CD19 +CD27 naive cells. A subset of memory CD8 +T cell, expressing CXCR3 was found to be increased in SSc patients as compared to healthy controls. Transcriptome analysis of sorted B cell and T cell subsets showed decrease in genes related to survival and increased expression of apoptotic genes in CD4,CD8 T and MAIT cells from SSc patients. Genes related to exhaustion and leukocyte migration were highly expressed in T cells from patients.

Conclusions: This study provides an in depth analysis of systemic immune composition in SSc with the potential to delineate mechanisms of pathogenesis and identify diagnostic and/or therapeutic targets. This is the first demonstration of dysfunction of MAIT cells in SSc and further characterisation of their function in this context is required.

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Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.6082

FRIDAY, 15 JUNE 2018

Navigating the world of digital health

OP0343-HPR AN ECONOMIC EVALUATION OF A TAILORED GUIDED INTERNET-BASED COGNITIVE BEHAVIOURAL INTERVENTION FOR PATIENTS WITH RHEUMATOID ARTHRITIS AS AN ADDITION TO USUAL CARE

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Background: Within the field of rheumatoid arthritis (RA), patients report decreased health-related quality of life (HRQoL) as a result of living with physical factors such as pain and psychological factors such as negative mood. As these factors are associated with the disease trajectory, health care utilisation, and workplace disability of patients, these factors lead to significant societal health expenses. In a recent randomised controlled trial, improvements in especially psychological functioning (e.g., depressed mood) were found by offering tailored, therapist guided cognitive behavioural therapy online.¹ Although internet-based cognitive behavioural therapy holds promise for implementation and cost-reductions, scarce research is available on the cost-effectiveness of these treatments.

Objectives: A cost-effectiveness study from a societal perspective was conducted alongside a randomised controlled trial on a tailored and therapist-guided internet-based cognitive behavioural intervention (ICBT) for patients with elevated levels of distress, as an addition to usual care alone in order to inform stakeholders on implementation of this treatment.

Methods: Data were collected at baseline/pre-intervention, 6 months/post-intervention, and three-monthly thereafter during one year follow-up. Effects were measured in quality-adjusted life years (QALYs) and costs from a societal perspective including healthcare sector costs (including healthcare use, medication, and intervention costs), patient travel costs for healthcare use, and costs associated with loss of labour.

Results: The intervention improved quality of life compared to usual care alone (Δ QALYs=0.059), but also led to higher costs (Δ =€ 4.211,44), which reduced substantially when medication costs were left out of the equation (Δ =€ 1.862,72). Most (93%) of the simulated ICERS were in the north-east quadrant, suggesting a high probability that the intervention is effective in improving HRQoL, but at a greater monetary cost for society compared to usual care alone.

Conclusions: A positive effect on quality-adjusted life years is seen in the intervention group compared to the control group. However, cost-ratios show that this comes at a greater cost to society. The substantial costs in this population are generated by medication costs, for which no group differences could be found. The cost-benefit ratio improves when the costs for medication are not taken into account.

Based on the effects for improvement of quality of life, implementation of the intervention is recommended, yet on the side of costs, further study is warranted.

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Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.5349

FRIDAY, 15 JUNE 2018

The rheumatologist-orthopaedic surgeon connexion in secondary fracture prevention

OP0344 FRAME STUDY: THE FOUNDATION EFFECT OF REBUILDING BONE WITH ONE YEAR OF ROMOSUZUMAB LEADS TO CONTINUED LOWER FRACTURE RISK AFTER TRANSITION TO DENOSUMAB

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Objectives: Romosozumab (Romo), a sclerostin antibody, has a dual effect of increasing bone formation and decreasing bone resorption. In the FRAME study (NCT01575834), one year of Romo treatment resulted in large bone mineral density (BMD) increases at the lumbar spine (LS) and total hip (TH) versus placebo (Pbo).¹ The differences between groups remained after all subjects transitioned to denosumab (DMAb) during the second year of study. Here, we further characterise the BMD gains seen during the FRAME study and examine the effect of building bone with Romo on fracture-risk reduction after transition to DMAb.

Methods: Subjects in FRAME were randomised to receive monthly Romo 210 mg or Pbo for 12 months, after which all subjects received 6-monthly DMAb 60 mg for an additional 12 months. Endpoints for the current analysis were mean change from baseline in BMD T-score, percentage of subjects with a BMD gain, and fracture incidence in the second year of the FRAME study, including new vertebral, clinical (nonvertebral and symptomatic vertebral), and other fracture categories.

N = Number of subjects with values at baseline and at least one post-baseline visit at or before month 12. Data are percent change in BMD from baseline to month 12 by individual subject at the lumbar spine. N's included subjects with baseline and ≥1 postbaseline measurement; missing data were imputed by last observation carried forward. X-axis represents each individual subject. Dotted horizontal lines reflect 3%, 6%, and 10% BMD gain from baseline to month 12. Lines with arrowheads below the X-axis represent the percent of subjects with the indicated BMD gains (> 0%, ≥ 3%, ≥ 6%, and ≥ 10%). BMD, bone mineral density.

Abstract OP0344 – Figure 1 Percent change in lumbar spine BMD from baseline to month 12 by individual subject