

## Validation of a French version of the Expanded Prostate Cancer Index Composite (EPIC)

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### Abstract

#### Objectives

To assess the psychometric properties of a French version of the Expanded Prostate Cancer Index Composite (EPIC-50), among a clinical sample of prostate cancer patients.

#### Methods

The validity of the French version of the EPIC-50 was assessed among patients from the radio-oncology and urology departments of L'Hôtel-Dieu de Québec (CHU de Québec). A total of 251 patients were recruited. Participants taking part in the sensitivity to change study (n = 51) were asked to complete a battery of self-report scales at their consultation and at a follow-up visit at the hospital, approximately 6 months after the initiation of their treatment. Another subsample of 68 patients completed the EPIC on two occasions separated by 2 weeks to estimate temporal stability. The battery comprised the following questionnaires: the EPIC-50, the International Prostate Symptom Score (IPSS), the Sexual Health Inventory for men (SHIM), and the EORTC QLQ PR25. Analyses were conducted using the SAS 9.3 software (2012, SAS Institute, Cary, NC, USA) and the alpha level was set at 5%.

**Results:** The internal consistency of the EPIC was demonstrated by significant item-total correlations and elevated Cronbach's alpha for each subscale (urinary:  $r=.25-.80$ ;  $\alpha=.85$ ; intestinal:  $r=.27-.73$ ;  $\alpha=.84$ ; sexual:  $r=.48-.80$ ;  $\alpha=.92$ ; hormonal:  $r=.21-.71$ ;  $\alpha=.80$ ). Strong and significant correlations were found between EPIC-urinary subscale and IPSS total score ( $r=-.71$ ,  $p<.01$ ) and between EPIC-sexual subscale and SHIM total score ( $r=.79$ ,  $p<.01$ ), thus supporting the convergent validity of the EPIC. The test-retest reliability was excellent with strong and significant correlations obtained between the two administrations (urinary:  $r=.90$ ; intestinal:  $r=.84$ ; sexual:  $r=.88$ ; hormonal:  $r=.79$ ) and the absence of significant differences between T1 and T2 mean scores. Finally, a significant deterioration was found on all EPIC subscales from pre- to posttreatment thus indicating that the tool is sensitive to clinical change.

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Conclusion: Our French version of the EPIC-50 appears to provide a reliable and valid assessment of quality of life in prostate cancer patients. Future analyses will investigate its factorial structure and the psychometric properties of the abbreviated version.

