

**Updates and Evolving Care Considerations in the Mitigation of Hyperkalemia in  
Patients with End-Stage Renal Disease on Dialysis  
Case Review #1 Glossary & References**

**Glossary:**

ACE	Angiotensin-converting enzyme
ACEi	Angiotensin-converting enzyme inhibitor
ARB	Angiotensin II receptor blocker
CKD	Chronic Kidney Disease
DM	Diabetes Mellitus
ECG	electrocardiogram
ER	Emergency Room
ESRD	end-stage renal disease
HD	Hemodialysis
HF	Heart Failure
HK	Hyperkalemia
IV	intravenous
K <sup>+</sup>	Potassium
MRA	Mineralocorticoid receptor antagonist
Pts	Patients
QRS	Q-, R- and S-wave
RAAS	renin-angiotensin-aldosterone system
RAASi	renin-angiotensin-aldosterone system inhibitor
SCZ	sodium zirconium cyclosilicate
SP	Sodium polystyrene
tx	treatment
yo	year old

**References:**

Post 6:

Palmer BF, Clegg DJ. *Cleve Clin J Med*. 2017;84:934-942

Post 7:

Lazich I, Bakris GL. Prediction and management of hyperkalemia across the spectrum of chronic kidney disease. *Semin Nephrol*. 2014;34(3):333-339. doi:10.1016/j.semnephrol.2014.04.008.

Núñez J, et al. *Circulation*. 2018;137:1320-1330.

Palmer BF, Clegg DJ. *Adv Physiol Educ*. 2016;40:480-490.

Palmer BF, Clegg DJ. *Cleve Clin J Med*. 2017;84:934-942.

Sidhu, Kiran; Sanjanwala, Rohan; Zieroth, Shelley Hyperkalemia in heart failure, *Current Opinion in Cardiology*: March 2020 - Volume 35 - Issue 2 - p 150-155 doi: 10.1097/HCO.0000000000000709.

#### Post 8:

Betts KA, et al. *Kidney Int Rep.* 2020;5(8):1280-1290. Published 2020 Jun 11.

doi:10.1016/j.ekir.2020.06.004

Epstein M, Reaven NL, Funk SE, McGaughey KJ, Oestreicher N, Knispel J. Evaluation of the treatment gap between clinical guidelines and the utilization of renin-angiotensin-aldosterone system inhibitors. *Am J Manag Care.* 2015;21(11 Suppl):S212-S220.

Palmer BF, Clegg DJ. *Cleve Clin J Med.* 2017;84:934-942, De Nicola L, et al. *J Nephrol.* 2018;31:653-664; Montford JR, Linas S. *J Am Soc Nephrol.* 2017;28:3155-3165.

#### Post 9:

Clase CM, et al. *Kidney Int.* 2020;97(1):42-61. doi:10.1016/j.kint.2019.09.018

Lazich I, Bakris GL. *Semin Nephrol.* 2014;34(3):333-339. doi:10.1016/j.semnephrol.2014.04.008

Palmer B, et al. *Cleve Clin J Med.* 2017;84:934-942; DOI: <https://doi.org/10.3949/ccjm.84a.17056>

#### Posts 10 & 11:

Bianchi S, Regolisti G. Pivotal clinical trials, meta-analyses and current guidelines in the treatment of hyperkalemia. *Nephrol Dial Transplant Off Publ Eur Dial Transpl Assoc - Eur Ren Assoc.* 2019;34(Suppl 3):iii51-iii61. doi:10.1093/ndt/gfz213

Leon SJ, Harasemiw O, Tangri N. New therapies for hyperkalemia. *Curr Opin Nephrol Hypertens.* 2019;28(3):238-244. doi:10.1097/MNH.0000000000000500

Relypsa. First patient treated in DIAMOND study to evaluate if [patiromer] (patiromer) improves outcomes by enabling long-term use of essential RAASi therapy. Press Release. <https://www.relypsa.com/newsroom/press-releases/052119/>. Published 2019.

US FDA. *Patiromer Prescribing Information.*; 2018.

[https://www.accessdata.fda.gov/drugsatfda\\_docs/label/2018/205739s016lbl.pdf](https://www.accessdata.fda.gov/drugsatfda_docs/label/2018/205739s016lbl.pdf).

US FDA. *Sodium Zirconium Cyclosilicate Prescribing Information.*; 2020.

[https://www.accessdata.fda.gov/drugsatfda\\_docs/label/2020/207078s003lbl.pdf](https://www.accessdata.fda.gov/drugsatfda_docs/label/2020/207078s003lbl.pdf).

#### Post 12:

Bianchi S, Regolisti G. Pivotal clinical trials, meta-analyses and current guidelines in the treatment of hyperkalemia. *Nephrol Dial Transplant Off Publ Eur Dial Transpl Assoc - Eur Ren Assoc.* 2019;34(Suppl 3):iii51-iii61. doi:10.1093/ndt/gfz213

Leon SJ, Harasemiw O, Tangri N. New therapies for hyperkalemia. *Curr Opin Nephrol Hypertens.* 2019;28(3):238-244. doi:10.1097/MNH.0000000000000500

Palmer BF, Clegg DJ. *Cleve Clin J Med.* 2017;84:934-942

Relypsa. First patient treated in DIAMOND study to evaluate if [patiromer] (patiromer) improves outcomes by enabling long-term use of essential RAASi therapy. Press Release. <https://www.relypsa.com/newsroom/press-releases/052119/>. Published 2019.

US FDA. *Patiromer Prescribing Information.*; 2018.

[https://www.accessdata.fda.gov/drugsatfda\\_docs/label/2018/205739s016lbl.pdf](https://www.accessdata.fda.gov/drugsatfda_docs/label/2018/205739s016lbl.pdf).

US FDA. *Sodium Zirconium Cyclosilicate Prescribing Information.*; 2020.

[https://www.accessdata.fda.gov/drugsatfda\\_docs/label/2020/207078s003lbl.pdf](https://www.accessdata.fda.gov/drugsatfda_docs/label/2020/207078s003lbl.pdf).

#### Post 13:

De Nicola L, Lullo LD, Paoletti E, Cupisti A, Bianchi S. Chronic hyperkalemia in non-dialysis CKD: controversial issues in nephrology practice. *J Nephrol.* 2018;31:653-664.

Palmer BF, Clegg DJ. *Cleve Clin J Med.* 2017;84:934-942

Montford JR, Linas S. How dangerous is hyperkalemia? *J Am Soc Nephrol.* 2017;28:3155-3165.

Núñez J, et al. *Circulation.* 2018;137:1320-1330.

#### Post 14:

Chart adapted from Palmer BF, Clegg DJ. *Am J Kidney Dis.* 2019;74:682-695.