

**Regence BlueCross BlueShield of Oregon · Regence BlueShield
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Medication Policy Manual

Policy No: dru088

Topic: Amevive[®], alefacept

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Revised/Effective Date: November 14, 2008

Next Review Date: November
2009

IMPORTANT REMINDER

This Medical Policy has been developed through consideration of medical necessity, generally accepted standards of medical practice, and review of medical literature and government approval status.

Benefit determinations should be based in all cases on the applicable contract language. To the extent there are any conflicts between these guidelines and the contract language, the contract language will control.

The purpose of medical policy is to provide a guide to coverage. Medical Policy is not intended to dictate to providers how to practice medicine. Providers are expected to exercise their medical judgment in providing the most appropriate care.

Description

Alefacept is a biological medication that acts on overactive cells in the immune system thought to be an underlying cause of psoriasis. Alefacept is used for the treatment chronic plaque psoriasis.

Policy/Criteria

- I.** Most contracts require prior authorization approval of alefacept prior to coverage. Alefacept may be considered medically necessary in patients with chronic plaque psoriasis when all criteria A through D below are met.

- A.** Chart notes support a diagnosis of chronic plaque psoriasis involving at least 10% of the body surface area or causes significant functional disability.

AND

- B.** Treatment with phototherapy or photochemotherapy was ineffective, contraindicated, or not tolerated (see Appendix 1).

AND

- C.** Treatment with at least one oral systemic agent for psoriasis was ineffective, or not tolerated, unless all are contraindicated. Examples of oral systemic agents include, but are not limited to, cyclosporine, methotrexate, and acitretin.

AND

- D.** The prescribing physician is a dermatologist.

II. Administration, Quantity Limitations, and Authorization Period

- A.** Regence does not consider alefacept to be a self-administered medication. It is administered intramuscularly and is only covered under the medical benefit.

- B.** When prior authorization is approved, alefacept may be initially authorized for a period of 12 weeks.

- C.** Additional 12-week treatment courses may be authorized when all of the following criteria 1 through 3 are met:

- 1.** A minimum of 12 weeks has elapsed since the completion of the previous 12- week treatment course.

AND

- 2.** CD4+ T lymphocyte counts are within the range of normal.

AND

- 3.** There is documented clinical improvement in symptoms or function or lessening of the affected body surface area.

- III.** Alefacept treatment is considered investigational for all conditions other than chronic plaque psoriasis, including, but not limited to:
- A.** Psoriatic arthritis
 - B.** Lichen planus
 - C.** Alopecia areata

Position Statement

Treatment of plaque psoriasis [1, 4, 11-14]

- There are many treatments for psoriasis that are effective, have known long-term safety profiles, and are recommended by national treatment guidelines.
 - * Light therapy, including UVB and PUVA, is very effective and safe. UVB therapy can be used at home, as well at the doctor's office. PUVA has the potential to cause long-term remissions.
 - * When systemic therapy is needed to manage psoriasis, oral therapies are the best value.
 - Oral therapies, including methotrexate and cyclosporine, have a proven track record and have been the standard of care for many years.
 - Oral medications are effective for most patients, and cyclosporine is known to work rapidly.
 - Oral therapies have known potential risks. The management of these risks is well established.
- When oral medications and phototherapy are inadequate, biologic medications (e.g., adalimumab, etanercept, infliximab, efalizumab, alefacept) may be appropriate. Each of these biologics been shown to be effective for psoriasis.
- Of the medications known as TNF- α inhibitors (etanercept, adalimumab, and infliximab), there are not showing that one is more effective than another.
- Alefacept and efalizumab are also effective in some patients, but there is indirect evidence that they may be less effective than other alternatives.
- Individual responses and tolerability are unpredictable and may vary between patients.

- Because responses vary, if one of the biologic DMARDs provides an inadequate response, another biologic medication may yet be effective.

Efficacy of biologic agents in plaque psoriasis ^[1, 4, 11-14]

The benefit of medications can be indirectly compared by calculating their number needed to treat (NNT). The number needed to treat is a measure of the chances of a patient achieving a benefit (how many patients need to be treated before a benefit is achieved over a certain period of time). The lower the number needed to treat, the more likely the medication will have benefit.

Table 1 summarizes the chances that certain biologic medications will improve size and thickness of skin lesions, redness, and itching in moderate to severe plaque psoriasis:

Table 1: Chances of improving of skin lesions, redness, and itching, by 75% after 12 to 16 weeks of treatment with biologic medications (compared to no treatment). ^[1, 4, 11-14]	
Medications	Benefit In Moderate To Severe Plaque Psoriasis
etanercept (Enbrel), adalimumab (Humira), infliximab (Remicade)	About 1 in 3 likely to benefit ^a NNT = 3 (Range 2-4)
alefacept (Amevive)	About 1 in 9 likely to benefit ^a NNT = 9 (Range 2 – 4)
efalizumab (Raptiva)	About 1 in 5 likely to benefit ^a NNT = 5 (Range 3 – 6)

^a Benefit = at least 75% improvement in size and thickness of skin lesions, redness, and itching after 12 to 16 weeks of treatment.

Efficacy of alefacept in plaque psoriasis

PSORIASIS

- In a randomized, controlled trial of patients with moderate-to-severe disease, 14% of patients who received alefacept 7.5 mg intravenously every week for 12 weeks achieved at least a 75% decrease in psoriasis area and severity index (PASI) score 2 weeks after the last dose compared to 4% of patients who received placebo.^[2] Of patients who received a second course of alefacept, 23% achieved a greater than or equal to 75% decrease in PASI score 2 weeks after the last dose compared to 7% of patients receiving placebo.

- There are only limited data (unpublished, unavailable, manufacturer data on file) evaluating the efficacy of retreatment beyond two cycles.
- Preliminary data suggests that the combination of alefacept and UVB phototherapy may be more effective than alefacept alone. Alefacept alone was compared to alefacept plus UV-B Phototherapy in 14 patients with moderate to severe psoriasis using a open label, randomized, half-body study. At week 12, PASI scores were reduced by 62% and 81% respectively (p<0.001), though the small numbers of patients in this study limit its usefulness. Larger, prospective, randomized controlled trials are needed to fully describe this approach to treatment. ^[10]
- Based on expert opinion and clinical practice guidelines, alefacept may result in long-term remission in some patients.

Safety of alefacept

- The use of alefacept is limited by the risk of potential side effects and needs to be weighed against the risk/benefit ratio in using other therapeutic alternatives.
- Alefacept carries a bolded warning stating that it induces dose-dependent reductions in circulating CD4+ and CD8+ T lymphocyte counts.^[1] Alefacept therapy should not be initiated in patients with a CD4+ T lymphocyte count below normal. The CD4+ T lymphocytes counts of patients receiving alefacept should be monitored weekly throughout the course of the 12 week dosing regimen.
- Alefacept may increase the risk of malignancies and should not be administered to patients with a history of systemic malignancy.^[1]
- Alefacept has the potential to increase the risk of infection and reactivate latent, chronic infections.^[1] Alefacept should not be administered to patients with a clinically important infection.
- An analysis of 13 trials in the manufacturer database included patients who had received up to 9 courses of alefacept treatment. The number of patients decreased as treatment courses progressed. The incidence of side effects, including increased risk of infection, remained similar throughout treatment courses. ^[8]

Use of alefacept in other conditions

- Alefacept was used to treat steroid-resistant or steroid-dependent acute graft-vs.-host disease in a case-series of 7 patients. Further controlled studies are needed to establish this as an accepted treatment. ^[5]

- Alefacept was used in combination with methotrexate for the treatment of psoriatic arthritis in a Phase II randomized, controlled study. Further controlled studies evaluating disease progression and functional improvement are needed.^[9]

Appendix 1: Absolute and Relative Contraindications for Phototherapy or Photochemotherapy

Situations where phototherapy may be absolutely or relatively contraindicated include:

- Type 1 or type 2 skin
- History of photosensitivity
- Treatment of facial lesions
- Presence of premalignant lesions
- History of melanoma or squamous-cell carcinoma
- Physical inability to stand for the required exposure time

References

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11. Enbrel[®] [package insert]. Thousand Oaks, CA.: Immunex Corporation; June 2008
12. Remicade[®] [package insert]. Malvern, PA.: Centocor, Inc.; April 2007
13. Humira[®] [package insert]. North Chicago, IL: Abbott Laboratories; February 2008
14. Raptiva[®] [package insert]. South San Francisco, CA: Genentech, Inc.; June 2005

Cross References
Enbrel [®] , etanercept dru035
Humira [®] , adalimumab dru081
Remicade [®] , infliximab dru036
Raptiva [®] , efalizumab dru104

Codes	Number	Description
HCPCS	J0215	Injection, alefacept, 0.5 mg