

SPARK

— NORWAY —

A novel influenza vaccine that can rapidly be deployed to quench an emerging pandemic

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Did you know that current influenza vaccines are still produced in chicken eggs?

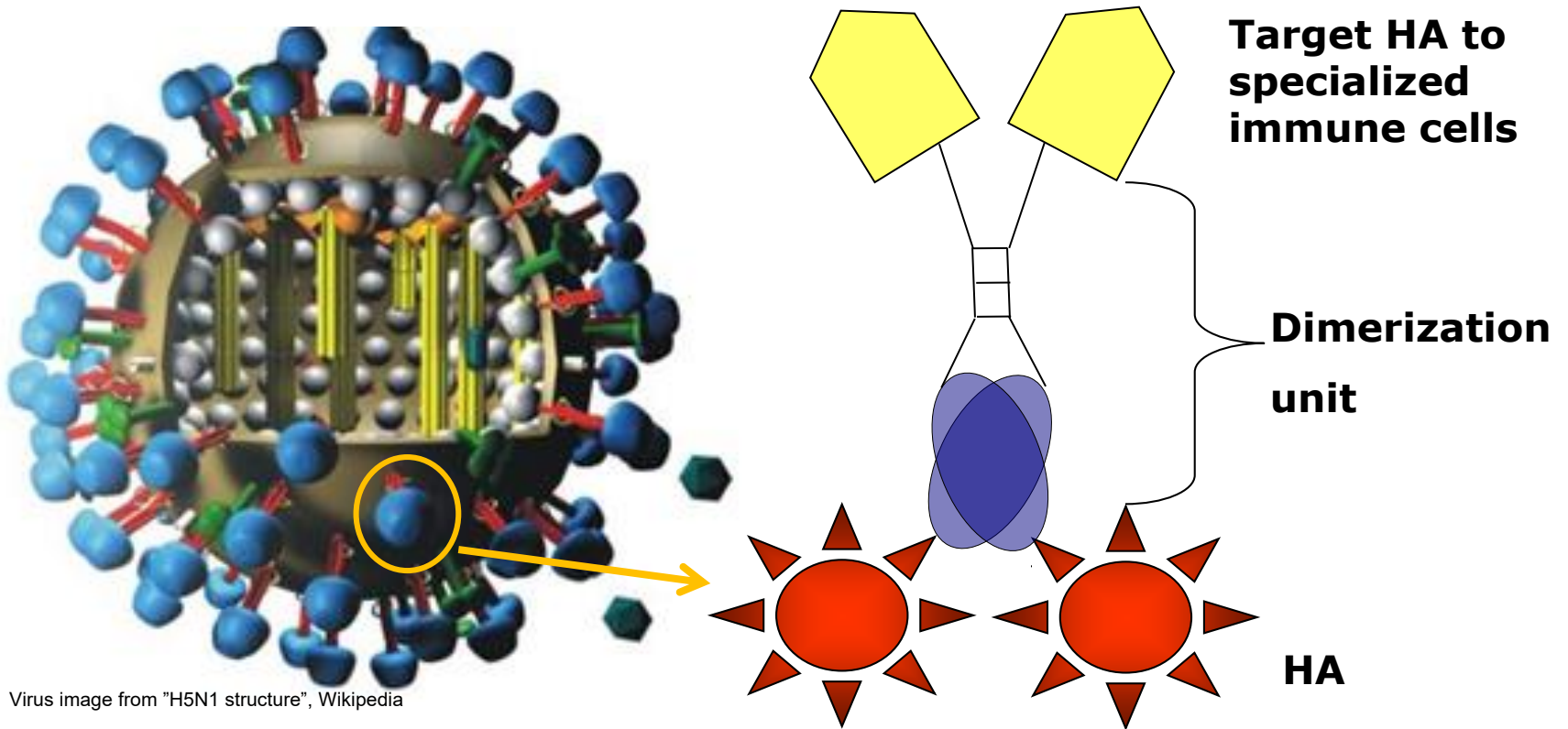


Unmet need: an influenza vaccine that can be produced within weeks to a) quench an emerging influenza pandemic, and b) to efficiently protect against seasonal influenza.

Key: Speed of production

GlobalData (KoL): “Biggest clinical unmet need of current influenza vaccines is vaccine effectiveness . “...the influenza virus’ rapid antigenic drift coupled to a time-consuming egg-based vaccine manufacturing approach is a barrier to increasing vaccine efficacy and duration.”

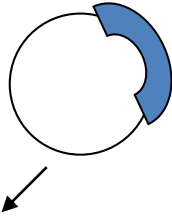
Solution: target antigen to HLAI-molecules



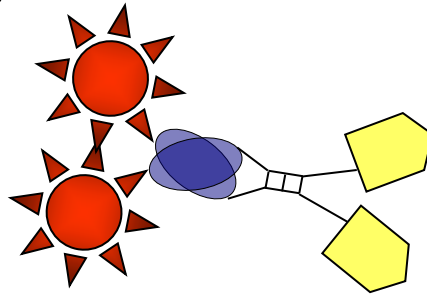
Virus image from "H5N1 structure", Wikipedia

Ease of production: DNA delivery

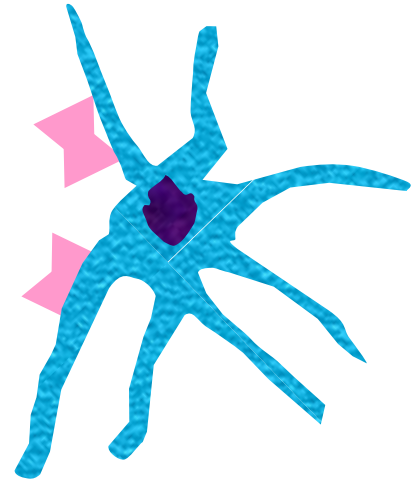
Vaccibody DNA construct



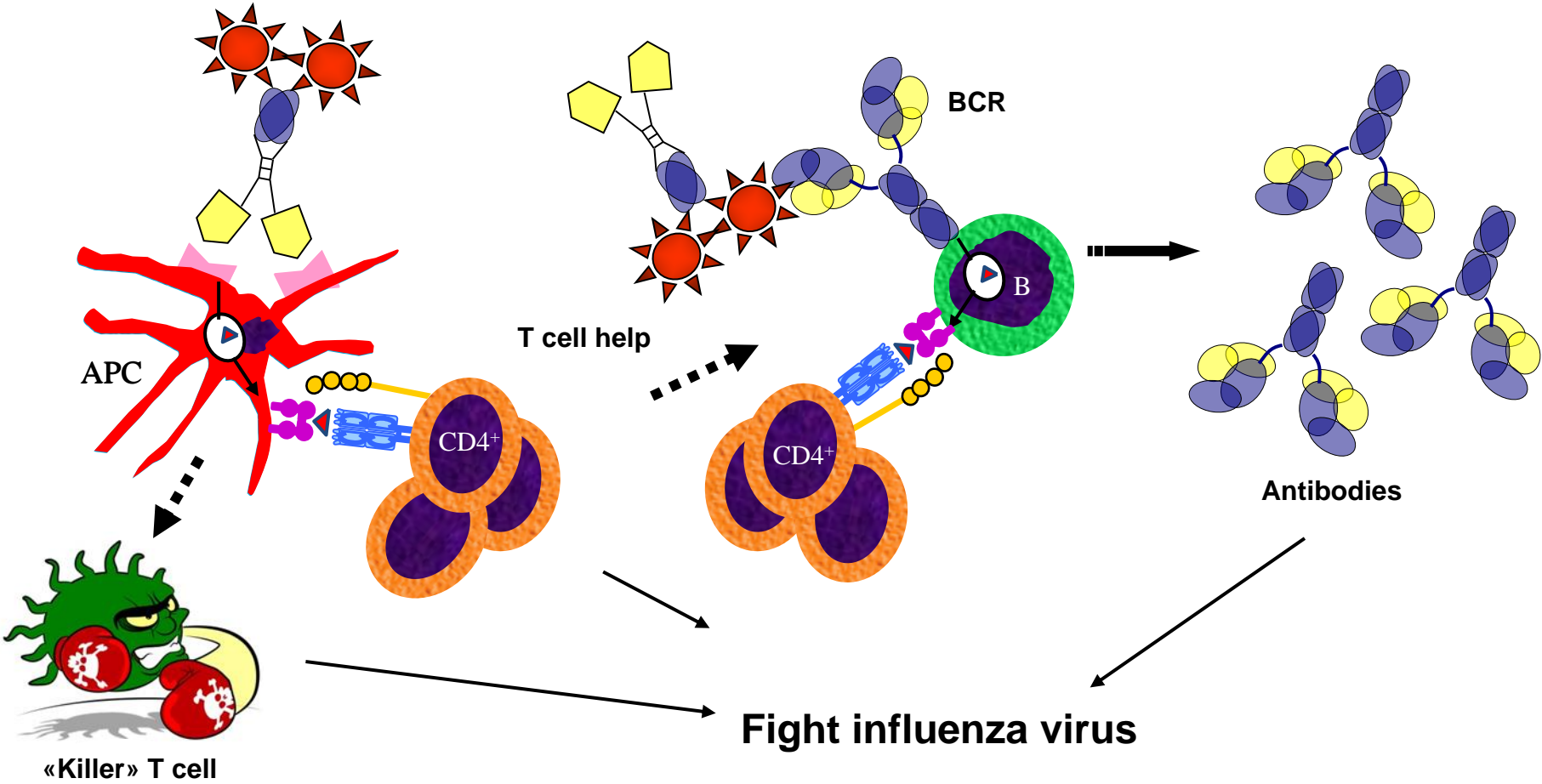
Secretion of vaccine proteins



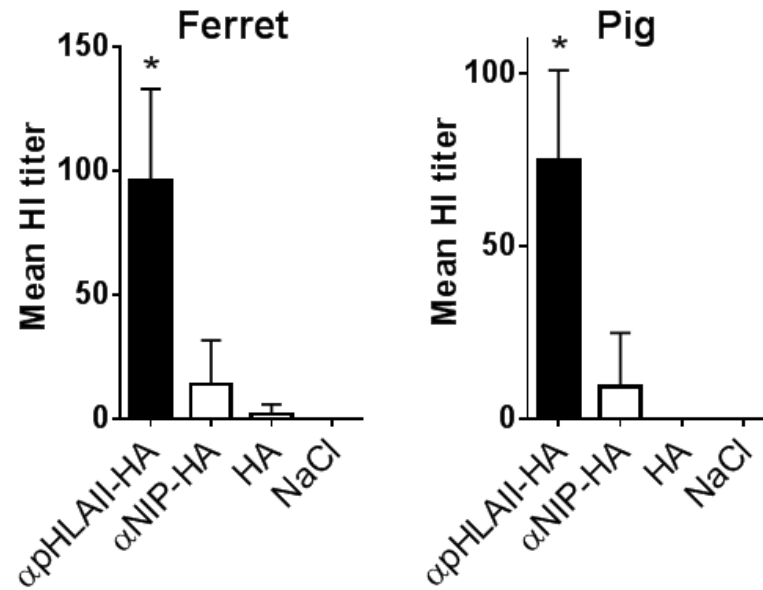
Targeting to APC



Targeting towards selected receptors on APC



DNA vaccination of ferrets and pigs

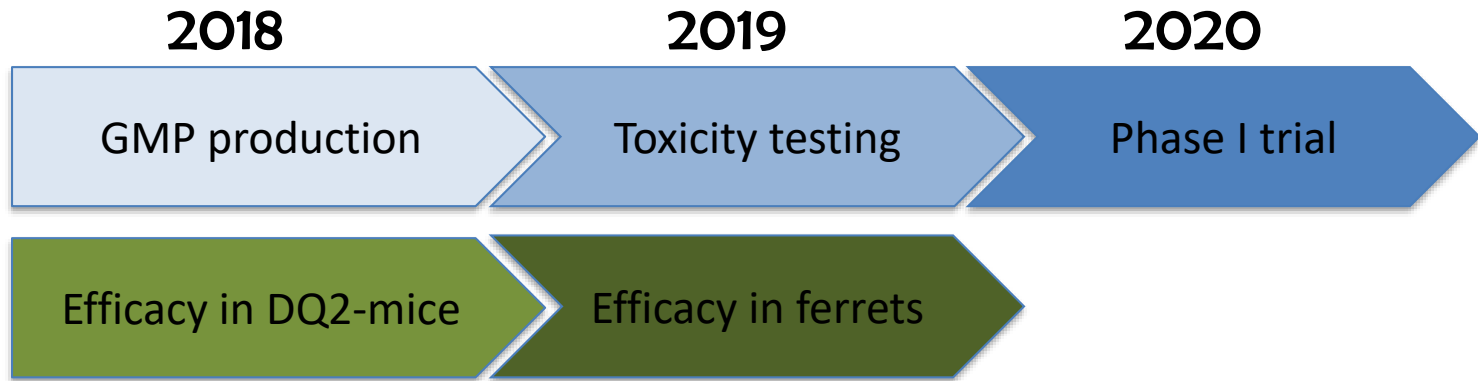


First vaccine to clinical testing

HLAII-targeted vaccine against influenza A/Shanghai/2/2013 (H7N9)



3-year plan



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