

Thesis Title	The Study of p53 Gene Mutation in Thai Ovarian Cancer Patients.
Name	Chongdee Dangrat
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Thesis Supervisor Committee	Neelobol Neungton, M.D. Patcharee Wichyanuwat, M.D., Ph.D. Somchaya Neungton, M.D.
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Abstract

The p53 tumor suppressor gene mutations reported in literature are found in approximately 50% of advanced stage ovarian cancers. Almost all of the p53 gene mutations are point mutations that are clustered throughout the exons 5-8 of the gene, corresponding to amino acid codon 126-306 of p53 protein. In this study, we studied the coding exons 5-8 of the p53 gene mutations in 33 samples obtained from ten Thai patients with ovarian cancers. The DNA from fresh cancer tissues, paraffin embedded tissues, blood leukocyte of each patient were extracted using appropriate methods. The exons 5-8 of p53 gene were amplified by the polymerase chain reaction (PCR) followed by direct sequencing analysis to detect the mutation in each coding exon, including their splice sites. One out of 10 Thai ovarian cancer patients was found to have the p53 gene mutation at the nucleotide 13053 of exon 5, corresponding to amino acid codon 127. The mutation was a C to T (transition type), resulting in amino acid change from serine to phenylalanine. The mutation of this patient was found in fresh and paraffin embedded cancer tissues but none in leukocyte DNA.