

## Reasons for gender differences in prescription of drug therapies in rheumatoid arthritis – results from the database of the German Collaborative Arthritis Centres

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**Purpose:** In a previous analysis of age and disease duration matched pairs, we found differences in prescription of drug treatments between female and male patients inconsistent with observed disease parameters in these groups. We examined in detail the reasons for these differences.

**Methods:** We analysed data from the national database of the German Collaborative Arthritis Centres for the year 2003, gathered from 8,770 outpatients with rheumatoid arthritis in continuous rheumatologic care.

**Results:** Comparing the patients according to the intensity of their reported pain, men with medium pain (4-6 on a VAS 0-10) were prescribed more often analgesics than women. In all three groups (low, medium and high pain) men got more frequently high-dose corticosteroids which are known to increase the risk of osteoporosis. Without showing differences in age, women got about 10% more osteoporosis treatments after controlling for corticosteroid intake. Controlling for disease activity, there was a systematic difference in prescription rates of disease modifying antirheumatic drugs (DMARDs): women received more frequently drugs with lower efficacy and better tolerability while standard therapy with methotrexate was more often prescribed for men. The percentage of combination therapy with more than one DMARD was also higher in men. Age and disease duration could only partly explain the differences.

**Conclusion:** Although we controlled for expected determinants of prescription behaviour, differences in prescription rates according to gender remained. These disparities suggest that decision making concerning drug treatment might be different for men and women.