Predictive Testing to Guide Targeted Therapy Selection in Rheumatoid Arthritis (RA) Key Questions

1. Please describe the level of certainty in the evidence supporting the selection of first-line and alternate medical therapies for rheumatoid arthritis (RA), as outlined in the American College of Rheumatology guidelines?

2. Specifically, how robust is the evidence supporting TNF-inhibitors (TNFis) as a first line therapy in RA (please provide)? What is the rationale for this practice, given that only about one-third of patients will adequately respond to this class of treatments?

3. Are you aware of any payor-imposed mandates regarding prescribing TNFis as first-line therapy in RA? If so, please comment.

4. What does the literature define as 'clinical response' in RA? Is there variability in the definitions of clinical response used by practicing rheumatologists, in the literature, or in practice guidelines (ie ACR-20 vs ACR-50)?

5. Please discuss the validity of using blood vs synovium as the more appropriate indicator of RA activity and treatment response. According to the literature, does disease activity in the blood correlate to what is happening in the synovium? Could differences be a possible reason for nonresponse to therapy?

6. What does the literature support as the primary clinical and laboratory indicators to consider when choosing a drug to treat RA - at a given time, or in a given sequence?

7. What is the level of certainty in the literature regarding anti-TNFi antibody testing in RA? Should it be performed and, if so, when?

8. What biomarkers are currently available for predictive testing to guide targeted therapy selection in RA and what is the evidence for their use?

9. What is the certainty of evidence in the literature to support the use of new technologies in predictive testing for the treatment of RA? Are such tests being offered clinically and, if so, how?

10. Regarding the new technologies and biomarkers discussed in the previous questions, does the literature support their use in only limited clinical situations and/or populations? Do you have concerns regarding their use or limitations? What are potential barriers to their implementation in practice (if any)?