# THROMBOLYTIC AGENTS
## INDICATIONS AND REGIMENS

<table>
<thead>
<tr>
<th>AGENT</th>
<th>PRE-MEDICATION</th>
<th>DVT</th>
<th>PULMONARY EMBOLISM</th>
<th>PERIPHERAL ARTERIAL OCCLUSION</th>
<th>CORONARY ARTERY THROMBOSIS (MYOCARDIAL INFARCTION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urokinase*</td>
<td>Optional to avoid allergic reactions.</td>
<td>IV loading dose (4000 units/kg over 10–30 min), followed by 4000 units/kg/h for 24–72 h. Local or systemic infusion.</td>
<td>As with DVT for 12–24h. No advantage of 24-h vs. 12-h infusion or local vs. systemic infusion.</td>
<td>As with DVT for systemic infusion for 12–72 h. Local infusion preferred at 4000 U/min until blood flow re-established and then 1000–2000 U/min until thrombus is totally dissolved over 12–18 h.</td>
<td>Up to 3 million units over 1 h for systemic administration; 10 000 units/min for up to 2 h for intracoronary infusion.</td>
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<tr>
<td>rt-PA</td>
<td>None necessary.</td>
<td>No proven efficacy.</td>
<td>100 mg IV over 2 h.</td>
<td>Treatment regimens being evaluated.</td>
<td>100 mg over 3 hours with 6 mg bolus, 54 mg over 1 hour, and 40 mg over 2 hours. Systemic infusion preferred.</td>
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**Drugs**

<table>
<thead>
<tr>
<th>Drug</th>
<th>Acute Ischemic Stroke</th>
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<tbody>
<tr>
<td>Urokinase*</td>
<td>Not recommended.</td>
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<tr>
<td>rt-PA</td>
<td>0.9 mg/kg (maximum 90 mg) with 10% of the total dose administered as a bolus and the remainder infused over 60 minutes – assuming treatment initiated within 3 hours of clearly defined symptom onset and no &quot;extensive&quot; territory. (Grade IA)</td>
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*Urokinase is not readily available at this time.*

**References:**  
CONTRAINDICATIONS TO THROMBOLYTIC THERAPY

ABSOULTE CONTRAINDICATIONS
Recent or active internal bleeding
History of recent CNS hemorrhagic stroke, trauma, or surgery
Intracranial or intraspinal neoplasm

RELATIVE CONTRAINDICATIONS
Major surgery or trauma within past 14 days
Biopsy/invasive arterial procedure in area inaccessible to external compression in past 10 days
History of genitourinary or gastrointestinal bleeding secondary to anticoagulant therapy (excluding aspirin)
Congenital coagulopathies, including thrombocytopenia (platelets less than 100 x 10^9/L)
Subacute bacterial endocarditis or left ventricular mural thrombus
Uncontrolled severe hypertension
Pregnancy or delivery within past 10 days
Concurrent anticoagulation with PTT elevated (heparin), INR greater than 1.7 (warfarin), or LMWH.