

Table 19: Matsunuma 2014 ³¹⁰

Reference	Matsunuma 2014
Study type and analysis	Retrospective cohort (derivation and validation of a prognostic tool)
Number of participants and characteristics	n=93 Inclusion criteria: People with lung cancer (terminal stage) confirmed pathologically or clinically and admission to the palliative care unit from April 2009 to June 2012 (training group) and July 2012 to June 2013 (testing group).

	<p>Exclusion criteria: None reported</p> <p>Setting: Palliative care unit Country: Japan Time to death : 22/69 (training set) and 8/24 (testing set) patients died within 2 weeks Median survival: 30 days Age, years. Mean (\pmSD): training: 75 \pm10, testing: 73 \pm7.9 Female (%): training: 31 (45%), testing: 8 (33%)</p>
<p>Prognostic variable(s)</p>	<p>Twenty six candidate predictors were identified in the training group and factors that were significantly related to survival were extracted and multivariate analysis performed, using Cox proportional hazards regression model.</p> <p>Univariate analysis identified 8 factors with prognostic significance for survival. Multivariate analysis was then conducted using these predictors: Palliative prognostic score, desaturation, supplemental oxygen, anorexia, fatigue, dyspnoea, hypoalbuminemia, hyponatremia.</p>
<p>Confounders OR stratification strategy</p>	<p>Multivariate analysis showed 5 factors were independent for predicting short-term prognosis. - training group , n = 69 Patients divided into 2 groups having 0 - 2 of these factors (0 - 2group) or >3 of these factors (3 - 5 group) - survival curve given.</p>
<p>Outcomes and effect sizes</p>	<p>Hazard ratios (95 CI)</p> <p>Palliative prognostic score - not reported Desaturation HR 3.3 (1.42 - 7.65) Supplemental oxygen - not reported Anorexia HR 2.57 (1.14 - 5.88) Fatigue HR 5.9 (2.04 - 17.0) Dyspnoea - not reported Hypoalbuminemia HR 2.37 (1.05 - 5.36) Hyponatremia HR 2.17 (1.01 - 4.68)</p> <p>Mean survival (training group) 0 - 2 of these factors = 48\pm5.1 days >3 of these factors = 9.2 \pm 2.6 days</p>

Diagnostic calculations - in testing group n = 24				
Items	Sensitivity (%)	Specificity (%)	Positive predictive value (%)	Negative predictive value (%)
This study (death within 2 weeks) - 3 or more factors	100	75	67	100
PaP (palliative prognostic score) - death within 3 weeks	21	100	100	48
PPI (palliative prognostic index) - death within 4 weeks	66	100	100	83
Comments	Reporting bias - noted that authors state 8 factors significant using univariate analysis, but then go on to only report significant findings for 5/8 factors using multivariate analysis. Data not reported to complete 2x2 tables for diagnostic outcomes.			