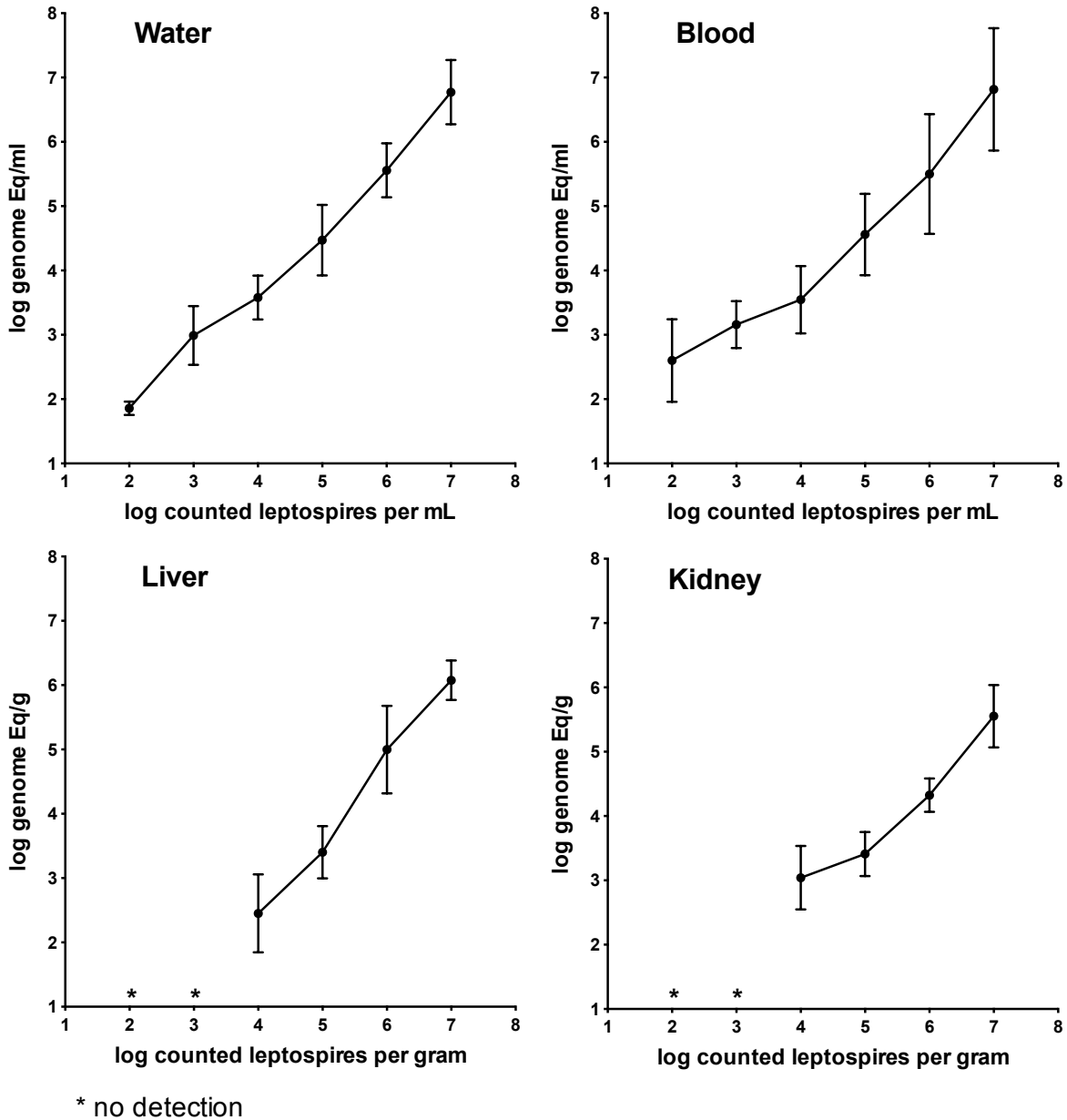


1 **Table S1:** Burden of leptospires in kidney, liver and lung of an animal infected with  $10^8$   
2 leptospires, 1-hour post-infection and an animal infected with  $2.5 \times 10^2$  leptospires, 8-days post-  
3 infection. For each organ, three fragments from different sites were extracted and analyzed by Real  
4 Time PCR to determine if the distribution of leptospires are localized or spread equally. The mean  
5 was calculated based on the bacterial load quantified from three different pieces of the same tissue.  
6

Leptospires Inoculum	Time of necropsy post-infection	Mean $\pm$ SD concentration of leptospires per gram of tissue		
		Kidney	Liver	Lung
$10^8$	1 hour	$1.07 \pm 0.11 \times 10^4$	$2.57 \pm 0.14 \times 10^4$	$2.29 \pm 0.11 \times 10^3$
$2.5 \times 10^2$	8 days	$9.55 \pm 0.06 \times 10^7$	$1.05 \pm 0.37 \times 10^7$	$3.16 \pm 0.23 \times 10^5$

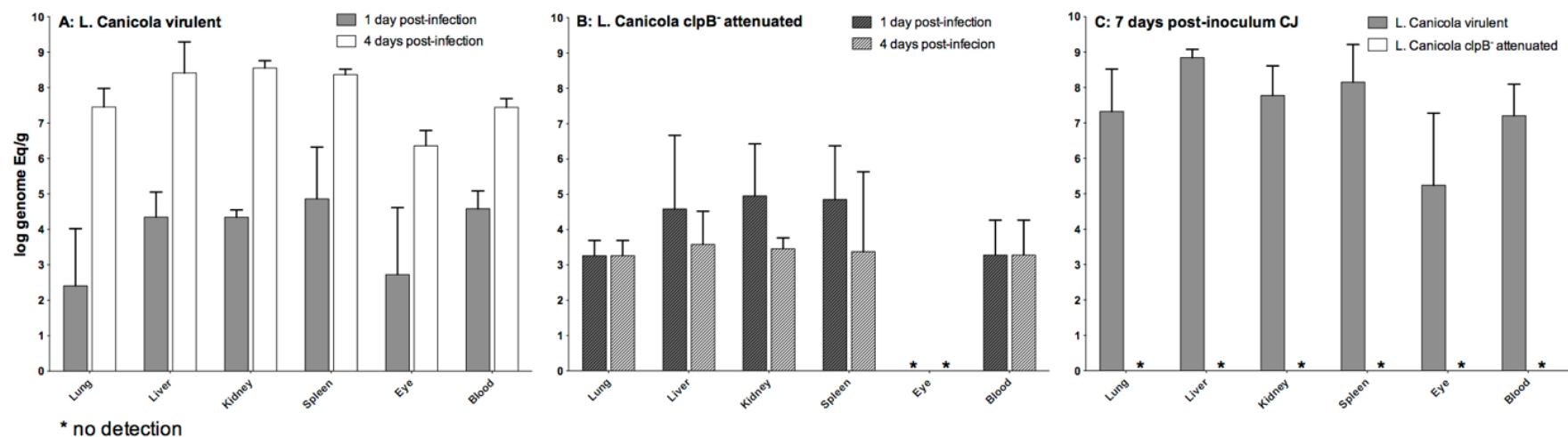
7

8 **Figure S1**



9 **Figure S1.** Results of the spiking experiments with Fiocruz L1-130 strain. Water and tissues were  
 10 spiked with dilutions of  $1 \times 10^6$  to  $1 \times 10^0$  leptospire per milliliter or gram of water or blood and  
 11 tissue, respectively. Each point represents the mean result (logarithmic scale) of three independent  
 12 experiment performed in water, kidney, liver and blood. Error bars represent the standard  
 13 deviation.

14 **Figure S2**



15 **Figure S2.** Kinetics dissemination of leptospires in tissues from hamsters infected intraperitoneally and conjunctivally with  $10^8$   
 16 leptospires. Animals were infected with a virulent wild-type *Canicola* strain (A) and compared with a *clpB* mutant of a virulent *L.*  
 17 *Canicola* strain which lost its virulence phenotype (B), using the IP route (A and B), and CJ route (C). Analysis of the tissues were  
 18 performed 1 and 4-days post IP infection (A and B), and 7-days post CJ infection (C) by the mean result of two perfused hamsters for  
 19 all the strains. Each column represents the mean (logarithmic scale) of two independent experiments. Error bars represent the standard  
 20 deviation.