IMMUNOGLOBULIN (human) **This drug must be guardrailed**

Trade Name	Privigen (CSL) – the main product for NICU for short term use Privigen NZ - for patients on long term use
Class	Blood product
Mechanism of Action	Immunoglobulin G replacement therapy **Privigen** and Privigen NZ contains 69% IgG1, 26% IgG2, 3% IgG3, 2% IgG4 and have an IgA content of 0.025 mg/mL The only difference is that Privigen NZ is derived exclusively from NZ donors
Indications	Fulminant sepsis Hypogammaglobulinaemia Immune thombocytopaenia Hyperbilirubinaemia due to rhesus isoimmunisation or ABO incompatibility
Contraindications	Patients with hypersensitivity/anaphylaxis to a human immunoglobulin preparation. Patients with IgA deficiency, especially with anti-IgA antibodies Lack of blood products consent.
Supplied As **See comments section below for details about ordering immunoglobulin from Blood Bank**	**Privigen® and Privigen® NZ** are both sterile, clear or slightly opalescent colourless or pale yellow solutions of human normal immunoglobulin. Privigen bottles: 5g/50mL, 10g/100mL, 20g/200mL, 40g/400mL Privigen NZ : 5g/50mL, 10g/100mL, 20g/200mL, 40g/400mL Labelled as 10% (100g/litre) which equals **100mg/mL**
Dilution	None usually required
Dosage ***Must chart guardrail and use Alaris pump***	1g/kg
Guardrails	Concentration: 100mg/mL Soft Alert Min: 166mg/kg/hr Hard Alert Max: 335mg/kg/hr Soft Alert Max: 333mg/kg/hr Default Setting: 250mg/kg/hr
Interval	Fulminant sepsis - can repeat dose at 48 hours Rhesus/ABO incompatibility – can repeat the dose at 12 hrs
Administration	Solution should be at room temperature before use. IV infusion over 3-4 hours Do not shake prior to use. Do not use if solution is cloudy or contains particles/precipitate.

Compatible With	Glucose 5%. If required Privigen or Privigen NZ can be diluted with 5% glucose
Incompatible With	Do not mix with other medication. Infusion line may be primed or flushed with 0.9% sodium chloride but Privigen or Privigen NZ must not be directly mixed/diluted with solutions of 0.9% sodium chloride.
Monitoring	Monitor BP, HR. Monitor IV site for phlebitis Monitoring is recommended to be carried out regularly during the infusion and for the first hour afterwards.
Stability	Manufacturers expiry. Use immediately after opening and discard the remainder.These products do not contain preservative.
Storage	Store below 25 ^{o}C (do not freeze), protect from light
Adverse Reactions	Adverse reactions tend to occur more often when the patient is inadequately hydrated or Privigen is infused at a faster rate . **Common:** Headache, nausea, vomiting, muscle aches, chills, fever, flushing, flu-like illness, increased blood pressure, dizziness, anaemia, rash/itch. **Rare**: cases of hypoglycaemia
Metabolism	Half life = 30 – 40days
Comments	There is a national process to request immunoglobulin (IVIG) to streamline requests and to ensure appropriate clinical use in line with national guidelines. Please refer to the Neonatal Handbook for further instructions on the steps below. For any queries regarding the process contact Blood Bank on extension 80310. 1. The prescriber needs to be registered as an approved clinician 2. When approved a request for IVIG needs to be completed from the IgO site. 3. Once this is approved the product can be charted on a fluid chart and requested from blood bank by completing the QMR022B Blood Components/ Blood products form. Immunoglobulin does not need to be filtered. Caution: Immunoglobulin may reduce efficacy of live attenuated vaccines. Plan to vaccinate 2 weeks before or 1-3 months after immunoglobulin. Privigen may impair immunological response to measles vaccination for up to 12 months. Infants who have received Privigen should have their antibody status checked following administration of MMR. Privigen is the product we request for most NICU cases

References	1. Neofax 2001 2. www.medsafe.govt.nz 3. AAP Clinical Practice Guideline for hyperbilirbinaemia. *Pediatrics* 2004:114;297-361 4. Gottstein R, Cooke R. Systematic review of iv immunoglobulin in haemolytic disease of the newborn. *Arch Dis Child Fetal Neonatal Ed* 2003:88;F6-10.
Updated	Dr B Dixon July 2001 A Lynn, N Austin November 2007 A Lynn, B Robertshawe September 2009 A Lynn, B Robertshawe Nov 2012 (re-order profile), Dec 2013 clarify dose and infusion time A Lynn Aug 2015 (increase hard max after audit) A Lynn, H Harris, B Robertshawe May 2016 (Privigen added) N Austin, M Wallenstein, B Robertshawe July 2019 (update of order process) A Lynn Aug 2020 (update order process) A Lynn B Robertshawe May 2021 (checked with Blood Bank no changes) A Lynn, B Robertshawe August 2023 (replacement of Intragam P with Privigen NZ)