

09-J1000-22

Original Effective Date: 06/15/00

Reviewed: 06/11/14

Revised: 04/01/21

Subject: Viscosupplementation, Hyaluronan Injections (e.g. Synvisc®)

THIS MEDICAL COVERAGE GUIDELINE IS NOT AN AUTHORIZATION, CERTIFICATION, EXPLANATION OF BENEFITS, OR A GUARANTEE OF PAYMENT, NOR DOES IT SUBSTITUTE FOR OR CONSTITUTE MEDICAL ADVICE. ALL MEDICAL DECISIONS ARE SOLELY THE RESPONSIBILITY OF THE PATIENT AND PHYSICIAN. BENEFITS ARE DETERMINED BY THE GROUP CONTRACT, MEMBER BENEFIT BOOKLET, AND/OR INDIVIDUAL SUBSCRIBER CERTIFICATE IN EFFECT AT THE TIME SERVICES WERE RENDERED. THIS MEDICAL COVERAGE GUIDELINE APPLIES TO ALL LINES OF BUSINESS UNLESS OTHERWISE NOTED IN THE PROGRAM EXCEPTIONS SECTION.

[Dosage and Administration](#)

[Position Statement](#)

[Billing/Coding](#)

[Reimbursement](#)

[Program Exceptions](#)

[Definitions](#)

[Related Guidelines](#)

[Other](#)

[References](#)

[Updates](#)

DESCRIPTION:

[Hyaluronan](#) (HA), also known as hyaluronate or hyaluronic acid, is a naturally occurring macromolecule that is a major component of synovial fluid and is thought to contribute to its viscoelastic properties. Chemical cross-linking of hyaluronan increases its molecular weight; cross-linked HA are referred to as hylans. In osteoarthritis, the overall length of HA chains present in cartilage and the HA concentration in the [synovial fluid](#) are decreased. Intra-articular injection of HA has been proposed as a means of restoring the normal viscoelasticity of the synovial fluid in individuals with osteoarthritis. This treatment has been referred to as [viscosupplementation](#).

Numerous preparations of intra-articular hyaluronan have been approved by the U.S. Food and Drug Administration (FDA) as an alternative to NSAID therapy in the treatment of osteoarthritis of the knee [Synvisc, Synvisc-One, Hyalgan, Hymovis, Supartz FX (previously Supartz), OrthoVisc, Gel-One, GenVisc 850, GelSyn-3 (previously Gel-Syn), Monovisc, Durolane, Euflexxa, Synjoynt, VISCO-3, and Triluron]. Synvisc-One contains the same material and total treatment volume as the 3-injection viscosupplement (Synvisc), providing the 6 mL of hylan G-F 20 in a single intraarticular injection.

POSITION STATEMENT:

Intra-articular hyaluronan injections are associated with clinically irrelevant benefit and an increased risk of adverse events; therefore, are considered **NOT medically necessary**.

DOSAGE/ADMINISTRATION:

THIS INFORMATION IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY AND SHOULD NOT BE USED AS A SOURCE FOR MAKING PRESCRIBING OR OTHER MEDICAL DETERMINATIONS. PROVIDERS SHOULD REFER TO THE MANUFACTURER'S FULL PRESCRIBING INFORMATION FOR DOSAGE GUIDELINES AND OTHER INFORMATION RELATED TO THIS MEDICATION BEFORE MAKING ANY CLINICAL DECISIONS REGARDING ITS USAGE.

Refer to manufacturer's prescribing information.

PRECAUTIONS:

Avian allergies: These products are extracted from chicken/rooster combs (except Euflexxa®). Use caution in individuals allergic to avian proteins, feathers, and egg products.

Immune response: Individuals having repeated exposure to Euflexxa® have the potential for an immune response; however, this has not been assessed in humans.

Inflamed knee joint: The safety and efficacy of Synvisc® in severely inflamed knee joints have not been established.

Inflammatory arthritis: Transient increases in inflammation in the injected knee following injections with sodium hyaluronate have been reported in some individuals with inflammatory arthritis (e.g. rheumatoid or gouty arthritis).

Intraarticular administration: Administer by intraarticular injection only. Avoid intravascular, extra-articular, synovial tissue and capsule administration; rare systemic adverse reactions have been reported. Safety and efficacy of intraarticular administration in locations other than the knee and for conditions other than OA have not been established.

Joint effusion: Remove joint effusion before using hyaluronic acid derivatives.

Latex sensitivity: Parts of Euflexxa® syringe contain natural rubber latex, which may cause allergic reactions. Use caution in individuals with a possible history of latex sensitivity.

Lymphatic or venous stasis: Use Synvisc® with caution when evidence of lymphatic or venous stasis exists in treatment leg.

Quaternary ammonium salts: Avoid concomitant use of disinfectants for skin preparation containing quaternary ammonium salts, such as benzalkonium chloride; precipitation of drug may occur.

Treatment cycle: The efficacy of a single treatment cycle of less than the recommended number of injections has not been established; 3 injections of Euflexxa®, 3 injections of Hyalgan®, 3 injections of Orthovisc®, 3 injections of Supartz®, 3 injections of Synvisc®. Safety and efficacy of repeat cycles have not been established.

Hypersensitivity reactions: Anaphylactoid reactions have occurred with Supartz®. The incidents resolved with favorable outcomes upon discontinuation of therapy. Five allergic reactions were reported in the Supartz® group. All 5 reactions were classified as mild to moderate. These were: hay fever, reaction on face and neck, cutaneous reaction on forearms and knees, and an undefined mild allergic reaction. No anaphylactic reactions were observed.

Children: Safety and efficacy have not been established.

BILLING/CODING INFORMATION:

HCPCS Coding:

J7318	Hyaluronan or derivative, durolane, for intra-articular injection, 1 mg
J7320	Hyaluronan or derivative, genvisc 850, for intra-articular injection, 1 mg
J7321	Hyaluronan or derivative, Hyalgan, Supartz or Visco-3, for intra-articular injection, per dose
J7322	Hyaluronan or derivative, hymovis, for intra-articular injection, 1 mg
J7323	Hyaluronan or derivative, Euflexxa, for intra-articular injection, per dose
J7324	Hyaluronan or derivative, Orthovisc, for intra-articular injection, per dose
J7325	Hyaluronan or derivative, Synvisc or Synvisc-One, for intra-articular injection, 1 mg
J7326	Hyaluronan or derivative, Gel-One, for intra-articular injection, per dose
J7327	Hyaluronan or derivative, Monovisc, for intra-articular injection, per dose
J7328	Hyaluronan or derivative, gel-syn, for intra-articular injection, 0.1 mg [for GelSyn-3]
J7329	Hyaluronan or derivative, trivisc, for intra-articular injection, 1 mg
J7331	Hyaluronan or derivative, synojoynt, for intra-articular injection, 1 mg
J7332	Hyaluronan or derivative, triluron, for intra-articular injection, 1 mg

PROGRAM EXCEPTIONS:

Federal Employee Program (FEP): Follow FEP guidelines.

State Account Organization (SAO): Follow SAO guidelines.

Medicare Advantage Products:

No National Coverage Determination (NCD) was found at the time of the last guideline revised date.

The following Local Coverage Determination (LCD) located at www.fcso.com was reviewed on the last guideline revised date:

- Viscosupplementation Therapy for Knee, (L33767)

DEFINITIONS:

Arthrocentesis: puncture and aspiration of a joint.

Chondromalacia: the progressive erosion of cartilage, common in the knee joint where it is known as chondromalacia patella. Symptoms of chondromalacia in the knee joint include knee pain with hill climbing or stair climbing.

Elastoviscosity: the quality or characteristics of being thick and elastic.

Hyaluronan: hyaluronic acid, or hyaluronate, a naturally occurring macromolecule that is a major component of synovial fluid, thought to contribute to its elastoviscosity.

Osteoarthritis: non-inflammatory degenerative joint disease characterized by degeneration of the articular cartilage, hypertrophy of bone at the margins, and changes in the synovial membrane resulting from the loss of elastoviscosity in the synovial fluid and accompanied by pain and stiffness.

Synovial fluid: a thick transparent lubricating fluid, resembling the white of an egg, secreted by the synovial membrane, and contained in joint cavities, bursae, and tendon sheaths.

Viscosupplementation: intra-articular injection of hyaluronan into a joint as a means of restoring the normal elastoviscosity of the synovial fluid in individuals with osteoarthritis.

RELATED GUIDELINES:

None applicable.

OTHER:

None applicable.

REFERENCES:

1. American Academy of Family Physicians. Patient Information for osteoarthritis of the knee (created 09/00; updated 11/06).
2. American Academy of Orthopedic Surgeons/American Association of Orthopedic Surgeons. Osteoarthritis of the Hip. A Compendium of Evidence-based Information and Resources. (10/03) Accessed 05/19/08.
3. American Academy of Orthopaedic Surgeons, TREATMENT OF OSTEOARTHRITIS OF THE KNEE EVIDENCE-BASED GUIDELINE, 2ND EDITION, Adopted by the American Academy of Orthopaedic Surgeons Board of Directors, May 18, 2013. Can be found at: http://www.aaos.org/research/guidelines/TreatmentofOsteoarthritisoftheKneeGuideline.pdf?bcsi_scan_d7506437d2fab8fa=0&bcsi_scan_filename=TreatmentofOsteoarthritisoftheKneeGuideline.pdf
4. American College of Rheumatology 2012. Recommendations for the Use of Nonpharmacologic and Pharmacologic Therapies in Osteoarthritis of the Hand, Hip, and Knee. MARC C. HOCHBERG, et. al. Arthritis Care and Research, Vol 64, No. 4, April 2012, pp 465-474
5. Anne W.S. Rutjes, PhD; Peter Juni, MD; Bruno R. da Costa, MSc; Sven Trelle, MC; Eveline Nuesch, PhD; and Stephan Reichenbach, MD, MSc. Viscosupplementation for Osteoarthritis of the Knee: A Systematic Review and Meta-analysis. Ann Intern Med. 2012;157(3):180-191. 7 August 2012.
6. Bellamy N, Campbell J, Robinson V, Gee T, Bourne R, Wells G. Viscosupplementation for the treatment of osteoarthritis of the knee. Cochrane Database of Systematic Reviews 2006, Issue 2. Art. No: CD005321. DOI: 10.1002/14651858.CD005321.pub2.
7. Blue Cross Blue Shield Association. Medical Policy 2.02.31 Intra-articular Hyaluronan Injections for Osteoarthritis, September 2014
8. Clinical Pharmacology. Copyright© 2012 Elsevier. Accessed 05/14/13.
9. ClinicalTrials.gov. Identifier NCT00479687 and NCT003300135.
10. DRUGDEX®. Accessed 05/14/13.
11. Durolane (hyaluronic acid, stabilized single injection) [package insert]. Bioventus LLC.; Durham, NC: March 2018.
12. ECRI Hotline Response: "Viscosupplementation for Joint Disorders of the Hip" (04/09/07; updated 05/21/08).

13. ECRI's Health Technology Forecast™, "Hyaluronan-based therapy for osteoarthritis of the hip", (01/29/04).
14. ESRI Windows on Medical Technology: "Hyaluronan-based Therapy for Osteoarthritis of the Knee", (09/01).
15. Euflexxa® Prescribing Information. Revised 9/2011.
16. Facts & Comparisons® E Answers. Accessed 05/14/13.
17. Gel-One® Prescribing Information. Revised May 20, 2011.
18. GelSyn-3® Prescribing Information. Revised February 2016.
19. HAYES Directory of New Medical Technologies' Status evaluation. "Sodium Hyaluronate for Osteoarthritis", (11/97).
20. HAYES Medical Technology Directory: "Sodium Hyaluronate for Osteoarthritis", (03/04; updated 05/05/08).
21. Hyalgan® Prescribing Information. Revised June 2011.
22. Hymovis® Prescribing Information. Revised October 2015.
23. Orthovisc® Prescribing Information. Revised 06/05.
24. Ringdahl E; Pandit S. Treat of Knee Osteoarthritis. Am Fam Physician. 2011 Jun 1;83(11):1287-1292.
25. Samson DS, Grant MD, Ratko TA et al. Treatment of primary and secondary osteoarthritis of the knee. AHRQ Publication No. 07-E012 09/07.
26. Supartz FX® Prescribing Information. Revised April 2015.
27. Synvisc® Prescribing Information. Revised March 11, 2010.
28. Synvisc-One® Prescribing Information. Revised January 5, 2010.
29. Viscosupplementation for knee OA. Second Look-Clinical News and Views. American Academy of Orthopaedic Surgeons. March 2014, Volume 8, Number 3.
30. Wen, Dennis Y, MD. Intra-articular Hyaluronic Acid Injections for Knee Osteoarthritis. American Family Physician. 08/01/00.

COMMITTEE APPROVAL:

This Medical Coverage Guideline (MCG) was approved by the Florida Blue Pharmacy Policy Committee on 06/11/14.

GUIDELINE UPDATE INFORMATION:

06/15/00	Medical Coverage Guideline developed.
06/28/01	Reimbursement section revised to include Supartz™ information.
01/01/02	HCPCS update (J7315 deleted, J7316 added).
08/15/02	HCPCS update (Q3030 added).
11/15/02	Reimbursement information for Hyalgan corrected.
01/01/03	HCPCS coding update (J7316 and Q3030 deleted; J7317 added).
09/15/04	Scheduled review; re-numbered guideline; added information for OrthoVisc®; added limitation for repeat treatments.
10/15/05	Scheduled review; revised MCG title; added information regarding Nuflexxa; no change in coverage statement.
03/15/06	Revisions consisting of changes in the reimbursement limitations; addition of definition for

	chondromalacia.
10/15/06	Scheduled review; no change in coverage statement. Added name change for Nuflexxa to Euflexxa and removed non-coverage statement for Nuflexxa.
01/01/07	Annual HCPCS coding update (added J3473, J7319, Q4083, Q4084, Q4085, and Q4086; deleted J7317 and J7320.)
04/01/07	HCPCS 2nd quarter coding update; deleted J7319.
07/01/07	Revised to add J3471 and J3472.
08/15/07	Scheduled review; reformatted guideline; updated references.
01/01/08	Annual HCPCS coding update: added J7321, J7322, J7323, and J7324; removed Q4083, Q4084, Q4085, and Q4086.
11/15/08	Scheduled review; no change in position statement; references updated.
05/15/09	Revision of Position Statement and Reimbursement Information regarding coverage of Synvisc-One; references updated.
01/01/10	Annual HCPCS coding update: added J7325; removed a related guideline link and code J7322.
03/15/10	Changed policy number from a medical to a pharmacy sequence. Revision of Position Statement to include information regarding Euflexxa for start-up therapy; Coding and Reimbursement sections are updated regarding hyaluronan injections requiring only one injection.
11/15/10	Revision to guideline; consisting of removing HCPCS codes J3471-J3473 and clarifying limitations.
07/15/11	Review and revision to guideline; consisting of adding dosage and administration and precautions section and updating the references.
11/15/11	Revision to guideline; consisting of adding Synvisc® and Synvisc-One® to preferred status and clarify reimbursement information.
01/01/12	Revision to guideline; consisting of updating coding.
07/15/12	Review and revision to guideline; consisting of updating position statement, exceptions and references.
07/15/13	Review and revision to guideline; consisting of reformatting position statement and updating program exceptions and references.
07/15/14	Review and revision to guideline; consisting of addition of criteria for coverage to position statement.
04/01/15	Revision to guideline; consisting of changing position statement.
10/01/15	Revision consisting of update to Program Exceptions section.
11/01/15	Revision: ICD-9 Codes deleted.
01/01/16	Annual HCPCS coding update: added codes J7328 and Q9980.
04/01/16	Revision to guideline consisting of adding code C9471 and J3490
11/15/16	Revision to guidelines consisting of updating brand names with the currently available products.
01/01/17	Revision: added HCPCS codes J7320 and J7322.
01/01/18	Annual HCPCS coding update: revision to description of HCPCS code J7321.
04/01/18	Addition of HCPCS code C9465 and J3490 for Durolane.
01/01/19	Revision: HCPCS code updates. Added J7318 and J7329, and removed C9465 and J3490.
10/01/19	Revision: Added HCPCS J7331 and J7332.
07/01/20	Revision: Added HCPCS code J7333 and revised description for code J7321.
07/17/20	Revision: Updated Billing and Coding section.

04/01/21

Revision: Deleted HCPCS code J7333 and revised description for code J7321.