

IMMUNOSUPPRESSANTS > MONOCLONAL ANTIBODIES, ANTI-LYMPHOCYTE

Vedolizumab

25-Jul-2018

- **DRUG ACTION** Vedolizumab is a monoclonal antibody that binds specifically to the $\alpha_4\beta_7$ integrin, which is expressed on gut homing T helper lymphocytes and causes a reduction in gastrointestinal inflammation.

● INDICATIONS AND DOSE

Moderate to severe active ulcerative colitis in patients who have had an inadequate response with, lost response to, or are intolerant to either conventional therapy or a tumour necrosis factor alpha inhibitor (under expert supervision)

▶ BY INTRAVENOUS INFUSION

- ▶ **Adult:** Initially 300 mg, then 300 mg after 2 weeks, followed by 300 mg after 4 weeks, followed by 300 mg every 8 weeks, dose to be given over 30 minutes, if treatment is interrupted or response decreases, dosing frequency may be increased—consult product literature; review treatment if no response within 10 weeks of initial dose

Moderate to severe active Crohn's disease in patients who have had an inadequate response with, lost response to, or are intolerant to either conventional therapy or a tumour necrosis factor alpha inhibitor (under expert supervision)

▶ BY INTRAVENOUS INFUSION

- ▶ **Adult:** Initially 300 mg, then 300 mg after 2 weeks, followed by 300 mg after 4 weeks, followed by 300 mg every 8 weeks, dose to be given over 30 minutes, if no response is observed, an additional dose of 300 mg may be given 10 weeks after initial dose; if treatment is interrupted or response decreases, dosing frequency may be increased—consult product literature; review treatment if no response within 14 weeks of initial dose

- **CONTRA-INDICATIONS** Severe active infection
- **CAUTIONS** Controlled chronic severe infection · history of recurring severe infection · previous treatment with natalizumab (wait at least 12 weeks between natalizumab use and initiation of vedolizumab unless potential benefit outweighs risk) · previous treatment with rituximab

CAUTIONS, FURTHER INFORMATION

- ▶ **Risk of infection** Patients must be screened for tuberculosis before starting treatment; if latent tuberculosis is diagnosed, appropriate treatment must be initiated prior to vedolizumab treatment; if tuberculosis is diagnosed during treatment, discontinue vedolizumab until infection is resolved.
 - Patients should be brought up to date with current immunisation schedule before initiating treatment.

- **INTERACTIONS** → Appendix 1: monoclonal antibodies

● SIDE-EFFECTS

- ▶ **Common or very common** Arthralgia · constipation · cough · fatigue · fever · gastrointestinal discomfort · gastrointestinal disorders · headache · hypertension · increased risk of infection · muscle spasms · muscle weakness · nasal congestion · nausea · night sweats · oropharyngeal pain · pain · paraesthesia · skin reactions
- ▶ **Uncommon** Chills · feeling cold
- ▶ **Frequency not known** Hypersensitivity · infusion related reaction

SIDE-EFFECTS, FURTHER INFORMATION Infusion-related and hypersensitivity reactions have been reported. Patients should be observed continuously during each infusion for signs and symptoms of acute hypersensitivity reactions; they should also be observed for 2 hours after the initial two infusions, and for 1 hour after subsequent

infusions. Discontinue treatment if a severe infusion-related or other severe reaction occurs and initiate appropriate treatment (e.g. adrenaline and antihistamines); if a mild to moderate infusion-related reaction occurs, interrupt infusion or reduce infusion rate and initiate appropriate treatment (if reaction subsides the infusion may be continued)—consider pretreatment with an antihistamine, hydrocortisone, and/or paracetamol prior to subsequent infusions in patients who experience mild to moderate infusion-related reactions.

- **CONCEPTION AND CONTRACEPTION** Manufacturer advises effective contraception required during and for at least 18 weeks after treatment.
- **PREGNANCY** Manufacturer advises use only if potential benefit outweighs risk.
- **BREAST FEEDING** Manufacturer advises avoid—present in milk in animal studies.
- **MONITORING REQUIREMENTS**
 - ▶ Manufacturer advises monitor closely for infection before, during and after treatment—potential increased risk of opportunistic infection.
 - ▶ Manufacturer advises monitor for new onset or worsening neurological signs and symptoms (withhold treatment if progressive multifocal leukoencephalopathy (PML) is suspected).
- **DIRECTIONS FOR ADMINISTRATION** For intravenous infusion (*Entyvio*®), give intermittently in Sodium chloride 0.9%; allow vial to reach room temperature then reconstitute with 4.8 mL of water for injection (using a syringe with a 21–25 gauge needle); gently swirl vial for at least 15 seconds, do not shake vigorously or invert; allow to stand for up to 20 minutes (gently swirl vial if needed), leave for an additional 10 minutes if not dissolved; gently invert vial three times, withdraw 5 mL of reconstituted solution (using a syringe with a 21–25 gauge needle), and add to 250 mL of infusion fluid; gently mix and give over 30 minutes.
- **PATIENT AND CARER ADVICE** Patients should be provided with a patient alert card.

● NATIONAL FUNDING/ACCESS DECISIONS

NICE decisions

- ▶ **Vedolizumab for treating moderately to severely active Crohn's disease after prior therapy (August 2015)** NICE TA352 Vedolizumab (*Entyvio*®) is recommended as an option for the treatment of moderate to severe active Crohn's disease only if:
 - a tumour necrosis factor alpha inhibitor has failed (that is, the disease has responded inadequately or has lost response to treatment), or
 - a tumour necrosis factor alpha inhibitor cannot be tolerated or is contra-indicated, and
 - the manufacturer provides vedolizumab with the discount agreed in the patient access scheme.
 Vedolizumab should be given as a planned course of treatment until treatment fails, or surgery is needed, or until 12 months after starting treatment, whichever is the shorter. Treatment should be continued only if there is clear evidence of a response. Patients who continue treatment should be reassessed at least every 12 months to determine whether ongoing treatment is still clinically appropriate.

Patients whose treatment was started within the NHS before this guidance was published should have the option to continue treatment, without change to their funding arrangements, until they and their NHS clinician consider it appropriate to stop.

www.nice.org.uk/guidance/ta352

- ▶ **Vedolizumab for treating moderately to severely active ulcerative colitis (June 2015)** NICE TA342 Vedolizumab (*Entyvio*®) is recommended, within its marketing authorisation, as an option for treating