

Applying precision medicine to unmet clinical needs in Rheumatoid Arthritis

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Rheumatoid Arthritis (RA) is a chronic inflammatory autoimmune disease affecting the joints. Over the last two decades, the management and outcome of RA patients significantly improved thanks to a new treatment approach involving biologics. Nevertheless, despite the current availability of many new targeted molecules, about 30-40% of RA patients fail to respond adequately to therapy and progress.

The key to addressing this unmet clinical need may reside in developing a "personalised" therapeutic approach to RA patients. As the hallmark of RA is the inflammation of the synovial tissue, we hypothesised and proved that diverse synovial cellular and molecular signatures are associated with distinct clinical phenotypes and response profiles.

Thanks to the technological advance and the recent in-depth molecular portraits of the synovial tissue, precision medicine is becoming an achievable goal in rheumatoid arthritis.