

## **Journal Watch**

### **Meta-analysis addressing the association with the Palliative Performance scale and mortality**

**Presented by:** David Pickle, Family Medicine resident, September 26, 2008. During morning rounds Grey Nuns Tertiary Palliative Care unit.

**Reference:** *Downing M. Lau F. Lesperance M. Karlson N. Shaw J. Kuziinsky C. Bernard S. Hanson L. Olajide L. Head B. Ritchie C. Harrold J. Casarett D. Meta-analysis of survival prediction with Palliative Performance Scale. Journal of Palliative Care. 23(4): 245-54 2007*

**Abstract:** This paper aims to reconcile the use of Palliative Performance Scale (PPSv2) for survival prediction in palliative care through an international collaborative study by five research groups. The study involves an individual patient data meta-analysis on 1,808 patients from four original datasets to reanalyze their survival patterns by age, gender, cancer status, and initial PPS score. Our findings reveal a strong association between PPS and survival across the four datasets. The KaplanMeier survival curves show each PPS level as distinct, with a strong ordering effect in which higher PPS levels are associated with increased length of survival. Using a stratified Cox proportional hazard model to adjust for study differences, we found females lived significantly longer than males, with a further decrease in hazard for females not diagnosed with cancer. Further work is needed to refine the reporting of survival times/probabilities and to improve prediction accuracy with the inclusion of other variables in the models.

**Strengths:** Extensive literature search. Large sample size allowing for closer scrutiny of the PPS levels and reconciling major weakness of individual studies.

**Weakness:** Only 4 studies available from peer reviewed journals. Heterogeneous patient population (ie tertiary care, community hospice, consult service). Disease trajectory not accounted for. Only one study commented on inter-rater reliability. PPS does not account for quality of life, symptom burden, comorbidity.

**Relation to Palliative Care:** There continues to be a strong association between the PPS and survival in palliative care patients across a number of different settings. Other factors such as symptom burden and quality of life must be taken into account and there must be consistent training regarding use of the tool.