

## **PHARMACY FOCUS**

JOURNAL OF THE VALLEY HOSPITAL PHARMACY

## **FORMULARY UPDATES**



### **ADDITIONS**

#### Cabergoline

FDA-approved for hyperprolactinemic disorders; used off-label for lactation inhibition. Added to the formulary for lactation inhibition in postpartum women. The recommended dose is 1 mg as a single dose within 48 hours of delivery. The current formulary alternative is pyridoxine.

### Blinatumomab

A bispecific CD19-directed CD3 T-cell engager indicated for precursor B-cell acute lymphoblastic leukemia. A full course consists of up to 2 induction cycles, 3 consolidation cycles, and up to 4 cycles of continued therapy. Cycle 1 requires inpatient initiation for 5–7 days to monitor for adverse effects such as cytokine release syndrome. Cycle 2 requires a 2-day inpatient stay before outpatient continuation. All subsequent cycles may be completed outpatient.

### <u>Mifeprestone</u>

FDA-approved for induction of labor in intrauterine fetal demise. Added to the formulary based on evidence showing that mifepristone plus misoprostol shortens time to delivery compared with misoprostol alone. The recommended dose is 200 mg or 600 mg given 24–48 hours before induction with misoprostol.

### <u>Suzetrigine</u>

FDA-approved for moderate to severe acute pain in adults. This non-opioid analgesic does not act on mu-opioid receptors. In clinical trials, suzetrigine showed statistically significant improvement over placebo at the SPID48 endpoint. It is not superior to opioid analgesics such as hydrocodone/acetaminophen but represents the first non-opioid alternative for this indication. Efficacy and safety have not been studied beyond 14 days of use.

### <u>Additional approvals</u>

- Tarlatamab-dlle approved for inpatient use
- Blinatumomab + TKI addition to inpatient treatment plans
- Tarlatamab-dlle addition to inpatient treatment plans
- ICE + Rituximab-abbs addition to inpatient treatment plans
- Romiplostim formulary restricted to Hematology/Oncology credentialed providers

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# DECADES OF DEDICATION: CARLO LUPANO RETIRES AFTER YEARS OF SERVICE

At The Valley Hospital, Carlo has been a driving force in advancing pharmacy practice, patient care, and professional development. Through his leadership, he has led numerous initiatives that have strengthened the department and elevated the role of pharmacy within the healthcare team.

Among his many achievements, Carlo played a pivotal role in expanding the Luckow Infusion Pharmacy and in developing key pharmacy subcommittees aimed at enhancing evidence-based care. He has also been a strong advocate for pharmacy education, leading the growth of the PGY1 Residency Program and establishing the FDU faculty program, both of which continue to prepare future pharmacy leaders.

Carlo has successfully guided the department through major accreditation and regulatory milestones while serving on multiple hospital committees, consistently prioritizing patient-centered care. As a dedicated mentor, he has precepted numerous students and fostered valuable academic partnerships, leaving a lasting impact on the next generation of pharmacists. His recognition as an ASHP Fellow, along with active involvement with NJHSP and ASHP, further underscores his broad influence across the profession.

Carlo's contributions reflect a legacy of leadership that will benefit colleagues, residents, and patients for years to come.









# MEET OUR NEW PGY1 PHARMACY COORDINATOR!

### Phillip Park, PharmD

PGY1 Community-Based Pharmacy Residency Program Coordinator

Phillip earned his Doctor of Pharmacy degree from Rutgers University in May 2023. During pharmacy school, he developed a strong interest in outpatient clinical pharmacy while working at a specialty pharmacy, which sparked his passion for specialty medication management and ambulatory care. He went on to complete a PGYI Community-Based Pharmacy Residency with Valley Health System, where he gained extensive experience delivering patient-centered care in collaboration with providers across diverse outpatient settings.

Phillip currently serves as a Clinical Specialty Pharmacist and the PGYI Community-Based Pharmacy Residency Program Coordinator at Valley Health System. In this role, he is dedicated to advancing resident training through clinical education, mentorship, and practice innovation. Born in Rochester, Minnesota, Phillip spent much of his early life in South Korea before returning to the United States in 2017 to begin his pharmacy studies. Outside of pharmacy, he enjoys traveling, cooking, and watching movies with family and friends.



## **MEET OUR NEW PGY1 PHARMACY RESIDENTS!**

The Valley Hospital's two pharmacy residency programs are proudly accredited by the American Society of Health-System Pharmacists. Following graduation from pharmacy school, pharmacists have the opportunity to advance their training through a one-year post-doctoral residency. This program provides new practitioners with indepth exposure to a wide range of pharmacy practice areas, equips them to care for specialized patient populations, and supports the development of clinical, leadership, and interprofessional collaboration skills. We are excited to welcome the four residents who will be joining our July 2025 – June 2026 residency class!



Alyssa Bode, PharmD

PGY1 Traditional Pharmacy Resident

Alyssa Bode is from Sparta, New Jersey, and earned her Doctor of Pharmacy degree from the University of Connecticut in May 2025. Alyssa is excited to begin her PGY1 residency at Valley, where she looks forward to exploring a wide range of clinical areas and gaining new experiences throughout the year. She is especially looking forward to learning more about cardiology and compounding as she continues to develop her clinical skills in a collaborative, patient-focused environment. She is eager to build professional relationships and contribute to the healthcare team. By the completion of her residency, she hopes to have gained the confidence, knowledge, and experience to help her succeed in her future pharmacy practice. When she's not working, Alyssa likes to snack, relax by the lake, and hang out with her family, preferably all at once.



Gianna Traenkner, PharmD

PGY1 Traditional Pharmacy Resident

Gianna Traenkner is from Blackwood, NJ and earned her Doctor of Pharmacy degree from Rutgers Ernest Mario School of Pharmacy in May 2025. Gianna is excited to begin her career as a PGYI Pharmacy Resident with Valley and to start practicing as a licensed pharmacist. She looks forward to collaborating with other healthcare professionals and gaining hands-on experience in a variety of clinical settings, with particular interests in critical care and emergency medicine. Gianna strives to make a lasting impact on patients and the healthcare team while contributing to high-quality, evidence-based care. Throughout her residency journey at Valley, she aims to strengthen her clinical skills and expand her knowledge through diverse learning opportunities, culminating in meaningful contributions to research and continuous improvement initiatives. Outside of pharmacy, she enjoys cooking, exercising, traveling, spending time at the beach, and unwinding with friends and family.



**Meryl Coriell, PharmD**PGYl Community Pharmacy Resident

Meryl Coriell grew up in Bridgewater, NJ and completed her Doctor of Pharmacy degree at The University of Rhode Island in May 2025. Meryl is thrilled to join the Valley Health System as a PGY-1 Community-Based Resident, and looks forward to further developing her interests in ambulatory care and geriatrics. During her residency she plans to broaden her clinical experience across different therapeutic areas while building collaborative relationships with both patients and other healthcare professionals. Outside of pharmacy, you can find Meryl reading, cooking, or trying new restaurants. She also loves spending time with her friends and family.



**Jennifer Grohowski ,PharmD**PGYI Community Pharmacy Resident

degree from Rutgers University in May 2025.

Jennifer is beginning her PGYI Community-Based Residency with a passion for helping patients feel more comfortable with their medications in the ambulatory care setting. Throughout this year, she hopes to develop her skills in counseling patients and working with interdisciplinary teams to optimize patient care. Outside of pharmacy,

Jennifer Grohowski is from Iselin, NJ and earned her Doctor of Pharmacy



Jennifer likes to stay active and play board games.

## PEMBROLIZUMAB SUBCUTANEOUS APPROVAL SEPTEMBER 2025

ALYSSA BODE, PHARMD

A new subcutaneous (SC) injection form of pembrolizumab received FDA approval on September 19, 2025. This SC formulation combines pembrolizumab with berahyaluronidase alfa, an enzyme allowing administration under the skin rather than the traditional intravenous (IV) infusion. The change looks to streamline treatment for patients with various solid tumors across all existing pembrolizumab indications.

Clinical trial data shows that the SC pembrolizumab provides pharmacokinetics comparable to the IV version while reducing patient time in chair by nearly 50%, from about two hours of infusion to just a two-minute injection. Hospital staff also benefit from a roughly 45% reduction in time spent preparing and administering the drug, potentially improving workflow efficiency on oncology units. The safety profile for the SC formulation closely mirrors that of the IV formulation, supporting its convenience without compromising efficacy or patient safety.

The launch of the SC formulation is projected for early October 2025, offering a more patient-friendly and resource-efficient treatment option. This advance is particularly relevant for hospital oncology teams, as it may improve infusion center workflow, scheduling flexibility, and overall patient experience. This upcoming approval could reshape infusion center workflows and supportive care approaches.

### A Phase 3 Noninferiority Trial Results:

The 345A-D77 randomized, open-label trial compared the SC formulation of pembrolizumab plus chemotherapy to the standard IV pembrolizumab plus chemotherapy in patients with newly diagnosed stage IV squamous or non-squamous non-small cell lung cancer without sensitizing EGFR, ALK, or ROS1 alterations

Efficiency Benefits of SC Pembrolizumab Compared to IV Administration				
Measure (minutes)	SC Pembrolizumab with Chemotherapy	IV Pembrolizumab with Chemotherapy	% Reduction with SC	
Patient time in chair	~59.0	~117.2	49.70%	
Patient time in treatment room	~66.7	~126.9	47.40%	
Total active healthcare professional (HCP) time	~14.0	~25.8	45.70%	
Preparation time for pembrolizumab	~5.1	~9.2	44.60%	
Administration and monitoring time	~8.9	~16.7	46.70%	

Clinical and Pharmacokinetic Comparison of SC vs. IV Pembrolizumab				
Parameter	SC Pembrolizumab	IV Pembrolizumab		
Dosing/interval	790mg every 6 weeks	400mg every 6 weeks		
Injection/infusion time	~2 minutes (median injection time)	~120 minutes (approximate infusion time)		
Pharmacokinetics (PK)	Noninferior AUC during first cycle and higher trough concentration at steady state	Standard		
Objective Response Rate (ORR)*	45.4% (95% CI: 39.1-51.8)	42.1% (95% CI: 33.3-51.2)		
Median Duration of Response (DOR)*	9.1 months (95% CI: 6.9-NR)	8.0 months (95% CI: 7.4-NR)		
Median Progression-Free Survival (PFS)*	8.1 months (95% CI: 6.3-8.3)	7.8 months (95% CI: 6.2-9.7)		
Median Overall Survival (OS)*	Not reached	Not reached		
Grade ≥3 Adverse Events (AEs)	47.00%	47.60%		
Local injection site reactions	2.4% (all low grade)	N/A		
Treatment-related AE discontinuation (pembrolizumab)	8.40%	8.70%		
Treatment-related AE discontinuation (chemotherapy)	15.10%	11.90%		
Treatment-related deaths	3.60%	2.40%		

ORR: defined as the percentage of participants with a confirmed complete or partial response (CR or PR)

DOR: defined as the time from first documented CR or PR until disease progression or death from any cause, whichever occurs first PFS: defined as the time from randomization to first documented disease progression or death from any cause, whichever occurs first OS: defined as the time from randomization to death from any cause

SC pembrolizumab administered every six weeks with a median injection time of approximately two minutes demonstrated noninferior pharmacokinetics compared to IV pembrolizumab, which requires about 120 minutes per infusion. Both formulations showed similar efficacy outcomes, including objective response rates, duration of response, progression-free survival, and overall survival, with comparable safety profiles. SC formulation offers the potential to reduce treatment time and healthcare resource use.

#### References

<sup>1.</sup> Felip E, Rojas CI, Schenker M, et al. Subcutaneous versus intravenous pembrolizumab, in combination with chemotherapy, for treatment of metastatic non-small-cell lung cancer: the phase III 3475A-D77 trial. Ann Oncol . 2025;36(7):775-785. doi:10.1016/j.annonc.2025.03.012

<sup>2.</sup> Merck's Investigational Subcutaneous Pembrolizumab With Berahyaluronidase Alfa Demonstrates Noninferior Pharmacokinetics Compared to Intravenous (IV) KEYTRUDA® (pembrolizumab) in Pivotal 3475A-D77 Trial - Merck.com. Accessed September 15, 2025. https://www.merck.com/news/mercks-investigational-subcutaneous-pembrolizumab-with-berahyaluronidase-alfa-demonstrates-noninferior-pharmacokinetics-compared-to-intravenous-iv-keytruda-pembrolizumab-in-pivotal/

# A NEW INDICATION FOR FINERENONE, A MINERALOCORTICOID RECEPTOR

ALYSSA BODE, PHARMD

### What's New?

In July 2025, the FDA approved a new indication for finerenone, for the treatment of adults with heart failure (HF) who have a left ventricular ejection fraction (LVEF) of 40% or more. This indication expands finerenone's use beyond its original 2021 approval for chronic kidney disease associated with type 2 diabetes and includes patients with preserved ejection fraction (HFpEF).

### What is Finerenone? How Does it Differ from Older MRAs?

Finerenone is a selective, nonsteroidal mineralocorticoid receptor antagonist (MRA). Like other MRAs, finerenone blocks the mineralocorticoid receptor (MR), preventing aldosterone from driving sodium/water retention, cardiac fibrosis, and inflammation. However, finerenone uniquely demonstrates less off-target (non-MR) activity with less risk of hormonal side effects. It also shows more balanced effects across heart and kidney, reducing cardiac fibrosis and remodeling in ways that steroidal agents may not.

### What Did the FINEARTS -HF Trial Find?

The expanded approval is based on the Phase 3 FINEARTS-HF trial, which enrolled 6,000 patients with symptomatic heart failure and a LVEF of 40% or greater, randomizing them to finerenone or placebo over a median follow-up of approximately 2.6 years. Finerenone significantly reduced the primary composite outcome of cardiovascular death and total HF events, including both first and recurrent hospitalizations, by 16% compared to placebo (rate ratio 0.84; 95% CI 0.74-0.95). Specifically, worsening HF events were reduced by 18% (842 events in finerenone group vs. 1,024 in placebo; rate ratio 0.82; 95% CI 0.71-0.94). Cardiovascular deaths trended lower but did not reach statistical significance (8.1% vs. 8.7%; hazard ratio 0.93; 95% CI 0.78-1.11). The benefit was consistent across LVEF subgroups, including patients with mildly reduced (<50%) and preserved (>60%) ejection fraction. Patients also reported modest but statistically significant improvement in symptoms measured by the Kansas City Cardiomyopathy Questionnaire (+1.6 points; p<0.001). Safety analysis showed a slight increase in hyperkalemia episodes without significant increases in serious adverse events. These findings establish finerenone as the first selective nonsteroidal MRA to demonstrate significant clinical benefit in HF with LVEF of 40% or more.

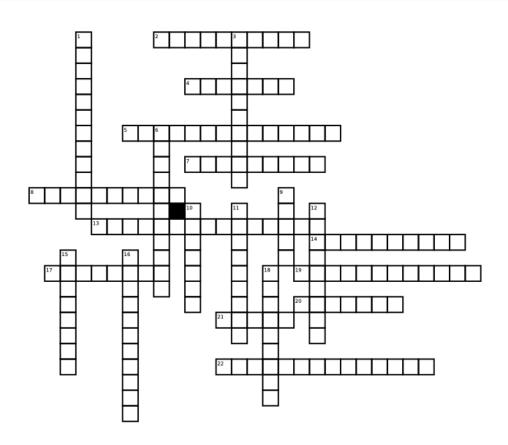
### What does this mean for pharmacy/clinical teams?

Finerenone's new indication marks advancement in heart failure treatment guidelines by providing evidence-based therapy for patients with HFpEF, populations that have historically lacked effective options compared to heart failure with reduced ejection fraction (HFrEF). The FINEARTS-HF trial's demonstration of reduced heart failure hospitalizations and improved clinical outcomes supports finerenone's role as an MRA in this setting, expanding the therapeutic landscape and offering clinicians a targeted, well-tolerated option aligned with evolving standards of care.

### References

- 1. Fineronone. Lexi-Drugs. UpToDate Lexidrug. UpToDate Inc. https://online.lexi.com. Accessed August 31, 2025.
- 2.Solomon SD, McMurray JJV, Vaduganathan M, et al. Finerenone in Heart Failure with Mildly Reduced or Preserved Ejection Fraction. N Engl J Med . 2024;391(16):1475-1485. doi:10.1056/NEJMoa2407107
- 3.U.S. FDA approves Kerendia (finerenone) to treat patients with heart failure with left ventricular ejection fraction ≥40% following priority review.
- 4. News release. Bayer. July 14, 2025. Accessed July 14, 2025. https://bayer2019tf.q4web.com/news/news-details/2025/U-S--FDA-Approves-
- 5. KERENDIA-fine renone-to-Treat-Patients-With-Heart-Failure-With-Left-Ventricular-Ejection-Fraction-40-Following-Priority-Review/description-fraction-fra

## PHARMACY CROSSWORD CHALLENGE



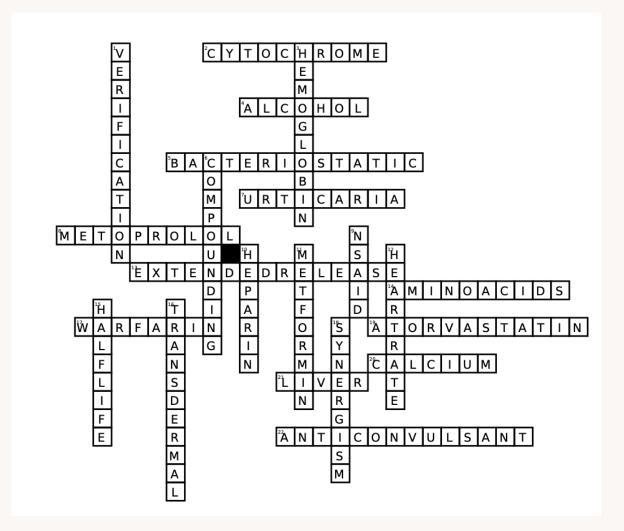
### Down:

- The process of checking a prescription before dispensing
- Protein that carries oxygen in blood, sometimes referenced in dosing
- A hospital pharmacist's specialty in preparing sterile medications
- Medication type often used to reduce inflammation
- Injectable anticoagulant often monitored by aPTT
- 11. Drug used to lower blood sugar in diabetes
- 12. A vital sign monitored when administering beta blockers
- 15. A pharmacokinetic parameter describing drug elimination
- 16. Drug absorption route through the skin
- 18. Term for two drugs working together for greater effect

### Across:

- Enzyme important in metabolizing many drugs (e.g., CYP450)
- 4. Common antiseptic used for hand hygiene
- 5. Drug class that inhibits bacterial growth
- Medication allergy reaction often associated with rash
- Beta blocker used to treat hypertension
- 13. A drug formulation designed for slow release
- Protein building blocks relevant to drug manufacturing
- 17. A common anticoagulant given orally
- 19. A drug used to treat high cholesterol
- 20. A supplement commonly used for bone
- 21. The organ primarily responsible for metabolizing drugs
- 22. Medication given to prevent seizures

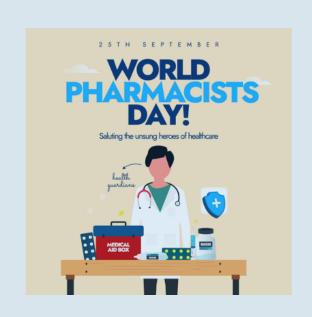
## PHARMACY CROSSWORD CHALLENGE KEY



### World Pharmacists Day 2025

### Think Health, Think Pharmacist!

On September 25th, we celebrated World Pharmacists Day with the 2025 theme "Think Health, Think Pharmacist!" This reminds everyone that at the heart of every hospital, pharmacists are crucial to patient care, safety, and innovation. We thank our pharmacy team for being the steady link between science and healing, making every dose count and every patient feel cared for. Here's to the pharmacy team who makes the hospital healthier every day!



## <u>Drug Spotlight: Ketamine Gains New Use for</u> <u>Surgical Pain Management</u>

Ketamine has been approved by the FDA for the management of pain associated with surgical procedures. Traditionally used as an anesthetic and for treatment-resistant depression, ketamine has also been widely utilized off-label for analgesia. This approval formally establishes ketamine's role as a therapeutic agent specifically for surgical pain. Ketamine acts as a noncompetitive antagonist of the N-methyl-Daspartate (NMDA) receptor, reducing central sensitization and modulating excitatory glutamate signaling to provide effective analgesia without the respiratory depression risks associated with opioids. This regulatory change supports the integration of ketamine into multimodal perioperative analgesia protocols aimed at minimizing opioid consumption during patient recovery. Clinicians may expect updated guidelines on clinical implementation as ketamine becomes more widely adopted in surgical pain management pathways. Until now, ketamine's use for this indication was primarily off-label, making this approval a significant advancement in its recognized therapeutic applications.

### Reference

1.FDA Approves Ketamine for Surgical Pain Management | Pharmacy Times - Pharmacy Practice News and Expert Insights. Accessed September 26, 2025. https://www.pharmacytimes.com/view/fda-approves-ketamine-for-surgical-pain-management



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Contributors

Alyssa Bode, PharmD