



Therapeutic Class ReviewSM

Skin – retapamulin ointment 1% (Altabax[®])

September 2007

New Product for Review:

retapamulin (Altabax[®]) GlaxoSmithKline [GSK]

Dossier Provided by Manufacturer: Yes

Dossier Evaluation: (2, missing PE model)

- 1 - Dossier missing significant clinical trial(s).
- 2 - Mfg. provided all relevant trials; Missing pharmacoeconomics model.
- 3 - Mfg. provided all relevant trials and information.

Executive Summary

- Impetigo^{1,2}
 - Impetigo is a skin infection typically consisting of multiple lesions on the face or hands that often rupture, leaving pustules that crust over and generally resolve spontaneously without scarring within approximately two weeks.
 - Diagnosis is based on clinical presentation/appearance rather than lab or diagnostic tests.
 - It is most common in children in whom it is an important infection because of an association with poststreptococcal glomerulonephritis.
 - Since 1990, the majority of cases have been caused by *Staphylococcus aureus*, either alone or in combination with group A streptococcus (GAS). Emerging bacteriologic resistance to treatment has been described.
 - Affected patients usually have little or no systemic toxicity.
- Treatment options³
 - The 2005 Infectious Diseases Society of America (IDSA) guidelines recommend topical treatment for patients with a limited number of lesions and oral antibiotic therapy when the disease is more severe.
 - Mupirocin ointment (Bactroban[®]) is considered the best topical treatment, although resistance has been described.
- Retapamulin (Altabax) is a new molecular entity, the first in a class of drugs called pleuromutilins.
- Retapamulin (Altabax) ointment is applied to the lesions of impetigo twice daily for 5 days. This is in contrast to mupirocin, which is applied three times daily for 10 days.

- Clinical trials in other skin diseases, such as secondarily infected traumatic lesions (SITL) and secondarily infected dermatoses (SID), may lead to off label use of retapamulin (Altabax).

Evidence ⁴

- There is possibly useful clinical trial evidence that retapamulin (Altabax) is safe and effective in the treatment of impetigo.
 - 85.6% clinical success rate after 5 days of treatment, representing a treatment effect of 33.5% versus placebo (comparable to 71% clinical success rate and 36% treatment effect seen with mupirocin⁶).
 - Mild to moderate adverse events (AEs) were reported by 24.5% of subjects, but rarely resulted in treatment discontinuation (< 1% of Altabax subjects withdrew due to AEs).
- There is no useful clinical evidence that retapamulin (Altabax) is effective in treating resistant infections.
 - No mupirocin or methicillin resistant bacteria were isolated from cultures performed in the impetigo clinical trial.
 - Therefore, it is not possible to clinically evaluate retapamulin (Altabax) in this respect.
- The effect of concurrent application of retapamulin (Altabax) and other topical products to the same area of skin has not been studied.
- There are no head-head trials of retapamulin (Altabax) and mupirocin; however, the safety and efficacy profiles appear similar.⁵⁻⁸

Decision

Retapamulin (Altabax) is non-preferred/non-formulary because there is no evidence that it provides additional safety or efficacy for its additional cost over the preferred/formulary alternative, mupirocin.

Products

Drug Products	FDA approval ^a	Patent Expiration(s) ^c	FDA approved indications	Usual Dose/Route	Potential Off-label Uses ^d
retapamulin ointment (Altabax)	4/2007	4/2012	impetigo	Apply bid for 5 days	secondarily infected traumatic lesions
mupirocin ointment (generics)	12/1987	expired	impetigo	Apply tid for 10 days	secondarily infected traumatic lesions

^a Date applies to approval date for the original brand name medication where there are now generics available.

^c Based on patents listed in Orange Book as of 04/24/2007.

^d As listed in © 1974 - 2007 Thomson MICROMEDEX database or as referenced.

References

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