Transfusion dose density affects myelodysplastic syndrome survival

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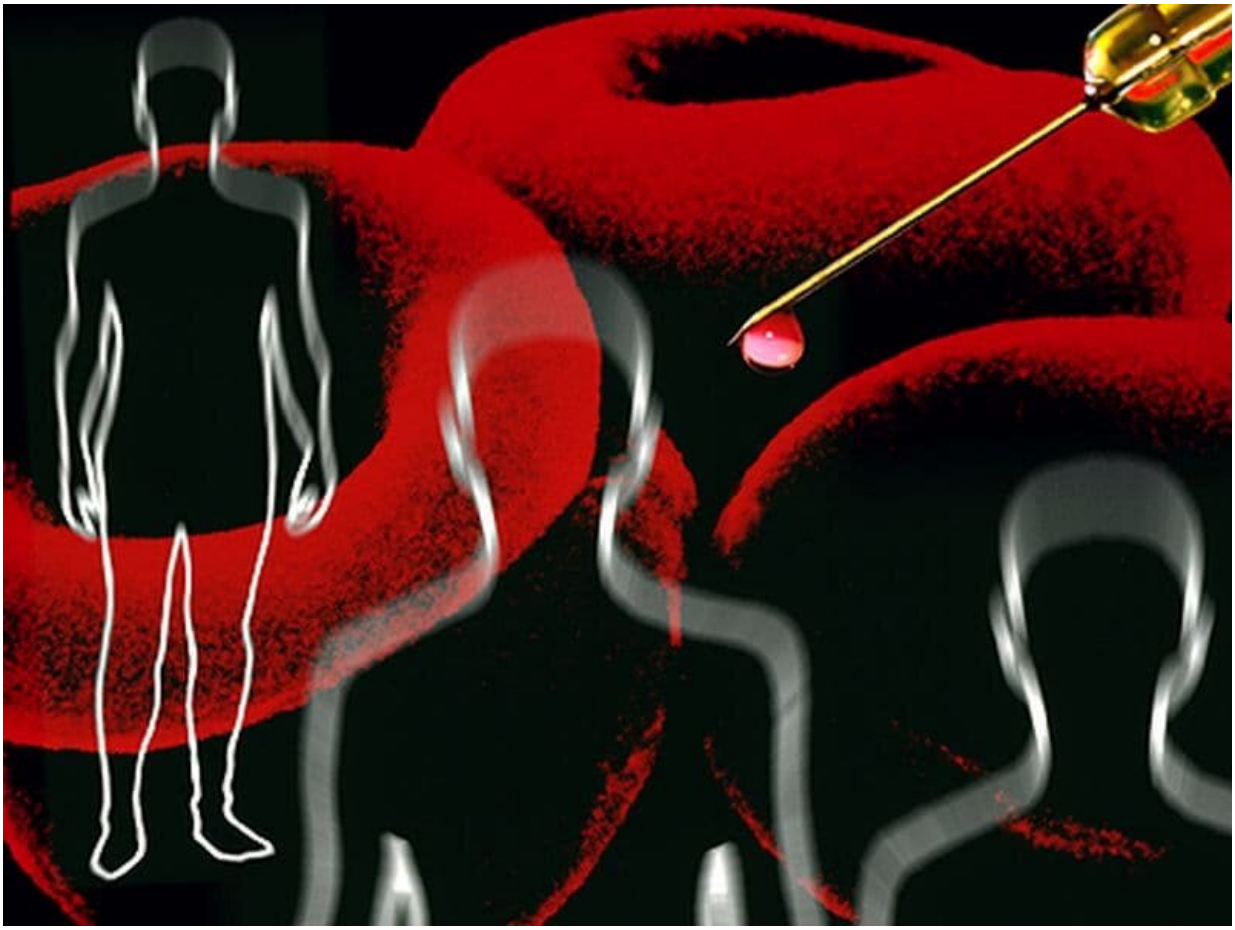

(HealthDay)—Transfusion dose density is an independent prognostic

factor for progression-free survival (PFS) in patients with myelodysplastic syndromes treated with red blood cell transfusions (RBCTs), according to a study published online June 6 in *Haematologica*.

Louise de Swart, M.D., from the Radboud University Medical Center in Nijmegen, Netherlands, and colleagues examined progression-free survival of lower-risk patients with myelodysplastic syndromes treated with RBCTs. Data were analyzed for 1,267 patients from 16 European countries and Israel.

The researchers found that 317 patients died without progression, and disease progressed in 162 patients. There were significant correlations for PFS with age, EQ-5D index, baseline World Health Organization classification, bone marrow blast count, cytogenetic risk category, number of cytopenias, and country. An inverse association was noted for transfusion dose density with progression-free survival; dose density had an increasing impact on risk up to a dose density of 3 units/16 weeks. After correction for the impact of treatment with erythropoietin agents, lenalidomide, and/or iron chelators, the transfusion dose effect continued to increase beyond 8 units/16 weeks.

"The negative association of transfusions on PFS already occurs at low RBCT dose densities below 3 units per 16 weeks," the authors write. "This indicates that the RBCT dependency in patients transfused at relatively low rates, who are usually considered as untransfused patients, may be considered as an indicator of poor prognosis for progression-free survival."

Several authors disclosed financial ties to the biopharmaceutical industry.

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