**Statistical methods for survival analysis in oesophageal cancer**

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I read with interest the paper by Liu et al. [1] describing the factors affecting 5-year survival following surgical resection of oesophageal squamous cell carcinoma. This remains a disease with a dismal prognosis even with a complete ‘curative’ resection and the identification of the factors that affect survival is clearly important as some of these could potentially be addressed to improve outcomes.

However, the analytical approach using logistic regression to identify the factors predicting survival is flawed. Non-parametric methods of event history analysis (Kaplan–Meier) or semi-parametric methods such as Cox regression (that permit the incorporation of multiple covariates) are preferable to logistic regression methods as used in the paper due to their ability to focus on the ‘time to the event of interest’ and the effects of factors on survival in specified groups of patients by censoring individuals who do not experience the event during the study period [2]. These methods, therefore, maintain focus on ‘time to the event’ rather than pegging the event at a fixed time and facilitate the identification of covariates that independently affect survival. A second advantage is the ability to examine the effects of covariates that vary with time. Factors like age and quantified weight loss clearly change over the 5 years of the study period and their effects are better examined by conventional survival analysis techniques.

**REFERENCES**
