# Criteria for the diagnosis of fibromyalgia: Validation of the modified 2010 preliminary ACR criteria and the development of alternative criteria.

Bennett R<sup>1</sup>, Friend R, Marcus D, Bernstein C, Han BK, Yachoui R, Deodar A, Kaell A, Bonafede P, Chino A, Jones K.

## **Abstract**

## Objective.

To validate the 2011 modification of the 2010 American College of Rheumatology (ACR) Preliminary Criteria for the Diagnosis of Fibromyalgia (2011ModCr) and develop alternative criteria, in a sample of patients with diverse pain disorders that are commonly seen in everyday practice by pain specialists, rheumatologists and psychologists.

#### Methods.

Eight clinicians, from geographically varied locations in the United States, evaluated chronic pain and psychiatric patients with a standard set of questions that included the 2011ModCr questions, the Symptom Impact Questionnaire (SIQR), a 28 area pain location inventory (PLI) and the SF-36. Alternative diagnostic criteria were developed from the same data set using logistic regression and receiver operating curve analysis.

# Results.

Complete data on 321 patients were evaluated; there were 135 with FM (ACR 1990 criteria) and 186 with 16 other common chronic pain problems. Comparing the 2011ModCr with the ACR 1990 criteria provided a sensitivity of 83%, specificity of 67% and a correct classification of 74%. Alternative Criteria were derived from the 10-item symptom score from the SIQR symptoms and the 28 PLI. Maximal diagnostic accuracy was obtained with pain sites ≥ 17 (range 0-28) and SIQR symptom score of ≥ 21 (range 0-50). These alternative criteria (2013 AltCr) had a diagnostic sensitivity of 81%, specificity of 80% and a correct classification of 80%.

### Conclusion.

The 2011ModCr had robust operating characteristics. Alternative criteria (2013 AltCr), based on symptom items from the SIQR and pain locations from the PLI, had comparable operating characteristics with somewhat better specificity and ease-of-use.

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