

Effect of the vaccination route on the humoral immune response

and PRRSV transmission after challenge

Porcilis PRRS is a PRRSV1 modified live vaccine for use in both young pigs and breeding age female pigs, gilts and sows administered either **intramuscularly (IM)** or **intradermally (ID)**

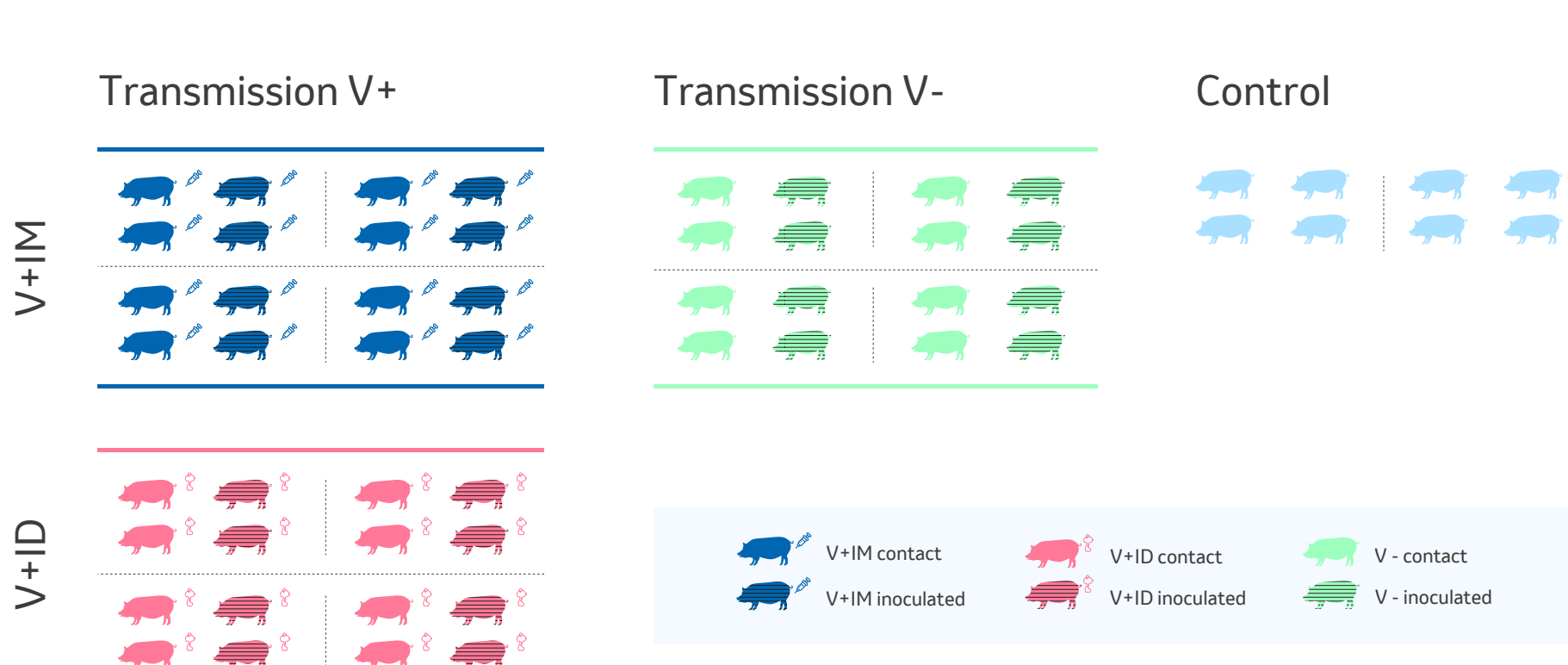
Does the vaccination route have an impact on the humoral immune response and PRRSV transmission after infection?

Experimental design

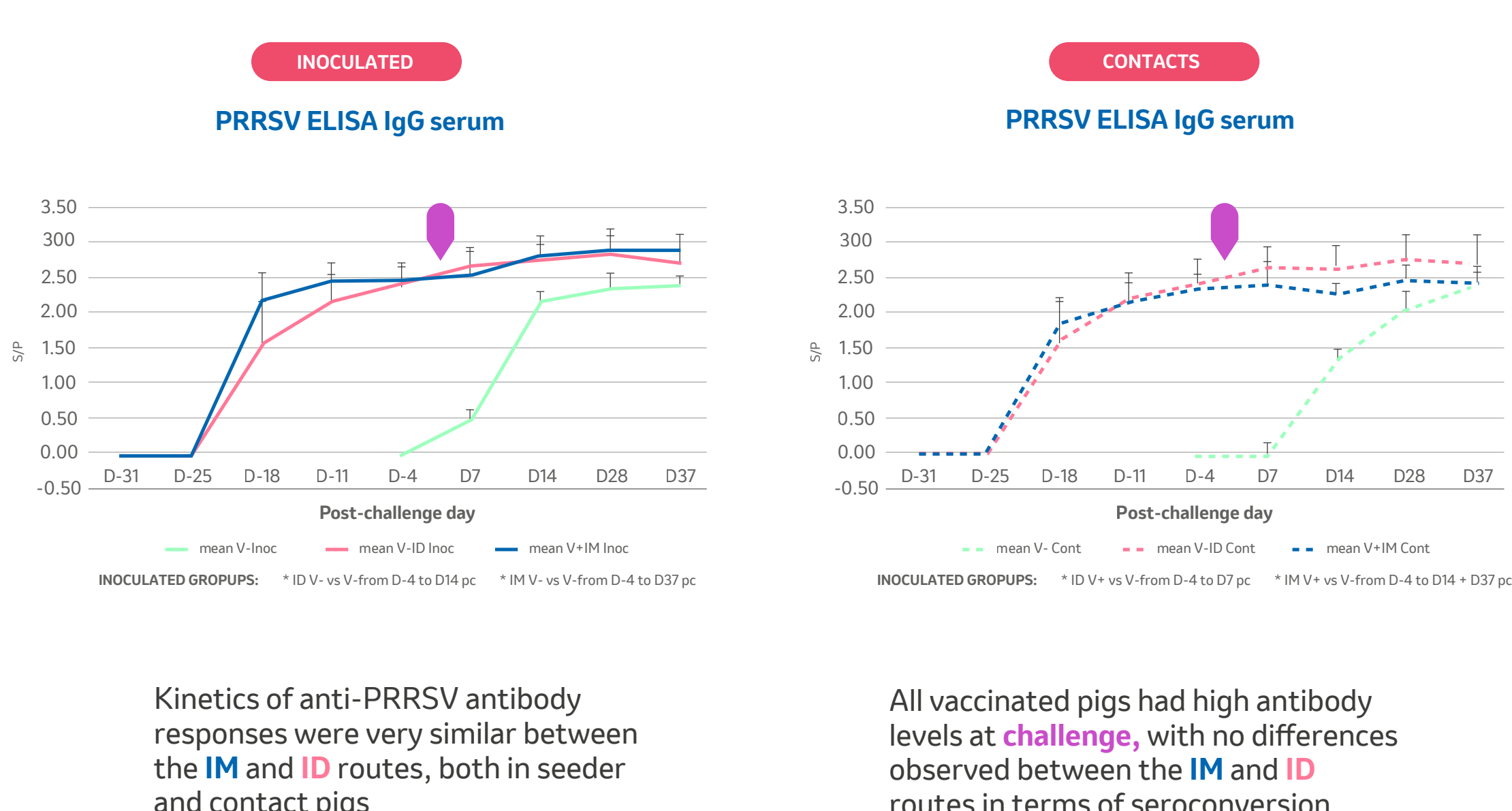
Fifty-six SPF piglets divided in 4 groups:



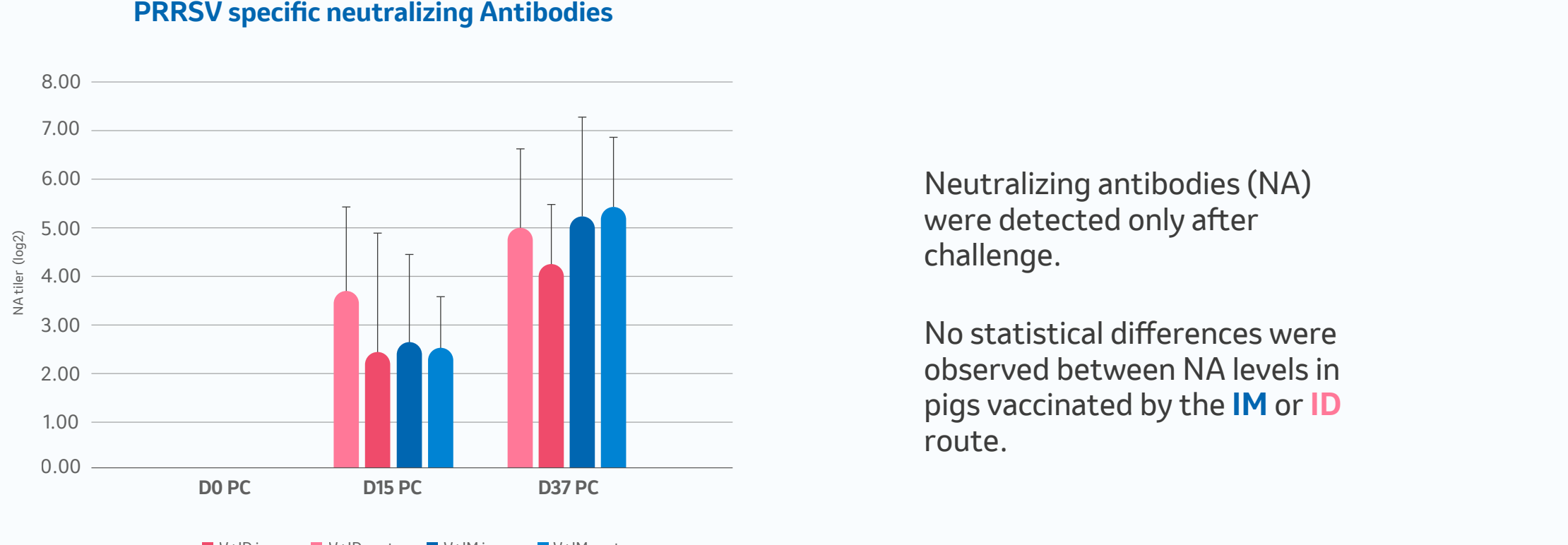
Pigs were challenged with the Finistere PRRSV1 strain.



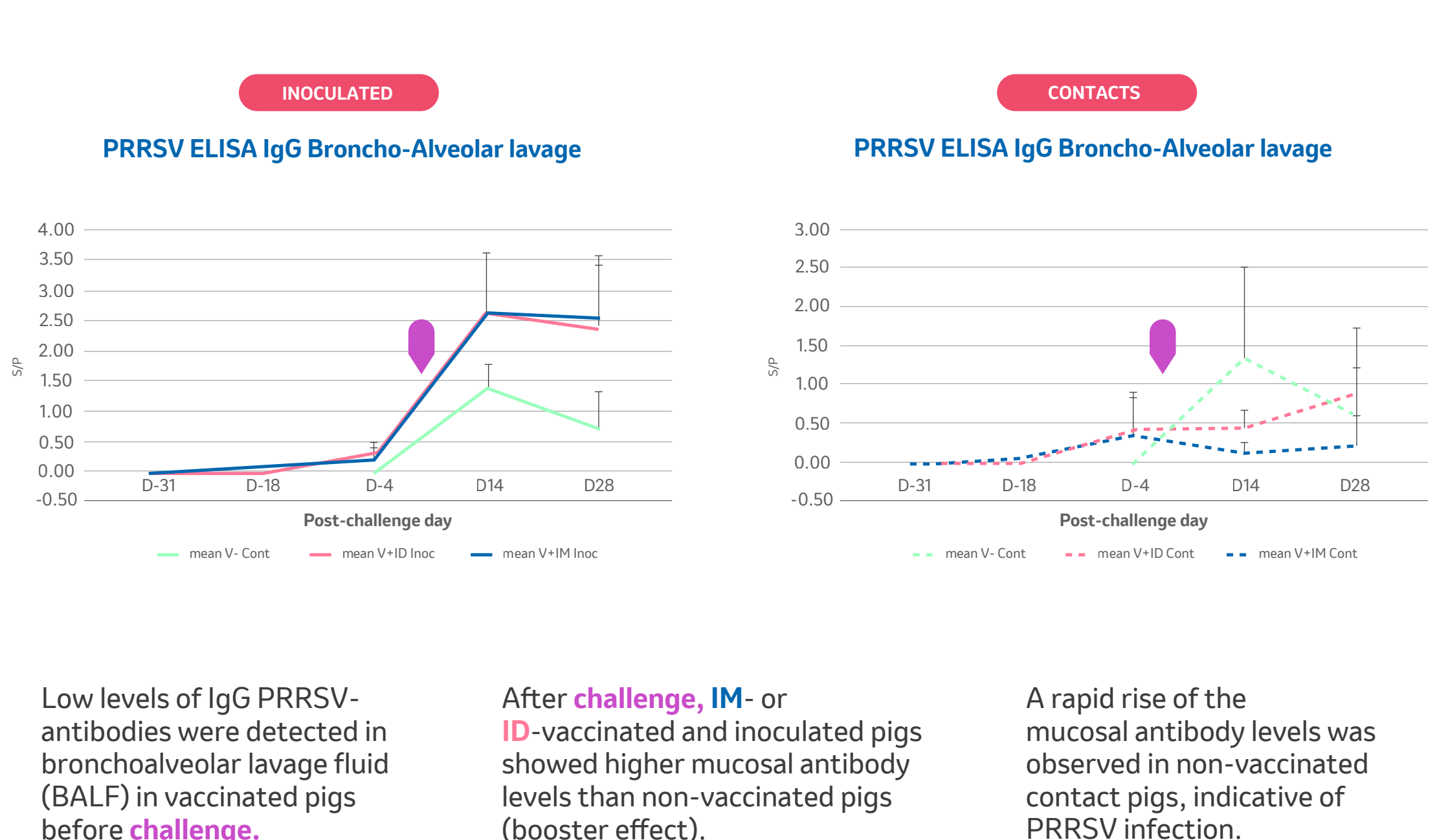
Systemic humoral immune response against PRRSV



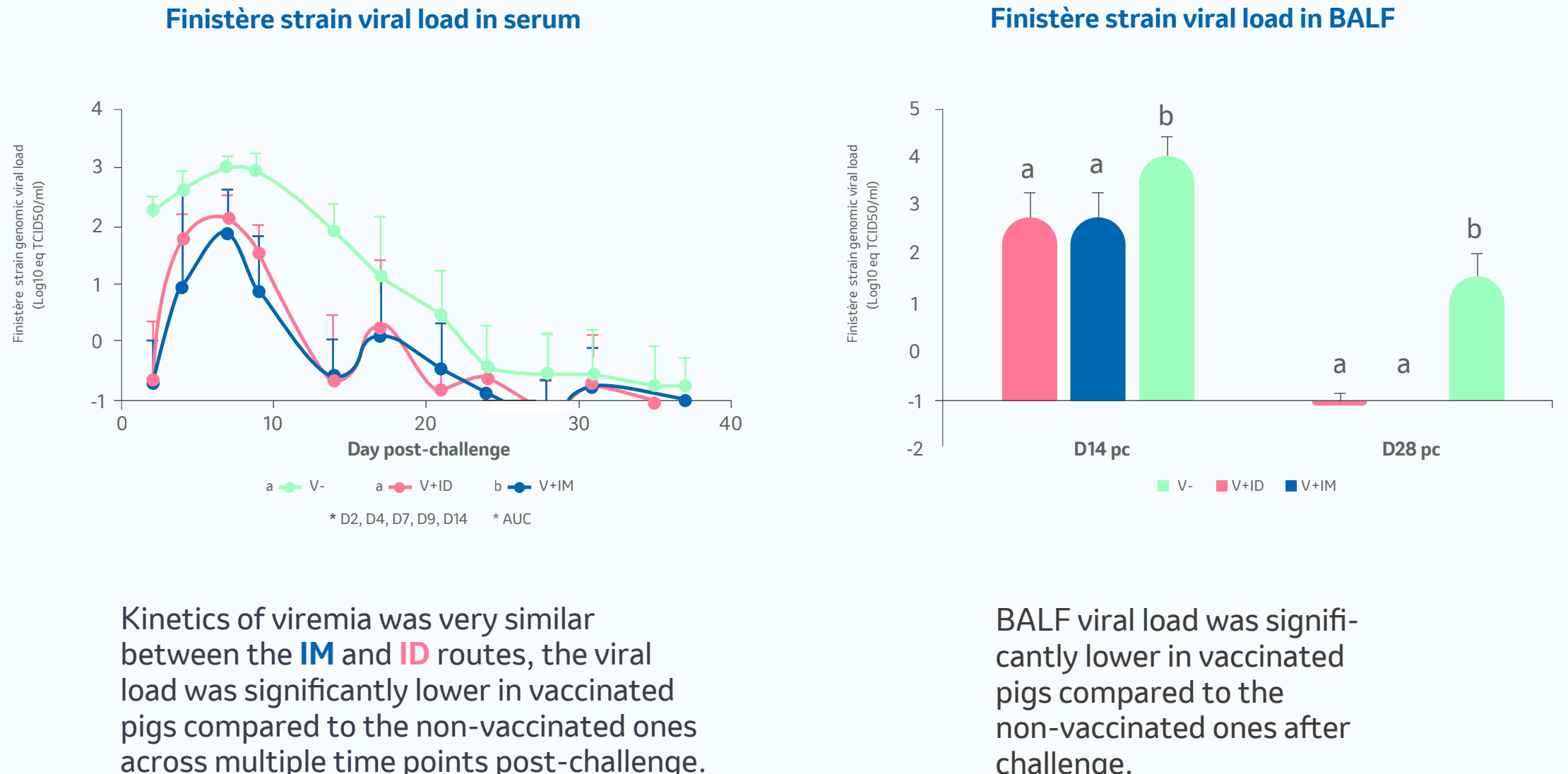
Systemic humoral immune response against PRRSV



Mucosal humoral immune response against PRRSV



Viremia and viral load in BALF



PRRSV transmission

	Transmission	
	median	95% CI
V-	0.25	[0.11, 0.50]
V+ID	0.008	[4E-4, 0.04]
V+IM	0.009	[5E-4, 0.04]

Transmission rate was much lower in vaccinated pigs compared to the non-vaccinated ones, with no differences between the **IM** or **ID** route.

Keypoints

- Both the IM and ID routes elicit a **similar humoral immune response against PRRSV**.
- Viremia post-challenge is greatly **reduced in vaccinated pigs**, with no differences between IM and ID routes.
- Transmission of PRRSV is **significantly reduced in vaccinated pigs**, with no differences between IM and ID routes.

Porcilis PRRS generates a strong humoral immune response against PRRSV and effectively reduces virus transmission, either administered via intradermal or intramuscular injection.