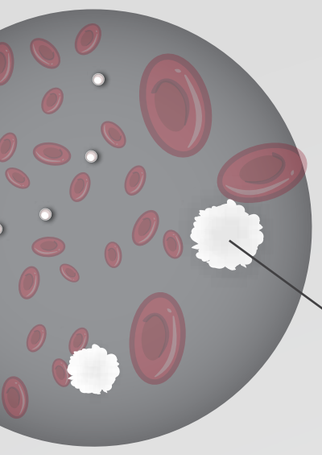
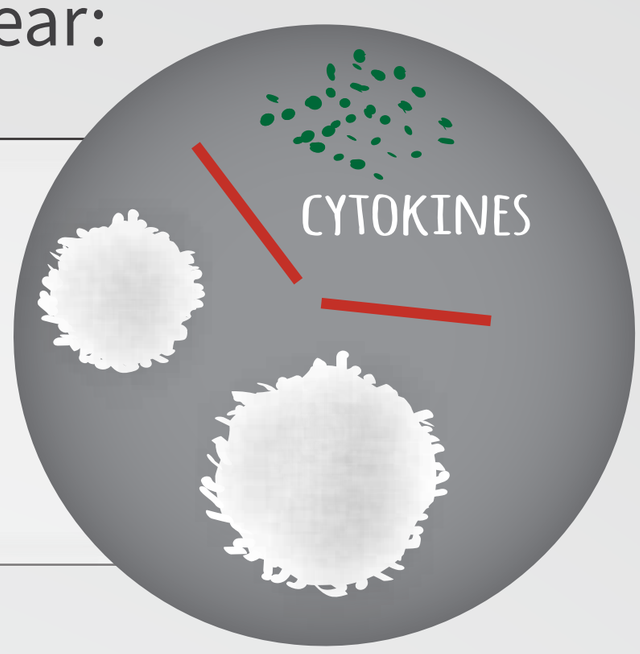
How Biologics Work

WebMD



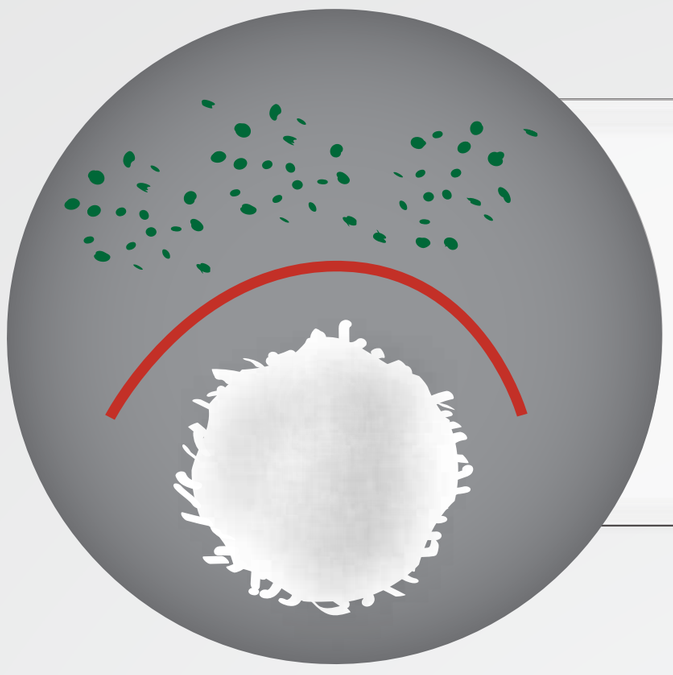
Biologics are manmade drugs created from living material. They're a kind of disease-modifying antirheumatic drug (DMARD). Biologics lessen joint pain and swelling by going after specific parts of your immune system.

Some target white blood cells, which play a big role in RA, but many block cytokines. Those are proteins that drive inflammation. If you take biologics, here are some terms you may hear:



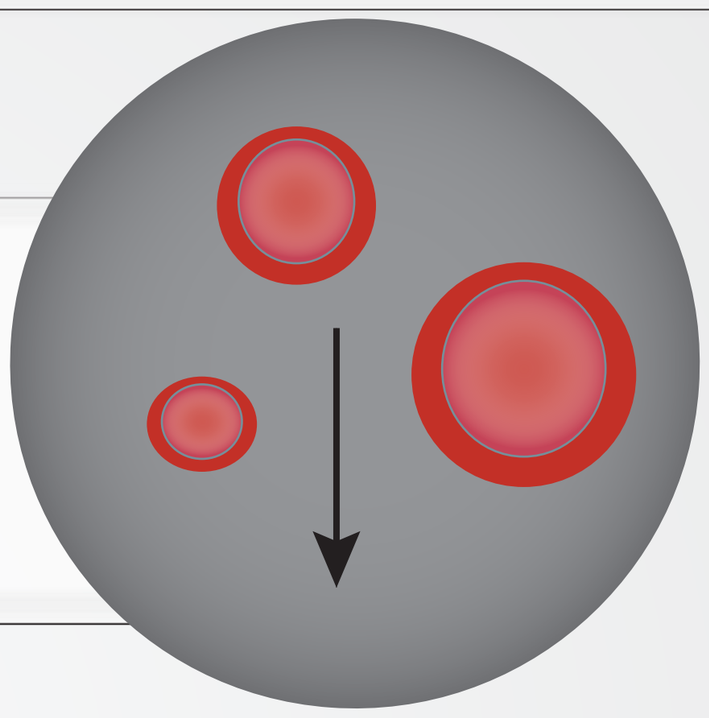
Tumor necrosis factor (TNF) inhibitors

These block signals from a cytokine called TNF-alpha. That's a protein that tells other cells to make inflammation that can hurt your joints.



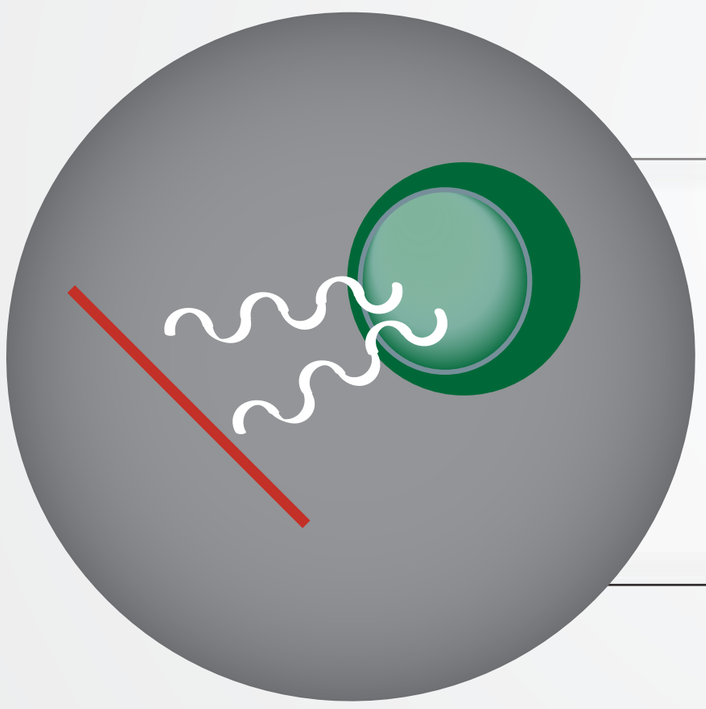
Interleukin (IL) inhibitors

These stop certain pro-inflammatory cytokines, mainly IL-1 and IL-6, from attaching to cells.



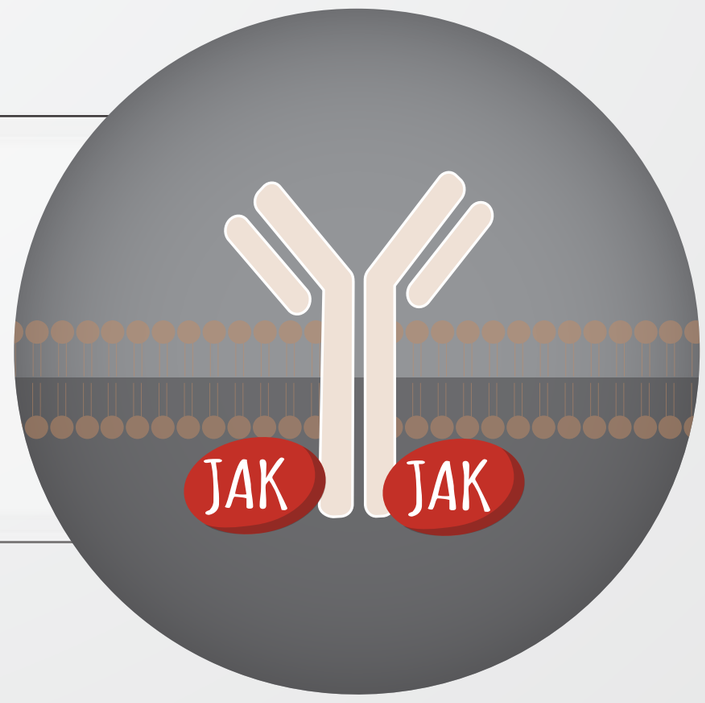
B-cell inhibitors

These lower levels of B cells, a kind of white blood cell that can cause swelling and joint damage.



T-cell co-stimulation blockers

These block signals that set off your T cells, a kind of immune cell that triggers inflammation.



Janus kinase (JAK) inhibitors

Another type of DMARD, these are targeted drugs that block the pro-inflammatory enzyme JAK. Unlike biologics, you can take them as a pill.

SOURCES: Arthritis Foundation: "Biologics." Clinical Therapeutics: "The Use of Biologics in Rheumatoid Arthritis: Current and Emerging Paradigms of Care." Annals of the Rheumatic Diseases: "Role of interleukin 1 and interleukin 1 receptor antagonist in the mediation of rheumatoid arthritis." Merck Manual: "Rheumatoid Arthritis (RA)."