Health-Related Quality of Life indicators and overall Quality of Life: results from a cluster analysis on baseline EORTC QLQ-C30 data from 6739 cancer patients.

Author Block: C. Coens, F. Martinelli, C. Quinten, C. Cleeland, E. Greimel, M. King, J. Ringash, J. Schmucker-Von Koch, Q. Shi, A. Bottomley; EORTC, Brussels, Belgium; U.T.M.D. Anderson Cancer Center, Houston, TX; Medical University Graz, Graz, Austria; University of Sidney, Sidney, Australia; The Princess Margaret Hospital, Toronto, ON, Canada; University of Regensburg, Regensburg, Germany

Abstract:

Background:
Increasingly randomized controlled trials in cancer research include Health-Related Quality of Life (HRQoL) alongside traditional biomedical outcome measures. The majority of these trials focus on a general cancer HRQoL measure. The objective of this meta-analysis was to identify which HRQoL indicators influence a patient’s overall quality of life, in order to better understand the changes in such a generic scale.

Methods:
Retrospective pooling of 29 European Organisation for Research and Treatment of Cancer (EORTC) clinical trials, among 10 cancer sites, yielded baseline EORTC QLQ-C30 data for a total of 6739 patients. A cluster analysis, using Ward’s method, was performed to determine how the 15 HRQoL indicators, and the Global Health scale (GH) in particular, cluster overall and by cancer characteristics. Cronbach’s alpha coefficient (α) was used to measure internal consistency. Dendrograms of the HRQoL indicators were plotted for each cancer type.

Results:
Three main clusters emerged: a physical function related cluster (physical functioning, role functioning, fatigue and pain, \(\alpha = 0.83\)), a psychological function related cluster (emotional functioning, cognitive functioning and insomnia, \(\alpha = 0.64\)) and a gastrointestinal cluster (nausea and vomiting and appetite loss, \(\alpha = 0.68\)). The GH scale was found to be part of the physical function cluster in the overall dataset (\(\alpha = 0.85\)). This result was reproduced for both metastatic and non-metastatic patients. When looking across the 10 different cancer sites, the GH scale was mainly linked with a physical component in brain, head and neck, lung, melanoma, ovarian, pancreatic and prostate cancer. However, in breast and testicular cancer, GH was more strongly associated with the emotional scales.

Conclusions: This study shows that the GH scale of the EORTC QLQ-C30 is most strongly linked with a patient’s physical status. This result is consistent across stage of disease and most cancer sites. The different results seen in patients with breast and testicular cancer deserve additional investigation.

Author Disclosure Information: C. Coens, None; F. Martinelli, None; C. Quinten, None; C.
Cleeland, None; E. Greimel, None; M. King, None; J. Ringash, None; J. Schmucker-Von Koch, None; Q. Shi, None; A. Bottomley, None.

Topic Category (Complete): Quality-of-Life Management
Keyword (Complete): quality of life; psychosocial oncology; meta-analysis
Sponsor (Complete):
Additional Information I (Complete):
  Type of Trial: Meta-Analysis
  Research Category: Clinical
  Trial Accrual: No
  Funding: Foundation
  Funder Name: Pfizer Foundation
  Grant Funding: No
  Type of Grant: Not Applicable

Additional Information II (Complete):
  Trial Participants over the age of 65: No
  I Agree to ASCO Abstract Policies: Yes
  I Agree to Present: Yes
  Abstract selected for presentation at the 2009 Gastrointestinal Cancers Symposium: No
  Abstract selected for presentation at the 2009 Genitourinary Cancers Symposium: No
  Abstract presented at the 2008 Breast Cancer Symposium: No
  Merit Award: No

Late Breaking (Complete):
  I intend to submit a late-breaking abstract: No

Attached Files:
No Files Attached

Status: Complete
ASCO – 2318 Mill Road, Suite 800 – Alexandria, VA 22314. Phone: 703-299-0150 – Fax: 571.366.9547 - Email: Abstracts@asco.org.
If you experience technical difficulty with the website, please contact Coe-Truman Customer Service at (217) 398-1792, or email support@abstractsonline.com. If you have any questions regarding the Annual Meeting or how to submit an abstract to the meeting, please contact ASCO staff directly at (571) 483-1400, or email abstracts@asco.org. Hours of operation for both services are M-F 9am-5pm EDT. If you have any questions regarding ASCO membership, please contact the ASCO Members Hotline at (888) 282-2552 or (703) 299-0158 if you are an international caller.

***To log out, simply close your browser window. All information will be saved if you have hit the Continue button after each step.