Coverage for services, procedures, medical devices and drugs are dependent upon benefit eligibility as outlined in the member's specific benefit plan. This Medical Coverage Guideline must be read in its entirety to determine coverage eligibility, if any.

The section identified as “Description” defines or describes a service, procedure, medical device or drug and is in no way intended as a statement of medical necessity and/or coverage.

The section identified as “Criteria” defines criteria to determine whether a service, procedure, medical device or drug is considered medically necessary or experimental or investigational.

State or federal mandates, e.g., FEP program, may dictate that any drug, device or biological product approved by the U.S. Food and Drug Administration (FDA) may not be considered experimental or investigational and thus the drug, device or biological product may be assessed only on the basis of medical necessity.

Medical Coverage Guidelines are subject to change as new information becomes available.

For purposes of this Medical Coverage Guideline, the terms "experimental" and "investigational" are considered to be interchangeable.

BLUE CROSS®, BLUE SHIELD® and the Cross and Shield Symbols are registered service marks of the Blue Cross and Blue Shield Association, an association of independent Blue Cross and Blue Shield Plans. All other trademarks and service marks contained in this guideline are the property of their respective owners, which are not affiliated with BCBSAZ.

**Description:**

The terms therapeutic apheresis, plasmapheresis and plasma exchange (PE) are often used interchangeably, but when properly used denote different procedures. The American Society for Apheresis (ASFA) definitions for these procedures are as follows:

**Apheresis:**
A procedure in which an individual's blood or donor blood is passed through a medical device which separates out one or more components of blood and returns the remainder with or without extracorporeal treatment or replacement of the separated component.

**Plasma Exchange:**
A therapeutic procedure in which an individual's blood is passed through a medical device which separates out plasma from other components of blood, the plasma is removed and replaced with a replacement solution such as colloid solution (e.g., albumin and/ or plasma) or a combination of crystalloid/colloid solution.
PLASMA EXCHANGE AND PLASMAPHERESIS (cont.)

**Description:** (cont.)

**Plasmapheresis:**
A procedure in which an individual’s blood or donor blood is passed through a medical device which separates out plasma from the other components of blood and the plasma is removed (i.e., less than 15% of total plasma volume) without the use of replacement solution.

**Criteria:**

- Plasma exchange and plasmapheresis are considered **medically necessary** for **ANY** of the following:
  1. **Autoimmune:**
     - Severe multiple manifestations of mixed cryoglobulinemia (MC) such as cryoglobulinemic nephropathy, skin ulcers, sensory motor neuropathy and widespread vasculitis in combination with immunosuppressive treatment
     - Catastrophic antiphospholipid syndrome (CAPS)
  2. **Hematologic:**
     - ABO incompatible hematopoietic progenitor cell transplantation
     - Hyperviscosity syndromes associated with:
       - Multiple myeloma
       - Waldenstrom’s macroglobulinemia
     - Idiopathic thrombocytopenic purpura in emergency situations
     - Thrombotic thrombocytopenic purpura (TTP)
     - Atypical hemolytic uremic syndrome
     - Post-transfusion purpura
     - HELLP (Hemolysis, Elevated Liver, Low Platelet) syndrome of pregnancy
     - Myeloma with acute renal failure
  3. **Neurological:**
     - Acute inflammatory demyelinating polyneuropathy (Guillain-Barre syndrome)
       - Severity grade 1-2 within two weeks of onset
       - Severity grade 3-5 within four weeks of onset
       - Children less than 10 years old with severe Guillain-Barre syndrome
     - Chronic Inflammatory Demyelinating Polyneuropathy (CIDP)
     - Multiple sclerosis, with acute fulminant Central Nervous System (CNS) demyelination
     - Myasthenia gravis in crisis or as part of preoperative preparation
     - Paraproteinemia polyneuropathy; IgA or IgG
PLASMA EXCHANGE AND PLASMAPHERESIS (cont.)

Criteria: (cont.)

- Plasma exchange and plasmapheresis are considered **medically necessary** for **ANY** of the following: (cont.)

4. Renal:
   - Anti-glomerular basement membrane disease (Goodpasture’s syndrome)
   - ANCA (antineutrophil cytoplasmic antibody-associated vasculitis (e.g., Wegener’s granulomatosis, also known as granulomatosis with polyangitis or GPA) with associated renal failure
   - Dense deposit with factor H deficiency and/or elevated C3 Nephritic factor

5. Transplantation:
   - Prior to solid organ transplantation in individuals at high risk of antibody mediated rejection including, **but not limited to**:
     - Individuals receiving an ABO incompatible organ
     - Highly sensitized individuals (e.g., prior blood transfusions, transplants or pregnancies)
   - Following solid organ transplantation as a treatment for antibody mediated rejection
   - Kidney transplantation recipient in whom a high level of antibodies to a potential donor exists in an attempt to prevent or reduce graft/organ rejection. (Often combined with immune globulin therapy.)
   - Focal segmental glomerulosclerosis after renal transplant
PLASMA EXCHANGE AND PLASMAPHERESIS (cont.)

Criteria: (cont.)

- Plasma exchange and plasmapheresis for all other indications not previously listed are considered experimental or investigational based upon:
  1. Insufficient scientific evidence to permit conclusions concerning the effect on health outcomes, and
  2. Insufficient evidence to support improvement of the net health outcome.

These indications include, but are not limited to:

- Acute disseminated encephalomyelitis
- Acute inflammatory demyelinating polyneuropathy (Guillain-Barre syndrome) in children less than 10 years old with mild or moderate forms
- Acute liver failure
- Amyotrophic lateral sclerosis
- ANCA-associated rapidly progressive glomerulonephritis (Wegener’s granulomatosis or GPA without renal failure)
- Aplastic anemia
- Asthma
- Autoimmune hemolytic anemia; warm autoimmune hemolytic anemia; cold agglutinin disease
- Chronic fatigue syndrome
- Coagulation factor inhibitors
- Cryoglobulinemia; except for severe mixed cryoglobulinemia as noted above
- Dermatomyositis and polymyositis
- Focal segmental glomerulosclerosis (other than after renal transplant)
- Hemolytic uremic syndrome (HUS); typical (diarrheal-related)
- Hyperviscosity syndromes with renal failure (other than associated with multiple myeloma or Waldenstrom’s macroglobulinemia)
- Idiopathic thrombocytopenic purpura; refractory or non-refractory
- Inclusion body myositis
- Lambert-Eaton syndrome
- Multiple sclerosis; chronic progressive or relapsing remitting
- Mushroom poisoning
- Myasthenia gravis with anti-MuSK antibodies
- Overdose and poisoning (other than mushroom poisoning)
- Paraneoplastic Syndromes
- Paraproteinemic polyneuropathy; IgM
- Pediatric autoimmune neuropsychiatric disorders associated with streptococcal infections (PANDAS)
- Pemphigus vulgaris
- Phytic acid storage disease (Refsum’s disease)
- POEMS (polyneuropathy, organomegaly endocrinopathy, M protein, skin changes
- Psoriasis
- Pruritus secondary to cholestatic liver disease
PLASMA EXCHANGE AND PLASMAPHERESIS (cont.)

Criteria: (cont.)

- Plasma exchange and plasmapheresis for all other indications not previously listed are considered experimental or investigational based upon: (cont.)

  1. Insufficient scientific evidence to permit conclusions concerning the effect on health outcomes, and
  2. Insufficient evidence to support improvement of the net health outcome.

These indications include, but are not limited to: (cont.)

- Red blood cell alloimmunization in pregnancy
- Rheumatoid arthritis
- Scleroderma (systemic sclerosis)
- Sepsis
- Stiff person syndrome
- Sydenham’s chorea (SC)
- Systemic lupus erythematosus (SLE [systemic lupus erythematosus] nephritis)
- Thyrotoxicosis

Resources:

Resources prior to 06/11/13 may be requested from the BCBSAZ Medical Policy and Technology Research Department.


