# CHAPTER 5

# CONCLUSION

This study identified some interesting proteins that showed differences between sdLDL and bdLDL. We demonstrated the presence of apo A-I, a newly discovered protein phosphatase 2A (PP2A) and phospholipase A1 (PLA1) in sdLDL. On the other hand, we found the presence of apo D and lysozyme in bdLDL. PLA1 is normally located at the plasma membrane and functions as enzymatic hydrolysis of triglycerides in LDL. In this study, this identified PLA1 in the surface of sdLDL may be active and continuously hydrolyze triglycerides in LDL to generate sdLDL. While competitive binding between lysozyme and AGE allow LDL to be recognized by LDL receptor. Further western blot analysis is required to confirm the presence of PLA1 and lysozyme. This protein profile may be applied to the development of novel technique for characterizing the LDL phenotypes.