## 癌症病人血清細胞激素濃度與存活期相關性之探討 Relationship between Levels of Serum Cytokines and Survival in Cancer Patients

## 中文摘要

盡管醫藥科技不斷進步,仍有許多癌症病人面臨死亡,許多的預後因子如臨床症 狀、身體功能狀況、生活品質、癌症種類及部位的轉移等,均是用來預測癌症病 人的存活期。過量的細胞激素製造會造成免疫-發炎疾病和死亡,有些可能會促 進腫瘤生長而影響存活期(Caruso et al., 2004)。復發性乳癌病人血清中 IL-8/CXCL8升高其復發後的存活期顯著短於IL-8/CXCL8正常的人(Benoy et al., 2004)。白血病和淋巴瘤血清中 TNF-a 濃度升高已經被建議爲不利的預後因子 (Torben, Lotta, & Jonas, 2005)。因此本研究主要探討癌症病人血清細胞激素濃 度與存活期之相關性。研究設計採前瞻性研究設計,研究工具為 KPS 功能狀況 量表、台灣版安德森症狀量表及測量細胞激素,以立意取樣於台北地區兩家區域 醫院進行收案,追蹤其存活時間,共收案 226 名癌症病人,失聯 74 位,最後進 入分析共 152 人。以描述性統計、Kaplan-Merier survival analysis、Cox regression、 Mann-Whitney test 統計、皮爾森相關及迴歸分析進行資料分析。 研究結果顯示:疾病轉移與否、KPS、IL-8/CXL8、可以用來預測存活期。本研 究結果顯示除了臨床症狀、身體功能、癌症種類、癌症轉移等預測因子外,也藉 由血清細胞激素之濃度來預測癌症病人的存活期,於臨床上可幫助醫護人員作爲 照護依據,於家屬層面可提供家屬及病人利用剩下時間完成心願及準備。

## 英文摘要

Although medical science and technology is progressing constantly, a lot of cancer patients face the death. A lot of prognosis factor was used for predicting survival time in cancer patients, such as clinical symptoms, Karnofsky Performance Status, quality of the life, cancer type and, stage of disease etc. Excessive produce of cytokines can promote the tumor to grow and may influence survival time (Caruso, et al., 2004). The purpose of this study is to describe the relationship between levels of serum cytokines and survival in cancer patients. This study is a perspective design. This study tools is include demographic form, Karnofsky Performance Status, M. D. Anderson Symptom Inventory-Taiwan Form, ELISA. 152 subjects with cancer were recruited by convenience sampling at two regional of teaching hospitals in Taipei. Data were analyzed using descriptive statistics, Kaplan-Merier survival analysis, Cox regression, Mann-Whitney test statistics, Pearson correlation, and regression statistics. The results of study showed stage of disease, KPS, and IL-8/CXL8 could be used for predicting survival time. The result not only showed except clinical symptom, performance status, cancer type, stage of disease prognosis factor, but also serum

cytokines levels could predicted survival time in cancer patient. Results from this study can provide decision making of clinical value to patient, family, and health care provider in assisting with the relative and patient preparing for planning a quality end of life.