ライフサイエンスイノベーション推進機構
トランスレーショナルリサーチ推進センター

日 時：平成 22 年 4 月 8 日（木）17:00～18:30
会 場：松岡キャンパス研究棟 3 階会議室
演 者：**Yung-Chi Cheng.**先生

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演 題：**Exploration of PHY906, a TCM formula as adjuvant therapy for cancer patients undergoing chemotherapy.**

【要　旨】

For Chinese medicine to be accepted and to benefit healthcare worldwide, there are many hurdles, including scientific issues and perceptions of todays mainstream medicine needed to be addressed. This is a case study in an attempt to address many of those issues.

PHY906, a four herb Chinese Medicine formula first described 1800 years ago for the treatment of diarrhea, vomiting, nausea, intestinal cramps and fever was found to enhance the antitumor activity of chemotherapeutic drugs with a variety of mechanisms of action and decrease global toxicity of Irinotecan in tumor bearing mice. Deletion of anyone of the four herbs in the formula will not have the same effect. PHY906 could be manufactured consistantly under GMP judged by chemical and biological multiplex fingerprint (Phytomics) and analyzed by Phyto Similarity Index (PSI) Software. The first phase I/2a studies in combination with Irinotecan for the treatment of colon carcinoma showed no change of PK of Irinotecan and decreased diarrhea, vomiting and nausea side effects in patients. Not all the chemicals from PHY906 could be detected in plasma from patients. Animal studies indicated that PHY906 could decrease the inflamatory partly by inhibition of iNOS and COX-2 enzyme activity and increase the recovery of damaged intestine by potentiating the Wnt pathway in stem/progenitor cells in Irinotecan treated tumor bearing mice. In addition, PHY906 could enhance apoptosis of tumor and decrease the imflamatory cytokines in plasma of Irinotecan treated tumor bearing mice. The chemicals from PHY906 involved are not the same for the multiple sites of action. The second phase I/2a studies in combination with Captocitabine for the treatment of unresectable Child Pough A hepatocellular carcinoma (HCC) indicated that there is no PHY906 associated toxicity, no Grade 3 and Grade 4 toxicity associated with treatment. The median survivial time of 20 patients was 10.9 months. This is equivalent to Sorafenib, the only approved HCC drug in US/Europe Phase 3 trial, but is much longer than Asian trials. The third phase of I/2a trial is to examine whether PHY906 could increase the maxium tolerated dosage of Captocitabine in Advanced Pancratic Carcinoma patient. The results indicated it is possible to escalate Captocitabine 150% without more toxicity. Phase II study is also encouraging. In conclusion PHY906 has the potential to enhance antitumor activity and decrease G.I. related toxicity of a variety of chemotherapeutic agents in patients with cancer.

In summary, many of these scientific issues of Chinese medicine can be addressed. The opinion of mainstream medicine with a reductionist approach will change in time in view of new directions using genetics, system biology and individualized treatment approaches. Chinese medicine has many of those features and may serve as the cornerstone of developing future medicine.

教職員、大学院生の皆様のご来聴をお願いいたします。

〔福井大学トランスレーショナルリサーチ推進センター〕