

Response to: 'Drugs and cardiovascular risk in inflammatory arthritis: another case of glucocorticoid-bashing?' by Dr Boers

We thank Dr Boers for the interesting comments¹ on our paper². First, the decision to exclude studies reporting less than 400 patients was made after noticing that most of these studies had less than 1 year of follow-up or had large drop-outs with few remaining patients at or beyond 1 year. We also reviewed the abstract by Tarp *et al.*³ Among a total of 4831 subjects, 1944 were specifically analysed for cardiovascular purpose; no statistically significant increase in cardiovascular diseases was found in subjects treated with glucocorticoids. Of note, given that this is an abstract, we had no precise data regarding inclusion and exclusion criteria, as well as references of the included randomised controlled trials. Some lack of statistical power may be hypothesised because of low sample size. Our meta-analysis exploring the association between the use of glucocorticoids and cardiovascular events, analysed a total of 83 205 subjects included in 11 observational studies. Importantly, the median study duration of 24 weeks, may not be sufficient to report cardiovascular events, and to ensure that the impact of glucocorticoids was a true effect and not due to chance in a short duration of observation. Second, we agree with Dr Boers that observational studies may suffer from some channelling biases, but specifically regarding glucocorticoids the evidence is so overwhelming for all the outcomes studied pointing in the same direction, that it would be difficult to speculate that unaccounted confounding factors could have altered the data in a significant manner. Finally, the purpose of this review was not to balance cardiovascular effects of the studied drugs against their potential benefits, and definitely not to specifically bash glucocorticoids since we did not address other potential side effects. In one of our meta-analyses on the effects of bone density in RA and seronegative arthritis, we found that in rheumatoid arthritis (RA), glucocorticoids improved bone mass in the wrist (likely due to decreasing inflammation) but worsened bone mass elsewhere.⁴ However, we should be reminded that it is now part of all recommendations including the European League Against Rheumatism, to limit the use of glucocorticoids to the lowest dose and for the shortest duration possible.

Camille Roubille,¹ Vincent Richer,² Tara Starnino,³ Collette McCourt,⁴ Alexandra McFarlane,⁵ Patrick Fleming,⁶ Stephanie Siu,⁷ John Kraft,⁸ Charles Lynde,⁸ Janet Pope,⁷ Wayne Gulliver,⁹ Stephanie Keeling,⁵ Jan Dutz,⁴ Louis Bessette,¹⁰ Robert Bissonnette,¹¹ Boulos Haraoui¹²

¹University of Montreal Hospital Research Center (CRCHUM), Montreal, Quebec, Canada

²Department of Medicine, Dermatology Service, St-Luc Hospital, Montreal, Quebec, Canada

³Sacré-Coeur Hospital of Montreal, University of Montreal, Montreal, Quebec, Canada

⁴Department of Dermatology and Skin Science, University of British Columbia, Vancouver, British Columbia, Canada

⁵Division of Rheumatology, University of Alberta, Edmonton, Alberta, Canada

⁶Division of Dermatology, University of Toronto, Toronto, Ontario, Canada

⁷Division of Rheumatology, Department of Medicine, Western University of Canada, St. Joseph's Health Care, London, Ontario, Canada

⁸Lynde Dermatology, Markham, Ontario, Canada

⁹Faculty of Medicine, Memorial University of Newfoundland, St. John's, Newfoundland, Canada

¹⁰Department of Medicine, Centre de Recherche du CHU de Québec, Laval University, Québec City, Québec, Canada

¹¹Innovaderm Research, Montreal, Quebec, Canada

¹²Department of Medicine, Rheumatic Disease Unit, Centre Hospitalier de l'Université de Montréal (CHUM) and Institut de Rhumatologie de Montréal, Montreal, Quebec, Canada

Correspondence to Dr Boulos Haraoui, Institut de Rhumatologie de Montreal, 1551 Ontario Street East, Montreal, Quebec, Canada H2L 1S6; boulos.haraoui@sss.gouv.qc.ca

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