



## **A Systematic Review of Adherence to Oral Antineoplastic Therapies**

**JOSEPH A. GREER, et al** *The Oncologist* 2016; 21:354–376

### **ABSTRACT**

**Background.** Oral antineoplastic therapies not only improve survival but also reduce the burden of care for patients. Yet patients and clinicians face new challenges in managing adherence to these oral therapies. We conducted a systematic literature review to assess rates and correlates of adherence to oral antineoplastic therapies and interventions aimed at improving adherence.

**Methods.** Following Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines, we conducted a comprehensive literature search of the Ovid MEDLINE database from January 1, 2003 to June 30, 2015, using relevant terminology for oral antineoplastic agents. We included observational, database, and intervention studies. At least two researchers evaluated each paper to ensure accuracy of results and determine risk of bias.

**Results.** We identified 927 records from the search and screened 214 abstracts. After conducting a full-text review of 167 papers, we included in the final sample 51 papers on rates/correlates of adherence to oral antineoplastic therapy and 12 papers on intervention studies to improve adherence. Rates of adherence varied widely, from 46% to 100%, depending on patient sample, medication type, follow-up period, assessment measure, and calculation of adherence.

Of the intervention studies, only 1 of the randomized trials and 2 of the cohort studies showed benefit regarding adherence, with the majority suffering high risk of bias.

**Conclusions.** Although no reliable estimate of adherence to oral antineoplastic therapies can be gleaned from the literature, a substantial proportion of patients struggle to adhere to these medications as prescribed. The few intervention studies for adherence have notable methodological concerns, thereby limiting the evidence to guide practice in promoting medication adherence among patients with cancer.