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Novel formulations and delivery strategies for inactivated polio vaccines : new routes with benefits

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Stellingen

behorende bij het proefschrift

Novel formulations and delivery strategies for inactivated polio vaccines

NEW ROUTES WITH BENEFITS

1. Novel formulations and delivery strategies for inactivated polio vaccines are crucial towards and beyond polio eradication.

This thesis

2. Classical parenterally injected inactivated polio vaccine is as far from an ideal product as oral polio vaccine (although for different reasons).

This thesis, chapter 2

3. Future clinical studies, using a suitable and fully developed applicator for Bioneedle administration, should prove the practical use, safety, and efficacy of Bioneedles for human vaccination.

This thesis, chapter 5

4. The development of alternative delivery technologies using (trivalent) inactivated polio vaccine in a dried form is challenging, due to the vulnerability of the polio antigen during the drying procedure and a possibly altered polio type 3 particle with reduced potency.

This thesis, chapter 9

5. “The success of sublingual vaccination depends on formulation, formulation and formulation...”

Prof. dr. Jan Holmgren, MUCOVAD 2016 (Lausanne)

6. Lessons from use in the field must be considered to improve the performance of these vaccines in underprivileged children.

Cecil Czerkinsky and Jan Holmgren (Phil. Trans. R. Soc., 2015)

7. Like for other misinformation campaigns, social media provide an ideal channel for the diffusion of anti-vaccination ideas.

Schmidt et al. (Vaccine, 2018)

8. It is not easy (or even impossible) to obtain reliable results from animal studies that are predictive for human condition, so preferably the use of animals should be reduced to the minimum during vaccine development.

9. “To turn caring into action, we need to see a problem, find a solution, and deliver impact.”

Bill Gates, co-chair of the Bill & Melinda Gates Foundation

10. Een goed springpaard heeft geen kleur.