CHAPTER V

CONCLUSIONS

1. In order to determine point mutation at the -511 on the IL-1β gene promoter, the appropriate conditions for PCR with RFLP were established as follows, denaturing temperature at 94 ^{o}C for 1 minute, the annealing temperature at 64 ^{o}C for 1 minute, the extention temperature at 74 ^{o}C for 1 minute, the dNTP concentration 200 µmol, $MgCl_2$ concentration 2.5 mM and each primer concentration 150 pmol.

2. Three polymorphisms in the –511 promoter of IL-1 β gene were detected from 130 volunteer DNA samples: genotype C/C 33 cases (25.4%), genotype C/T 67 cases (51.5%), and genotype T/T 30 cases (23.1%).The T/T genotype did not appear to increase further the risk of gastric cancer in the northern Thai population (OR<1).

3. The cut-offs for pepsinogen I and pepsinogen I/II ratio were ≤ 50 ng/ml, and ≤ 2.4 respectively. The level of plasma pepsinogen I significantly decreased in gastric cancer group ($p<0.05$) when compared with the benign gastritis group, while pepsinogen I /II ratio partially decreased but not significantly different.

4. Based on the pepsinogen I/II ratio, the proinflammatory IL-1 β -511 T/T and C/T genotypes are associated with a high risk for gastric cancer group, when compared with the C/C genotype ($p=0.025$ and $p=0.012$, respectively).

The usefulness of the IL-1β mutation and pepsinogen levels are suitable for screening in the population to prevention the propagation of gastric cancer.