

## Functional Assessment of Cancer Therapy – General (FACT-G Version 4)

Cella DF, Tulsky DS, Gray G et al. (1993) The Functional Assessment of Cancer Therapy (FACT) scale : Development and validation of the general measure. Journal of Clinical Oncology 11 (3): 570-579.

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|-------------------------------------|--|
| Meetinstrument                      | Functional Assessment of Cancer Therapy – General (Version 4)  |
| Afkorting                           | FACT-G (Version 4)   |
| Auteur                              | Cella DF et al. (1993)   |
| Thema                               | Kwaliteit van leven (gerelateerd aan de gezondheid) – oncologie.   |
| Doel                                | Meten van de kwaliteit van leven (gerelateerd aan de gezondheid)   |
| Populatie                           | Volwassen kankerpatiënten.   |
| Afname                              | Zelfrapportage vragenlijst of afgenomen door artsen, verpleegkundigen of onderzoekers.   |
| Aantal items                        | 27   |
| Aanwezigheid van de patiënt vereist | Ja   |
| Vindplaats van het meetinstrument   | <a href="http://www.facit.org/qview/qlist.aspx">http://www.facit.org/qview/qlist.aspx</a><br>Cella DF, Tulsky DS, Gray G et al. (1993) The Functional Assessment of Cancer Therapy (FACT) scale : Development and validation of the general measure. Journal of Clinical Oncology 11 (3): 570-579. |

### DOEL

De vragenlijst wordt gebruikt als meetinstrument voor het meten van de kwaliteit van leven (gerelateerd aan de gezondheid) bij kankerpatiënten (of andere chronische ziekten). Het instrument kan ook gebruikt worden in het kader van grote ontwikkelingsprogramma's van therapieën of klinisch onderzoek. De FACT-G vraagt de personen om hun eigen niveau van functioneren na te gaan met betrekking tot de domeinen die in de vragenlijst ingesloten zijn.

## **DOELPUBLIEK**

Het instrument werd ontwikkeld voor kankerpatiënten (ongeacht het soort kanker).

Dit instrument werd ook gebruikt en gevalideerd voor het gebruik bij andere chronische ziekten (voorbeeld : AIDS)

## **BESCHRIJVING**

De FACT-G maakt deel uit van de FACIT (Functional Assessment of Chronic Illness Therapy Measurement System), die verschillende meetinstrumenten bevat en gebruikt kan worden in de context van chronische ziekten.

De ontwikkeling van FACT-G werd gestart in 1987 (door Dr Cella). De eerste versie werd gefinaliseerd in 1993 (Cella et al., 1993). Vervolgens werden er gewijzigde versies gepubliceerd. Op heden wordt de vierde versie aanbevolen.

In de FACT-G zijn er per item 5 antwoordmogelijkheden, gaande van « helemaal niet » tot « veel » (Likertschaal). De vragen gaan over de 7 dagen die aan het invullen van de vragenlijst vooraf gingen.

De FACT-G kan beschouwd worden als één van de « hybride » instrumenten die het meest gebruikt wordt in de oncologie. Er bestaan aangepaste FACT vragenlijsten, in functie van het soort kanker, het soort behandeling en de symptomen. In het BeST II project hebben we ons niet gefocust op de specifieke modules.

De vragen van de FACT-G zijn onderverdeeld in 4 subschalen betreffende 4 domeinen over de kwaliteit van leven die apart beoordeeld kunnen worden: lichamelijk welzijn (7 items), het sociale/familiale welzijn (7 items), het emotionele welzijn (6 items), en het functionele welzijn (7 items). Per subschaal wordt een score berekend. Het is eveneens mogelijk om de « totale » kwaliteit van leven te meten. Hoe hoger de scores, hoe beter de kwaliteit van leven. De auteurs stellen voor om rekening te houden met ontbrekende scores. Dit kan door elke ontbrekende score te vervangen door de gemiddelde score die op de betrokken subschaal wordt verkregen. Dit is mogelijk op voorwaarde dat de patiënt ten minste geantwoord heeft op de helft van de items van de subschaal. Meer informatie over de manier van scoren kan verkregen worden via de website : [www.facit.org](http://www.facit.org).

Een sterkte van de vragenlijst is zijn minimale variabiliteit. De FACT-G vereist minder antwoorden dan instrumenten die grote variabiliteit hebben (Cheung et al., 2005).

## **BETROUWBAARHEID**

Verschillende studies hebben aangetoond dat de FACT-G een goede betrouwbaarheid had, meer bepaald in de context van AIDS (Cella et Bonomi, 1996).

Wat de oncologische sector betreft blijkt de interne consistentie van het instrument (Chronbach's alpha coëfficiënten) zeer goed voor de « totale » kwaliteit van leven (met coëfficiënten gaande van 0.84 tot 0.90) en de subschaal over het « functionele welzijn » (gaande van 0.79 tot 0.86). De interne consistentie bleek goed voor de subschaal over het « lichamelijke welzijn » (Alpha coëfficiënten gaande van 0.75 tot 0.82). Het bleek minder goed voor de subschaal over het « emotionele welzijn » (de alpha coëfficiënten varieerden tussen 0.66 en 0.84) en nog minder voor de schaal over het « sociale welzijn » (tussen 0.53 en 0.74) (Cella et al., 1998 ; Cella et al., 1993 ; Cella et al., 1995 ; Fairclough et Cella, 1996 ; Brady et al., 1997 ; Pandey et al., 2002 ; Ward et al., 1999 ; Novik et al., 2000 ; McDowell, 2006).

Victorson et al. (2008) hebben een literatuurreview gedaan op basis van 344 artikels teneinde de betrouwbaarheid na te gaan van de FACT-G en zijn subschalen: ze concludeerden dat de FACT-G en zijn subschalen een acceptabele betrouwbaarheid vertoonden door middel van verschillende studies (gemiddelde score voor de FACT-G = 0.88, de gemiddelde scores van de subschalen gingen van 0.71 tot 0.83).

Wat de stabiliteit van het meetinstrument betreft in de oncologische sector, rapporteerden Cella et al. (1993) goede correlatiecoëfficiënten bij het herhalen van de test tussen 3 en 7 dagen na de eerste metingen in een steekproef van 70 ambulanten patiënten met diverse kankerdiagnosen. Meer bepaald : 0.92 (totale score), 0.88 (lichamelijk welzijn), 0.84 (functioneel welzijn), 0.82 (sociaal en emotioneel welzijn). Er werd geconstateerd dat deze resultaten lager waren in een Japanse studie (Fumimoto et al., 2002), met correlatiecoëfficiënten gaande van 0.63 tot 0.81.

Holzner et al. (2006) hebben ook aangetoond dat de subschalen over het fysieke, emotionele en functionele welzijn van de FACT-G en de EORTC QLQ-C30 goed overeen stemmen. Terwijl Kemmler et al. (1999) meer nadruk legden op het feit dat de subschalen van de FACT-G en de EORTC QLQ-C30 verschillende aspecten van de kwaliteit van leven meten.

## **VALIDITEIT**

Verschillende studies hebben aangetoond dat de FACT-G goede psychometrische eigenschappen vertoonde met betrekking tot de validiteit, bijvoorbeeld in de context van AIDS (Cella et Bonomi, 1996).

In de oncologische sector blijken de correlatiecoëfficiënten van de convergente validiteit vaak hoog voor de FACT.

Cella et al. (1993) hebben de FACT vergeleken met ander meetschalen door correlatiecoëfficiënten te berekenen: de coëfficiënten in correlatie met de FLIC (Functional Living Index – Cancer) was 0.79 en -0.68 in correlatie met de korte versie van de POMS (Profile of Mood States) en -0.58 in correlatie met de TMAS (Taylor Manifest Anxiety Scale).

De correlatiecoëfficiënt tussen de subschaal « lichamelijk welzijn » en de score van de ECOG (Eastern Cooperative Oncology Group performance rating) was -0.64 bij Cella et al. (1998).

Er werd een hoge correlatiecoëfficiënt (-0.73) vastgesteld tussen de subschaal « emotioneel welzijn » en de depressiescore van de POMS (Cella et al., 1998).

De correlatiecoëfficiënt tussen de subschaal van het « functionele welzijn » en de « POMS vigor scale » was 0.71 en 0.62 tussen de POMS en de totale FACT score. (Cella et al., 1998 ; McDowell, 2006).

De scores van de subschalen van de FACT-G (lichamelijk, functioneel en emotioneel welzijn) waren significant verschillend wanneer men verschillende ziektestadia van patiënten vergeleek (« ECOG performance rating ») (Cella et al., 1993). In 3 patiëntensteekproeven waren het « lichamelijke en functionele welzijn » en de « totale score » sterk geassocieerd met de veranderingen in de toestand van de patiënt en de ernst van de ziekte (Ward et al. 1998 ; McDowell, 2006).

Het ontwikkelingsproces van de FACT-G kwam hoofdzakelijk tot stand door informatiegegevens en door de items gegenereerd door patiënten. De items werden geïdentificeerd door kwalitatief onderzoek (meer bepaald door focus groepen) : dit proces vergroot de validiteit van het instrument.

## **GEBRUIKSVRIENDELIJKHEID**

De invultijd van de vragenlijst bedraagt over het algemeen 5 tot 10 minuten.

De FACT-G werd in meer dan 50 talen vertaald, waaronder het Frans en het Nederlands. Dit maakt transculturele vergelijkingen mogelijk. Het betreft een zelfrapportage vragenlijst, dat toelaat de vragenlijst via telefoon of interview in te vullen. Het is gemakkelijk in gebruik.

## **VARIANTEN**

Er bestaan verschillende versies van de FACT-G. Op heden wordt de vierde versie aanbevolen.

## **REFERENTIES**

Brady, M.J., Cella, D.F., Mo, F. et al. (1997). Reliability and validity of the Functional Assessment of Cancer Therapy – Breast quality of life instrument. *J Clin Oncol*, 15, 974-986.

Cella, D., Bonomi, A.E., Lloyd, S.R. et al. (1995). Reliability and validity of the Functional Assessment of Cancer Therapy-Lung (FACT-L) quality of life instrument. *Lung Cancer*, 12, 199-220.

Cella, D., Chang, C.H., Lai, J.S., Webster, K. (2002). Advances in quality of life measurements in oncology patients. *Semin Oncol*, 29 (3), Suppl 8 (June), 60-68.

Cella, D., Hernandez, L., Bonomi, A.E. et al. (1998). Spanish language translation and initial validation of the Functional Assessment of Cancer Therapy quality-of-life instrument. *Med Care*, 36, 1407-1418.

Cella, D., Tulsky, D.S., Gray, G., Sarafian, B., Lloyd, S., Linn, E., Bonomi, A., Silberman, M., Yellen, S.B., Winicour, P., Brannon, J., Eckberg, K., Purl, S., Blendowski, C., Goodman, M., Barnicle, M., Stewart, I., McHale, M., Bonomi, P., Kaplan, E., Taylor, S., Thomas, C., & Harris, J. (1993). The Functional Assessment of Cancer Therapy (FACT) scale: Development and validation of the general measure. *J Clin Oncol*, 11 (3), 570-579.

Cheung, Y.B., Goh, C., Thumboo, J., Khoo, K.S., Wee, J. Variability and sample size requirements of quality-of-life measures: a randomized study of three major questionnaires. *J Clin Oncol*, 23, 4936-4944.

Costet, N., Lapierre, V., Benhamou, E., Le Galès, C. (2005). Reliability and validity of the Functional Assessment of Cancer Therapy General (FACT-G) in French cancer patients. *Qual Life Res*, 14, 1427-1432.

Fairclough, D.L., Cella, D.F. (1996). Functional Assessment of Cancer Therapy (FACT-G): non-response to individual questions. *Qual Life Res*, 5, 321-329.

Frost, M.H., Bonomi, A.E., Ferrans, C.E., Wong, G.Y., Hays, R.D. et al. (2002). Patient, clinician, and population perspectives on determining the clinical significance of quality-of-life scores. *Mayo Clin Proc*, 77, 488-494.

Fumimoto H., Kobayashi, K., Chang, C.H. et al. (2002). Cross-cultural validation of an international questionnaire, the general measure of the Functional Assessment of Cancer Therapy scale (FACT-G), for Japanese. *Qual Life Res*, 11, 701-709.

Granda-Cameron, C., Viola, S.R., Lynch, M.P., Polomano, R.C. (2008). Measuring patient-oriented outcomes in palliative care : functionality and quality of life. *Clin J Oncol Nurs*, 12 (1), 65-77.

Hahn, E.A., Rao, D., Cella, D., Choi, S.W. (2008). Comparability of interview- and self-administration of the Functional Assessment of Cancer Therapy – General (FACT-G) in English- and Spanish-speaking ambulatory cancer patients. *Med Care*, 46 (4), 423-431.

Holzner, B., Bode, R.K., Hahn, E.A., Cella, D., Kopp, M., Sperner-Unterweger, B., Kemmler, G. (2006). Equating EORTC QLQ-C30 and FACT-G scores and its use in oncological research. *Eur J Cancer*, 42 (18), 3169-77.

<http://www.facit.org/qview/qlist.aspx>

<http://www.proqolid.org>

Kaasa, S., Loge, J.H.. (2003). Quality of life in palliative care : principles and practice. *Pall Med*, 17, 11-20.

Kemmler, G., Holzner, B., Kopp, M., Dünser, M., Margreiter, R., Greil, R., Sperner-Unterweger, B. (1999). Comparison of two quality-of-life instruments for cancer patients : the Functional Assessment of Cancer Therapy-General and the European Organization for Research and Treatment of Cancer Quality of Life Questionnaire-C30. *J Clin Oncol*, 17 (9), 2932-2940.

Kruijver, I.P.M., Garssen, B., Visser, A.P., Kuiper, A.J. (2006). Signalising psychosocial problems in cancer care. The structural use of a short psychosocial checklist during medical or nursing visits. *Patient Educ Counsel*, 62, 163-177.

Lindblad, A.K., Ring, L., Glimelius, B., Hansson, M.G. (2002). Focus on the individual. Quality of life assessments in oncology. *Acta Oncol*, 41 (6), 507-516.

McDowell, I. (2006). *Measuring health: a guide to rating scales and questionnaires*, third edition. Oxford university press, 748p.

Novik, A.A., Ionova, T.I., Fedorenko, D.A. et al. (2000). Sensitivity of FACT-G in quality of life assessment of lung cancer patients after radical surgery. *Quality of Life Newsletter*, 24, 12.

Overcash, J., Extermann, M., Parr, J., Perry, J., Balducci, L. (2001). Validity and reliability of the FACT-G scale for use in the older person with cancer. *Am J Clin Oncol*, 24 (6), 591-596.

Pandey, M., Thomas, B.C., Ramdas, K. et al. (2002). Quality of life in breast cancer patients: validation of a FACT-B Malayalam version. *Qual Life Res*, 11, 87-90.

Panzini, I., Fioritti, A., Gianni, L., Tassinari, D., Canuti, D., Fabbri, C., Rudnas, B., Desiderio, F., Ravaioli, A. (2006). Quality of life assessment of randomized controlled trials. *Tumori*, 92, 373-378.

Pratheepawanit, N., Phunmanee, A., Sookprasert, A. et al. (2002). Quality of life in Thai cancer patients; validation of an interview-administered FACT-G. *Quality of Life Newsletter*, 29, 17-18.

Sharp, L.K., Knight, S.J., Nadler, R., Albers, M., Moran, E., Kuzel, T., Sharifi, R., Bennett, C. (1999). Quality of life in low-income patients with metastatic prostate cancer: divergent and convergent validity of three instruments. *Qual Life Res*, 8, 461-470.

Varricchio, C.G. (2006). Measurement issues in quality-of-life assessments. *Oncol Nurs Forum*, 33 (1), 13-21.

Victorson, D., Barocas, J., Song, J., Cella, D. (2008). Reliability across studies from the functional assessment of cancer therapy-general (FACT-G) and its subscales: a reliability generalization. *Qual Life Res*, 17, 1137-1146.

Ward, W.L., Hahn, E.A., Mo, F. et al. (1999). Reliability and validity of the Functional Assessment of Cancer Therapy – Colorectal (FACT-C) quality of life instrument. *Qual Life Res*, 8, 181-195.

Webster, K., Odom, L., Peterman, A., Lent, L., Cella, D. (1999). The Functional Assessment of Chronic Illness Therapy (FACIT) measurement system: Validation of version 4 of the core questionnaire. *Qual Life Res*, 8 (7), 604.

Winstead-Fry, P., Schultz, A. (1997). Psychometric analysis of the Functional Assessment of Cancer Therapy-General (FACT-G) scale in a rural sample. *Cancer*, 79 (12), 2446-2452.

## LOCALISATION DE L'INSTRUMENT DE MESURE

<http://www.facit.org/qview/qlist.aspx>

Cella DF, Tulsky DS, Gray G et al. (1993) The Functional Assessment of Cancer Therapy (FACT) scale : Development and validation of the general measure. *Journal of Clinical Oncology* 11 (3): 570-579.

| Author (year)          | Setting  | Sample (n)  | Design  | Reliability                      | Validity                            |
|------------------------|--|---|---|----------------------------------|-------------------------------------|
| 1. Cella et al., 1993  | <p>4 sources :</p> <ol style="list-style-type: none"> <li>121 inpatients at Rush-Presbyterian-St Luke's Medical Center (RPSLMC), Chicago, IL,</li> <li>195 outpatients receiving chemotherapy and/or radiation therapy at RPSLMC,</li> <li>139 patients receiving services from the Cancer Wellness Center (CWC) Skokie, IL, a freestanding nonprofit community support center,</li> <li>90 in- and outpatients entered on a funded intervention study to improve QOL in patients with advanced breast, lung and colorectal cancer.</li> </ol> | 545 patients with different types of cancer (39 % breast, 15 % lung, 12 % colorectal, 8 % leukemia/lymphoma, 8 % head and neck, 6 % prostate, 2 % ovarian, 10 % other/unknown). | <p>Development study</p> <p>Validation study</p>                              | <p><b>IC</b></p> <p><b>S</b></p> | <p><b>CtV</b></p> <p><b>CsV</b></p> |
| 2. Costet et al., 2005 | <p>Study conducted in :</p> <ol style="list-style-type: none"> <li>in two outpatient clinics (41.1% of the sample),</li> <li>in one-day hospital admissions (11.3%),</li> <li>in the radiation therapy department of the Gustave Roussy Cancer Institute (47.6%).</li> </ol>   | 493 French cancer patients: the study sample includes 64% with localized disease, 26% with metastases, 11 % in remission and 71 % receiving radiation/chemotherapy.             | Validation study (first validation study of the French Version of the FACT-G) | <p><b>IC</b></p> <p><b>S</b></p> | <p><b>FV</b></p> <p><b>CsV</b></p>  |

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|---|---|--|---|------------------|----------------------------------|
| <p><b>3.</b> Overcash et al., 2001</p>          | <p>2 groups:</p> <ol style="list-style-type: none"> <li>1. 85 patients with cancer on initial visit to the outpatient Senior Adult Oncology Program (SAOP) at the H. Lee Moffitt Cancer Institute,</li> <li>2. 12 community-dwelling elderly (CDE) people without a diagnosis of cancer.</li> </ol>   | <p>112 subjects aged 65 or more.</p>   | <p>Prospective study<br/>Validation study</p> | <p><b>IC</b></p> | <p><b>CrV</b></p>                |
| <p><b>4.</b> Sharp et al., 1999</p>             | <p>Data were collected on 110 men recruited during March 1995 to April 1996 from urology and hematology/oncology clinics in four Veteran's Affairs Medical Centers (Long Beach, CA; Durham, NC; two in Chicago, IL) and in a medical school-affiliated urology clinic (Chicago, IL). All participants had received previous diagnoses of metastatic prostate cancer and had initiated treatment for prostate cancer within the clinic at least one month prior to recruitment for this study.</p> | <p>110 patients with metastatic prostate cancer of whom 94% were low income (and 62 % were African-American).</p>  | <p>Comparative study<br/>Validation study</p> | <p><b>IC</b></p> | <p><b>CsV</b></p>                |
| <p><b>5.</b> Winstead-Fry and Schultz, 1997</p> | <p>The researchers identified 850 rural cancer patients dwelling in Maine and Vermont from the cancer registries of 2 hospitals.</p>  | <p>344 rural adult cancer patients with mixed diagnoses in varying stages of illness.</p> <p>Criteria for inclusion in the study were :</p> <ol style="list-style-type: none"> <li>1. the diagnosis had to be of at least 1</li> </ol> | <p>Validation study</p>                       | <p><b>IC</b></p> | <p><b>CsV</b><br/><b>CrV</b></p> |

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|  |  | <p>month's duration,</p> <p>2. no patients with a diagnosis of cervical or prostate carcinoma in situ were included and no persons with only positive prostate specific antigens without treatment.</p> <p>The researchers assured a sample of 344 patients because of the response rate.</p> |  |  |  |
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Betrouwbaarheid/ fiabilité: Stability (S), Internal Consistency (IC), Equivalence (E)

Validiteit/ validité: Face Validity (FV), Content Validity (CtV), Criterion Validity (CrV), Construct Validity (CsV)

Sensitivity (Sen), Specificity (Sp), Positive Predictive Value (PPV), Negative Predictive Value (NPV), Receiver Operating Curve (ROC), Likelihood Ratio (LR), Odds Ratio (OR), Area Under the Curve (AUC)

| Results reliability  | Results validity   | Commentary          |                     |                     |                   |          |        |        |                   |                     |                     |                     |                   |   |
|--|--|---------------------|---------------------|---------------------|-------------------|----------|--------|--------|-------------------|---------------------|---------------------|---------------------|-------------------|---|
| <p><b>1.</b></p> <p><b>IC: Internal consistency</b></p> <p>Cronbach's alpha (N = 466):</p> <p>Physical: 0.82</p> <p>Functional: 0.80</p> <p>Social: 0.69</p> <p>Emotional: 0.74</p> <p>Total FACT-G score: 0.89</p> <p><b>S: Stability</b></p> <p>Test-retest correlation coefficients (n=60):</p> <p>Physical: 0.88</p> <p>Functional: 0.84</p> <p>Social: 0.82</p> <p>Emotional: 0.82</p> <p>FACT-G total score : 0.92</p> | <p><b>CtV: Content validity</b></p> <p>Content validity was conducted by an independent panel of experts (oncologists, oncology nurses, social scientists). Items were generated and reduced by including patients with cancer.</p> <p><b>CsV: Construct validity</b></p> <p>Convergent and divergent validity is evaluated with Pearson correlations:</p> <table border="1" data-bbox="629 643 1677 823"> <thead> <tr> <th></th> <th>FLIC</th> <th>B-POMS</th> <th>TMA</th> <th>ECOG-PSR</th> <th>M-CSDS</th> </tr> </thead> <tbody> <tr> <th>FACT-G</th> <td>0.79<br/>(n = 424)</td> <td>- 0.68<br/>(n = 297)</td> <td>- 0.58<br/>(n = 290)</td> <td>- 0.52<br/>(n = 433)</td> <td>0.22<br/>(n = 298)</td> </tr> </tbody> </table> |                     | FLIC                | B-POMS              | TMA               | ECOG-PSR | M-CSDS | FACT-G | 0.79<br>(n = 424) | - 0.68<br>(n = 297) | - 0.58<br>(n = 290) | - 0.52<br>(n = 433) | 0.22<br>(n = 298) | <p>B-POMS = Brief Profile of Mood States</p> <p>TMA = Taylor Manifest Anxiety Scale</p> <p>ECOG-PSR = Eastern Cooperative Oncology Group performance status rating</p> <p>M-CSDS = Marlowe-Crowne Social Desirability Scale</p> <p><b>Sensitivity :</b></p> <ul style="list-style-type: none"> <li>- FACT-G sensitivity to stage of disease was seen in the physical (p&lt;0.01) and the functional (p&lt;0.0001) subscales, and the FACT-G total score (p&lt;0.01).</li> <li>- The total FACT-G score and the scores of the subscales were significantly higher (better) for patients with lower (better) PSRs (social scores: p&lt;0.05, other scores: p&lt;0.0001).</li> <li>- Comparisons across patient locations are also made and are</li> </ul> |
|  | FLIC   | B-POMS              | TMA                 | ECOG-PSR            | M-CSDS            |          |        |        |                   |                     |                     |                     |                   |   |
| FACT-G   | 0.79<br>(n = 424)  | - 0.68<br>(n = 297) | - 0.58<br>(n = 290) | - 0.52<br>(n = 433) | 0.22<br>(n = 298) |          |        |        |                   |                     |                     |                     |                   |   |

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|   |   | <p>statistically significant (<math>p &lt; 0.0001</math>).</p> <p>- Multivariate analysis of variance confirmed a significant overall effect (<math>p = 0.002</math>), indicating that the FACT-G can clearly distinguish the three following groups: 1. those whose PSR declined over time (<math>n = 27</math>), 2. those whose PSR improved (<math>n = 17</math>), 3. those whose PSR remained unchanged (<math>n = 60</math>). Results indicate, as expected, that the strongest contributors to sensitivity to change in PSR were the physical (<math>p &lt; 0.001</math>) and functional (<math>p &lt; 0.01</math>) subscales. Also sensitive to change in PSR was the emotional subscale (<math>p &lt; 0.05</math>), but not the social subscale.</p> |
| <p><b>2.</b></p> <p><b>IC: Internal consistency</b></p> <p>Cronbach's alpha:</p> <p>PWB: 0.86</p> <p>FWB: 0.86</p> <p>SFWB: 0.83</p> <p>EWB: 0.77</p> | <p><b>FV: Face validity</b></p> <p>Face validity of the FACT-G questionnaire was pretested as part of a Multilingual Translation Project, and some items were revised with the consent of the developers.</p> | <p>PWB = Physical well-being</p> <p>FWB = Functional well-being</p> <p>SFWB = Social / Family well-being</p> <p>EWB = Emotional well-being</p>   |

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|---|--|--|
| <p>Total FACT-G score: 0.90</p> <p><b>S: Stability</b></p> <p>Test-retest reliability score 6 to 10 days (n = 126 for total score, n = 87 to 93 across subscales) for those who declared no change in their health state between testing and retesting:</p> <p>PWB: 0.74 (p&lt;0.001)</p> <p>FWB: 0.85 (p&lt;0.001)</p> <p>SFWB: 0.77 (p&lt;0.001)</p> <p>EWB: 0.83 (p&lt;0.001)</p> <p>Total FACT-G score: 0.90 (p&lt;0.001)</p> | <p><b>CsV: Construct validity</b></p> <p>ANOVA models show that :</p> <ul style="list-style-type: none"> <li>- PWB differentiated between the three disease stages,</li> <li>- the global FACT-G and FWB discriminated between patients with metastases and others with localized disease or in remission,</li> <li>- EWB only discriminated between metastases and localized disease,</li> <li>- SFWB did not discriminate between groups at different stages of cancer,</li> <li>- only the PWB subscale discriminated between patients with no history from those receiving chemotherapy (p ≤ 0.05),</li> <li>- none of the scales discriminated between groups based on radiotherapy.</li> </ul> |  |
| <p><b>3.</b></p> <p><b>IC: Internal consistency</b></p> <p>Cronbach's alpha (N = 85, SAOP) :</p> <p>Physical: 0.78</p> <p>Functional: 0.85</p> <p>Social: 0.62</p> <p>Emotional: 0.60</p> <p>Total FACT-G score: 0.86</p>   | <p><b>CrV Criterion validity (concurrent validity)</b></p> <p>Concurrent validity was examined by comparing the FACT-G to the SF-36 (which is a known valid and reliable QOL instrument for use in the elderly) in that they are both measures of health-related QOL. The Pearson product correlation revealed good correlations between the total and subscores of the SF-36 and the FACT-G in most areas except vitality :</p>   |  |

**TABLE 3. Pearson product correlation between FACT-G and SF-36 total and subscale scores**

|                                     | Physical FACT | Social FACT | Emotional FACT | Functional FACT | Relationship with MD FACT | Total FACT-G |
|-------------------------------------|---------------|-------------|----------------|-----------------|---------------------------|--------------|
| SF-36 physical                      | 0.48***       | 0.03        | 0.22*          | 0.49***         | -0.06                     | 0.43***      |
| SF-36 role physical                 | 0.37***       | 0.12        | 0.10           | 0.36***         | 0.02                      | 0.34***      |
| SF-36 body pain                     | 0.60***       | 0.11        | 0.14           | 0.51***         | 0.06                      | 0.50***      |
| SF-36 general health                | 0.41***       | 0.18        | 0.36***        | 0.47***         | 0.27**                    | 0.51***      |
| SF-36 vitality                      | 0.04          | -0.11       | -0.11          | -0.14           | -0.03                     | -0.11        |
| SF-36 social functioning            | 0.52***       | 0.17        | 0.32**         | 0.61***         | 0.04                      | 0.57***      |
| SF-36 role emotional                | 0.40***       | 0.23*       | 0.38***        | 0.43***         | 0.06                      | 0.49***      |
| SF-36 mental health                 | 0.44***       | 0.29**      | 0.50***        | 0.51***         | 0.22*                     | 0.60***      |
| SF-36 mental health summary score   | 0.58***       | 0.09        | 0.20*          | 0.56***         | 0.05                      | 0.52***      |
| SF-36 physical health summary score | 0.36***       | 0.19*       | 0.45***        | 0.43***         | 0.16                      | 0.52***      |

FACT-G, Functional Assessment of Cancer Therapy General Scale; SF-36, MOS Short Form Health Survey.  
 \*  $p = 0.05$ .  
 \*\*  $p = 0.01$ .  
 \*\*\*  $p = 0.001$ .

When the FACT-G was examined in relation to the ECOG PS (Performance Status), it was shown that the subjects who scored higher on the FACT-G had a better PS (SFWB :  $p < 0.05$  ; other subscales of the FACT-G and total score :  $p < 0.0001$ ).

The FACT-G social well-being subscale was able to differentiate between patients who had metastatic disease versus those patients who did not ( $p = 0.02$ ).

The FACT-G was able to discriminate between patients diagnosed with cancer and CDE ( $p < 0.002$ ). The emotional well-being physical well-being, and functional well-being of subjects without cancer were found to be greater than that of patients with cancer.

The scores of the SF-36 were lower in the older patients with cancer than in the patients without cancer. This change in score paralleled the change in score of the FACT-G and indicates that both instruments are *sensitive* to the diagnosis of cancer.

**4.**  
**IC: Internal consistency**  
 Cronbach's alpha:  
 Physical: 0.81  
 Functional: 0.86

**CsV: Construct Validity (convergent and discriminant validity)**

**Receiver operating characteristic (ROC) curves were calculated to determine the sensitivity and specificity of the scales and**

| <p>Social: 0.72</p> <p>Emotional: 0.65</p>   | <p><b>Table 3. Multitrait-multimethod matrix for the EORTC, FACT, and QLI</b></p> <table border="1"> <thead> <tr> <th>Instrument Scales</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>6</th> <th>7</th> <th>8</th> <th>9</th> <th>10</th> <th>11</th> <th>12</th> <th>13</th> <th>14</th> <th>15</th> <th>16</th> <th>17</th> </tr> </thead> <tbody> <tr> <td rowspan="7">EORTC</td> <td>1. Cognitive</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2. Emotional</td> <td>0.49*</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3. Financial</td> <td>-0.43*</td> <td>-0.43*</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4. Global QOL</td> <td>0.26</td> <td>0.47*</td> <td>-0.25</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5. Physical</td> <td>0.31</td> <td>0.28</td> <td>-0.49*</td> <td>0.50*</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>6. Role</td> <td>0.39*</td> <td>0.38*</td> <td>-0.51*</td> <td>0.50*</td> <td>0.72*</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>7. Social</td> <td>0.33</td> <td>0.46*</td> <td>-0.48*</td> <td>0.45*</td> <td>0.57*</td> <td>0.73*</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td rowspan="4">Fact</td> <td>8. Dr Relationship</td> <td>0.24</td> <td>0.37*</td> <td>-0.28</td> <td>0.46*</td> <td>0.28</td> <td>0.22</td> <td>0.30</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>9. Emotional</td> <td>0.32</td> <td>0.54*</td> <td>-0.19</td> <td>0.43*</td> <td>0.40*</td> <td>0.35*</td> <td>0.33</td> <td>0.41*</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>10. Functional</td> <td>0.32</td> <td>0.49*</td> <td>-0.43*</td> <td>0.66*</td> <td>0.55*</td> <td>0.54*</td> <td>0.54*</td> <td>0.58*</td> <td>0.62*</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>11. Physical</td> <td>0.38*</td> <td>0.56*</td> <td>-0.52*</td> <td>0.63*</td> <td>0.72*</td> <td>0.78*</td> <td>0.72*</td> <td>0.35*</td> <td>0.54*</td> <td>0.63*</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td rowspan="6">QLI</td> <td>12. Social</td> <td>0.14</td> <td>0.27</td> <td>-0.03</td> <td>0.26</td> <td>0.15</td> <td>0.09</td> <td>0.12</td> <td>0.32</td> <td>0.42*</td> <td>0.48*</td> <td>0.15</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>13. Activity</td> <td>0.29</td> <td>0.41*</td> <td>-0.36*</td> <td>0.52*</td> <td>0.54*</td> <td>0.48*</td> <td>0.52*</td> <td>0.35*</td> <td>0.43*</td> <td>0.51*</td> <td>0.57*</td> <td>-0.06</td> <td>-</td> <td></td> <td></td> <td></td> </tr> <tr> <td>14. Daily living</td> <td>0.32</td> <td>0.23</td> <td>-0.28</td> <td>0.27</td> <td>0.50*</td> <td>0.38*</td> <td>0.43*</td> <td>0.21</td> <td>0.40*</td> <td>0.36*</td> <td>0.44*</td> <td>0.11</td> <td>0.60*</td> <td>-</td> <td></td> <td></td> </tr> <tr> <td>15. Health</td> <td>0.42*</td> <td>0.53*</td> <td>-0.45*</td> <td>0.61*</td> <td>0.64*</td> <td>0.63*</td> <td>0.55*</td> <td>0.37*</td> <td>0.47*</td> <td>0.68*</td> <td>0.80*</td> <td>0.22</td> <td>0.52*</td> <td>0.37*</td> <td>-</td> <td></td> </tr> <tr> <td>16. Outlook</td> <td>0.36*</td> <td>0.53*</td> <td>-0.29</td> <td>0.32</td> <td>0.27</td> <td>0.22</td> <td>0.32</td> <td>0.37*</td> <td>0.45*</td> <td>0.38*</td> <td>0.42*</td> <td>0.21</td> <td>0.34*</td> <td>0.32</td> <td>0.30</td> <td>-</td> </tr> <tr> <td>17. Support</td> <td>-0.08</td> <td>0.15</td> <td>0.00</td> <td>0.00</td> <td>-0.02</td> <td>-0.09</td> <td>-0.05</td> <td>0.01</td> <td>0.18</td> <td>0.23</td> <td>0.01</td> <td>0.37*</td> <td>0.00</td> <td>-0.05</td> <td>0.03</td> <td>0.38*</td> <td>-</td> </tr> </tbody> </table> <p>* <math>p &lt; 0.001</math> with Bonferroni correction.</p> <p>Pearson correlation coefficients for the EORTC and FACT displayed convergent validity on three of the four dimensions sharing scale names. Specifically, the emotional, physical, and role/functional dimensions had Pearson correlation coefficients ranging from 0.54 to 0.72. Convergence was not obtained for the social scales of the EORTC and the FACT which were correlated at 0.12.</p> <p>Divergent validity was supported between dissimilar scales. Support for divergent validity was considered to be a correlation coefficient below 0.40.</p> | Instrument Scales | 1      | 2      | 3      | 4     | 5      | 6   | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14   | 15    | 16 | 17 | EORTC | 1. Cognitive | - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2. Emotional | 0.49* | - |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3. Financial | -0.43* | -0.43* | - |  |  |  |  |  |  |  |  |  |  |  |  |  | 4. Global QOL | 0.26 | 0.47* | -0.25 | - |  |  |  |  |  |  |  |  |  |  |  |  | 5. Physical | 0.31 | 0.28 | -0.49* | 0.50* | - |  |  |  |  |  |  |  |  |  |  |  | 6. Role | 0.39* | 0.38* | -0.51* | 0.50* | 0.72* | - |  |  |  |  |  |  |  |  |  |  | 7. Social | 0.33 | 0.46* | -0.48* | 0.45* | 0.57* | 0.73* | - |  |  |  |  |  |  |  |  |  | Fact | 8. Dr Relationship | 0.24 | 0.37* | -0.28 | 0.46* | 0.28 | 0.22 | 0.30 | - |  |  |  |  |  |  |  |  | 9. Emotional | 0.32 | 0.54* | -0.19 | 0.43* | 0.40* | 0.35* | 0.33 | 0.41* | - |  |  |  |  |  |  |  | 10. Functional | 0.32 | 0.49* | -0.43* | 0.66* | 0.55* | 0.54* | 0.54* | 0.58* | 0.62* | - |  |  |  |  |  |  | 11. Physical | 0.38* | 0.56* | -0.52* | 0.63* | 0.72* | 0.78* | 0.72* | 0.35* | 0.54* | 0.63* | - |  |  |  |  |  | QLI | 12. Social | 0.14 | 0.27 | -0.03 | 0.26 | 0.15 | 0.09 | 0.12 | 0.32 | 0.42* | 0.48* | 0.15 | - |  |  |  |  | 13. Activity | 0.29 | 0.41* | -0.36* | 0.52* | 0.54* | 0.48* | 0.52* | 0.35* | 0.43* | 0.51* | 0.57* | -0.06 | - |  |  |  | 14. Daily living | 0.32 | 0.23 | -0.28 | 0.27 | 0.50* | 0.38* | 0.43* | 0.21 | 0.40* | 0.36* | 0.44* | 0.11 | 0.60* | - |  |  | 15. Health | 0.42* | 0.53* | -0.45* | 0.61* | 0.64* | 0.63* | 0.55* | 0.37* | 0.47* | 0.68* | 0.80* | 0.22 | 0.52* | 0.37* | - |  | 16. Outlook | 0.36* | 0.53* | -0.29 | 0.32 | 0.27 | 0.22 | 0.32 | 0.37* | 0.45* | 0.38* | 0.42* | 0.21 | 0.34* | 0.32 | 0.30 | - | 17. Support | -0.08 | 0.15 | 0.00 | 0.00 | -0.02 | -0.09 | -0.05 | 0.01 | 0.18 | 0.23 | 0.01 | 0.37* | 0.00 | -0.05 | 0.03 | 0.38* | - | <p>composite scores as predictors of functional status (i.e. KPRS). Analysis with receiver operating characteristic curves provided empirical support for the FACT as a multidimensional measure. The ROC curves for the emotional, functional, and physical scales of the EORTC and FACT overlap substantially. The EORTC social scale, however, showed greater sensitivity and specificity than the FACT social scale for predicting the KPRS groups. The <b>area under the ROC curves</b> for the FACT ranged from 0.58 to 0.82 (EWB : 0.58 ; FWB : 0.82 ; PWB : 0.80 ; SWB : 0.59 ; total score : 0.72). The best FACT predictors of KPRS were 'functional well-being', 'physical well-being' and total FACT score.</p> |
|--|---|-------------------|--------|--------|--------|-------|--------|---|-------|-------|-------|-------|-------|-------|-------|------|-------|----|----|-------|--------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------------|-------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------------|--------|--------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|---------------|------|-------|-------|---|--|--|--|--|--|--|--|--|--|--|--|--|-------------|------|------|--------|-------|---|--|--|--|--|--|--|--|--|--|--|--|---------|-------|-------|--------|-------|-------|---|--|--|--|--|--|--|--|--|--|--|-----------|------|-------|--------|-------|-------|-------|---|--|--|--|--|--|--|--|--|--|------|--------------------|------|-------|-------|-------|------|------|------|---|--|--|--|--|--|--|--|--|--------------|------|-------|-------|-------|-------|-------|------|-------|---|--|--|--|--|--|--|--|----------------|------|-------|--------|-------|-------|-------|-------|-------|-------|---|--|--|--|--|--|--|--------------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|---|--|--|--|--|--|-----|------------|------|------|-------|------|------|------|------|------|-------|-------|------|---|--|--|--|--|--------------|------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---|--|--|--|------------------|------|------|-------|------|-------|-------|-------|------|-------|-------|-------|------|-------|---|--|--|------------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|---|--|-------------|-------|-------|-------|------|------|------|------|-------|-------|-------|-------|------|-------|------|------|---|-------------|-------|------|------|------|-------|-------|-------|------|------|------|------|-------|------|-------|------|-------|---|---|
| Instrument Scales  | 1   | 2                 | 3      | 4      | 5      | 6     | 7      | 8   | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16   | 17    |    |    |       |              |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |        |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |               |      |       |       |   |  |  |  |  |  |  |  |  |  |  |  |  |             |      |      |        |       |   |  |  |  |  |  |  |  |  |  |  |  |         |       |       |        |       |       |   |  |  |  |  |  |  |  |  |  |  |           |      |       |        |       |       |       |   |  |  |  |  |  |  |  |  |  |      |                    |      |       |       |       |      |      |      |   |  |  |  |  |  |  |  |  |              |      |       |       |       |       |       |      |       |   |  |  |  |  |  |  |  |                |      |       |        |       |       |       |       |       |       |   |  |  |  |  |  |  |              |       |       |        |       |       |       |       |       |       |       |   |  |  |  |  |  |     |            |      |      |       |      |      |      |      |      |       |       |      |   |  |  |  |  |              |      |       |        |       |       |       |       |       |       |       |       |       |   |  |  |  |                  |      |      |       |      |       |       |       |      |       |       |       |      |       |   |  |  |            |       |       |        |       |       |       |       |       |       |       |       |      |       |       |   |  |             |       |       |       |      |      |      |      |       |       |       |       |      |       |      |      |   |             |       |      |      |      |       |       |       |      |      |      |      |       |      |       |      |       |   |   |
| EORTC  | 1. Cognitive  | -                 |        |        |        |       |        |   |       |       |       |       |       |       |       |      |       |    |    |       |              |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |        |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |               |      |       |       |   |  |  |  |  |  |  |  |  |  |  |  |  |             |      |      |        |       |   |  |  |  |  |  |  |  |  |  |  |  |         |       |       |        |       |       |   |  |  |  |  |  |  |  |  |  |  |           |      |       |        |       |       |       |   |  |  |  |  |  |  |  |  |  |      |                    |      |       |       |       |      |      |      |   |  |  |  |  |  |  |  |  |              |      |       |       |       |       |       |      |       |   |  |  |  |  |  |  |  |                |      |       |        |       |       |       |       |       |       |   |  |  |  |  |  |  |              |       |       |        |       |       |       |       |       |       |       |   |  |  |  |  |  |     |            |      |      |       |      |      |      |      |      |       |       |      |   |  |  |  |  |              |      |       |        |       |       |       |       |       |       |       |       |       |   |  |  |  |                  |      |      |       |      |       |       |       |      |       |       |       |      |       |   |  |  |            |       |       |        |       |       |       |       |       |       |       |       |      |       |       |   |  |             |       |       |       |      |      |      |      |       |       |       |       |      |       |      |      |   |             |       |      |      |      |       |       |       |      |      |      |      |       |      |       |      |       |   |   |
|  | 2. Emotional  | 0.49*             | -      |        |        |       |        |   |       |       |       |       |       |       |       |      |       |    |    |       |              |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |        |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |               |      |       |       |   |  |  |  |  |  |  |  |  |  |  |  |  |             |      |      |        |       |   |  |  |  |  |  |  |  |  |  |  |  |         |       |       |        |       |       |   |  |  |  |  |  |  |  |  |  |  |           |      |       |        |       |       |       |   |  |  |  |  |  |  |  |  |  |      |                    |      |       |       |       |      |      |      |   |  |  |  |  |  |  |  |  |              |      |       |       |       |       |       |      |       |   |  |  |  |  |  |  |  |                |      |       |        |       |       |       |       |       |       |   |  |  |  |  |  |  |              |       |       |        |       |       |       |       |       |       |       |   |  |  |  |  |  |     |            |      |      |       |      |      |      |      |      |       |       |      |   |  |  |  |  |              |      |       |        |       |       |       |       |       |       |       |       |       |   |  |  |  |                  |      |      |       |      |       |       |       |      |       |       |       |      |       |   |  |  |            |       |       |        |       |       |       |       |       |       |       |       |      |       |       |   |  |             |       |       |       |      |      |      |      |       |       |       |       |      |       |      |      |   |             |       |      |      |      |       |       |       |      |      |      |      |       |      |       |      |       |   |   |
|  | 3. Financial  | -0.43*            | -0.43* | -      |        |       |        |   |       |       |       |       |       |       |       |      |       |    |    |       |              |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |        |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |               |      |       |       |   |  |  |  |  |  |  |  |  |  |  |  |  |             |      |      |        |       |   |  |  |  |  |  |  |  |  |  |  |  |         |       |       |        |       |       |   |  |  |  |  |  |  |  |  |  |  |           |      |       |        |       |       |       |   |  |  |  |  |  |  |  |  |  |      |                    |      |       |       |       |      |      |      |   |  |  |  |  |  |  |  |  |              |      |       |       |       |       |       |      |       |   |  |  |  |  |  |  |  |                |      |       |        |       |       |       |       |       |       |   |  |  |  |  |  |  |              |       |       |        |       |       |       |       |       |       |       |   |  |  |  |  |  |     |            |      |      |       |      |      |      |      |      |       |       |      |   |  |  |  |  |              |      |       |        |       |       |       |       |       |       |       |       |       |   |  |  |  |                  |      |      |       |      |       |       |       |      |       |       |       |      |       |   |  |  |            |       |       |        |       |       |       |       |       |       |       |       |      |       |       |   |  |             |       |       |       |      |      |      |      |       |       |       |       |      |       |      |      |   |             |       |      |      |      |       |       |       |      |      |      |      |       |      |       |      |       |   |   |
|  | 4. Global QOL   | 0.26              | 0.47*  | -0.25  | -      |       |        |   |       |       |       |       |       |       |       |      |       |    |    |       |              |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |        |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |               |      |       |       |   |  |  |  |  |  |  |  |  |  |  |  |  |             |      |      |        |       |   |  |  |  |  |  |  |  |  |  |  |  |         |       |       |        |       |       |   |  |  |  |  |  |  |  |  |  |  |           |      |       |        |       |       |       |   |  |  |  |  |  |  |  |  |  |      |                    |      |       |       |       |      |      |      |   |  |  |  |  |  |  |  |  |              |      |       |       |       |       |       |      |       |   |  |  |  |  |  |  |  |                |      |       |        |       |       |       |       |       |       |   |  |  |  |  |  |  |              |       |       |        |       |       |       |       |       |       |       |   |  |  |  |  |  |     |            |      |      |       |      |      |      |      |      |       |       |      |   |  |  |  |  |              |      |       |        |       |       |       |       |       |       |       |       |       |   |  |  |  |                  |      |      |       |      |       |       |       |      |       |       |       |      |       |   |  |  |            |       |       |        |       |       |       |       |       |       |       |       |      |       |       |   |  |             |       |       |       |      |      |      |      |       |       |       |       |      |       |      |      |   |             |       |      |      |      |       |       |       |      |      |      |      |       |      |       |      |       |   |   |
|  | 5. Physical   | 0.31              | 0.28   | -0.49* | 0.50*  | -     |        |   |       |       |       |       |       |       |       |      |       |    |    |       |              |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |        |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |               |      |       |       |   |  |  |  |  |  |  |  |  |  |  |  |  |             |      |      |        |       |   |  |  |  |  |  |  |  |  |  |  |  |         |       |       |        |       |       |   |  |  |  |  |  |  |  |  |  |  |           |      |       |        |       |       |       |   |  |  |  |  |  |  |  |  |  |      |                    |      |       |       |       |      |      |      |   |  |  |  |  |  |  |  |  |              |      |       |       |       |       |       |      |       |   |  |  |  |  |  |  |  |                |      |       |        |       |       |       |       |       |       |   |  |  |  |  |  |  |              |       |       |        |       |       |       |       |       |       |       |   |  |  |  |  |  |     |            |      |      |       |      |      |      |      |      |       |       |      |   |  |  |  |  |              |      |       |        |       |       |       |       |       |       |       |       |       |   |  |  |  |                  |      |      |       |      |       |       |       |      |       |       |       |      |       |   |  |  |            |       |       |        |       |       |       |       |       |       |       |       |      |       |       |   |  |             |       |       |       |      |      |      |      |       |       |       |       |      |       |      |      |   |             |       |      |      |      |       |       |       |      |      |      |      |       |      |       |      |       |   |   |
|  | 6. Role   | 0.39*             | 0.38*  | -0.51* | 0.50*  | 0.72* | -      |   |       |       |       |       |       |       |       |      |       |    |    |       |              |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |        |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |               |      |       |       |   |  |  |  |  |  |  |  |  |  |  |  |  |             |      |      |        |       |   |  |  |  |  |  |  |  |  |  |  |  |         |       |       |        |       |       |   |  |  |  |  |  |  |  |  |  |  |           |      |       |        |       |       |       |   |  |  |  |  |  |  |  |  |  |      |                    |      |       |       |       |      |      |      |   |  |  |  |  |  |  |  |  |              |      |       |       |       |       |       |      |       |   |  |  |  |  |  |  |  |                |      |       |        |       |       |       |       |       |       |   |  |  |  |  |  |  |              |       |       |        |       |       |       |       |       |       |       |   |  |  |  |  |  |     |            |      |      |       |      |      |      |      |      |       |       |      |   |  |  |  |  |              |      |       |        |       |       |       |       |       |       |       |       |       |   |  |  |  |                  |      |      |       |      |       |       |       |      |       |       |       |      |       |   |  |  |            |       |       |        |       |       |       |       |       |       |       |       |      |       |       |   |  |             |       |       |       |      |      |      |      |       |       |       |       |      |       |      |      |   |             |       |      |      |      |       |       |       |      |      |      |      |       |      |       |      |       |   |   |
|  | 7. Social   | 0.33              | 0.46*  | -0.48* | 0.45*  | 0.57* | 0.73*  | -   |       |       |       |       |       |       |       |      |       |    |    |       |              |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |        |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |               |      |       |       |   |  |  |  |  |  |  |  |  |  |  |  |  |             |      |      |        |       |   |  |  |  |  |  |  |  |  |  |  |  |         |       |       |        |       |       |   |  |  |  |  |  |  |  |  |  |  |           |      |       |        |       |       |       |   |  |  |  |  |  |  |  |  |  |      |                    |      |       |       |       |      |      |      |   |  |  |  |  |  |  |  |  |              |      |       |       |       |       |       |      |       |   |  |  |  |  |  |  |  |                |      |       |        |       |       |       |       |       |       |   |  |  |  |  |  |  |              |       |       |        |       |       |       |       |       |       |       |   |  |  |  |  |  |     |            |      |      |       |      |      |      |      |      |       |       |      |   |  |  |  |  |              |      |       |        |       |       |       |       |       |       |       |       |       |   |  |  |  |                  |      |      |       |      |       |       |       |      |       |       |       |      |       |   |  |  |            |       |       |        |       |       |       |       |       |       |       |       |      |       |       |   |  |             |       |       |       |      |      |      |      |       |       |       |       |      |       |      |      |   |             |       |      |      |      |       |       |       |      |      |      |      |       |      |       |      |       |   |   |
| Fact   | 8. Dr Relationship  | 0.24              | 0.37*  | -0.28  | 0.46*  | 0.28  | 0.22   | 0.30  | -     |       |       |       |       |       |       |      |       |    |    |       |              |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |        |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |               |      |       |       |   |  |  |  |  |  |  |  |  |  |  |  |  |             |      |      |        |       |   |  |  |  |  |  |  |  |  |  |  |  |         |       |       |        |       |       |   |  |  |  |  |  |  |  |  |  |  |           |      |       |        |       |       |       |   |  |  |  |  |  |  |  |  |  |      |                    |      |       |       |       |      |      |      |   |  |  |  |  |  |  |  |  |              |      |       |       |       |       |       |      |       |   |  |  |  |  |  |  |  |                |      |       |        |       |       |       |       |       |       |   |  |  |  |  |  |  |              |       |       |        |       |       |       |       |       |       |       |   |  |  |  |  |  |     |            |      |      |       |      |      |      |      |      |       |       |      |   |  |  |  |  |              |      |       |        |       |       |       |       |       |       |       |       |       |   |  |  |  |                  |      |      |       |      |       |       |       |      |       |       |       |      |       |   |  |  |            |       |       |        |       |       |       |       |       |       |       |       |      |       |       |   |  |             |       |       |       |      |      |      |      |       |       |       |       |      |       |      |      |   |             |       |      |      |      |       |       |       |      |      |      |      |       |      |       |      |       |   |   |
|  | 9. Emotional  | 0.32              | 0.54*  | -0.19  | 0.43*  | 0.40* | 0.35*  | 0.33  | 0.41* | -     |       |       |       |       |       |      |       |    |    |       |              |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |        |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |               |      |       |       |   |  |  |  |  |  |  |  |  |  |  |  |  |             |      |      |        |       |   |  |  |  |  |  |  |  |  |  |  |  |         |       |       |        |       |       |   |  |  |  |  |  |  |  |  |  |  |           |      |       |        |       |       |       |   |  |  |  |  |  |  |  |  |  |      |                    |      |       |       |       |      |      |      |   |  |  |  |  |  |  |  |  |              |      |       |       |       |       |       |      |       |   |  |  |  |  |  |  |  |                |      |       |        |       |       |       |       |       |       |   |  |  |  |  |  |  |              |       |       |        |       |       |       |       |       |       |       |   |  |  |  |  |  |     |            |      |      |       |      |      |      |      |      |       |       |      |   |  |  |  |  |              |      |       |        |       |       |       |       |       |       |       |       |       |   |  |  |  |                  |      |      |       |      |       |       |       |      |       |       |       |      |       |   |  |  |            |       |       |        |       |       |       |       |       |       |       |       |      |       |       |   |  |             |       |       |       |      |      |      |      |       |       |       |       |      |       |      |      |   |             |       |      |      |      |       |       |       |      |      |      |      |       |      |       |      |       |   |   |
|  | 10. Functional  | 0.32              | 0.49*  | -0.43* | 0.66*  | 0.55* | 0.54*  | 0.54*   | 0.58* | 0.62* | -     |       |       |       |       |      |       |    |    |       |              |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |        |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |               |      |       |       |   |  |  |  |  |  |  |  |  |  |  |  |  |             |      |      |        |       |   |  |  |  |  |  |  |  |  |  |  |  |         |       |       |        |       |       |   |  |  |  |  |  |  |  |  |  |  |           |      |       |        |       |       |       |   |  |  |  |  |  |  |  |  |  |      |                    |      |       |       |       |      |      |      |   |  |  |  |  |  |  |  |  |              |      |       |       |       |       |       |      |       |   |  |  |  |  |  |  |  |                |      |       |        |       |       |       |       |       |       |   |  |  |  |  |  |  |              |       |       |        |       |       |       |       |       |       |       |   |  |  |  |  |  |     |            |      |      |       |      |      |      |      |      |       |       |      |   |  |  |  |  |              |      |       |        |       |       |       |       |       |       |       |       |       |   |  |  |  |                  |      |      |       |      |       |       |       |      |       |       |       |      |       |   |  |  |            |       |       |        |       |       |       |       |       |       |       |       |      |       |       |   |  |             |       |       |       |      |      |      |      |       |       |       |       |      |       |      |      |   |             |       |      |      |      |       |       |       |      |      |      |      |       |      |       |      |       |   |   |
|  | 11. Physical  | 0.38*             | 0.56*  | -0.52* | 0.63*  | 0.72* | 0.78*  | 0.72*   | 0.35* | 0.54* | 0.63* | -     |       |       |       |      |       |    |    |       |              |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |        |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |               |      |       |       |   |  |  |  |  |  |  |  |  |  |  |  |  |             |      |      |        |       |   |  |  |  |  |  |  |  |  |  |  |  |         |       |       |        |       |       |   |  |  |  |  |  |  |  |  |  |  |           |      |       |        |       |       |       |   |  |  |  |  |  |  |  |  |  |      |                    |      |       |       |       |      |      |      |   |  |  |  |  |  |  |  |  |              |      |       |       |       |       |       |      |       |   |  |  |  |  |  |  |  |                |      |       |        |       |       |       |       |       |       |   |  |  |  |  |  |  |              |       |       |        |       |       |       |       |       |       |       |   |  |  |  |  |  |     |            |      |      |       |      |      |      |      |      |       |       |      |   |  |  |  |  |              |      |       |        |       |       |       |       |       |       |       |       |       |   |  |  |  |                  |      |      |       |      |       |       |       |      |       |       |       |      |       |   |  |  |            |       |       |        |       |       |       |       |       |       |       |       |      |       |       |   |  |             |       |       |       |      |      |      |      |       |       |       |       |      |       |      |      |   |             |       |      |      |      |       |       |       |      |      |      |      |       |      |       |      |       |   |   |
| QLI  | 12. Social  | 0.14              | 0.27   | -0.03  | 0.26   | 0.15  | 0.09   | 0.12  | 0.32  | 0.42* | 0.48* | 0.15  | -     |       |       |      |       |    |    |       |              |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |        |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |               |      |       |       |   |  |  |  |  |  |  |  |  |  |  |  |  |             |      |      |        |       |   |  |  |  |  |  |  |  |  |  |  |  |         |       |       |        |       |       |   |  |  |  |  |  |  |  |  |  |  |           |      |       |        |       |       |       |   |  |  |  |  |  |  |  |  |  |      |                    |      |       |       |       |      |      |      |   |  |  |  |  |  |  |  |  |              |      |       |       |       |       |       |      |       |   |  |  |  |  |  |  |  |                |      |       |        |       |       |       |       |       |       |   |  |  |  |  |  |  |              |       |       |        |       |       |       |       |       |       |       |   |  |  |  |  |  |     |            |      |      |       |      |      |      |      |      |       |       |      |   |  |  |  |  |              |      |       |        |       |       |       |       |       |       |       |       |       |   |  |  |  |                  |      |      |       |      |       |       |       |      |       |       |       |      |       |   |  |  |            |       |       |        |       |       |       |       |       |       |       |       |      |       |       |   |  |             |       |       |       |      |      |      |      |       |       |       |       |      |       |      |      |   |             |       |      |      |      |       |       |       |      |      |      |      |       |      |       |      |       |   |   |
|  | 13. Activity  | 0.29              | 0.41*  | -0.36* | 0.52*  | 0.54* | 0.48*  | 0.52*   | 0.35* | 0.43* | 0.51* | 0.57* | -0.06 | -     |       |      |       |    |    |       |              |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |        |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |               |      |       |       |   |  |  |  |  |  |  |  |  |  |  |  |  |             |      |      |        |       |   |  |  |  |  |  |  |  |  |  |  |  |         |       |       |        |       |       |   |  |  |  |  |  |  |  |  |  |  |           |      |       |        |       |       |       |   |  |  |  |  |  |  |  |  |  |      |                    |      |       |       |       |      |      |      |   |  |  |  |  |  |  |  |  |              |      |       |       |       |       |       |      |       |   |  |  |  |  |  |  |  |                |      |       |        |       |       |       |       |       |       |   |  |  |  |  |  |  |              |       |       |        |       |       |       |       |       |       |       |   |  |  |  |  |  |     |            |      |      |       |      |      |      |      |      |       |       |      |   |  |  |  |  |              |      |       |        |       |       |       |       |       |       |       |       |       |   |  |  |  |                  |      |      |       |      |       |       |       |      |       |       |       |      |       |   |  |  |            |       |       |        |       |       |       |       |       |       |       |       |      |       |       |   |  |             |       |       |       |      |      |      |      |       |       |       |       |      |       |      |      |   |             |       |      |      |      |       |       |       |      |      |      |      |       |      |       |      |       |   |   |
|  | 14. Daily living  | 0.32              | 0.23   | -0.28  | 0.27   | 0.50* | 0.38*  | 0.43*   | 0.21  | 0.40* | 0.36* | 0.44* | 0.11  | 0.60* | -     |      |       |    |    |       |              |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |        |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |               |      |       |       |   |  |  |  |  |  |  |  |  |  |  |  |  |             |      |      |        |       |   |  |  |  |  |  |  |  |  |  |  |  |         |       |       |        |       |       |   |  |  |  |  |  |  |  |  |  |  |           |      |       |        |       |       |       |   |  |  |  |  |  |  |  |  |  |      |                    |      |       |       |       |      |      |      |   |  |  |  |  |  |  |  |  |              |      |       |       |       |       |       |      |       |   |  |  |  |  |  |  |  |                |      |       |        |       |       |       |       |       |       |   |  |  |  |  |  |  |              |       |       |        |       |       |       |       |       |       |       |   |  |  |  |  |  |     |            |      |      |       |      |      |      |      |      |       |       |      |   |  |  |  |  |              |      |       |        |       |       |       |       |       |       |       |       |       |   |  |  |  |                  |      |      |       |      |       |       |       |      |       |       |       |      |       |   |  |  |            |       |       |        |       |       |       |       |       |       |       |       |      |       |       |   |  |             |       |       |       |      |      |      |      |       |       |       |       |      |       |      |      |   |             |       |      |      |      |       |       |       |      |      |      |      |       |      |       |      |       |   |   |
|  | 15. Health  | 0.42*             | 0.53*  | -0.45* | 0.61*  | 0.64* | 0.63*  | 0.55*   | 0.37* | 0.47* | 0.68* | 0.80* | 0.22  | 0.52* | 0.37* | -    |       |    |    |       |              |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |        |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |               |      |       |       |   |  |  |  |  |  |  |  |  |  |  |  |  |             |      |      |        |       |   |  |  |  |  |  |  |  |  |  |  |  |         |       |       |        |       |       |   |  |  |  |  |  |  |  |  |  |  |           |      |       |        |       |       |       |   |  |  |  |  |  |  |  |  |  |      |                    |      |       |       |       |      |      |      |   |  |  |  |  |  |  |  |  |              |      |       |       |       |       |       |      |       |   |  |  |  |  |  |  |  |                |      |       |        |       |       |       |       |       |       |   |  |  |  |  |  |  |              |       |       |        |       |       |       |       |       |       |       |   |  |  |  |  |  |     |            |      |      |       |      |      |      |      |      |       |       |      |   |  |  |  |  |              |      |       |        |       |       |       |       |       |       |       |       |       |   |  |  |  |                  |      |      |       |      |       |       |       |      |       |       |       |      |       |   |  |  |            |       |       |        |       |       |       |       |       |       |       |       |      |       |       |   |  |             |       |       |       |      |      |      |      |       |       |       |       |      |       |      |      |   |             |       |      |      |      |       |       |       |      |      |      |      |       |      |       |      |       |   |   |
|  | 16. Outlook   | 0.36*             | 0.53*  | -0.29  | 0.32   | 0.27  | 0.22   | 0.32  | 0.37* | 0.45* | 0.38* | 0.42* | 0.21  | 0.34* | 0.32  | 0.30 | -     |    |    |       |              |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |        |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |               |      |       |       |   |  |  |  |  |  |  |  |  |  |  |  |  |             |      |      |        |       |   |  |  |  |  |  |  |  |  |  |  |  |         |       |       |        |       |       |   |  |  |  |  |  |  |  |  |  |  |           |      |       |        |       |       |       |   |  |  |  |  |  |  |  |  |  |      |                    |      |       |       |       |      |      |      |   |  |  |  |  |  |  |  |  |              |      |       |       |       |       |       |      |       |   |  |  |  |  |  |  |  |                |      |       |        |       |       |       |       |       |       |   |  |  |  |  |  |  |              |       |       |        |       |       |       |       |       |       |       |   |  |  |  |  |  |     |            |      |      |       |      |      |      |      |      |       |       |      |   |  |  |  |  |              |      |       |        |       |       |       |       |       |       |       |       |       |   |  |  |  |                  |      |      |       |      |       |       |       |      |       |       |       |      |       |   |  |  |            |       |       |        |       |       |       |       |       |       |       |       |      |       |       |   |  |             |       |       |       |      |      |      |      |       |       |       |       |      |       |      |      |   |             |       |      |      |      |       |       |       |      |      |      |      |       |      |       |      |       |   |   |
|  | 17. Support   | -0.08             | 0.15   | 0.00   | 0.00   | -0.02 | -0.09  | -0.05   | 0.01  | 0.18  | 0.23  | 0.01  | 0.37* | 0.00  | -0.05 | 0.03 | 0.38* | -  |    |       |              |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |        |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |               |      |       |       |   |  |  |  |  |  |  |  |  |  |  |  |  |             |      |      |        |       |   |  |  |  |  |  |  |  |  |  |  |  |         |       |       |        |       |       |   |  |  |  |  |  |  |  |  |  |  |           |      |       |        |       |       |       |   |  |  |  |  |  |  |  |  |  |      |                    |      |       |       |       |      |      |      |   |  |  |  |  |  |  |  |  |              |      |       |       |       |       |       |      |       |   |  |  |  |  |  |  |  |                |      |       |        |       |       |       |       |       |       |   |  |  |  |  |  |  |              |       |       |        |       |       |       |       |       |       |       |   |  |  |  |  |  |     |            |      |      |       |      |      |      |      |      |       |       |      |   |  |  |  |  |              |      |       |        |       |       |       |       |       |       |       |       |       |   |  |  |  |                  |      |      |       |      |       |       |       |      |       |       |       |      |       |   |  |  |            |       |       |        |       |       |       |       |       |       |       |       |      |       |       |   |  |             |       |       |       |      |      |      |      |       |       |       |       |      |       |      |      |   |             |       |      |      |      |       |       |       |      |      |      |      |       |      |       |      |       |   |   |
| <p>5.</p> <p>IC: Internal consistency</p> <p>Cronbach's alpha:</p> <p>Total FACT-G score: 0.93</p> <p>All of the subscales : 0.68-0.90</p> | <p>CsV: Construct validity + CrV: Criterion validity</p> <p>Convergent and divergent validity is evaluated with Pearson correlations:</p> <table border="1"> <thead> <tr> <th></th> <th>FLIC</th> <th>B-POMS</th> </tr> </thead> <tbody> <tr> <th>FACT-G</th> <td>0.84</td> <td>- 0.82</td> </tr> </tbody> </table>   |                   | FLIC   | B-POMS | FACT-G | 0.84  | - 0.82 | <p>The authors conclude that the results of the reliability and validity measures as demonstrated in this study are within acceptable limits and the scale is appropriate for use with rural samples.</p> <p>A factor analysis using an oblique</p> |       |       |       |       |       |       |       |      |       |    |    |       |              |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |        |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |               |      |       |       |   |  |  |  |  |  |  |  |  |  |  |  |  |             |      |      |        |       |   |  |  |  |  |  |  |  |  |  |  |  |         |       |       |        |       |       |   |  |  |  |  |  |  |  |  |  |  |           |      |       |        |       |       |       |   |  |  |  |  |  |  |  |  |  |      |                    |      |       |       |       |      |      |      |   |  |  |  |  |  |  |  |  |              |      |       |       |       |       |       |      |       |   |  |  |  |  |  |  |  |                |      |       |        |       |       |       |       |       |       |   |  |  |  |  |  |  |              |       |       |        |       |       |       |       |       |       |       |   |  |  |  |  |  |     |            |      |      |       |      |      |      |      |      |       |       |      |   |  |  |  |  |              |      |       |        |       |       |       |       |       |       |       |       |       |   |  |  |  |                  |      |      |       |      |       |       |       |      |       |       |       |      |       |   |  |  |            |       |       |        |       |       |       |       |       |       |       |       |      |       |       |   |  |             |       |       |       |      |      |      |      |       |       |       |       |      |       |      |      |   |             |       |      |      |      |       |       |       |      |      |      |      |       |      |       |      |       |   |   |
|  | FLIC  | B-POMS            |        |        |        |       |        |   |       |       |       |       |       |       |       |      |       |    |    |       |              |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |        |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |               |      |       |       |   |  |  |  |  |  |  |  |  |  |  |  |  |             |      |      |        |       |   |  |  |  |  |  |  |  |  |  |  |  |         |       |       |        |       |       |   |  |  |  |  |  |  |  |  |  |  |           |      |       |        |       |       |       |   |  |  |  |  |  |  |  |  |  |      |                    |      |       |       |       |      |      |      |   |  |  |  |  |  |  |  |  |              |      |       |       |       |       |       |      |       |   |  |  |  |  |  |  |  |                |      |       |        |       |       |       |       |       |       |   |  |  |  |  |  |  |              |       |       |        |       |       |       |       |       |       |       |   |  |  |  |  |  |     |            |      |      |       |      |      |      |      |      |       |       |      |   |  |  |  |  |              |      |       |        |       |       |       |       |       |       |       |       |       |   |  |  |  |                  |      |      |       |      |       |       |       |      |       |       |       |      |       |   |  |  |            |       |       |        |       |       |       |       |       |       |       |       |      |       |       |   |  |             |       |       |       |      |      |      |      |       |       |       |       |      |       |      |      |   |             |       |      |      |      |       |       |       |      |      |      |      |       |      |       |      |       |   |   |
| FACT-G   | 0.84  | - 0.82            |        |        |        |       |        |   |       |       |       |       |       |       |       |      |       |    |    |       |              |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |        |        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |               |      |       |       |   |  |  |  |  |  |  |  |  |  |  |  |  |             |      |      |        |       |   |  |  |  |  |  |  |  |  |  |  |  |         |       |       |        |       |       |   |  |  |  |  |  |  |  |  |  |  |           |      |       |        |       |       |       |   |  |  |  |  |  |  |  |  |  |      |                    |      |       |       |       |      |      |      |   |  |  |  |  |  |  |  |  |              |      |       |       |       |       |       |      |       |   |  |  |  |  |  |  |  |                |      |       |        |       |       |       |       |       |       |   |  |  |  |  |  |  |              |       |       |        |       |       |       |       |       |       |       |   |  |  |  |  |  |     |            |      |      |       |      |      |      |      |      |       |       |      |   |  |  |  |  |              |      |       |        |       |       |       |       |       |       |       |       |       |   |  |  |  |                  |      |      |       |      |       |       |       |      |       |       |       |      |       |   |  |  |            |       |       |        |       |       |       |       |       |       |       |       |      |       |       |   |  |             |       |       |       |      |      |      |      |       |       |       |       |      |       |      |      |   |             |       |      |      |      |       |       |       |      |      |      |      |       |      |       |      |       |   |   |

|  |  |   |
|--|--|---|
|  |  | <p>rotation was performed. These findings suggest that the responses to the FACT-G items by a rural sample closely approximate the responses in an urban sample (Cella et al., 1993).</p> |
|--|--|---|

Betrouwbaarheid/ fiabilité: Stability (S), Internal Consistency (IC), Equivalence (E)

Validiteit/ validité: Face Validity (FV), Content Validity (CtV), Criterion Validity (CrV), Construct Validity (CsV)

Sensitivity (Sen), Specificity (Sp), Positive Predictive Value (PPV), Negative Predictive Value (NPV), Receiver Operating Curve (ROC), Likelihood Ratio (LR), Odds Ratio (OR), Area Under the Curve (AUC)

Below is a list of statements that other people with your illness have said are important. **Please circle or mark one number per line to indicate your response as it applies to the past 7 days.**

| PHYSICAL WELL-BEING      |   | Not at all | A little | Some-what | Quite a bit | Very much |
|--------------------------|---|------------|----------|-----------|-------------|-----------|
| GP1                      | I have a lack of energy   | 0          | 1        | 2         | 3           | 4         |
| GP2                      | I have nausea   | 0          | 1        | 2         | 3           | 4         |
| GP3                      | Because of my physical condition, I have trouble meeting the needs of my family   | 0          | 1        | 2         | 3           | 4         |
| GP4                      | I have pain   | 0          | 1        | 2         | 3           | 4         |
| GP5                      | I am bothered by side effects of treatment  | 0          | 1        | 2         | 3           | 4         |
| GP6                      | I feel ill  | 0          | 1        | 2         | 3           | 4         |
| GP7                      | I am forced to spend time in bed  | 0          | 1        | 2         | 3           | 4         |
| SOCIAL/FAMILY WELL-BEING |   | Not at all | A little | Some-what | Quite a bit | Very much |
| GS1                      | I feel close to my friends  | 0          | 1        | 2         | 3           | 4         |
| GS2                      | I get emotional support from my family  | 0          | 1        | 2         | 3           | 4         |
| GS3                      | I get support from my friends   | 0          | 1        | 2         | 3           | 4         |
| GS4                      | My family has accepted my illness   | 0          | 1        | 2         | 3           | 4         |
| GS5                      | I am satisfied with family communication about my illness   | 0          | 1        | 2         | 3           | 4         |
| GS6                      | I feel close to my partner (or the person who is my main support)   | 0          | 1        | 2         | 3           | 4         |
| Q1                       | Regardless of your current level of sexual activity, please answer the following question. If you prefer not to answer it, please mark this box and go to the next section. |            |          |           |             |           |

|     |                                 |   |   |   |   |   |
|-----|---------------------------------|---|---|---|---|---|
| GS7 | I am satisfied with my sex life | 0 | 1 | 2 | 3 | 4 |
|-----|---------------------------------|---|---|---|---|---|

Please circle or mark one number per line to indicate your response as it applies to the past 7 days.

**EMOTIONAL WELL-BEING**

**Not at all    A little    Some-    Quite a    Very**  
**bit    what    bit    much**

|     |  | 0 | 1 | 2 | 3 | 4 |
|-----|--|---|---|---|---|---|
| GE1 | I feel sad .....   | 0 | 1 | 2 | 3 | 4 |
| GE2 | I am satisfied with how I am coping with my illness..... | 0 | 1 | 2 | 3 | 4 |
| GE3 | I am losing hope in the fight against my illness .....   | 0 | 1 | 2 | 3 | 4 |
| GE4 | I feel nervous.....                                      | 0 | 1 | 2 | 3 | 4 |
| GE5 | I worry about dying .....                                | 0 | 1 | 2 | 3 | 4 |
| GE6 | I worry that my condition will get worse .....           | 0 | 1 | 2 | 3 | 4 |

**FUNCTIONAL WELL-BEING**

**Not at all    A little    Some-    Quite a    Very**  
**all            bit    what    bit    much**

|     |  | 0 | 1 | 2 | 3 | 4 |
|-----|--|---|---|---|---|---|
| GF1 | I am able to work (include work at home).....            | 0 | 1 | 2 | 3 | 4 |
| GF2 | My work (include work at home) is fulfilling .....       | 0 | 1 | 2 | 3 | 4 |
| GF3 | I am able to enjoy life.....                             | 0 | 1 | 2 | 3 | 4 |
| GF4 | I have accepted my illness .....                         | 0 | 1 | 2 | 3 | 4 |
| GF5 | I am sleeping well.....                                  | 0 | 1 | 2 | 3 | 4 |
| GF6 | I am enjoying the things I usually do for fun.....       | 0 | 1 | 2 | 3 | 4 |
| GF7 | I am content with the quality of my life right now ..... | 0 | 1 | 2 | 3 | 4 |

Hieronder vindt u een lijst met uitspraken die andere mensen, met dezelfde ziekte als u, belangrijk vonden. Omcirkel of duid a.u.b. één cijfer per regel aan om uw antwoord zoals het tijdens de afgelopen 7 dagen van toepassing was aan te geven.

| LICHAMELIJK WELBEVINDEN |   | Helemaal<br>niet | Een<br>beetje | Enigs-<br>zins | In vrij hoge<br>mate | In zeer<br>hoge<br>mate |
|-------------------------|---|------------------|---------------|----------------|----------------------|-------------------------|
| GP1                     | Het ontbreekt me aan energie.....   | 0                | 1             | 2              | 3                    | 4                       |
| GP2                     | Ik voel me misselijk  | 0                | 1             | 2              | 3                    | 4                       |
| GP3                     | Door mijn lichamelijke toestand heb ik moeite om aan de behoeften van mijn gezin/familie tegemoet te komen..... | 0                | 1             | 2              | 3                    | 4                       |
| GP4                     | Ik heb pijn   | 0                | 1             | 2              | 3                    | 4                       |
| GP5                     | Ik heb last van de bijwerkingen van de behandeling  | 0                | 1             | 2              | 3                    | 4                       |
| GP6                     | Ik voel me ziek   | 0                | 1             | 2              | 3                    | 4                       |
| GP7                     | Ik moet in bed blijven.....   | 0                | 1             | 2              | 3                    | 4                       |

| SOCIAAL WELZIJN EN WELZIJN VAN HET GEZIN/FAMILIE |  | Helemaal<br>niet | Een<br>beetje | Enigs-<br>zins | In vrij hoge<br>mate | In zeer<br>hoge<br>mate |
|--|--|------------------|---------------|----------------|----------------------|-------------------------|
| GS1  | Ik heb een hechte band met mijn vrienden     | 0                | 1             | 2              | 3                    | 4                       |
| GS2  | Ik krijg morele steun van mijn gezin/familie | 0                | 1             | 2              | 3                    | 4                       |
| GS3  | Ik krijg steun van mijn vrienden             | 0                | 1             | 2              | 3                    | 4                       |
| GS4  | Mijn gezin/familie aanvaardt mijn ziekte     | 0                | 1             | 2              | 3                    | 4                       |

|     |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|
| GS5 | Ik ben tevreden met de communicatie over mijn ziekte in mijn gezin/familie  | 0 | 1 | 2 | 3 | 4 |
| GS6 | Ik heb een hechte relatie met mijn partner (of de persoon die mijn belangrijkste steun is)  | 0 | 1 | 2 | 3 | 4 |
| Q1  | Beantwoord a.u.b. de volgende vraag ongeacht het huidige niveau van uw seksuele activiteit. Als u liever niet wilt antwoorden, kruis dan a.u.b. dit vakje aan en ga door met het volgende |   |   |   |   |   |
| GS7 | Ik ben tevreden met mijn seksleven  | 0 | 1 | 2 | 3 | 4 |

**Omcirkel of duid a.u.b. één cijfer per regel aan om uw antwoord zoals het tijdens de afgelopen 7 dagen van toepassing was aan te geven.**

| EMOTIONEEL WELZIJN |   | Helemaal niet | Een beetje | Enigszins | In vrij hoge mate | In zeer hoge mate |
|--------------------|---|---------------|------------|-----------|-------------------|-------------------|
| GE1                | Ik voel me verdrietig.....                            | 0             | 1          | 2         | 3                 | 4                 |
| GE2                | Ik ben tevreden over hoe ik met mijn ziekte omga..... | 0             | 1          | 2         | 3                 | 4                 |
| GE3                | Ik verlies de hoop in de strijd tegen mijn ziekte     | 0             | 1          | 2         | 3                 | 4                 |
| GE4                | Ik voel me nerveus                                    | 0             | 1          | 2         | 3                 | 4                 |
| GE5                | Ik maak me zorgen dat ik zou kunnen doodgaan          | 0             | 1          | 2         | 3                 | 4                 |
| GE6                | Ik maak me zorgen dat mijn toestand zal verergeren    | 0             | 1          | 2         | 3                 | 4                 |

| FUNCTIONEEL WELBEVINDEN |  | Helemaal<br>niet | Een<br>beetje | Enigs-<br>zins | In vrij hoge<br>mate | In zeer<br>hoge<br>mate |
|-------------------------|--|------------------|---------------|----------------|----------------------|-------------------------|
| GF1                     | Ik ben in staat te werken (werk thuis inbegrepen).....             | 0                | 1             | 2              | 3                    | 4                       |
| GF2                     | Mijn werk (werk thuis inbegrepen) schenkt mij voldoening           | 0                | 1             | 2              | 3                    | 4                       |
| GF3                     | Ik kan van het leven genieten                                      | 0                | 1             | 2              | 3                    | 4                       |
| GF4                     | Ik aanvaard mijn ziekte  | 0                | 1             | 2              | 3                    | 4                       |
| GF5                     | Ik slaap goed  | 0                | 1             | 2              | 3                    | 4                       |
| GF6                     | Ik geniet van wat ik in mijn vrije tijd doe                        | 0                | 1             | 2              | 3                    | 4                       |
| GF7                     | Op dit moment ben ik tevreden met de kwaliteit van mijn leven..... | 0                | 1             | 2              | 3                    | 4                       |

Gelieve bij gebruik van dit rapport als volgt te refereren :

Bulteel L., Gobert M., Piron C., Filion N., Vanderwee K., Verhaeghe S., Caillet O., Van Durme T., Vandermolen M., Defloor T. (2009) Actualiseren van de bestaande BeST-databank & Aanvullen van de bestaande BeST-databank met nieuwe schalen. Brussel: Federale Overheidsdienst Volkgezondheid van de voedselketen en leefmilieu

Comment citer ce rapport ?

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