POLICY STATEMENT:

I. Based upon our criteria and assessment of the peer-reviewed literature, viscosupplementation with an FDA approved preparation (e.g., Synvisc®, Hyalgan®, SupartztM, EuflexxaTM [formerly Nuflexxa], Gel-SynTM, or Orthovisc®) for osteoarthritis of the knee is considered medically appropriate for patients meeting all of the following criteria:
   A. patient has failed to respond to conservative, non-pharmacologic therapy (e.g., physical therapy, exercise or activity modification);
   B. patient has failed to respond to simple analgesics, if appropriate (e.g. acetaminophen);
   C. patient is intolerant of or has contraindications to non-steroidal anti-inflammatory drugs (NSAIDs), is unable to be maintained on NSAIDs, and/or has failed to respond to NSAIDs;
   D. patient has failed to respond to, has contraindications to, or refuses steroid injections; and
   E. pain duration must have been for at least 6 months.

II. Based upon our criteria and assessment of the peer-reviewed literature, repeat treatment course(s) of intra-articular hyaluronan injections (e.g., Synvisc®, Hyalgan®, SupartztM, EuflexxaTM or Orthovisc®) are considered medically appropriate for patients with continued pain in the knee(s) due to osteoarthritis if relief of pain (demonstrated by reduction in the use or need for analgesics) was obtained from the previous treatment course of intra-articular hyaluronan injections, and at least 6 months have elapsed since the previous course of treatment.

III. Based upon our criteria and assessment of the peer-reviewed literature, the use of intra-articular hyaluronan injections into joints other than the knee have not been medically proven to be effective and are considered investigational.

IV. Based upon our criteria and assessment of the peer-reviewed literature, an FDA approved single-injection treatment intra-articular hyaluronan or derivative (e.g. Synvivc-OneTM, Gel-One®, MonoviscTM) for osteoarthritis of the knee is considered a medically appropriate treatment option to the multiple-injection course of treatment.

Refer to Corporate Medical Policy #11.01.03 regarding Experimental or Investigational Services.

POLICY GUIDELINES:

I. Synvisc®, Hyalgan®, SupartztM, OrthoVisc®, and EuflexxaTM (formerly Nuflexxa) are approved when used according to FDA-approved labeling for osteoarthritis of the knee only.

II. Synvisc®, Synvivc-One®, and Euflexxa® are considered preferred products for viscosupplementation. Please refer to the FLRx policy, Medical Preferred Drug Process.

III. 5 weekly injections for Hyalgan®, SupartztM, or GenVisc® 850, OR 3 weekly injections for EuflexxaTM or Synvisc® OR 3 to 4 weekly injections for OrthoVisc®, OR 2 weekly injections of Hymovisc®, per treatment course, may be allowed.

IV. The Federal Employee Health Benefit Program (FEHBP/FEP) requires that procedures, devices or laboratory tests approved by the U.S. Food and Drug Administration (FDA) may not be considered investigational and thus these procedures, devices or laboratory tests may be assessed only on the basis of their medical necessity.

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Viscosupplementation is the intra-articular injection of hyaluronan, also known as hyaluronate or hyaluronic acid, as a treatment for pain in osteoarthritis of the knee in patients who have failed to respond adequately to conservative, non-pharmacological therapy and simple analgesics. The proposed purpose of viscosupplementation is to restore normal viscoelasticity in the synovial fluid. It may reduce pain for up to 6 to 12 months. There are several FDA approved hyaluronan preparations. The various preparations differ in their molecular weights and are derived from either bacterial cells or avian sources.

Rationale:

Several 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®, Hylgan®, Supartz™, OrthoVisc®, and Euflexxa™ (formerly Nuflexxa). Intra-articular hyaluronic acid “is indicated for the treatment of pain in osteoarthritis of the knee in patients who have failed to respond adequately to conservative nonpharmacologic therapy, and to simple analgesics, e.g. acetaminophen.” The product inserts indicate that Synvisc® and Euflexxa™ should be injected intra-articularly into the knee joint once per week for a total of 3 injections over a 2 to 3 week period. Gel-Syn™ received FDA approval in May 2014 and consists of 3 weekly injections. In contrast, 5 weekly injections are recommended for the Hylgan® and Supartz™ products, and 3 to 4 weekly injections are recommended for OrthoVisc®. The FDA approved Synvisc One on February 26, 2009. Gel-One®, which received FDA approval in March of 2011, is also designed as a single injection treatment, similar to Synvisc One. Monovisc™, FDA approved in February 2014, is a single injection of hyaluronic acid. GenVisc 850 received FDA approval in September 2015. GenVisc 850 is administered by intra-articular injection. A treatment cycle consists of five injections given at weekly intervals. Hymovisc® also received FDA PMA approval in 2015. The intra-articular injections are administered 2 times, in two injections, 1 week apart. The FDA has not approved intra-articular hyaluronan for joints other than the knee.

Evidence from randomized controlled trials is sufficient to conclude that viscosupplementation improves health outcomes, providing pain relief and functional improvement in patients who have failed conventional conservative management or who cannot tolerate alternative medical treatment. Evidence of the safety and effectiveness of repeat treatment cycles is limited, however the FDA has removed the precaution regarding repeat cycles from the product labels for Synvisc and Hylgan. A literature review of safety and efficacy for multiple courses of viscosupplementation indicates no loss in efficacy for repeat courses.

In September 2007 the BlueCross BlueShield Technology Evaluation Center (TEC) published a technology assessment for the Agency for Healthcare Research and Quality (AHRQ) on the treatment of primary and secondary osteoarthritis of the knee. The report concluded that results from 42 trials (5,843 patients) generally show positive effects of viscosupplementation on pain and function scores compared to placebo for patients with primary osteoarthritis of the knee. However, clinical evidence includes considerable uncertainty due to variable trial quality, potential publication bias, and unclear clinical significance of the changes reported. Trials of hylan G-F-20 generally reported better results than other trials. There was no evidence for differential effects according to subgroups defined by age, sex, primary/disease, body mass index (BMI)/weight, or disease severity. Minor adverse events accompanying intra-articular injections are common, but the relative risk accompanying hyaluronan injections over placebo appears to be small. The risk of local adverse events appears to increase with prior courses of treatment. Pseudoseptic reactions associated with hyaluronans appear relatively uncommon but can be severe.

The available data are not sufficient to determine if hyaluronan injections are effective in joints other than the knee.

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**Proprietary Information of Excellus Health Plan, Inc.**
**SUBJECT:** VISCOSUPPLEMENTATION OF THE KNEE FOR OSTEOARTHRITIS  
**POLICY NUMBER:** 7.01.02  
**CATEGORY:** Vaccines/Biologics  
**EFFECTIVE DATE:** 11/19/99  
**REVISED DATE:** 10/19/00, 10/18/01, 10/16/02, 10/15/03, 07/15/04, 05/18/05, 04/20/06, 03/15/07, 04/17/08, 03/19/09, 01/21/10, 12/16/10, 12/15/11, 02/21/13, 02/20/14, 02/19/15, 11/19/15, 11/17/16  
**PAGE:** 3 OF: 8

**CODES:**  
Number | Description  
--- | ---  
**Eligibility for reimbursement is based upon the benefits set forth in the member’s subscriber contract.**  
**CODES MAY NOT BE COVERED UNDER ALL CIRCUMSTANCES. PLEASE READ THE POLICY AND GUIDELINES STATEMENTS CAREFULLY.**  
Codes may not be all inclusive as the AMA and CMS code updates may occur more frequently than policy updates.  
**CPT:** No specific codes; however 20610 or 20611 may be billed along with the J code.  

**HCPCS:**  
C9471 | Hyaluronan or derivative, Hymovis, for intra-articular injection, 1 mg (to be deleted 1/1/17)  
J7320 | Hyaluronan or derivative, GenVisc 850, for intra-articular injection, 1 mg (effective 1/1/17)  
J7321 | Hyaluronan or derivative, Hylalgan or Supartz, for intra-articular injection, per dose  
J7322 | Hyaluronan or derivative, Hymovis, for intra-articular injection, 1 mg (effective 1/1/17)  
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, 0.1mg  

**ICD9:**  
715.16 | Osteoarthrosis, localized, primary, lower leg  
715.26 | Osteoarthrosis, localized, secondary, lower leg  
715.36 | Osteoarthrosis, localized, not specified whether primary or secondary, lower leg  
715.96 | Osteoarthrosis, unspecified whether generalized or localized, lower leg  

**ICD10:**  
M17.0-M17.9 | Osteoarthrosis of knee (code range)  

**REFERENCES:**  
**SUBJECT: VISCOSUPPLEMENTATION OF THE KNEE FOR OSTEOARTHRITIS**

**POLICY NUMBER: 7.01.02**

**CATEGORY: Vaccines/Biologics**

**EFFECTIVE DATE: 11/19/99**

**REVISED DATE: 10/19/00, 10/18/01, 10/16/02, 10/15/03, 07/15/04, 05/18/05, 04/20/06, 03/15/07, 04/17/08, 03/19/09, 01/21/10, 12/16/10, 12/15/11, 02/21/13, 02/20/14, 02/19/15, 11/19/15, 11/17/16**

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* key article

KEY WORDS:
Euflexxa, Gel-One, Hyalgan, Hyaluronan, intra-articular injection, Nuflexxa, OrthoVisc, Supartz, Synvisc, Synvisc-One.

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**CMS COVERAGE FOR MEDICARE PRODUCT MEMBERS**

There is currently a Local Coverage Determination (LCD) for drugs and biologics and a subsequent Article that addresses hyaluronans. Please refer to the following LCD websites for Medicare Members:

**LCD:**

**Article:**
https://www.cms.gov/medicare-coverage-database/details/article-details.aspx?articleId=52420&ver=20&Cntrctr=275&name=National+Government+Services%2c+Inc.++(06302 %2c+MAC+-+Part+B)&DocType=Active%7cFuture%7cAllProposed&LCDId=26375&ContrId=275&ContrVer=1&Cntrctr Selected=275*1&LCntrctr=275*1&bc=AgACAAIAAAAAA%3d%3d&