Colistin 1.5 mg/mL was visually compatible with single concentrations of 9 other antimicrobial products during simulated Y-site injection at 26 °C without light protection for at least 1 hour” Katip (2017).

Abstract:

Purpose: The compatibility of colistin with other antibiotics at concentrations commonly used in intensive care units was studied.

Methods: A vial of colistin was dissolved in sterile water for injection. The reconstituted solution (colistin base 75 mg/mL) was then diluted in 0.9% sodium chloride injection in polyvinyl chloride (PVC) infusion bag to give a total volume of 100 mL (colistin 1.5 mg/mL). Secondary drugs, including cefoperazone–sulbactam, ceftazidime, ertapenem, fosfomycin, imipenem–cilastatin, linezolid, meropenem, piperacillin–tazobactam, and vancomycin, were reconstituted if necessary and then diluted in 0.9% sodium chloride injection in PVC infusion bags to give final study concentrations of one-hundredth of their initial concentrations. The admixtures were collected in beakers at the end of the i.v. line and stored at 26 °C under constant fluorescent light throughout the study. Compatibility was assessed visually during delivery of each drug pair at time 0 and at 1 hour after starting the infusion. Compatibility was defined as the absence of visually detected particulate formation, haze, precipitation, color change, or gas evolution. Each combination was tested in triplicate.

Results: No particulate formation or other evidence of incompatibility was found in any of the studied drug combinations when observed immediately after mixing or at 1 hour. No particulate matter was observed with the unaided eyes, during microscopic evaluation, or against black and white backgrounds.

Conclusion: Colistin 1.5 mg/mL was visually compatible with single concentrations of 9 other antimicrobial products during simulated Y-site injection at 26 °C without light
protection for at least 1 hour.

Reference:


DOI: https://doi.org/10.2146/ajhp160216

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