A RISK-TAILORED STRATEGY ENABLES INDIVIDUALIZED STRATIFICATION OF CARE WITH IMPROVED OUTCOME AND APPROPRIATE ALLOCATION OF LIMITED RESOURCES – LONG-TERM RESULTS OF A MANAGED CARE MODEL IN EARLY ARTHRITIS

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Objectives:

We have developed a managed care model for early arthritis that combines the following principles: a) treat to target (clinical remission, functional capacity, radiologic progression); b) tight control; c) prospective identification of subjects with poor prognosis and stratification of therapy by a risk-tailored strategy; (d) guidance of therapy according to predefined algorithms.

Methods:

From 2005-2012 613 patients with early arthritis (≤ 2 years) registered for the model. On entry, a modified Visser score (1) plus shared epitopes and MRI findings as additional prognostic markers was used for an initial appraisal of prognosis. For a following treatment period of 3 months, patients were assigned to one of four risk groups: low (< 25%), moderate (25-50%), high (50-75%), and very high (75-100%) risk for developing erosions. Treatment modalities (e.g., DMARDs, steroids), intensity of care (inpatient, outpatient, physiotherapy, occupational therapy) and frequency of control visits were ascertained according to the particular risk group. If at periodical assessments every 3 months (x-rays every 12 months) the therapeutic objectives (DAS28 ≤ 3.2, HAQ ≤ 1.0, halt of radiographic progression) were achieved and the prognosis re-evaluation yielded the same risk group, current therapy was continued unchanged within the treatment corridor of that group. In all other cases, therapy was modified and adjusted to the new risk group. 248 subjects with definite diagnosis of RA (n=200) or PsA (n=48) were chosen for further analysis.

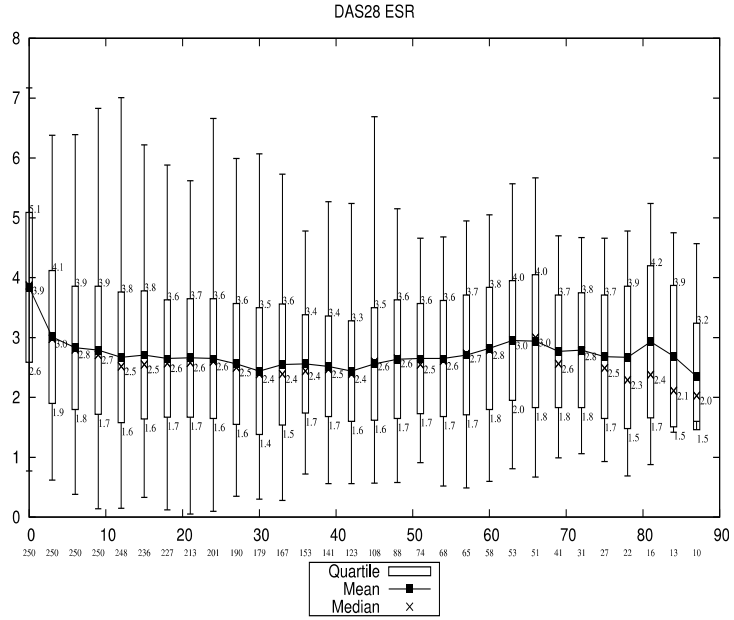

Figure 1: DAS28 ESR (expressed as mean and median) over a disease duration of 84 months.

Results:

The intended objectives could be achieved in defiance of different treatment modalities and different assignment of resources. The majority of subjects reached low disease activity within the first 3 months and had sustained low disease activity over a follow-up of up to 84 months. At 60 months, 26/61 patients (43 %) were in clinical remission (DAS28 ≤ 2.6); 40/61 (66%) had reached at least low disease activity (DAS28 ≤ 3.2); and 6/61 (10%) were in drug free remission.

The clinical outcome was independent of the initial stratification arm and the current assignment to a risk group. 32/61 (52.5 %) were treated with traditional DMARDs (13% combination therapy), and 8/61 (13%) had biologic DMARDs. 38/61 patients had no steroids (62%); the vast majority of the remaining subjects had low dose prednisolone (≤ 5 mg, 21/23, 91%; mean dose 3.95 mg). The proportion of patients with biologics was relatively low compared to registry data (up to 23% of RA patients) while the remission rates were comparable to clinical studies of biologic therapy in early RA (49-50% (2,3)).

Conclusions:

In patients with early arthritis, a risk-tailored strategy with individualized stratification of tight control and a prognosis-orientated, differentiated allocation of man power and of cost-intensive therapies enables appropriate outcomes with economic, effective and efficient usage of resources.

References:

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