

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |        |               |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------|
| • 系統編號   | RG9513-3323                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |               |
| • 計畫中文名稱 | 中草藥防治癌症之重要機轉與特色-癌症逆轉                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |        |               |
| • 計畫英文名稱 | Cancer Reversion Model as a Character of Traditional Chinese Medicine for Cancer Prevention                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |               |
| • 主管機關   | 行政院衛生署                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | • 計畫編號 | CCMP94-RD-023 |
| • 執行機構   | 台北醫學大學生物醫學材料研究所                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |        |               |
| • 本期期間   | 9401 ~ 9412                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |               |
| • 報告頁數   | 29 頁                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | • 使用語言 | 中文            |
| • 研究人員   | 鄧文炳；孫琪；陳佳鈺；劉恆宇 Deng,Win-Ping；Sun,Chi；Chen,Chia-Yu；Lau,Han-Yu                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |        |               |
| • 中文關鍵字  | 子宮頸癌細胞；癌細胞逆轉                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |        |               |
| • 英文關鍵字  | YGK；HeLa cell；cancer reversion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |        |               |
| • 中文摘要   | <p>癌症是國人死亡率之第一位，目前由於抗癌策略絕大多數仍然是殺死癌細胞，因此在進行治療的同時，不可否認地多半仍對於人體有程度不一的傷害性。另一方面，研究者開始發現有些高齡老人，其體內其實早已到處充滿著癌細胞，但因為這些癌細胞處於所謂的「休眠狀態」中，並不對人體造成威脅。該等癌細胞甚至還有「長壽癌」之稱。這樣的現象啓示了一種抗癌的新穎可能性，就是設法找尋出一種可使人體內的癌細胞停止在此「休眠狀態」之藥物；若此藥物果能奏效，因為人體並沒有細胞被殺死，則很可能此種療法對於人體的各種副作用也可以降至最低。所謂癌症逆轉現象(Cancer Reversion)，意指腫瘤細胞回復「部分正常」，而成為不具威脅性地可與人體共存的人癌共生現象。特定的中草藥可能藉著啓動腫瘤細胞中的逆轉作用機制，讓癌細胞不表現腫瘤特性，甚至於恢復成相當程度之類似正常細胞。本實驗室已經利用複方中草藥 YGK 建立了癌症逆轉的平台技術，可以直接應用在新的標地藥物之癌症逆轉的篩選。具腫瘤誘發性的 HeLa 細胞的表面抗原，其具有自磷酸化(Autophosphorylation)活性，是一種細胞的腸鹼性磷酸酵素(Intestinal alkaline phosphatase, IAP)，因此本實驗室嘗試解析 IAP 表現與腫瘤誘發性之間的關係。此外在基因層面的探討，初步實驗結果發現，複方中草藥 YGK 有增強抑癌基因 p53 表現的趨勢；而對子宮頸癌主要的 E6/E7 致病因子則有抑制的功效。在動物實驗方面，注射複方中草藥 YGK 對於腫瘤細胞生長確實有抑制的效果。以流式細胞儀技術分析複方中草藥 YGK 對癌細胞的影響，可能並非走細胞毒殺的路徑，因此可以更加的推斷藥物對細胞的作用是進行癌症逆轉的模式。 關鍵詞：癌症逆轉、複方中草藥 YGK、子宮頸癌細胞、腸鹼性磷酸酵素(IAP)、致癌基因 E6/E7、抑癌基因 p53</p> |        |               |
| • 英文摘要   | <p>Cancer reversion model as a character of traditional Chinese medicine for cancer prevention The hostess of the plane: Win-Ping Deng Ph.D. Administer unit: Taipei Medical University ABSTRACT The cancer is the primary importance of compatriot's death rate, because the anticancer tactics overwhelming</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |        |               |

majority still kills the cancer cell at present, so while treating, the undeniable ground still has degree no injury of one to the human body mostly. On the other hand, the researcher begins to send to the old man at some advanced ages now, its has actually already been full of cancer cell everywhere, but in the so-called ' the dormancy state ' because of the cancer cell, do not threaten the human body. These cancer cells even have the claiming of ' macrobiotic cancers '. Such a phenomenon has enlightened a kind of novel possibility of resisting the cancer, but try to look for out one to make the cancer cell in the human body stop the medicine of ' the dormancy state ' here; If this medicine fruit can work , because the human body has no cell to kill, probably this kind of treatment can drop various kinds of side effects of the human body to the lowest. Phenomenon (Cancer Reversion) that the so-called cancer reverses, it mean tumor the cells the ' some normal ' without being replied, it but become not threatening nature can with person cancer intergrowth phenomenon where human body coexist. Function mechanism of reversion of the tumor cells that the specific Chinese herbal medicine may be made use of and started, let the cancer cell not display the tumor characteristic, even resume into a similar normal cell analogous to the degree. This laboratory has already utilized Chinese herbal medicine YGK of medicine made of two or more ingredients to set up the platform technology that the cancer reverses, can directly person who apply new mark to screening that cancer reverses of medicine. Have HeLa surface antigen of cell , tumor of person who bring out, it have phosphoric acid activation since, it is a intestines soda phosphoric acid ferment of a kind of cell (Intestinal alkaline phosphatase, IAP), so try to analyze IAP to behave with the relation between the tumor bringing out in this laboratory . In addition the discussion in the gene aspect, the preliminary experimental result finds , Chinese herbal medicine YGK of medicine made of two or more ingredients strengthens and restrains the trend that cancer gene p53 displays ; E6/E7 main to the cervix cancer causes the son of cause of disease to have efficiency suppressed . In animal's experiment, injecting Chinese herbal medicine YGK of medicine made of two or more ingredients will really have a result suppressed to grow to the tumor cell. In order to the flowing type Chinese herbal medicine YGK impact on cancer cell of medicine made of two or more ingredients of technological analysis of cell's appearance, may not leave in the route which the cell kills , so the function on the cell of inference medicine can be to carry on the way that the cancer reverses

Keywords: Cancer Reversion, YGK, HeLa cell, Intestinal alkaline phosphatase (IAP), E6/E7, p53