



Figure S1. Immune cell phenotype. Immune cell populations in peripheral blood from the day of treatment (d0) and during the first year of follow-up.

Table S1. Quality of life questionnaire. Adapted from [42]

How much do you think the disease affects your dog's quality of life?			
A lot (0)	Quite a lot (1)	A Little (2)	Not at all (3)
Does he/she still do the activities he/she likes (playing, walking...)?			
No (0)	Infrequently (1)	Frequently (2)	As usual (3)
How is your dog's mood?			
Altered (0)	Sometimes altered (1)	Slightly changed (2)	Normal (3)
Does he/she maintain his/her grooming habits?			
No (0)	Infrequently (1)	Less than before illness (2)	Yes(3)
How often do you think your dog experiences pain?			
All the time(0)	Frequently (1)	Rarely (2)	Never (3)
Does your pet have appetite?			
No (0)	Forced or food he/she likes (1)	Less than usual (2)	Normal (3)
Does your pet get tired easily?			
Yes (0)	Frequently (1)	Rarely (2)	No (3)
How would you rate your dog's rest?			
Very bad (0)	Bad (1)	Almost normal (2)	Normal (3)
How often does your dog vomit?			
Always (0)	Frequently (1)	Rarely (2)	Never (3)
How would you rate your dog's intestinal functionality?			
Very bad (0)	Bad (1)	Almost normal (2)	Normal (3)
Is your dog able to position himself to urinate and defecate?			
Never (0)	Rarely (1)	Frequently (2)	Yes (3)
How much attention does your dog pay to the family?			
Indifferent (0)	Little attention (1)	Increased attention (2)	No change (3)

Table S2. Tumor infiltrated by immune cells, endothelial cells, and oncolytic virus. ICOCV15 detected by qPCR (#) or IHC. *ICOCV15 administered. M: metastatic tissue. N/A: not assessed.

			CD3	CD4	CD20	MAC387	CD31	ICOCV15
PSit01	Necropsy (d282)	Tumor	Medium	Negative	Low	Low	Negative	Positive
		Lung (M)	N/A	N/A	N/A	N/A	N/A	Negative
		Liver (M)	N/A	N/A	N/A	N/A	N/A	Positive
		Spleen	N/A	N/A	N/A	N/A	N/A	Negative
PSit02	Tumor	d0 *	Medium	Negative	Medium	Medium	Negative	N/A
		d28	High	High	High	Medium	Negative	Positive
		d112 *	Medium	Medium	Medium	Medium	Negative	Negative
		d140	High	Medium	High	High	Low	Negative
		d221	Medium	High	High	High	Low	Positive
	Necropsy (d332)	Tumor	High	Medium	High	High	Low	Positive
		Liver	N/A	N/A	N/A	N/A	N/A	Positive
Spleen		N/A	N/A	N/A	N/A	N/A	Positive	
PSit04	Tumor	d0 *	Low	Low	Medium	Low	Negative	N/A
		d28	High	Medium	High	Medium	Low	Positive #
		d84 *	Medium	Medium	Medium	Medium	Low	Negative
		d185 *	High	Medium	High	High	Low	Positive #
PSit05	Necropsy (d332)	Tumor	Medium	Low	Negative	High	Low	Positive
		Liver	N/A	N/A	N/A	N/A	N/A	Negative
		Spleen	N/A	N/A	N/A	N/A	N/A	Positive
PSit06	Tumor	d0 *	High	Low	Medium	Low	Negative	N/A
		d28	High	Low	Medium	Medium	Low	Positive
		d126 *	High	Low	High	Negative	Negative	Positive
		d244 *	Low	Medium	Negative	Low	Negative	Positive
		d350	High	Medium	Medium	Low	Low	Positive
PSit07	Tumor	d0 *	High	Medium	Medium	Low	Low	N/A
	Necropsy (d21)	Tumor	Medium	Medium	Negative	Medium	Negative	Positive
		Liver	N/A	N/A	N/A	N/A	N/A	Positive
		Spleen	N/A	N/A	N/A	N/A	N/A	Positive
PSit08	Tumor	d0 *	High	Low	Medium	Low	Negative	N/A
		d42	Low	Low	Negative	Low	Negative	Negative
PSit09	Tumor	d0 *	High	High	Low	Low	Negative	N/A
	Necropsy (388)	Pelvic tumor (M)	Medium	Medium	Low	Medium	Low	Positive
		Ribwall tumor	Low	Medium	Low	Medium	Negative	Positive