

MEDICAL POLICY - 2.01.543

Recombinant and Autologous Platelet-Derived Growth Factors for Wound Healing and Other Non-Orthopedic Conditions

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RELATED MEDICAL POLICIES:

2.01.26 Prolotherapy

8.01.55

2.01.57 Electrostimulation and Electromagnetic Therapy for Treating Wounds

2.01.98 Orthopedic Applications of Platelet-Rich Plasma7.01.113 Bioengineered Skin and Soft Tissue Substitutes

7.01.142 Surgery for Groin Pain in Athletes

7.01.583 Amniotic Membrane and Amniotic Fluid

8.01.52 Orthopedic Applications of Stem Cell Therapy (Including Allografts and

Bone Substitutes Used with Autologous Bone Marrow)
Stem Cell Therapy for Peripheral Arterial Disease

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Introduction

Special substances that are found in the blood may help cells to grow and divide. Some of these blood-derived growth factors, including some platelet-derived growth factors (PDGFs) and platelet-rich plasma (PRP), have been used to treat wounds and skin ulcers. Some of these growth factors have been made in the lab by manipulating genetic material such as DNA. These are called recombinant blood-derived growth factors. Other growth factors come from your own body. These are called autologous blood-derived growth factors. This policy discusses the use of recombinant and autologous blood-derived growth factors when treating wounds and skin ulcers.

Note: The Introduction section is for your general knowledge and is not to be taken as policy coverage criteria. The rest of the policy uses specific words and concepts familiar to medical professionals. It is intended for providers. A provider can be a person, such as a doctor, nurse, psychologist, or dentist. A provider also can be a place where medical care is given, like a hospital, clinic, or lab. This policy informs them about when a

Policy Coverage Criteria

Treatment	Medical Necessity
Recombinant platelet-	Recombinant platelet-derived growth factor (i.e., becaplermin)
derived growth factor (i.e.,	may be considered medically necessary when used as an
becaplermin)	adjunct to standard wound management for the following
	indications (for information on individual selection criteria, see
	Additional Guidelines section below):
	Neuropathic diabetic ulcers extending into the subcutaneous tissue
	Pressure ulcers extending into the subcutaneous tissue
	Other applications of recombinant platelet-derived growth
	factor (i.e., becaplermin) are considered investigational,
	including but not limited to:
	Ischemic ulcers
	Venous stasis ulcers
	Ulcers not extending through the dermis into the subcutaneous
	tissue

Treatment	Investigational
Use of platelet-rich plasma	Use of platelet-rich plasma (i.e., autologous blood-derived
(i.e., autologous blood-	preparations) is considered investigational for the treatment
derived preparations)	of acute or chronic wounds, including surgical wounds,
	nonhealing ulcers, and for fat graft retention (aka fat graft
	take).

Additional Guidelines

Becaplermin

- Appropriate candidates for becaplermin gel for treatment of neuropathic ulcers should meet **ALL** of the following criteria:
 - Adequate tissue oxygenation, as measured by a transcutaneous partial pressure of oxygen of 30 mm Hg or greater on the foot dorsum or at the margin of the ulcer

Additional Guidelines

AND

 Full-thickness ulcer (i.e., stage III or IV), extending through the dermis into subcutaneous tissues

AND

- Participation in a wound management program, which includes sharp debridement, pressure relief (i.e., non-weight bearing), and infection control
- Appropriate candidates for becaplermin gel for the treatment of pressure ulcers should meet
 ALL of the following criteria:
 - Full-thickness ulcer (i.e., stage III or IV), extending through the dermis into subcutaneous tissues

AND

o Ulcer is in an anatomic location that can be off-loaded for the duration of treatment

AND

Albumin concentration is >2.5 dL

AND

Total lymphocyte count is >1,000/μL

AND

- Normal values of vitamins A and C
- Individuals are typically treated once daily for up to 20 weeks or until completely healed.
 Application of the gel may be performed by the individual in the home
- Becaplermin is available in 2-g, 7.5-g, and 15-g tubes and is applied in a thin continuous layer, about 1/16 of an inch thick (i.e., 1.6 mm or the thickness of a dime). The amount of the gel used will depend on the size of the ulcer, measured in square centimeters. However, an average-sized ulcer, measuring 3 cm², treated for an average length of time of 85 days, will require a little more than one 15-g tube. If the ulcer is treated for the maximum length of time of 140 days, 1.75 of the 15-g tubes would be required.

Documentation Requirements

For recombinant platelet derived growth factor (i.e., Regranex [becaplermin]) to be used as an added treatment to standard wound management the following supporting documentation is required:

- For neuropathic diabetic ulcers extending into the subcutaneous tissue (diabetic ulcers that reach the innermost layer of skin):
 - Adequate tissue oxygenation as shown by a transcutaneous partial pressure of oxygen of
 30 mm Hg or greater on the top of the foot or at the margin of the ulcer

AND



Documentation Requirements

o Full-thickness ulcer (stage III or IV) ulcer, extending through the dermis and into subcutaneous tissues

AND

- Participation in a wound management program, which includes the cutting away of tissue, pressure relief (that is, non-weight bearing), and infection control
- For Pressure ulcers extending into the subcutaneous tissue (the innermost layer of skin):
 - Full-thickness ulcer (stage III or IV), extending through the dermis and into subcutaneous tissues

AND

o The wound is in a location where pressure can be relieved for the duration of treatment

AND

Albumin concentration greater than 2.5 dL

AND

Total lymphocyte count greater than 1,000/μL

AND

Normal values of vitamins A and C

Coding

Code	Description
СРТ	
0232T	Injection(s), platelet rich plasma, any site, including image guidance, harvesting and preparation when performed
HCPCS	
G0460	Autologous platelet rich plasma for nondiabetic chronic wounds/ulcers, including phlebotomy, centrifugation, and all other preparatory procedures, administration and dressings, per treatment
G0465	Autologous platelet rich plasma (PRP) for diabetic chronic wounds/ulcers, using an FDA-cleared device (includes administration, dressings, phlebotomy, centrifugation, and all other preparatory procedures, per treatment)
P9020	Platelet rich plasma, each unit
S0157	Becaplermin gel 0.01%, 0.5 gm



Code	Description
S9055	Procuren or other growth factor preparation to promote wound healing
	(Please note that Procuren may no longer be available, but this code is used to report other growth factor preparations that promote wound healing.)

Note: CPT codes, descriptions and materials are copyrighted by the American Medical Association (AMA). HCPCS codes, descriptions and materials are copyrighted by Centers for Medicare Services (CMS).

Related Information

Benefit Application

Becaplermin is used as part of a program of wound management, as described in the **Additional Guidelines**. Use of becaplermin gel is potentially high, particularly if used for off-label indications, or if used outside the setting of adequate and diligent standard wound management.

Evidence Review

Description

The use of blood-derived growth factors, including recombinant platelet-derived growth factors (PDGFs) and platelet-rich plasma (PRP), has been suggested as a treatment of wounds or other miscellaneous non–orthopedic conditions, including but not limited to, diabetic ulcers, pressure ulcers, venous stasis ulcers, and surgical and traumatic wounds.

Background

Wound Healing Treatment

A variety of growth factors have been found to play a role in wound healing, including PDGF, epidermal growth factor, fibroblast growth factors, transforming growth factors, and insulin-like growth factors. Autologous platelets are a rich source of PDGF, transforming growth factors



(that function as a mitogen for fibroblasts, smooth muscle cells, osteoblasts), and vascular endothelial growth factors. Recombinant PDGF has also been extensively investigated for clinical use in wound healing.

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 degranulates platelets, releasing various growth factors, and 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. 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 transforming growth factor, 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.

PRP is distinguished from fibrin glues or sealants, which have been used for many years as a surgical adjunct to promote local hemostasis at incision sites. Fibrin glue is created from platelet-poor plasma and consists primarily of fibrinogen. Commercial fibrin glues are created from pooled homologous human donors; Tisseel (Baxter International) and Hemaseel (Haemacure Corp.) are examples of commercially available fibrin sealants. Autologous fibrin sealants can also be created from platelet-poor plasma. This policy does not address the use of fibrin sealants.

Wound Closure Outcomes

This policy addresses the use of recombinant PDGF products and PRP for nonorthopedic indications, which include a number of wound closure-related indications.

For this policy, the primary end points of interest for the study of wound closure are as follows, consistent with guidance from the U.S. Food and Drug Administration (FDA) for the industry in developing products for the treatment of chronic cutaneous ulcer and burn wounds¹:

- 1. Incidence of complete wound closure
- 2. Time to complete wound closure (reflecting accelerated wound closure)
- 3. Incidence of complete wound closure following surgical wound closure
- 4. Pain control

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Summary of Evidence

Recombinant Platelet-Derived Growth Factors

For individuals who have diabetic lower-extremity ulcers who receive recombinant PDGFs, the evidence includes randomized controlled trials (RCTs) and systematic reviews. The relevant outcomes are symptoms, change in disease status, morbid events, quality of life, and treatment-related morbidity. Results have shown improved rates of healing with use of recombinant PDGF for diabetic neuropathic ulcers and pressure ulcers. The evidence is sufficient to determine that the technology results in an I improvement in the net health outcome.

For individuals who have pressure ulcers who receive recombinant PDGF, the evidence includes a single RCT. The relevant outcomes are symptoms, change in disease status, morbid events, quality of life, and treatment-related morbidity. Results have shown improved rates of healing with use of recombinant PDGF for pressure ulcers. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have venous stasis leg ulcers or acute surgical or traumatic wounds who receive recombinant PDGF, the evidence includes small RCTs. The relevant outcomes are symptoms, change in disease status, morbid events, quality of life, and treatment-related morbidity. The level of evidence does not permit conclusions whether recombinant PDGF is effective in treating other wound types, including chronic venous ulcers or acute traumatic wounds. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Platelet-Rich Plasma

For individuals with chronic wounds who receive PRP, the evidence includes meta-analyses of a number of small, controlled trials. The relevant outcomes are symptoms, change in disease status, morbid events, quality of life, and treatment-related morbidity. In meta-analyses of individuals with lower extremity diabetic ulcers, PRP demonstrated an improvement over the control groups in complete wound closure and healing time, but moderate to high risk of bias and imprecision preclude drawing conclusions on other important outcomes such as recurrence, infection, amputation, and quality of life. In individuals with venous ulcers, PRP did not demonstrate an improvement over the control groups in complete wound closure, recurrence, wound infection, or quality of life, although imprecision likely precluded identifying differences



on these outcomes. In individuals with pressure ulcers, although PRP reduced wound size, other important outcomes such as complete wound closure were not measured. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have acute surgical or traumatic wounds who receive PRP, the evidence includes a systematic reviews and a number of small, controlled trials. The relevant outcomes are symptoms, change in disease status, morbid events, quality of life (QOL), and treatment-related morbidity. Current results of trials using PRP are mixed, and the studies are limited in both size and quality. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals where platelet rich plasma has been used for fat graft retention (aka fat graft take) there is limited evidence that supports this use. Published trials regarding the use of platelet rich plasma combined with fat grafting address different clinical scenarios such as facial lipostructure for cheek contouring and split treatments to the face and hand with autologous fat grafting and PRP, One histological review of fat grafting and PRP in wound healing from animal studies concluded "the fundamental issue of low fat graft survival hinders its clinical use in all settings." The review acknowledges that PRP may increase the viability of fat grafts but states that well-designed studies in humans are needed to establish its clinical usefulness. Another article discussing the use of PRP for facial rejuvenation and hair restoration in combination with fat grafting describes the lack of standardized protocols for the platelet rich plasma preparation. Limitations of these studies include small sample sizes and lack of long-term follow-up which is needed to determine the sustainability of the response of this treatment, These limited clinical scenarios prohibit the ability to extrapolate their findings to other clinical scenarios. Thus, the evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Ongoing and Unpublished Clinical Trials

Some larger studies that might influence this review are listed in **Table 1**.



Table 1. Summary of Key Clinical Trials

NCT No.	Trial Name	Planned Enrollment	Completion Date
Ongoing			
NCT05979584	Platelet Rich Plasma VS Platelet Fibrin Plasma in Treatment of Diabetes Foot Ulcer: a Randomized Controlled Trial	56	Dec 2024
NCT02312596 ^a	A Prospective, Randomized Clinical Trial of PRP Concepts Fibrin Bio-Matrix in Chronic Non-Healing Pressure Ulcers	200	Dec 2021
NCT02312570 ^a	A Prospective, Randomized Clinical Trial of PRP Concepts Fibrin Bio-Matrix in Chronic Non-Healing Pressure Ulcers	200	Dec 2021
NCT02307448 ^a	Effectiveness of Autologous Platelet Rich Plasma in the Treatment of Chronic Non-Healing Wounds	80	Dec 2022
NCT02402374 ^a	Randomized, Placebo-controlled, Blind-assessor Study to Evaluate the Safety and Efficacy of Autologous Platelet Rich Plasma Gel Prepared With the RegenKit-BCT Plus Family of Kits for the Treatment of Diabetic Foot Ulcer	192	Dec 2020 (unknown)
Unpublished			
NCT02071979 ^a	Registry Trial of the Effectiveness of Platelet Rich Plasma for Chronic Non-Healing Wounds (CMS)	1500	Jan 2018 (terminated; updated 01/16/18)

NCT: national clinical trial; PRP: autologous platelet-rich plasma

Practice Guidelines and Position Statements

The purpose of the following information is to provide reference material. Inclusion does not imply endorsement or alignment with the evidence review conclusions.

Guidelines or position statements will be considered for inclusion if they were issued by, or jointly by, a US professional society, an international society with US representation, or National Institute for Health and Care Excellence (NICE). Priority will be given to guidelines that are informed by a systematic review, include strength of evidence ratings, and include a description of management of conflict of interest.

^a Denotes industry-sponsored or cosponsored trial.

American College of Physicians

In 2015 the American College of Physicians (ACP) published guidelines on treatment of pressure ulcers.⁸¹ The guidelines noted that "although low quality evidence suggests that dressings containing PDGF [platelet-derived growth factors] promote healing, ACP supports the use of other dressings such as hydrocolloid and foam dressings, which are effective at promoting healing and cost less than PDGF dressings." A search of the ACP website on December 1, 2020, found that this 2015 guideline is now listed as inactive.

Association for the Advancement of Wound Care

The Association for the Advancement of Wound Care developed guideline recommendations for the management of pressure ulcers (2010)⁸² and venous ulcers (2015)⁸³:

- Pressure ulcer: "Growth factors are not indicated for PU [pressure ulcers] at this time" (level C evidence no RCTs available comparing growth factors with A-level dressings)⁸²
- Venous ulcer: "Platelet derived growth factor has shown no significant effects on VU [venous ulcer] healing or recurrence" (level A evidence)⁸³

National Institute for Health and Care Excellence

In 2019, the National Institute for Health and Care Excellence updated its guidance on the prevention and management of diabetic foot problems.⁸⁴ The guidance stated that neither autologous platelet-rich plasma (PRP) gel nor platelet-derived growth factors should be offered in the treatment of diabetic foot ulcers.

Medicare National Coverage

In 2012, the Centers for Medicare & Medicaid Services (CMS) revised its national coverage decision on autologous blood-derived products for chronic non-healing wounds.^{85,86} This revision replaces prior noncoverage decisions.^{87,88}

The Centers for Medicare & Medicaid Services covers autologous PRP only for individuals who have chronic non-healing diabetic, pressure, and/or venous wounds and when all of the following conditions are met:



The patient is enrolled in a clinical research study that addresses the following questions using validated and reliable methods of evaluation...

The clinical research study must meet the requirements specified below to assess the effect of PRP for the treatment of chronic non-healing diabetic, venous, and/or pressure wounds. The clinical study must address:

Prospectively, do Medicare beneficiaries that have chronic non-healing diabetic, venous, and/or pressure wounds who receive well-defined optimal usual care, along with PRP therapy, experience clinically significant health outcomes compared to patients who receive well-defined optimal usual care for chronic non-healing diabetic, venous, and/or pressure wounds as indicated by addressing at least one of the following:

- a. Complete wound healing?
- b. Ability to return to previous function and resumption of normal activities?; or
- c. Reduction of wound size or healing trajectory, which results in the patient's ability to return to previous function and resumption of normal activities?

In response to a formal request from Nuo Therapeutics on May 9, 2019, CMS began a fourth reconsideration of its national coverage decision. ⁶¹ To inform this reconsideration, the Mayo Evidence-based Practice Center performed a technology assessment that was published by Qu et al (2020) and its results are described in the Rationale section. ⁸⁹Following their review of this evidence, on December 21, 2020, CMS posted a Proposed Decision Memorandum that proposes to expand its 2012 Coverage with Evidence Development decision to cover any use of autologous PRP "...for the treatment of chronic non-healing diabetic wounds under section 1862(a)(1)(A) of the Social Security Act (the Act). ⁸⁸, This decision is based on the evidence described above that is sufficient "...to demonstrate that patients with diabetic ulcers who are treated with autologous PRP have better outcomes (complete wound healing) when compared to patients who receive standard care." CMS additionally noted that a limitation of the evidence is that "None of these studies addressed whether or not PRP affected a patient's ability to return to previous function and resumption of normal activities or resulted in reduction of wound size or healing trajectory as an intermediary towards a formal endpoint of a patient's ability to return to previous function and resumption of normal activities."

For other chronic non-healing wounds, "CMS proposes that coverage of autologous PRP for the treatment of all other chronic non-healing wounds will be determined by local Medicare Administrative Contractors (MACs) under section 1862(a)(1)(A) of the Act."

In April 2021, CMS published an updated decision memo following the fourth reconsideration of the national coverage analysis stating that CMS will "cover autologous platelet-rich plasma (PRP) for the treatment of chronic non-healing diabetic wounds under section 1862(a)(1)(A) of the Social Security Act (the Act) for a duration of 20 weeks, when prepared by devices whose FDA cleared indications include the management of exuding cutaneous wounds, such as diabetic ulcers. Coverage of autologous PRP for the treatment of chronic non-healing diabetic wounds beyond 20 weeks will be determined by local Medicare Administrative Contractors (MACs).

Coverage of autologous PRP for the treatment of all other chronic non-healing wounds will be determined by local Medicare Administrative Contractors (MACs) under section 1862(a)(1)(A) of the Act."⁹⁰

Regulatory Status

Becaplermin

In 1997, becaplermin gel (Regranex; Smith & Nephew), a recombinant PDGF product, was approved by the FDA for the following labeled indication:

Regranex Gel is indicated for the treatment of lower extremity diabetic neuropathic ulcers that extend into the subcutaneous tissue or beyond and have an adequate blood supply. When used as an adjunct to, and not a substitute for, good ulcer care practices including initial sharp debridement, pressure relief, and infection control, Regranex Gel increases the complete healing of diabetic ulcers.

The efficacy of Regranex Gel for the treatment of diabetic neuropathic ulcers that do not extend through the dermis into subcutaneous tissue or ischemic diabetic ulcers ... has not been evaluated...Regranex is not intended to be used in wounds that close by primary intention.

In 2008, the manufacturer added the following black box warning to the labeling for Regranex:

An increased rate of mortality secondary to malignancy was observed in patients treated with three or more tubes of Regranex Gel in a post marketing retrospective cohort study. Regranex Gel should only be used when the benefits can be expected to outweigh the risks. Regranex Gel should be used with caution in patients with known malignancy.

In 2018, the "Boxed Warning" and "Warnings and Precautions" were changed to remove "increased rate of cancer mortality" and "cancer mortality," respectively.



Platelet-Rich Plasma

The FDA regulates human cells and tissues intended for implantation, transplantation, or infusion through the Center for Biologics Evaluation and Research, under Code of Federal Regulation title 21, parts 1270 and 1271. Blood products such as PRP are included in these regulations.

Under these regulations, certain products including blood products such as PRP are exempt and therefore do not follow the traditional FDA regulatory pathway. To date, the FDA has not attempted to regulate activated PRP.²

Numerous PRP preparation systems have been cleared for marketing by the FDA through the 510(k) process. These devices are intended to concentrate patient plasma at the point of care during bone grafting procedures. The use of different devices and procedures can lead to variable concentrations of active platelets and associated proteins, increasing variability between studies of clinical efficacy.

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History

Date	Comments
05/05/97	Add to Medicine Section - New Policy
08/17/99	Replace Policy - Revised policy; addresses becaplermin gel.
10/08/02	Replace Policy - Policy reviewed with changes: new policy statement on becaplermin gel for treatment of pressure ulcers.



Date	Comments
10/16/03	Replace Policy - Policy updated; no change in policy statement. Information regarding Autologel and SafeBlood provided. Title updated by removing Platelet and adding Blood.
01/11/05	Replace Policy - Policy updated focusing on autologous blood derived wound healing products; reference added; no change in policy statement.
01/10/06	Presented at January MPC - Policy revised; policy statement added regarding miscellaneous use of platelet-rich plasma as a primary procedure. Description and rationale now include discussion of platelet-rich plasma. MPC requested further research before adopting.
02/14/06	Replace Policy - Policy revised per MPC request of removing description regarding fibrin sealant and surgical indications (primary wound closure).
06/16/06	Update Scope and Disclaimer - No other changes
07/10/07	Replace Policy - Policy updated with literature search; references added; policy statement unchanged.
08/12/08	Replace Policy - Policy updated with literature search; no change to the policy statement.
01/13/09	Code Updates - Codes Q4102 and Q4103 added, effective 1/1/09.
10/13/09	Replace Policy - Policy updated with literature search; policy statement updated to include "acute" wounds for PRP. References added.
12/27/10	Codes Updated - CPT code 0232T added to policy; no other changes.
06/13/11	Replace Policy - Policy updated with literature search, reference numbers 11-14, 18, 19, 23, 24 added, policy statements unchanged. ICD-10 codes added to policy. CPT coding related to platelet-rich plasma also updated. Title changed to "Recombinant and Autologous Platelet-Derived Growth Factors as a Treatment of Wound Healing and Other Conditions."
03/22/12	Minor update, Related Policies updated with 7.01.113 and 1.01.16.
06/26/12	Replace policy. Policy updated with literature search through February 2012, references added and reordered; some references removed; policy statements unchanged. Codes Q4102 and Q4103 removed; these do not apply to this policy and appear on 7.01.113.
07/25/12	Related Policies Update: 8.01.52 and 8.01.55 have been added.
08/24/12	Update Related Policies – Remove 1.01.16 as it was archived. Update coding section – ICD-10 codes are now effective 10/01/2014.
07/23/13	Replace policy. Policy updated with literature search through March 8, 2013; references added and reordered; policy statements unchanged.
03/17/14	Update Related Policies. Remove 7.01.100 as it was archived.



Date	Comments
07/31/14	Annual Review. Policy updated with literature review through March, 2014. References 6, 19, 22-23, 26, 31, 36, and 48 added; others renumbered/removed. Policy statements unchanged. HCPCS code G0460 added to the policy.
09/23/14	Update Related Policies. Add 7.01.142.
07/14/15	Annual Review. Policy title changed to "Recombinant and Autologous Platelet-Derived Growth Factors as a Treatment of Wound Healing and Other Non–Orthopedic Conditions." Orthopedic applications of platelet-rich plasma (PRP) policy statements removed from this policy and placed in new Policy No. 2.01.98. Coding table in Policy Guidelines updated to match Coding section of policy. Policy updated with literature review through April 15, 2015; references 1 and 3 added. Policy statements removed as noted, others remain unchanged. CPT code 20926 removed; platelet-rich plasma is not considered a tissue graft. ICD-9 and ICD-10 codes removed; these were for informational purposes only.
09/01/15	Update Related Policies. Add 7.01.149
10/16/15	Update Related Policies. Remove 7.01.142.
04/01/16	Annual Review, approved March 8, 2016. Policy updated with literature review through October 29, 2015; references 16 and 18-19 added. Policy statements unchanged.
04/01/17	Annual Review, approved March 14, 2017. Policy updated with literature review through November 8, 2016; references 1, 16, 20, 23, and 27-31 added. Policy statements unchanged.
09/22/17	Policy moved to new format. No changes to policy statements.
04/01/18	Annual Review, approved March 20, 2018. Policy updated with literature review through November 2017; no new references added; notes 1-2, 29-30, and 32-34 updated. Policy statements unchanged.
03/01/19	Annual Review, approved February 25, 2019. Policy updated with literature review through October 2018; 12, 27, and 30 references added. Policy statements unchanged.
04/01/20	Annual Review, approved March 19, 2020. Policy updated with literature review through November 2019; references added. Policy statements unchanged.
08/01/20	Update related policies. 7.01.149 is now 7.01.583.
04/01/21	Annual Review, approved March 2, 2021. Policy updated with literature review through December 1, 2020; references added. Policy statements unchanged.
04/01/22	Annual Review, approved March 7, 2022. Policy updated with literature review through December 13, 2021; references added. Policy statements unchanged. Added HCPCS code G0465. Removed CPT code 86999.
04/01/23	Annual Review, approved March 6, 2023. Policy updated with literature review through December 13, 2022; references added. Minor editorial refinements to policy statements; intent unchanged. Changed the wording from "patient" to "individual"



Date	Comments
	throughout the policy for standardization. Updated code description for HCPC code G0460.
03/01/24	Annual Review, approved February 26, 2024. Policy updated with literature review through November 14, 2023; references added. Policy statements unchanged.
01/01/25	Policy renumbered from 2.01.16 Recombinant and Autologous Platelet-Derived Growth Factors for Wound Healing and Other Non-Orthopedic Conditions to 2.01.543, approved December 10, 2024. Added to the policy statement that "for fat graft retention (aka fat graft take)" the use of PRP is considered investigational. References added.

Disclaimer: This medical policy is a guide in evaluating the medical necessity of a particular service or treatment. The Company adopts policies after careful review of published peer-reviewed scientific literature, national guidelines and local standards of practice. Since medical technology is constantly changing, the Company reserves the right to review and update policies as appropriate. Member contracts differ in their benefits. Always consult the member benefit booklet or contact a member service representative to determine coverage for a specific medical service or supply. CPT codes, descriptions and materials are copyrighted by the American Medical Association (AMA). ©2025 Premera All Rights Reserved.

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