INDIRECT COMPARISON OF BARICITINIB, TOFACITINIB AND UPADACITINIB IN THE TREATMENT OF RHEUMATOID ARTHRITIS IN THE ANTI-TNF-RESISTANT PATIENT

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Background
Along with the new Janus Kinase inhibitors, it is necessary to establish whether the drugs are equivalent, or there is a superior one.

Aim and objectives
Comparison of effectiveness (ARC 20, ARC 50 and ARC 70) between the 3 Janus kinase (JAK) inhibitors currently marketed in our country, in patients diagnosed with rheumatoid arthritis and who are resistant to anti-TNF

Material and methods
A Pubmed search was conducted to identify phase 3 clinical trials in patients diagnosed with rheumatoid arthritis who had an inadequate response to anti-TNF biologics and whose comparator was placebo treated with baricitinib, tofacitinib or upadacitinib. The trials should have the ARC20/50/70 variable collected at week 12.

Indirect comparisons were made using the Bucher method to compare the three drugs and the different ARC20, ARC 50 and ARC 70.

Results
Three pivotal trials (SELECT-BEYOND, RA-BEACON and ORAL-step) that met the inclusion criteria were selected, for upadacitinib, baricitinib and tofacitinib respectively. It is expressed in the following table RR (95% CI) of the indirect comparison for ARC / 20/50/70 at week 12

<table>
<thead>
<tr>
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<th>ARC20</th>
<th>ARC50</th>
<th>ARC70</th>
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</thead>
<tbody>
<tr>
<td>Upadacitinib 30 mg vs Tofacitinib 10 mg</td>
<td>0.99 (IC95% 0.64 to 1.55)</td>
<td>1.1 (IC95% 0.5 to 2.38)</td>
<td>1.95 (IC95% 0.4 to 9.6)</td>
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<tr>
<td>Upadacitinib 30 mg vs Baricitinib 4 mg</td>
<td>1.02 (IC95% 0.68 to 1.51)</td>
<td>1.18 (IC95% 0.57 to 2.41)</td>
<td>1.4 (IC95% 0.41 to 4.81)</td>
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<tr>
<td>Tofacitinib 10 mg vs Baricitinib 4 mg</td>
<td>1.02 (IC95% 0.65 to 1.59)</td>
<td>1.07 (IC95% 0.63 to 2.23)</td>
<td>0.72 (IC95% 0.12 to 4.37)</td>
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</table>

RR>1 favors treatment on the right

Conclusion
No statistically significant differences were found between the three JAK inhibitors compared for this patient profile. It is necessary to have direct studies to be able to establish with greater precision if there are differences in terms of efficacy for the 3 JAK inhibitors

References
ELECT-BEYOND DOI: 10.1016/S0140-6736(18)31116-4
RA-BEACON DOI: 10.1056/NEJMoa1507247
ORAL-step DOI: 10.1016/S0140-6736(12)61424-X