

## Supplementary data

**Table S1: Bacterial culture of nasal swabs of vaccinated or mock-treated goats.**

sample	group	goat no.	sampling day (dpv)					
			-14	0	28	56	84	112
nasal swab	mock-treated	0008	-	-	-	-	-	-
		0031	-	-	-	-	-	-
		0014	-	-	-	-	-	-
		0023	-	-	-	cont	-	-
		0029	-	-	-	-	-	-
		0030	-	-	-	-	-	-
	BCG	0007	-	-	-	-	-	-
		0013	cont	-	-	-	-	-
		0015	-	-	-	-	-	-
		0022	-	-	-	-	-	-
		0027	-	-	-	-	-	-
		0034	-	-	-	-	-	cont
	VPM1002	0001	-	-	-	-	-	-
		0002	-	-	-	-	-	-
		0009	-	-	-	-	-	-
		0016	-	-	-	-	-	cont
		0017	-	-	-	-	-	-
		0024	-	-	-	-	-	-
	NUOG	0005	-	-	-	-	-	-
		0006	-	-	-	-	-	-
		0011	-	-	-	-	-	-
		0020	-	-	-	-	-	-
		0021	-	-	-	-	-	-
		0026	-	-	-	-	-	-
	PDX	0003	-	-	-	-	-	-
		0004	-	-	-	-	-	-
		0010	-	-	-	-	-	-
		0018	-	-	-	-	-	-
		0019	cont	-	-	-	-	-
		0025	-	-	-	-	-	-

(- no growth, cont contaminated)

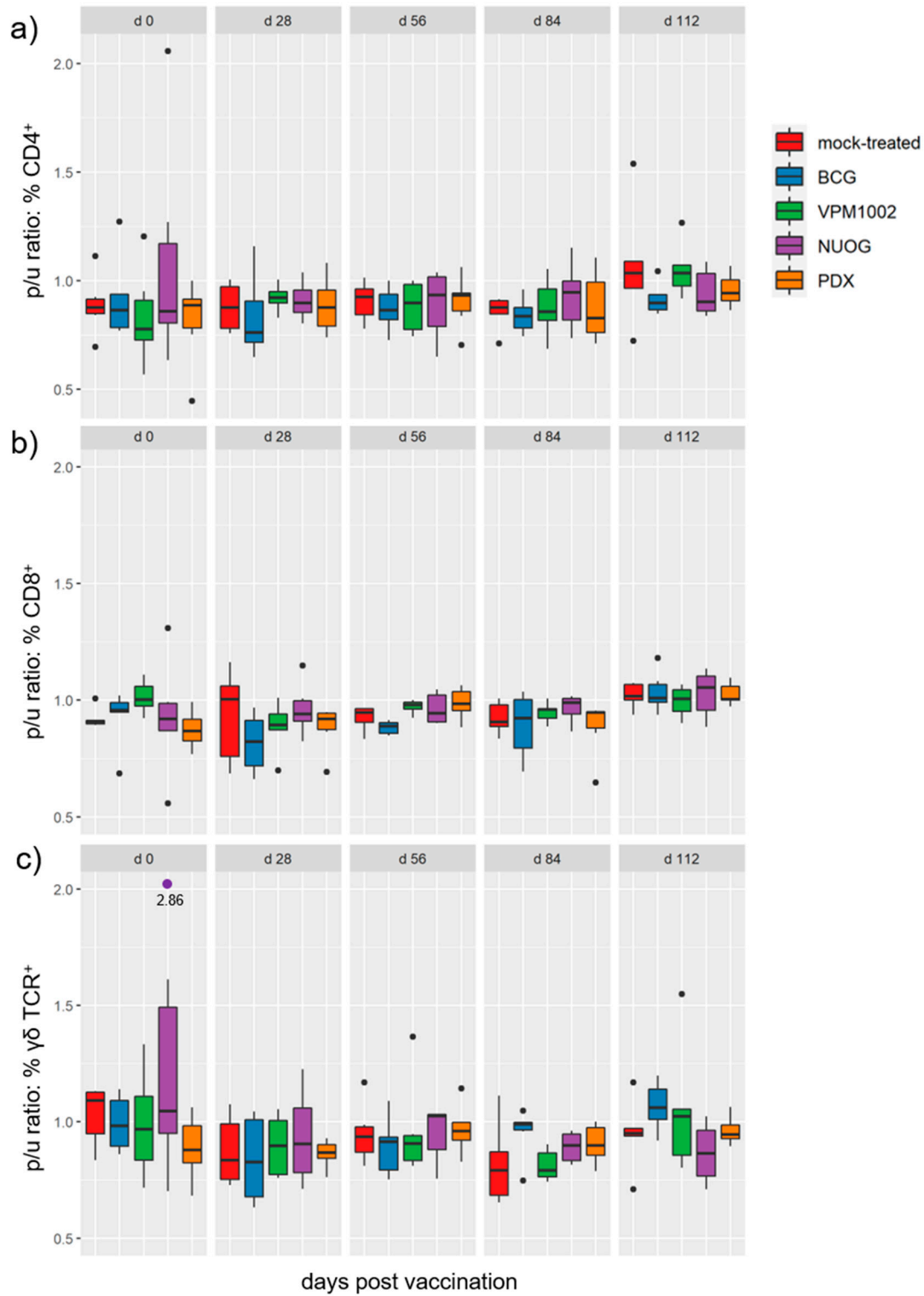
**Table S2: Mycobacterial cultures of tissue samples after necropsy of vaccinated or mock-treated goats (127 days post vaccination).**

[illegible]

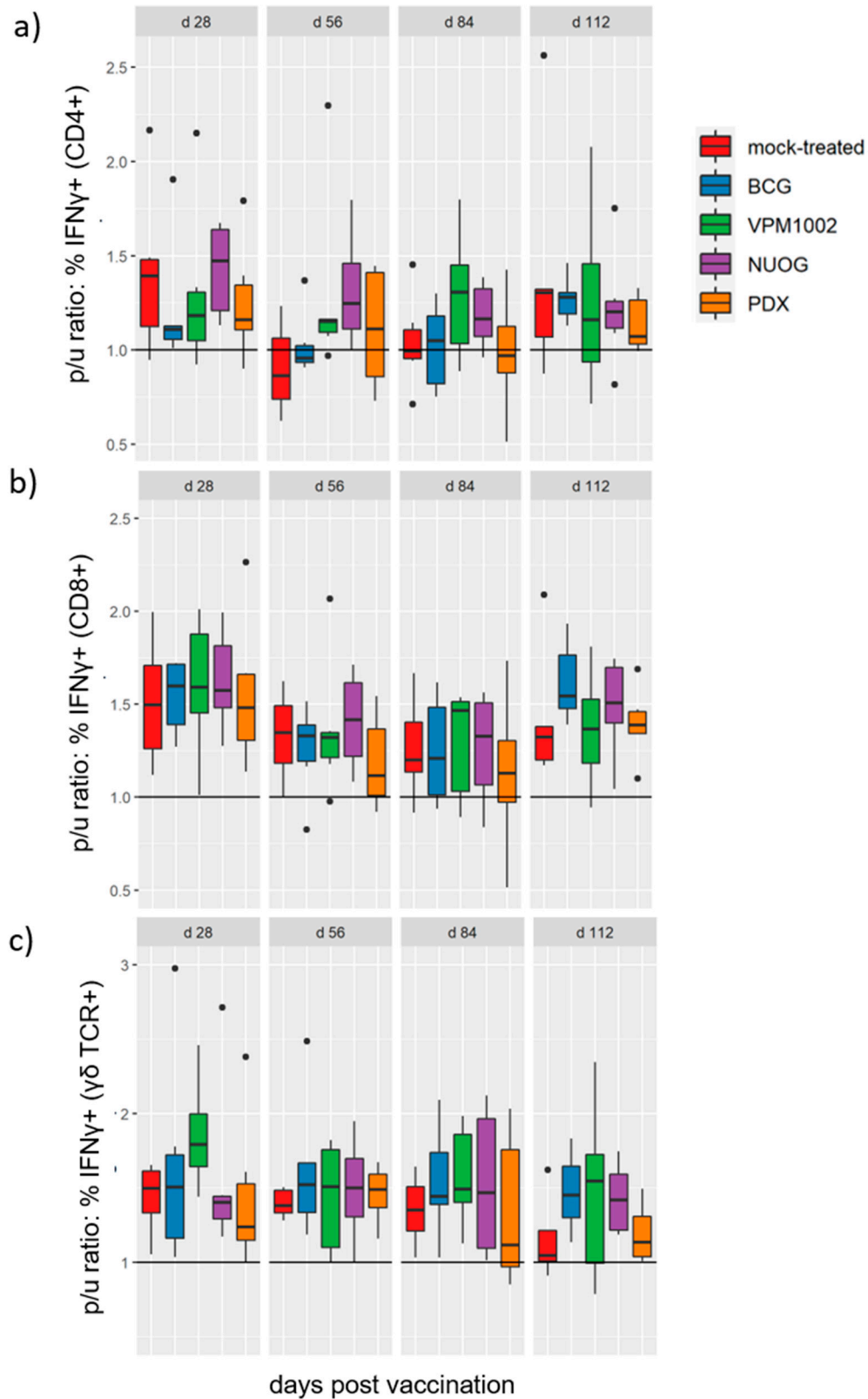
A	Skin at vaccination site	N	Kidney	-	negative
B	Contralateral skin site	O	<i>Ln renales</i>	+	<i>M. bovis</i>
C	<i>Ln cervicalis superficialis</i> L	P	Heart (rV)	#	<i>M. gordonae</i>
D	<i>Ln cervicalis superficialis</i> R	Q	Tonsil	§	<i>M. septicum/M. peregrinum</i>
E	<i>Ln axillaris profundus</i> L	R	<i>Ln retroph medialis</i>	nd	not done
F	<i>Ln axillaris profundus</i> R	S	Jejunal Peyer's Patch	cont	contaminated
G	Lung - dors. caud. lobe L	T	Ileum		
H	<i>Ln tracheobronchialis</i> L	U	<i>Ln mesenterialis cran.</i>		
J	<i>Lnn mediastinales</i>	V	<i>Ln ileocolici</i>		
K	Liver	W	Lung lesioned		
L	<i>Ln hepatici</i>	X	Bone marrow		
M	Spleen				

**Table S3: Primers used for Polymerase Chain Reaction (PCR)-based genotyping of VPM1002 and its derivatives and expected PCR product..**

target	primer	sequence (5'-3')	product size (in bp)		
			VPM1002	PDX	NUOG
LLO	Hlynt.fw	AATGCTGTACCAAATTTGCAATTAAT	500	500	500
	Hlyint.rev	CTAAGACGCCAATCGAAAAGAAACA			
Pdx	Pdx1loc.fw	ATGGATCCTGCAGGTAACCCAGC	900	300	900
	Pdx1loc.rev	ATGACCGACAGCGATCTCGTCC			
NuoG	nuoG-flank.fw	CACTGACATCCGGGTAGGCC	2400	2400	300
	nuoG-flank.rev	TCATGAGCCCGCTCCGAT			



**Figure S1: Percentage of (a) CD4<sup>+</sup>, (b) CD8<sup>+</sup> and (c) γδ T cells after *in vitro* stimulation with bovine purified protein derivative (bPPD; TB antigen) of vaccinated or mock-treated goats. Box plots represent values of the p/u ratio ( $\frac{\text{bPPD stimulated}}{\text{unstimulated}}$ ). There were no significant differences between groups (Kruskal-Wallis test).**



**Figure S2: Percentage of cells within major T cell subsets with detectable levels of intracellular Interferon gamma after *in vitro* stimulation with bPPD of vaccinated or mock-treated goats.** Box plots represent values of the p/u ratio ( $\frac{\text{bPPD stimulated}}{\text{unstimulated}}$ ) of % IFN- $\gamma$ + cells within the population of (a) CD4+ T cells, (b) CD8+ T cells, and (c)  $\gamma\delta$  T cells. There were no significant differences between groups (Kruskal-Wallis test).