POLICY: Hyaluronic Acid Derivatives Intraarticular Utilization Management Medical Policy

- Durolane® (sodium hyaluronate injection – Bioventus)
- Gel-One® (sodium hyaluronate injection – Seikagaku Corporation/Zimmer)
- Gelsyn-3™ (sodium hyaluronate injection – IBSA)
- GenVisc® 850 (sodium hyaluronate injection – OrthogenRx)
- Hyalgan® (sodium hyaluronate injection – Fidia Pharma)
- Hymovis® (high molecular weight viscoelastic hyaluronan injection – Fidia Pharma USA)
- Monovisc™ (high molecular weight hyaluronan injection – DePuy Mitek/Johnson & Johnson)
- Orthovisc® (high molecular weight hyaluronan injection – DePuy Mitek/Johnson & Johnson)
- Supartz FX™ (sodium hyaluronate injection – Smith & Nephew)
- Sodium hyaluronate 1% injection – Teva
- SynoJoynt™ (sodium hyaluronate injection – Arthrex)
- Triluron™ (sodium hyaluronate injection – Fidia Pharma)
- TriVisc™ (sodium hyaluronate injection – OrthogenRx)
- Visco-3™ (sodium hyaluronate injection – Seikagaku Corporation/Bioventus)

EFFECTIVE DATE: 1/1/2022
LAST REVIEW DATE: 09/16/2024

COVERAGE CRITERIA FOR: All Aspirus Medicare Plans

OVERVIEW

Hyaluronic acid derivatives are indicated for the treatment of **pain related to knee osteoarthritis** in patients who have failed to respond adequately to conservative nonpharmacologic therapy and to simple analgesics (e.g., acetaminophen).[1-16] The use of intraarticular injections are to restore the normal properties (viscosity and elasticity) of the synovial fluid. Gel-One, Hyalgan, Supartz FX, Synvisc/Synvisc-One, Triluron, and Visco-3 are derived from rooster or chicken combs. The remaining products are derived from non-avian sources and may be useful for patients with allergies to eggs or poultry products. GenVisc 850 has data to support similarity to Supartz FX.[9] All of the products given as a series of five injections (GenVisc 850, Hyalgan, and Supartz FX) have a corresponding product that is equivalent to three injections (TriVisc, Triluron, and Visco-3, respectively). Although retreatment data are limited, all of these products have data concerning efficacy and/or safety of repeat courses. In many cases, at least 6 months was required or a minimum of 6 months had elapsed prior to injection of a repeat course.

Guidelines

Guidelines for the medical management of osteoarthritis of the hand, hip, and knee are available from the American College of Rheumatology (2019).[17] Multiple non-pharmacological modalities are recommended for knee osteoarthritis, including exercise, self-management programs, weight loss, Tai Chi, and use of assistive devices (i.e., bracing or a cane). Pharmacologic therapy for knee osteoarthritis consists of acetaminophen, oral and topical non-steroidal anti-inflammatory drugs (NSAIDs), tramadol, intraarticular corticosteroid injections, duloxetine, and topical capsaicin. There is limited evidence establishing a benefit of hyaluronic acid intraarticular injections, which contributes to the conditional recommendation against use in knee osteoarthritis. However, when other alternatives have been exhausted or have failed to provide satisfactory benefit, use of intraarticular hyaluronic acid injections may be viewed more favorably than offering no intervention. In the guidelines, no distinction is made between the available intraarticular hyaluronic acid products or between products with various molecular weights.

The Osteoarthritis Research Society International also has guidelines for knee osteoarthritis (2019).[19] These guidelines note that use of intraarticular hyaluronic acid injections are conditionally recommended for patients with knee osteoarthritis. The guidelines comment on the long-term treatment effect with intraarticular hyaluronic acid injections which is associated with symptom improvement beyond 12 weeks and a more favorable safety profile than intraarticular corticosteroid injections.

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POLICY STATEMENT

Prior authorization is recommended for medical benefit coverage of hyaluronic acid derivatives indicated for knee osteoarthritis. Approval is recommended for those who meet the Criteria and Dosing for the listed indication. Extended approvals are allowed if the patient continues to meet the Criteria and Dosing. Previous therapy is required to be verified by a clinician in the Coverage Review Department when noted in the criteria as **[verification of therapies required].** All approvals for initial therapy are provided for the number of injections noted below.

This policy incorporates Medicare coverage guidance as set forth in National Coverage Determinations (NCDs) and Local Coverage Determinations (LCDs), as well as in companion policy articles and other guidance applicable to the relevant service areas. These documents are cited in the References section of this policy. In some cases, this guidance includes specific

lists of HCPCS and ICD-10 codes to help inform the coverage determination process. The Articles that include specific lists for billing and coding purposes will be included in the Reference section of this policy. However, to the extent that this policy cites such lists of HCPCS and ICD-10 codes, they should be used for reference purposes only. The presence of a specific HCPCS or ICD-10 code in a chart or companion article to an LCD is not by itself sufficient to approve coverage. Similarly, the absence of such a code does not necessarily mean that the applicable condition or diagnosis is excluded from coverage.

Note: Conditions for coverage outlined in this Medicare Advantage Medical Policy may be less restrictive than those found in applicable National Coverage Determinations, Local Coverage Determinations and/or Local Coverage Articles. Examples of situations where this clinical policy may be less restrictive include, but are not limited to, coverage of additional indications supported by CMS-approved compendia and the exclusion from this policy of additional coverage criteria requirements outlined in applicable National Coverage Determinations, Local Coverage Determinations and/or Local Coverage Articles.

Indications with a ^ below are also covered (and, if applicable, further detailed/referenced) in the corresponding Commercial Care Continuum (CC) Policy. Note: Additional criteria requirements for coverage of the same indication as outlined in the Commercial CC Policy and this Medicare Advantage CC Policy may NOT be the same.

Recommended Authorization Criteria

Coverage of hyaluronic acid derivatives is recommended for requests meeting both the preferred product step therapy requirements and indication requirements.

Preferred Product Step Therapy Requirements (New Starts Only)

Criteria. *The patient must meet the following criteria (A or B):*

A) For patients new to Durolane, Gel-One, Gelsyn-3, GenVisc 850, Hyalgan, Hymovis, Monovisc, Orthovisc, Supartz FX, Sodium hyaluronate injection, Triluron, TriVisc, Visco-3 therapy only, must have a trial of at least one course of Euflexxa. Synvisc, or Synvisc One prior to approval of Durolane, Gel-One, Gelsyn-3, GenVisc 850, Hyalgan, Hymovis, Monovisc, Orthovisc, Supartz FX, Sodium hyaluronate injection, Triluron, TriVisc, Visco-3. New starts to therapy defined as no use of Durolane, Gel-One, Gelsyn-3, GenVisc 850, Hyalgan, Hymovis, Monovisc, Orthovisc, Supartz FX, Sodium hyaluronate injection, Triluron, TriVisc, Visco-3 within the past 365 days for Medicare patients.

B) Patient has a contraindication or other clinical reason why Euflexxa, Synvisc, or Synvisc One cannot be tried before Durolane, Gel-One, Gelsyn-3, GenVisc 850, Hyalgan, Hymovis, Monovisc, Orthovisc, Supartz FX, Sodium hyaluronate injection, Triluron, TriVisc, Visco-3.

Note: Step therapy only required for indications FDA-Approved for both Durolane, Gel-One, Gelsyn-3, GenVisc 850, Hyalgan, Hymovis, Monovisc, Orthovisc, Supartz FX, Sodium hyaluronate injection, Triluron, TriVisc, or Visco-3 and the preferred product(s).

FDA-APPROVED INDICATIONS

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1. Osteoarthritis of the Knee. ^

Criteria. Approve one course of therapy per treated knee if the patient meets ONE of the following conditions (A or B):

A. Initial Therapy. *Approve an initial course if the patient meets the following criteria (i and ii)*:

i. Diagnosis of the knee to be treated is confirmed by radiologic evidence of knee osteoarthritis; AND
Note: Examples of radiographic evidence includes x-ray, magnetic resonance imaging (MRI), computed tomography (CT) scan, ultrasound.

ii. The patient has tried at least TWO of the following three modalities of therapy for osteoarthritis (a, b, c):

a. Non-pharmacologic therapy for knee osteoarthritis;

b. At least TWO of the following pharmacologic therapies [(1), (2), (3), (4)] **[verification of therapies required]**:

1) Oral or topical nonsteroidal anti-inflammatory drug(s) [NSAID(s)];
Note: Examples of oral NSAIDs include naproxen, ibuprofen, celecoxib. Examples of topical NSAIDs include diclofenac solution or diclofenac gel. Atrial of two or more NSAIDs (oral and/or topical) counts as one pharmacologic therapy.

2) Acetaminophen;

3) Tramadol (Ultram®/XR, generics);

4) Duloxetine (Cymbalta®, generics);

c. At least TWO injections of intraarticular corticosteroids to the affected knee; OR

B. Patient has Already Received One or More Courses of a Hyaluronic Acid Derivative in the Same Knee. *Approve one repeat course if the patient meets the following criteria (i and ii)*:

i. At least 6 months have elapsed since the last injection with any hyaluronic acid derivative; AND

ii. According to the prescriber, the patient had a response to the previous course of hyaluronic acid derivative therapy for osteoarthritis of the knee and now requires additional therapy for osteoarthritis symptoms.
Note: Examples of a response include reduced joint pain, tenderness, or morning stiffness, improved mobility.

Dosing. Approve the following dosing regimens:

A) Durolane, Gel-One, Monovisc: Approve one injection.

B) Hymovis: Approve up to two injections given 1 week apart.

C) Gelsyn-3, sodium hyaluronate 1% injection, SynoJoynt, Triluron, TriVisc, Visco-3: Approve up to three injections given 1 week apart.

D) Orthovisc: Approve up to 4 injections given 1 week apart.

E) GenVisc 850, Hyalgan, Supartz FX: Approve up to 5 injections given 1 week apart.

Note: Dose listed is for one knee. If two knees are being treated, then each knee requires a syringe or vial of product

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CONDITIONS NOT RECOMMENDED FOR APPROVAL

Coverage of hyaluronic acid derivatives is not recommended in the following situations:

1. **Osteoarthritis (OA) and Other Pathologic Conditions Involving Joints Other than the Knee** (e.g., hand, hip, ankle, shoulder OA, temporomandibular joint [TMJ], adhesive capsulitis of the shoulder, subacromial impingement). The prescribing information for these agents state in the precautions section that the safety and effectiveness of hyaluronic acid derivatives injections into joints other than the knee have not been established.[1-16] Due to the absence of evidence to support use of IA HA and potential for harm, the guidelines for the management of hand, hip, and knee OA by ACR (2012) do not recommend use of IA HA in patients with hand or hip OA.[17] AAOS has published guidelines that mention HA as an option for glenohumoral (shoulder) joint OA.20 The guidelines note that the strength of evidence for using HA to treat this joint is weak even though each outcome in the single study evaluated did result in statistically significant improvement in pain relief, range of motion, and quality of life for patients with shoulder pain. Small trials have also investigated IA HA in other joints, including ankle OA and hip OA.[23-38] More data are needed to determine if there is a role for IA HA for the treatment of OA involving other joints. A small trial (n = 70) found that IA HA did not result in increased benefit for adhesive capsulitis of the shoulder (also known as frozen shoulder) in patients who were already receiving PT.[39] Another small study (n = 159) did not show benefit of IA HA over corticosteroid or placebo injections in patients with subacromial impingement.[40]

2. **Pathologic Conditions of the Knee Other than Osteoarthritis (OA)** [e.g., chondromalacia patellae, osteochondritis dissecans, patellofemoral syndrome, post-anterior cruciate ligament {ACL} reconstruction]. HA products are indicated in knee OA.[1-16] Adequate, well-designed trials have not clearly established the use of IA HA in other conditions of the knee.[41-42]

3. Coverage is not recommended for circumstances not listed in the Recommended Authorization Criteria. Criteria will be updated as new published data are available.

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Type of Revision	Summary of Changes	Date
Policy created	New Medicare Advantage Medical Policy	07/11/2018
Select revision	Reviewed and revised original policy created 07/11/2018 in accordance with Local Coverage Article A52420.	08/28/2019

Policy revised	Completion of 2019 monthly monitoring process. Removed note indicating that Triluron and Sodium hyaluronate 1% are not referenced in LCA *A52420.*	10/31/19
Policy revision	Completion of 2019 monthly monitoring process in accordance with Local Coverage Determination L33394, Local Coverage Article A52420.	12/11/2019
Policy revision	Non-clinical update to policy to add the statement "This policy incorporates Medicare coverage guidance as set forth in National Coverage Determinations (NCDs) and Local Coverage Determinations (LCDs), as well as in companion policy articles and other guidance applicable to the relevant service areas. These documents are cited in the References section of this policy. In some cases, this guidance includes specific lists of HCPCS and ICD-10 codes to help inform the coverage determination process. The Articles that include specific lists for billing and coding purposes will be included in the Reference section of this policy. However, to the extent that this policy cites such lists of HCPCS and ICD-10 codes, they should be used for reference purposes only. The presence of a specific HCPCS or ICD-10 code in a chart or companion article to an LCD is not by itself sufficient to approve coverage. Similarly, the absence of such a code does not necessarily mean that the applicable condition or diagnosis is excluded from coverage."	1/30/2020
Policy revision	*Updated Overview section, added Guidelines section *Added the following note: "Conditions for coverage outlined in this Medicare Advantage Medical Policy may be less restrictive than those found in applicable National Coverage Determinations, Local Coverage Determinations and/or Local Coverage Articles. Examples of situations where this clinical policy may be less restrictive include, but are not limited to, coverage of additional indications supported by CMS-approved compendia and the exclusion from this policy of additional coverage criteria requirements outlined in applicable National Coverage Determinations, Local Coverage Determinations and/or Local Coverage Articles."	4/15/2020
Policy revision	**Osteoarthritis of the Knee**: Examples of radiographic evidence, non-steroidal anti-inflammatory drugs, and	09/18/2020

	response to therapy were moved to notes in the criteria (previously listed as examples within the criteria). For the criteria applying to patients previously treated who have responded to therapy, wording was updated to more generally allow this determination by the prescriber (criteria previously specified this was according to the prescribing physician).	
Policy revision	SynoJoynt was added to the policy. Criteria for dosing approves for up to three injections given 1 week apart.	08/09/2022
Policy review	No criteria changes	09/27/2023
Policy revision	Changed requirement of "At least one course of physical therapy for knee osteoarthritis" to "Non-pharmacologic therapy for knee osteoarthritis"	02/08/2024
Aspirus P&T Review	Policy reviewed and approved by Aspirus P&T committee. Annual review process	09/16/2024