Medical Coverage Policy

Autologous Platelet-Derived Growth Factors (PRP)

☐ Device/Equipment  ☐ Drug  ☒ Medical  ☐ Surgery  ☐ Test  ☐ Other

Effective Date: 6/2/2009  Policy Last Updated: 06/27/2011

☐ Prospective review is recommended/required. Please check the member agreement for preauthorization guidelines.

☒ Prospective review is not required.

Description

A variety of growth factors have been found to play a role in wound healing, including platelet-derived growth factor (PDGF), epidermal growth factor, fibroblast growth factors, transforming growth factors, and insulin-like growth factors.

Autologous PDGFs have been investigated as wound-healing products. For example, platelets are a rich source of PDGFs, transforming growth factors (which function as a mitogen for fibroblasts, smooth muscle cells, and osteoblasts), and vascular endothelial growth factors. Autologous platelet concentrate suspended in plasma, also known as platelet-rich plasma (PRP), can be prepared from samples of centrifuged autologous blood. Exposure to a solution of thrombin and calcium chloride results in the polymerization of fibrin from fibrinogen, creating a platelet gel. The platelet gel can then be applied to wounds or may be used as an adjunct to surgery to promote hemostasis and accelerate healing. Activated platelets then degranulate, releasing the various growth factors.

There are a number of commercially available centrifugation devices used for the preparation of PRP. For example, AutoloGel™ (Cytomedix) and SafeBlood® (SafeBlood Technologies) are 2 related but distinct autologous blood-derived preparations that can be prepared at the bedside for immediate application. Both Autologel and SafeBlood have been specifically marketed for wound healing. Other devices may be used in the operating room setting, such as Medtronic Electromedic, Elmd-500 Autotransfusion system, the Plasma Saver device, or the Smart PreP device. In the operating room setting, PRP has been investigated as an adjunct to a variety of periodontal, reconstructive, and orthopedic procedures. For example, bone morphogenetic proteins are a type of transforming growth factors, and thus PRP has been used in conjunction with bone-replacement grafting (using either autologous grafts or bovine-derived xenograft) in periodontal and maxillofacial surgeries. In addition, PRP has also been proposed as a primary treatment of miscellaneous conditions, such as epicondylitis, plantar fasciitis, and Dupuytren’s contracture.

Use of autologous PDGF as a primary treatment of soft-tissue injuries is in an early stage. Peer-review literature is limited to small studies and the evidence is insufficient to permit conclusions concerning the effect of PDGF on health outcomes.
Medical Criteria:

Not applicable. The service is not medically necessary.

Policy:

Autologous blood-derived preparations (i.e., platelet-rich plasma) are considered not medically necessary as the literature is limited to small studies and the evidence is insufficient to permit conclusions concerning the effect on health outcomes.

Coverage:

Benefits may vary between groups/contracts. Please refer to the appropriate Evidence of Coverage or Subscriber Agreement, applicable "Services Not Medically Necessary" coverage.

Coding:

There is no specific CPT code for obtaining the blood, deriving the platelet-rich plasma, and injecting it. This process is considered to be a single service and it should be properly reported with an unlisted musculoskeletal procedure code that is specific to the anatomic site treated. Specifically, this is not obtaining a graft and use of CPT code 20926 is incorrect. Providers who have erroneously used this procedure code should submit amended claims to BCBSRI to correct the error using the Claim Adjustment Request Form.

The following code is considered not medically necessary:

0232T

Related Topics:

CPT Category III Codes

Also Known As:

Platelet-Rich Plasma (PRP)

Published:

Provider Update, May 2009
Provider Update, July 2009
Provider Update, October 2010
Provider Update, September 2011

This medical policy is made available to you for informational purposes only. It is not a guarantee of payment or a substitute for your medical judgment in the treatment of your patients. Benefits and eligibility are determined by the member’s subscriber agreement or member certificate and/or the employer agreement, and those documents will supersede the provisions of this medical policy. For information on member-specific benefits, call the provider call center. If you provide services to a member which are determined to not be medically necessary (or in some cases
medically necessary services which are non-covered benefits), you may not charge the member for the services unless you have informed the member and they have agreed in writing in advance to continue with the treatment at their own expense. Please refer to your participation agreement(s) for the applicable provisions. This policy is current at the time of publication; however, medical practices, technology, and knowledge are constantly changing. BCBSRI reserves the right to review and revise this policy for any reason and at any time, with or without notice.