

Find me a -mAb

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Biology 302 – Immunology

9/16/22

Monoclonal antibodies are a drug treatment used to treat many different conditions. These conditions can include but are not limited to cancers, autoimmune diseases, and viruses. (2 and 4). Monoclonal antibodies do this by mimicking the human body's normal immune response. They are specifically designed to target a part of the condition affecting the patient. One such monoclonal antibody is the drug Adalimumab (3) This drug can be useful in treating many conditions. These conditions include rheumatoid arthritis, psoriatic arthritis, ankylosing spondylitis, Crohn's disease, ulcerative colitis, and plaque psoriasis (5). The condition most associated with Adalimumab is rheumatoid arthritis or RA. RA is a chronic autoimmune disease that affects joints in the body and can even affect internal organs (1) In people with RA, their immune system attacks healthy joints on accident and causes inflammation as a result. This joint damage can cause long term chronic pain and can lead to bone deformity. As RA progresses it can affect the heart, lungs, and eyes. RA differs from other arthritis by appearing symmetrical in the body. This means that a person with RA will have both knees affected by the arthritis. Some factors increase the risk of developing RA. RA can begin at any age but its likelihood of developing increases with age. RA can also be inherited, as risk for developing RA increases when someone related gets RA. RA can not be cured and is instead treated to slow or stop the progression of the disease. Disease-modifying antirheumatic drugs and biologicals are both used to help treat rheumatoid arthritis. People with RA can also make lifestyle changes to manage the disease. These changes include maintaining a healthy weight, getting regular exercise, and getting physical therapy.

Adalimumab is a biologic that is very effective in treating RA. Adalimumab is commonly sold as Humira and needs to be prescribed. Adalimumab is the first fully human recombinant immunoglobulin G1 anti-TNF monoclonal antibody (3). TNF is tumor necrosis factor and has

been linked to many arthritic disease states like rheumatoid arthritis (3). Adalimumab blocks the interaction of TNF and p55 and p75 cell surface TNF receptors (3). Adalimumab is a TNF inhibitor and suppresses TNF which is part of the inflammatory response. By easing inflammation, patients with RA can see an improved quality of life and eased chronic pain. Adalimumab is shown to be effective at treating RA but is not without its own side effects. Side effects can include higher risk of cancer, and opportunistic infections. These opportunistic infections can include latent tuberculosis and fungal infections. Overall, Adalimumab is an effective monoclonal antibody that is used to a number of diseases that lead to increased inflammation.

References

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