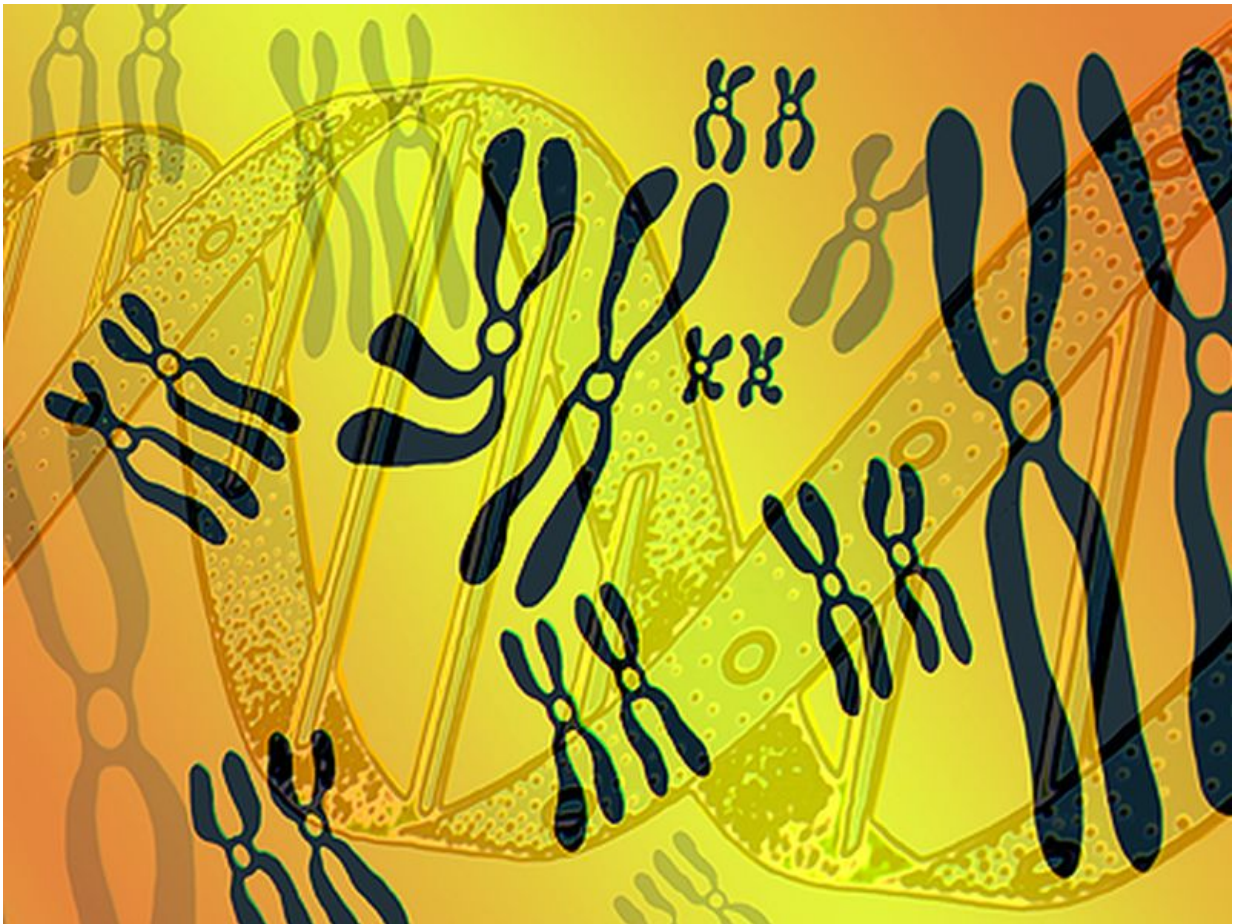


New mutations help predict survival in RARS-T

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(HealthDay)—New mutations have been identified with next-generation

sequencing (NGS) in refractory anemia with ring sideroblasts and thrombocytosis (RARS-T), which are prognostic for survival, according to a study published online Feb. 13 in the *American Journal of Hematology*.

Mrinal M. Patnaik, M.D., from the Mayo Clinic in Rochester, Minn., and colleagues examined predictors of survival in RARS-T. Clinical and laboratory samples from 82 patients were analyzed and a 27-gene NGS assay was applied to 48 marrow samples obtained at diagnosis.

The researchers found that most patients (94 percent) had one or more [mutations](#), with the most common mutations being *SF3B1* (85 percent), *JAK2V617F* (33 percent), *ASXL1* (29 percent), *DNMT3A* (13 percent), *SETBP1* (13 percent), and *TET2* (10 percent). Anemia and abnormal karyotype were independent prognostic factors for inferior survival in a multivariable survival analysis. In patients with NGS information, an association between poor survival was seen with the presence of *SETBP1* or *ASXL1* in univariate analysis ($P = 0.08$), while absence of these mutations was favorable ($P = 0.04$). A hazard ratio-weighted prognostic model, which included abnormal karyotype, *ASXL1* and/or *SETBP1* mutations, and [anemia](#), was able to classify [patients](#) into risk categories, with median survivals of 80, 42, and 11 months, respectively, for low, intermediate, and high risk ($P = 0.01$).

"In summary, we confirm the unique mutational landscape in RARS-T and provide a novel mutation-enhanced prognostic model," the authors write.

More information: [Abstract](#)
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