



# Lumetra

Brighter insights. Better healthcare.

One Sansome Street, Suite 600  
San Francisco, CA 94104-4448

415.677.2000 Phone  
415.677.2195 Fax  
www.lumetra.com

**DATE OF REVIEW:** July 8, 2009

**IRO CASE #:**

**DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE**

Articular knee joint injection – right knee

**A DESCRIPTION OF THE QUALIFICATIONS FOR EACH PHYSICIAN OR OTHER HEALTH CARE PROVIDER WHO REVIEWED THE DECISION**

Certified by the American Board of Anesthesiology-General, Pain Medicine-Subspecialty

**REVIEW OUTCOME**

Upon independent review the reviewer finds that the previous adverse determination should be:

- Upheld (Agree)
- Overturned (Disagree)
- Partially Overturned (Agree in part/Disagree in part)

Injury date	Claim Number	Review Type	Begin Date	End Date	ICD-9/ DSMV	HCPCS/ NDC	Service Units	Upheld/ Overturned
Xx/xx/xx		Prospective		06/30/2009	337.20	73500	1	Upheld
Xx/xx/xx		Prospective		06/30/2009	337.20	77003	1	Upheld
xx/xx/xx		Prospective		06/30/2009	337.20	20610	1	Upheld

**PATIENT CLINICAL HISTORY:**

According to the information provided, this female sustained a work-related injury to her right knee in xx/xxxx. Since the injury she has had persistent right knee pain, ranging from 3-9 on a scale of 0-10, despite physical therapy, Tens unit, and medications. The pain is present throughout the day and interferes with her sleep.

The Reviewer noted the documentation that on physical examination the patient has full range of motion of the right knee, but does have some allodynia and hyperpathia around the right knee with some associated tenderness over the surrounding area. An MRI was obtained in January 2009, which revealed some ill-defined edema in the distal femur,

while the cartilage appeared to be preserved, and the retinaculum intact.

A diagnostic right-sided lumbar sympathetic block was performed on 4/29/09, which initially gave the patient 100% pain relief, but only for one hour with a gradual return of her pain to baseline and no prolonged benefit. There is now a request to perform a diagnostic intra-articular knee joint injection.

## **ANALYSIS AND EXPLANATION OF THE DECISION INCLUDING CLINICAL BASIS, FINDINGS AND CONCLUSIONS USED TO SUPPORT THE DECISION**

The Reviewer considered the following ODG criteria:

ODG guidelines: Corticosteroid injections

**Recommended for short-term use only.** Intra-articular corticosteroid injection results in clinically and statistically significant reduction in osteoarthritic knee pain 1 week after injection. The beneficial effect could last for 3 to 4 weeks, but is unlikely to continue beyond that. Evidence supports short-term (up to two weeks) improvement in symptoms of osteoarthritis of the knee after intra-articular corticosteroid injection. The number of injections should be limited to three.

([Leopold, 2003](#)) ([Arroll-BMJ, 2004](#)) ([Godwin, 2004](#)) The short-term benefit of intra-articular (IA) corticosteroids in treatment of knee osteoarthritis is well established, and few side effects have been reported. Longer-term benefits have not been confirmed. Comparisons of IA corticosteroids showed triamcinolone hexacetonide was superior to betamethasone for number of patients reporting pain reduction up to four weeks post injection. The response to hyaluronan/hylan products appears more durable, compared to corticosteroids. ([Bellamy-Cochrane, 2005](#)) ([Bellamy, 2006](#)) In a randomized controlled trial comparing a new reciprocating procedure device (RPD) to the traditional syringe for injection of intraarticular corticosteroid, the RPD significantly reduced patient pain and procedure time. ([Bankhurst, 2007](#)) Intra-articular injections of hyaluronate are associated with delayed onset of analgesia but a prolonged duration of action vs injections of corticosteroids. ([Zhang, 2008](#)) Intra-articular corticosteroid injections help to relieve pain and reduce swelling in osteoarthritis of the knee (level of evidence, A). Intra-articular injections typically yield improvement within 24 hours that lasts 4 to 8 weeks. Repeated injections to the knee may not accelerate disease progression for osteoarthritis. ([Stephens, 2008](#))

The Reviewer noted that the documentation provided lacks both objective and subjective evidence that the patient has osteoarthritis of the right knee, which is an indication for the requested procedure. The patient underwent a diagnostic right lumbar sympathetic block in April 2009, which initially provided 100% pain relief for the first hour. According to the Reviewer, the initial 100% pain relief for the lumbar sympathetic block indicates that this patient's pain pathology is 100% sympathetically (CRPS) mediated, and this pain will not respond favorably to an intra-articular knee joint injection. Although the one hour of complete relief is less than one would expect (and patient's recollections can sometimes interfere with the collection of accurate data), one has to assume that this was a successful diagnostic injection and that the patient's right knee pain is 100% sympathetically mediated.

Based on the clinical information submitted for this review, and using evidence-based, peer-reviewed guidelines referenced above, in the Reviewer's opinion this request for an

articular knee joint injection-right knee is not certified.

**A DESCRIPTION AND THE SOURCE OF THE SCREENING CRITERIA  
OR OTHER CLINICAL BASIS USED TO MAKE THE DECISION:**

- ACOEM- AMERICAN COLLEGE OF OCCUPATIONAL & ENVIRONMENTAL MEDICINE UM KNOWLEDGEBASE
- AHCPR- AGENCY FOR HEALTHCARE RESEARCH & QUALITY GUIDELINES
- DWC- DIVISION OF WORKERS COMPENSATION POLICIES OR GUIDELINES
- EUROPEAN GUIDELINES FOR MANAGEMENT OF CHRONIC LOW BACK PAIN
- INTERQUAL CRITERIA
- MEDICAL JUDGEMENT, CLINICAL EXPERIENCE AND EXPERTISE IN ACCORDANCE WITH ACCEPTED MEDICAL STANDARDS
- MERCY CENTER CONSENSUS CONFERENCE GUIDELINES
- MILLIMAN CARE GUIDELINES
- ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES
- PRESSLEY REED, THE MEDICAL DISABILITY ADVISOR
- TEXAS GUIDELINES FOR CHIROPRACTIC QUALITY ASSURANCE & PRACTICE PARAMETERS
- TEXAS TACADA GUIDELINES
- TMF SCREENING CRITERIA MANUAL
- PEER REVIEWED NATIONALLY ACCEPTED MEDICAL LITERATURE (PROVIDE A DESCRIPTION)
- OTHER EVIDENCE BASED, SCIENTIFICALLY VALID, OUTCOME FOCUSED GUIDELINES (PROVIDE A DESCRIPTION)