CHAPTER VII

SUMMARY

In this study, the oligonucleotide ligation assay (OLA) was developed, optimized and evaluated for the detection of HIV-1 M184V mutation in clinical setting as an alternative to genotyping method using standard nucleotide sequencing. From the results of this study, the lower limit of detection was 3-5% or as low as 1% of some variant in the PCR products could be detected by OLA ($p<0.005$), the overall sensitivity was 93.5% and the specificity was 100%. The highly adaptability of the assay such as the addition of probes can be incorporated in order to increase the sensitivity or expand the capability to cover other mutations, i.e. newly discover mutations or other mutations of interest. The economical nature of this assay, the ease of use and high specificity comparing to the standard sequence analysis make it a practical alternative method to be adopted in resource-poor settings.