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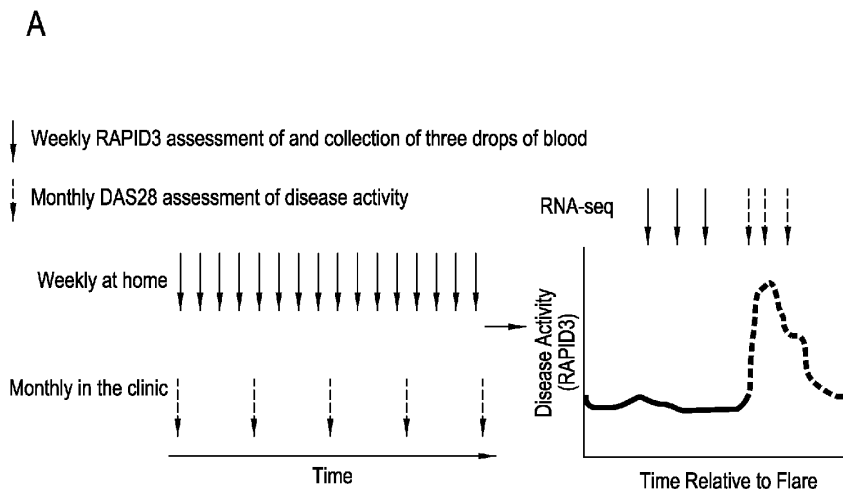


FIG. 1-1

(57) **Abstract:** The present disclosure provides biological markers which are molecular and cellular antecedents of rheumatoid arthritis (RA) flares. The present disclosure provides RNA and protein markers that can predict an RA flare one or two weeks prior to the flare. The present disclosure further provides blood circulating cells, particularly pre-inflammatory mesenchymal cells, which are cellular precursors and indicators of an impending RA flare. The present disclosure further provides methods, kits and markers for identification and monitoring of flares in RA patients and their application as markers and targets in and for treatment of rheumatoid arthritis and conditions induced or related to rheumatoid arthritis.

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