

## Medical Affairs Policy & Procedure

**Title/Service:** Tysabri (natalizumab)

<b>Revised</b>	
<b>Reviewed</b>	02/16/07, 04/28/10, 11/18/11
<b>Developed</b>	
<b>Policy Committee Approval</b>	11/18/11

### **Description:**

Tysabri (natalizumab) is a recombinant humanized monoclonal antibody. It is an alpha-four integrin antagonist in the class of selective adhesion-molecule inhibitors indicated for the treatment of patients with relapsing forms of multiple sclerosis (MS) and Crohn's disease to reduce the frequency of clinical exacerbations by binding to adhesion molecules at certain sites of chronic inflammation.

### **Indications of Coverage:**

Tysabri is considered medically necessary for the treatment of multiple sclerosis when all of the following criteria are met:

A neurologist has diagnosed the condition as a moderate to severe relapsing, remitting form of MS (not chronic progressive MS)

Tysabri is prescribed by a neurologist and is used as a monotherapy (used alone, not in combination with another designed to modify or suppress the immune system).

A trial of other MS treatments (at least two of the following: interferon beta, Rebif, Betaseron, glatiramer acetate, or Copaxone) has been documented in the medical record as ineffective, not tolerated, or contraindicated. Prior treatments are considered ineffective when at least two of the following are documented:

Multiple clinical relapses within the past twelve months

MRI documents continuing progression of CNS lesions

Worsening disability (for example, decreased mobility or decreased ability to perform activities of daily living due to disease progression) is documented

Tysabri is prescribed by a neurologist who is registered with the TOUCH Prescribing Program (call 1-800-456-2255 to determine whether the provider is participating in the program).

Tysabri is considered medically necessary for the treatment of moderately to severely active Crohn's disease when all of the following criteria are met:

Tysabri is prescribed by a gastroenterologist.

The patient has had an inadequate response, with continuing inflammation, to conventional therapy including Humira, Cimzia, or Remicade.

No other immunosuppressants, including TNF inhibitors, are prescribed at the same time as Tysabri. Aminosalicylates may be continued during treatment with Tysabri.

Tysabri is prescribed by a neurologist who is registered with the TOUCH Prescribing Program (call 1-800-456-2255 to determine whether the provider is participating in the program).

If the above criteria are met, a maximum of six monthly injections are appropriate. Approval of further treatments requires documentation of the effectiveness of Tysabri.

Dosage and Administration: the recommended dosage of Tysabri is a 300 mg intravenous infusion every four weeks.

### **Limitations of Coverage:**

Review contract and endorsements for exclusions and prior authorization or benefit requirements.

If used for a condition/diagnosis other than is listed in the Indications of Coverage, deny as experimental or investigative.

If used for a condition/diagnosis that is listed in the Indications of Coverage, but the criteria is not met, deny as not medically necessary.

Tysabri is considered experimental or investigational in any of the following situations:

For the treatment of conditions other than relapsing forms of multiple sclerosis or Crohn's disease (for example, non-relapsing forms of multiple sclerosis, rheumatoid arthritis).

When used in combination with any other multiple sclerosis disease modifying treatment medications (for example, interferon beta, Avonex, Rebif, Betaseron, glatiramer acetate, or Copaxone)

For individuals less than eighteen years of age as the safety and efficacy of Tysabri for pediatric patients has not been established.

When used for more than twenty four months

For patients who have, or have a history of, progressive multifocal leukoencephalopathy.

**Documentation Required:**

- Office notes with history and examination
- MRI report (for multiple sclerosis)
- Colonoscopy, pathology report (for Crohn's)
- Prescription medication use data

**Rationale:**

The effects of Tysabri are thought to be the result of the drug's action of blocking the interaction of inflammatory cell molecules with other cells in the body by reducing the ability of the inflammatory cells to pass through cell layers in the [intestines](#) and into the brain.

Tysabri was approved by the Food and Drug Administration (FDA) in November 2004, and was removed from the market in February 2005, after three patients participating in Tysabri clinical trials were diagnosed with progressive multifocal leukoencephalopathy (PML). The FDA allowed the manufacturer to resume distribution of Tysabri in February 2006 once it was determined that there were no other cases of PML at that time in patients who had been prescribed Tysabri. The manufacturer agreed to distribute Tysabri under the TOUCH Prescribing Program, which requires providers to register, provide the drug only to patients enrolled in the program, evaluate the patient prior to initiation of Tysabri, and re-evaluate the patient every six months. Cases of PML continue to occur in patients who have taken Tysabri.

**References:**

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3. [Goodin DS](#), [Cohen BA](#), [O'Connor P](#), [Kappos L](#), [Stevens JC](#); [Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology](#). Assessment: the use of natalizumab (Tysabri) for the treatment of multiple sclerosis (an evidence-based review): report of the Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology. [Neurology](#). 2008 Sep 2;71(10):766-73.

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*Approved by the Medical Director*