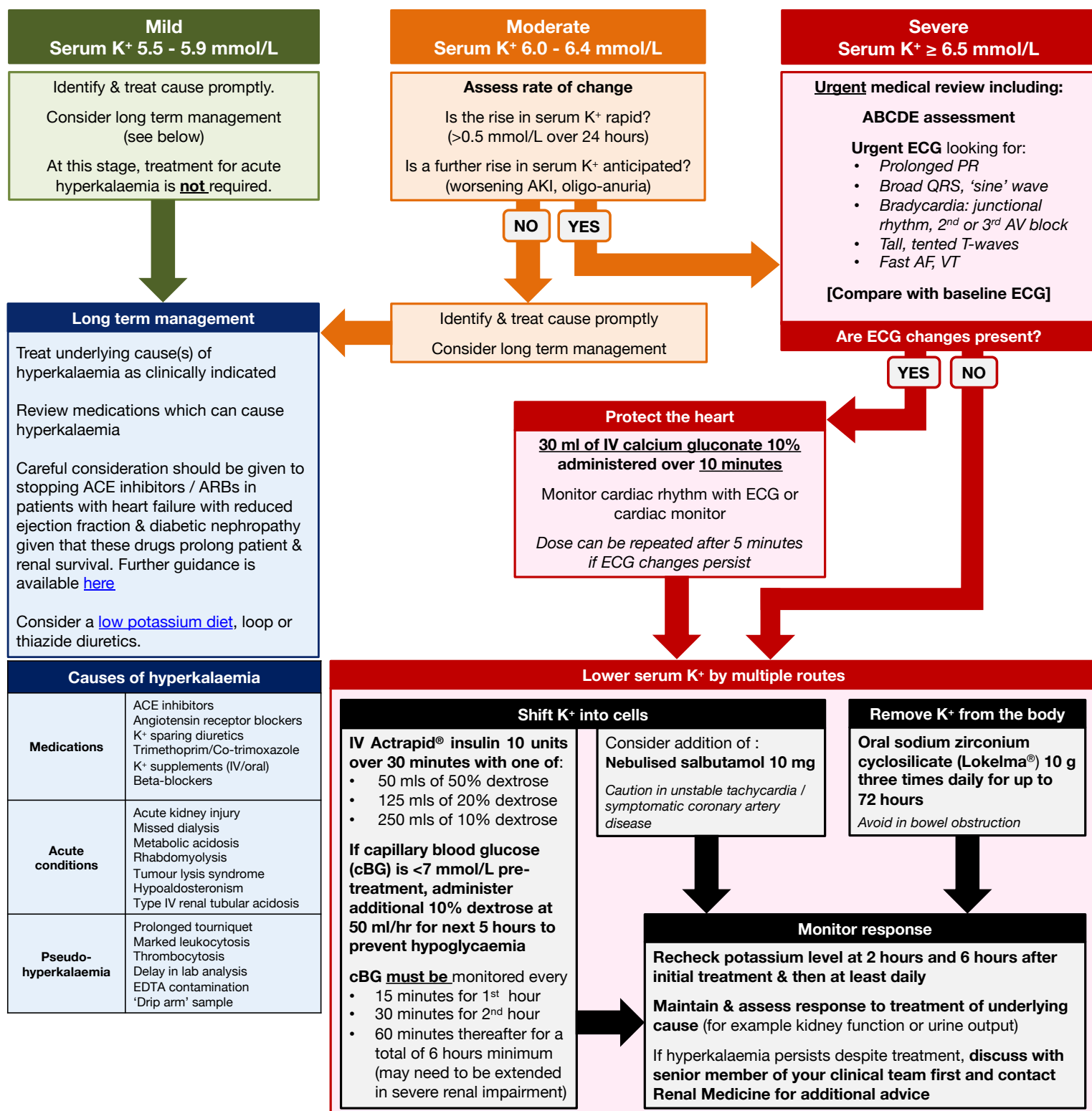




Management of Hyperkalaemia in Adults in Hospital



IMPORTANT NOTES

Calcium gluconate 10%: Peak effect within 5 minutes. Duration of action is 30-60 minutes. Repeat if required. Calcium gluconate should be administered by medical staff or advanced nurse practitioners. Large bore (18G) IV access preferred, check patency of prior to administration. MUST NOT be administered via IV access containing sodium bicarbonate as it can precipitate as calcium carbonate.

IV insulin: onset of K⁺ lowering within 15 minutes. Peak effect within 30-60 minutes. Duration of action up to 2 hours with a **rebound in potassium** thereafter.

Nebulised salbutamol (10mg): onset within 30 minutes of administration. Peak effect at 60-90 minutes with duration of at least 2 hours. Non-selective beta-blockers may blunt effects and 40% of patients with advanced CKD do not respond to salbutamol, thus do not use as monotherapy for hyperkalaemia.

Sodium zirconium cyclosilicate (Lokelma®): a novel oral K⁺ gut binder with a better efficacy, safety and tolerability profile than calcium resonium. Onset of action within 1 hour, peak effect at 2 to 4 hours, duration of action of single dose is 12 hours and thus 8 hour dosing leads to sustained reductions of K⁺ ~1 mmol/L at 24 to 48 hours. Dosing is 10 g three times daily for a **maximum of 72 hours**. If K⁺ remains ≥5.5 mmol/L after 72 hours of treatment, discuss with Renal Medicine. If K⁺ falls to <5.5 mmol/L within 72 hours of starting treatment, change prescription to 5 g once daily & discuss duration of treatment with Renal Medicine. **STOP** when K⁺ <4.0 mmol/L. Lokelma® is generally for **INPATIENT USE ONLY**. Select patients managed by ambulatory care or Hospital @ Home may be suitable for outpatient treatment. These **must** be discussed with Renal Medicine for approval & dispensing.

Sodium bicarbonate: 1.26% infusion can cause sodium and fluid overload therefore is not a routine treatment but can be of benefit in patients with hyperkalaemia and metabolic acidosis. Can be associated with significant hypocalcaemia and associated complications.

Dialysis patients should be treated as above but the on-call Renal Registrar or Consultant **must** be contacted as urgent dialysis may be required.