

July 25, 2022 FunPep Co., Ltd.

# Notice of Completion of Subject Enrollment in Phase III Clinical Trial of Functional Peptide SR-0379

FunPep Co., Ltd. ("FunPep") is conducting a Phase III clinical study (the "Study") of its functional peptide SR-0379 in Japan for patients with skin ulcers and is pleased to announce that it has treated the target number of subjects treated with the investigational drug and that subject enrollment has been completed.

The results of this study will be evaluated after all subjects have completed the treatment and observation periods, and preliminary results are expected to be disclosed in the fourth quarter of this year (October to December).

This study is designed to evaluate the efficacy and safety of SR-0379 administered once daily for 28 days in patients (target number of patients: 120) with skin ulcers (pressure ulcers, diabetic ulcers, and leg ulcers) requiring simple surgical measures (suturing, skin grafting, pedicled flap) in a double-blind, placebo-controlled study.

Skin ulcers that require simple surgical measures such as skin grafting have deep skin defects, so it is important to promote the formation of benign granulation, which is a regenerative tissue of the skin, while controlling for infection to improve the condition of the wound base and quickly return the wound condition to a state where skin grafts or other treatments can be applied.

Therefore, the primary endpoint of this study is "the number of days until simple surgical measures can be applied," and it hopes to confirm that the administration of SR-0379 shortens the time until the skin ulcer improves to a state where skin grafts and other measures can be applied.

SR-0379 is a novel functional peptide compound consisting of 20 amino acids. Its main action is to promote angiogenesis and granulation, and it also has antibacterial activity.

A skin ulcer is a condition in which the barrier function of the skin is defective, and various bacteria adhere to the wound surface. Bacterial proliferation and infection can delay wound healing, and more serious conditions can be caused by sepsis; therefore, it is important to control bacteria and infection. SR-0379 has been shown to have antibacterial activity unlike existing drugs that also have wound-healing-promoting activity. In addition, SR-0379 has a simple administration method (spray formulation that can be stored at room temperature) that is easy to use in home medical care, which is expected to become more common in the future and is therefore expected to contribute to the treatment of a wide range of patients.

Through the development of SR-0379, FunPep aims to contribute to the improvement of patients' quality of life (QOL) by promoting the early recovery of pressure ulcers and other skin ulcers, which are becoming increasingly prominent in an aging society.

#### < Reference Information >

## ◆ R&D Pipeline

<Products in Development>

Product	Indication	Region	Clinical trial sites	Discov ery	Preclini cal	Clinical Trials			Alliance
						P1	P2	P3	
SR-0379	Skin Ulcers	Global	Japan		Phase	III Ongoin	g		Shionogi (Global license)
FPP003	Psoriasis	Clabal	Australia	Phase I/IIa Ongoing			Sumitomo Pharma		
(Target:IL-17A)	Ankylosing spondylitis	Giobai	Japan	Phase I	Ongoing	* * Inve	stigator ini	iated trial	(Option for N.America)
FPP004 (Target:IgE)	Pollinosis (Seasonal allergy rhinitis)	Global	_	Preclini	cal				TBD
FPP005 (Target:IL-23)	Psoriasis	Global	-	Preclini	cal				TBD
FPP006	COVID-19	Global	_	Preclini	cal				TBD

#### < Research Themes >

Туре	Indication	Academia	Partners		
	Neuropsychiatric disease		Sumitomo Pharma		
	Pain	Osaka University	(Research agreement on Neuronsychiatric disease)		
	High blood pressure	(Research collaboration on antibody-inducing pentide)			
Antibody inducing peptide	Allergy-related diseases	Kumamoto University	Shionogi (Research collaboration on pain)		
	Thrombosis	(Research collaboration on dyslipidemia)	Madinal Haldinga		
	Dyslipidemia		(R&D support agreement)		
	Others				

## Skin Ulcer

Skin ulcers include pressure ulcers (so-called "bedsores"), which often occur in bedridden elderly people; diabetic ulcers, which are a complication of diabetes and are highly prevalent in the elderly; and leg ulcers, which are primarily caused by venous stasis. The treatment of skin ulcers is becoming more and more important in an aging society.

## **Granulation**

Granulation is a red, soft, granular connective tissue that forms during the healing process of skin ulcers.

Antibacterial Mechanism of Action of SR-0379

The skin and immune cells contain a group of peptides called "antimicrobial peptides," which consist of about 20 to 40 amino acids and play a role in the immune defense. Antimicrobial peptides are structurally characterized by the uneven distribution of positively charged hydrophilic and hydrophobic amino acids, which disrupts the cell membranes of bacteria and fungi to produce antimicrobial effects. Since SR-0379 has similar structural characteristics to naturally occurring antimicrobial peptides, it exhibits similar antimicrobial activity. This disrupts the cell membrane of bacteria, etc., making it difficult for resistant forms to develop.

## <Antibacterial Mechanism of Action of Antibacterial Peptides>



Antimicrobial peptide Helical structure (amphipathic) Positive charge







"Positively charged" antimicrobial peptides bind to "negatively charged" bacterial membranes and penetrate the membrane



Disruption of bacterial cell membrane