

13. Anti-inflammatory peptide loaded micro emulsion gel formulation as potential therapeutic for post-operative adhesion

This research project uses two proprietary components (a drug and a drug delivery system) to jointly develop the new micro-emulsion gel loaded with anti-inflammatory peptide. The gel will prevent the formation of fibrous bands, called adhesions, that tend to form between tissues and organs during and after surgical operations, causing complications. The combined formulation ensures a novel drug release action at the site of operation and hence useful as a novel anti-adhesion agent. The effectiveness of this new formulation will be assessed in this project through a relevant animal model. The results of the project will provide important data for subsequent clinical trials of the product, and is an important step in the commercialization process.



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Prof Gopalakrishnakone is a professor at the Department of Anatomy, NUS Yong Loo Lin School of Medicine, holding an M.B.,B.S degree and a PhD and D.Sc from the University of London and NUS, respectively. Over the years, he has garnered a number of teaching and research awards - Outstanding University Researcher Award in 1998 and National Science and Technology Board Ministerial Citation winner in 2000. He also received the Faculty Outstanding Researcher Award in 2003 as well as the Teaching Excellence Award in academic year 2003/2004. His first patent “novel therapeutic and prophylactic agents” was awarded in 2003. A number of other patents have recently been applied for and some have been granted lately. An analgesic peptide was licensed to a company for further development for clinical use. He founded the Asia-Pacific arm of the IST in 1985, and organized the first Asia-Pacific Congress on Toxin as well as the World Congress of IST in Singapore. He is presently serving as the President of the prestigious International Society on Toxinology (IST) for a three-year term, and is also a member of the editorial board of *Toxicon*, the official journal of IST published by Elsevier, the world’s largest publisher of medical and scientific literature. He has more than 100 international publications on his venom and toxin research and drug discovery.