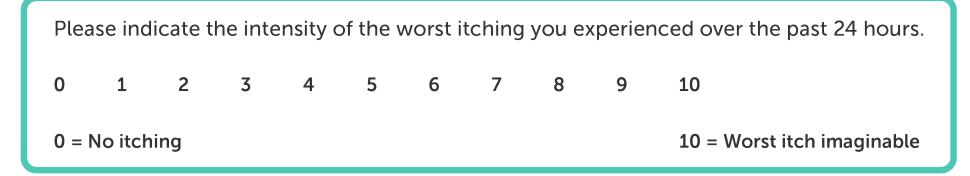
### Worst Itch Numerical Rating Scale (WI-NRS) Itch-Severity Assessment Tool



- Measures patient-reported itch over a 24-hour period
- Quick & simple for clinical settings
- Validated in KALM Studies
  - ≥3-point improvement = clinically meaningful
- Can be used to assess itch trends weekly

Sidbury R, et al. *J Am Acad Dermatol.* 2014;71(2):327-349. Topf J, et al. *Kidney Med.* 2022;4(8):100512. Lopes MB, et al. *Kidney Med.* 2022;4(6):100476. Vernon MK, et al. *J Am Acad Dermatol.* 2021;84:1132-1134. Vernon MK, et al. *J Patient Rep Outcomes.* 2021;5:134.

### **Treatment Selection for CKD-aP**

Skin Moisturizers	<ul><li>For dry skin</li><li>Safe</li></ul>
Gabapentinoids	<ul> <li>Lack of evidence for effectiveness</li> <li>Serious adverse effects (eg, cognitive impairment, ↑ suicidal risk)</li> </ul>
Antihistamines	<ul><li>Sedative effect</li><li>Not recommended</li></ul>
UVB	<ul> <li>Time intensive</li> <li>Requires dermatologist supervision</li> <li>Potential skin harm</li> </ul>

Hercz D, et al. *Cochrane Database Syst Rev.* 2020;12(12):CD011393. Weisshaar E, et al. *Acta Derm Venereol.* 2019;99(5):469-506. Verduzco HA, et al. *Kidney Int Rep.* 2020;5(9):1387-1402. Gunal AI, et al. *Nephrol Dial Transplant.* 2004;19(12):3137-3139. Rayner H, et al. *Nephron Clin Pract.* 2012;122(3-4):75-79.



### National Institute for Healthcare and Excellence (NICE) Recommends Difelikefalin for Treating Pruritus in Adults with CKD on Hemodialysis

 Enables eligible patients in England, Wales, and Northern Ireland to access difelikefalin, the first licensed treatment for moderate to severe chronic kidney disease (CKD)-associated pruritus in adult patients on hemodialysis



### **KALM-1 and KALM-2** Phase 3 Randomized Clinical Trials 12 weeks N = 851

	≥3-point ↓ of WI-NRS at 12 weeks	≥15-point ↓ of Skindex- 10 at 12 weeks	≥5-point <b>↓</b> of 5-D ltch at 12 weeks
Difelikefalin	51%	55%	52%
	<i>P</i> < 0.001	<i>P</i> < 0.001	<i>P</i> < 0.01
Placebo	35%	40%	42%

#### **Conclusions:**

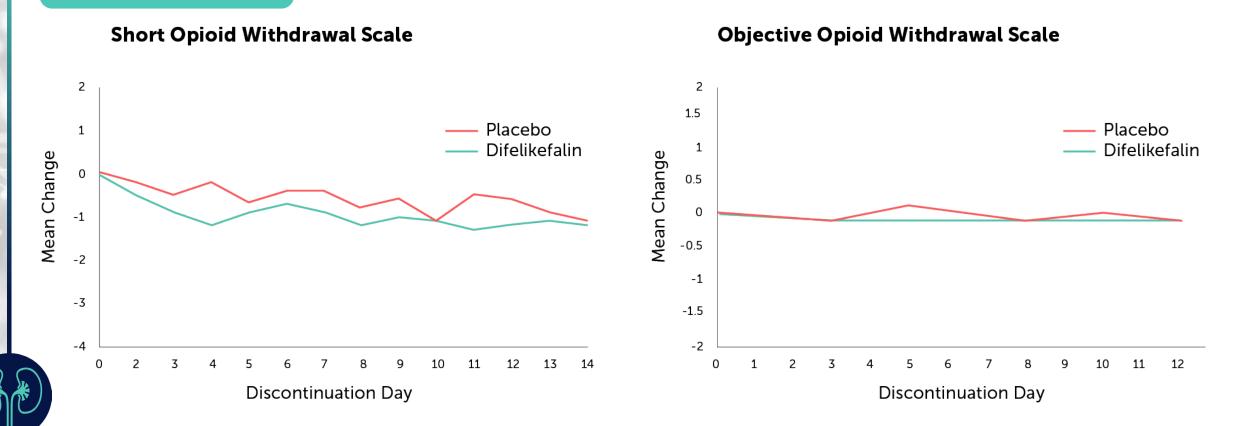
- Rapid and sustained efficacy of difelikefalin in patients on hemodialysis
- Well tolerated and acceptable safety profile



Topf J, et al. *Kidney Med*. 2022;4(8):100512.

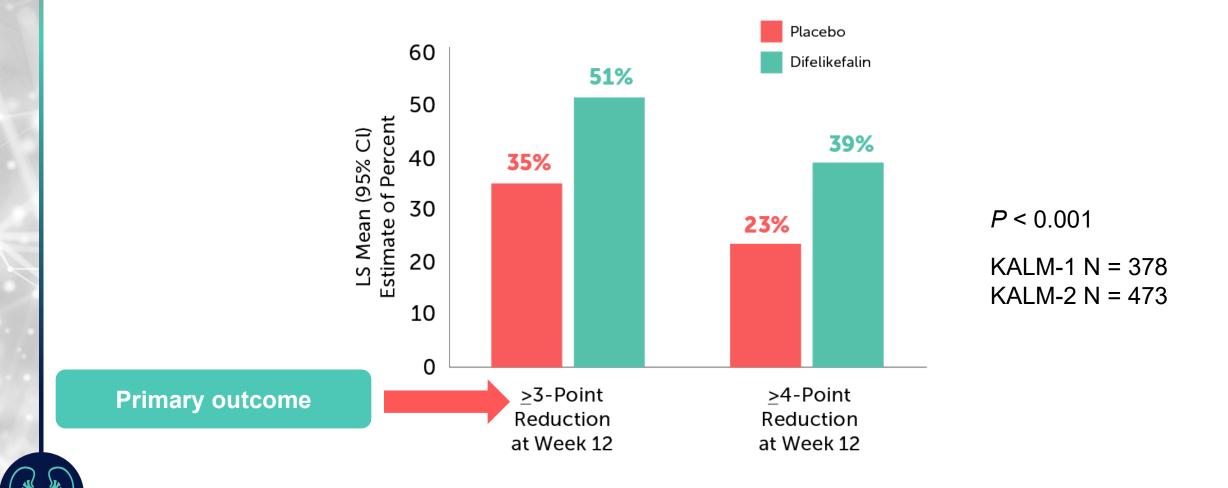
## Difelikefalin: Opioid Dependence? Monitored for 2 Weeks After Last Dose

#### KALM-1 Trial



Fishbane S, et al. N Engl J Med. 2020;382(3):222-232.

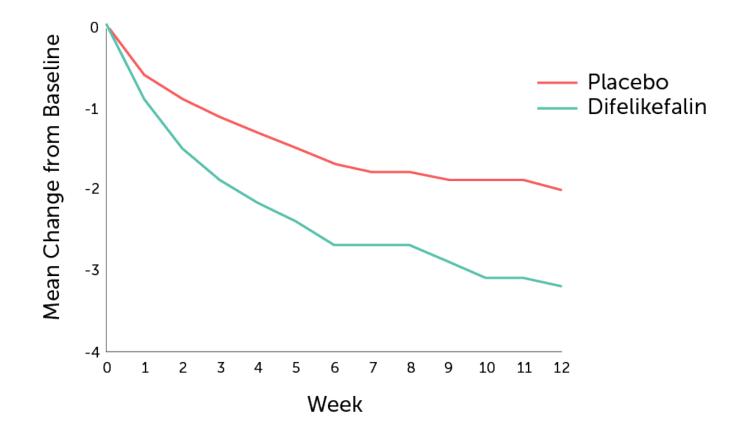
## Pooled Analysis: KALM-1 & KALM-2



Topf J, et al. Kidney Med. 2022;4(8):100512.

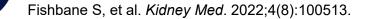
## **Difelikefalin: Efficacy**

Itch reduction was seen by week 4 and **sustained** by week **12** (WI-NRS)

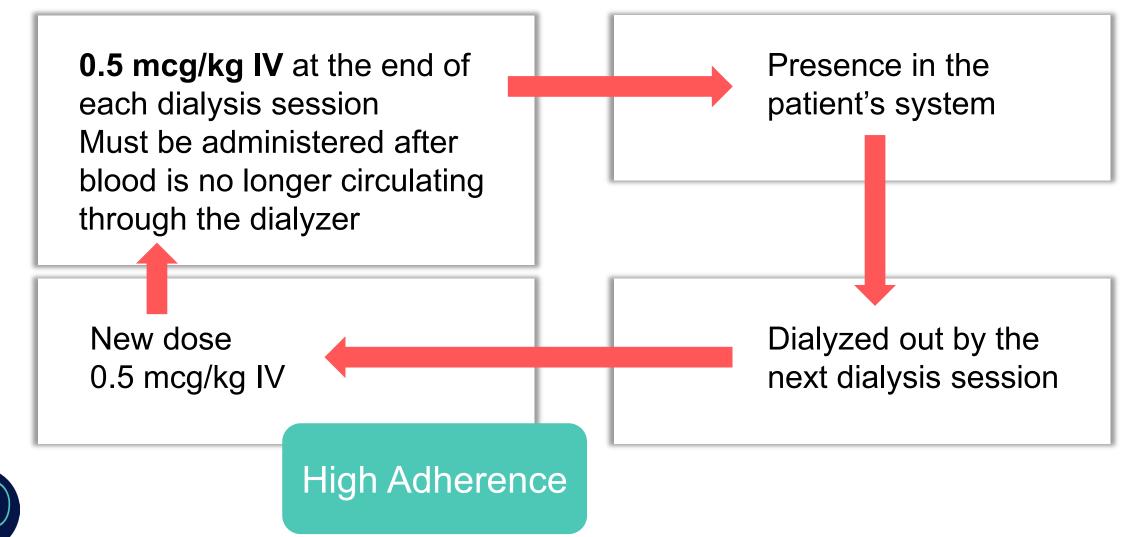


# **Difelikefalin: Safety**

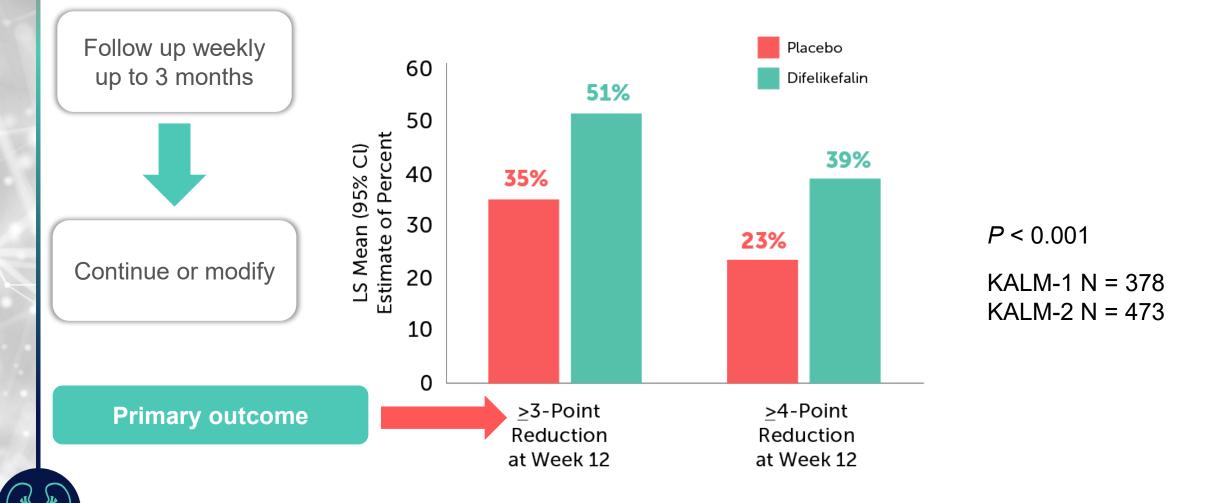
	Diarrhea	Nausea	Dizziness	Gait Disturbance
Difelikefalin	9%	7%	7%	7%
Placebo	6%	5%	4%	5%



## **Difelikefalin: Dosing & Administration**



# Pooled Analysis: KALM-1 & KALM-2



Topf J, et al. Kidney Med. 2022;4(8):100512.