

**Alteplase 2mg (actilyse cathflo®) for occluded  
haemodialysis lumen catheters**

**\*Use of alteplase should be discussed with medical staff prior to  
administration\***

<b>Indication</b>	Thrombolytic treatment of occluded haemodialysis lumen catheters
<b>Reconstitution</b>	<p>Alteplase 2mg (actilyse cathflo®) vial is reconstituted with 2.2ml of water for injection. The mixture should be swirled gently until dissolution. Vigorous agitation should be avoided to prevent foam formation. Inspect for particles and colour. The reconstituted solution should be a clear and colourless to pale yellow solution.</p> <p>Final concentration is 1mg/ml</p> <p>Repeat above for administration into each lumen.</p>
<b>Dosage and administration</b>	<p>Remove any existing lock and flush with 10ml sodium chloride 0.9% (It is vital to remove the lock before flushing to avoid alteplase being flushed into the patient).</p> <p><b>For patients weighing ≥30kg</b> Withdraw 2ml (2mg) of reconstituted alteplase solution and instill into each dysfunctional lumen.</p> <p><b>For Patients weighing &lt;30kg</b> the volume of reconstituted solution to be instilled into the dysfunctional lumen(s) should correspond to 110% of the internal lumen volume i.e. if line lumen is 1ml the total dose of alteplase would be 1.1mg in a volume of 1.1ml. The total dose of alteplase should not exceed 2mg.</p> <p>For lumens &gt;2ml the reconstituted solution can be further diluted with sodium chloride 0.9% for injection to the desired volume i.e. if lumen volume 2.5ml the total dose of alteplase would be 2mg in 2.5ml.</p> <p>Leave for 30 minutes dwell time then attempt aspiration</p> <p>If catheter function is restored aspirate 4-5ml blood to remove alteplase and residual clot and discard. Then gently flush lumen with 10ml sodium chloride 0.9% for injection.</p> <p>If unable to aspirate, leave alteplase solution in for another 90 mins and attempt aspiration.</p>

*Written by: Sadaf Arshad, Renal Pharmacist  
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	<p>If aspiration still not possible after this time, aspirate the alteplase solution as possible and repeat the process with a further dose of equal amount.</p> <p>If line not functional after 2<sup>nd</sup> dose contact medical staff to consider radiology intervention.</p>
<b>Side effects</b>	<p>In principle all undesirable effects as found for the systemic application of alteplase may occur if actilyse cathflo reaches the systemic circulation e.g. haemorrhage, embolism, hypersensitivity/anaphylactoid reactions, blood pressure decreased, nausea, vomiting, body temperature increased.</p> <p>However pharmacokinetic data indicate that physiologically relevant plasma concentrations are not reached using this dosage.</p>
<b>Contra-indications</b>	<p>Hypersensitivity to the active substance alteplase, gentamicin (a trace residue from the manufacturing process) or to any of the excipients which include arginine, phosphoric acid and polysorbate 80.</p>
<b>Precautions and Interactions</b>	<p>Active internal bleeding Surgery within 48 hours Obstetrical delivery within 48 hours Percutaneous biopsy of viscera or deep tissues within 48 hours Puncture of non-compressible vessels within 48 hours Thrombocytopenia Patients with haemostatic defects including those secondary to severe hepatic or renal disease Infection Any condition for which bleeding constitutes a significant hazard or would be difficult to manage because of its location or who are at high risk for embolic complications.</p> <p>If severe bleeding occurs during systemic treatment with actilyse cathflo<sup>®</sup> treatment should be stopped immediately.</p> <p>The risk of bleeding is increased if actilyse cathflo<sup>®</sup> is administered to patients on oral anticoagulants, platelet aggregation inhibitors, unfractionated heparin, LMWH or other agents inhibiting coagulation are administered before, during or within the first 24 hours after treatment with actilyse cathflo<sup>®</sup>.</p> <p>Concomitant treatment with ACE inhibitors may enhance the risk of suffering an anaphylactoid reaction</p>
<b>Concentration/strength</b>	<p>2mg vial containing powder for solution for injection and infusion</p>

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