



# BSRBR-RA in Scotland

**Welcome** to our newsletter for centres in Scotland involved with the BSRBR-RA. We will update on how recruitment is going and provide register updates.

## Risk of heart attacks in patients with rheumatoid arthritis almost halved by biologic drugs: Data from the BSRBR-RA

Recently, the results of an analysis looking at the influence of TNFi on the risk of myocardial infarction (MI) have been published. The results represents a successful collaboration between the BSRBR-RA and the Myocardial Ischaemia National Audit Project (MINAP). We know that patients with rheumatoid arthritis (RA) are at increased risk of MI or heart attacks compared with subjects without RA, with the increased risk driven potentially by inflammation. TNF inhibitors (TNFi) may modulate the risk and severity of MI. This analysis compared the risk and severity of MI in patients treated with TNFi with that in those receiving synthetic disease-modifying antirheumatic drugs (sDMARDs).

The analysis included patients with RA recruited to the BSRBR-RA from 2001 to 2009 starting one of the three original TNFi (etanercept/ infliximab/ adalimumab) and a biologic-naïve comparator cohort receiving sDMARD. Only patients with no history of ischaemic heart disease were included. In addition to the regular follow-up within the BSRBR-RA, all patients were linked to MINAP, a national registry of hospitalisations for MI. This linkage provided details of any additional MI's occurring in England and Wales since 2003 not originally reported to the BSRBR-RA. It also provided more details about the MI itself, such as cardiac enzyme levels, ECG changes and occurrence of cardiac arrest. The risk of first MI was compared between cohorts using COX regression, adjusted using propensity scores to account for a wide range of possible confounding factors. MI phenotype and severity were also compared as was the 6-month mortality rates post-MI.

In total, 252 verified first MIs were analysed: 58 in 3058 patients receiving sDMARD and 194 in 11 200 patients receiving TNFi (median follow-up per person 3.5 years and 5.3 years, respectively). The adjusted risk of MI in TNFi compared to sDMARD was 0.61 (95% CI 0.41 to 0.89), a 40% reduction. No statistically significant differences in MI severity or mortality were observed between treatment groups. These data suggest that patients with RA who receive TNFi have a significantly decreased risk of MI compared with patients with RA receiving sDMARD therapy over the medium term. This might be attributed to a direct action of TNFi on the atherosclerotic process or better overall disease control over time with TNFi.

Search: [Ann Rheum Dis doi:10.1136/annrheumdis-2016-209784](https://doi.org/10.1136/annrheumdis-2016-209784) for the paper: 'Relationship between exposure to tumour necrosis factor inhibitor therapy and incidence and severity of myocardial infarction in patients with rheumatoid arthritis.'

**Table 1: Scottish recruitment 2015/2016 (up to 30/09/2016)**

Hospital	2015	2016	Total
WISHAW GENERAL HOSPITAL ( <i>nr Motherwell</i> )	1	11	12
BORDERS GENERAL HOSPITAL ( <i>nr Galashiels</i> )	1	7	8
GLASGOW ROYAL INFIRMARY	8	7	15
FIFE RHEUMATIC DISEASES UNIT	5	5	10
GARTNAVEL GENERAL HOSPITAL ( <i>Glasgow</i> )	0	5	5
RAIGMORE HOSPITAL ( <i>Inverness</i> )	4	3	7
WESTERN GENERAL HOSPITAL ( <i>Edinburgh</i> )	2	3	5
ABERDEEN ROYAL INFIRMARY	9	2	11
STOBHILL GENERAL HOSPITAL ( <i>nr Glasgow</i> )	2	0	2

**If your hospital name is not listed this is because there have been no new registrations from your site. Details of those cohorts that are still recruiting are listed over the page. If your centre is experiencing difficulties recruiting please contact our local Scottish study support or the office and we will see what we can do to help out where possible. Don't forget that all registrations (including re registration) are eligible for inclusion in UKCRN portfolio accruals.**

### Congratulations

to our top Recruiters!



**WISHAW GENERAL HOSPITAL**



**BORDERS GENERAL HOSPITAL & GLASGOW ROYAL INFIRMARY**



**FIFE RHEUMATIC DISEASES UNIT & GARTNAVEL GENERAL HOSPITAL**

Thank you to everyone for their registrations. Keep up the good work. You can continue to help us meet our registration targets by aiming to recruit at least 8 participants per year from your centre.

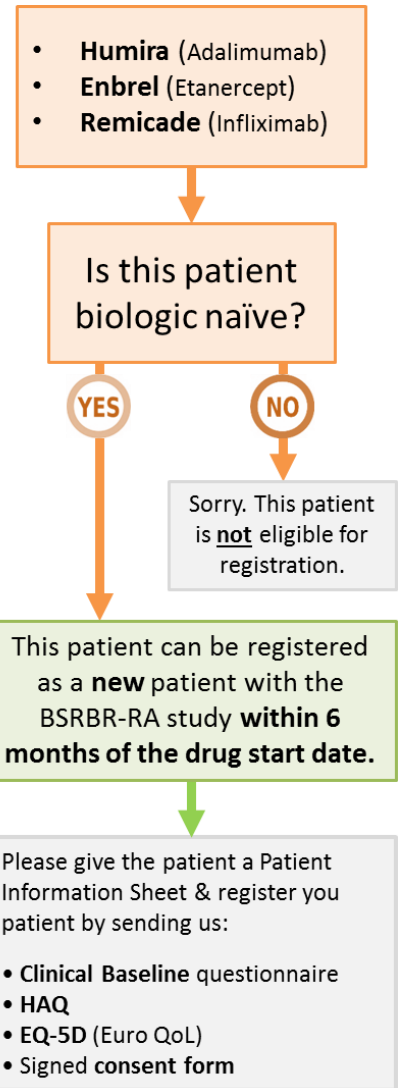
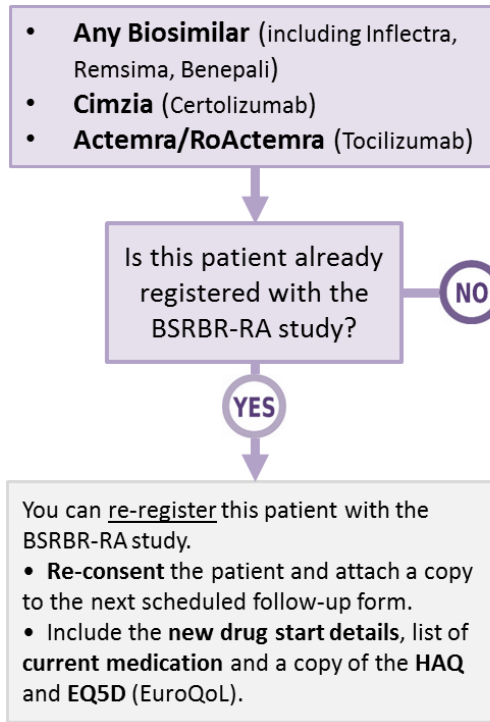


## Recruiting Update

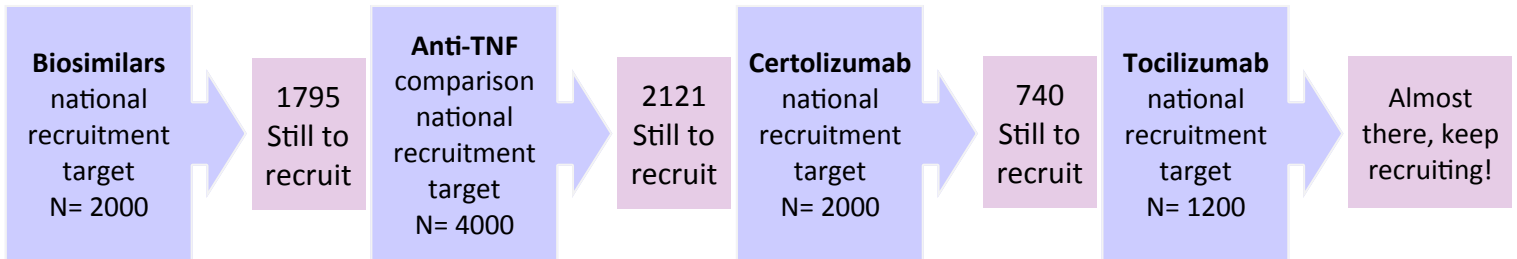
Since our last newsletter biosimilars have arrived!

The BSRBR-RA would like to register all Rheumatoid Arthritis patients who are starting these drugs as their first therapy and those who are switching from the biologic originator.

The office will be able to provide some help with this such as providing a list of currently registered patients and the biologic we currently have them recorded as taking. We may also be able to provide short base-lines for patients switching to a biosimilar that are pre filled with the details we already hold.



Full details are on our website/available from the office. If for some reason a patient cannot be re-registered please continue to let us know at follow up about all biologic/biosimilar drug changes. **(BSRBR-RA UK CRN ID: 7302)**



Visit our Health Professionals section at [www.BSRBR.org](http://www.BSRBR.org)

### Scotland contact details

Ann Tierney is our dedicated study-support person in Scotland. Please contact her if you have any questions regarding local support

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### Direct office contact details

Our dedicated team in Manchester are happy to answer you queries.

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