



Palliative Care Pharmacy Team:

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If you have a topic you would like the pharmacy team to answer, please send your suggestions to: lowrymf@upmc.edu

TODAY’S TOPIC:  
Pruritis Management in Chronic Disease

**Background:**  
Pruritis is a troublesome symptom that can be caused by various medications including opioids, immune modulatory agents, and various disease states. Historically, this has been managed with antihistamines with uncertain efficacy. Treatment varies by etiology and mechanism, and this article will focus on pruritis in chronic kidney disease/ uremic pruritis (UP), and cholestatic pruritis (CP).

**Importance:**  
Palliative care patients may experience pruritis. This issue is intended to serve as a review of possible treatment recommendations and evidence to address pruritis of various etiologies. Note that neither study had sufficient information on opioid/medication induced pruritis to comment on evidence.

Common Pharmacologic Options:

Medication Class	Medication and Dose	Certainty of Evidence on Cochrane Review	Type of Pruritis with Benefit	Notes
Kappa Opioid Agonists	Nalbuphine (60-120 mg BID) Difelikefalin (0.5-1.5 ug/kg)	High	UP	-Mean pruritis 0.96 cm reduced vs placebo (small effect), risk ratio (RR) 1.73 for adverse events -Nalbuphine is an older/cheaper agent -Difelikefalin is a recently approved IV medication for adults on hemodialysis – cost/availability may limit access
Gabapentinoids	Pregabalin (25-50 mg/d)  Gabapentin (100-300 mg/d)	Moderate (Low for gabapentin vs pregabalin)	UP	-Mean pruritis 5.1 cm smaller than with placebo groups (moderate effect) 2.63x Odds Ratio (OR) of adverse events compared to placebo -Special caution in older adults, those on concomitant opioids etc., see other Tablet Article -Dosing depends on indication (UP vs other causes) and organ function, though it is lower than dosing used for pain. -In CKD, gabapentin may be more effective than pregabalin, though also may have more adverse effects
Opioid Antagonists	Naltrexone (10-50 mg/d)	Low	CP, UP	-Reduction in pruritis of 2.49 cm, though the RR of adverse events is 2.67 compared to placebo -Caution in palliative care population – especially patients on existing opioids, as these antagonists may cause precipitated withdrawal, consider low doses
Topicals	Moisturizing agents & Capsaicin (0.03-0.25%)	Low/ Very Low	CP, UP	-Limited evidence, but can consider multimodal adjuncts -Caution with capsaicin which may cause burning sensation, counsel patients on handwashing after use -Other agents undergoing investigation include topical cannabinoids, calcineurin inhibitors, pramoxine, etc.
Selective Serotonin Reuptake Inhibitors (SSRIs)	Paroxetine (20 mg/d) Sertraline (25-100 mg/d)	Very Low	CP, UP	-Very limited data to support substantial reduction in pruritis -Caution with paroxetine especially as it has more drug/receptor interactions than other agents in the class, and has only demonstrated benefit in one study to date -Some limited studies of other serotonergic medications (e.g., mirtazapine, doxepin)
Antimicrobials	Rifampicin/ Rifampin (300-600 mg/d)	Very Low	CP	-Mean decreased by 42 mm compared to placebo, however OR for adverse events 0.29 vs placebo -Doses studied 300-600 mg daily -Caution with other medications as this drug is a CYP3A inducer and can increase hepatic metabolism
Antihistamines	Hydroxyzine (10-25 mg/d) Desloratadine (5 mg/d)	N/A	CP, UP	-Sometimes used as comparator groups/placebos in trials -Data is not compelling for efficacy in many chronic disease/palliative care conditions and safety concerns for anticholinergic ADEs especially in older adults

**Table based on the following:**  
1. Boehlke C, Joos L, Coune B, et al. Pharmacological interventions for pruritus in adult palliative care patients. *Cochrane Database Syst Rev.* 2023;4(2023):CD008320. Published 2023 Apr 14. doi:10.1002/14651858.CD008320.pub4  
2. Kaya E, McDonald G, Gallagher R. Managing Pruritus in Advanced Chronic Disease. *J Palliat Med.* 2024;27(12):1666-1671. doi:10.1089/jpm.2024.0048

**The Literature:**  
[Boehlke C, et al.2023;4\(2023\):CD008320. doi:10.1002/14651858.CD008320.pub4](#)  
**Pharmacological Interventions for Pruritis in Palliative Care**  
**Objective:** To assess effects of active control/placebo vs. various pruritis treatments  
**Methods:** Cochrane review searching CENTRAL, MEDLINE, and Embase for randomized controlled trials  
**Outcomes:**  
*Primary:* subjective/objective measures of pruritis  
*Secondary:* quality of life, patient satisfaction, depression, adverse events  
**Results:** 91 trials identified including 4,562 people – each study consisted of 8-373 people. A total of 51 treatments were evaluated. Relevant information is included in the table above.  
Other agents that appeared in the review with low/very low evidence include montelukast, ondansetron, fish oil, zinc sulphate, cromolyn sodium, and various other treatments that are less common/available OTC.  
**Conclusion:** There are many different treatments available for pruritis with varying degrees of evidence. Those with the highest evidence include kappa opioid agonists and gabapentinoids.

[Kaya E, et al. 2024;27\(12\):1666-1671. doi:10.1089/jpm.2024.0048](#)  
**Managing Pruritis in Advanced Chronic Disease**  
**Objective:** To assess effects of active control/placebo vs. various pruritis treatments  
**Methods:** Review searching MEDLINE, Pubmed, and Cochrane focusing on clinical guidelines, systematic reviews, and meta-analyses in patients with chronic non-cancer disease  
**Results:** Handful of trials included – relevant findings in the table above. This review did not include many quantifiable data points, however, much of it supplemented the findings of the Cochrane review.  
**Conclusion:** Pruritis in chronic disease is common, though there is limited evidence for various treatments.

**Discussion:**

- Pruritis can be a troublesome symptom in palliative care, caused by organ dysfunction or medications.
- There are several agents to treat pruritis, though limited evidence for individual agents depending on the etiology – not all treatments studied are available in the US.
- Most agents were studied independently vs. in combination, which may be more efficacious – can consider other agents and topical adjuncts including moisturization and capsaicin cream.