BJC

Comment on 'Prognostic biomarkers for oral tongue squamous cell carcinoma: a systematic review and meta-analysis'

Rama Jayaraj*,[1] and Chellan Kumarasamy[1]

[1]Charles Darwin University, Darwin, NT 0909, Australia

Sir,

The study performed by Almangush et al, (2017) chooses to focus on Oral Tongue Squamous Cell Carcinoma (OTSCC) alone, though it is clear that comprehensive research studies on molecular markers as prognosticators in OTSCC is sparse. There is a lack of comprehensive meta-analyses and systematic reviews existing in OTSCC and the attempt made by the authors to fill this knowledge gap is highly commendable; however, the study does not fulfil the ideal vision of the authors to identify clinically viable prognostic markers in OTSCC. To achieve this, we must realise that there exists an inherent publication bias if this study limits itself to OTSCC, as the collective pool of research on this subject is already quite low. Therefore, if the primary aim of the study is to be fulfilled, then the horizons of this systematic review and meta-analysis should be expanded to include OSCC as well as other SCC occurring in the mucosal regions of the Head and Neck.

We also suggest that if the study was more flexible in its selection criteria to include studies where OTSCC was analysed as a subset of other anatomical sites of HNSCC, considering the histological and molecular similarities between different types of HNSCC including OTSCC, the resulting pool of studies would have been capable of underlining biomarkers having significant prognostic effect in HNSCC as well as OTSCC.

As a point of contention, we would like to highlight the promising oncogenic and prognostic marker, eukaryotic translation initiation factor 4E, also known as eIF4E. In cancer, eIF4E overexpression results in cellular growth, angiogenesis, malignancy, transformation, tumourigenesis and metastasis (Zimmer et al, 2000; Meric-Bernstam, 2008). Overexpression of eIF4E has also been observed in HNC, with previous studies showing up to 100% increase in eIF4E expression in HNC patients (Nathan et al, 1997b; Cardesa and Nadal, 2011). Competitive PCR and IHC analysis have also visualised overexpression of eIF4E in tumour-free surgical margins of HNC (Nathan et al, 1997a), with the respective studies predicting a seven-fold increase in risk of local recurrence (Nathan et al, 1999).

CONFLICT OF INTEREST

The authors declare no conflict of interest.

REFERENCES

Almangush A, Heikkinen I, Mäkitie AA, Coletta RD, Läärä E, Leivo I, Salo T (2017) Prognostic biomarkers for oral tongue squamous cell carcinoma: a systematic review and meta-analysis. *Br J Cancer* **117**(6): 856–866.

Cardesa A, Nadal A (2011) Carcinoma of the head and neck in the HPV era. *Acta Dermatovenerol Alp Pannonica Adriat* **20**(3): 161–173.

Meric-Bernstam F (2008) Translation initiation factor 4E (eIF4E): prognostic marker and potential therapeutic target. *Ann Surg Oncol* **15**(11): 2996–2997.

Nathan C-AO, Franklin S, Abreo FW, Nassar R, De Benedetti A, Glass J (1999) Analysis of surgical margins with the molecular marker eIF4E: a prognostic factor in patients with head and neck cancer. *J Clin Oncol* **17**(9): 2909–2909.

Nathan C-AO, Liu L, Li BD, Abreo FW, Nandy I, De Benedetti A (1997a) Detection of the proto-oncogene eIF4E in surgical margins may predict recurrence in head and neck cancer. *Oncogene* **15**(5): 579–584.

Nathan CAO, Liu L, Li B (1997b) Detection of the proto-oncogene eIF4E in surgical margins may predict recurrence in head and neck cancer. *Oncogene* **15**: 579–584.

Zimmer SG, DeBenedetti AU, Graff J (2000) Translational control of malignancy: the mRNA cap-binding protein, eIF-4E, as a central regulator of tumor formation, growth, invasion and metastasis. *Anticancer Res* **20**(3A): 1343–1351.

*Correspondence: Dr R Jayaraj; E-mail: Rama.Jayaraj@cdu.edu.au