Title: Test and Re-test of the painDETECT Questionnaire

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Background and Objective

Since its introduction in 2006 the painDETECT questionnaire (PD-Q) has been widely used. Data from more than 225,000 patients have been collected in the painDETECT project register. The original validation did not include 'test–retest' because of the resulting necessity to suspend or interrupt pain treatment.

Validation of the test-retest performance of PD-Q items and the derived PD-Q score is reported.

Methods

For the patients in the data base with stable disease, retrospective analysis of 2 consecutive visits was performed. To ensure stable disease, the visits had to fulfil the following criteria: interval between visits, 7–21 days; time since first capture in database, ≥6 months; indication, back pain; difference of average, greatest and current pain between visits each less than 5 points on the 100-point NRS.

It was verified that the selected sub-population was representative of the whole study population.

Intra-class-correlation ICC, Pearson correlation and weighted kappa were used as statistical measures for ordinal scaled items. Bland–Altman plot and Passing–Bablok regression were also assessed for continuously scaled PD-Q score.

Results

Data from 94 patients fulfilled the very narrow criteria; mean duration between visits was 15 days. There was no relevant deviation of mean PD-Q score or pain severity in comparison with the whole study population. The measures were in the range of typical results for pain questionnaires (e.g. VAS).

	PD-Q Items	PD-Q score
ICC	0.65 – 0.80	0.87
Pearson's r	0.66 – 0.80	0.87
Weighted kappa	0.50 – 0.66	–
BA plot	–	Mean(SD) of difference: –0.36 (3.85)
PB regression	–	Slope = 1 Intercept = 0

Conclusions

This validation has shown that the PD-Q is reliable and can be used for follow-up. Further investigations will be necessary to determine the clinical relevance of changes in PD-Q score.