SLC26A4

late-onset Alzheimer's disease patients and controls. The A allele of this polymorphism was significantly associated with a reduced risk of late-onset Alzheimer's disease (odds ratio (OR) = 0.792, 95% confidence interval (CI) = 0.670-0.937, P = 0.007). When the data were stratified by the apolipoprotein E  $\varepsilon$ 4 status, there was a significant difference only among apolipoprotein E  $\varepsilon$ 4 noncarriers (genotypic P = 0.001, allelic P = 0.001). Furthermore, the association between rs2072064 and late-onset Alzheimer's disease remained significant by logistic regression analysis after adjustment for age, gender, and the apolipoprotein E  $\varepsilon$ 4 carrier status (dominant model: OR = 0.787, 95% CI = 0.619-1.000, P = 0.050; recessive model: OR = 0.655, 95% CI = 0.448-0.959, P = 0.030; additive model: OR = 0.792, 95% CI = 0.661-0.950, P = 0.012). These findings suggest that SLC26A4 is a susceptibility gene for late-onset Alzheimer's disease in a Northern Han Chinese population from the Qingdao area  $^{2)}$ .

Pendrin is an anion exchange protein that in humans is encoded by the SLC26A4 gene. Pendrin was

The SLC26A4 gene rs2072064 polymorphism was found to be associated with late-onset Alzheimer's disease in Caucasians. Here, we investigated this association in a large Northern Han Chinese cohort consisting of 599 sporadic late-onset Alzheimer's disease patients and 598 healthy controls matched

polymerase chain reaction-ligase detection reaction revealed that there were significant differences in the genotype (P = 0.017) and allele (P = 0.007) frequencies of the rs2072064 polymorphism between

for sex and age in a Northern Han Chinese population from Qingdao, China. Genotyping by the

initially identified as a sodium-independent chloride-iodide exchanger with subsequent studies

SLC26A4 is a novel biomarker and can reasonably predict the prognosis and Homologous

showing that it also accepts formate and bicarbonate as substrates.

recombination deficiency in prostate cancer<sup>1)</sup>.

1)

Luo C, Liu Z, Gan Y, Gao X, Zu X, Zhang Y, Ye W, Cai Y. SLC26A4 correlates with homologous recombination deficiency and patient prognosis in prostate cancer. J Transl Med. 2022 Jul 14;20(1):313. doi: 10.1186/s12967-022-03513-5. PMID: 35836192. 2)

Zhang J, Li Y. SLC26A4 gene polymorphism and late-onset Alzheimer's disease in a Han Chinese population from Qingdao, China. Neural Regen Res. 2013 Mar 15;8(8):754-9. doi: 10.3969/j.issn.1673-5374.2013.08.010. PMID: 25206722; PMCID: PMC4146073.

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