TEMSIROLIMUS

BRAND NAME	TORISEL
DRUG CLASS	Non-cytotoxic antineoplastic, mTOR inhibitor
AVAILABILITY	Vial contains 25 mg/1.2 mL of temsirolimus. Also contains ethanol, dl-alpha-tocopherol, propylene glycol and citric acid.[1] Diluent vial contains polysorbate-80, macrogol 400 and ethanol.[1]
	Temsirolimus is potentially teratogenic and carcinogenic.[1] Take additional precautions when handling this medicine.[2] Wear a mask and gloves when preparing the dose. Severe hypersensitivity and anaphylactic reactions may occur. Resuscitation facilities must be readily available.[1]
pH	No information
PREPARATION	Reconstitute the vial with 1.8 mL of the diluent provided. Invert the vial to mix well. Stand until bubbles disperse.[1] The solution is clear to slightly turbid and colourless to yellow.[1] The concentration is 10 mg/mL and the extractable dose is 25 mg/2.5 mL.[1] Dilute the dose in 250 mL sodium chloride 0.9%. Invert the bag or bottle to mix. Avoid excessive shaking.[1] Use glass, polyolefin or polyethylene containers. Do not use PVC or EVA containers.[1]
STABILITY	Vial: store at 2 to 8 °C. Protect from light.[1] Concentrate mixed with diluent: stable for 24 hours at 20 to 25 °C. Protect from light.[1] Infusion solution: stable for 6 hours at 20 to 25 °C. Protect from light.[1] Longer stability information is available.[3]
ADMINISTRATION	
IM injection	Not recommended
SUBCUT injection	Not recommended
IV injection	Not recommended
IV infusion	Infuse over 30 to 60 minutes using a 0.2–5 micrometre inline filter.[1] Use a non-PVC container and giving set.[1]
COMPATIBILITY	Sodium chloride 0.9%[1]
INCOMPATIBILITY	No information
SPECIAL NOTES	Infusion reactions are common and include flushing, chest pain, dyspnoea, hypotension and apnoea. Reactions can occur early in the first infusion but may occur in subsequent infusions. Stop or slow the infusion and treat accordingly.[1] Anaphylactic reactions are rare but are a medical emergency. Stop the infusion and commence treatment immediately. Premedication with an antihistamine is required.[1] Low emetogenic risk.[4] Check your local guidelines for premedication requirements.

REFERENCES

1. Product information. Available from www.tga.gov.au. Accessed 28/06/2019.
2. National Institute for Occupational Safety and Health. NIOSH list of antineoplastic and other hazardous drugs in healthcare settings 2016. Cincinnati, Ohio: Department of Health and Human Services; 2016.
3. McEvoy GK, editor. Handbook on injectable drugs. 20th ed. Bethesda, MD: American Society of Health-System Pharmacists; 2018.
4. Clinical resource: Prevention of antineoplastic induced nausea and vomiting [v4 January 2019]. eviQ [internet]. Sydney: Cancer Institute NSW. Available from www.eviq.org.au. Accessed 10/10/2019.

Archived monograph AIDH 8th edition published February 2020