

ZERA MPs consist of structurally organized antigen oligomers, mimicking a viral pattern. ZERA MPs have been shown to drastically **improve the immunogenicity**, already in the absence of adjuvants, in comparison with the administration of soluble antigens, due to its particulated formulation.

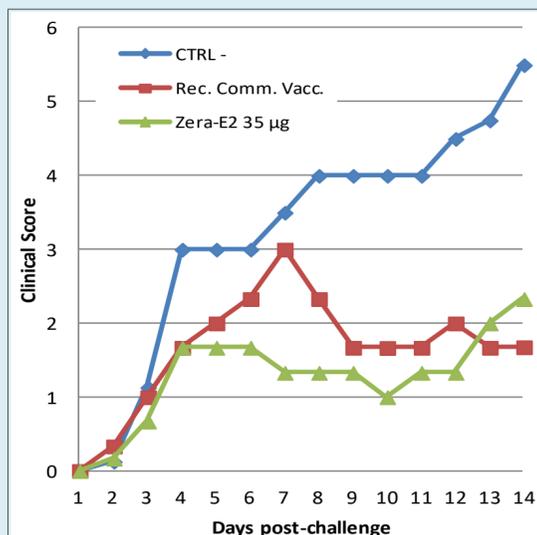
The administration of the Zera-antigen formulation takes advantage of the protease-resistant nature of ZERA MPs that work as **antigen depot**. ZERA MPs are processed by antigen presenting cells and their **slow-release** sustain and amplify the immunogenic response.

ZERA MPs VACCINES :

- ZERA drastically **improves recombinant antigen expression and accumulation**, *in vivo*
- ZERA induces significant **cellular and humoral immune responses**, already in the absence of adjuvant
- ZERA **stabilizes the antigen** in storage conditions and allows shelf-life in non refrigerated conditions
- **Standard** density-based **downstream**

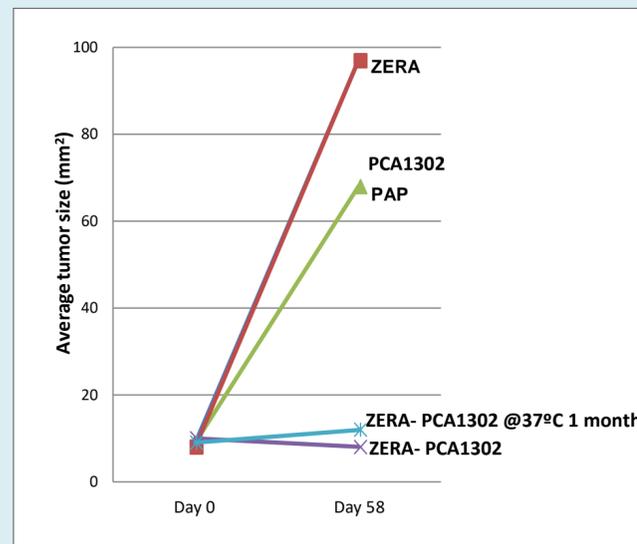
Compatible with ZERA-Antigen DNA vaccines for **heterologous prime-boost** regimen

CSFV vaccine - Zera-E2 MPs



Zera[®]-E2, a non-optimized prototype vaccine, performs as good as a commercial recombinant vaccine against Classical Swine Fever Virus

Prostate cancer immunotherapy - Zera-PCA1302 MPs



Zera[®]-PCA1302 MPs break self-tolerance, improve cellular immune response and induce complete tumor regression in Prostate Cancer, without the need of low temperature storage.

ZERA has shown to be an optimal platform for the development recombinant vaccines. The R&D performed internally had the main objective of identifying the differential characteristics of ZERA-based vaccines in comparison with canonical subunit vaccines. To do so, clinically relevant indications have been identified, both for animal and human health, and **preclinical immunological performance has been assessed**.

All the results generated, as well as all the molecules tested, are **available for evaluation of licensing opportunities**.

	Programme	Discovery	Preclinical
Recombinant Zera Vaccine			
Classical Swine Fever Virus	[Progress bar]		
Porcine reproductive and respiratory syndrome virus	[Progress bar]		
Porcine Circovirus	[Progress bar]		
Prostate cancer immunotherapy	[Progress bar]		