

Drs. Lim and Feldman reply

To the Editor:

We thank Drs. Broder and Putterman for their input¹. We were invited to kick off a new series that will discuss issues in study designs in *The Journal of Rheumatology*². In this series, the editor assigns a paper to be published within the same issue to help illustrate various concepts of study design pertinent to the kind of study being discussed, e.g., prognosis, trial.

We are glad that Drs. Broder and Putterman concurred with many points in our discussion on study design. Drs. Broder and Putterman stated that their study was not one of prognosis because they did not “imply a directional causal relationship between a predictor and an outcome.” Altman had stated that prognosis studies include clinical studies of variables predictive of future events³. As Hemingway and we have noted, several definitions of prognosis are possible⁴. Another version simply refers to prognosis as the relationship between predictor and outcome in defined populations of people with disease⁴. Because Drs. Broder and Putterman’s article sought to study the effect of hydroxychloroquine on the development of antiphospholipid antibodies, we considered their study to be under the umbrella of prognosis studies. Causal factors probably make the strongest prognostic factors, but prognostic factors need not be causal; this is not surprising given that disease outcome is often the result of interactions of the host, the disease, and the environment⁴.

We hope that our reports will help design other robust future studies to answer important questions of interest to clinicians and patients^{2,5}.

LILY SIOK HOON LIM, MBBS, MRCPCH, PhD(c), Division of Rheumatology, Department of Pediatrics, The Hospital for Sick Children; BRIAN FELDMAN, MD, FRCPC, MSc, Institute of Health Policy, Management and Evaluation, University of Toronto, Toronto, Ontario, Canada. Address correspondence to Dr. Lim, The Hospital for Sick Children, Division of Rheumatology, 555 University Ave., Suite 8253A, Toronto, Ontario M5G1X8, Canada. E-mail: lily.lim@sickkids.ca

REFERENCES

1. Broder A, Putterman C. Commentary on “The Risky Business of Studying Prognosis”. *J Rheumatol* 2013;40:1771.
2. Lim LS, Feldman BM. The risky business of studying prognosis. *J Rheumatol* 2013;40:9-15.
3. Altman DG. Systematic reviews of evaluations of prognostic variables. *BMJ* 2001;323:224-8.
4. Hemingway H. Prognosis research: Why is Dr. Lydgate still waiting? *J Clin Epidemiol* 2006;59:1229-38.
5. Broder A, Putterman C. Hydroxychloroquine use is associated with lower odds of persistently positive antiphospholipid antibodies and/or lupus anticoagulant in systemic lupus erythematosus. *J Rheumatol* 2013;40:30-3.

J Rheumatol 2013;40:10; doi:10.3899/jrheum.130692