Patient-Reported Outcomes and Quality of Life Committee

Goals
Quality of Life (QOL) research in NCCTG was officially established in September 1999 and was renamed as the Patient-Reported Outcome and Quality of Life Committee (PROQOL Committee) in 2007. The primary goal of the PROQOL group is to assess relevant QOL endpoints that have tangible outcomes for cancer patients and clinical practice. We will continue to follow our three guiding principles of facilitating the implementation of QOL in treatment trials as appropriate, developing new methodology to increase the precision and efficiency of QOL assessment, and carry out QOL-directed protocols where indicated to complement the treatment trial research portfolio.

As a result of the successful NCI site visit in July 2006, the PROQOL Committee was approved as a Discipline-oriented Scientific Committee with six years of funding. Research for the present grant cycle includes three major themes:

Theme 1: Genetics and QOL: The first paper was published on Twin Research and Human Genetics to describe the establishment of the GENEQOL Consortium to investigate the genetic disposition of Patient-Reported Quality-of-Life Outcomes. It was a collaborative work with the University of Amsterdam/Karolinska Institute from the international and interdisciplinary consortium, the GENEQOL Consortium held in Feb. 2009. Work was published in December of 2010 summarizing the theoretical and empirical evidence to date relating genetic variables and five QOL-related PRO domains: negative psychological affect, positive psychological affect, self-rated physical health, pain, and fatigue. Further, an expansion of the theoretical framework of Wilson and Cleary was put forward by Sprangers and Sloan providing a foundation for all future work in this area. (references are in publications below)

Genetic correlative work is planned for the phase III study of Lapatinib and/or Trastuzumab Treatment Optimisation (ALTTO) trial which is projected to accrue 8000 patient worldwide was opened in May 2007. This trial is for adjuvant therapy in patients with HER2 positive breast cancer. A quality of life (QOL) substudy is available to patients and includes the LASA6, single-item measures of fatigue, rash, and diarrhea, and the FACT-B assessed at five time points. Planned analyses include comparison of arms as well as association between genetic markers and QOL. Evidence of cytokines related to lung cancer patients’ fatigue and QOL has been found and the manuscript will appear in Cancer. Concepts are also under development in the neuro, lung, and surgical committees with embedded QOL and genetic components.

Theme 2: Improve the clinical trial patient experience: PRO-CTCAE Items are newly developed and are being assessed in a diverse patient population, which represents the spectrum of disease burden and symptoms in cancer care. The study MC1091 is now open and accruing. The basis of this study has been included in numerous NCCTG clinical trials. At the conclusion of the PRO-CTCAE study, the PRO-CTCAE will be
ready for broad implementation in NCCTG cancer treatment and control trials. N0392, the Was It Worth It protocol, have accrued over 300 patients, intending to gather data on patient’s assessment of their clinical trial experience to inform and improve clinical trial design. Results of the WIWI measure for N0147 were analyzed and will be presented at ASCO 2011. The ASCPRO (Assessing the Symptoms of Cancer using Patient-Reported Outcomes) initiative published a paper in Journal of Pain and Symptom Management providing guidelines for assessing fatigue. A concept has been written and submitted to analyze reasons why patients do not complete or return QOL booklets, with the purpose to determine areas where we can improve practice to ensure compliance.

**Theme 3: Value-added of PRO assessments:** Real-time, self-reported QOL assessment is a uniquely different approach to incorporating QOL assessments in oncology practice. This approach includes the use of real-time QOL assessments and feedback, the use of normative data based triggers for poor QOL, and the use of NCCN distress practice guidelines for initiating clinician-based interventions. A joint RTOG-NCCTG study has been designed to test whether the provision of real-time, self-reported QOL data during the course of radiotherapy will improve patient-reported QOL. The focus of this protocol will be in two areas: one related to the patient perspective of care: 1) to obtain estimates for effect sizes on differences in key QOL domains between patients receiving realtime QOL data and those not receiving QOL data; and 2) to obtain preliminary estimates of differences in patient satisfaction between patients receiving realtime QOL data and those not receiving QOL data; the other related to the clinician perspective of care: 1) to evaluate clinician attitudes towards the incorporation of real-time QOL data into oncology patient management; 2) to evaluate the use of a set of clinical pathways for the incorporation of real-time QOL data into oncology patient management; 3) to evaluate the potential impact on the quality of the patient-physician relationship with real-time use of QOL data compared to interactions where QOL data are not used (physician assessment); and 4) to obtain preliminary estimates of whether the real-time use of QOL data in a radiation oncology practice significantly increases the duration of the weekly on treatment visit.

**Protocols and Studies**

Since 1995, there have been 172 studies using Mayo Clinic Rochester as a data center with a QOL component, 62 of which are NCCTG. The Uniscale, LASA, SDS, and FACT/FACIT continue to be the most commonly used QOL tools. We have 1 NCCTG study in development with QOL component cancer control. As of 03/22/2011 there are 20 studies with QOL components that are open to accrual: cancer control (3), breast (1), CNS (7), gastrointestinal (2), GU (2), GYN (1), head/neck (2), lung (1) and multiple (1). One cancer control and one GI opened within the last year. There are 41 closed protocols: breast (3), CNS (2), GI (7), GU (1), GYN (1), head/neck (1), lung (5), melanoma (1), other(1) and cancer control (19). Thirteen of the studies have published manuscripts. Two manuscripts have been accepted. The remaining closed studies are in some stage of manuscript completion.
**Inclusion of single-item screen for overall QOL and fatigue** as of March 16, 2010, all future NCCTG treatment trials will include the following single item overall QOL and fatigue item to be used as either a stratification factor, a prognostic factor or a covariate in the design and analysis of the clinical trial. This is a result of our collaborative research indicating these single items are prognostic for survival across a broad spectrum of cancer patients. These items are included in the real-time initiative and also have been incorporated into Mayo oncology clinical practice. Manuscripts summarizing this work are under preparation.

**Liaisons**
Clinical liaisons continue to provide support and facilitate interaction between the NCCTG QOL committee and tumor group committees. The liaisons are: Yolada Garces (Lung), Axel Grothey, Joleen Hubbard (Colorectal), Paul Brown (Neuro-Oncology), Michele Halyard (Breast), Susan McClement (nursing), and Tait Shanafelt (Hematology). Memberships with questions or ideas regarding tumor-specific QOL should feel free to contact these colleagues.

**Grant Activities**
The Patient Reported Outcome Measurement Information System (PROMIS) grant was submitted in February 2010. This grant requests funding for the Mayo Clinic to serve as a research site for a broad-based national and international network to validate the PROMIS domains in the context of clinical studies and to develop the PROMIS system to facilitate adoption by clinical researchers. The Mayo Clinic PROMIS Research Network (MCPRN) will be in collaboration with member sites of the North Central Cancer Treatment Group, Memorial-Sloan-Kettering Cancer Center, M.D. Anderson Cancer Center, the Australia Clinical trials network, and the Canadian Clinical Trials Network to allow for rapid accrual and the rapid exploration of application questions for PROMIS products to compare relative efficiencies for differences in modalities, (paper/pencil vs. laptop vs. hand held tablet), disclosure status (e.g., results disclosed to physician or not), and racial differences (minority versus not). Specific analytical aims include testing the relative performance psychometrics of the PROMIS tools and the new PRO-CTC measures versus simple single-item numerical analogues, exploration of patient satisfaction and distress, and determining the prognostic nature of PROMIS products for overall survival, disease-free survival and time to progression. This R01 received a positive review and is awaiting final decision on funding.

**Other Activities**
The PROQOL team will present 3 abstracts to ASCO 2011. They are:
1. N0147 Was It Worth It. Accepted as a poster.
2. N0147 Overall QOL results. Accepted for a poster.
5. Real Time pilot: compliance data. Accepted as a poster.

Other manuscripts in development discuss the impact on study results of various imputation techniques, the results of the Control Preference Scale (CPS) in regard to the patient characteristics, the results of the CPS in regard to different health care systems,
the incidence of sleep problems (N0493), the relationship between CTCAE and PRO outcomes (N0591), the relationship between QOL and survival (N9741), the QOL of lung cancer patients, and the QOL difference in minority patients (N0691). Other meta-analyses include the assessment of peripheral neuropathy and the exploration of the Skindex-16 assessment tool. The QOL web site, https://ncctg.mayo.edu/ncctg/group/qol.html, continues to be a complimentary resource. This web site contains instruments, references, and meeting minutes. Members are encouraged to visit the site for updates on particular studies or to gather resource information on QOL measures, papers, and activities. A bibliography, scoring keys and validity/reliability paragraphs are also available.

Published Manuscripts and Abstracts (2010/2011)


Members are encouraged to share feedback on the studies that follow this summary and the research efforts initiated. Please contact Dr. Jeff Sloan, 507-284-9985 or email at jsloan@mayo.edu for questions, input or feedback on the PROQOL research program.