


# IVIG (Intravenous Immune Globulin) REQUEST - Transfusion Medicine (TM)

Send completed form to IH IVIG Coordinator, fax **250-862-4051** or **250-862-4052**. If request is urgent or IH IVIG Coordinator is not available, **send to hospital TM/Lab** where patient will get IVIG. Labs will follow IH IVIG procedure and Job Aid.

Patient Name	_____
Date of Birth	_____
PHN	_____
Requesting Physician	_____
Prescribing Physician	_____

→ **Items 1 to 11 must be completed in order for request to be processed.** ←

1. Is request urgent? <input type="checkbox"/> Yes <input type="checkbox"/> No    Inpatient? <input type="checkbox"/> Yes <input type="checkbox"/> No;    Facility where patient will get IVIG: _____			
2. <b>CHECK ONE</b> <input type="checkbox"/> Patient meets established criteria for IVIG listed on next page, select from conditions below. <input type="checkbox"/> Medical condition not listed ( <i>specify</i> ) _____ Please provide supporting evidence of efficacy. Initial therapy will be limited to 3 month trial if approved.			
3. <b>APPROVED INDICATIONS AND POSSIBLE NEUROMUSCULAR INDICATIONS</b> ( <i>select one</i> )			
<b>Immunology</b> <input type="checkbox"/> Primary Immune Deficiency (PID) <input type="checkbox"/> Secondary Immune Deficiency (SID)  <b>Hematology</b> <input type="checkbox"/> Idiopathic Thrombocytopenic Purpura (ITP) - adult <input type="checkbox"/> Idiopathic Thrombocytopenic Purpura (ITP) - pediatric <input type="checkbox"/> Fetal-Neonatal Alloimmune Thrombocytopenia (F/NAIT) <input type="checkbox"/> Hemolytic Disease of the Newborn (HDN)	<b>Neurology</b> <input type="checkbox"/> Guillain-Barré Syndrome (GBS), including Miller-Fisher Syndrome <input type="checkbox"/> Multifocal Motor Neuropathy (MMN) <input type="checkbox"/> Myasthenia Gravis (MG) <input type="checkbox"/> Chronic Inflammatory Demyelinating Polyneuropathy (CIDP)  <b>Dermatology</b> <input type="checkbox"/> Pemphigus Vulgaris (PV)  <b>Infectious Diseases</b> <input type="checkbox"/> Infectious Staphylococcal Toxic Shock (STS) <input type="checkbox"/> Invasive Group A Streptococcal Fasciitis with associated Toxic Shock (IGAS)	<b>Rheumatology</b> <input type="checkbox"/> Juvenile Dermatomyositis (JD) <input type="checkbox"/> Kawasaki Disease (KD) <i>IVIG for patients over 18 years of age with Rheumatological conditions must be approved by Provincial Blood Coordinating Office (PBCO) Rheumatology IVIG panel. The Adult Rheumatology IVIG Request form is available from PBCO website <a href="http://www.pbco.ca">www.pbco.ca</a> or IH IVIG Coordinator.</i>  <b>Possible Neuromuscular Indications</b> <input type="checkbox"/> Atypical/Possible Chronic Inflammatory Demyelinating Polyneuropathy <input type="checkbox"/> Refractory Vasculitic Neuropathy <input type="checkbox"/> Lambert Eaton Syndrome <input type="checkbox"/> Sensory Ganglionopathy <input type="checkbox"/> Stiff Person Syndrome <input type="checkbox"/> Severe Diabetic Radiculoplexopathy <input type="checkbox"/> Voltage Gated K <sup>+</sup> Channelopathy <input type="checkbox"/> Other Neuromuscular conditions ( <i>specify</i> ): _____	
4. <input type="checkbox"/> I have prescribing privileges at this facility and I will write prescription orders for infusion. <input type="checkbox"/> I do not have prescribing privileges and ( <i>name of physician</i> ) _____ will write / co-sign prescription orders for infusion.*			
5. <b>BLOODWORK REQUIRED</b>	<input type="checkbox"/> Pre-infusion IgG level for PID/SID : _____ g/L	<input type="checkbox"/> Pre-infusion platelet count for ITP: _____ 10 <sup>9</sup> /L	<input type="checkbox"/> ABO/Rh type to determine risk of IVIG related hemolysis: _____
6. <b>PATIENT WEIGHT AND HEIGHT</b>	Weight _____ kg Height _____ cm	Go to <a href="http://www.pbco.ca">www.pbco.ca</a> and click on the icon  to calculate the IVIG dose based on dosing weight. Record dosing weight (DW): _____ kg ( <i>DW N/A pediatrics or pregnant women</i> )	
7. <b>INDICATE DOSING</b>	<input type="checkbox"/> 0.4 g/kg dosing weight <input type="checkbox"/> 1 g/kg dosing weight <input type="checkbox"/> 2 g/kg dosing weight <input type="checkbox"/> Other ( <i>specify</i> ) _____		
8. <b>DOSE</b>	Transfuse _____ grams IVIG every 24 hours × _____ day(s). (Dose will be rounded down to nearest vial size)		
9. <b>REPEAT EVERY</b>	<input type="checkbox"/> month <input type="checkbox"/> _____ week(s) <input type="checkbox"/> _____ day(s)    × _____ cycle(s)		
10. <b>REQUESTING PHYSICIAN</b>	Signature _____	MSP# _____	Date (dd/mm/yyyy) _____
11. <b>*PRESCRIPTION ORDER</b>	Complete IH Physician's Order form 826165 or site specific booking form and send to clinical area. Include patient demographics, location, scheduling/urgency requirements, dosage, transfusion rate, and pre- or post-medications.		

Laboratory use only. Screening note:	Hematopathologist/Pathologist Signature	
	MSP#	Date (dd/mm/yyyy)

## Keep this page as a reference

BC Ministry of Health Intravenous Immune Globulin Utilization Management Program Guidelines	<ol style="list-style-type: none"> <li>1. A definitive diagnosis must be established.</li> <li>2. Dosing with adjusted body weight calculator (adults)</li> <li>3. For immune deficiency conditions, serum IgG levels must be clinically assessed to ensure optimum dosing.</li> </ol>	<ol style="list-style-type: none"> <li>4. For all other conditions, IVIG should be used only when other, less expensive, equally safe and efficacious alternative therapy has failed. The use of IVIG should be the exception, rather than the rule.</li> <li>5. There must be regular clinical outcome assessment.</li> </ol>
Conditions and Specific Prerequisites and Comments		Dose and Duration - start with lowest dose
<b>Primary And Secondary Immune Deficiency (PID/SID)</b> - Hypogammaglobulinemia (reduced total IgG or IgG subclasses and/or inadequate response to immunization) with recurrent <u>bacterial</u> infection.		<b>Adult:</b> initial dose 0.4 g/kg dosing weight monthly. Monitor IgG trough level to target IgG in low normal range (7 g/L). Titrate dose by clinical features to maximum dose of 0.6g/kg dosing weight. <b>Pediatric:</b> 0.3 to 0.6 g/kg every 4 weeks.
<b>Fetal-Neonatal Alloimmune Thrombocytopenia (F/NAIT)</b> - Previous affected pregnancy, family history of F/NAIT or mother has platelet alloantibodies. IVIG is first line therapy for FAIT. <b>F/NAIT:</b> Treatment should be guided by high-risk obstetrical centre with expertise in F/NAIT. <b>NAIT (newborn):</b> Antigen-negative compatible platelets should be first line therapy and IVIG adjunctive.		1 g/kg every week. Dosing during pregnancy is based on actual weight.
<b>Hemolytic Disease of the Newborn (HDN)</b> - IVIG is indicated only in HDN infants with severe hyperbilirubinemia; i.e. Total serum bilirubin (TSB) rising despite intensive phototherapy or TSB level within 34 to 51 micromol/L of exchange level		0.5 to 1 g/kg actual weight over 2 hours. If necessary, dose can be repeated in 12 hours.
<b>Pediatric Idiopathic Thrombocytopenic Purpura - Acute (ITP)</b> - IVIG may be considered initial therapy if platelet count less than $20 \times 10^9/L$ . Consultation with pediatric haematologist is advised. IVIG is recommended as part of multimodality therapy (with platelet transfusions and bolus intravenous MP) when patient has life-threatening bleeding. IVIG not indicated if only mild bleeding (petechiae, bruises or asymptomatic). <b>Chronic ITP:</b> IVIG may be considered.		<b>Acute or chronic ITP:</b> one dose of 0.8 to 1 g/kg actual weight, with a second dose within 48 hours if the platelet count has not increased to above $20 \times 10^9/L$ . <b>Acute ITP with life-threatening bleeding:</b> 1 g/kg actual weight daily for 2 days.
<b>Adult Idiopathic Thrombocytopenic Purpura (ITP)</b> - No treatment required if platelet count greater than $20 \times 10^9/L$ and no active bleeding. <b>Acute ITP with bleeding:</b> IVIG recommended as part of multimodality therapy for major or life threatening bleeding complications and/or if clinically significant mucocutaneous bleeding. <b>Acute ITP with severe thrombocytopenia, but no bleeding:</b> IVIG not considered first-line therapy. <b>ITP with no/slow response to adequate dose steroids:</b> IVIG may be considered possible adjunctive therapy. <b>Chronic ITP post splenectomy:</b> IVIG may be considered possible adjunctive therapy as a steroid-sparing measure.		<b>Acute ITP:</b> one dose of 1 g/kg dosing weight, with a second dose within 48 hours if the platelet count has not increased to above $20 \times 10^9/L$ . <b>Chronic ITP post-splenectomy:</b> 0.5 g/kg dosing weight every 4 weeks or monthly; gradually decrease to minimum effective dose at maximum intervals to maintain safe platelet levels. Re-evaluate every 3 to 6 months. Consider alternative therapies for patients who do not achieve durable response for minimum of 2 to 3 weeks.
<b>Guillain-Barré Syndrome (GBS), including Miller-Fisher syndrome and other variants</b> with symptoms of grade 3 severity (able to walk with aid) or greater or symptoms less than grade 3 severity that are progressing: Treatment should be given within 2 weeks of symptom onset. Diagnosis of GBS variants should be made by a specialist with expertise in GBS.		2 g/kg dosing weight over 2 to 5 days for adults and 2 g/kg actual weight over 2 days for children.
<b>Multifocal Motor Neuropathy (MMN)</b> - Diagnosis should be made by a neuromuscular specialist with expertise in MMN as very specific electrodiagnostic expertise is required.		<b>Initial treatment:</b> 2 g/kg dosing weight over 2 to 5 days. <b>Maintenance therapy:</b> tailor to lowest dose that maintains clinical efficacy, 0.5 to 1 g/kg dosing weight every 3 to 6 weeks.
<b>Myasthenia Gravis (MG)</b> - Severe exacerbations of MG or myasthenic crises, or to stabilize patients before surgery. IVIG not recommended as maintenance therapy for chronic MG.		<b>Initial treatment:</b> 2 g/kg dosing weight over 2 to 5 days. If short term <b>maintenance therapy</b> required, 0.5 to 1 g/kg dosing weight every 3 to 4 weeks or monthly.
<b>Chronic Inflammatory Demyelinating Polyneuropathy (CIDP)</b> - IVIG is considered a first line treatment for initial treatment of CIDP. Some patients may respond fully to IVIG alone. Other CIDP patients may have a limited or incomplete response to IVIG and then alternate treatments and immunosuppressants may be considered. All patients receiving IVIG for chronic treatment of CIDP should be followed by a neuromuscular specialist.		<b>Initial treatment:</b> 2 g/kg dosing weight over 2 to 5 days. <b>Maintenance therapy:</b> tailor to the lowest dose that maintains clinical efficacy, usually 0.5 to 1 g/kg dosing weight every 4 to 8 weeks. Continued use should be based on objective measures of sustained effectiveness.
<b>Possible Neuromuscular Conditions where IVIG may be indicated:</b> <ul style="list-style-type: none"> <li>• <b>Atypical/Possible Chronic Inflammatory Demyelinating Polyneuropathy (ACIDP)</b></li> <li>• <b>Refractory Vasculitic Neuropathy (RVN)</b></li> <li>• <b>Lambert Eaton Syndrome (LE)</b></li> <li>• <b>Sensory Ganglionopathy (SG)</b></li> <li>• <b>Stiff Person Syndrome (SPS)</b></li> <li>• <b>Severe Diabetic Radiculoplexopathy (SDR)</b></li> <li>• <b>Voltage Gated K+ Channelopathy (VGKC)</b></li> <li>• <b>Other Neuromuscular conditions</b></li> </ul> A Non-Approved Neuromuscular Condition Outcome Questionnaire must be submitted to PBCO NM panel within 3 months of initial request if considering maintenance therapy		<b>Initial treatment:</b> 2 g/kg dosing weight over 2 to 5 days. Initial treatment is limited to a 3 month trial. <ul style="list-style-type: none"> <li>• <b>If IVIG appears effective during those 3 months, a Non-Approved Neuromuscular Condition Outcome Questionnaire must be submitted to the PBCO Neuromuscular Screening Panel for consideration of maintenance therapy.</b></li> <li>• <b>Directions for submitting a request to the PBCO NM panel are on the form and is available on the PBCO website, <a href="http://www.pbco.ca">www.pbco.ca</a> or from the IH IVIG Coordinator.</b></li> </ul> <b>If maintenance therapy is approved:</b> tailor to the lowest dose that maintains clinical efficacy, usually 0.5 to 1 g/kg dosing weight every 4 to 8 weeks. Continued use should be based on objective measures of sustained effectiveness and reviewed every 6 months.
<b>Pemphigus Vulgaris (PV)</b> - Firm histological and immunodiagnosis needed. Consider IVIG when there is no response to corticosteroids to corticosteroids and immunosuppressive agents.		2 g/kg dosing weight over 5 days.
<b>Infectious Staphylococcal Toxic Shock (STS) and Invasive Group A Streptococcal Fasciitis with associated Toxic Shock (IGAS)</b> – IVIG may be indicated if there is evidence of systemic inflammation and end organ hypoperfusion with fever, tachycardia, tachypnea and hypotension. Consult with a medical microbiologist or infectious disease specialist before treatment.		1 g/kg dosing weight on day 1 and 0.5 g/kg dosing weight per day on days 2 and 3 or 0.15 g/kg dosing weight per day over 5 days.
<b>Juvenile Dermatomyositis (JD)</b> – Pediatric patients (18 years old or younger). IVIG may be considered if there is a lack of response or contraindication to corticosteroids, Methotrexatate and/or Azathioprine therapy. <b>Requests for patients over 18 years of age:</b> must be approved by the PBCO Rheumatology IVIG Consultant. Screening request form is available from PBCO website <a href="http://www.pbco.ca">www.pbco.ca</a> or IH IVIG Coordinator.		<b>Initial treatment:</b> 2 g/kg actual weight over 2 days. <b>Maintenance therapy:</b> a systematic approach should be taken to determine minimum effective dose. Continued use should be based on objective measures of sustained effectiveness. Maximum dose per treatment course not to exceed 2 g/kg actual weight.
<b>Kawasaki Disease (KD)</b> - The validity of the diagnosis must be established.		2 g/kg actual weight $\times$ 1 day. Repeat $\times$ 1 if patient fails to respond first time.
<b>IVIG is not recommended or is contraindicated for use in the following conditions:</b>		<b>Hematology:</b> Aplastic Anemia, Heparin-Induced Thrombocytopenia <b>Neurology:</b> Adrenoleukodystrophy, Amyotrophic Lateral Sclerosis, Autism, Critical Illness Polyneuropathy, Inclusion Body Myositis, Intractable Childhood Epilepsy, Paraproteinemic Neuropathy (IgM Variant), POEMS (Polyneuropathy, Organomegaly, Endocrinopathy, Monoclonal Gammopathy and Skin Changes)