

**Supplementary Table S1**—Results of the generalized linear model built to explore factors associated with changes in iCa concentration in 161 chelonians.

	<b>Change in iCa (mmol/L)</b>	<b>Lower 95% CI</b>	<b>Upper 95% CI</b>	<b>P Value</b>
tCa	0.25	0.19	0.3	< 0.001
Albumin	-0.2	-0.28	-0.12	< 0.001
Sex				
Female	-0.09	-0.22	0.03	0.15
Male	-0.05	-0.18	0.08	0.43
Unknown	1			
Organ system affected				
Endocrine/hemopoietic	0.18	0.02	0.33	0.03
GI/liver	0.16	-0.01	0.32	0.06
Other systems	0.07	-0.09	0.23	0.42
Renal/urinary	0.18	0.01	0.36	0.04
Respiratory	0.14	-0.05	0.34	0.15
Skin/musculoskeletal	0.12	-0.04	0.27	0.15
Reproductive	1			
Species				
African spurred tortoises	0.24	0.11	0.38	0.001
Chinese three-striped box turtles	-0.07	-0.23	0.1	0.41
Leopard tortoises	0.29	0.12	0.45	0.001
Red-eared sliders	0.13	0.01	0.24	0.04
Other species	1			