

# FDA Approves Gepotidacin for Urogenital Gonorrhea in Adult and Pediatric Patients

## Key Takeaways

- Gepotidacin is approved for treating uncomplicated urogenital gonorrhea in patients aged 12 and older, especially those with limited treatment options.
- This first-in-class antibiotic inhibits bacterial DNA replication and is effective against resistant strains of *Neisseria gonorrhoeae*.
- EAGLE clinical trials showed gepotidacin's noninferiority to standard treatments and efficacy in treating urinary tract infections.
- Adverse events were mostly mild to moderate, with gastrointestinal issues being the most common.

*FDA approves gepotidacin as a new oral treatment for uncomplicated gonorrhea, expanding options against resistant sexually transmitted infections.*

The FDA approved a supplemental new drug application for gepotidacin (Blujepa; GSK) as an oral treatment for uncomplicated urogenital gonorrhea caused by susceptible strains of *Neisseria gonorrhoeae* (N gonorrhoeae) in adult and pediatric patients aged 12 years of age and older weighing at least 45 kg. This indication is specifically for those who have limited or no alternative treatments and for whom the standard of care is contraindicated or who are intolerant or unwilling to use first-line treatment.<sup>1</sup>

Gepotidacin is a bactericidal, first-in-class triazaacenaphthylene antibiotic that inhibits bacterial DNA replication by a distinct binding site, a novel mechanism of action, and for most pathogens, provides well-balanced inhibition of 2 different Type II topoisomerase enzymes. This provides activity against N gonorrhoeae and most target uropathogens (such as *Escherichia coli* and *Staphylococcus saprophyticus*), including isolates resistant to current antibiotics.

Because of the well-balanced inhibition for most pathogens, a single target-specific mutation may not significantly impact gepotidacin activity.<sup>1</sup> This FDA approval follows the approval of gepotidacin earlier this year as an oral treatment for female adult and pediatric patients aged 12 years and older (weighing  $\geq 40$  kg) with uncomplicated urinary tract infection.<sup>2</sup>

## The EAGLE Clinical Trial Program

The approval is based on positive findings from the EAGLE clinical trial program, which includes the phase 3 EAGLE-1 (NCT04010539)<sup>3</sup>, EAGLE-2 (NCT04020341)<sup>4</sup>, and EAGLE-3 (NCT04187144)<sup>5</sup> trials.

### EAGLE-1

Results from the EAGLE-1 trial, which enrolled 628 participants between October 21, 2019, and October 10, 2023, and randomly assigned them to receive either gepotidacin (n = 314) or

ceftriaxone (Rocephin; Roche) plus azithromycin (Zithromax; Pfizer; n = 314). Results of the primary analysis, which were published in *The Lancet* in May 2025, showed microbiological success rates of about 92.6% (95% CI 88.0 to 95.8) in the gepotidacin group and 91.2% (95% CI 86.4 to 94.7) in the ceftriaxone plus azithromycin group (adjusted treatment difference: -0.1% [95% CI -5.6 to 5.5]). Gepotidacin was noninferior to ceftriaxone plus azithromycin, and there was no bacterial persistence of urogenital *N gonorrhoeae* observed at the test-of-cure for either group. The gepotidacin group had higher rates of adverse events (AEs) and drug-related AEs, mainly due to gastrointestinal adverse events, and almost all were mild or moderate. There were no treatment-related severe or serious AEs that occurred in either group.<sup>6</sup>

## **EAGLE-2 and EAGLE-3**

In EAGLE-2, 50.6% (162 of 320) of patients assigned gepotidacin and 47.0% (135 of 287) of patients assigned nitrofurantoin (Marcobid; Almatica Pharma) had therapeutic success (adjusted difference 4.3% [95% CI -3.6 to 12.1]). In EAGLE-3, 58.5% (162 of 277) of patients assigned gepotidacin and 43.6% (115 of 264) of patients assigned nitrofurantoin had therapeutic success (adjusted difference 14.6% [95% CI 6.4 to 22.8]). Gepotidacin was shown to be noninferior to nitrofurantoin in both EAGLE trials, but was superior to nitrofurantoin in EAGLE-3. The most common AE with gepotidacin was diarrhea (EAGLE-2: n = 111; 14%; EAGLE-3: n = 147; 18%), whereas the most common AE with nitrofurantoin was nausea (EAGLE-2: n = 29, 4%; EAGLE-3: n = 35, 4). Cases were mostly mild or moderate. No life-threatening or fatal events occurred.<sup>7</sup>

“We’re proud to have delivered the first new class of antibiotics for gonorrhea in over 3 decades and a new oral option for US patients. The ability of *N gonorrhoeae* to develop resistance to currently available options, including standard of care, makes it important to expand the range of effective oral treatments,” Tony Wood, chief scientific officer of GSK, said in a news release.<sup>1</sup>

## **REFERENCES**

1. GSK. Blujepa (gepotidacin) approved by US FDA as oral option for treatment of uncomplicated urogenital gonorrhoea (uGC). News release. December 11, 2025. Accessed December 11, 2025. <https://www.gsk.com/en-gb/media/press-releases/blujepa-gepotidacin-approved-by-us-fda-as-oral-option-for-treatment-of-uncomplicated-urogenital-gonorrhoea-ugc/>
2. McGovern G. Gepotidacin Receives FDA Approval for uUTIs in Adult, Pediatric Female Patients. *Pharmacy Times*. March 25, 2025. Accessed December 11, 2025. <https://www.pharmacytimes.com/view/gepotidacin-receives-fda-approval-for-uutis-in-adult-and-pediatric-female-patients>
3. A Study Evaluating Efficacy and Safety of Gepotidacin Compared With Ceftriaxone Plus Azithromycin in the Treatment of Uncomplicated Urogenital Gonorrhea. ClinicalTrials.gov identifier: NCT04010539. Updated May 30, 2024. Accessed December 11, 2025. <https://clinicaltrials.gov/study/NCT04010539>

4. A Study to Evaluate Efficacy and Safety of Gepotidacin in the Treatment of Uncomplicated Urinary Tract Infection (UTI). ClinicalTrials.gov identifier: NCT04020341. Updated June 22, 2023. Accessed December 11, 2025. <https://clinicaltrials.gov/study/NCT04020341>
5. Comparative Study to Evaluate Efficacy and Safety of Gepotidacin to Nitrofurantoin in Treatment of Uncomplicated Urinary Tract Infection (UTI). ClinicalTrials.gov identifier: NCT04187144. <https://clinicaltrials.gov/study/NCT04187144>
6. Ross JDC, Wilson J, Workowski KA, et al. Oral gepotidacin for the treatment of uncomplicated urogenital gonorrhoea (EAGLE-1): a phase 3 randomised, open-label, non-inferiority, multicentre study. *The Lancet*. 2025;405(10489):1608–1620. doi:10.1016/S0140-6736(25)00628-2
7. Wagenlehner F, Perry CR, Hooton TM, et al. Oral gepotidacin versus nitrofurantoin in patients with uncomplicated urinary tract infection (EAGLE-2 and EAGLE-3): two randomised, controlled, double-blind, double-dummy, phase 3, non-inferiority trials. *The Lancet*. 2024;403(10428):741–755. doi:10.1016/S0140-6736(23)02196-7

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