

Use of biologic response modifying drugs by Ontario rheumatology specialists: 2008 Update

Claire Bombardier; J. Michael Paterson; Brandon Zagorski; Jan Hux; Sasha Bernatsky; Alf Cividino; Janet Pope; Carter Thorne; Ontario Biologics Research Initiative .

Objective:To assess use of biologic response modifiers (BRMs) by Ontario rheumatology specialists since the introduction of these agents.

Methods: We studied prescribing patterns of the 154 rheumatology specialists from 2001–2007. Anonymized patient and provider data from the Ontario Health Insurance Plan Database and the Registered Persons Database were used. Data on BRM (infliximab, etanercept, anakinra, adalimumab) use and costs were obtained from the Ontario Drug Benefit Plan Database, which captures information on publicly reimbursed drugs for Ontario residents aged ≥ 65 years and social assistance recipients and the PharmaStat Database (Brogan Inc.), which provided aggregate data on public- and privately-insured BRM expenditures. The latter database contains drug claim data for Ontario beneficiaries of 12 private drug plans, representing approximately 85% of Ontario's private drug insurance business. Quarterly PharmaStat data were used to estimate proportions of BRM expenditures paid for by public vs. private drug insurance. We also estimated the number of Ontario rheumatology patients receiving BRMs. Analyses were conducted at the Institute for Clinical Evaluative Sciences.

Results:As expected, the number of rheumatology patients receiving publicly-funded BRMs for any arthritis indication has risen significantly over time (165 in 2001; 1793 in 2004; and 3879 in 2007). In 2007, under 40% of BRM costs were covered by the public drug plan. We estimate that just under 10000 Ontarians received a BRM for a rheumatic indication, representing <10% of the estimated number of Ontarians living with inflammatory arthritis. In 2007, 64.5% of publicly-funded BRM users were <65 years old. Etanercept was the most frequently prescribed BRM in this group. Information regarding number of rheumatology patients new to BRMs was available for patients aged ≥ 65 years. Although the annual number of new (incident) users of BRMs continues to rise, the proportion of new users comprised of all publicly-funded use appears to have stabilized. In 2006 and 2007, new users represented approximately 1/4 of rheumatology patients treated with BRMs.

Conclusions: There has been substantial growth in BRM use in usual rheumatology care in Ontario. This emphasizes the urgent need for systematic post-marketing surveillance of these agents.