

# Thrombolytic Eligibility Criteria

For patients with **potentially disabling** symptoms thought *most likely* to be secondary to ischemic stroke

Risk of bleeding	3 Lytic Questions						
	Clinical presentation/medical history	Have you had any recent trauma, surgeries or procedures?	Have you had any bleeding problems?	Are you taking any blood thinners?	Imaging	Labs*	
Higher risk	Lytic is contraindicated	<ul style="list-style-type: none"> <li>LKW &gt; 4.5h</li> <li>Sx of SAH</li> </ul>	<ul style="list-style-type: none"> <li>Severe head trauma w/in 3 mo</li> </ul>		<ul style="list-style-type: none"> <li>Acute intracranial hemorrhage</li> <li>Completed infarct</li> </ul>		
	Lytic is not recommended/potentially harmful	<ul style="list-style-type: none"> <li>BP cannot be lowered &lt; 185/110</li> <li>Sx concerning for endocarditis</li> <li>Known or suspected aortic dissection</li> <li>On anti-amyloid immunotherapy†</li> </ul>	<ul style="list-style-type: none"> <li>Intracranial or intraspinal surgery w/in 3 mo</li> <li>Major non-cranial surgery‡ or trauma w/in 14 days with uncontrollable bleeding site (e.g. internal organs)</li> </ul>	<ul style="list-style-type: none"> <li>H/o intracranial hemorrhage§ (consider the etiology and timing of hemorrhage)</li> <li>Structural GI malignancy or GIB w/in 21 days</li> </ul>	<ul style="list-style-type: none"> <li>Warfarin w/ INR &gt; 1.7</li> <li>UFH w/ ↑ aPTT</li> <li>Therapeutic dose LMWH w/in 24 hrs</li> <li>DOAC w/in 48 hrs</li> </ul>	<ul style="list-style-type: none"> <li>Intra-axial intracranial neoplasm (not extra-axial, i.e. not meningioma)</li> </ul>	<ul style="list-style-type: none"> <li>INR &gt; 1.7</li> <li>PT &gt; 15 sec</li> <li>aPTT &gt; 40 sec</li> <li>Plt &lt; 100K</li> </ul>
	Safety and efficacy of lytic is not well established	<ul style="list-style-type: none"> <li>Age &lt; 18yo</li> <li>Ischemic stroke w/ in 3 mo</li> <li>NIHSS &gt; 25 in the 3-4.5 hr window</li> <li>Cerebral aneurysm &gt; 1 cm in size</li> </ul>	<ul style="list-style-type: none"> <li>Arterial puncture at a non-compressible site w/in 7 days</li> <li>Parturition w/in 14 days*</li> </ul>	<ul style="list-style-type: none"> <li>Known bleeding diathesis</li> </ul>	DOACs: Dabigatran (Pradaxa) Rivaroxaban (Xarelto) Apixaban (Eliquis) Edoxaban (Savaysa)	<ul style="list-style-type: none"> <li>Intracranial arterial dissection</li> <li>Unruptured or untreated intracranial vascular malformation</li> </ul>	*Do not delay lytic administration waiting for lab results if the pt has no history or reason to suspect anticoagulant use, and has no h/o abnormal bleeding
Lower risk	Lytic may be considered/may be reasonable, especially if moderate to severe stroke	<ul style="list-style-type: none"> <li>Pregnancy‡</li> <li>Myocardial infarction w/in 3 mo</li> <li>Acute pericarditis or LV/LA thrombus</li> </ul>	<ul style="list-style-type: none"> <li>Lumbar puncture w/ in 7 days</li> <li>Major non-cranial surgery‡ or trauma within 14days with controllable bleeding site (e.g. limb)</li> </ul>	<ul style="list-style-type: none"> <li>GI or GU bleeding &gt; 21 days ago</li> <li>Hemorrhagic ophthalmologic condition</li> <li>Menorrhagia‡</li> </ul>	† Recent surgeries and procedures: Consider the risk of <b>bleeding at the site</b> of the surgery/procedure AND Consider the risk of the surgery/procedure of having caused a <b>silent stroke (ex: TAVR, CEA, CABG)</b> that could serve as a potential nidus for thrombolysis-associated hemorrhage	BG < 50 or > 400	

‡ Pregnancy and vaginal bleeding: If patient is pregnant, peripartum or has a history of recent or active vaginal bleeding causing clinically significant anemia, then emergency consultation with a Ob-gyn is recommended before a decision about lytic use is made

§ Patients w/ known cerebral microbleeds:

- 1-10 CMB: administration of lytic is reasonable
- > 10 CMB: administration of lytic may be associated with an increased risk of sICH. Tx may be considered in the setting of moderate to severe stroke

Factors which are not contraindications to lytic, but are known to be associated with an increased risk of post-lytic hemorrhage:

- Older age (> 80 yo)
- Later in the time window (> 3 hr from time LKW)
- Severe stroke (NIHSS > 25)
- Hyperglycemia (BG > 140)
- Hypertension (BP > 180/100)
- Severe white matter disease on head CT (Fazekas grade 3 leukoaraisosis)

† Anti-amyloid immunotherapy (IV infusions): aducanumab (Aduhelm), lecanemab (Leqembi), donanemab (enrolled in the TRAILBLAZER Trial)

An accumulation of these risk factors should be taken into consideration when making decisions regarding lytic use, especially in patients with less severe stroke symptoms.

In every case, the **risk of bleeding** complications from lytic should be weighed against the **potential benefit** from lytic given the severity of deficits