

3rd International Conference on Translational Medicine

November 03-05, 2014 Las Vegas, USA

The role of ERCC1 in predicting the prognosis and the treatment response in HNSCC- A meta-analysis with the imply of braking system of DNA repair involved in radioation threrapy with DNA damage chemo-drugs

Jingwen Huang
West China Hospital, China

Background: Excision repair crosscomplementing-1 (ERCC1) has been reported to play a prognostic role and may indicate the treatment response in patients with head and neck squamous carcinoma (HNSCC). Nevertheless, the strength of evidence of ERCC1 predicting these two clinical outcomes are still controversial.

Methods: Potentially eligible studies were retrieved using PubMed. Basic clinical characteristics of patients and statistical data with survival data were collected. Then a meta-analysis model was established to investigate the correlation between overexpression of ERCC1 and survival outcome as well as to determin whether the treatment response is dependent on expression stature of ERCC1.

Results: 17 eligible studies and 1263 patients were yielded in our meta-analysis. The pooled HRs with 95% confidence intervals (CIs) for OS and DFS were 2.14 [1.51, 3.05] and 2.60 [1.98, 3.42], respectively. In terms of subgroup analysis, race was found to be a significant factor divided for these analyses, and the pooled HRs for the Asian subgroup are 2.97 [2.05, 4.32] and 2.75 [1.82, 4.13] respectively. In non-Asian subgroup, pooled HRs indicate the predict role for PFS 2.42 [1.60, 3.66], but no value for OS ($P>0.05$). With regard to treatment response, the pooled ORs were 3.04 [1.99, 4.62]. Rusult fom subgroup analysis that divided by race further showed that pooled ORs in Asian group were 3.95 [2.30, 6.78] and 1.93 [0.97, 3.84] in non-Asian group.

Conclusion: ERCC1 could be a fine prognostic factor of HNSCC and can also prompt treatment response, which could be proven by further multicenter clinical trials.

Biography

Jingwen Huang is still a junior medical student in West China Medical School, West China Hospital, and she has been focusing on biomarker study with her team since she came into university. She has published 7 papers in this area at this young age.

livyhuang7@163.com