



Identification of Core Modules and Genes in Rheumatoid Arthritis Following Infliximab Therapy

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ABSTRACT The aim of this work was to investigate core modules and genes in rheumatoid arthritis (RA) following infliximab (IFX) therapy by combining systematic tracking of modules and attract method. Core modules were determined by attract method between IFX group (ION) and control group (CON). As a result, a total of 15 and 13 candidate modules were obtained for IFX group and control group, respectively. When matching candidate modules across the two groups, researchers gained 8 module pairs and named them as modules. In detail, Module 1 had the highest differential MCD (ΔC), $\Delta C = 0.041$. The result of attract method showed that 2 core modules (Module 3 and Module 6) and 9 core genes (*POLE2*, *CDC45*, *DLGAP5*, *KIF11*, *NCAPG*, *RPS5*, *RPL18A*, *RPL35* and *RPS19*) were successfully identified. The findings might give great insights to reveal the molecular mechanism underlying IFX, and provide potential biomarkers for treatment and prognosis of RA disease.