

Propositions accompanying the doctoral thesis

**NEEDLE-FREE JET INJECTOR-ASSISTED
DERMAL DELIVERY OF BLEOMYCIN**

Paving the way to effective and minimal invasive
treatment of keloidal scars

Liora Bik

1. Bleomycin is effective and safe as intralesional treatment for keloidal scars and warts.
This thesis
2. Needle-free jet injection enables high-dose dermal drug delivery of bleomycin.
This thesis
3. The use of clinical endpoints is indispensable for the effective and safe treatment with needle-free jet injector systems in daily clinical practice.
This thesis
4. Potentially harmful airborne small-droplet aerosols are formed during intralesional jet injection with bleomycin.
This thesis
5. Keloid patients prefer intralesional corticosteroid treatment administered with needle-free jet injection over conventional hypodermic needles.
This thesis
6. Coffee is used to increase productivity at work, including academia, and can be considered a 'healthy beverage' because of its protective effect on chronic diseases such as type 2 diabetes.
Based on RM van Dam et al, N Engl J Med. 2020
7. The success of healthcare innovation rests largely on the identification of well-defined problems faced by clinicians in medical practice.
Based on L Garibyan, JAMA Dermatol 2017
8. Given global climate change and increased immigration, cutaneous manifestations of 'uncommon' infectious diseases will be seen more frequently in daily clinical practice.
Based on ZY Nawas et al, J Am Acad Dermatol. 2016
9. The COVID-19 pandemic had a negative impact on the mental health of PhD students, but self-compassion and savouring are psychological resources to cope with adversity.
Based on M Paucsik et al, Stress Health. 2022
10. Research collaborations with other (international) academic centers is fun and facilitates high-quality research which will lead to future healthcare innovations.
11. Wie dan leeft, die dan zorgt.
Mam