

# Comparison between RA patients included in the BARFOT study 1992-1999 and 2000-2006 - a five year follow-up



RE 11P

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## Conclusion

RA patients included in the 2000s achieved higher reduction of DAS28 and higher frequency of remission than those included in 1990s, probably due to more active treatment. Despite the difference in DAS28 improvement, pain and HAQ did not differ between the groups.

## Objective

To compare patient and disease characteristics over the first 5 years of disease in a large inception cohort of early RA patients, included 1992 to 1999 and 2000 to 2006, respectively.

## Background

Treatment strategies for rheumatoid arthritis (RA) have changed over the last decades. In Sweden the recommendation in the 1990s was initial DMARD monotherapy and early use of low-dose glucocorticoid, and "step-up" combination therapy reserved for more severe disease. In 2000 that strategy was changed to possibility to initiate treatment with biologics when the first DMARD or combination of DMARDs failed.

## Methods

In all 2544 RA patients were recruited from the BARFOT prospective multi-center observational study. They had at inclusion a disease duration of  $\leq 12$  months. The patients were divided into two groups, group 1 (N=1256, 66% women) included 1992 to 1999 and group 2 (N=1288, 68% women) included 2000 to 2006. Disease Activity Score (DAS28), VAS pain and Health Assessment Questionnaire (HAQ) were assessed at inclusion, 3, 6 months and 1, 2 and 5 years. Remission was defined as DAS28 < 2.6. Statistical comparisons between groups were done by Mann-Whitney U test and Chi2.

## Results

At inclusion, as shown in table 1, the women in group 2 were, compared with those in group 1, older, and more frequently RF positive, whereas the men did not differ in these aspects. In both women and men group 2 had compared with group 1, higher DAS28. VAS pain was also higher in group 2 compared with group 1, in women. HAQ did not differ between the groups.

Over time DAS28 decreased in both groups, and as from 6 months in men and 12 months in women the mean DAS28 was significantly lower in group 2 compared with group 1 and remained lower during the entire 5 year follow-up (figure 1). At 5 year 42% of the women in group 2 were in remission vs. 29% in group 1,  $p < 0.001$ , and in men the corresponding percentages were 64% and 51%,  $p = 0.006$  (figure 2). At 5 year there were also fewer patients with high disease activity in group 2, women 6% vs. 16% and men 4% vs. 8%,  $p < 0.001$  and  $p = 0.006$ , respectively (figure 2).

VAS pain and HAQ decreased similarly during follow-up in the two groups (figure 3 and 4), thus with no differences between groups at any time point.

The patients in group 1 started with methotrexate (MTX) in 21%, with sulphasalazine (SAL) in 29%, and with other DMARDs in 10%, and the corresponding figures for group 2 were 61%, 19% and 3%. At the 5 year follow-up patients in group 1 got MTX in 32%, combination therapy in 9% and biologics in 6% (figure 5), and in group 2 the corresponding figures were 41%, 9% and 20%.

Table 1. Baseline characteristics

	Women		P-Value	Men		P-value
	Group 1	Group 2		Group 1	Group 2	
N	827	871		429	417	
Age	55 (16)	58 (16)	<0.001	61 (14)	62 (14)	0.3
Disease duration (months)	6.2 (3.1)	5.7 (3.0)	0.002	5.9 (3.0)	5.7 (3.0)	0.3
Non smoker (%)	48	44	0.2	31	29	0.5
RF pos (%)	57	65	0.001	61	59	0.6
DAS28 (0-10)	5.26 (1.23)	5.42 (1.23)	0.004	5.01 (1.27)	5.28 (1.23)	0.001
Pain VAS (0-100 mm)	46.6 (24.4)	49.8 (25.5)	0.004	41.4 (24.1)	44.6 (24.6)	0.08
HAQ (0-3)	1.07 (0.65)	1.14 (0.66)	0.07	0.84 (0.62)	0.90 (0.62)	0.1

Figure 1. Mean DAS28 over 5 years in group 1, patients included 1992-1999 and group 2, patients included 2000-2006

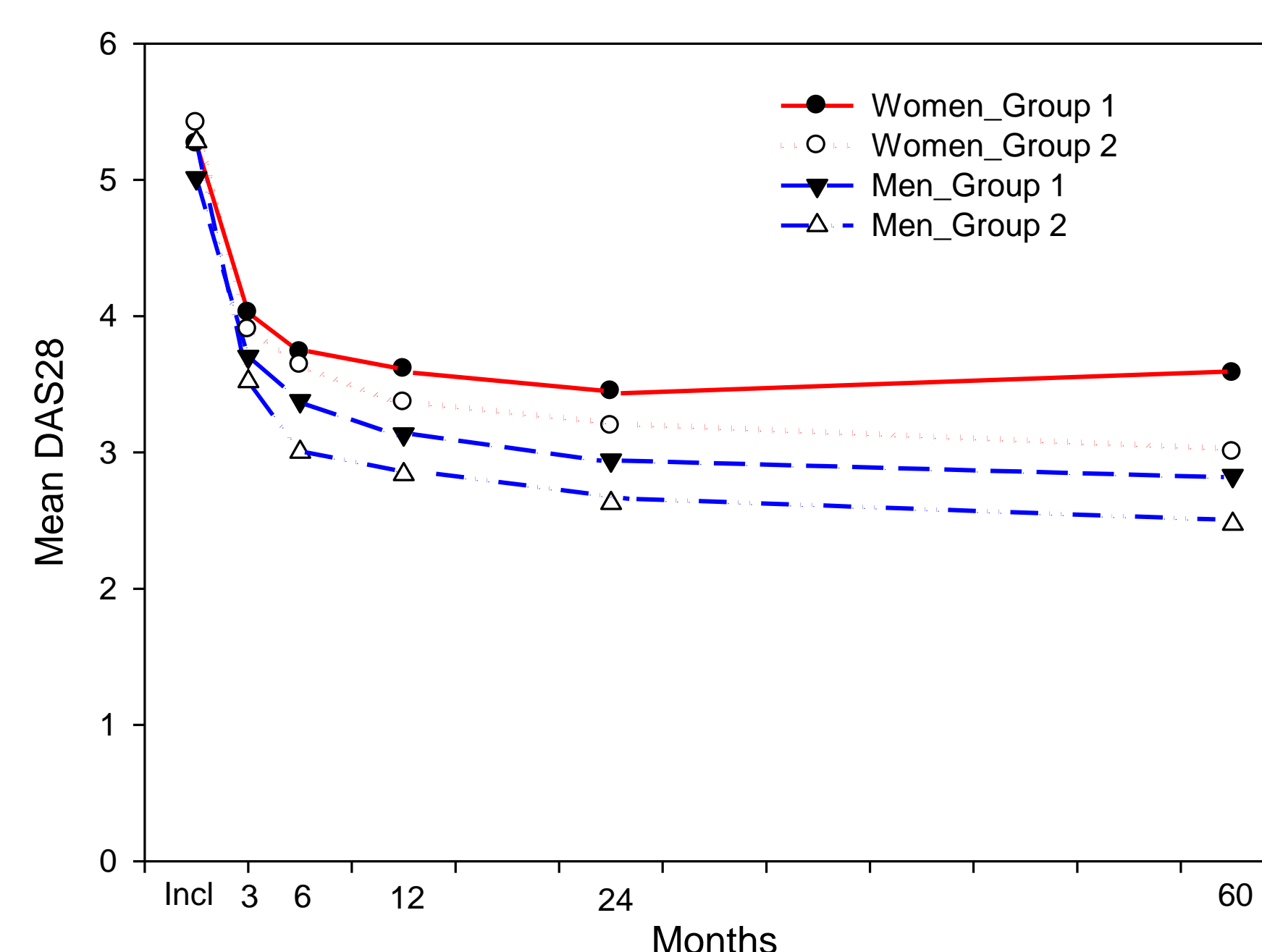


Figure 2. Rate of remission at 5 year follow-up in group 1, patients included 1992-1999 and group 2, patients included 2000-2006

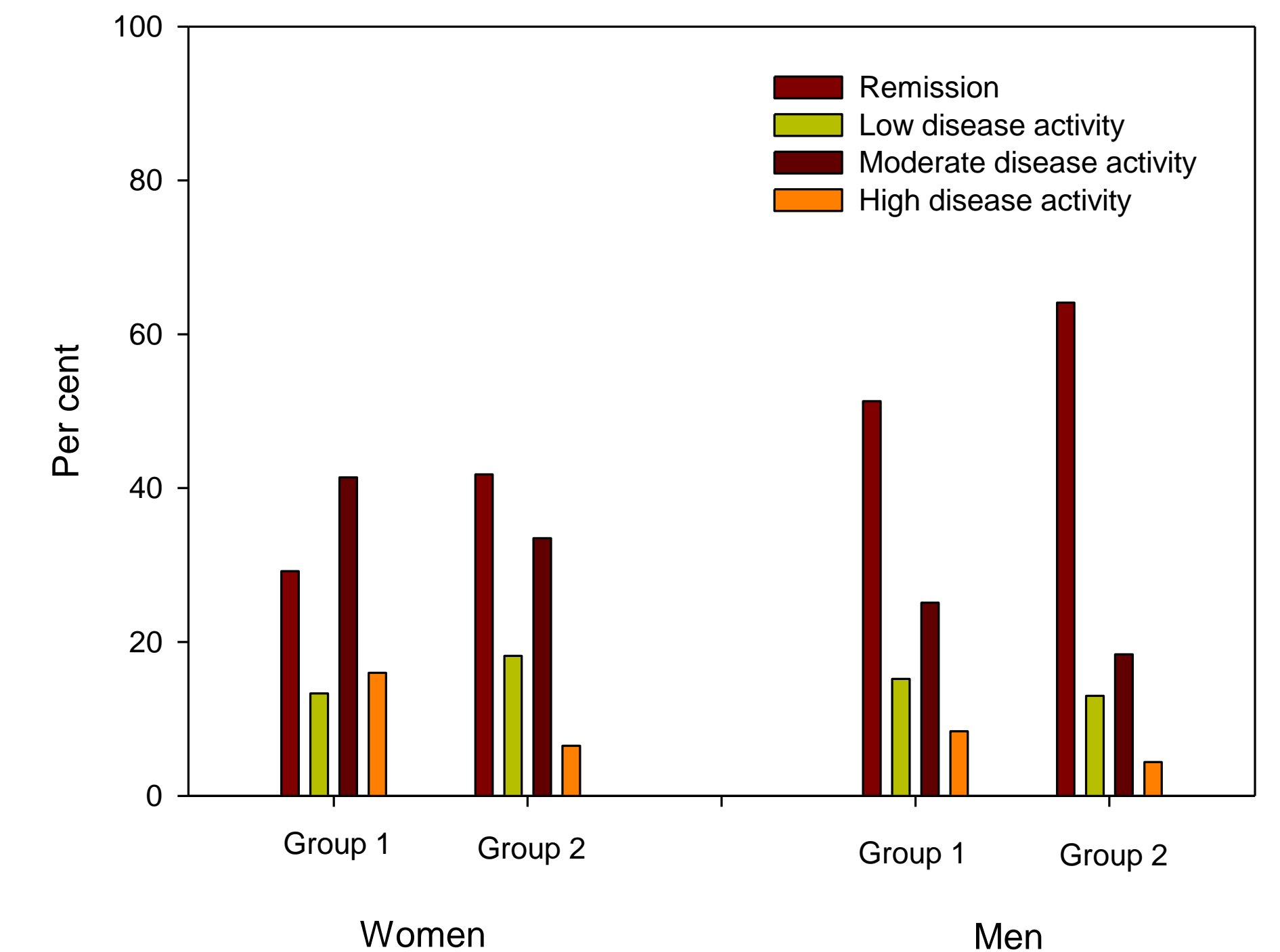


Figure 3. Mean VAS pain over 5 years in group 1, patients included 1992-1999 and group 2, patients included 2000-2006

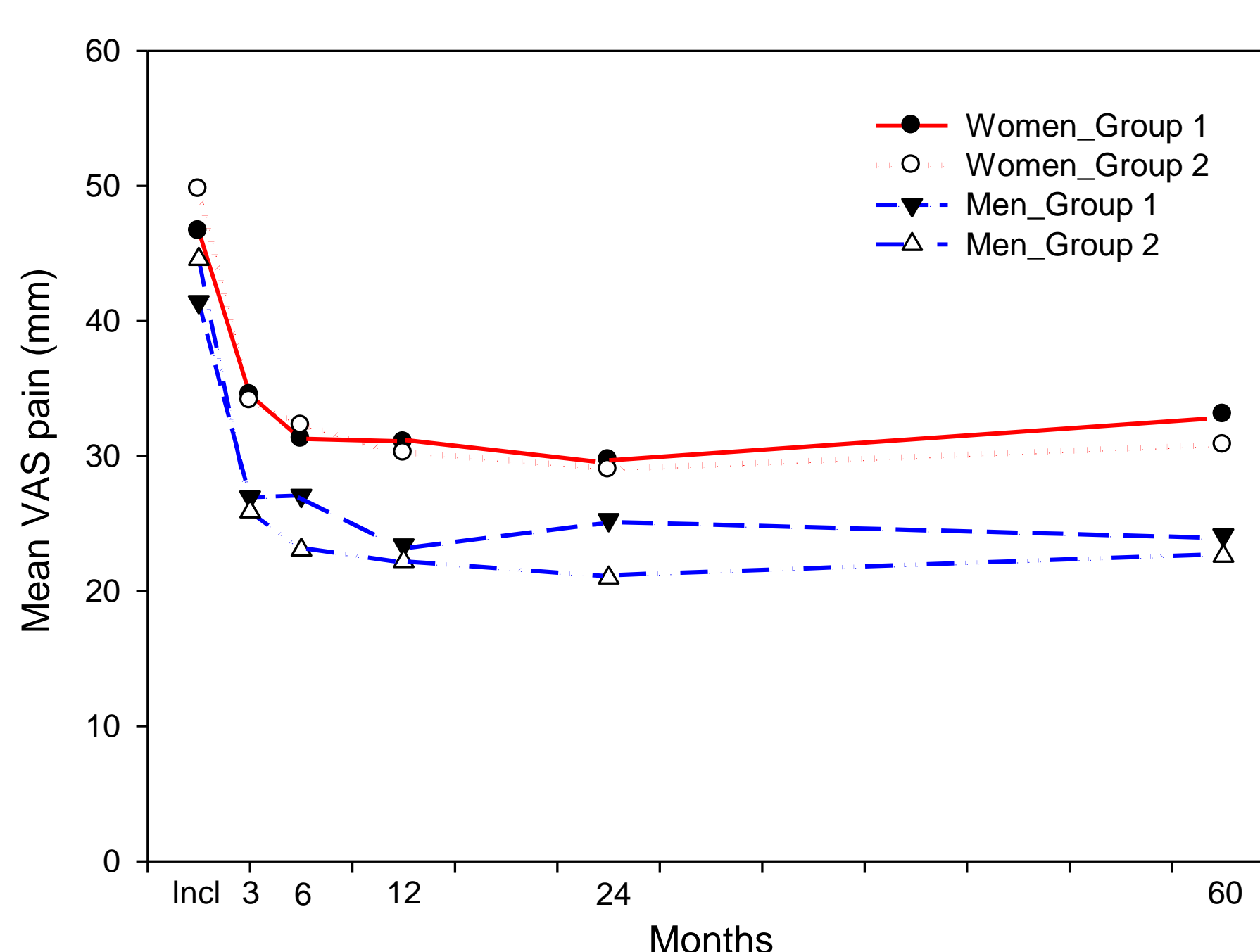


Figure 4. Mean HAQ over 5 years in group 1, patients included 1992-1999 and group 2, patients included 2000-2006

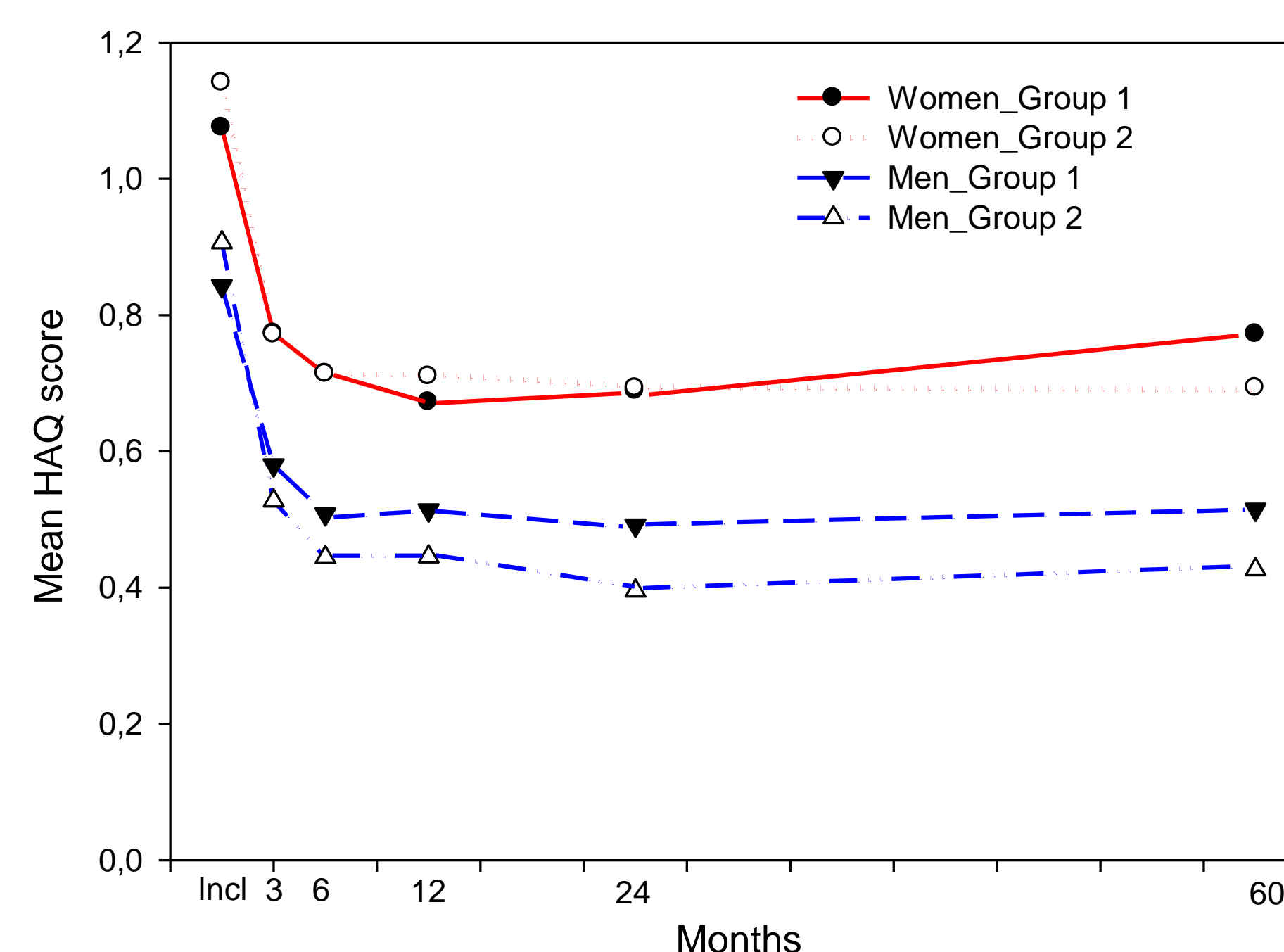


Figure 5. Rate of patients treated with biologics over the first 5 years in group 1, patients included 1992-1999 and group 2, patients included 2000-2006

