

THE EFFECTS OF OTR4120
A HEPARAN SULFATE GLYCOSAMINOGLYCAN MIMETIC
ON IMPROVING ACUTE AND IMPAIRED WOUND HEALING IN RATS

Propositions

1. Wound treatment should be shifted from wound repair to wound regeneration. (this thesis)
2. Wound healing should be viewed as a dynamic and coordinated system rather than a process with 3 isolated individual healing phases. (this thesis)
3. Although the pathophysiology of chronic wounds is intrinsically different from acute wounds, they also have a self-healing capability (i.e. the natural wound healing mechanisms). (this thesis)
4. OTR4120 plays a key role in protecting and sequestering growth factors in wound tissue leading to an improved wound repair and regeneration. (this thesis)
5. Stimulation of the resolution of inflammation is an important mechanism of action of OTR4120 in both acute and impaired wound healing in rats. (this thesis)
6. The effect of OTR4120 treatment on improving collagen synthesis and maturation contributes to wound healing. (this thesis)
7. Matrix therapy with OTR4120 is characterised by improving the chemical signalling between the cells in wound tissue, which highlights its clinical application in wound treatment. (this thesis)
8. A true chronic wound experimental animal model does not exist. However, the ischemia-reperfusion-induced pressure ulcers in experimental diabetic rats mimic clinically relevant aspects of impaired wounds. (this thesis)
9. Acute wounds can fail to heal in a timely manner, or heal with a hypertrophic scar or keloid, even if we remove all the necrotic tissue and close the wounds appropriately. (Adapted from Franz MG *et al.* Wound Repair Regen. 2008; 16: 723-48)
10. Healing is a matter of time, but it is sometimes also a matter of opportunity. (Hippocrates, ca. 460 BC - ca. 377 BC)
11. Going too far is the same as not going far enough. (Confucius, 551 BC - 479 BC)