

A review of safety, efficacy, and utilization of erythropoietin, darbepoetin, and peginesatide for patients with cancer or chronic kidney disease: a report from the Southern Network on Adverse Reactions (SONAR).

Abstract:

The erythropoiesis-stimulating agents (ESAs) erythropoietin and darbepoetin prevent transfusions among chemotherapy-associated anemia patients. Clinical trials, meta-analyses, and guidelines identify mortality, tumor progression, and venous thromboembolism (VTE) risks with ESA administration in this setting. Product labels advise against administering ESAs with potentially curative chemotherapy (United States) or to conduct risk-benefit assessments (Europe/Canada). Since 2007, fewer chemotherapy-associated anemia patients in the United States and Europe receive ESAs. ESAs and the erythropoietin receptor agonist peginesatide prevent transfusions among chronic kidney disease (CKD) patients; clinical trials, guidelines, and meta-analyses demonstrate myocardial infarction, stroke, VTE, or mortality risks with ESAs targeting high hemoglobin levels. U.S. labels recommend administering ESAs or peginesatide at doses sufficient to prevent transfusions among dialysis CKD patients. For dialysis CKD patients, Canadian and European labels recommend targeting hemoglobin levels of 10 to 12 g/dL and 11 to 12 g/dL, respectively, with ESAs. ESA utilization for dialysis CKD patients has decreased in the United States.