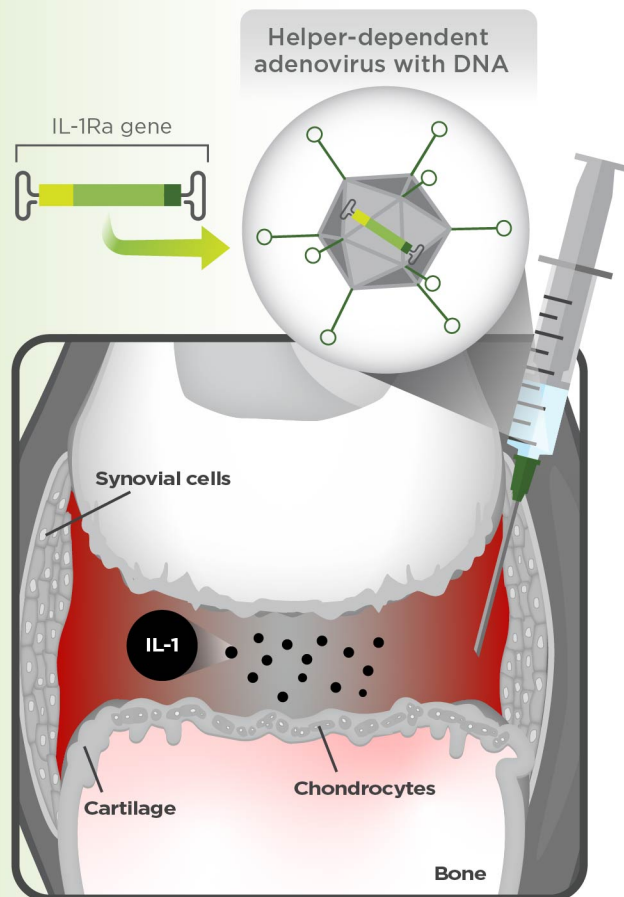


# What Is FX201?

## FX201 Background and Description

**Osteoarthritis (OA)** of the knee is a debilitating, degenerative joint disease characterized by chronic pain and inflammation that perpetuates cartilage loss and other structural changes.<sup>1-4</sup>

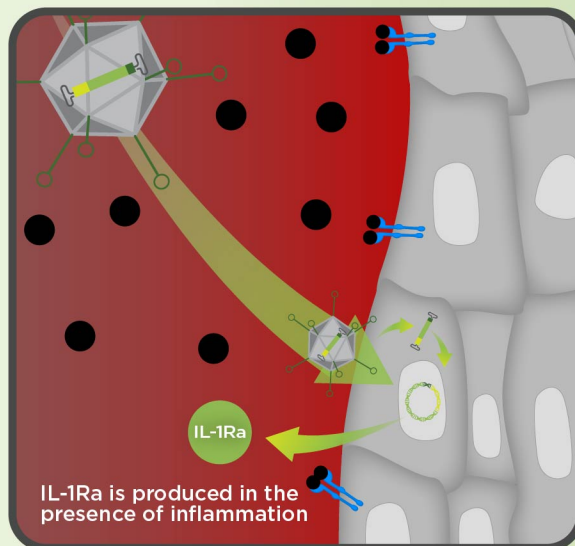
**Interleukin-1 (IL-1)** is considered a key mediator of inflammation, pain, and cartilage destruction in OA.<sup>5-7</sup>



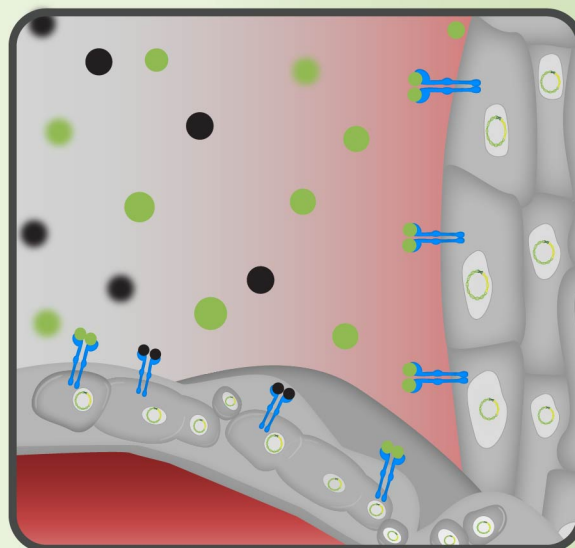
### FX201:

- A helper-dependent adenovirus-based gene therapy
- An investigational compound that may support long-term expression of IL-1 receptor antagonist (IL-1Ra)<sup>8</sup> in chondrocytes and synovial cells after injection into the knee joint

## Proposed Mechanism of Action



**FX201** targets chondrocytes and synovial cells.<sup>8</sup> Upon entry, IL-1Ra DNA is maintained episomally in the nuclei of these cells and IL-1Ra protein is subsequently produced and secreted in response to inflammation.<sup>9,10</sup>



## Potential Effects

Based on preclinical findings, **FX201** has the potential to:



Reduce inflammation and pain



Improve function

and may ultimately modify disease by decreasing:



Cartilage loss



Subchondral bone remodeling

Disclaimer: FX201 is an investigational therapy for the treatment of OA.

## References:

1. Neogi T. *Osteoarthritis Cartilage*. 2013;21(9):1145-1153.
2. Alkan BM et al. *Mod Rheumatol*. 2014;24(1):166-171.
3. Stoppiello LA et al. *Arthritis Rheumatol*. 2014;66(11):3018-3027.
4. Matsukawa A et al. *J Immunol*. 1995;154(10):5418-5425.
5. Kapoor M et al. *Nat Rev Rheumatol*. 2011;7(1):33-42.
6. Li M et al. *Acta Pharmacol Sin*. 2005;26(2):192-198.
7. Inoue A. *J Neurochem*. 1999;73(5):2206-2213.
8. Ruan MZ et al. *Sci Transl Med*. 2013;5(176):176ra34.
9. Flexion Therapeutics, Inc. Data on file. 2019.
10. Flexion Therapeutics, Inc. Data on file. 2019.
11. Arend WP et al. *J Clin Invest*. 1990;85(5):1694-1697.
12. Flexion Therapeutics, Inc. Data on file. 2019.

