JAK-pot collaboration: comparing how well advanced therapies work in patients with RA

Effectiveness of TNF-inhibitors, abatacept, IL6-inhibitors and JAK-inhibitors in 31 846 patients with rheumatoid arthritis in 19 registers from the 'JAK-pot' collaboration.

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What was already known?

For some patients with rheumatoid arthritis (RA), if their initial treatment with conventionalsynthetic disease-modifying anti-rheumatic drugs (DMARDs) does not work to control their arthritis, they may need to consider other options. Biologic DMARDs were the first advanced therapies to become available, including tumour necrosis factor (TNF) inhibitors, interleukin (IL)-6 inhibitors, and the treatment called abatacept. More recently, targeted-synthetic DMARDs such as Janus-kinase (JAK) inhibitors have become available for patients with RA. Very few studies have looked at how well all of these drugs work in the real-world.

What was discovered?

As part of the JAK-pot collaboration, 19 registers internationally – including the British Society for Rheumatology Biologics Register for RA (BSRBR-RA), collated all their data on how well these drugs work in the real-world. Overall, more than 30'000 different episodes of treatment were included, and it is the first to evaluate real-life effectiveness and safety outcomes among four common available advanced treatment options; TNF inhibitors, IL6 inhibitors, abatacept, and JAK inhibitors. Overall, how long patients remained on treatment for (a marker for how well the drug works for), as well as how many patients responded to treatment, was similar between treatments. However, more patients stopped JAK inhibitors for safety reasons, which could be due to a combination of real differences in safety profile as well as heightened concerns from physicians and patients, causing them potentially to be more careful with this newer treatment.

Why is this important/what is the benefit to patients?

These results support the use of these four treatments for treating patients with RA in 'real-world' clinical care. Considering similar effectiveness among these treatments, this study calls for the evaluation of other outcomes that could influence treatment choice, such as patient-reported outcomes, comorbidities, tolerability, safety or cost-effectiveness.

Should you wish to read this scientific paper in full, the text can be found online here: <u>https://doi.org/10.1136/annrheumdis-2022-222586</u>



