Ms Hassanzadeh, *et al* reply

To the Editor:

We thank Dr. Kapoor for his interest¹ in our recent article on the use of subcutaneous methotrexate (MTX)². He lists the rare side effects of this drug but fails to point out that oral MTX can also cause pneumonitis³, lymphoma^{4,5}, and neurotoxicity⁶. There is no significant evidence of increased risk of side effects with subcutaneous MTX as opposed to the oral form.

We would also point out that anti-tumor necrosis factor (TNF- α) therapy has also been associated with rare but serious adverse events such as demyelination⁷, severe infusion reactions⁸, congestive heart failure⁹, and autoimmunity¹⁰. Therefore, these drugs and their side effects must be put into context. The longterm side effects of anti-TNF- α agents are still unknown. The balance of risks and benefits of biologic disease-modifying antirheumatic drugs can only be reliably determined when good longterm data on such effects are available.

Patient safety should not be compromised. The significant cost benefits must be taken into consideration, while at the same time keeping the risk to the patient to a minimum.

ROYA HASSANZADEH, BSc, Medical Student; CLODAGH MANGAN, Medical Student, University of Glasgow, Medical School; JANICE FRANCE, RGN, SCM, ADM, Specialist Nurse; SANDEEP BAWA, MBChB, MRCP, MSc, Consultant, Gartnavel General Hospital, Department of Rheumatology, Glasgow, UK. Address correspondence to Dr. R. Hassanzadeh, University of Glasgow – Medical School, Wolfson Medical School Building, University Avenue, Glasgow G12 8QQ, UK. E-mail: royahmr@googlemail.com

REFERENCES

1. Kapoor S. Rare side effects of subcutaneous methotrexate therapy [letter]. *J Rheumatol* 2013;40:205.

2. Hassanzadeh R, Mangan C, France J, Bawa S. Subcutaneous methotrexate to cut costs? [letter]. *J Rheumatol* 2012;39:1764-5.
3. Grove ML, Hassell AB, Hay EM, Shadforth MF. Adverse reactions to disease modifying anti rheumatic drugs in clinical practice. *Q J Med* 2001;94:309-19.
4. Wang H, Wu D, Xiang H, Chen A, Liu J. Pulmonary non-Hodgkin's lymphoma developed during long-term methotrexate therapy for rheumatoid arthritis. *Rheumatol Int* 2012;32:3639-42.
5. Rizzi R, Curci P, Delia M, Rinaldi E, Chiefa A, Specchia G, et al. Spontaneous remission of "methotrexate-associated lymphoproliferative disorders" after discontinuation of immunosuppressive treatment for autoimmune disease. Review of the literature. *Med Oncol* 2009;26:1-9.
6. Rollins N, Winick N, Bash R, Booth T. Acute methotrexate neurotoxicity: findings on diffusion-weighted imaging and correlation with clinical outcome. *AJNR Am J Neuroradiol* 2004;25:1688-95.
7. Mohan N, Edwards ET, Cupps TR, Oliverio PJ, Sandberg G, Crayton H, et al. Demyelination occurring during anti-tumor necrosis factor alpha therapy for inflammatory arthritides. *Arthritis Rheum* 2001;44:2862-9.
8. Schaible TF. Long term safety of infliximab. *Can J Gastroenterol* 2000;14 Suppl C:29C-32C.
9. Setoguchi S, Schneeweiss S, Avorn J, Katz JN, Weinblatt ME, Levin R, et al. Tumor necrosis factor-alpha antagonist use and heart failure in elderly patients with rheumatoid arthritis. *Am Heart J* 2008;156:336-41.
10. Shakoor N, Michalska M, Harris CA, Block JA. Drug-induced systemic lupus erythematosus associated with etanercept therapy. *Lancet* 2002;359:579-80.

J Rheumatol 2013;40:2; doi:10.3899/jrheum.121377