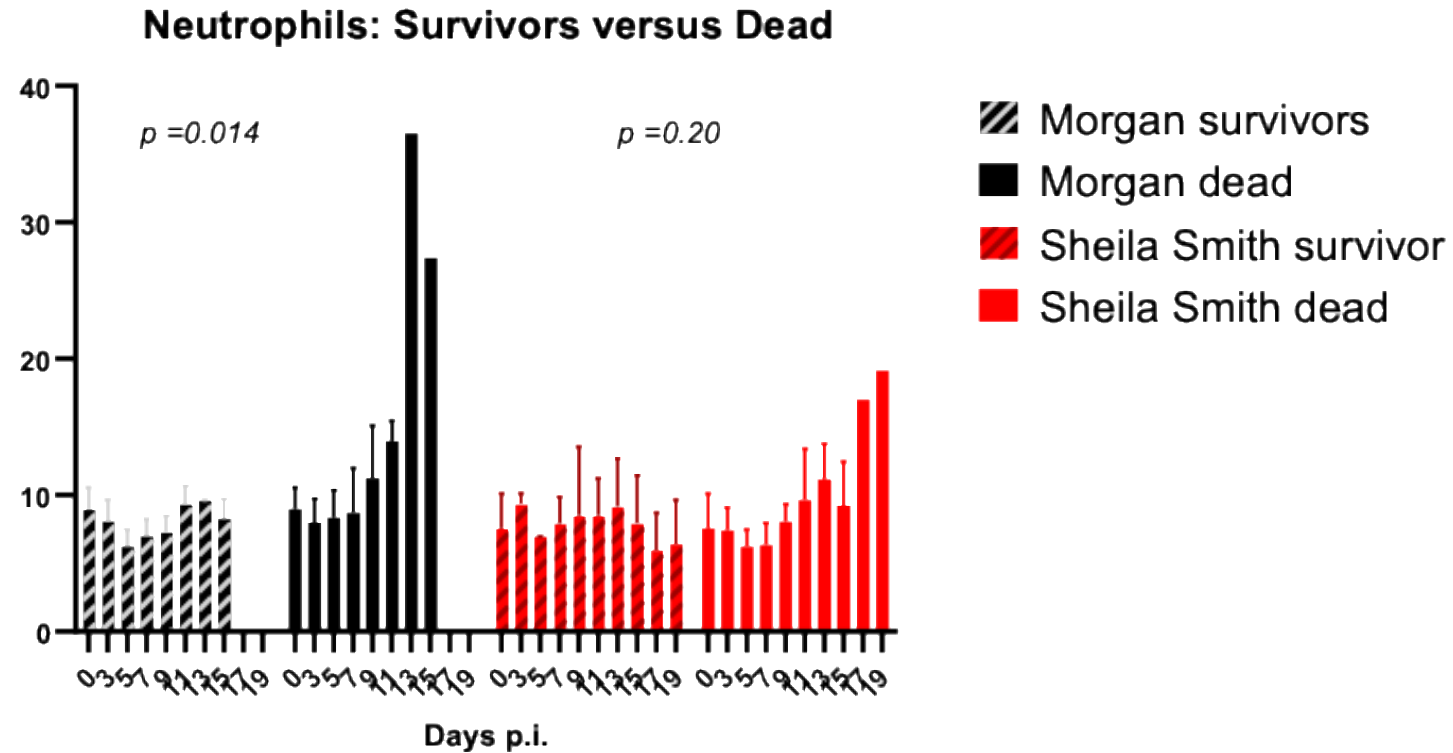




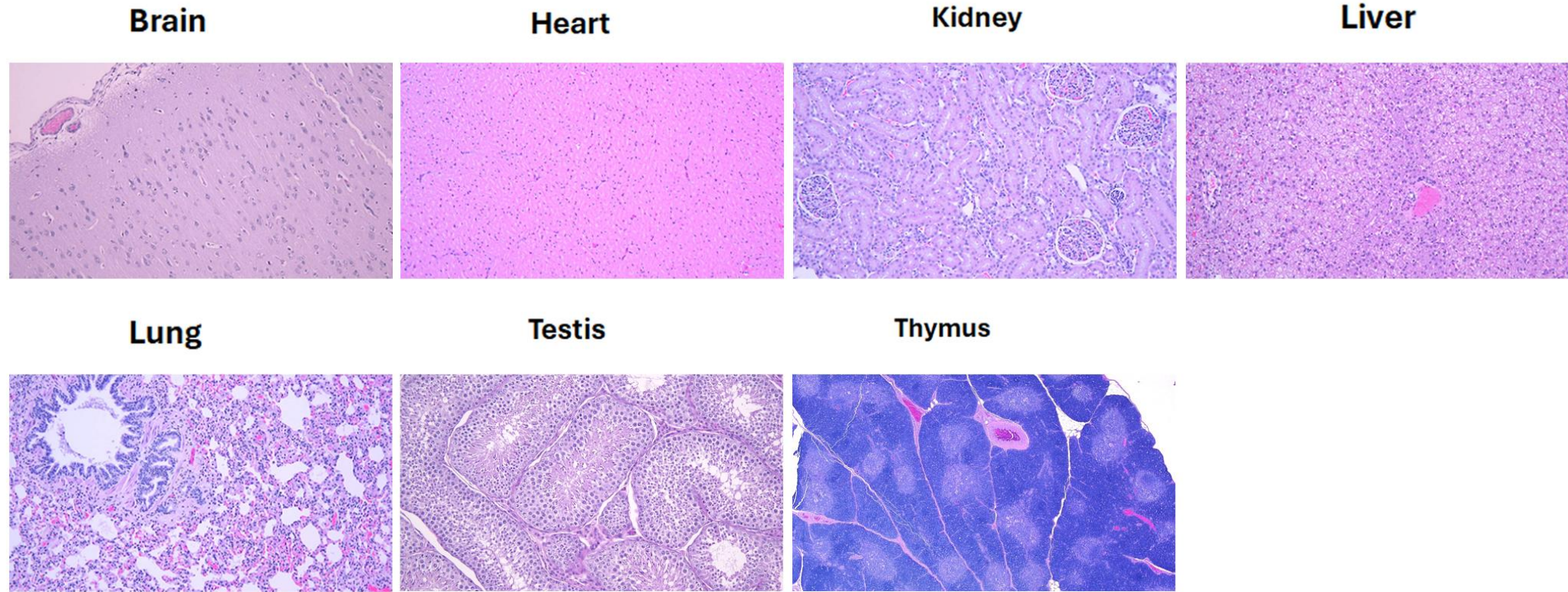


Figure S2. Histopathological findings in unvaccinated dogs that survived virulent *R. rickettsii* infection. Survived unvaccinated dogs (PBS, PHS, KTT, RBU) also exhibited limited histological alterations relative to animals succumbed to death. Lesions were milder (severity scores 1–2) and restricted to isolated inflammatory foci in select organs, including liver, lung, or thymus for the animals overcame the severe disease progression.

[illegible]

Tabel S2. Blood-derived DNAs assessed by q-PCR targeting Sca 4 gene (Stoll et al., 2026)

[illegible]

Table S3. Tissue sample-derived DNAs assessed by q-PCR targeting Sca 4 gene (Stoll et al., 2026)

		Infection status of tissue samples															
									Brain			Lymph nodes					
Group	Animal	Heart	Lung	Liver	Spleen	Kidney	Thymus	B.M.	Cerebrum	Cerebellum	Brain Stem	Mediastir	Tracheot	Prescapu	Testis OR	Tonsil	
Sheila Smith Controls	PHS3	-	-	-	-	-	-	-	-	-	-		-		-		
	HIT3	-	-	-	-	-	-	-	+	+	-		+		+		
	KTT3	-	-	-	-	-	-	-	-	-	-	-	-		-		
	ISS3	-	-	-	-	-	-	-	-	-	-	-	-		-		
	SOT3	-	-	-	-	-	-	-	-	-	-		-		+,+		
Morgan Controls	PBS3	-	-	-	-	-	-	-	-	-	-		-		-		
	RBU3	-	-	-	-	-	-	-	-	-	-		-		-		
	HVT3	-	-	-	-	-	-	-	-	-	-	-	-		-		
	DIS3	-	-	+	-	-	-	-	+	-	-	-	-	-	-	-	
	RUT3	-	-	-	-	-	-	+	-	+	-	-	-	-		+	
Iowa Controls	PXT3	-	-	-	-	-	-	-	-	-	-		-		-		
	PTT3	-	-	-	-	-	-	-	-	-	-		-		-		
	IZS3	-	-	-	-	-	-	-	-	-	-		-		-		
	HKS3	-	-	-	-	-	-	-	-	-	-		-		-		
	KDS3	-	-	-	-	-	-	-	-	-	-		-		-		
Vaccine Sheila smith Challenge Morgan	OFS3	-	-	-	-	-	-	-	-	-	-	-	-		-		
	JET3	-	-	-	-	-	-	-	-	-	-		-		-		
	KVT3	-	-	-	-	-	-	-	-	-	-		-		-	-	
	LWT3	-	-	-	-	-	-	-	-	-	-		-		-		
	GLS3	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
Vaccine Morgan Challenge Sheila Smith	LJS3	-	-	-	-	-	-	-	-	-	-		-		-		
	EKT3	-	-	-	-	-	-	-	-	-	-		-		-		
	JHT3	-	-	-	-	-	-	-	-	-	-		-		-		
	OWT3	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	FVS3	-	-	-	-	-	-	-	-	-	-		-		-		
Vaccine Morgan Challenge Morgan	FQT3	-	-	-	-	-	-	-	-	-	-		-		-	-	
	DVS3	-	-	-	-	-	-	-	-	-	-		-		-		
	EF3	-	-	-	-	-	-	-	-	-	-		-		-		
	FAS3	-	-	-	-	-	-	-	-	+	-	-	-		-		
	SKT3	-	-	-	-	-	-	-	-	-	-		-		-		
Vaccine Iowa Challenge Sheila Smith	FZT3	-	-	-	-	-	-	-	-	-	-	-	-		-		
	GRT3	-	-	-	-	-	-	-	-	-	-	-	-		-		
	FBS3	-	-	-	-	-	-	-	-	-	-	-	-		-		
	HOS3	-	-	-	-	-	-	-	-	-	-	-	-		-		
	JZS3	-	-	-	-	-	-	-	-	-	-		-		-		
Vaccine Iowa Challenge Morgan	GQT3	-	-	-	-	-	-	-	-	-	-		-		-		
	IGT3	-	-	-	-	-	-	-	-	-	-		-		-		
	JQT3	-	-	-	-	-	-	-	-	-	-	-	-		-		
	CTS3	-	-	-	-	-	-	-	-	-	-		-		-		
	GTS3	-	-	-	-	-	-	-	-	-	-		-		-		