Biomarker test predicts mild, serious IBD in newly diagnosed

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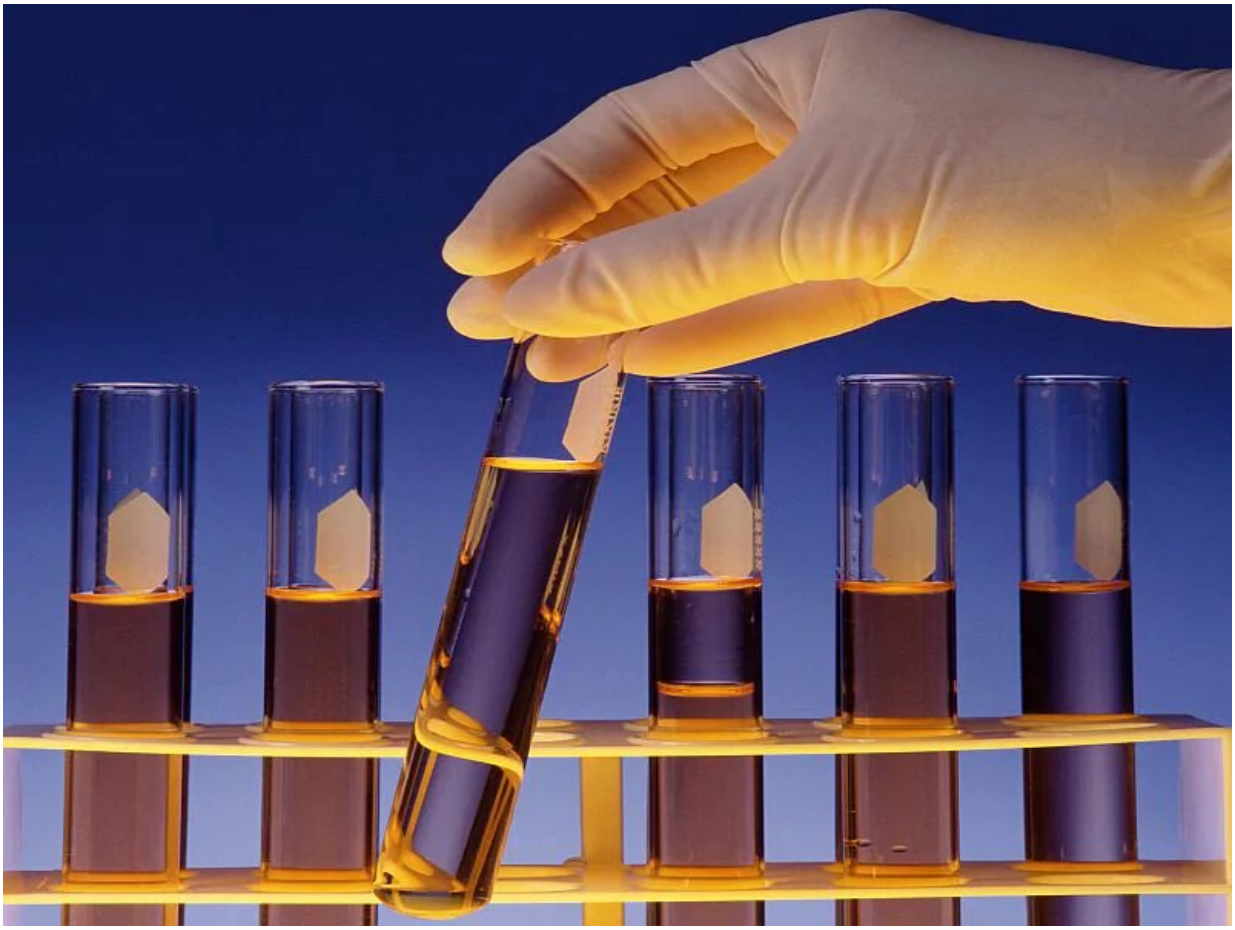

(HealthDay)—A new test can predict the course of inflammatory bowel

disease (IBD) in patients, according to a study published online April 27 in *Gut*.

Daniele Biasci, Ph.D., from the University of Cambridge in the United Kingdom, and colleagues performed transcriptomic analyses on purified CD8 T cells and/or whole blood from patients with active IBD. Consensus clustering of CD8 T cell transcriptomes was used to identify IBD1/IBD2 patient subgroups. Machine learning identified groups of genes that could classify IBD1/IBD2 subgroups. The best classifying genes were optimized for a quantitative polymerase chain reaction (qPCR) test that was validated in 66 patients with Crohn disease (CD) and 57 patients with ulcerative colitis (UC).

The researchers found that in both validation cohorts, a 17-gene qPCR-based classifier organized patients into two distinct subgroups. Regardless of the underlying diagnosis, the poor-prognosis IBD1 subgroup (IBDhi patients) experienced significantly more aggressive disease than IBDlo patients (IBD2 subgroup). The IBDhi group needed earlier treatment escalation (hazard ratios, 2.65 [CD] and 3.12 [UC]) and more escalations over time. For multiple escalations within 18 months, the test yielded a sensitivity of 72.7 percent (CD) and 100 percent (UC) and a negative predictive value of 90.9 percent (CD) and 100 percent (UC).

"This is the first validated prognostic biomarker that can predict prognosis in newly diagnosed patients with IBD and represents a step towards personalized therapy," the authors write.

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More information: Abstract/Full Text