RANITIDINE HYDROCHLORIDE

SYNONYMS

Ranitidine

TRADE NAME

RANITIDINE SANDOZ, ZANTAC

DRUG CLASS

H₂ antagonist

AVAILABILITY

Zantac: Ampoule contains 50 mg/2 mL of ranitidine hydrochloride. Also contains monobasic potassium phosphate, sodium chloride and dibasic sodium phosphate.

Ranitidine Sandoz: Ampoule contains 50 mg/5 mL of ranitidine hydrochloride. Also contains sodium hydroxide.²

pH

Zantac: 7¹

PREPARATION

Not applicable

ADMINISTRATION

IM injection: Suitable³

SUBCUT injection: Has been used in palliative care as a continuous subcutaneous infusion.⁴

IV injection: Dilute 50 mg with 20 mL of sodium chloride 0.9% and inject over at least 5 minutes.¹,²

IV infusion: Dilute 50 mg in 100 mL of compatible fluid and infuse over 15 to 20 minutes³ or over 2 hours (25 mg/hour).¹,²

May also be given as a continuous infusion. Dilute 150 mg in 250 mL of compatible fluid and infuse at a rate of 6.25 mg/hour over 24 hours.³

IV use for infants and children: Dilute to 2.5 mg/mL and inject over at least 5 minutes. Or dilute to less than 0.5 mg/mL and infuse over 15 to 20 minutes or as a continuous infusion.³ Maximum rate 10 mg/minute.⁵,⁶

STABILITY

Ampoule: Store below 25 °C.¹,² Ranitidine Sandoz: Protect from light.¹,²

Diluted solution: Zantac: Stable for 24 hours.¹

Ranitidine Sandoz: Stable for 24 hours at 2 to 8 °C if diluted with sodium chloride 0.9%, sodium bicarbonate 4.2% or Hartmann’s. Stable for 8 hours at 2 to 8 °C if diluted with glucose 5% or glucose 4% and sodium chloride 0.18%.²

COMPATIBILITY

Compatible fluids: Glucose 5%¹,², glucose 10%³, Hartmann’s¹,², sodium bicarbonate 4.2%¹,², sodium chloride 0.9%¹,², sodium chloride in glucose solutions¹,²

Compatible via Y-site: Aciclovir³, adrenaline hydrochloride³,⁷, amifostine³, aminophylline³, anidulafungin³, atracurium³, aztreonam³, bivalirudin³, cefoxitin³, ceftaroline fosamil³, ciprofloxacin³, cisatracurium³, dexmedetomidine³, dobutamine³, dopamine³, doripenem³, esmolol³, ethano³, filgrastim³, fluconazole³, foscarinet³, glycercyl trinitrate³, granisetron³, heparin sodium³, labelalom³, linezolid³, lorazepam³, midazolam³, milrinone³, pancuronium³, piperacillin-tazobactam (EDTA-free)³, remifentanil³, tigecycline³, vecuronium³, zidovudine³

Compatible in syringe: Atropine³, cyclizine³, dexamethasone³, fentanyl³, glycopyrrolate³, hydromorphone³, hyoscine hydrobromide³, metoclopramide³, morphine sulfate³, pethidine³, promethazine³

(continued)
INCOMPATIBILITY

Incompatible fluids: No information

Incompatible drugs: Caspofungin\textsuperscript{7}, levomepromazine\textsuperscript{3}, phenobarbitone\textsuperscript{3}, sugammadex\textsuperscript{1}

SPECIAL NOTES

Rapid administration can cause bradycardia.\textsuperscript{1,2}

REFERENCES