Prediction of Survival Time in Advanced Cancer: A Prognostic Scale for Chinese Patients
Lingjun Zhou, MS, Jing Cui, MS, Jian Lu, MD, MPH, Bee Wee, MA (Oxon), PhD, FRCP, MRCGP, MA Ed, and Jijun Zhao, BSc

Abstract:
This study reports the development of a simple Chinese Prognostic Scale (ChPS) for predicting survival in advanced cancer patients. Data relating to 1,019 advanced cancer patients referred to a palliative home care service were retrospectively analyzed. The records were divided into two sets using stratified random sampling: 80% as a “training set” for developing the scale and 20% as a “testing set” for validating it. Demographic data, symptoms/signs, Karnofsky Performance Status (KPS), quality of life (QOL), and survival time were statistically analyzed to create the scale. In the training set, a total of 10 prognostic factors were determined: weight loss, nausea, dysphagia, dyspnea, edema, cachexia, dehydration, gender, KPS, and QOL. The ChPS score was calculated for each case by summing the partial scores of prognostic factors, ranging from 0 (no altered variables) to 124 (maximal altered variables). The score for a cutoff point of three months’ survival was 28 (95% confidence interval: 26.6, 28.9). When scores were more than 28, survival appeared to be usually less than three months. The accuracy rate was 69.4% in the training set and 65.4% in the testing set. In conclusion, it is possible with this prognostic scale to guide physicians in predicting more accurately the likely survival time of Chinese cancer patients, and to help policy makers in establishing appropriate referral for hospice care.

Comments:
Strengths/uniqueness:
- Interesting statistical technique with the training and testing set.
- Good number of patients.
- The quality of life assessment included family relationship which is quite novel.

Weaknesses:
- Definitions of the various symptoms e.g. anorexia, constipation are not clearly defined.
- The inclusion of working relationship in the quality of life assessment may not be very relevant, depending on nature of patient’s work e.g. housewife.
- The exclusion of patients with cognitive impairment and assuming that these patients will be admitted to the hospital needs to be substantiated.
- The lack of formal assessment for delirium is concerning.
Relevance to Palliative Care:

This study illustrates the difficulty with prognostic tools however, seems to support the use of functional assessment and occurrence of certain symptoms e.g. dysphagia to prognosticate. This approach is consistent with the current literature. Further validation of the functional assessments, symptoms and prognostic tools in different settings (home care versus acute care etc) is required.