

# ERCC1 SNP can identify good prognosis in nasopharyngeal CA

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(HealthDay)—Excision repair cross-complementing group 1 (*ERCC1*) genotype for the single nucleotide polymorphism (SNP) cytosine-to-thymine substitution at codon 118 (C118T) interacts with post-radiotherapy plasma Epstein-Barr virus (EBV) DNA (pEBV) to identify favorable prognosis for a subgroup of patients with nasopharyngeal carcinoma (NPC), according to a study published in the Aug. 15 issue of *Cancer*.

Edwin P. Hui, M.D., from The Chinese University of Hong Kong, and colleagues examined whether the *ERCC1* genotype for the SNPs C118T and cytosine-to-adenine substitution at codon 8092 (C8092A) is prognostic in [patients](#) with NPC. The authors evaluated the hypothesis using biomarker screening samples from a prospective, multicenter trial that used post-radiotherapy pEBV levels to screen high-risk NPC patients for adjuvant chemotherapy. *ERCC1* SNPs were analyzed in 576

patients who underwent pEBV screening.

The researchers found that neither *ERCC1* C118T nor C8092A genotype correlated with relapse-free survival (RFS) or overall survival (OS). In multivariate analyses, only post-radiotherapy pEBV status independently predicted RFS and OS. A significant interaction was seen for *ERCC1* C118T genotype and pEBV status (RFS,  $P = 0.0106$ ; OS,  $P = 0.0067$ ). In the pEBV-negative, but not pEBV-positive, population, *ERCC1* C118T genotype correlated with both RFS and OS (hazard ratios, 1.67 and 2.31, respectively).

"The *ERCC1* C118T [genotype](#) may help to identify a favorable subgroup (approximately 7 percent) of pEBV-negative patients with NPC who have an excellent prognosis and can be spared the toxicities of further therapy," the authors write.

One author disclosed financial ties to the pharmaceutical industry.

**More information:** [Abstract](#)  
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