Measures of Rheumatoid Arthritis Disease Activity

To the Editor:

The article by Pincus and colleagues¹ and the accompanying editorial by Neogi and Felson² debate the relative merits of individual and composite measures of disease outcome in rheumatoid arthritis (RA). Composite indices have clear merits. Pincus and colleagues reported that the physician global assessment performed well, and it gains some support from Neogi and Felson, as to them it represents a form of composite index. However, the issue that neither tackles is, "Which physician?"

Extensive work has shown that physicians differ substantially in their assessments of the severity of disease³⁻⁵ and of change in response to therapy⁶. Figure 1⁶ illustrates the opinion of 38 rheumatologists who judged the progress of 5 patients following the initiation of disease modifying antirheumatic drug (DMARD) therapy. Although there are trends in outcomes for the patients, with Patient E faring better than Patient A, there is very wide variation between the assessments made by different rheumatologists. Patient C, for example, has some physicians considering there has been a substantial improvement, while others score a substantial deterioration.

These differences are just as great when restricted to "clinically important" changes in disease status⁶, and are stable over long periods⁷, but are not apparent in routine clinical practice, where patients are reviewed by individual clinicians who do not test their assessments against those of their peers. Further, even when such comparisons are undertaken, the reasons for disagreement are not apparent to those making different judgments⁸. (Analysis of these clinical judgments can help clinicians converge on a common approach^{8,9}.) One solution is to develop a policy on judging the severity of RA based on the collective opinions of many rheumatologists, as applied to substantial patient management decisions, such as when to change DMARD due to perceived lack of efficacy. This has been done, and from it emerged the Disease Activity Score¹⁰.

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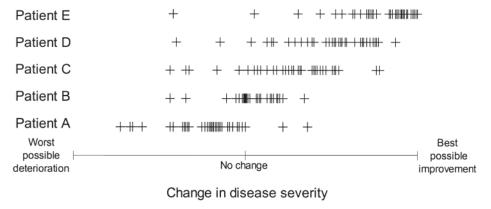


Figure 1. The opinion of 38 rheumatologists on the change in disease status of 5 patients with RA after initiation of DMARD therapy.

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