LONG-TERM USE OF LEVETIRACETAM TO TREAT TICS IN CHILDREN AND ADOLESCENTS WITH TOURETTE SYNDROME Y.M. Awaad ^{1,2} A.M. Michon ¹ S. Minarik ¹

Tics are common disorder in children. Some available drugs have unacceptable side effects, and thus alternative treatments are needed. Levetiracetam is an antiepileptic drug reported to be useful for the treatment of tics. Patients age 18 years and younger with tics and Tourette syndrome were enrolled in this prospective, open-label study. Seventy patients were treated with levetiracetam as monotherapy for 4 years. The initial dose of levetiracetam was 250 mg/d. The dose was titrated over 3 weeks to 1,000 to 2,000 mg/d. Clinical outcomes were assessed with the Clinical Global Impression Scale, Yale Global Tic Severity Scale, Revised Conners' Parent Rating Scale, and Revised Conners' Teacher Rating Scale. After 4 years of treatment with levetiracetam, all 70 patients showed some improvements based on the scales used. A total of 49 patients improved with regard to behavior and school performance. Levetiracetam was generally well tolerated. Despite the limitations of open-label studies, these results suggest that levetiracetam may be useful in treating tics in children and adolescents. Given its established safety profile, levetiracetam is a candidate for further study.

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