

Consider Switching to Tenecteplase for More Indications

You'll see **interest in making tenecteplase the preferred thrombolytic at your hospital.**

Compared to alteplase, tenecteplase is typically easier to prep, faster to administer as an IV push, and costs less.

Consider switching to tenecteplase as the preferred thrombolytic for acute ischemic stroke...myocardial infarction (MI)...and possibly pulmonary embolism (PE).

For stroke, both meds have similar outcomes (mortality, neurological improvement, bleeding, etc) when used within 4.5 hours of symptom onset. But logistical ease tips the scale in favor of tenecteplase.

For MI, tenecteplase improves reperfusion and survival similar to alteplase...and tenecteplase has less major bleeding.

For PE, the choice is more controversial. Either med seems effective, but there aren't head-to-head studies.

Tenecteplase is associated with an increase in bleeding for intermediate-risk PE...but these data used aggressive anticoagulation regimens, which aren't comparable to alteplase studies.

Lean toward tenecteplase when a thrombolytic is indicated for PE...due to easier prep and faster IV push administration.

Be aware, the manufacturer doesn't replace mixed, unused tenecteplase like they do for alteplase. But tenecteplase doesn't need to be premixed due to its easy and fast prep.

Stick with alteplase for catheter-directed thrombolysis (CDT). Tenecteplase data are limited. Plus both meds are given as a continuous infusion...so tenecteplase isn't faster to prep or give.

Continue to use alteplase (*Cathflo*) for catheter occlusion. Line clearance seems similar to tenecteplase...but alteplase comes in small vials, which leads to less waste and lower cost.

Help avoid errors and mix-ups between tenecteplase doses for different uses...and between thrombolytics if both are on formulary.

Require using indication-specific order sets. For stroke, tenecteplase is 0.25 mg/kg up to 25 mg...lower than MI and PE doses.

Keep in mind, tenecteplase kits from the manufacturer have a 50 mg vial and only include MI dosing. Prepare separate kits for stroke with a dosing card and 5 mL syringe to avoid giving over 25 mg.

Separate where tenecteplase and alteplase are stored.

If a patient develops a serious bleed after tenecteplase, treat as you would for a post-alteplase bleed (cryoprecipitate, tranexamic acid, etc).

Key References:

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