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: In collaboration with the University of Amsterdam/Karolinska Institute, the PROQOL Committee conducted a 3 day consortium for internationally-renowned researchers on February 26-28, 2009 in Rochester, MN. Brainstorming was performed to identify available data sets to use in this pursuit and goals for research were identified. A manuscript is in preparation to summarize current genetic research related to the outcomes of positive psychological affect, negative psychological affect, physical well-being, fatigue and pain, and lay out a research agenda for the consortium (and hence the NCCTG) to follow. A new concept was approved allowing Dr. Gen Shinozaki of the Department of Psychiatry at Mayo to use the data from N9741 to explore linkage between a set of genetic markers that have preliminary indication of a relationship with mood disruption. Adjuvant Lapatinib and/or Trastuzumab Treatment Optimisation (ALTTO) trial opened in May 2007 and is projected to accrue 8000 patient worldwide. 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. 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: N0392, the Was It Worth It protocol, is accruing, intending to gather data on patient’s assessment of their clinical trial experience to inform and improve clinical trial design. 2008 ASCO abstracts were presented to report on analyses indicating better ways to assess pain, peripheral neuropathy, and osteoporosis. 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: Three 2008 ASCO abstracts were presented indicating the relative value of PRO assessments to tumor measurement and validating
baseline PRO assessments as being prognostic for survival. The ASCPRO (Assessing the Symptoms of Cancer using Patient-Reported Outcomes) initiative has formed task forces on the assessment of fatigue, cognitive function, and symptom clusters. A manuscript describing ASCPRO activities and structure has been submitted to the Journal of Pain and Symptom Management.

Protocols and Studies

Since 1995, there have been 187 studies using Mayo Clinic Rochester as a data center with a QOL component, 83 of which are NCCTG. The Uniscale, LASA, SDS, and FACT/FACIT continue to be the most commonly used QOL tools. We have 4 NCCTG studies in development with QOL components: cancer control (1), CNS (2), and Lung (1). As of 03/23/2009 there are 18 studies with QOL components that are open to accrual: cancer control (6), breast (1), CNS (3), gastrointestinal (2), GYN (1), head/neck (1), lung (2), melanoma (1) and the Was It Worth It (N0392) study. There are 61 closed protocols: breast (4), CNS (2), GI (14), GU (2), GYN (1), hematology (1), lung (5), other (1) and cancer control (31). Twenty of the studies have published manuscripts. Three have submitted manuscripts and seven have manuscripts accepted but not yet published. The remaining closed studies are in some stage of manuscript completion.

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 Turja (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. The 2008 annual retreat took place February 29 – March 1 to prioritize efforts within each tumor group. The 2009 retreat will be held via teleconference in April.

Grant Activities

Submitted in February 2009 was the Patient Reported Outcome Measurement Information System (PROMIS) grant. 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.
Drs. Sargent and Sloan submitted a T32 training grant in January. The intent of the grant is to establish a postdoctoral program in clinical trial design and PRO research. If successful, this will provide a pool of young postdoctoral candidates from whom the NCCTG can capitalize in building new studies and exploring research aims.

As a team, two challenge grants will be submitted for the recent NIH stimulus package competition. The first, with Dr. Sloan as PI, will follow up on our research relating genetics to PRO variables in trial N9741. The first aim will be to perform an analysis of genes linked to PROs in previous studies, including fatigue and other symptoms (depressed mood, insomnia, anorexia, overall outlook) as well as overall quality of life. The second aim proposes to perform a Genome-Wide Association Study (GWAS) to assess which other genes might correlate with severity of symptoms (fatigue, outlook, total symptom burden) and overall quality of life. The third aim is to study the genes associated with symptom severity in relation to Time to Progression and Overall Survival. The second will extend Dr. Halyard's real-time pilot protocol into three NCCTG sites.

Other Activities

The PROQOL team submitted 4 abstracts to ASCO 2009. They are:

1. Assessing simple measures of patient-reported fatigue for oncology clinical trials: a pooled analysis of 3,915 patients. Accepted as a poster.
2. Baseline quality of life as a prognostic factor for overall survival in lung cancer patients. Accepted for publication.
3. Association between lung cancer survival and pessimistic explanatory style. Accepted as a poster discussion.
4. Longitudinal assessment of cognitive impairment among lung cancer survivors. Accepted as a poster.

The team has been collaborating with investigators utilizing the Esophageal Adenocarcinoma and Barrett’s Esophagus (EABE) registry established at the Mayo clinic Rochester. Poster presentations were accepted at the American College of Gastroenterology conference held in Philadelphia, October 2007: Changes in Quality of Life Over Time in Patients Registered on the Mayo Clinic Esophageal Adenocarcinoma and Barrett’s Esophagus Registry, and at American Society for Therapeutic Radiology and Oncology held in Los Angeles, October 2007: Assessment of Quality of Life in Patients with Esophageal Cancer after Combined Modality Therapy. Manuscripts in production for this data base summarize QOL within the cancer and BE groups, determine if marital status has any effect on QOL, and explore the relationship of QOL to patient survival as recorded in the EABE registry.

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 (2008/2009)

- A patient-level meta-analysis investigation of the prognostic significance of baseline quality of life (QOL) for overall survival (OS) among 3704 patients participating in 24 North Central Cancer Treatment Group (NCCTG) and Mayo Clinic Cancer Center (MC) oncology clinical trials. (Abstract 9515). J Clin Oncol 2008; 26(15s, pt 1):505s.
- Use of baseline quality of life (QOL) as compared with performance status (PS) as prognostic factors for overall survival (OS) in patients with metastatic colorectal cancer (mCRC). (Abstract 4016). J Clin Oncol 2008; 26(15s, pt I):182s.


01/2008 Tumor burden is not related to quality of life in patients with metastatic colorectal cancer. 
ASCO GI, Orlando, FL

03/2008 Clinical Trials and Clinical Significance for Patient-Reported Outcomes (PROs). 
CTSC 5850 Course, Intro to Psych/Behavioral Measurement Rochester, Minnesota

03/2008 1. Resident well-being and coping strategies during internal medicine training: results from the Mayo IMWELL Study. 
2. Suicidal Ideation among U.S. Medical Students: A Multi-institutional Study 
3. A comparison of internal medicine resident empathy evaluation by validated metrics and traditional supervisor, nursing, and peer evaluation forms. 
Ottawa International Conference on Clinical Competence Melbourne, Australia

03/2008 Physical activity and quality of life in long term lung cancer survivors 
29th Annual meeting Society of Behavioral Medicine Annual Meeting San Diego, California

03/2008 Patient Reported Outcomes Quality of Life Committee 
PROQOL update 
NCCTG Executive Meeting Rochester, Minnesota

04/2008 Quality of Life: What's It All About, Why Do We Study It? 
Prostate Cancer Support Group Rochester, Minnesota

05/2008 1. The Great Debate, Paper versus ePRO. 
3. Utilize Patient Reported Outcomes in Post-Approval Research. 
4. Analysis and Interpretation of Results Based on Patient Reported Outcomes. 
CBI's 2nd Forum on Patient Reported Outcomes (PRO) Philadelphia, Pennsylvania
05/2008
1. Health Related Quality of Life and Patient Reported Outcomes in Rehabilitation.
2. Patient-reported Outcomes: Recent Scientific Advances and Implications for Orthopedics and Rehabilitation.
Vanderbilt University
Nashville, Tennessee

05/2008
1. The Value of Preliminary Data in Power Specifications Based Upon 64 NCCTG Phase II/III treatment trials, poster presentation.
2. A patient-level meta-analytic investigation of the prognostic significance of baseline quality of life (QOL) for overall survival (OS) among 3704 patients participating in 24 North Central Cancer Treatment Group (NCCTG) and Mayo Clinic Cancer Center(MC) oncology clinical trials, oral discussion.
3. Comparing and Validating Simple measures of Patient-reported Peripheral Neuropathy (PRPN) for NCCTG Clinical Trials: a Pooled Analysis of 2440 Patients (pts), poster presentation.
4. Baseline quality of life (QOL) is a strong and performance status (PS)-independent prognostic factor for overall survival (OS) in patients with metastatic colorectal cancer (mCRC), a poster discussion.
5. Tumor burden is not related to quality of life in patients with metastatic colorectal cancer, poster discussion.
6. Baseline quality of life (QOL) is a strong prognostic factor for overall survival (OS) in patients (Pts) with advanced stage non-small cell lung cancer (A-NSCLC): An Analysis of NCCTG Studies, poster presentation.

ASCO, Chicago, Ill.

06/2008
1. Recent Advances in Patient-Reported Outcomes (PROs).
2. Quality of Life: What's it all about, why do we study it?
NCI Cancer Prevention and Control Colloquia
Bethesda, Maryland

08/2008
Burnout and Suicidal Ideation among US medical Students: Is Burnout Reversible and Does Recovery Decrease Suicidal Ideation?
Association of Medical Educators of Europe, Prague.

09/2008
Mometasone Decreases Patient Reported Skin Toxicity in Breast Cancer Patients Receiving Radiation Therapy: A Phase III Randomized Double-Blind Trial from the North Central Cancer Treatment Group
American Society for Therapeutic Radiology and Oncology (ASTRO)
Boston, Massachusetts

11/2008
Novel Approaches
2008 Chicago Multidisciplinary Symposium in Thoracic Oncology
Chicago, Illinois

11/2008
A Distress Index for Medical Students: Developments Findings from a Content Validation Study.
2008 BMA AMA CMA International Conference on Doctors' Health.

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.