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MEDICAL POLICY – 7.01.48

Autologous Chondrocyte Implantation for Focal Articular Cartilage Lesions

BCBSA Ref. Policy:	7.01.48	
Effective Date:	July 1, 2024	RELATED MEDICAL POLICIES:
Last Revised:	June 10, 2024	7.01.15 Meniscal Allografts and Other Meniscal Implants
Replaces:	7.01.48	8.01.52 Orthopedic Applications of Stem Cell Therapy (Including Allografts and Bone Substitutes Used with Autologous Bone Marrow)
		7.01.78 Autografts and Allografts in the Treatment of Focal Articular Cartilage Lesions
		11.01.524 Site of Service: Select Surgical Procedures

Select a hyperlink below to be directed to that section.

POLICY CRITERIA | DOCUMENTATION REQUREMENTS | CODING
RELATED INFORMATION | EVIDENCE REVIEW | REFERENCES | HISTORY

∞ Clicking this icon returns you to the hyperlinks menu above.

Introduction

Cartilage is firm, rubbery tissue that covers the ends of bones at the joints. Damaged cartilage can cause pain and negatively affect how the joint works. One treatment to repair knee cartilage involves using a person's own cartilage cells, which are called chondrocytes. The treatment requires two steps. In the first step, cartilage cells are removed from the knee. They are sent to a lab where a large number of cartilage cells are grown. The second step requires surgery. The damaged cartilage is removed from the end of the bone, a protective layer of tissue is placed over the bone, and the new cartilage cells are injected into the space between the bone and the protective tissue. This policy describes when this surgery may be considered medically necessary for the knee. It has not been well studied in other locations in the body and is considered unproven (investigational) for other joints.

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 service may be covered.

Policy Coverage Criteria

We will review for medical necessity these elective surgical procedures.

We also will review the site of service for medical necessity. Site of service is defined as the location where the surgical procedure is performed, such as an off campus-outpatient hospital or medical center, an on campus-outpatient hospital or medical center, an ambulatory surgical center, or an inpatient hospital or medical center.

Site of Service for Elective Surgical Procedures	Medical Necessity
Medically necessary sites of service: • **Off campus-outpatient hospital/medical center** • **On campus-outpatient hospital/medical center** • **Ambulatory Surgical Center**	**Certain elective surgical procedures will be covered in the most appropriate, safe, and cost-effective site. These are the preferred medically necessary sites of service for certain elective surgical procedures.**

Inpatient hospital/medical center	**Certain elective surgical procedures will be covered in the most appropriate, safe, and cost-effective site. This site is considered medically necessary only when the individual has a clinical condition which puts him or her at increased risk for complications including any of the following (this list may not be all inclusive):**
	• Anesthesia Risk
	  ○ ASA classification III or higher (see **definition**)
	  ○ Personal history of complication of anesthesia
	  ○ Documentation of alcohol dependence or history of cocaine use
	  ○ Prolonged surgery (>3 hours)
	• Cardiovascular Risk
	  ○ Uncompensated chronic heart failure (**NYHA class** III or IV)
	  ○ Recent history of myocardial infarction (MI) (<3 months)
	  ○ Poorly controlled, resistant hypertension*

Site of Service for Elective Surgical Procedures	Medical Necessity
	○ Recent history of cerebrovascular accident (< 3 months) ○ Increased risk for cardiac ischemia (drug eluting stent placed < 1 year or angioplasty <90 days) ○ Symptomatic cardiac arrhythmia despite medication ○ Significant valvular heart disease • Liver Risk ○ Advance liver disease (MELD Score > 8)** • Pulmonary Risk ○ Chronic obstructive pulmonary disease (COPD) (FEV1 <50%) ○ Poorly controlled asthma (FEV1 <80% despite treatment) ○ Moderate to severe obstructive sleep apnea (OSA)*** • Renal Risk ○ End stage renal disease (on dialysis) • Other ○ Morbid obesity (BMI ≥ 50) ○ Pregnancy ○ Bleeding disorder (requiring replacement factor, blood products, or special infusion product [DDAVP**** does not meet this criteria]) ○ Anticipated need for transfusion(s) **Note:** * 3 or more drugs to control blood pressure ** **https://reference.medscape.com/calculator/meld-score-end-stage-liver-disease** *** Moderate-AHI≥15 and ≤ 30, Severe-AHI ≥30 **** DDAVP-Deamino-Delta-D-Arginine Vasopressin (Desmopressin)
Inpatient hospital/medical center	**This site of service is considered NOT medically necessary for certain elective surgical procedures when the site of service criteria listed above are not met.**

Procedure	Medical Necessity

Autologous chondrocyte implantation (MACI is current product name)	**Autologous chondrocyte implantation may be considered medically necessary when ALL of the following criteria are met:**
	• Severe disabling knee pain and loss of knee function caused by acute or repetitive trauma that interferes with activities of daily living or work ability is present
	• Adolescent individuals should be skeletally mature with documented closure of growth plates (e.g., age 15 years or older); **or**
	• Adult individuals are too young to be considered an appropriate candidate for total knee arthroplasty or other reconstructive knee surgery (e.g., younger than 55 years of age)
	• Focal, full-thickness (grade III or IV **Outerbridge scale**) unipolar lesions of the weight-bearing surface of the femoral condyles, trochlea, or patella that are at least 1.5 cm^2 in size
	• Documented minimal to absent degenerative changes in the surrounding articular cartilage (**Outerbridge** grade II or less), and normal-appearing hyaline cartilage surrounding the border of the defect
	• All of the following are present on exam:
	  ○ Stable knee with intact or reconstructed ligaments (ACL or PCL) or repairs are planned with the procedure (see Related Information **below**)
	  ○ Normal joint alignment
	  ○ Normal joint space

Procedure	Investigational
Autologous chondrocyte implantation (all other joints)	**Autologous chondrocyte implantation for all other joints, including the talar (ankle), and any indications other than those listed above is considered investigational.**

Documentation Requirements
The individual's medical records submitted for review for all conditions should document that medical necessity criteria are met. The record should include the following:

Documentation Requirements
• Office visit notes that contain the relevant history and physical exam, including the individuals age, size of and description of the lesion and the surrounding articular cartilage and border of the defect with the Outerbridge grade classification noted.

Coding

Code	Description
CPT	
27412	Autologous chondrocyte implantation, knee
29870	Arthroscopy, knee, diagnostic, with or without synovial biopsy (separate procedure)
29877	Arthroscopy, knee, surgical; debridement/shaving of articular cartilage (chondroplasty)
29879	Arthroscopy, knee, surgical; abrasion arthroplasty (includes chondroplasty where necessary) or multiple drilling or microfracture
29880	Arthroscopy, knee, surgical; with meniscectomy (medial AND lateral, including any meniscal shaving) including debridement/shaving of articular cartilage (chondroplasty), same or separate compartment(s), when performed
29881	Arthroscopy, knee, surgical; with meniscectomy (medial OR lateral, including any meniscal shaving) including debridement/shaving of articular cartilage (chondroplasty), same or separate compartment(s), when performed
29882	Arthroscopy, knee, surgical; with meniscus repair (medial OR lateral)
29883	Arthroscopy, knee, surgical; with meniscus repair (medial AND lateral)
HCPCS	
J7330	Autologous cultured chondrocytes, implant
S2112	Arthroscopy, knee, surgical, for harvesting of cartilage (chondrocyte cells)

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

For smaller lesions (e.g., < 4 cm^2), if debridement is the only prior surgical treatment, then consideration should be given to marrow-stimulating techniques before autologous chondrocyte implantation (ACI) is performed.

The average defect size reported in the literature is about 5 cm^2; many studies treated lesions as large as 15 cm^2.

Severe obesity (e.g., body mass index >35 kg/m^2) may affect outcomes due to the increased stress on weight-bearing surfaces of the joint.

Misalignment and instability of the joint are contraindications. Therefore, additional procedures, such as repair of ligaments or tendons or creation of an osteotomy for realignment of the joint, may be performed at the same time. In addition, meniscal allograft transplantation may be performed in combination, either concurrently or sequentially, with ACI. The charges for the culturing component of the procedure are submitted as part of the hospital bill.

The entire matrix-induced ACI procedure consists of 4 steps:

1. Initial arthroscopy and biopsy of normal cartilage
2. Culturing of chondrocytes on an absorbable collagen matrix
3. A separate arthrotomy to place the implant
4. Postsurgical rehabilitation

The initial arthroscopy may be scheduled as a diagnostic procedure; as part of this procedure, a cartilage defect may be identified, prompting biopsy of normal cartilage in anticipation of a possible chondrocyte transplant. The biopsied material is then sent for culturing and returned to the hospital when the implantation procedure (i.e., arthrotomy) is scheduled.

Definition of Terms

American Society of Anesthesiologists (ASA) Score:

ASA 1 A normal healthy patient.
ASA 2 A patient with mild systemic disease.
ASA 3 A patient with severe systemic disease.
ASA 4 A patient with severe systemic disease that is a constant threat to life.
ASA 5 A moribund patient who is not expected to survive

New York Heart Association (NYHA) Classification:

Class I No symptoms and no limitation in ordinary physical activity, e.g., shortness of breath when walking, climbing stairs etc.
Class II Mild symptoms (mild shortness of breath and/or angina) and slight limitation during ordinary activity.
Class III Marked limitation in activity due to symptoms, even during less-than-ordinary activity, e.g., walking short distances (20–100 m). Comfortable only at rest.
Class IV Severe limitations. Experiences symptoms even while at rest. Mostly bedbound patients

Modified Outerbridge Classification

The Outerbridge classification is a grading system for joint cartilage breakdown. It has been modified to report MRI results, and was originally used for arthroscopy results. Below is correlation between the two.

Table 1. Modified Outerbridge Classification

	MRI Results	Arthroscopy Results
GRADE I	focal areas of hyperintensity with normal contour	cartilage with softening and swelling
GRADE II	blister-like swelling/fraying of articular cartilage extending to surface	fragmentation and fissuring within soft areas of articular cartilage
GRADE III	partial thickness cartilage loss with focal ulceration	partial thickness cartilage loss with fibrillation (crab-meat appearance)
GRADE IV	full thickness cartilage loss with underlying bone reactive changes	cartilage destruction with exposed subchondral bone*

*Subchondral bone is the bone underneath the white joint cartilage

Consideration of Age

The age range listed in this policy, 15 to 55 years of age, takes into consideration skeletal maturity and the age at which total knee replacements are considered. Skeletal maturity is

reached around the age of 15, and adults younger than 55 are generally considered unsuitable candidates for total knee replacement.

Evidence Review

Description

A variety of procedures are being developed to resurface articular cartilage defects. Autologous chondrocyte implantation (ACI) involves harvesting chondrocytes from healthy tissue, expanding the cells in vitro, and implanting the expanded cells into the chondral defect. Second- and third-generation techniques include combinations of autologous chondrocytes, scaffolds, and growth factors.

Background

Articular Cartilage Lesions

Damaged articular cartilage typically fails to heal on its own and can be associated with pain, loss of function, and disability and may lead to debilitating osteoarthritis over time.[1] These manifestations can severely impair an individual's activities of daily living and adversely affect quality of life.

Treatment

Conventional treatment options include debridement, subchondral drilling, microfracture (MF), and abrasion arthroplasty.[2] Debridement involves the removal of synovial membrane, osteophytes, loose articular debris, and diseased cartilage and is capable of producing symptomatic relief. Subchondral drilling, microfracture, and abrasion arthroplasty attempt to restore the articular surface by inducing the growth of fibrocartilage into the chondral defect. Compared with the original hyaline cartilage, fibrocartilage has less capability to withstand shock or shearing force and can degenerate over time, often resulting in the return of clinical symptoms. Osteochondral grafts and ACI attempt to regenerate hyaline-like cartilage and thereby restore durable function. Osteochondral grafts for the treatment of articular cartilage defects are discussed in a separate medical policy (see **Related Policies** above).

With ACI, a region of healthy articular cartilage is identified and biopsied through arthroscopy. The tissue is sent to a facility licensed by the US Food and Drug Administration (FDA) where it is minced and enzymatically digested, and the chondrocytes are separated by filtration. The isolated chondrocytes are cultured for 11 to 21 days to expand the cell population, tested, and then shipped back for implantation. With the individual under general anesthesia, an arthrotomy is performed, and the chondral lesion is excised up to the normal surrounding cartilage. Methods to improve the first-generation ACI procedure have been developed, including the use of a scaffold or matrix-induced autologous chondrocyte implantation (MACI) composed of biocompatible carbohydrates, protein polymers, or synthetics. The only FDA-approved MACI product to date is supplied in a sheet, which is cut to size and fixed with fibrin glue. This procedure is considered technically easier and less time consuming than the first-generation technique, which required suturing of a periosteal or collagen patch and injection of chondrocytes under the patch.

Desired features of articular cartilage repair procedures are the ability (1) to be implanted easily, (2) to reduce surgical morbidity, (3) not to require harvesting of other tissues, (4) to enhance cell proliferation and maturation, (5) to maintain the phenotype, and (6) to integrate with the surrounding articular tissue. In addition to the potential to improve the formation and distribution of hyaline cartilage, use of a scaffold with MACI eliminates the need for harvesting and suture of a periosteal or collagen patch. A scaffold without cells may also support chondrocyte growth.

Summary of Evidence

For individuals who have focal articular cartilage lesion(s) of the weight-bearing surface of the femoral condyles, trochlea, or patella who receive autologous chondrocyte implantation (ACI), the evidence includes systematic reviews, randomized controlled trials (RCTs), and observational studies. Relevant outcomes are symptoms, change in disease status, morbid events, functional outcomes, and quality of life. There is a large body of evidence on ACI for the treatment of focal articular cartilage lesions of the knee. For large lesions, ACI results in better outcomes than microfracture, particularly in the long term. In addition, there is a limit to the size of lesions that can be treated with osteochondral autograft transfer, due to a limit on the number of osteochondral cores that can be safely harvested. As a result, ACI has become the established treatment for large articular cartilage lesions in the knee. In 2017, first-generation ACI with a collagen cover was phased out and replaced with an ACI preparation that seeds the chondrocytes onto a bioresorbable collagen sponge. Although the implantation procedure for this second-generation ACI is less technically demanding, studies to date have not shown

improved outcomes compared with first-generation ACI. Some evidence has suggested an increase in hypertrophy (overgrowth) of the new implant that may exceed that of the collagen membrane covered implant. Long-term studies with a larger number of individuals will be needed to determine whether this hypertrophy impacts graft survival. Based on mid-term outcomes that approximate those of first-generation ACI and the lack of alternatives, second-generation ACI may be considered an option for large disabling full-thickness cartilage lesions of the knee. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have focal articular cartilage lesions of joints other than the knee who receive ACI, the evidence includes case series, systematic reviews of case series, and a network meta-analysis of prospective (none of which evaluated autologous chondrocyte implantation) and retrospective studies. Relevant outcomes are symptoms, change in disease status, morbid events, functional outcomes, and quality of life. The greatest amount of literature is for ACI of the talus. Comparative trials are needed to determine whether ACI improves outcomes for lesions in joints other than the knee. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Ongoing and Unpublished Clinical Trials

Some currently ongoing trials that might influence this review are listed in **Table 2**.

Table 2. Summary of Key Trials

NCT No.	Trial Name	Planned Enrollment	Completion Date
Ongoing			
NCT04785092	All Autologous Cartilage Regeneration in the Treatment of the Knee Cartilage Defects	20	March 2024
NCT03219307	Safety and Efficacy of NOVOCART 3D in the Treatment of Articular Cartilage Defects Following Failure on Microfracture	30	Dec 2023
NCT01656902[a]	A Prospective Randomized Controlled Multicenter Phase-III Clinical Study to Evaluate the Safety and Effectiveness of NOVOCART 3D Plus Compared to the	263	Jun 2023

NCT No.	Trial Name	Planned Enrollment	Completion Date
	Standard Procedure Microfracture in the Treatment of Articular Cartilage Defects of the Knee		
NCT04744402	A Multi-Center, Active-Controlled, Open-Label, Phase 2 Trial to Compare the Efficacy and Safety of CartiLife, and Microfracture for Patients With Articular Cartilage Defects in the Knee	50	Dec 2023
NCT01957722[a]	A Phase 3, Prospective, Randomized, Partially Blinded Multi-Center Study to Measure the Safety and Efficacy of NOVOCART 3D Compared to Microfracture in the Treatment of Articular Cartilage Defects	233	Dec 2024
NCT05651997	Randomized Study Comparing Two Methods for the Treatment of Large Chondral and Osteochondral Defects of the Knee: Augmented Microfracture Technique vs 3rd Generation of ACI	80	June 2028
NCT05402072[a]	Autologous MatRix-Induced ChondrogenEsis ComPared With Microfracture for Focal ArtIcular CaRtilage Damage of the Hip (REPAIR): A Pilot Randomized Controlled Trial	30	Jan 2026
NCT05328674	Clinical and Comparative Evaluation of the Treatment Results of Arthroscopic Reconstruction of Cartilage Defects in the Knee Joint With the Use of Autogenous Cartilage Graft with PRP GF (Platelet-rich Plasma With Growth Factors)	60	June 2022

NCT: national clinical trial.

[a] Denotes industry-sponsored or cosponsored trial.

Clinical Input Received from Physician Specialty Societies and Academic Medical Centers

While the various physician specialty societies and academic medical centers collaborate with and make recommendations during this process, through the provision of appropriate reviewers, input received does not represent an endorsement or position statement by the physician specialty societies or academic medical centers, unless otherwise noted.

2015 Input

In response to requests, input was received from two physician specialty societies (six reviewers) and four academic medical centers while this policy was under review in 2015. Input was generally supportive of the use of autologous chondrocyte implantation (ACI) for large patellar lesions, although the degree of support varied. Reviewers indicated that outcomes were improved when realignment procedures were performed concurrently with ACI of the patella, and that success rates were lower when using ACI after a prior microfracture. Most reviewers recommended that a prior surgical procedure not be required for lesions greater than 4 cm^2.

2011 Input

In response to requests, input was received from two physician specialty societies and three academic medical centers while this policy was under review in 2011. Input was generally in agreement with the stated criteria for ACI, except the following: input was mixed on the requirement for an inadequate response to a prior surgical procedure and the requirement for an absence of meniscal pathology. Input was also mixed on the investigational status of ACI in patellar and talar joints.

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 policy 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.

American Academy of Orthopaedic Surgeons

In its 2023 guidelines on the diagnosis and treatment of osteochondritis dissecans, the American Academy of Orthopaedic Surgeons did not recommend for or against a specific cartilage repair technique in symptomatic skeletally mature patients with an unsalvageable osteochondritis

dissecans lesion, or symptomatic skelletally immautre patients with unsalvagavle fragment.[55] The finding of insufficient evidence forsymptomatic skeletally mature patients with an unsalvageable osteochondritis dissecanslesion was based on a systematic review that found 4 level IV studies addressing cartilage repair techniques for an unsalvageable osteochondritis dissecans lesion. Because each level IV article used different techniques, different outcome measures, and differing lengths of follow-up, the Academy deemed the evidence for any specific technique inconclusive. The finding of insufficient evidence for symptomatic skeletally immature patients with unsalvageable fragments was based on a Level II study; this study did not address many outcomes and techniques and had inconclusive results.

National Institute for Health and Care Excellence

In 2018, the National Institute for Health and Care Excellence (NICE) updated its 2005 guidance on the use of autologous chondrocyte implantation.[56] The NICE recommendations are stated below:

"… as an option for treating symptomatic articular cartilage defects of the femoral condyle and patella of the knee (International Cartilage Repair Society grade III or IV) in adults, only if:

- the person has not had previous surgery to repair articular cartilage defects;
- there is minimal osteoarthritic damage to the knee (as assessed by clinicians experienced in investigating knee cartilage damage using a validated measure for knee osteoarthritis); and
- the defect is over 2 cm^2

Medicare National Coverage

There is no national coverage determination.

Regulatory Status

The culturing of chondrocytes is considered by the FDA to fall into the category of manipulated autologous structural cells, which are subject to a biologic licensing requirement. In 1997, Carticel (Genzyme; now Vericel) received the FDA approval for the repair of clinically significant,

"...symptomatic cartilaginous defects of the femoral condyle (medial, lateral or trochlear) caused by acute or repetitive trauma…"

In December 2016, MACI (Vericel) received the FDA approval for "the repair of symptomatic, single or multiple full-thickness cartilage defects of the knee with or without bone involvement in adults."[3] MACI consists of autologous chondrocytes that are cultured onto a bioresorbable porcine-derived collagen membrane. In 2017, production of Carticel was phased out, and MACI is the only ACI product available in the United States.

A number of other second-generation methods for implanting autologous chondrocytes in a biodegradable matrix are currently in development or testing or are available outside of the United States. They include Atelocollagen (Koken), a collagen gel; Bioseed C (BioTissue Technologies), a polymer scaffold; CaReS (Ars Arthro), collagen gel; Cartilix (Biomet), a polymer hydrogel; Chondron (Sewon Cellontech), a fibrin gel; Hyalograft C (Fidia Advanced Polymers), a hyaluronic acid-based scaffold; NeoCart (Histogenics), an ACI with a 3-dimensional chondromatrix in a phase 3 trial; and Novocart3D (Aesculap Biologics), a collagen-chondroitin sulfate scaffold in a phase 3 trial. ChondroCelect (TiGenix), characterized as a chondrocyte implantation with a completed phase 3 trial, uses a gene marker profile to determine in vivo cartilage-forming potential and thereby optimizes the phenotype (e.g., hyaline cartilage vs fibrocartilage) of the tissue produced with each ACI cell batch. Each batch of chondrocytes is graded based on the quantitative gene expression of a selection of positive and negative markers for hyaline cartilage formation. Both Hyalograft C and ChondroCelect have been withdrawn from the market in Europe. In 2020, the FDA granted breakthrough status to Agili-C™ (CartiHeal, Ltd.), a proprietary biocompatible and biodegradable tapered-shape implant for the treatment of cartilage lesions in arthritic and non-arthritic joints that, when implanted into a pre-prepared osteochondral hole, acts as a 3-dimensional scaffold that potentially supports and promotes the regeneration of the articular cartilage and its underlying subchondral bone. Agili-C was FDA-approved in 2021 for treatment of knee-joint surface lesions with a treatable area of 1 to 7 cm^2 without severe osteoarthritis.[4]

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History

Date	Comments
10/01/17	New policy (7.01.48), approved September 12, 2017, effective January 5, 2018. This policy was previously archived and is now reinstated. Autologous chondrocyte implantation may be considered medically necessary when criteria are met, considered investigational when criteria not met. *This policy varies slightly from the BCBSA reference policy.
03/01/18	Annual Review (7.01.48), approved February 27, 2018. Policy updated with literature review through November 2017, focusing on matrix-induced autologous chondrocyte implantation of the patella; references 12-18 added. Matrix-induced autologous chondrocyte implantation of the patella is considered medically necessary. Note added that this policy has been revised. Added link to revised policy that will become effective June 1, 2018.
06/01/18	Minor update (7.01.48); removed note and link to updated policy. Surgery Site of Service criteria becomes effective.
07/01/18	Interim Review(7.01.48) , approved June 22, 2018. Policy updated with literature review through February 2018. References 6, 8, 22, 27, and 30 added. Policy statements unchanged.
09/21/18	Minor update (7.01.48). Added Consideration of Age section.
05/01/19	Minor update (7.01.48), clarified Site of Service requirements.
07/01/19	Policy renumbered from 7.01.48 Autologous Chondrocyte Implantation for Focal Articular Cartilage Lesions and replaced with 7.01.569 Autologous Chondrocyte Implantation for Focal Articular Cartilage Lesions, approved June 4, 2019. Policy created with literature review through February 2019. Updated age to 15 years of age or older rather than 16. Other minor edits made for clarity only.
04/01/20	Interim Review, approved March 10, 2020. Updates to this policy are effective for dates of service on or after July 2, 2020, following provider notification. The site of service criteria and reference to policy 11.01.524 – Site of Service: Select Surgery Procedures, have been removed. Site of service will be included within the review for the primary procedure (knee arthroplasty, knee arthroscopy) using InterQual criteria and determine the appropriate site for this procedure, if medically necessary. Removed CPT codes 29870, 29877, 29879, 29880, 29881, 29882, and 29883. Removed HCPCS code S2112.
06/10/20	Interim Review, approved June 9, 2020, effective June 10, 2020. The site of service criteria and reference to policy 11.01.524 – Site of Service: Select Surgery Procedures, have been added back to the policy. Site of service will not be determined using InterQual criteria.

Date	Comments
07/01/20	Policy renumbered to 7.01.48 Autologous Chondrocyte Implantation for Focal Articular Cartilage Lesions and replaces 7.01.569 Autologous Chondrocyte Implantation for Focal Articular Cartilage Lesions approved June 2, 2020, effective July 1, 2020. Policy 7.01.48 replaces policy 7.01.569 which is deleted effective July 1, 2020. Policy updated with literature review through February 2020; references added. Policy statements unchanged.
08/01/20	Update to Related Policies. 7.01.570 is now 7.01.78.
07/01/21	Annual Review, approved June 1, 2021. Policy updated with literature review through February 23, 2021; references added. Policy statements unchanged.
05/01/22	Policy renumbered back to 7.01.569 from 7.01.48, approved April 12, 2022. Policy replaces with 7.01.48 Autologous Chondrocyte Implantation for Focal Articular Cartilage Lesions. No changes to policy criteria.
07/01/22	Interim Review, approved June 27, 2022. Policy updated with literature review through February 16, 2022; references added. Policy statements unchanged except for minor clarifications.
07/01/23	Annual Review, approved June 12, 2023. Policy updated with literature review through February 16, 2023; references added. Policy statements unchanged. Changed the wording from "patient" to "individual" throughout the policy for standardization.
08/01/23	Policy renumbered, approved July 11, 2023, from 7.01.569 to 7.01.48 Autologous Chondrocyte Implantation for Focal Articular Cartilage Lesions. Removed policy statements on conservative care failure and BMI ≤ 35.
09/08/23	Correction made to Documentation Requirements section to remove BMI and need for MRI results as this was inadvertently left on when the policy criteria was updated in August 2023.
07/01/24	Annual Review, approved June 10, 2024. Policy updated with literature review through February 20, 2024; references added. Policy statements unchanged.

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). ©2024 Premera All Rights Reserved.

Scope: Medical policies are systematically developed guidelines that serve as a resource for Company staff when determining coverage for specific medical procedures, drugs or devices. Coverage for medical services is subject to the limits and conditions of the member benefit plan. Members and their providers should consult the member benefit booklet or contact a customer service representative to determine whether there are any benefit limitations applicable to this service or supply. This medical policy does not apply to Medicare Advantage.