

Supplementary Table 3: Comparing *TNF- α -850* mutant rate and OR value between case-control groups with HLA-B27 positive.

	<i>TNF-α-850</i> C/T(%)	
	<i>TX (TT+CT)</i>	<i>CC</i>
HLA-B27 positive case	34 (47.9)	37 (52.1)
HLA-B27 positive control	4 (66.7)	2 (33.3)
χ^2		0.78
<i>P</i>		0.38
OR		0.46
95% CI		0.08-7.12

Mini-discussion

We recounted these cases with *TNF- α -850* mutant and wild type in HLA-B27 negative and HLA-B27 positive groups separately, and analyzed by chi-square and Odds Ratio detection, see the supplementary table 1, as follow; the cases with *TNF- α -850* mutant in HLA-B27 negative cases (62.5%), show a higher *TNF- α -850* mutant frequency compared with that in the B27 positive cases (47.9%). We could not give significant difference between them, but we indicated a trend of higher risk of AS cases with *TNF- α -850* mutant and HLA-B27 negative than these with *TNF- α -850* wild and HLA-B27 positive. Then, we counted also individuals with *TNF- α -850* mutant and wild type in HLA-B27 negative case-control groups separately and did the same analysis by case and control design, seeing the supplementary table 2. The rate (62.5%) of *TNF- α -850* mutant in HLA-B27 negative cases group was higher than that (31.7%) of control group. The rate difference between both groups was 30.8% about 2 fold higher and OR was 3.58 (95%CI: 0.82-32.68; χ^2 :3.190; $P=0.07$) in case group. But we could not see any difference between case and control with HLA-B27 positive groups, seeing the supplementary table 3. Considering the *TNF- α -850* mutant carrier results analyzed by stratification mentioned-above based on HLA-B27 in case-case and case-control groups separately, perhaps, it suggested that detecting the risk of AS be meaningful only for ones with *TNF- α -850* mutant and HLA-B27 negative carriers. It was also possible cause for the less sample size of AS cases with *TNF- α -850* mutant and HLA-B27 negative to be hard to achieve a significant level in statistics analysis.