Department of Renal Medicine
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Protocol for extended use sodium zirconium cyclosilicate (ZS-9, *Lokelma*)

Hyperkalaemia (serum K+ >5.5mmol) is frequently encountered in patients with acute kidney injury (AKI) and patients with kidney failure on renal replacement therapy. Use of Lokelma (a novel cation exchange resin that binds potassium in the gut for excretion) in selected patients within these groups may prevent unnecessary procedures and reduce morbidity associated with temporary central venous access and dialysis itself. Use of Lokelma in such settings is currently outside SMC approval.

We suggest the use of Lokelma to manage hyperkalaemia in these settings according to the following protocol **under the direction of a specialist in renal medicine**.

1. Confirm meets clinical criteria (*see companion guideline for full details*)

A. Dialysis patient	B. Patient with pre-dialysis CKD	C. Patient with AKI
K^+ >5.5mmol/L	**K^+ >6mmol/L despite medical management**	**K^+ >6mmol/L despite medical management**
and	***and***	***and***
No dialysis access	**Live donor transplantation within 48-72hrs**	**No other indication for urgent dialysis**
and	***or***	***and***
Requires 'plastic free' period	**Definitive dialysis access is planned within 48-72hrs**	**Renal recovery expected in next 72hrs**
or	***and***	***and***
Temporary access not feasible / desirable	**Avoiding temporary dialysis access is desirable**	**Dialysis is inappropriate as determined by responsible senior clinician**
and		
Definitive dialysis access is planned		

In all cases:
Ensure adherence to a low potassium diet
Review HEPMA for drugs contributing to hyperkalaemia

2. Prescribe on HEPMA

Sodium Zirconium Cyclosilicate 10g powder for oral suspension
Correction phase dosing: 10g every 8hrs for up to 72hrs
Inform clinical pharmacist to expedite delivery of drug to ward

3. Complete PACS2 Template form

Add patient name and CHI number to relevant sections on form
MUST be signed by approving Consultant in Renal Medicine
Email completed signed PACS2 form to Lyndsey.Baird@nhs.scot (PTR administrator)

4. Review response to treatment

Check U&Es every 24hrs at a minimum
If $K^+ \leq 5.5$mmol/L then switch to **maintenance phase dosing: 5g every 24hrs**
Subsequent dosing can be titrated up or down to maintain normokalaemia
Discontinue when either dialysis access secured or AKI resolves (typically within 7 days)

Warnings and precautions

Avoid Lokelma in patients with severe constipation, bowel obstruction or gut dysmotility
Lokelma granules may be apparent in plain abdominal radiographs
Lokelma increases gastric PH which may affect absorption of some medicines. See BNF & Lokelma SPC at www.medicines.org.uk

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