

## Levetiracetam (Keppra<sup>R</sup>): A Review

Janice Jeong, Pharm.D.

### References:

1. McCabe PH. New anti-epileptic drugs for the 21<sup>st</sup> century. *Exp Opin Pharmacother* 2000;1(4):633-74.
2. Leppik IE. Issues in the treatment of epilepsy. *Epilepsia* 2001;42(Suppl 4):1-6.
3. Hovinga CA. Levetiracetam: a novel antiepileptic drug. *Pharmacother* 2001;21(11):1375-88.
4. Harden C. Safety profile of levetiracetam. *Epilepsia* 2001;42(Suppl 4):36-9.
5. Personal communication. UCB Pharma, Inc. May 2002.
6. Nies AS. Principles of Therapeutics. In: Hardman JG, Limbird LE, Gilman AG (eds). *Goodman & Gilman's: the pharmacological basis of therapeutics*. New York: McGraw-Hill; 2001:54-5.
7. Patsalos PN. Pharmacokinetic profile of levetiracetam: toward ideal characteristics. *Pharmacol Ther* 2000;85:77-85.
8. Keppra (levetiracetam) [package insert]. UCB Pharma, Inc. Smyrna, GA; 1999.
9. Sharief MK, Singh P, Sander JW, et al. Efficacy and tolerability study of ucb L059 in patients with refractory epilepsy. *J Epilepsy* 1996;9:106-12.
10. Dooley M, Plosker GL. Levetiracetam a review of its adjunctive use in the management of partial onset seizures. *Drugs* 2000;60(4):871-93.
11. Cereghino JJ, Biton V, Abou-Khalil B, et al. Levetiracetam for partial seizures: results of a double-blind, randomized clinical trial. *Neurology* 2000;55:236-42.
12. Shorvon SD, Löwenthal A, Janz D. et al. Multicenter double-blind, randomized, placebo-controlled trial of levetiracetam as add-on therapy in patients with refractory partial seizures. *Epilepsia* 2000;41(9):1179-86.
13. Ben-Menachem E, Falter U. Efficacy and tolerability of levetiracetam 3000mg/d in patients with refractory partial seizures: a multicenter, double-blind, responder-selected study evaluating monotherapy. *Epilepsia* 2000;41(10):1276-83.
14. Betts T, Waegemans T, Crawford P. A multicentre, double-blind, randomized, parallel group study to evaluate the tolerability and efficacy of two oral doses of levetiracetam, 2000mg daily and 4000mg daily, without titration in patients with refractory epilepsy. *Seizure* 2000;9:80-7.
15. Boon P, Chauvel P, Pohlmann-Eden B, et al. Dose-response effect of levetiracetam 1000 and 2000mg/day in partial epilepsy. *Epilepsy Res* 2002;48:77-89.

### Other literature reviewed but not cited:

1. Faught E. Pharmacokinetic considerations in prescribing antiepileptic drugs. *Epilepsia* 2001;42(Suppl 4):19-23.
2. Micromedex. Drug information for the health care professional, USPDI. 22nd ed. Greenwood Village: Micromedex; 2002.
3. Wolters Kluwer Company. Drug facts and comparisons. Saint Louis: Wolters Kluwer Company; 2002.

---

A University of Washington / Harborview Medical Center Drug Information Center publication  
Distributed monthly by authority of the Pharmacy and Therapeutics Committee  
Editor: Nelda A. Murri, Pharm.D. (206) 598-6612 – Asst. Editor: Elizabeth Rudy, D.V.M., R.Ph.  
Department of Pharmacy Services / School of Pharmacy

---

Copyright © 2002 by the University of Washington  
Also published on the World Wide Web at <http://uw.pnrx.org/therapyTopics.asp>  
No material may be reproduced in whole or in part without written permission from the editor.

## **Levetiracetam: A Review** (continued)

4. Ferrendelli JA. Concerns with antiepileptic drug initiation: safety, tolerability, and efficacy. *Epilepsia* 2001;42(Suppl 4):28-30.
5. Wallace SJ. Newer antiepileptic drugs: advantages and disadvantages. *Brain Dev* 2001;23:277-83.
6. Privitera M. Efficacy of levetiracetam: a review of three pivotal clinical trials. *Epilepsia* 2001;42(Suppl 4):31-5.
7. Perucca E. Marketed new antiepileptic drugs: are they better than old-generation agents? *Ther Drug Monit* 2002;24:74-80.