# Meta-Analysis of the Risk of Subsequent Mood Episodes in Bipolar Disorder

Joaquim Radua<sup>a,e-g</sup>, Heinz Grunze<sup>h</sup> and Benedikt L. Amann<sup>a-d,e</sup>

<sup>a</sup>FIDMAG Germanes Hospitalàries, Sant Boi de Llobregat; <sup>b</sup>Institute of Neuropsychiatry and Addictions (INAD), Centre Fòrum Research Unit Hospital del Mar; <sup>c</sup>Department of Psychiatry, Autonomous University of Barcelona; <sup>d</sup>IMIM (Hospital del Mar Medical Research Institute), Barcelona; eMental Health Research Networking Center (CIBERSAM), Madrid: <sup>f</sup>Centre for Psychiatric Research and Education, Department of Clinical Neuroscience, Karolinska Institutet, Stockholm, Sweden: gDivision of Psychosis Studies, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, UK; <sup>a</sup>Paracelsus Medical University, Salzburg, Austria

#### Introduction

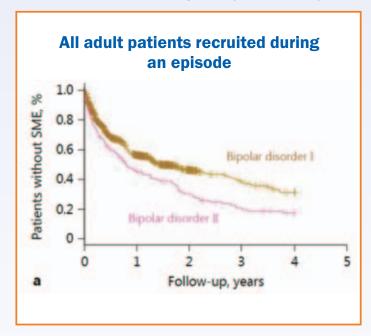
Reported relapse and recurrence rates in bipolar disorder (BD) differ significantly between studies. Most data originate from highly selective patients participating in sponsored randomized controlled trials with narrow inclusion criteria. To estimate the true risk of a subsequent mood episode (SME) under real-world conditions, we conducted a meta-analysis of rates of SME as reported in naturalistic BD studies.

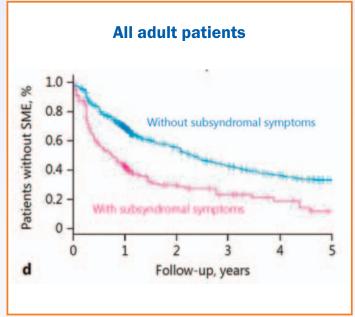
### **Methods**

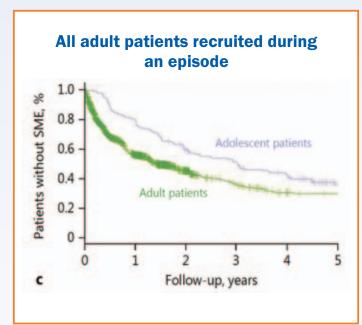
PubMed, ScienceDirect, Scopus, and Web of Knowledge were searched until July 2015. Studies reporting the time until the emergence of an SME, from which individual data or Kaplan-Meier plots with censors marked could be retrieved, were included.

## Results

Twelve studies comprising 5,837 patients met the inclusion criteria. The median time to an SME in adults after an index episode was 1.44 years. The risk of an SME was 44% during the first year. Not having a SME during this first year lowered this risk to 19% in the second year. The risk was higher in bipolar II disorder (BD-II) than in bipolar I disorder (BD-I; HR = 1.5). In BD-I, the risk of a subsequent manic, mixed, or depressive mood episode was higher after an index episode of the same polarity (HR = 1.89-5.14). The overall risk of an SME was higher in patients with persisting subsyndromal symptoms (HR = 2.17) but lower in adolescent patients (HR 0.62), when compared to adult subjects.







### **Conclusions**

The data from this study provide a more reliable estimate of a pronounced risk of an SME in BD in real-world settings. Subsyndromal symptoms cause more SME whereas more research into the longitudinal course of BD-II and adolescent patients is warranted to confirm its role as a risk factor for SME.

#### Reference

