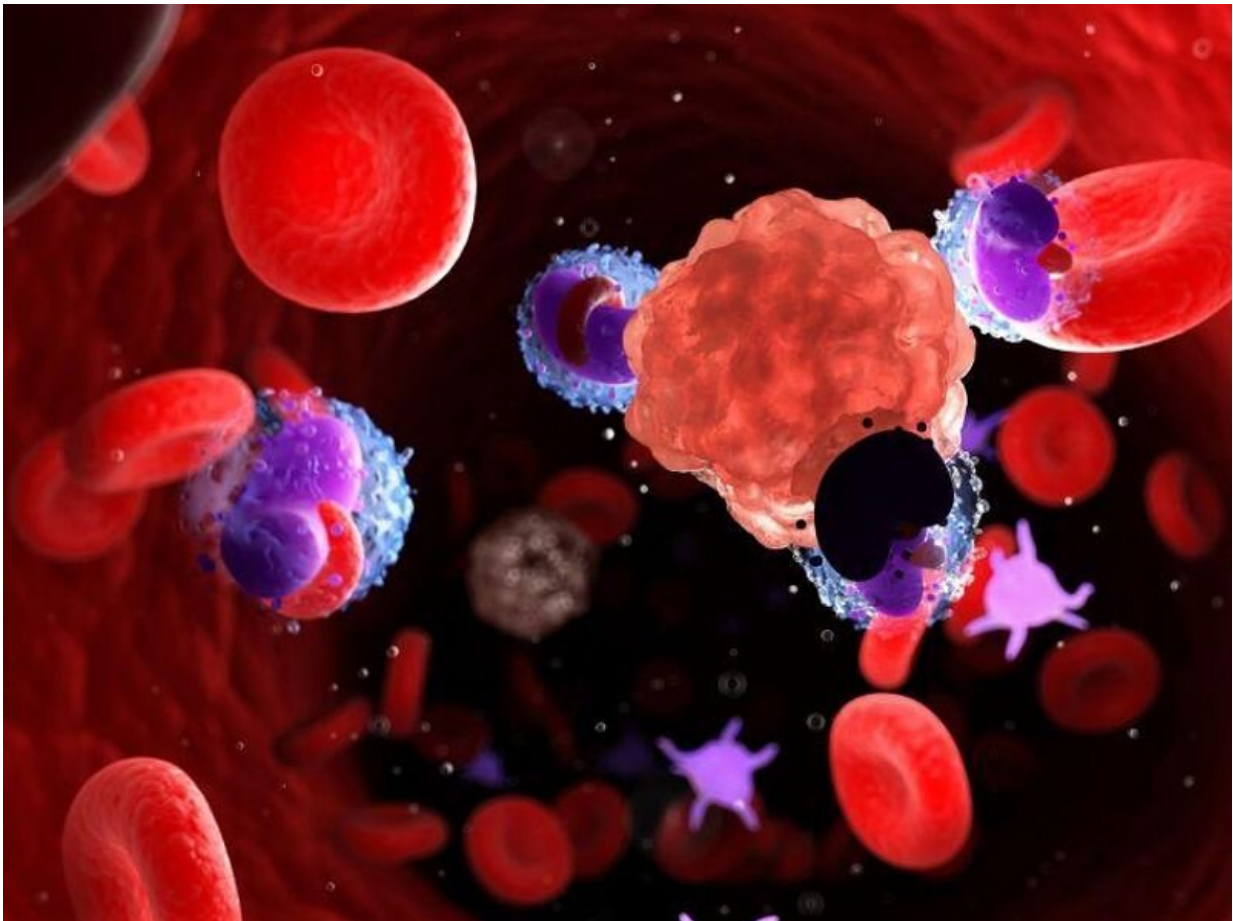


Single-tube multiparametric flow cytometry predicts treatment response in leukemia

December 21 2022, by Elana Gotkine



A single-tube eight-color multiparametric flow cytometry (MFC) panel

has good sensitivity for minimal/measurable residual disease (MRD) and excellent prediction for survival among patients with B-cell acute lymphoblastic leukemia (B-ALL), according to a study published online Dec. 12 in the *Archives of Pathology & Laboratory Medicine*.

Hongyan Liao, Ph.D., from the West China Hospital of Sichuan University in Chengdu, and colleagues reported their experience using a single-tube eight-color MFC panel to measure MRD status in adult B-ALL patients. The characteristics, MRD status, and prognosis of 486 patients were analyzed during a 10-year period.

The researchers found that in 74.2 percent of cases, MRD as assessed by MFC and polymerase chain reaction assays for *BCR-ABL*⁺ patients were concordant. MRD-negative status by MFC panel predicted favorable relapse-free survival and overall survival at the end of induction and the end of one consolidation course. Compared with those with at least one MRD-positive result and continuous MRD-positive results, [patients](#) with continuous MRD-negative results and at least one MRD-negative result showed favorable relapse-free survival and overall survival.

"Our single-tube eight-color MFC could potentially be taken as a routine indicator in the evaluation of the treatment response for [adult patients](#) with B-ALL," the authors write.

More information: Hongyan Liao et al, Association of Minimal Residual Disease by a Single-Tube 8-Color Flow Cytometric Analysis With Clinical Outcome in Adult B-Cell Acute Lymphoblastic Leukemia, *Archives of Pathology & Laboratory Medicine* (2022). [DOI: 10.5858/arpa.2022-0172-OA](#)

Copyright © 2022 [HealthDay](#). All rights reserved.

Citation: Single-tube multiparametric flow cytometry predicts treatment response in leukemia (2022, December 21) retrieved 25 April 2024 from <https://medicalxpress.com/news/2022-12-single-tube-multiparametric-cytometry-treatment-response.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.