Published in 2010, the CRASH-2 study remains one of the most influential clinical research articles in emergency care. Its staggering sample and effect sizes, randomized design, and low rate of adverse events drove clinical practice guidelines to recommend use of the fibrinolytic agent, tranexamic acid for adults with uncontrolled hemorrhage from trauma. The Figure above implies that an unnatural shift of the equilibrium of hemostasis in pathways A. or B. will lead to
an opposite effect. Any drug that prevents thrombosis by blocking A., whether via reducing coagulant protein effect, or agonist blockade on platelets, will increase the rate of bleeding. This axiom is based on hundreds of thousands of patients randomized in clinical trials for treatment of thrombosis affecting virtually every organ. Conversely, for the most part, any drug or combination of factors designed to tilt the balance of hemostasis toward clotting (by increasing A. or blocking B.) will increase the rate of clotting. As a notable exception to this axiom, in CRASH-2, the combined rate of clotting ("vascular occlusion events," defined as pulmonary embolism, deep vein thrombosis, stroke or myocardial infarction) was 2.0 percent versus 1.7 percent in the placebo and tranexamic acid groups, respectively. Many have wondered silently, and sometimes in print, how can a drug decrease bleeding with no increase in clotting? Explanations can be proffered regarding surveillance intensity, but these explanations remain speculative. Regardless of the reason, it is inarguable that the trial is now over a decade old and was not done in the setting of the US trauma care system. Hence the importance of this month's editor-in-chief pick of the month by Erramouspe et al, Mortality and Complication Rates in Adult Trauma Patients Receiving Tranexamic Acid: A Single-center Experience in the Post–CRASH-2 Era. In the context of trauma occurring in the vicinity of Sacramento, CA and treated at a Level I trauma center, Erramouspe et al. found what some might call a more "real life" rate of clotting, namely a 6.6 percent (95% CI = 3.7% to 9.5%) rate of clotting, defined similarly as it was in CRASH-2. This datum adds to our knowledge about the imperative to survey for thrombotic complications, and how to inform patients or their families about what to expect when patients with bleeding are treated by tilting the balance.

Best wishes,
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