

	Agent & Dose	Indications <i>Must meet all criteria</i>	Contraindications <i>(italic = relative)</i>
Stroke	<p>Alteplase</p> <p>0.9mg/kg (max 90mg)</p> <p>10% of dose over 2mins then rest over 1 hour</p>	<ul style="list-style-type: none"> Clinical signs and symptoms of definite acute stroke Clear time of onset <4.5hours ago Haemorrhage excluded by CT head NIH Stroke Score severity 4-25 	<p><u>Stroke related</u></p> <ul style="list-style-type: none"> Rapidly improving symptoms Ischaemia of >1/3 MCA territory Symptoms suggestive of SAH (even if CT normal) Seizure at start of stroke <p><u>Neurological</u></p> <ul style="list-style-type: none"> History of intracranial bleed, aneurysm, neoplasm Spinal or cranial surgery/injury Ischaemic stroke <3months Prior stroke <u>and</u> diabetes <p><u>Bleeding tendency</u></p> <ul style="list-style-type: none"> Significant bleeding disorder Therapeutic anticoagulation: LMWH, NOACs (<12h), warfarin (INR>1.6) Iron deficiency anaemia or thrombocytopenia (plt <100) Advanced liver disease <p><u>Trauma</u></p> <ul style="list-style-type: none"> Significant head injury <3months Major surgery/delivery/external heart massage <2weeks Puncture of non-compressible blood vessel <2weeks <p><u>Medical problems</u></p> <ul style="list-style-type: none"> SBP >180 or DBP>110 (try labetalol infusion) Active internal bleeding Aortic aneurysm Bacterial endocarditis/pericarditis Acute pancreatitis Haemorrhagic retinopathy Oesophageal varices Ulcerative GI disease <3months GI or urinary tract haemorrhage <3weeks
Myocardial infarction	<p>Tenecteplase</p> <p>0.5mg/kg</p> <p>IV bolus</p>	<ul style="list-style-type: none"> STEMI with ST-elevation in two contiguous ECG leads (>1mm in limb leads or >2mm in chest leads) or new LBBB Symptom onset <12hours PCI not available <90minutes 	<p><u>Neurological</u></p> <ul style="list-style-type: none"> History of intracranial bleed, aneurysm, neoplasm Spinal or cranial surgery/injury Ischaemic stroke <6months <i>TIA <6months</i> <p><u>Bleeding tendency</u></p> <ul style="list-style-type: none"> Significant bleeding disorder <i>Therapeutic oral anticoagulation (INR >1.4 if warfarin)</i> <i>Advanced liver disease</i>
Pulmonary embolism	<p>Alteplase</p> <p>1.5mg/kg (max 100mg)</p> <p>10mg over 2mins then rest over 2h</p> <p>Cardiac arrest dose = 50mg IV bolus</p>	<ul style="list-style-type: none"> Massive PE i.e. any of: <ul style="list-style-type: none"> -SBP<90 for >15mins -Requiring inotropic support -Pulselessness -Persistent profound bradycardia (<40bpm with signs or symptoms of shock) <p><i>If PE not confirmed and cardiac arrest imminent, thrombolysis may be initiated on clinical grounds if echo/CTPA not immediately available</i></p>	<p><u>Trauma</u></p> <ul style="list-style-type: none"> <i>Pregnancy or <1week post-partum</i> <i>Traumatic resuscitation</i> Significant head injury <3months Major surgery/major trauma/minor head injury <3weeks Surgery/trauma <2 weeks <i>Recent non-compressible venous or arterial puncture sites</i> <p><u>Medical problems</u></p> <ul style="list-style-type: none"> <i>SBP >180 or DSP >110</i> Active internal bleeding Aortic dissection Bacterial endocarditis/pericarditis Acute pancreatitis GI bleed <1 month <i>Active peptic ulcer <6months</i>

RISKS OF THROMBOLYSIS: minor bruising/bleeding (40%); major bleeding e.g. GI bleed (5%); intracerebral haemorrhage (1%); early mortality (5%) but similar overall mortality at 3-6 months to if not thrombolysed. **NOTE:** risk increases with age >80years.

BENEFIT IN STROKE: 1/3 gain benefit, 1/3 makes no difference, 1/3 experience complication (usually minor)