

ONLY 1 DOSE. ONLY 1 ML.

PneumoSTAR® SIV

– the only 1-dose SIV vaccine

PneumoSTAR SIV is the only vaccine designed and approved to provide protection from swine influenza virus (SIV) with just one dose. And, it's the only vaccine that does it with just a 1-mL dose.



PneumoSTAR SIV meets the challenge

How effective is PneumoSTAR SIV? Here are the results of an experimental challenge conducted on 10-week-old pigs.¹

- For this experiment, test pigs were vaccinated with a single 1-mL dose of PneumoSTAR SIV, while a control group was left unvaccinated.
- To detect serum antibodies, HI (hemagglutination inhibition) titers for two SIV strains were taken for both the vaccinates and the control group prior to challenge.

	H1N1 HI titer	H3N2 HI titer
Vaccinates	96% positive	100% positive
Controls	0% positive	0% positive

- At seven weeks post-vaccination, vaccinates and controls were challenged with either a heterologous H1N1 SIV strain or heterologous H3N2 SIV strain. Five days post-challenge, percent lung damage was determined.

	H1N1 challenge	H3N2 challenge
Vaccinates	4.4% lung lesions	5.0% lung lesions
Controls	21.4% lung lesions	31.7% lung lesions



**PneumoSTAR SIV
is the only one-dose
SIV vaccine available**

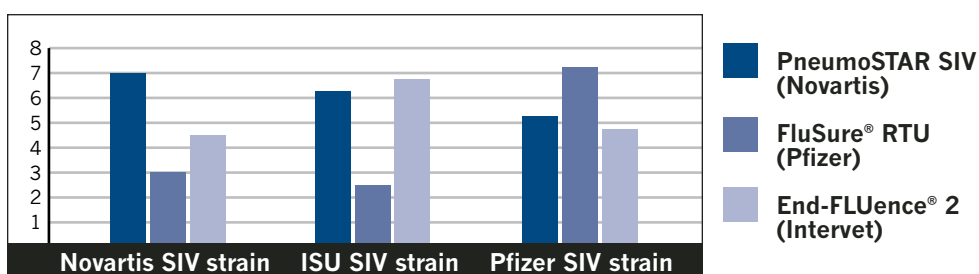


Don't just treat complex symptoms

Broad cross-reactivity from strain to strain

Because a single operation can easily have various strains of SIV, broad cross-reactivity means more effective immunity for your herd. In the following vaccine comparison, pigs were vaccinated with two doses of a commercial vaccine.²

After vaccination, sera were collected from all test pigs, and HINI HI titers were determined using the Novartis vaccine strain, the Iowa State University (ISU) standard strain and the Pfizer strain:



The results show PneumoSTAR SIV is consistently reactive to each strain. That broad cross-reactivity among various SIV strains is a big performance advantage.

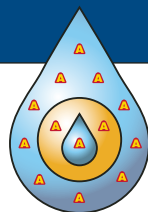
New ImmunSTAR™ adjuvant provides one-shot immunity.

Newly formulated technology means better immune response:

- Water-in-oil-in-water system
- Antigen encapsulation + surface antigen
- More complete immune response
- Excellent syringeability

ImmunSTAR™ Adjuvant

- Proprietary water-in-oil-in-water system
- Antigen encapsulation + surface antigen
- Enables one-shot, one-mL immunity
- New technology for more complete immune response
- Excellent syringeability



**One Shot.
One mL.
One Time.**

1. Data on file at Novartis Animal Health US, Inc. Reports 1 and 2. Code 19A5.22.
2. Data on file at Novartis Animal Health US, Inc. Marketing Study 04162003.

**Consistent.
Comprehensive.
Convenient.**

**One-dose
PneumoSTAR SIV.**

 **NOVARTIS**

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