“The stability of an admixture containing reconstituted daptomycin and heparin in lactated Ringer’s injection was evaluated” Ortega et al (2014).

Reference:


Abstract:

Purpose: The stability of an admixture containing reconstituted daptomycin and heparin in lactated Ringer’s injection was evaluated.

Methods: Two samples of the admixture of daptomycin 5 mg/mL and heparin sodium 100 USP units/mL diluted in lactated Ringer’s injection were prepared and divided into 5-mL portions for storage in syringes at 4 and −20 °C for 14 days. The percentage of the initial concentration of the drugs remaining in the syringes was assessed using a high-performance liquid chromatographic (HPLC) method with diode-array detection previously validated as stability indicating for both drugs. Forced degradation studies were performed independently with each drug diluted in lactated Ringer’s injection. One sample from each stored syringe was analyzed in triplicate on days 0, 1, 2, 3, 4, 7, and 14; quality-control samples of each concentration tested were used throughout the analysis. The admixture samples were visually inspected for color, clarity, and the formation of particulate matter.

Results: The HPLC analysis indicated no significant reduction (loss of ≤5%) in the concentration of daptomycin and heparin diluted in lactated Ringer’s injection stored in syringes refrigerated at 4 °C and frozen at −20 °C. None of the chromatographic peaks observed in samples subjected to forced degradation were detected in any sample during the 14-day study. All of the syringe-stored samples remained clear and colorless on visual
inspection for the duration of the study.

Conclusion: The admixture of daptomycin 5 mg/mL and heparin sodium 100 USP units/mL was stable when stored in polypropylene syringes for up to 14 days at 4 and −20 °C.

Other intravenous and vascular access resources that may be of interest (External links – IVTEAM has no responsibility for content).