Abstract:

This is a report on the chemical stability and physical compatibility of intravenous tedizolid phosphate 0.8 mg/mL-sodium rifampicin 2.4 mg/mL and tedizolid phosphate 0.8 mg/mL-meropenem 4 mg/mL combinations in polypropylene 0.9% sodium chloride infusion bags stored at different storage conditions. Triplicate solutions of both admixtures were prepared in 0.9% sodium chloride polypropylene infusion bags and stored under light protection at room temperature (25±2 °C), refrigeration (2-8 °C) or freezing (-15 – -25 °C) conditions. The study was performed using a validated and stability-indicating liquid chromatography (LC) method. For both admixtures and for all storage conditions, at least 90% of the initial drug concentration of tedizolid phosphate remained unchanged throughout the entire study period. Stability of sodium rifampicin at 25±2 °C was determined to be seven hours and six days when it was stored at 2-8 °C. Under the same storage conditions, meropenem was stable for 12 h or 6 days, respectively. Under freezing conditions, sodium rifampicin was stable throughout all 28 days, while stability of meropenem was only 8 days. Solutions of 0.8 mg/mL tedizolid phosphate admixed with 2.4 mg/mL rifampicin or 4 mg/mL meropenem, in polypropylene 0.9% sodium chloride infusion bags, are stable for at least 7 or 12 hours, respectively, when stored at 25±2 °C. When stored at 2-8 °C, stability was increased to 6 days for both admixtures.

Reference: