What is an integrin and an adhesion molecule?
The white blood cells in your bloodstream migrate to the intestine during times of infection or inflammation. As they are moving very fast through the blood stream they need to eventually stop before they can leave the blood stream and migrate through the blood vessel wall into the intestine. In order to do this they slow down and roll along the blood vessel wall (much like an airplane landing on a landing strip). In order to stop the white blood cells use a protein called an integrin (sort of an arm on the white blood cell) to grab onto and adhesion molecule on the blood vessels wall and then pull itself through the wall of the blood vessel and into the intestine.

What is human antibody to an adhesion molecules?
Vedolizumab is a genetically engineered medication designed to block the adhesion and migration of your white blood cells into the intestine. It binds specifically to the adhesion molecules and thus prevent your white blood cells from migrating into your intestine. It does not bind to adhesion molecules in other parts of your body and thus you are not more prone to infections. Although the medication is a fully human protein, other components may still cause an allergic reaction or a localized injection site reaction.

When is antibody to adhesion molecule (Vedolizumab) used?
Vedolizumab works well in approximately 60 to 80 per cent of inflammatory bowel disease patients. The medication is most effective in patients whose disease has not responded to standard medications, such as 5-ASA products, prednisone or immunosuppressive treatments (azathioprine or methotrexate). Vedolizumab is not a cure, but it can induce remission and when given over a long term and can thus maintain remission of inflammatory bowel disease.

How is antibody to adhesion molecule (vedolizumab) given?
Vedolizumab can only be given intravenously during a 1 to 2 hour infusion. Generally, vedolizumab is given every one to two months. If vedolizumab is effective in a patient with inflammatory bowel disease, he or she may be prescribed it indefinitely for maintenance purposes.

What are the side effects of antibody adhesion molecule (vedolizumab)?
The major short-term side effects are flu-like symptoms. If you have been exposed to tuberculosis in the past, the use of vedolizumab may reactivate this infection. To reduce the risk of this happening, prior to starting vedolizumab, you will have a chest x-ray and skin test for TB. Patients receiving vedolizumab are at increased risk for infections. Any signs of fever should be reported to your IBD health practitioner promptly. Because vedolizumab is a mouse/human antibody, it is possible to develop an allergic reaction to it.

Can I get cancer from this drug?
Like any drug that affects the immune system, there is a very remote risk of developing a lymph gland tumor (lymphoma). Ask your IBD health practitioner to explain this. To minimize this risk, you will undergo regular screening for lymphoma.

Do I need to get any blood tests while I am receiving antibody to adhesion molecule (vedolizumab)?
Yes, your IBD health practitioner will request monthly blood tests while taking this medication. Regular follow-up visits will also be arranged to discuss progress and concerns with your IBD health practitioner.

What is the cost of antibody to adhesion molecule (vedolizumab)?
Vedolizumab is a new class of genetically engineered medications and it is extremely expensive to produce. The cost will depend on your body weight and how much of the medication you require. You will need to have an insurance company help you pay for this medication. If you do not have private benefits, the IBD nurse will help you arrange Alberta Health Non-Group Coverage.