

Medical Policies



Policy S-180

Number:

Policy Name: Recombinant and Autologous Platelet-Derived Growth Factors for Wound Healing and Other

Non-Orthopedic Conditions

Policy Type: Medical Policy Surgery

Subtype:

Effective 09-15-2025 End Date: 11-02-2025

Date:

Description

A variety of growth factors have been found to play a role in wound healing, including platelet-derived growth factors (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, 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. PRP is distinguished from fibrin glues or sealants.

Policy Application

All claims submitted under this policy's section will be processed according to the policy effective date and associated revision effective dates in effect on the date of processing, regardless of service date; or

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Criteria

Coverage is subject to the specific terms of the member's benefit plan.

Policy Application

All claims submitted under this policy's section will be processed according to the policy effective date and associated revision effective dates in effect on the date of processing, regardless of service date.

Recombinant platelet-derived growth factor (i.e., becaplermin [Regranex]) may be considered medically necessary when used as an adjunct to standard wound management when **EITHER** of the following criteria has been met:

- Neuropathic diabetic ulcers extending into the subcutaneous tissue or beyond and have an adequate blood supply; **or**
- Pressure ulcers extending into the subcutaneous tissue.

Becaplermin gel for treatment of neuropathic ulcers may be considered medically necessary when **ALL** of the following criteria are met:

- Adequate tissue oxygenation of 30 mm Hg or greater measured by either:
 - A transcutaneous partial pressure on the foot dorsum or at the margin of the ulcer; or
 - Toe photoplethysmography (PPG) with infrared reflectance technique; and
- Full-thickness ulcer (i.e., Stage III or IV), extending through 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.

Becaplermin gel for the treatment of pressure ulcers may be considered medically necessary when **ALL** of the following criteria are met:

- Full-thickness ulcer (i.e., Stage III or IV), extending through dermis into subcutaneous tissues; and
- Ulcer in an anatomic location that can be off-loaded for the duration of treatment; and
- Albumin concentration greater than 2.5 dL; and
- Total lymphocyte count greater than 1,000; and
- Normal values of vitamins A and C.

All other applications of recombinant platelet-derived growth factor (i.e., becaplermin [Regranex]) are considered experimental/investigational, and therefore, non-covered including, but not limited to, ischemic ulcers, ulcers related to venous stasis, and ulcers not extending through the dermis into the subcutaneous tissue. The safety and/or effectiveness cannot be established by review of the published peer-reviewed literature.

Procedure Codes

| S01 | 57 | S9055 |
|-----|----|-------|
|-----|----|-------|

Policy Application

All claims submitted under this policy's section will be processed according to the policy effective date and associated revision effective dates in effect on the date of service.

Use of autologous blood-derived preparations (i.e., injection of PRP) is considered experimental/investigational and therefore non-covered for **ALL** non-orthopedic conditions because the effectiveness cannot be established by published peer-reviewed literature.

Procedure Codes

| 02321 04811 80999 G0400 G0405 P9020 | 0232 | | T 86999 | G0460 | G0465 | P9020 |
|-------------------------------------|------|--|---------|-------|-------|-------|
|-------------------------------------|------|--|---------|-------|-------|-------|

Professional Statements and Societal Positions Guidelines

Not Applicable

Diagnosis Codes

Covered Diagnosis Codes for Procedure Codes S0157 and S9055

| covered biagnosis codes for Frocedure codes 50157 and 55055 | | | | | | |
|-------------------------------------------------------------|---------|---------|---------|---------|---------|---------|
| E08.621 | E08.622 | E09.621 | E09.622 | E10.21 | E10.40 | E10.41 |
| E10.42 | E10.43 | E10.49 | E10.621 | E10.622 | E11.40 | E11.41 |
| E11.42 | E11.43 | E11.49 | E11.621 | E11.622 | E13.621 | E13.622 |
| L89.013 | L89.014 | L89.023 | L89.024 | L89.113 | L89.114 | L89.123 |
| L89.124 | L89.133 | L89.134 | L89.143 | L89.144 | L89.153 | L89.154 |
| L89.213 | L89.214 | L89.223 | L89.224 | L89.313 | L89.314 | L89.323 |
| L89.324 | L89.43 | L89.44 | L89.513 | L89.514 | L89.523 | L89.524 |
| L89.613 | L89.614 | L89.623 | L89.624 | L89.813 | L89.814 | L89.893 |
| L89.894 | L97.112 | L97.113 | L97.114 | L97.115 | L97.116 | L97.118 |
| L97.122 | L97.123 | L97.124 | L97.125 | L97.126 | L97.128 | L97.212 |
| L97.213 | L97.214 | L97.215 | L97.216 | L97.218 | L97.222 | L97.223 |
| L97.224 | L97.225 | L97.226 | L97.228 | L97.312 | L97.313 | L97.314 |
| L97.315 | L97.316 | L97.318 | L97.322 | L97.323 | L97.324 | L97.325 |
| L97.326 | L97.328 | L97.412 | L97.413 | L97.414 | L97.415 | L97.416 |
| L97.418 | L97.422 | L97.423 | L97.424 | L97.425 | L97.426 | L97.428 |
| L97.512 | L97.513 | L97.514 | L97.515 | L97.516 | L97.518 | L97.522 |
| L97.523 | L97.524 | L97.525 | L97.526 | L97.528 | L97.812 | L97.813 |
| L97.814 | L97.815 | L97.816 | L97.818 | L97.822 | L97.823 | L97.824 |
| L97.825 | L97.826 | L97.828 | L97.912 | L97.913 | L97.914 | L97.915 |

| L97.916 | L97.918 | L97.922 | L97.923 | L97.924 | L97.925 | L97.926 |
|---------|---------|---------|---------|---------|---------|---------|
| L97.928 | L98.412 | L98.413 | L98.414 | L98.415 | L98.416 | L98.418 |
| L98.422 | L98.423 | L98.424 | L98.425 | L98.426 | L98.428 | L98.492 |
| L98.493 | L98.494 | L98.495 | L98.496 | L98.498 | | |

CURRENT CODING

CPT:

| 0232T | NJX PLTLT PLASMA W/IMG HARVEST/PREPARATION | Commercial |
|-------|--------------------------------------------------|--------------------|
| 0481T | NJX AUTOL WBC CONCENTR INC IMG GDN HRV & PREP | Commercial |
| 86999 | UNLISTED TRANSFUSION MEDICINE PROCEDURE | Commercial |
| 0232T | NJX PLTLT PLASMA W/IMG HARVEST/PREPARATION | Medicaid Expansion |
| 0481T | NJX AUTOL WBC CONCENTR INC IMG GDN HRV & PREP | Medicaid Expansion |
| 86999 | UNLISTED TRANSFUSION MEDICINE PROCEDURE | Medicaid Expansion |

HCPCS:

| G0460 | Autolog prp not diab ulcer | Commercial |
|-------|------------------------------|--------------------|
| G0465 | Autolog prp diab wound ulcer | Commercial |
| P9020 | Plaelet rich plasma unit | Commercial |
| S0157 | Becaplermin gel 1%, 0.5 gm | Commercial |
| S9055 | Procuren or other growth fac | Commercial |
| G0460 | Autolog prp not diab ulcer | Medicaid Expansion |
| G0465 | Autolog prp diab wound ulcer | Medicaid Expansion |
| P9020 | Plaelet rich plasma unit | Medicaid Expansion |
| S0157 | Becaplermin gel 1%, 0.5 gm | Medicaid Expansion |
| S9055 | Procuren or other growth fac | Medicaid Expansion |

References

- 1. National Institute for Health and Clinical Excellence (NICE). Diabetic foot problems: prevention and management [NG19].
- 2. Johnson A. Taking a Fresh Look at Regranex Gel. *Podiatry Management*. August 2015;34(6):93-98.
- 3. Sridharan K Growth factors for diabetic foot ulcers: mixed treatment comparison analysis of randomized clinical trials. *Br J Clin Pharmacol*. 2018;84(3):434-444.29148070.
- 4. Alamdari DH AM, Rahim AN, et al. Efficacy and safety of pleurodesis using platelet-rich plasma and fibrin glue in management of postoperative chylothorax after esophagectomy. *World J Surg*. 2018;42(4):1046-1055.
- 5. Yeung CY HP, Wei LG, Hsia LC, Dai LG, Fu KY, Dai NT. Efficacy of lyophilised platelet-rich plasma powder on healing rate in patients with deep second degree burn injury: A prospective double-blind randomized clinical trial. *Ann Plast Surg.* 2018;80(1):S66- S69.
- 6. Smith O, Jell G, Mosahebi A. The use of fat grafting and platelet-rich plasma for wound healing: A review of the current evidence. *Int Wound J.* 2019;16(1)275-285.
- 7. Saha S, Patra A, Gowda S, et al. Effectiveness and safety of autologous platelet-rich plasma therapy with total contact casting versus total contact casting alone in treatment of trophic ulcer inleprosy: An observer-blind, randomized controlled trial. *Indian J Dermatol Venereol Leprol.* 2020;86:262-71.

ND Committee Review

Internal Medical Policy Committee 11-14-2019 language update

Internal Medical Policy Committee 1-19-2021 Annual Review

Internal Medical Policy Committee 1-20-2022 Coding Update- Effective January 01, 2022

• Adding Procedure Code: G0465

Internal Medical Policy Committee 1-26-2023 Annual Review - no changes in criteria

Internal Medical Policy Committee 1-16-2024 Annual Review - no changes in criteria

Internal Medical Policy Committee 9-17-2024 Coding Update- Effective November 4, 2022

- Removed Diagnosis Codes L89.003, L89.004, L89.103, L89.104, L89.203, L89.204, L89.303, L89.304, L89.503, L89.504, L89.603, L89.604, L89.93, L89.94, L97.102, L97.103, L97.104, L97.105, L97.106, L97.108, L97.202, L97.203, L97.204, L97.205, L97.2026, L97.208, L97.302, L97.303, L97.304, L97.305, L97.306, L97.308, L97.402, L97.403, L97.404, L97.405, L97.406, L97.408, L97.502, L97.503, L97.504, L97.505, L97.506, L97.508, L97.802, L97.803, L97.804, L97.805, L97.806, L97.808, L97.902, L97.903, L97.904, L97.905, and L97.906.
- o Added Policy Application

Disclaimer

Current medical policy is to be used in determining a Member's contract benefits on the date that services are rendered. Contract language, including definitions and specific inclusions/exclusions, as well as state and federal law, must be considered in determining eligibility for coverage. Members must consult their applicable benefit plans or contact a Member Services representative for specific coverage information. Likewise, medical policy, which addresses the issue(s) in any specific case, should be considered before utilizing medical opinion in

adjudication. Medical technology is constantly evolving, and the Company reserves the right to review and update medical policy periodically.