Incorporating health related quality of life alongside clinical data may improve the survival prognosis of cancer patients; an update of a provisional analysis of pooled EORTC studies.

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Background:

One of the main questions cancer patients ask themselves when diagnosed with cancer is ‘How long will I live?’ Health related quality of life may provide added value alongside clinical data in predicting survival. One of the aims of the PROBE (Patient Reported Outcomes and Behavioral Evidence) project is to investigate the improvement in predicting cancer survival prognosis including patient reported quality of life and psychosocial data in the survival estimation of cancer patients. This work is part of the Pfizer Foundation Global Health Partnerships Initiative to accelerate the pace of progress in the fight against cancer.

Methods:

Baseline data obtained from 30 closed European Organisation for Research and Treatment of Cancer (EORTC) randomized controlled trials covering 11 cancer sites were included in this retrospective study. Possible discrepancy between similar information (pain, fatigue, vomiting, nausea, diarrhea and constipation) received from the patient and the clinician was investigated with the Wilcoxon rank sign test. In addition, multivariate models were created to investigate the improvement in survival prognosis using the Harrell’s discrimination c-index.

Results:

More than 10,000 individual patient data were merged and analysed for this study. Discrepancy between patient and clinician assessed information was investigated and reported bigger for subjective variables like pain and fatigue than for more objective variables like vomiting and diarrhea. This indicates the complementary value of patient information next to clinician information for some health related quality of life data when both data are available. Including this patient information into a clinical model increased the predictive accuracy of survival in the general population of cancer patients, confirming past results.

Conclusion:

Our analysis suggests that patient reported outcomes, alongside clinical data, may be used by health care professionals in predicting survival. Such results provide a rationale to include patient self reported outcomes in future cancer RCTs to better assess disease.
status and survival prognosis. Further analysis is planned using more than 5,000 individual patient data from Medical Research Council (MRC), National Cancer Institute Canada – Clinical Trial Group (NCIC-CTG) and Arbeitsgemeinschaft Gynaekologische Onkologie Group (AGO). This will increase the robustness of our findings and allow us to confirm our findings in different subpopulations and cancer sites. It will establish general guidelines and policies for Quality of Life and psychosocial issues.

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