**Autologous Chondrocyte Implantation**

| Origination: 06/17/08 | Revised: 10/02/17 | Annual Review: 11/02/17 |

**Purpose:**

To provide autologous chondrocyte implantation guidelines for the Medical Department staff to reference when making benefit determinations.

**Additional Information**

- Autologous chondrocyte implantation/transplantation (CPT code 27412) utilizes an individual’s own cells in an effort to repair damage to articular cartilage in order to improve joint function and reduce pain. The procedure involves the collection and culture of articular cartilage cells (chondrocytes) that are then implanted into the cartilage defect with the intent that the cultured cells will contribute to the regeneration and repair of the articular surface.

**Coverage Guidelines**

Considered medically necessary for the treatment of symptomatic cartilaginous defects of the femoral condyle of the knee when the Member meets all of the following criteria:

1. Age between 15 - 55 years; *and*
2. BMI less than or equal to 35; *and*
3. Symptoms for more than one (1) year with current disabling pain and/or knee locking; *and*
4. Focal articular cartilage defect down to, but not through, the subchondral bone (Grade III – IV), on a load bearing surface of the femoral condyle (medial, lateral, trochlear; *not* in the patella); *and*
5. Size of defect measures less than 7 mm in depth, less than 6.0 cm in length, and area ranging from 1-12 square cm as evidenced by MRI or arthroscopy; *and*
6. Stable knee with intact meniscus and normal joint space on X-ray; *and*
7. No active inflammatory or other arthritis; no tibial chondromalacia; no osteoarthritis; and no corresponding tibial or patellar lesions, clinically and by X-ray; *and*
8. Failure of conservative therapy (minimum of 2 months of physical therapy) as well as established surgical interventions (i.e., microfraction, drilling, abrasion).
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**Exclusion Criterion**

- All other uses are considered experimental and investigational.

**References:**


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**Disclaimer Information:**

Coverage Issues Guidelines and Medical Technology Assessment Recommendations are developed to determine coverage for AvMed’s benefits, and are published to provide a better understanding of the basis upon which coverage decisions are made. AvMed makes coverage decisions using these guidelines, along with the Member's benefit document. The use of this guideline is neither a guarantee of payment nor a final prediction of how specific claim(s) will be adjudicated.

Coverage Issues Guidelines and Medical Technology Assessment Recommendations are developed for selected therapeutic or diagnostic services found to be safe, but proven effective in a limited, defined population of patients or clinical circumstances. They include concise clinical coverage criteria based on current literature review, consultation with practicing physicians in the AvMed service area who are medical experts in the particular field, FDA and other government agency policies, and standards adopted by national accreditation organizations.

Treating providers are solely responsible for the medical advice and treatment of Members. This guideline may be updated and therefore is subject to change.