Ganciclovir
Newborn use only

2020

Alert	**High risk medicine. Cytotoxic agent.**
Indication	Treatment of severe or moderately severe, symptomatic congenital CMV Treatment of acute severe CMV disease.
Action	Synthetic nucleoside analogue of 2-deoxyguanosine that inhibits replication of herpes viruses such as cytomegalovirus, herpes simplex virus 1 and 2, herpes virus type 6, 7 and 8, Epstein-Barr virus, varicella zoster virus and hepatitis B virus.
Drug type	Antiviral
Trade name	Cymevene, Ganciclovir SXP
Presentation	500 mg ganciclovir sodium vial for reconstitution
Dose	6 mg/kg/dose 12 hourly. Infants may be switched to oral valganciclovir if clinically stable and able to take oral medications. IV ganciclovir should generally not be used for more than 6 weeks. Please note, oral valganciclovir is the oral prodrug of ganciclovir and prescribed at a different dose.
Dose adjustment	
Maximum dose	
Total cumulative dose	
Route	IV
Preparation	**IV Provided by pharmacy** of the reconstituted/pre-diluted product. Final concentration should not be higher than 10 mg/mL. Cytotoxic agent so infusion should not be manipulated on the ward.
Administration	**IV** **Follow full cytotoxic precautions as per local policy.** IV infusion over 30 minutes preferably via central venous access.
Monitoring	Full blood count, particularly neutrophils, should be followed weekly for 6 weeks, then at week 8, then monthly for the duration of therapy. IV site for phlebitis Liver function tests monthly throughout therapy. Renal function tests.
Contraindications	Hypersensitivity to ganciclovir, valganciclovir, aciclovir or valacyclovir. Patients with: • absolute neutrophil count below 0.5 x 10^9/L or • platelet count below 25 x 10^9/L unless thrombocytopenia is related to CMV disease, or • haemoglobin less than 80 g/L (8 g/dL).
Precautions	Ganciclovir has both gonadal toxicity and carcinogenicity in animal models and its long-term safety after administration to young children is not established.[1]
Drug interactions	Convulsions have been reported in patients receiving ganciclovir and imipenem-cilastatin concurrently. Concurrent use of tacrolimus and ganciclovir increases nephrotoxicity.
Adverse reactions	Commonly causes neutropenia. If absolute neutrophil count (ANC) falls below 0.5 x 10^9/L and if it is thought not to be due to CMV disease, withhold medication until ANC is above 0.75 x 10^9/L then restart medication at half dose. If ANC falls below 0.5 x 10^9/L again, consider discontinuing the medication. Can also cause anaemia and thrombocytopenia. Discontinue medication if platelet count below 25 x 10^9/L or haemoglobin less than 80 g/L occurs and is thought not to be due to CMV disease.
Compatibility	Fluids: Glucose 5%, sodium chloride 0.9%. Must not be administered in conjunction with any other drugs.
Incompatibility	
Stability	Compounding centres that are licensed by the Australian Therapeutic Goods Administration to reconstitute and/or further dilute cytotoxic medicines and have validated aseptic procedures and regular monitoring of aseptic technique may apply a shelf life of 15 days at 2 to 8°C (refrigerate, do not freeze) to ganciclovir IV infusions reconstituted with water and further diluted with sodium chloride

	0.9% or glucose 5%. Please contact your Pharmacy Department for more information or refer to expiry date on the product.
Storage	Store vial below 30°C. Pre-diluted solution: Store at 2 to 8°C or as instructed on product label by compounding facility.
Excipients	None.
Special comments	
Evidence	Refer to full version.
Practice points	Refer to full version.
References	Refer to full version.

VERSION/NUMBER	**DATE**
Original 1.0	**18/09/2017**
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