

CHAPTER V

CONCLUSIONS

γ -Radiation and chemical reaction were combined together to obtain the reactive chitosan precursors. γ -Radiation induced the changes in primary structure of chitosan whereas the chemical reaction provided the functional groups on chitosan chain. γ -Radiation was found to induce the chain degradation as a priority as compared to chain crosslinking. N-Phthaloyl oligochitosan-CDI was achieved from the homogeneous reaction. Carboxyl N-phthaloyl oligochitosan was obtained by chromium trioxide oxidant, The obtained compound was soluble in water. Both N-Phthaloyl oligochitosan and carboxyl N-phthaloyl oligochitosan were a reactive precursor that can be leaded to the drug conjugation for prodrug preparation.