• 系統編號	RN9907-1116		
• 計畫中文名稱	迷你豬血管化膝關節異體移植---使用非骨髓破壞方式建立複合性組織異體移植的耐受性及異體膝關節之功能性評估		
• 計畫英文名稱	Vascularized Knee Joint Allotransplantation in Miniature Swine---Induce Tolerance to Composite Tissue Allografts by Non-myeloablative Approach and Assess Functional Results of Knee Joint Allografts		
• 主管機關	行政院國家科學委員會	• 計畫編號	NSC96-2314-B182A-057
• 執行機構	財團法人長庚紀念醫院整形外科		
• 本期期間	9608 ~ 9707		
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• 研究人員	林志鴻; 林承弘 Lin, Chih-Hung; Lin, Cheng-Hung		
• 中文關鍵字	複合性組織異體移植; 血管化關節異體移植; 免疫耐受性; 迷你豬		
• 英文關鍵字	Immune tolerance; Composite tissue allotransplantation; Vascularized joint allotransplantation; Miniature swine		
• 中文摘要	本實驗以迷你豬血管化膝關節異體移植當作臨床前研究的大型動物模型，來探討血管化骨頭皮瓣移植所面臨的問題。此模型的好處，在於迷你豬具有與人類相近的解剖及生理構造，可用於探討血管化骨頭皮瓣移植後功能性的評估。另外本實驗也探討結合 Mycophenolate Mofetil 及 Cyclosporine A 抗排斥藥物使用，以減少抗排斥藥物劑量及其副作用。然而經本實驗證明，迷你豬血管化膝關節異體移植在未經前置處理(conditioning)的情況下，只能延長其排斥現象出現的時程，約在移植一個月後，實驗組全部出現排斥現象導致皮瓣壞死，無法從事進一步功能性評估。		
• 英文摘要	In this experiment, we presented a miniature swine model of techniques applied for composite tissue allotransplantation with vascularized knee joints as a preclinical large animal model. The reproductive characteristics of swine as well as their anatomical and physiological similarities to man make them an even more attractive species for the purpose. In addition, we also explored if the combination of mycophenolate mofetil (MMF) and cyclosporine A (CsA) would reduce the dosage of immunosuppressive drugs and their side effects, which has already be proved successfully in our previous rat model. Nevertheless, in all pigs receiving treatment, the flaps were completely rejected around 30 days after transplantation. No further functional assessments were performed.		