



Pharmacy Prior Authorization Clinical Guidelines – Immune Globulins

Formulary Immune Globulins: Gamastan S-D, Gammagard Liquid, Gammagard S-D, Gamunex-C, Hizentra, Flebogamma Dif, Gammaked, Privigen

Non-Formulary Immune Globulins:

Bivigam, Carimune NF Nanofiltered, Cuvitru, Gamastan, Gammaplex, Hyqvia, Octagam, Xembify, Asceniv, Cutaquig, Panzyga

Authorization Guidelines:

Documentation of ALL the following:

- I. The dose prescribed, frequency of use and duration of therapy is within the Food and Drug Administration (FDA)-approved range for the indication or is supported by compendia/peer-reviewed literature
- II. Request is not for experimental/investigational use or for a clinical trial
- III. Products are not interchangeable, selection of product should be based on member factors including diagnosis, past history and individual comorbidities
- IV. The use of parenteral immune globulin therapy is approved for members with any of the following conditions:
 1. Primary immunodeficiencies
 - 1.1 Common Variable Immunodeficiency (CVID)
 - 1.2 Congenital agammaglobulinemia
 - 1.3 Hyper Immunoglobulin M (IgM) syndromes
 - 1.4 Hypogammaglobulinemia
 - 1.5 X-linked Immunodeficiency with hyperimmunoglobulin (elevated or normal Immunoglobulin M (IgM))
 - 1.6 Immunodeficiency with thymoma (Good syndrome)
 - 1.7 Severe Combined Immunodeficiency (SCID)
 - 1.8 Selective Immunoglobulin G (IgG) subclass deficiencies (with evidence of recurrent infections)
 - 1.9 Wiscott-Aldrich Syndrome
 - 1.10 X-linked agammaglobulinemia
 - Medical records and clinical notes will be required for approval:
 - Laboratory confirmation of immune globulin deficiency
 - Persistent infections despite antibiotic prophylaxis
 - Documented lack of ability to mount immunologic response to antigenic challenge
 2. B-cell chronic lymphocytic leukemia (prevention of recurrent bacterial infections)
 - Immunoglobulin G (IgG) level less than 500 mg/dl; and
 - Member has a history of recurrent sinopulmonary infections requiring intravenous antibiotics or hospitalization
 3. Multiple myeloma
 - Immunoglobulin G (IgG) less than 400 mg/dl and recurrent bacterial infections should be documented for immune globulin treatment
 4. Idiopathic Thrombocytopenic Purpura (ITP) (immune thrombocytopenia)
 - Other causes of thrombocytopenia have been ruled out



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- Idiopathic Thrombocytopenic Purpura (ITP) (Adults)
 - Unresponsive to corticosteroid therapy; and
 - Documentation of one of the following:
 - Platelet counts less than 20,000/ μ l; or
 - Rapid increase to platelet counts required (for example, prior to invasive major surgical procedures); or
 - Member is experiencing significant bleeding or is at high risk of bleeding
- Idiopathic Thrombocytopenic Purpura (ITP) (Chronic Refractory)
 - Duration of illness of greater than 6 months; and
 - No concurrent illness/disease explaining thrombocytopenia; and
 - One of the following:
 - Platelet counts less than 20,000/ μ l; or
 - Rapid increase to platelet counts required (for example, prior to invasive major surgical procedures); or
 - Member is experiencing significant bleeding or is at high risk of bleeding
 - Relapse after previously responding to IVIG or inadequate response/intolerance/contraindication to corticosteroid or anti-D
- Idiopathic Thrombocytopenic Purpura (ITP) (Pediatrics)
 - Acute Idiopathic Thrombocytopenic Purpura (ITP), one of the following:
 - Platelet count less than 20,000/ μ l, life-threatening bleeding, or moderate or severe bleeding; or
 - Member is a neonate born to a woman with ITP and has intracranial hemorrhage, platelet count less than 30,000/ μ l, or symptomatic bleeding
 - Rapid increase in platelets is required
 - Chronic Idiopathic Thrombocytopenic Purpura (ITP):
 - Medication is being used as rescue therapy or member is experiencing significant bleeding or is at high risk of bleeding
- Idiopathic Thrombocytopenic Purpura (ITP) (Pregnancy)
 - Platelet count less than 20,000/ μ l, the member has symptoms of bleeding, or a procedure is planned; or
 - The member is late in the third trimester and a platelet count of 50,000/ μ l or more is needed for delivery
- 5. Chronic inflammatory demyelinating polyneuropathy
 - Member has symmetric or asymmetrical polyradiculoneuropathy with slowly progressive or relapsing and remitting course over 2 months or longer
 - Documentation showing diagnosis was confirmed by electrodiagnostic studies
- 6. Multifocal motor neuropathy
- 7. Kawasaki disease – for the prevention of coronary artery aneurisms in pediatric members
- 8. Human Immunodeficiency Virus – for the prophylaxis of serious opportunistic infections in pediatric members
 - Primary prophylaxis: Immunoglobulin G (IgG) level is less than 400 mg/dl; or

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- Secondary prophylaxis: member experienced greater than 2 infections in a one-year period and both combination antiretroviral therapy and antibiotic prophylaxis were ineffective
9. Guillain-Barre Syndrome (GBS) and Guillain-Barre Syndrome (GBS) variants (infective polyneuritis (includes Guillain-Barre Syndrome (GBS) variants: Miller-Fisher syndrome (MFS), pan autonomic polyneuropathy, acute pandysautonomia, acute motor axonal neuropathy (AMAN), and acute motor and sensory axonal neuropathy (AMSAN)))
 - Severe Guillain-Barre syndrome with significant weakness such as inability to stand or walk without aid, respiratory or bulbar weakness, or Miller-Fisher syndrome (MFS); and
 - The disorder has been diagnosed during the first 2 weeks of the illness; and
 - Immune globulin therapy is initiated within one month of symptom onset
 10. Autoimmune neutropenia, refractory
 - Documentation that treatment with Granulocyte-Colony Stimulating Factors (G-CSF) is not appropriate.
 11. Autoimmune hemolytic anemia, refractory
 - Documentation of an inadequate response or contraindication to corticosteroids or splenectomy
 12. Polymyositis, dermatomyositis
 - Documentation of trial and failure of corticosteroids (for example, prednisone); and trial of an immunosuppressant (for example, methotrexate, azathioprine)
 13. Streptococcal and staphylococcal toxic shock syndrome or toxic necrotizing fasciitis due to group A streptococcus
 14. Moersch-Woltmann (Stiff-man) syndrome
 - Documentation of trial and failure with benzodiazepines and/or baclofen
 15. Myasthenia Gravis
 - One of the following:
 - Documentation medication is being used for treatment of acute myasthenic crisis with decompensation (respiratory failure or disabling weakness requiring hospital admission) or in preparation for surgery (for example thymectomy); or
 - Treatment of refractory disease and documentation of trial and failure of at least 2 other therapies, such as corticosteroids, azathioprine, cyclosporine mycophenolate mofetil, methotrexate, and tacrolimus
 16. Birdshot (vitiligenous) retinochoroidopathy
 - Documentation of trial and failure to 2 or more immunosuppressive agents (for example, corticosteroids, methotrexate, cyclosporine)
 17. Enteroviral meningoencephalitis
 18. Fetal/neonatal alloimmune thrombocytopenia
 19. Neonatal hemochromatosis prophylaxis
 - Documentation that member is pregnant with a history of pregnancy that ended in neonatal hemochromatosis
 20. Autoimmune mucocutaneous blistering diseases



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- Documentation showing one of the following has been proven by biopsy: 1) Pemphigus vulgaris 2) Pemphigus foliaceus 3) Bullous pemphigoid 4) Mucous membrane pemphigoid 5) Epidermolysis bullosa acquisita
 - The condition is rapidly progressing, extensive or debilitating; and
 - Failure on corticosteroids or immuno-suppressive agents or the member has experienced significant complications from standard treatment, such as diabetes or steroid-induced osteoporosis.
21. Acquired red cell aplasia
 22. Parvovirus B19 infection, chronic, with severe anemia
 23. Human Immunodeficiency Virus (HIV)-associated thrombocytopenia:
 - Active bleeding in thrombocytopenic members or platelet count less than 10,000/ μ l
 24. Toxic epidermal necrolysis and Steven-Johnson syndrome
 25. Opsoclonus-myoclonus
 26. Paraneoplastic opsoclonus-myoclonus-ataxia associated with neuroblastoma
 27. Rasmussen encephalitis (Rasmussen's syndrome)
 - Documentation of inadequate response or inability to tolerate anti-epileptic drugs and corticosteroids
 28. Lambert-Eaton myasthenic syndrome
 - No response to anticholinesterases (for example, pyridostigmine) and amifampridine; and
 - Used as an alternative to plasma exchange if weakness is severe or there is difficulty with venous access for plasmapheresis
 29. Systemic lupus erythematosus (SLE), for members with severe active systemic lupus erythematosus (SLE) for whom other interventions have been unsuccessful, have become intolerable, or are contraindicated
 30. Prophylaxis of bacterial infections in hematopoietic stem cell/bone marrow transplantation:
 - Prophylaxis within the first 100 days post-transplant
 - After 100 days post-transplant, member has Immunoglobulin G (IgG) level less than 400 mg/dL and recurrent bacterial infection
 31. Solid organ transplantation, for allosensitized members undergoing solid organ transplant
 32. Hemolytic disease of the newborn with severe hyperbilirubinemia in neonates
 33. Post-transfusion purpura
 - Severe thrombocytopenia with platelet counts less than 10,000/ μ l approximately 1-week post-transfusion
 34. Renal transplantation from live donor with ABO incompatibility or positive crossmatch, where a suitable non-reactive live or cadaveric donor is unavailable (preparative regimen)
 35. Acute disseminated encephalomyelitis
 - Documentation of trial and failure of intravenous corticosteroid treatment

Criteria for Renewal:

- Supporting documentation showing clinical improvement or stabilization of the disease state.

General Approval Duration:

- Initial: 6 months



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- Renewal: 6 months

Initial Approval Duration for Specific Indications:

- Autoimmune hemolytic anemia: 5 days
- Guillain-Barre Syndrome: 5 days
- Idiopathic thrombocytopenic purpura (acute): 1 month
- Idiopathic thrombocytopenic purpura in pregnant women: Entire pregnancy duration
- Post-transfusion purpura: 5 days
- Chronic inflammatory demyelinating polyneuropathy: 3 months
- Myasthenia Gravis – acute use: 1 month

Aetna considers parenteral immunoglobulins investigational and experimental for the following indications but not limited to:

- Isolated Immunoglobulin E (IgE) deficiency
- Isolated Immunoglobulin G₄ (IgG₄) deficiency
- Selective Immunoglobulin A (IgA) deficiency
- Isolated Immunoglobulin M (IgM) deficiency
- Inclusion body myositis
- Autoimmune diabetes mellitus
- Atopic dermatitis
- Inflammatory bowel disease
- Chronic fatigue syndrome
- Acute rheumatic fever
- Viral load in Human Immunodeficiency Virus infection
- Demyelinating neuropathy associated with monoclonal Immunoglobulin M (IgM)
- Adrenoleukodystrophy
- Amyotrophic lateral sclerosis
- Polyneuropathy, Organomegaly, Endocrinopathy, Monoclonal protein, Skin changes (POEMS) syndrome
- Paraneoplastic cerebellar degeneration, sensory neuropathy or encephalopathy
- Brachial plexopathy
- Autistic disorders
- Non-steroid dependent asthma
- Dilated cardiomyopathy
- Prevention of infection and acute graft-versus-host disease after bone marrow transplantation
- Cystic fibrosis without hypogammaglobulinemia
- Chronic sinusitis
- Crohn's disease
- Alzheimer's disease

References:

1. Perez EE, Orange JS, Bonilla F, et al. Update on the use of immunoglobulin in human disease: A review of evidence. The Journal of Allergy and Clinical Immunology. 2017; 139 (3S):S1-S46. <https://doi.org/10.1016/j.jaci.2016.09.023>. Accessed August 2, 2021.



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2. Orange JS, Hossny EM, Weiler CR, et al. Use of intravenous immunoglobulin in human disease: A review of evidence by members of the primary immunodeficiency committee of the American Academy of Allergy, Asthma and Immunology. 2006; 117 (4): S525-S553. <https://doi.org/10.1016/j.jaci.2006.01.015>. Accessed August 2, 2021.
3. Aetna CPB. https://www.aetna.com/products/rxonmedicare/data/2021/Destination/IVIG_2042-A_SGM_P2020.html. Accessed August 12, 2021.
4. NCCN Clinical Practice Guidelines in Oncology® Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma (Version 4.2021). © 2021 National Comprehensive Cancer Network, Inc. https://www.nccn.org/professionals/physician_gls/pdf/cli.pdf. Accessed August 2, 2021.
5. NCCN Clinical Practice Guidelines in Oncology® Multiple Myeloma (Version 7.2021). © 2021 National Comprehensive Cancer Network, Inc. https://www.nccn.org/professionals/physician_gls/pdf/myeloma.pdf. Accessed August 2, 2021.
6. Asceniv® [Prescribing Information]. ADMA Biologics, Boca Raton, FL; April 2019; <https://d1io3yog0oux5.cloudfront.net/asceniv/files/pages/full-prescribing-information/ASCENIV+PI.pdf>. Accessed August 2, 2021.
7. Bivigam® [Prescribing Information]. Biotest Pharmaceuticals Corporation, Boca Raton, FL; Revised July 2019. <https://d1io3yog0oux5.cloudfront.net/7d4efb6e0d33669e148b099e82c2e25d/bivigam/files/documents/prescribing-info.pdf>. Accessed August 2, 2021.
8. Cutaquig® [Prescribing Information]. Octapharma, Hoboken, NJ; Revised Nov 2019. https://www.cutaquigus.com/wp-content/uploads/2020/01/pil_810_USA_07.pdf. Accessed August 2, 2021.
9. Cuvitru [Prescribing Information]. Baxalta US Inc., Westlake Village, CA; Revised March 2021. https://www.shirecontent.com/PI/PDFs/Cuvitru_USA_ENG.PDF. Accessed August 2, 2021.
10. Flebogamma® [Prescribing Information]. Instituto Grifols, S.A., Barcelona, Spain; Revised Sep 2019. <https://www.grifols.com/documents/10192/89551/flebo5-ft-us-en/2224ef9e-34e5-4808-afde-d470dba5825d>. Accessed April 22, 2020.
11. Gamastan® [Prescribing Information]. Grifols Therapeutics, Inc., Research Triangle Park, NC; Revised 2013. <https://www.fda.gov/media/86789/download>. Accessed August 2, 2021.
12. Gammagard [Prescribing Information]. Baxalta US Inc., Lexington, MA; Revised March 2021. https://www.shirecontent.com/pi/pdfs/gamliquid_usa_eng.pdf. Accessed August 2, 2021.
13. Gammaked™ [Prescribing Information]. Grifols Therapeutics Inc., Research Triangle Park, NC; Revised June 2018. https://www.gammaked.com/clientuploads/GAMMAKED_Web-Fax_3052575-3052576_21686.pdf?t=1562867757. Accessed August 2, 2021.
14. Gammaplex 5%® [Prescribing Information]. Bio Products Laboratory Inc., Durham, NC; Revised Sept 2019. http://www.gammaplex.com/download/Gammaplex_5pct_US_PI_2020_pages.pdf. Accessed August 2, 2021.
15. Gammaplex 10%® [Prescribing Information]. Bio Products Laboratory Inc., Durham, NC; Revised Sept 2019. http://www.gammaplex.com/download/Gammaplex_10pct_US_PI_2020_pages.pdf. Accessed August 2, 2021.
16. Gamunex®-C [Prescribing Information]. Grifols Therapeutics, Inc., Research Triangle Park, NC; Revised January 2020. <https://www.gamunex-c.com/documents/27482625/27482925/Gamunex-C+Prescribing+Information.pdf/9258bd0f-4205-47e1-ab80-540304c1ff8e>. Accessed August 2, 2021.
17. Hizentra [Prescribing Information]. CSL Behring LLC., Kankakee, IL; Revised April 2021. <https://labeling.cslbehring.com/PI/US/Hizentra/EN/Hizentra-Prescribing-Information.pdf>. Accessed August 2, 2021.
18. Hyqvia [Prescribing Information]. Shire US Inc., Lexington, MA; Revised March 2021. https://www.shirecontent.com/PI/PDFs/HYQVIA_USA_ENG.pdf. Accessed August 2, 2021.
19. Octagam 5% [Prescribing Information]. Octapharma USA Inc., Hoboken, NJ; Revised April 2019. https://www.octagamus.net/octagam5/wp-content/uploads/sites/2/2020/02/Octagam-5_version-date_07_23_2019.pdf. Accessed August 2, 2021.
20. Octagam 10% [Prescribing Information]. Octapharma USA Inc., Hoboken, NJ; Revised August 2018. https://www.octagamus.net/octagam10/wp-content/uploads/sites/3/2020/02/Octagam-10_version-date_06_24_2019.pdf. Accessed August 2, 2021.
21. Panzyga® [Prescribing Information]. Octapharma USA Inc., Hoboken, NJ; Revised January 2021. <http://labeling.pfizer.com/ShowLabeling.aspx?id=12355>. Accessed August 2, 2021.

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22. Privigen® [Prescribing Information]. CSL Behring LLC., Kankakee, IL; Revised March 2019. <http://cslbehring.vo.llnwd.net/o33/u/central/PI/US/Privigen/EN/Privigen-Prescribing-Information.pdf>. Accessed August 2, 2021.
23. Xembify™ [Prescribing Information]. Grifols Therapeutics LLC, Research Triangle Park, NC; Revised August 2020. <https://www.xembify.com/documents/90180901/0/Xembify+Prescribing+Information+-+2019+-+3054808/9ff0e9a4-1249-4cd7-8b10-3ce50a8fad5d>. Accessed August 2, 2021.
24. Panel on Opportunistic Infections in HIV-Exposed and HIV-Infected Children. Guidelines for the prevention and treatment of opportunistic infections in HIV-exposed and HIV-infected children. Department of Health and Human Services. Updated November 2013. Available at: http://aidsinfo.nih.gov/contentfiles/lvguidelines/oi_guidelines_pediatrics.pdf. Accessed May 16, 2018.
25. DRUGDEX® System (electronic version). Truven Health Analytics, Ann Arbor, MI. Available at <http://www.micromedexsolutions.com> [available with subscription]. Accessed August 9, 2021.
26. Suzuki Y, Hayakawa H, Miwa S, et al. Intravenous immunoglobulin therapy for refractory interstitial lung disease associated with polymyositis/dermatomyositis. *Lung*. 2009; 187(3):201-206.
27. Poelman CL, Hummers LK, Wigley FM, et al. Intravenous immunoglobulin may be an effective therapy for refractory, active diffuse cutaneous systemic sclerosis. *J Rheumatol*. 2015; 42(2):236-242.
28. Monshi B, Posch C, Vujic I, et al. Efficacy of intravenous immunoglobulins in livedoid vasculopathy: Long-term follow-up of 11 patients. *J Am Acad Dermatol*. 2014; 71(4):738-744.
29. Center for Medicare and Medicaid Services (CMS). Intravenous immune globulin for autoimmune mucocutaneous blistering diseases. Decision Memorandum. CPG-00109N. Baltimore, MD: CMS; January 22, 2002. <https://www.cms.gov/medicare-coverage-database/details/nca-decision-memo.aspx?NCAId=43&NcaName=Intravenous+Immune+Globulin+for+Autoimmune+Mucocutaneous+Blistering+Diseases&NCDId=46&NCSelection=NCA%7CCAL%7CNCID%7CMEDCAC%7CTA%7CMCD&Keyword=HIV&KeywordLookUp=Doc&KeywordSearchType=Exact&kq=true>. Accessed May 16, 2018.
30. Pritchard J, Hughes R, Hadden R, Brassington R. Pharmacological treatment other than corticosteroids, intravenous immunoglobulin and plasma exchange for Guillain-Barré syndrome. *Cochrane Database Syst Rev*. 2016; (11):CD008630.
31. Van den Bergh PY, Hadden RD, Bouche P, et al. European Federation of Neurological Societies/Peripheral Nerve Society guideline on management of chronic inflammatory demyelinating polyradiculoneuropathy: report of a joint task force of the European Federation of Neurological Societies and the Peripheral Nerve Society - first revision. *Eur J Neurol*. 2010;17(3):356-363. <https://onlinelibrary.wiley.com/doi/10.1111/j.1468-1331.2009.02930.x>. Accessed August 5, 2021.
32. Anderson D, Ali K, Blanchette V, et al. Guidelines on the use of intravenous immune globulin for hematologic conditions. *Transfus Med Rev*. 2007; 21(2 Suppl 1):S9-56. <https://www.nacblood.ca/guidelines/downloads/ivig-hematology-guidelines.pdf>. Accessed August 4, 2021.
33. Provan D, Arnold D, Bussel JB, et al. Updated international consensus report on the investigation and management of primary immune thrombocytopenia. *Blood Adv* 2019; 3 (22): 3780–3817. doi: <https://doi.org/10.1182/bloodadvances.2019000812>. Accessed August 4, 2021.
34. Sanders DB, Wolfe GI, Benatar M, et al. International consensus guidance for management of myasthenia gravis: Executive summary. *Neurology*. 2016; 87(4):419-425.
35. Tomblyn M, Chiller T, Einsele H, et al. Guidelines for preventing infectious complications among hematopoietic cell transplant recipients: a global perspective. *Biol Blood Marrow Transplant*. 2009;15(10):1143-1238. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3103296/>. Accessed August 3, 2021.
36. Jordan, S.C., Toyoda, M., Kahwaji, J. and Vo, A.A. (2011), Clinical Aspects of Intravenous Immunoglobulin Use in Solid Organ Transplant Recipients. *American Journal of Transplantation*, 11: 196-202. <https://doi.org/10.1111/j.1600-6143.2010.03400.x> Accessed August 13, 2021.
37. van Schaik IN, van den Berg LH, de Haan R, Vermeulen M. Intravenous immunoglobulin for multifocal motor neuropathy. *Cochrane Database Syst Rev*. 2005 ;(2):CD004429.
38. Patwa HS, Chaudhry V, Katzberg H, et al. Evidence-based guideline: intravenous immunoglobulin in the treatment of neuromuscular disorders: report of the Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology. *Neurology*. 2012; 78(13):1009-1015.



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39. Montgomery RA, Zachary AA, Racusen LC, et al. Plasmapheresis and intravenous immune globulin provides effective rescue therapy for refractory humoral rejection and allows kidneys to be successfully transplanted into cross-match-positive recipients. *Transplantation*. 2000; 70(6):887-895.
40. Bachot N, Roujeau JC. Intravenous immunoglobulins in the treatment of severe drug eruptions. *Curr Opin Allergy Clin Immunol*. 2003; 3(4):269-274.
41. Prins C, Vittorio C, Padilla RS, et al, Saurat JH, French LE. Effect of high-dose intravenous immunoglobulin therapy in Stevens-Johnson syndrome: A retrospective, multicenter study. *Dermatology*. 2003; 207(1):96-99.
42. Peterlin BL, Flood W, Kothari MJ. Use of intravenous immunoglobulin in Lambert-Eaton myasthenic syndrome. *J Am Osteopath Assoc* 2002; 102:682-4.
43. Gelfand EW. Intravenous immune globulin in autoimmune and inflammatory diseases. *N Engl J Med* 2012; 367:2015-25.
44. Rakocevic G, Floeter MK. Autoimmune stiff person syndrome and related myelopathies: understanding of electrophysiological and immunological processes. *Muscle Nerve*. 2012;45(5):623-634. doi:10.1002/mus.23234
45. Minos E, Barry RJ, Southworth S. et al. Birdshot chorioretinopathy: current knowledge and new concepts in pathophysiology, diagnosis, monitoring and treatment. *Orphanet J Rare Dis* 11, 61 (2016). <https://doi.org/10.1186/s13023-016-0429-8>. Accessed August 12, 2021.
46. Dwyer JM, Erlendsson K. Intraventricular gamma-globulin for the management of enterovirus encephalitis. *Pediatr Infect Dis J* 1988; 7:S30-3.
47. NIH: Neonatal hemochromatosis: <https://rarediseases.info.nih.gov/diseases/7172/neonatal-hemochromatosis>. Accessed August 12, 2021.
48. Alcock GS, Liley H. Immunoglobulin infusion for isoimmune haemolytic jaundice in neonates. *Cochrane Database Syst Rev* 2002; CD003313.
49. Pohl D, Tenenbaum S. Treatment of acute disseminated encephalomyelitis. *Curr Treat Options Neurol* 2012; 14:264-75.
50. Hartung HP, Mouthon L, Ahmed R, et al. Clinical applications of intravenous immunoglobulins (IVIg) – beyond immunodeficiencies and neurology. *Clin Exp Immunol*. 2009 Dec; 158 (Suppl 1): 23–33.