

## Supplement 1

Partial views of the city of Porteirinha, Minas Gerais state, Brazil. A. Higher region. B.

Lower region



## Supplement 2

Comparison of seropositivity for canine leishmaniasis registered in the first canine census survey (CCS<sub>1</sub>) and first prevalence point (1<sup>st</sup> PP) in urban and rural areas of Porteirinha, Minas Gerais State, Brazil.

Area	No. dogs		Prevalence (%)	Confidence interval (95%)
	Examined	Positive		
Urban	1230	55	4.4	3.39–5.78
Rural	3841	236	6.1	5.41– 6.96
Total	5071	291	-	-
Mean	-	-	5.7	5.11–6.41

Odds ratio 1.37 (1.01–1.88); Yates corrigido  $\chi^2=4.04$ ,  $p = 0.044$

CVL, canine visceral leishmaniasis; CCS, canine census survey; PP, prevalence point

### Supplement 3

Data from the canine census surveys (CCSs) between 1999 and 2000, before the canine control action in the urban area of Porteirinha (Minas Gerais, Brazil).

Indicators	Canine census surveys				
	CCS <sub>2</sub>	CCS <sub>3</sub>	CCS <sub>4</sub>	CCS <sub>5</sub>	CCS <sub>6</sub>
No. dogs examined	1398	1504	1878	2045	2299
Accumulated no. of dogs examined	1398	2902	4780	6825	9124
No. seropositive dogs (new cases)	14	23	30	12	10
Accumulated no. of seropositive dogs	14	37	67	79	89
No. seropositive dogs (followed up)	14	30	56	51	41
No. seropositive dogs (surviving)	14	7	26	39	31
Survival rate (%)	100	50	86.6	69.6	60.8
Mortality index (%)	0	50	13.4	30.4	39.2
Growth rate of the of seropositive canine population (%)	-	7.6	24.9	8.9	11
Average prevalence rate (%)	1	2.5	3	2.5	1.8
Average incidence rate (cases/1000dogs/year)	10	15.3	15.9	5.9	4.3

## Supplement 4

Relative distribution of coat type and sex associated with the prevalence ratio evaluated in the third canine census survey (CCS<sub>3</sub>). Porteirinha, Minas Gerais state, Brazil.

Characteristics	Relative distribution (%)	No. dogs		Prevalence and confidence interval (%)	
		Examined	Positive		
Coat type	Long-haired	18.2	274	2	0.7 (0.09 – 2.59)
	Short-haired	81.8	1230	35	2.8 (1.93 – 3.83)
	Total	100.0	1504	37	2.46 (1.76 – 3.41)
Odds ratio= 3.98 (0.93 – 24.09); relative risk 1.02 (1.01 – 1.04); $\chi^2$ (Pearson) 4.18, p = 0.0409					
Gender	Female	40.7	612	16	2.61 (1.55 – 4.30)
	Male	59.3	892	21	2.35 (1.50 – 3.63)
	Total	100.0	1504	37	2.46 (1.76 – 3.41)
Odds ratio 1.1 (0.58 – 2.15) ; Yates corrigido $\chi^2 = 0.02$ , p = 0.880					

## Supplement 5

Data from the 3<sup>rd</sup> canine census survey (CCS<sub>3</sub>) per neighborhood of the urban area of Porteirinha, Minas Gerais state, Brazil. Incidence is expressed by the number of new cases of CVL/canine population exposed in the area x 1000. Prevalence is expressed by the number of cases of CVL/canine population exposed in the area x 1000. CMI stands for Comparative Morbidity Index.

Neighborhood	No. dogs		Seropositive dogs			Incidence	Prevalence	CMI
	New	Introduced	New	Existent	Total			
Centro	21	38	5	6	320	15.6	1.87	0.88
Floresta	5	9	0	0	43	0	0	0
Morada do Parque	0	3	0	0	8	0	0	0
Ouro Branco	12	24	0	0	144	0	0	0
Renascença	8	17	0	0	124	0	0	0
São Judas Tadeu	10	49	9	12	237	38	5.06	2.16
São Sebastião	5	19	0	5	97	0	5.15	2.83
Vila Kennedy	11	35	0	1	149	0	0.67	0.28
Vila Mato Verde	5	8	1	1	32	31.3	3.12	1.31
Vila Serranópolis	10	15	3	3	136	22.1	2.2	0.88
Vila União	5	15	4	4	100	40	4	1.71
Vila Vitória	13	12	1	5	114	8.8	4.38	2.27
Total	105	244	23	37	1504	15.2	2.46	-

## Supplement 6

Distributions per year of georeferenced domiciles with canine and human cases of visceral leishmaniasis from 1998 to 2001. Porteirinha, Minas Gerais state, Brazil.

Neighborhood	Canine cases per year				Total	Human cases (from 1998 to 2001)		Total
	1998	1999	2000	2001		Symptomatic	Inapparent	
Centro	0	6	6	3	15	1	0	1
Floresta	0	0	1	1	2	0	0	0
Mato Verde	0	1	1	0	2	0	0	0
Morada do Parque	0	0	0	0	0	0	0	0
Kennedy	5	1	9	5	20	0	0	0
Ouro Branco	1	0	2	3	6	0	0	0
Renascença	3	0	11	7	21	0	0	0
São Judas Tadeu	18	11	12	13	54	4	3	7
São Sebastião	3	5	8	4	20	0	0	0
Serranópolis	3	3	3	2	11	0	2	2
Vitória	6	5	4	2	17	3	42	45
União	5	5	14	3	27	11	18	29
<b>Total</b>	<b>44</b>	<b>37</b>	<b>71</b>	<b>43</b>	<b>195</b>	<b>19</b>	<b>65</b>	<b>84</b>

