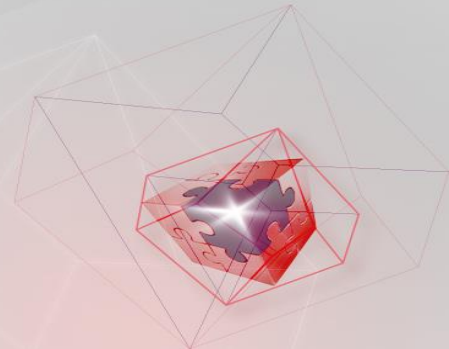
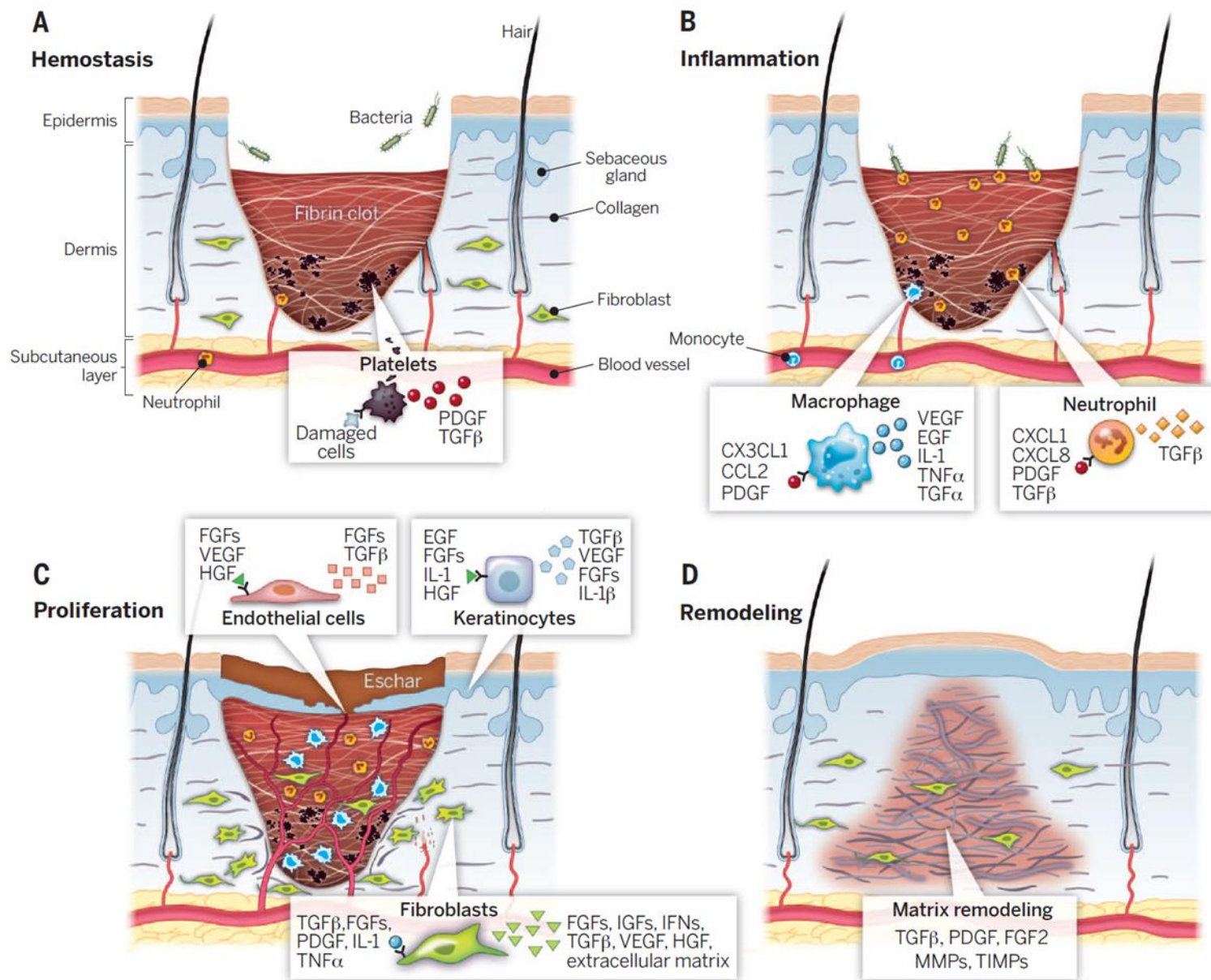


新型巨噬細胞調節藥物對複雜性糖尿病足潰瘍的影響：病例報告

Effect of a Novel Macrophage-Regulating
Drug on complicated Diabetic Foot Ulcers :
Case reports

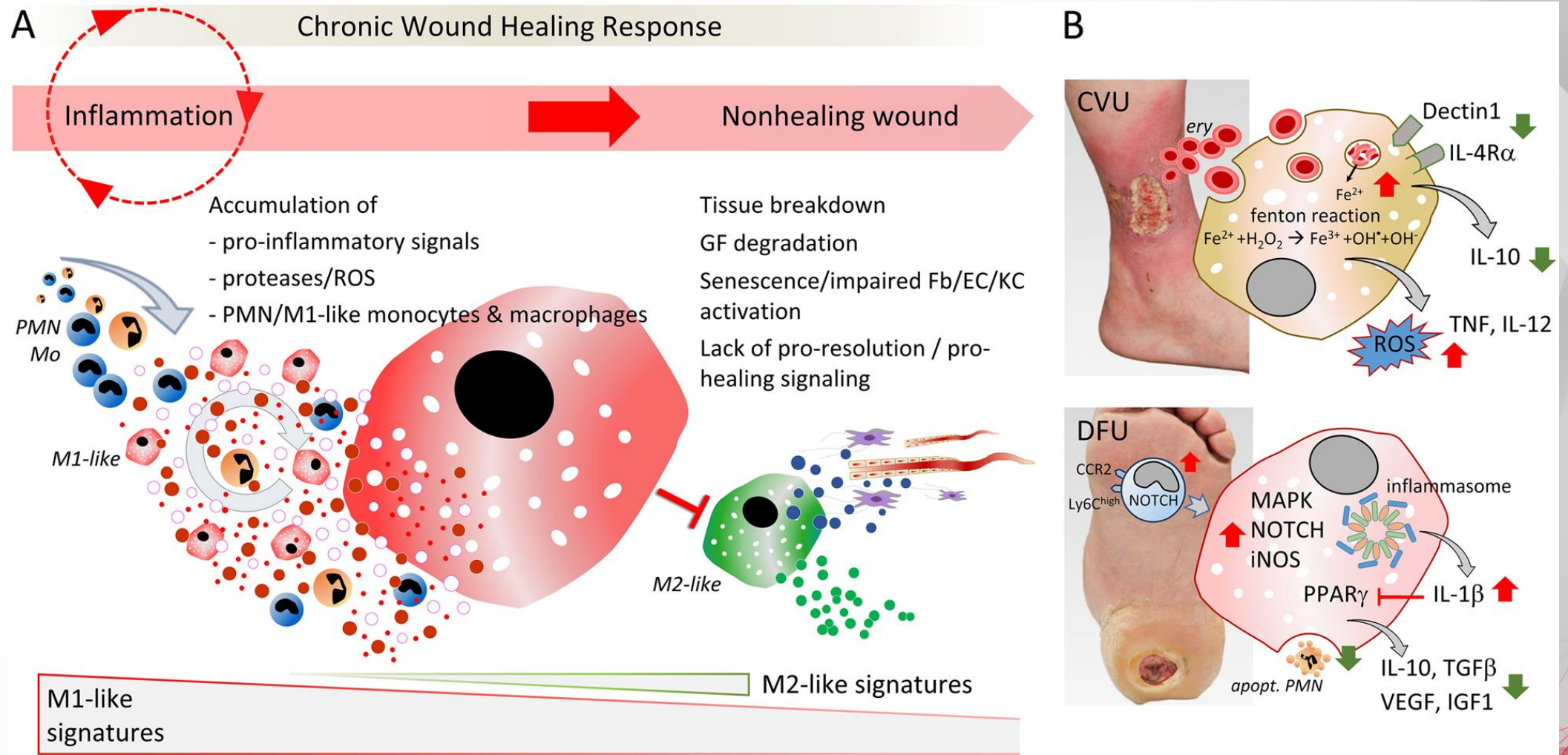
演講者：喬浩禹醫師
三軍總醫院 外科部 整形外科



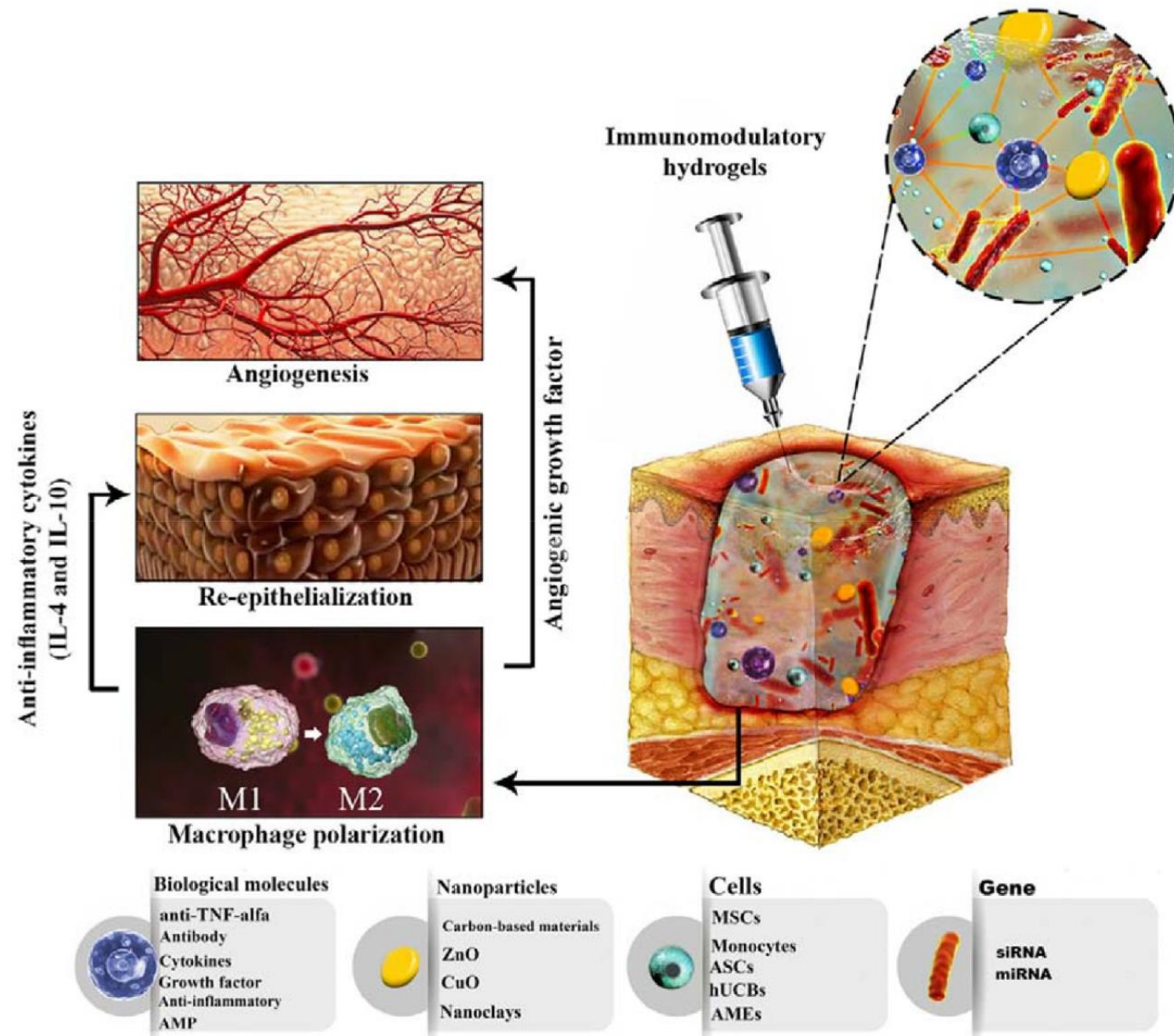


Advances in skin grafting and treatment of cutaneous wounds.
 Science. 2014 Nov 21;346(6212):941-5.

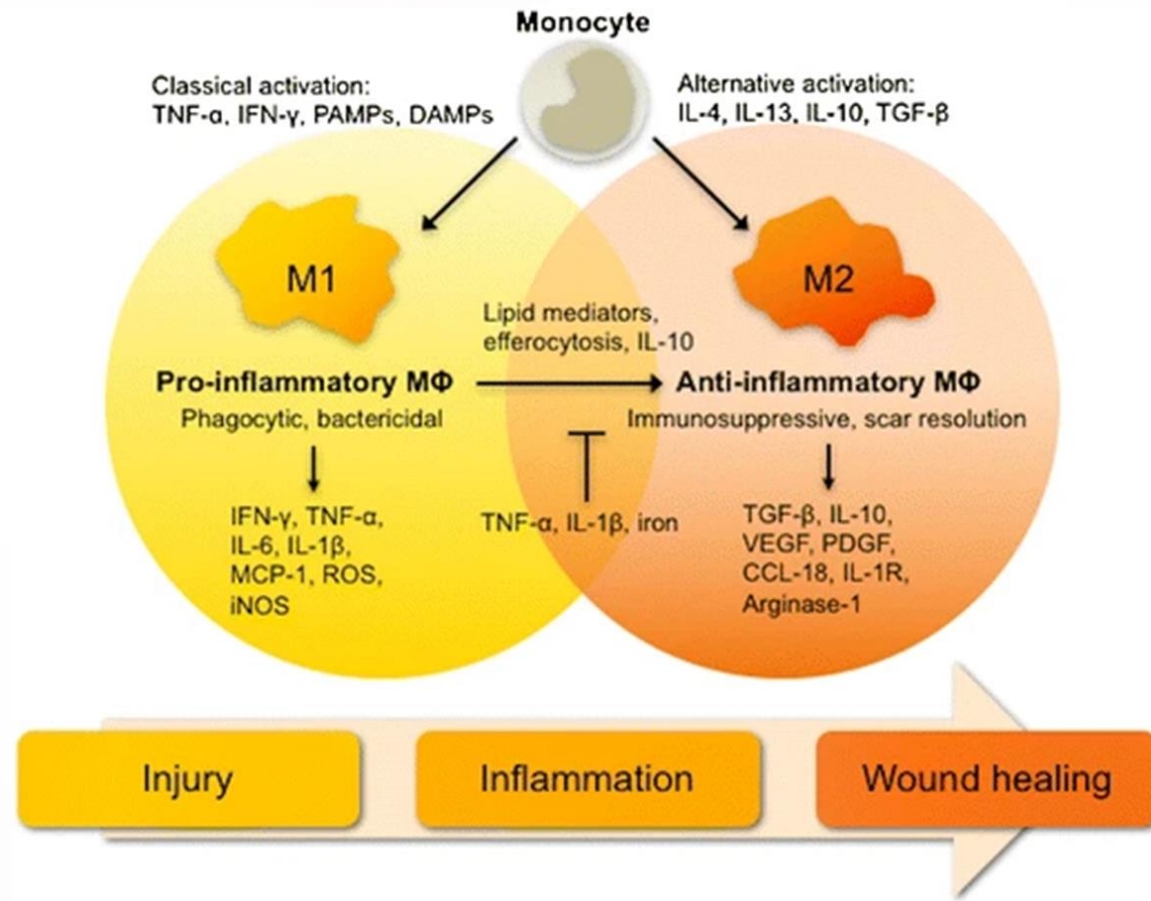
Macrophage in Chronic wound



Marta Torregrossa, Ainur Kakpenova, Jan C Simon, Sandra Franz. Modulation of macrophage functions by ECM-inspired wound dressings - a promising therapeutic approach for chronic wounds. Biol Che. 2021 Aug 16;402(11):1289-1307.



Evolution of macrophage function during repair

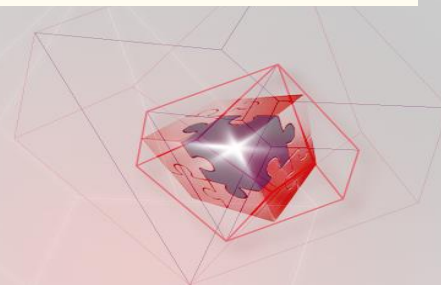


M2 subtype	Inducing stimuli	Signature markers	Functions
M2a ^a	IL-4, IL-13 and M-CSF	CD206, Arg1, Ym1, FIZZ1 IL-10, TGF- β	Anti-inflammatory and Wound healing Pro-healing
M2b	TLR ligands + IL-1R agonist	CD206, IL-1 β , IL-6, TNF- α , IL-12 ^{Low} IL-10	Immuno-regulation and promoting infections
M2c	IL-10, Glucocorticoids, TGF- β	CD206, CD163, MerTK IL-10, TGF- β	Efferocytosis and tissue remodeling Pro-remodeling
M2d	TLR + adenosine A2A R ligands, IL-6	VEGF, IL-10 TGF- β IL-12 ^{Low} , TNF- α ^{Low}	Angiogenesis, Tumor growth

J Transl Med. 2020 Feb 5;18(1):58.

Sci Adv. 2020 May 1;6(18):eaay6391.

Current Rheumatology Reports (2018) 20:17



速必一 乳膏 (衛部藥製字第060827號)

■ ON101乳膏

■ 產品描述

含1.25%到手香萃取物(PA-F4, 0.25%)與積雪草萃取物(S1, 1%)乳膏外觀為黃綠色至淡綠色，供局部使用

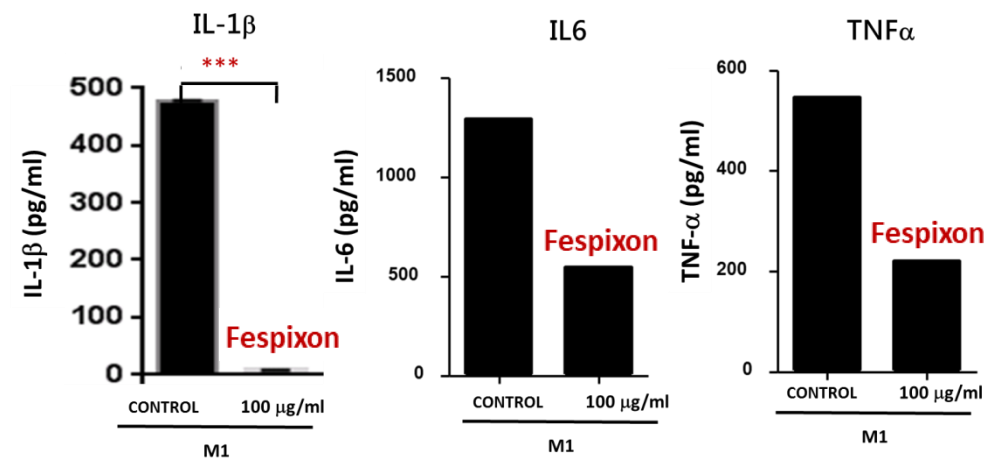
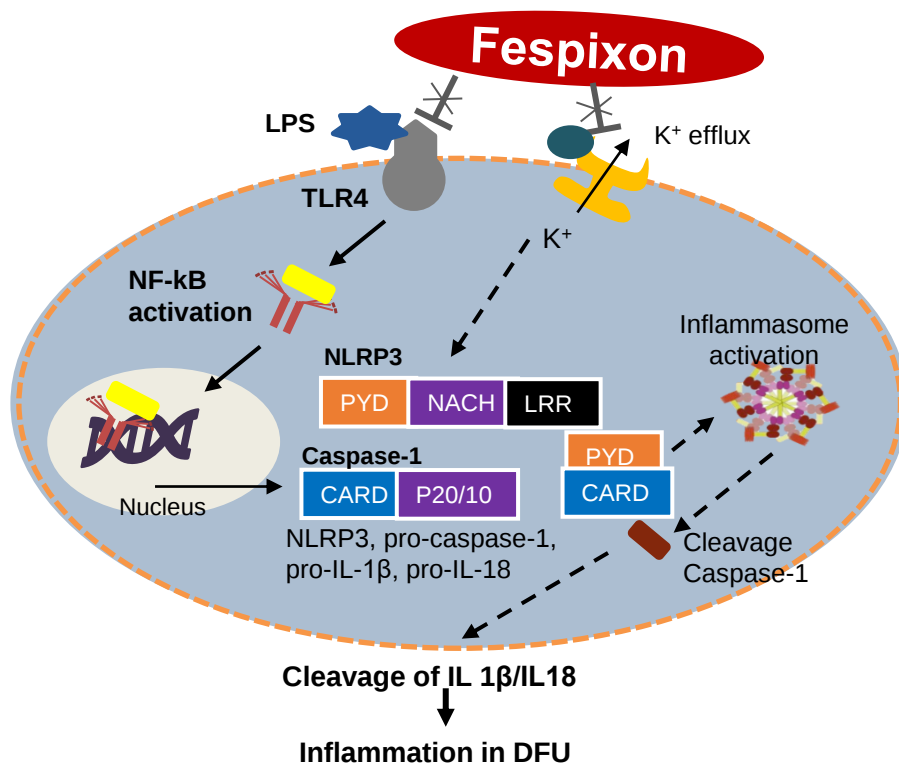
■ 適應症

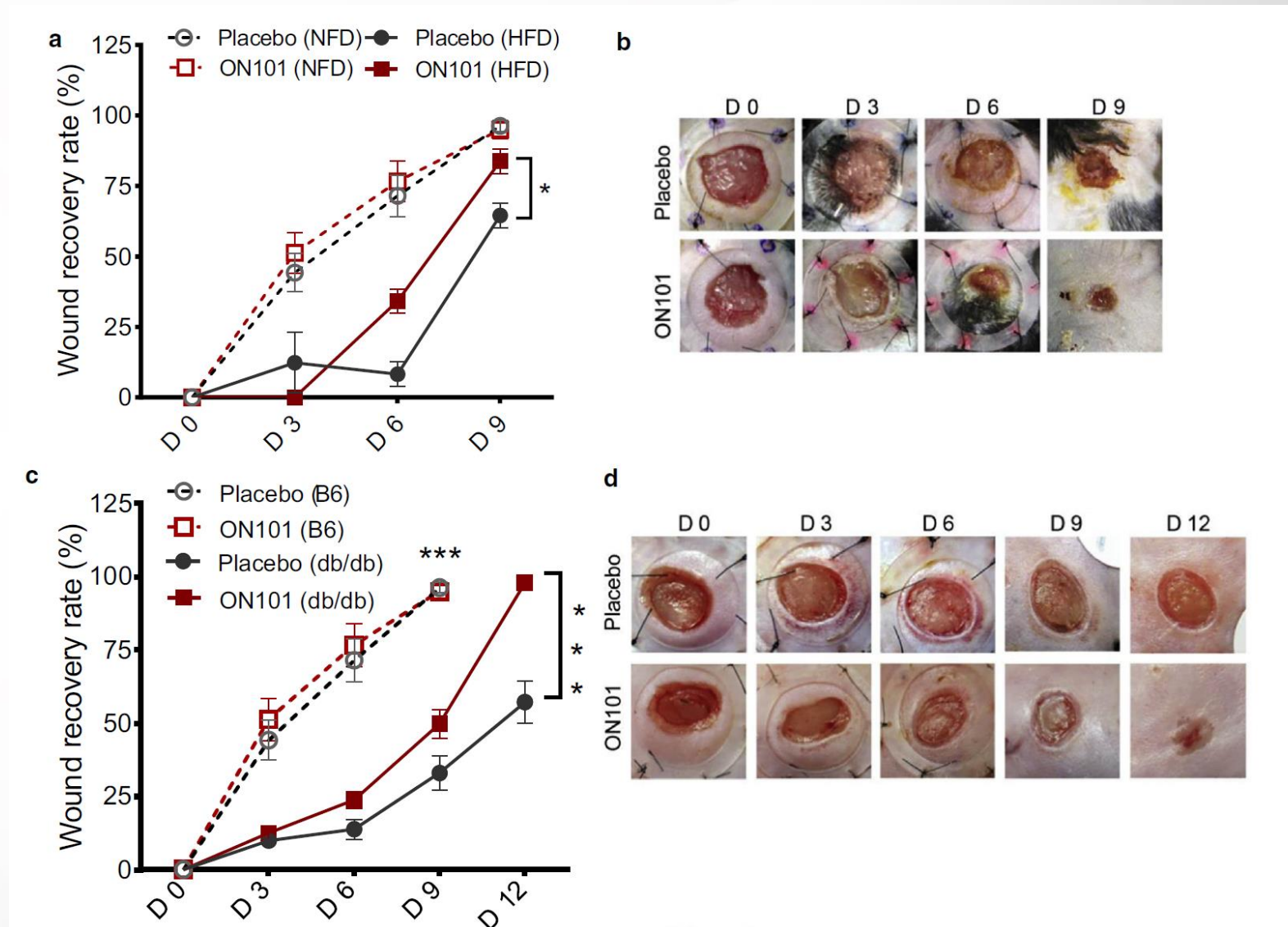
糖尿病足部傷口潰瘍

■ 用法用量

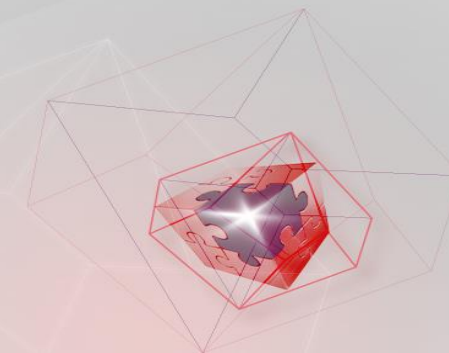
於患部每日塗抹一次，須完全覆蓋傷口





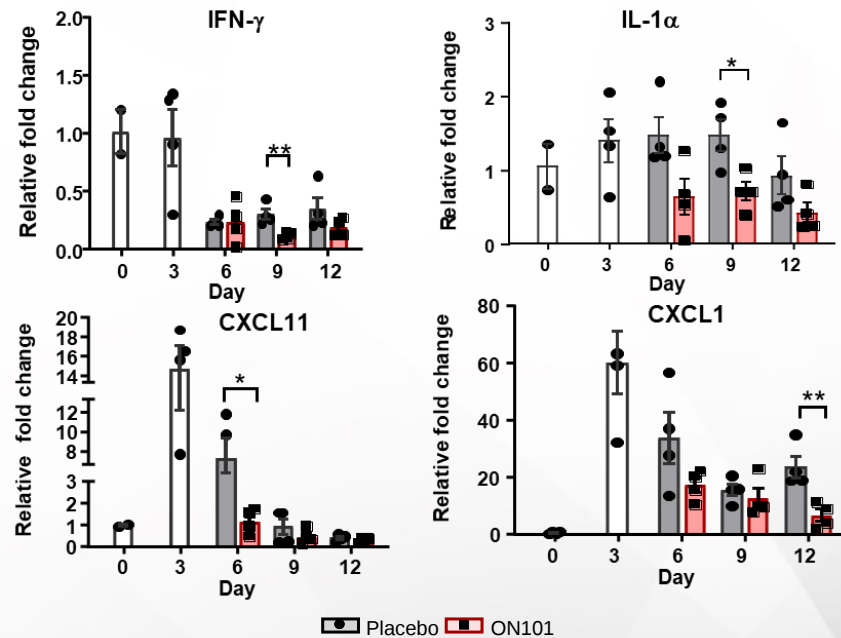


Restoring Prohealing/Remodeling-Associated M2a/c Macrophages Using ON101 Accelerates Diabetic Wound Healing. JID Innov. 2022 Jun 2;2(5):100138.

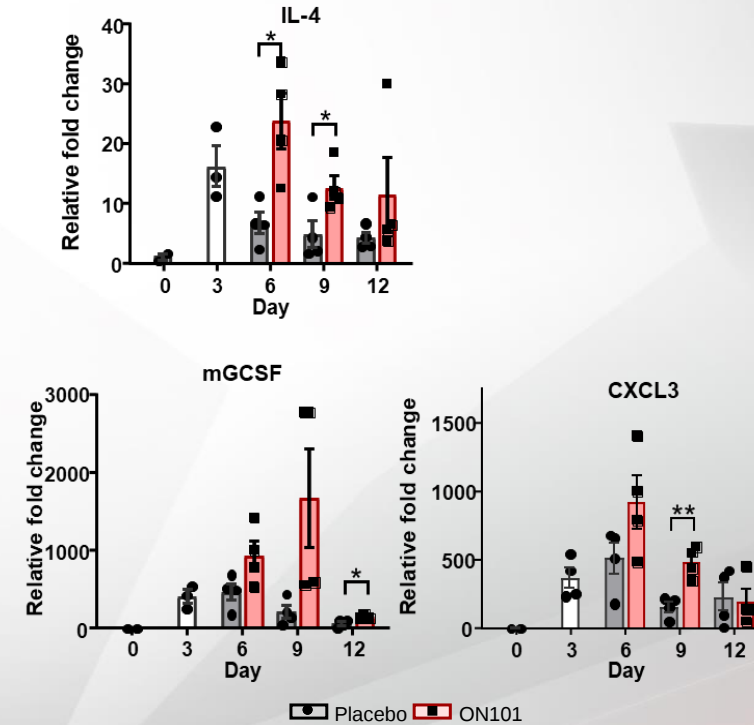


ON101 altered cytokine expression pattern in diabetic wounds

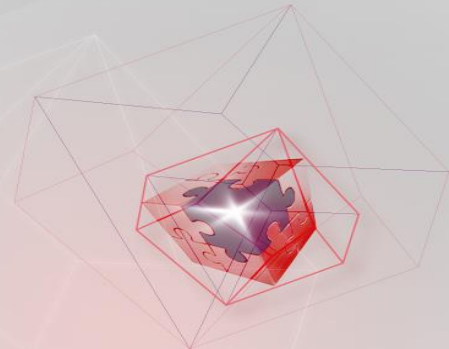
M1 associated cytokines

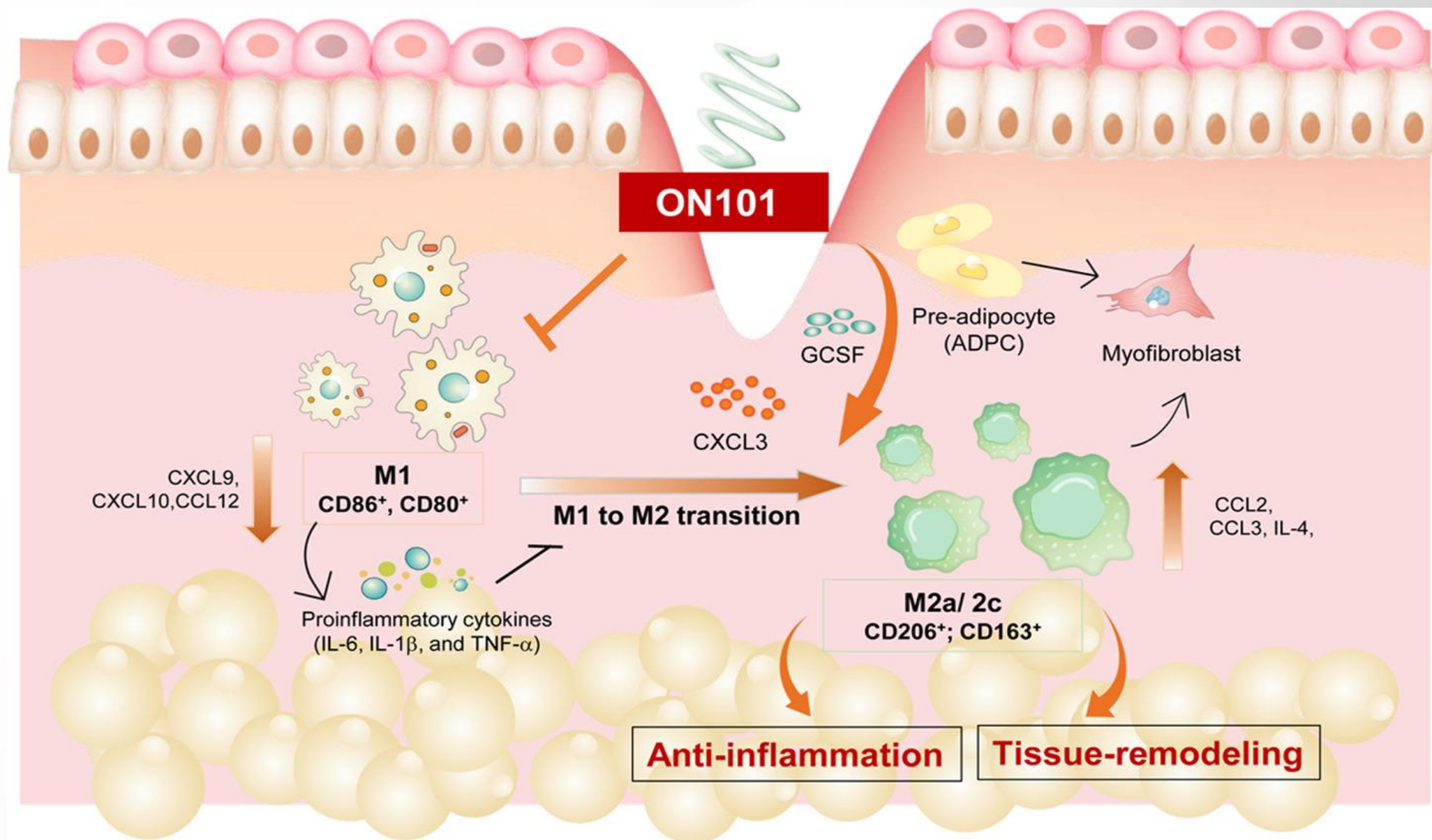


M2 associated cytokines



Restoring Prohealing/Remodeling-Associated M2a/c Macrophages Using ON101 Accelerates Diabetic Wound Healing. JID Innov. 2022 Jun 2;2(5):100138.



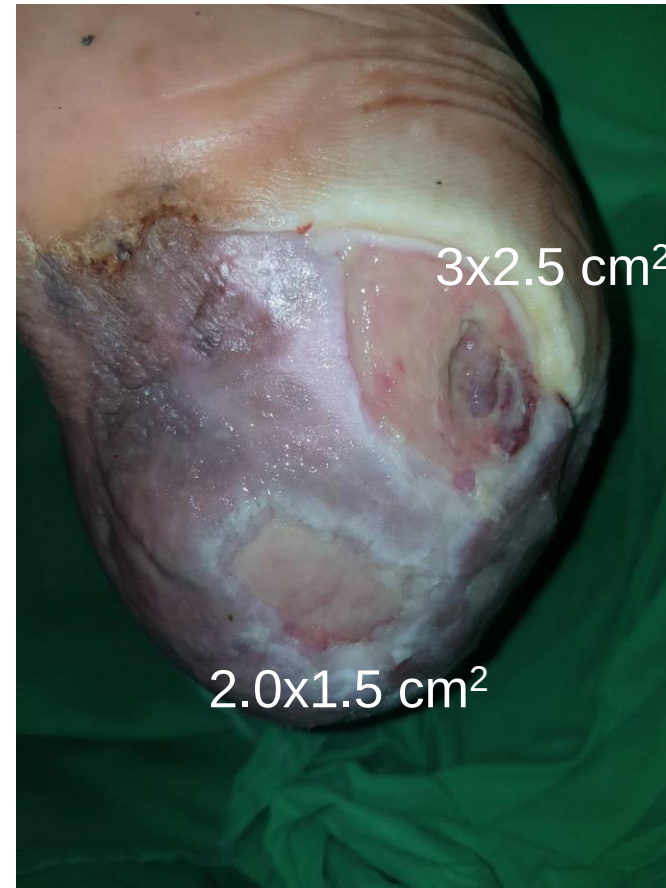




案例分享



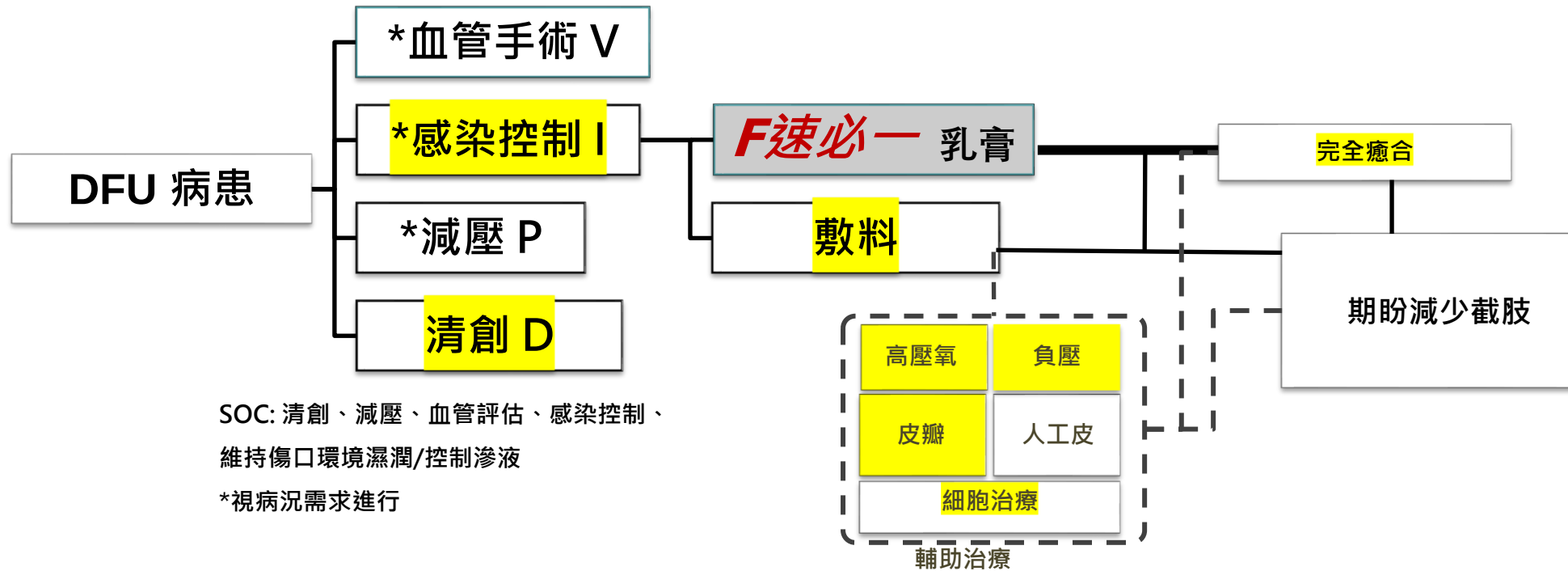
**70歲男性, 糖尿病足潰瘍 Wagner grade III
s/p free flap reconstruction, 接受過細胞治療,
the wound deep to the calcaneus bone.**





糖尿病足潰瘍治療

V.I.P.D.F. 糖足VIP



1. DAROC Clinical Practice Guidelines for Diabetes Care- 2018, Taiwan, Diabetes Association of the R.O.C., 2018
2. Prevalence and Medical Resource of Patients with Diabetic Foot Ulcer: A Nationwide Population-Based Retrospective Cohort Study for 2001–2015 in Taiwan

Wagner grade III s/p wound debridement, then received Fespixon treatment for 10 weeks (2022/10)



50歲男性, 糖尿病足潰瘍 Wagner grade IV End-stage renal disease. PAOD s/p PTA

2022/09/22



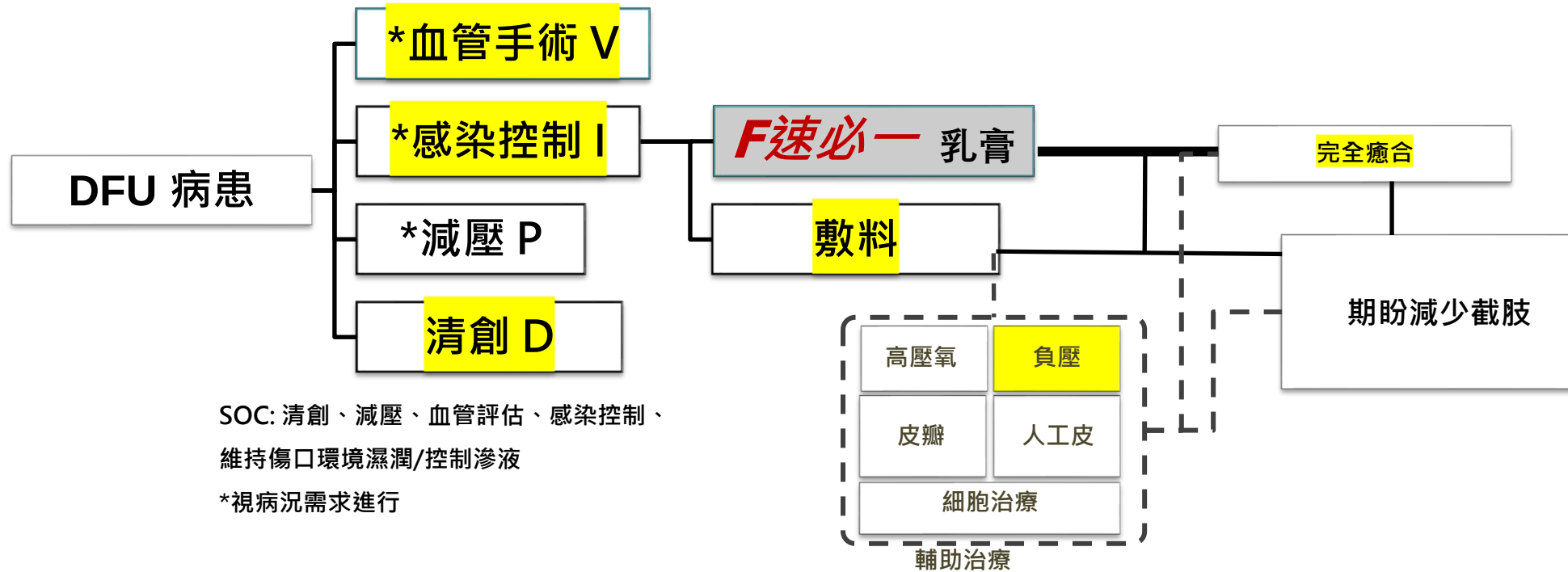
2022/10/16





糖尿病足潰瘍治療

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1. DAROC Clinical Practice Guidelines for Diabetes Care- 2018, Taiwan, Diabetes Association of the R.O.C., 2018
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50歲男性, 糖尿病足潰瘍 Wagner grade IV End-stage renal disease. PAOD s/p PTA

2023/01/18



2023/01/18



60歲男性, Necrotizing fasciitis. Type 2 DM.

2022/03



2022/04/02



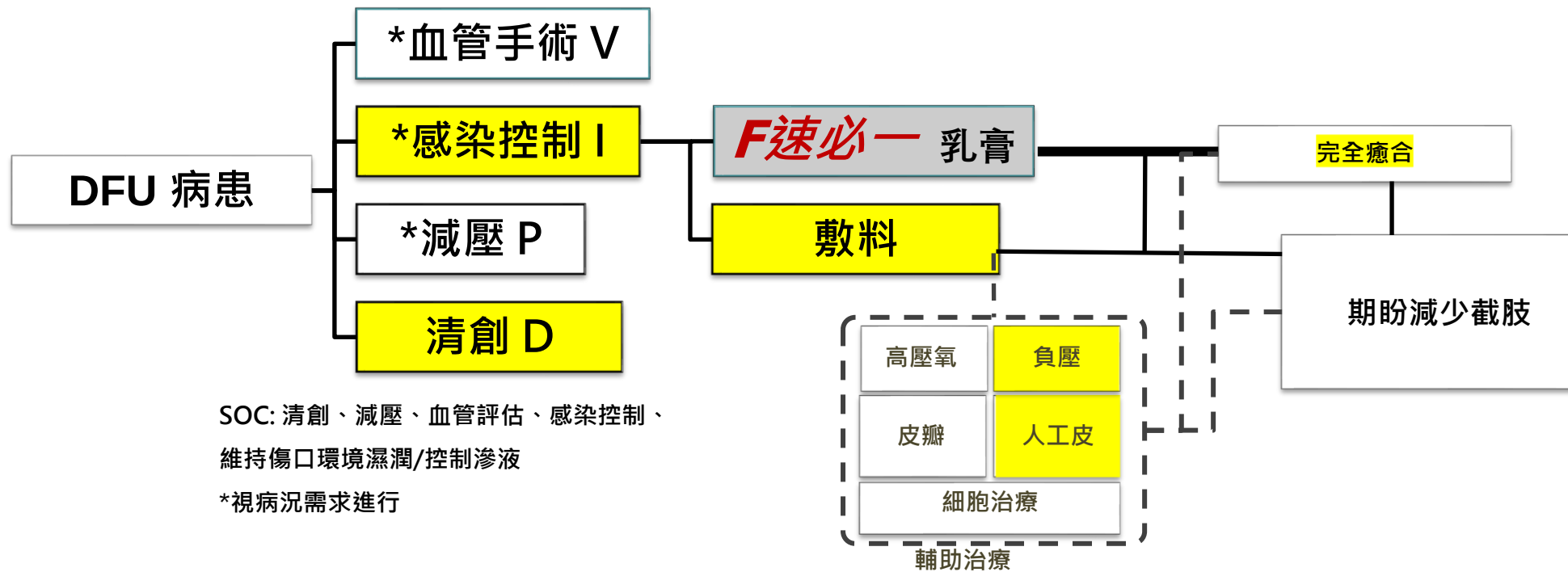
2022/04/16





糖尿病足潰瘍治療

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1. DAROC Clinical Practice Guidelines for Diabetes Care- 2018, Taiwan, Diabetes Association of the R.O.C., 2018
2. Prevalence and Medical Resource of Patients with Diabetic Foot Ulcer: A Nationwide Population-Based Retrospective Cohort Study for 2001–2015 in Taiwan

60歲男性, Necrotizing fasciitis. Type 2 DM.

2022/04/16



2022/05/25



2022/07/08



Conclusion

- 當傷口久不癒合, 需將慢性傷口轉為急性傷口
- 傷口的延遲癒合起因於巨噬細胞失衡, 因此重塑巨噬細胞之間的平衡在傷口癒合上具有關鍵作用
- 植物性新藥提供細胞激素調控的治療機轉
- 不只是糖尿病傷口, 可能有更多慢性傷口需要藉由調控M1/M2, 達成傷口癒合的目標

