

Thesis Title	A multivariate analysis of prognostic factors in chronic myeloid leukemia in Thai patients
Name	Tanawan Kummalue
Degree	Master of Science (Clinical Science)
Thesis Supervisory Committee	Anong Piankijagum, M.D., Ph.D. Amorn Leelarassamee, M.D., M.Sc.
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ABSTRACT

Chronic myeloid leukemia (CML) is one of the clonal myelo-proliferative diseases. Clinical course displays significant biphasic course, with the first phase called the chronic phase followed by the terminal phase, the so-called blastic phase represented by high percentage of blasts in the peripheral blood and bone marrow. Once a patient develop into blastic phase, no treatment can delay this fatal outcome except bone marrow transplantation. This study aimed to determine the prognostic factors associated with poor survival, so that the good and poor risk patients may be predicted.

Medical records of 147 patients diagnosed as CML at Siriraj Hospital between 1969-1987 were retrospectively analysed. Variables collected were clinical features such as age, sex, duration of symptoms, chief complaints, weight loss, fever, liver and spleen sizes and hematological data especially hemoglobin, white cell and differential counts, platelet count. Biochemical data such as liver enzyme, leukocyte alkaline phosphatase, iron study were

excluded from the study because these biochemical data was incomplete collected. Then univariate and multivariate analyses were done. Actuarial survival curves were plotted using the method of Kaplan and Meier.

The results from multivariate analysis show that the 5 variables were associated with poor prognosis, they were spontaneous bleeding, massive splenomegaly ($>$ grade 3), WBC count $>200,000/\text{cumm}$, blast plus promycocyte $> 10\%$ and absolute basophil count $\geq 30,000/\text{cumm}$. The variables; absence of weight loss, nor fever and hemoglobin $> 8.5 \text{ g/dl}$ were associated with longer survival but had no statistical significance.