



Association of -619C/T polymorphism in CDSN gene and psoriasis risk: a meta-analysis

Y. Wu^{1*}, B. Wang^{1*}, J.L. Liu², X.H. Gao¹, H.D. Chen¹ and Y.H. Li¹

¹Department of Dermatology, The First Affiliated Hospital, China Medical University, Shenyang, China

²Department of Oncology, The Fourth Affiliated Hospital, China Medical University, Shenyang, China

*These authors contributed equally to this study.

Corresponding author: Y.H. Li

E-mail: liyuanhong@vip.sina.com.cn / jlwuyan@126.com

Genet. Mol. Res. 10 (4): 3632-3640 (2011)

Received April 28, 2011

Accepted September 29, 2011

Published October 21, 2011

DOI <http://dx.doi.org/10.4238/2011.October.21.6>

ABSTRACT. Previous studies investigating the association between corneodesmosin (CDSN) polymorphisms and psoriasis risk have provided inconsistent results. The aim of our study was to clarify the effects of CDSN -619C/T polymorphism on psoriasis risk by conducting a meta-analysis. We conducted searches of the published literature in Pubmed and Embase databases up to October 2010. Six studies with a total of 842 psoriasis cases and 981 healthy controls were retrieved. Statistical analysis was performed with the programs Review Manager (version 5.0.24) and Stata (version 9.2). Meta-analysis results showed that there was no significant difference in CDSN -619C/T genotype distribution between psoriasis and control in the comparisons of C allele vs T allele, CC vs CT + TT, CC + CT vs TT, CC vs TT, and CC vs CT (respectively: OR = 1.28, 95%CI = 0.82-2.00, P = 0.28; OR = 1.33, 95%CI = 0.80-2.21, P = 0.28; OR = 1.23, 95%CI = 0.80-1.91, P = 0.35; OR = 1.41, 95%CI = 0.64-3.12, P = 0.40; OR = 1.30, 95%CI = 0.81-2.06, P = 0.27). In the subgroup analysis by ethnicity, results also showed no significant association between

CDSN -619C/T polymorphism and susceptibility to psoriasis in both Caucasian and Asian populations. In conclusion, this meta-analysis suggests that CDSN -619C/T polymorphism may not be associated with susceptibility to psoriasis.

Key words: Corneodesmosin; Psoriasis; Gene polymorphism; Risk; Meta-analysis