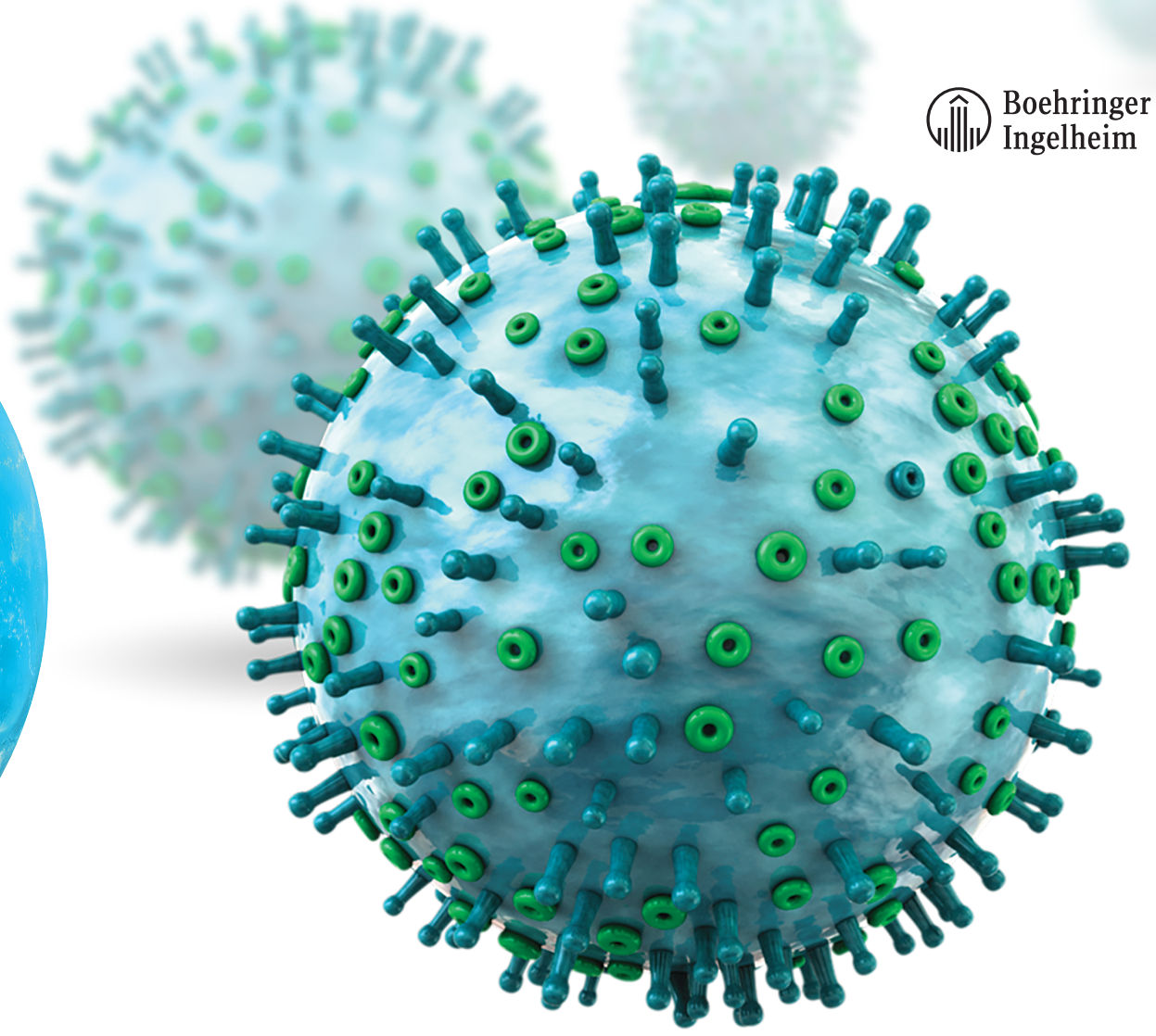
Global PRRS Solutions

Boehringer Ingelheim



Exploring Cross-Protection in Commercial PRRS Vaccines

In our quest to better understand cross-protection among vaccines, we've delved into an extensive array of scientific papers from across the globe. These studies provide valuable insights into the **potential for commercial vaccines to offer protection** against the porcine reproductive and respiratory syndrome (PRRS) virus.

Our data-driven approach has allowed us to perform:

Two Key Analyses:

1 Research Distribution by Vaccine and Region

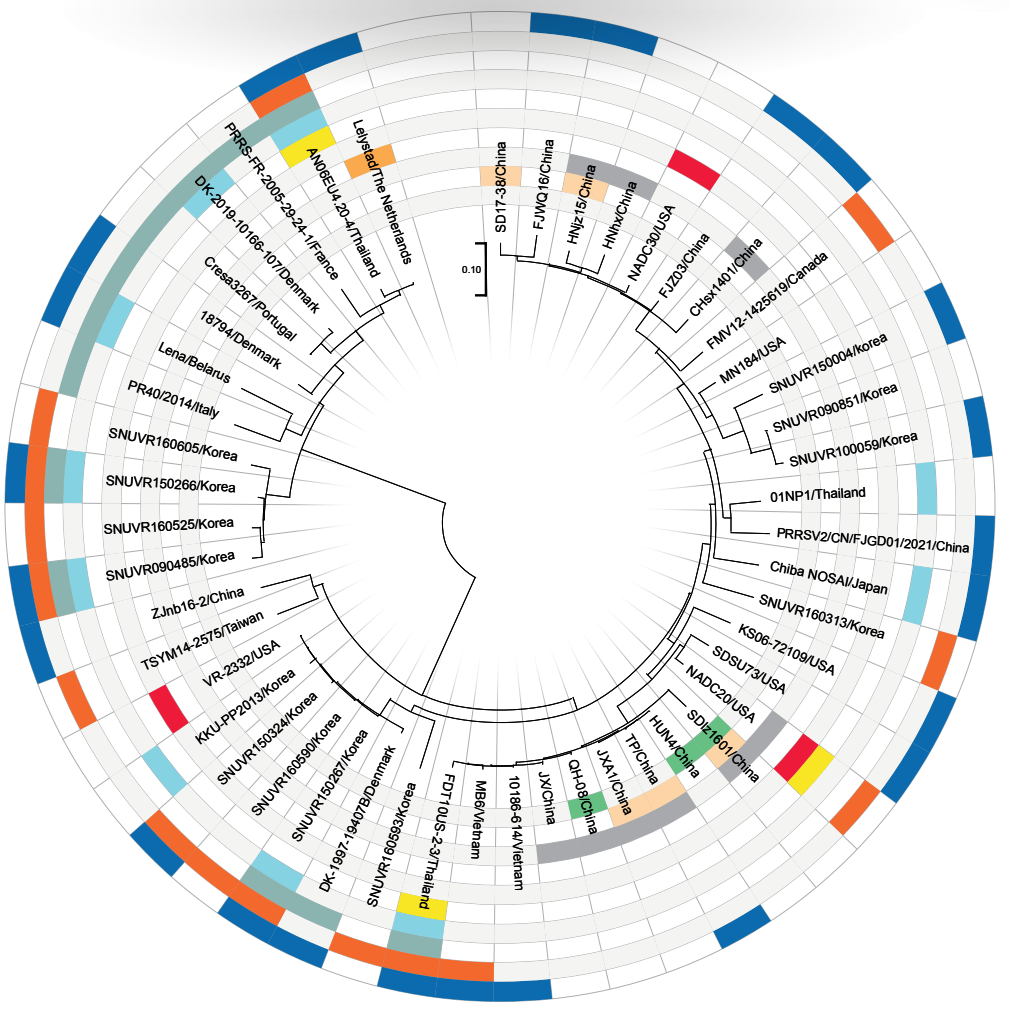
Our research has led us to categorize these studies into three primary geographical regions:

AMERICA: This encompasses research from the United States and Canada.

ASIA: We've analyzed studies conducted in the Republic of Korea, China, Thailand and Japan.

EUROPE: Our examination extends to research conducted in Denmark, Belgium, France, The Netherlands and Spain.

We've compared the volume of **peer-reviewed scientific papers for each vaccine** within each of these regions. This analysis provides valuable insights into the geographical focus and prevalence of research efforts.



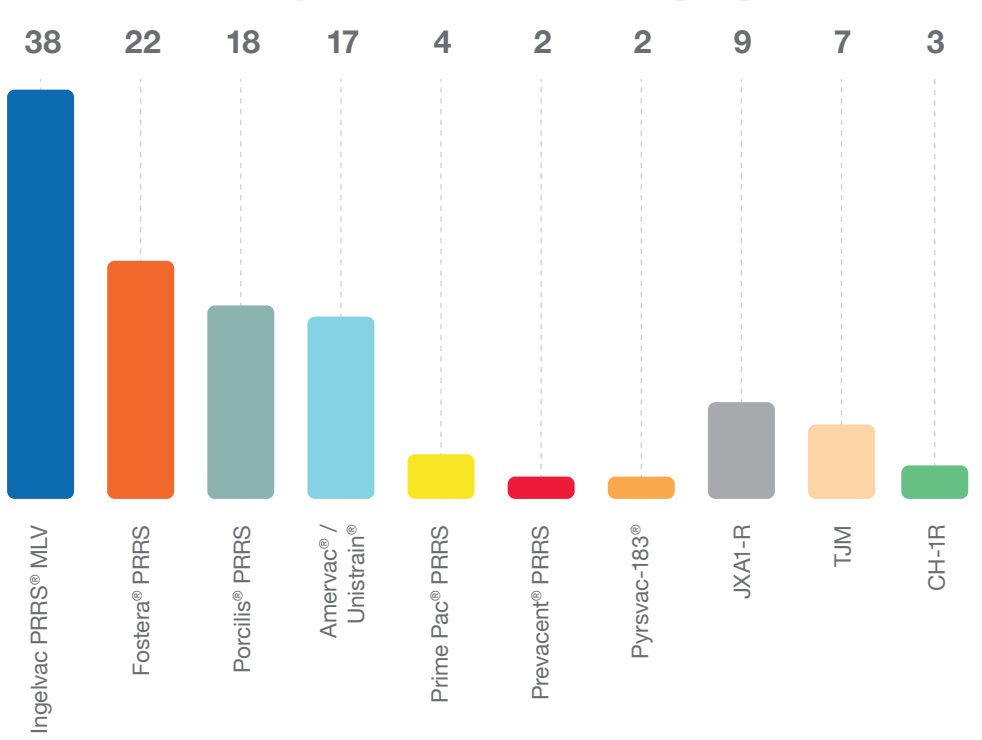
Phylogenetic tree based on the nucleotide sequence of full-length gene encoding GP5 of 51 PRRSV strains available at GenBank. The phylogenetic tree was inferred by using the maximum likelihood method and Tamura-Nei model in MEGA XI software (https://www.megasoftware.net/).

2 Strain-Specific Cross-Protection

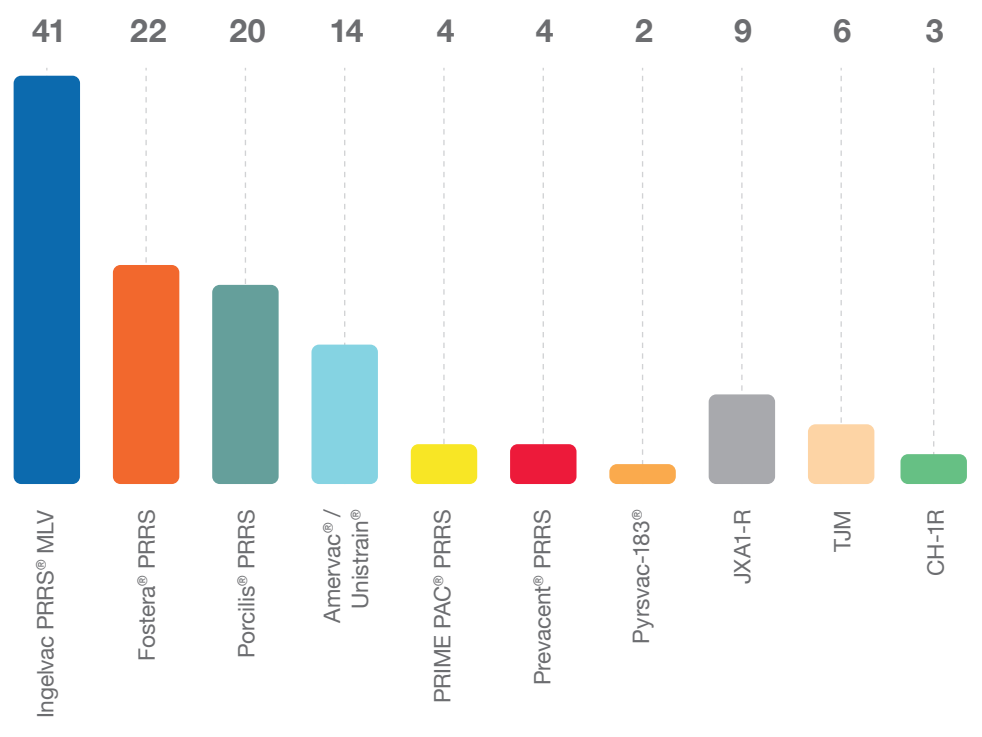
We have meticulously assessed the **number of strains for which each vaccine has demonstrated cross-protection (considering only peer-reviewed literature)**. This data is presented in the form of a visually informative bar chart, illustrating the extent of protection offered by each vaccine against various strains of the PRRS virus.

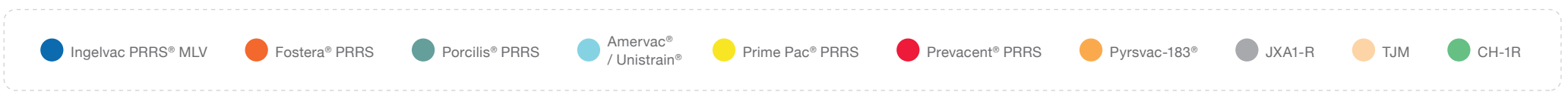
These analyses not only shed light on the global perspective of cross-protection research, but also offer a comprehensive overview of the **effectiveness of commercial vaccines against PRRS**.

Number of peer-reviewed papers:



Number of strains:





Navigate the scientific landscape

Unveiling the cross-protection insight: These tables provide a structured perspective on commercial PRRS vaccines: Vaccine names align with virus strains, and **cell values indicate the abundance of scientific peer-reviewed literature**. This methodical presentation sheds light on their cross-protection potential.

Peer-reviewed literature in Europe	Ingelvac PRRS® MLV	Fostera® PRRS	Porcilis® PRRS	Amervac/Unistrain	Prime Pac® PRRS	Prevacent® PRRS	Pyrsvac-183®	JXA1-R	TJM	CH-1R
18794	2		1							
Lelystad	1		1				1			
07 V063	1		1							
08 V194	1		1							
Lena	1		1	1						
DK-1997-19407B	1		1							
ILI6	1		1							
A-WT Poland			1							
5710			1							
05R1421			1							
Cresa3267			1							
PRRS-FR-2005-29-24-1			2							
PR40/2014			1							
DK-2019-10166-107 (Horsens)			1	1						
2156				1			1			
HP-PRRS21				1						

Scan the QR code to see the full list of papers on prrs.com

Cross-Protection Unleashed: A Global Vaccine Quest

In the realm of vaccine research, the pursuit of cross-protection is a journey that transcends borders and bridges continents.

Our mission? To unravel the remarkable potential of commercial vaccines in safeguarding against the porcine reproductive and respiratory syndrome (PRRS) virus.

As we delve into the depths of these findings, we invite you to join us on a voyage that traverses three key regions – America, Asia and Europe. Together, we'll unveil the fascinating insights and revelations that emerge when science knows no borders.

Let's embark on this exploration, unlocking the power of cross-protection, and charting a course toward a world where PRRS is met with resilience and vigilance.

Cross-protection means the products are showing positive results in both clinical (lung lesion reduction, viremia, mortality, etc.) and non-clinical (ADG, FCR, etc.) parameters against the challenge strains, compared to no intervention.

Peer-reviewed literature in America	Ingelvac PRRS® MLV	Fostera® PRRS	Porcilis® PRRS	Amervac/Unistrain	Prime Pac® PRRS	Prevacent® PRRS	Pyrsvac-183®	JXA1-R	TJM	CH-1R
MN184	1									
MN-30100	1									
SDSU73	2									
JA-142	1									
KS06-72109	1									
1-4-4 RFLP	1									
1-7-4 RFLP	1	1								
1-3-4 RFLP	1	1								
NADC20		1			1	1		1		
FMV12-1425619		1								
NC174						1				
NADC30						1				
VR-2332						1				

Peer-reviewed literature in Asia	Ingelvac PRRS® MLV	Fostera® PRRS	Porcilis® PRRS	Amervac/Unistrain	Prime Pac® PRRS	Prevacent® PRRS	Pyrsvac-183®	JXA1-R	TJM	CH-1R
PRRSV wt-11	1									
PRRSV wt-7	1									
SNUVR090485	6	5	4	5						
SNUVR090851	4	7	4	5						
JX143	1									
SNUVR100059	1									
rJXwn06	1									
rSRV07	1									
MB6	1	1								
HNjz15	1							1	1	
SNUVR150004	1									
SNUVR150324	2									
10186-614	1									
CHsx1401	1							1		
TP	1							1	1	
SNUVR150266	1	2	1	2						
SNUVR150267	1	2	1	2						
FJZ03	1									
FJWQ16	1									
v2016/ZJ/09-03	1									
ZJnb16-2	1									
AN06EU4204	1	1	1	1	1					
FDT10US23	1	1	1	1	1					
QH-08	1							1		1
PRRSV/CN/FJGD01/2021	1									
Chiba NOSAI	1			1						
SNUVR130527		1								
SNUVR130030		1								
SNUVR130081		1								
10PL01		2		2	1					
SNUVR150324		1								
SNUVR160525		1								
SNUVR160605		1								
SNUVR160590		2								
SNUVR160593		2								
SNUVR160313		2								
TSYM-142575		1								
KKU-PP2013				1						
01NP1				1						
JX								1		
JXA1								2	1	
HNhx								1		
SDlz1601								1	1	1
SD17-38									1	
HN201605									1	
HuN4										1