date there is no biomarker to predict such response. Autoantibodies are found in up to 80% of patients with IIM; myositis associated (MAA) and myositis specific antibodies (MSA) are associated with certain clinical features. Whether MSAs can be used as biomarkers to predict response to treatment is unknown.

Objectives: To investigate predictors of response according to the New ACR/EULAR 2016 response criteria for idiopathic inflammatory myositis using a national rheumatology register.

Methods: Patients with IIM who were included in the Swedish Rheumatology Quality Register (SRQ) between January 1st, 2003 and December 31st, 2015 within 12 months of diagnosis were included in this study. Response was assessed at the visit registered closest to one year after inclusion. IIM subgroup (dermatomyositis (DM), polymyositis (PM) and overlap myositis), autoantibody profile, time to diagnosis and treatment were categorized into dichotomous variables. Time to diagnosis (from first symptoms) less than 3 months was considered as early; initial dose of glucocorticoids was considered high when >45 mg. The ACR/EULAR 2016 criteria for Clinical Response were applied to measure response, and it was categorized in minimal (20–39/100), moderate (40–59/100) and major (>60/100) response. The association between response and clinical characteristics was assessed by multinomial logistic regression.

Results: 179 patients were included. Median age at inclusion was 58.9 years (Interquartile range (IQR) 46.7–68.6), 65% were female and 49% had ever smoked. Thirty-three percent had DM, 45% PM and 22% overlap myositis. Lung disease was present in 37% and cancer within ± 3 years from IIM diagnosis was present in 13%. Ninety-one percent were given glucocorticoid treatment, 72% immunosuppressive drugs, 22% cyclophosphamide and 13% a biological drug. **Response rates.** Two thirds (62%) were responders, 23% had minimal, 20% moderate and 18% major response. Minimal response was associated with high initial glucocorticoid dose (OR 3.4, CI95% 1.4–8.1); moderate response to high initial glucocorticoid dose (OR 4.8 CI95% 1.9–11.8) and major response to early diagnosis (OR 3.9 CI95% 1.3–11.9), and high initial glucocorticoids dose (OR 9.5 CI95% 3.0–29.8). No associations between IIM subgroup, autoantibody profile and response rates were observed.

Conclusions: Early and intensive treatment with high doses of glucocorticoids was associated with high rates of clinical response. These data suggest that early intensive immunosuppressive treatment is important in IIM.

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INVESTIGATION OF SELF-REPORTED PAINFUL JOINT COUNT AS OUTCOME MEASURE IN HAND OSTEOARTHRITIS

F. Kroon¹, J. van der Plas¹, S. van Beest¹, W. Damman¹, M. Kloppenburg^{1,2}.

¹Rheumatology, ²Clinical Epidemiology, Leiden University Medical Center, Leiden, Netherlands

Background: Hand osteoarthritis (OA) research is in need of disease-specific validated instruments to measure patient-reported outcomes. Self-reported painful joint count (PJC) could be useful to assess pain, including information about the distribution of painful joints, while being less time-consuming than assessor-reported tender joint count (TJC).

Objectives: To investigate the metric properties of self-reported PJC compared to assessor-reported TJC to measure pain.

Methods: Symptomatic hand OA patients from the Hand OSTeoArthritis in Secondary care (HOSTAS) study marked which joints were painful on standardized hand diagrams. Pain upon palpation was scored on similar diagrams by trained nurses, who were unaware of patients' scores. Self- and assessor-reported joint counts were calculated as the sum of painful/tender joints of both hands (range 0–30). Patients also rated pain on visual analogue scale and completed Australian/Canadian Hand Osteoarthritis index pain subscale, Short Form-36 Mental/Physical Component Summary scales, and Hospital Anxiety and Depression Scale. Radiographs were scored according to Kellgren-Lawrence. MRIs of the right distal and proximal interphalangeal joints (DIPs/PIPs) were evaluated for bone marrow lesions and synovitis. Validity was investigated by assessing correlations between self-reported PJC and assessor-reported TJC, and of both joint counts with other outcome measures. Absolute agreement on joint level, and patient level intra-class correlation coefficients (ICCs) were calculated.

Results: Of 524 hand OA patients (86% women, mean age 61, 90% fulfilling ACR criteria), 506 (96.9%) reported ≥ 1 painful joint (median PJC 8 [interquartile range (IQR) 4–13]), while nurses reported ≥ 1 tender joint in 426 (81.3%) patients (TJC 3 [1–7]). Patients and assessors both most frequently reported pain/tenderness in DIP 2–3, PIP 2–3 and the thumb base, and least often in metacarpophalangeal joints (MCPs) 2–5. Correlation between the joint counts was 0.38. Correlations of both joint counts with other measures were comparable, ranging from 0.11 to 0.37 (table 1). Absolute agreement was highest in MCPs 2–5 and lowest for thumb base, DIP 2–3 and PIP 2–3 (range 61%–89%). ICC between joint counts was 0.28 (95% confidence interval 0.08–0.14).

Table 1 Correlation coefficients for painful joint count (PJC), tender joint count (TJC), and selected clinical and imaging outcomes.

	Self-reported PJC	Assessor-reported TJC
Self-reported PJC	-	
Assessor-reported TJC	0.38**	-
VAS pain	0.37**	0.37**
AUSCAN pain	0.36**	0.36**
SF-36 PCS	-0.30**	-0.27**
SF-36 MCS	-0.12**	-0.11**
HADS depression scale	0.14**	0.15**
Kellgren-Lawrence score	0.08	0.04
MRI synovitis†	0.22*	0.21*
MRI BML†	0.14	0.22*

AUSCAN, Australian/Canadian osteoarthritis hand index; BML, bone marrow lesion; HADS, Hospital Anxiety and Depression Scale; MCS, mental component summary; MRI, magnetic resonance imaging; PCS, physical component summary; SF-36, Short Form 36; VAS, visual analogue scale.

* $p < 0.05$; ** $p < 0.01$; †Joint count of DIP and PIP joints of right hand ($n = 92$) was used (range 0–8).

Conclusions: Hand OA patients reported more painful joints than assessors reported tender joints. Self-reported PJC correlated weakly with assessor-reported TJC, and other instruments measuring pain and physical health. Divergent correlations with mental health and imaging scores were even lower. Agreement between patients and assessors was highest in joints with low prevalence of pain/tenderness, but overall agreement was low. Despite apparent advantages, these results suggest that self-reported PJC and assessor-reported TJC cannot be used interchangeably, and further study of PJC as an outcome measure in hand OA is warranted.

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