All aspects of the medical management of RA have undergone major changes in the past 25 years. In the 1990s numerous articles reported on the early onset of structural damage in patients with early RA that, if unchecked, would result in disability over time in >50% of patients. As a result, there was a shift to early aggressive therapy in hopes of improving patient outcomes and prevention of radiographic progression. This led to efforts to identify patients earlier in the disease and, with the advent of targeted biologic therapies to complement our non-biologic DMARDs, the opportunity for improvements in patient outcomes became a reality. With the availability of additional treatment options, the objectives of treatment have themselves changed, from relief of disease symptoms to arresting the disease process itself. And, in line with the changes in medical management, it has become necessary to redefine the disease, including the criteria for classifying a patient as having RA, the way disease activity is measured and the criteria for remission. This supplement offers a comprehensive picture of where RA management stands today with respect to all of these issues. In their article on ACR/EULAR 2010 rheumatoid arthritis classification criteria [1], Kay and Upchurch discuss the rationale for updating the RA classification criteria by working committees of the ACR and the European League Against Rheumatism (EULAR), as well as the process that resulted in the development of these criteria. As will be discussed, the previous criteria, dating from 1987 and put forward by the ARA (now the ACR), emphasized factors that distinguished RA from other conditions that present with joint pain and served to identify patients with established RA, but failed to identify many patients with early disease who could have benefited from aggressive intervention. In contrast, the 2010 classification aims specifically to identify patients early in their disease course who are at high risk for disease progression.

From the standpoint of RA management, it is necessary to assess the potential strengths and weaknesses of the new criteria, with the possibility that employing these criteria may result in either under- or overdiagnosis of RA. In the article by Bykerk and Massarotti on the new ACR/EULAR classification criteria for RA [2], several recent studies that compare these criteria with other standards for the definition of RA in different populations are examined. Because of advances in medical management that result in patients attaining much lower levels of disease activity, remission as a target of treatment has become a realistic possibility; however, in order to design clinical trials with treatment to remission as an outcome measure and to implement treatment plans in the clinic with remission as a target, a definition of remission is needed that is accepted by clinicians. The supplement article on the rationale for developing new criteria for remission [3] discusses the 2011 ACR/EULAR definition of remission, compares its performance with that of other definitions and discusses the implications for clinical practice. Previous definitions of remission (i.e. DAS28 <2.6) have been widely utilized, but patients meeting this threshold frequently have disease activity with persistent swollen or tender joints. Remission criteria predictive of future lack of radiographic progression and maintenance of physical function and lack of disability were needed. The new ACR/EULAR definition is more stringent and may limit the number of patients classified as in remission, and it will be of interest how they perform in the clinic as well as clinical trials. Controversies over the impact of inclusion of the patient global assessment as part of the criteria on the prevalence of remission are also discussed, as well as the potential impact of high-sensitivity imaging on the definition of remission.

With many chronic illnesses, such as diabetes, hypertension and hyperlipidaemia, target outcomes associated with morbidity have been established and clinicians are accustomed to treating patients to achieve specific goals, such as a reduction of A1C in diabetes or a decrease in low-density lipoprotein in lipid disorders. With the improvement in treatment options for RA patients, various composite disease activity evaluations have been suggested and the utility of altering treatment based on these measurements has been reported in a number of clinical trials. The article on RA disease measurement [4] describes the results of these clinical trials utilizing composite measures of disease activity as triggers for treatment adjustment and their potential utilization by the practitioner in the clinic to potentially improve patient outcomes.

The article on the evolution of treatment for RA [5] focuses on currently available treatment options, including the growing category of biologic agents. The benefits and limitations of the therapies are discussed with acknowledgement of the need for pharmacogenetics or other patient characteristics as a predictor of response to guide therapy selection. In addition, clinicians remain limited in their decision-making capacity due to the limited amount of data on the comparative benefits and risks of the various biologic agents.
Finally, in the management of any disease, especially a chronic disease that may require long-term or even life-long drug treatment, safety is a pre-eminent concern. No drug is entirely benign, and in every discussion with a patient regarding a new therapy a detailed discussion of the benefits and risks for the patient is necessary. The toxicities of the non-biologic and biologic DMARDs have been well delineated. Safety data on non-biologic and biologic DMARDs have been determined from randomized clinical trials resulting in registration and from large national registries that contain data on large numbers of patients who have been followed over long periods of time. The article on the safety of non-biologic and biologic DMARDs [6] discusses the safety data on DMARDs in detail, concluding that the risk of treatment with agents is reasonable, particularly when compared with the risk to patients from the disease itself.

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References

6 Ruderman E. Overview of safety of nonbiologic and biologic DMARDs. Rheumatology 2012;51(Suppl. 6):vi35–41.