

藥學科技 (二) Scifinder & Thomson Innovation 操作報告

Part I Scifinder

Topic：葡萄糖胺對於骨關節之影響

參考資料：

Hindawi Publishing Corporation

International Journal of Rheumatology

Volume 2011, Article ID 969012, 17 pages

doi:10.1155/2011/969012

摘要：

Based on the preclinical and clinical data, it is obvious that chondroprotectives such as glucosamine, chondroitin sulfate, and other nutrients, such as antioxidants and PUFAs, can modulate osteoarthritis. In long-term use they exhibit, in contrast to NSAIDs, an excellent safety profile, with as few adverse events as placebo.

The chondroprotectives are essential components of the cartilage metabolism and stimulate important cartilage regeneration processes, thereby adjusting the imbalance of catabolic and anabolic processes in osteoarthritis.

Newer data point out that inflammation and oxidative stress are characteristics of all stages of the disease. Chondroprotectives are able to inhibit many of these processes. They defend chondrocytes against oxidative stress-induced apoptosis, reduce the inflammatory mediator-induced joint cartilage degeneration, and reactivate the inflammation reduced anabolic processes of extracellular matrix components. This leads to reduced inflammation, swelling, and pain, and to an increased mobility of the affected joints. Especially when used in combination with other nutrients, such as antioxidants and omega-3 fatty acids, these substances are able to exert synergistic effects on the osteoarthritic joints.

Recently new study results were published that demonstrate promising effects of further food substances or phytochemicals, such as contained in ginger extracts, showing various antiosteoarthritic actions and, for example, even intra-articular resveratrol showing chondroprotective effects in a rat animal model.

In summary, future “nutraceutical” approaches to OA most likely will have to be more complex and should include glucosamine sulfate (and/or chondroitin sulfate) together with hyaluronic acid, collagen hydrolysate, and several other nutrients which were shown to have promising actions on joint cartilage, synovial fluid, and overall clinical outcome in OA patients.

Part II Thomson Innovation

Topic：抗癌試劑

參考資料：

Patent Number：US 8030506 B2

Date of Patent：Oct.，4，2011

摘要：

Abstract — Disclosed are a novel cyclotriphosphazene-platinum(II) complex conjugate anticancer agent, showing high selectivity to tumor tissues due to the enhanced permeability and retention effect in tumor tissues and a preparation method thereof.

心得：

Scifinder 包羅萬象的各式科學相關內容，加上強大的搜尋能力，即使僅有片段的資訊也能夠輕易的查詢，對於知識的取得相當方便，亦能隨時掌握所關注主題的相關研究進度；Thomson Innovation 系統則蒐羅了各國各方面的專利資料，使查詢者一方面可由他人的專利中探究改良或創新的方向，另一方面亦可印證本身想法的獨特性與否。若能熟稔此兩系統之操作，對於知識的累積從而激發思考的革新，想必可有莫大之助益。唯一美中不足之處或許為學習的時間太倉促，可使用的系統資源亦多有限制，但能於大學現階段便接觸到這樣的課程與資訊，學生覺得已是相當的難能可貴，相信對往後之發展，無論各領域皆會有所裨益吧！