

## **Supporting Information for**

# **Targeted drug delivery and treatment of endoparasites with biocompatible particles of pH responsive structure**

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## Supporting Information

**Table S1.** Initial masses used in preparation of triplicates (1-3) of alginate/chitosan particles free of drug (ALGCH), in presence of 38  $\mu$ M mebendazole (MB) or 38  $\mu$ M ivermectin (IVM); recovered masses obtained after lyophilization of supernatants in the particles washing procedure and corresponding averages with standard deviation.

Sample	Initial mass (mg)	Recovered mass (mg)	Average of recovered masses (mg)
ALGCH (1)	100.00	13.81	15.93 $\pm$ 2.22
ALGCH (2)	100.00	15.73	
ALGCH (3)	100.00	18.24	
ALGCH-MB (1)	111.21	14.26	15.77 $\pm$ 1.75
ALGCH-MB (2)	111.21	15.35	
ALGCH-MB (3)	111.21	17.69	
ALGCH-IVM (1)	133.25	12.93	16.39 $\pm$ 3.02
ALGCH-IVM (2)	133.25	17.72	
ALGCH-IVM (3)	133.25	18.51	
			Total average: 16.03 mg

**Table S2.** Hydrodynamic diameters (Dh, nm) obtained by DLS for 0.1 mg/mL solutions of chitosan (CH) and alginate (ALG) in different buffers (80 mM) at 25 °C. Maximal pH variation was 0.02. Dh are average of five independent measurements and variations are standard deviation. Aggregates represent particles size over 2  $\mu$ m.

pH	2.50	3.79	4.10	4.32	4.50	6.50
CH Dh	41 $\pm$ 18	47 $\pm$ 26	58 $\pm$ 17	52 $\pm$ 23	71 $\pm$ 15	aggregates
ALG Dh	aggregates	241 $\pm$ 78	119 $\pm$ 51	137 $\pm$ 42	108 $\pm$ 47	87 $\pm$ 32