

Report EDPs HCV

for the meeting in 09/16/21

Differential Evolution for all pacientes - long term results

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Differential Evolution (DE)

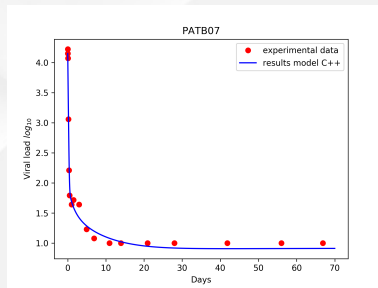
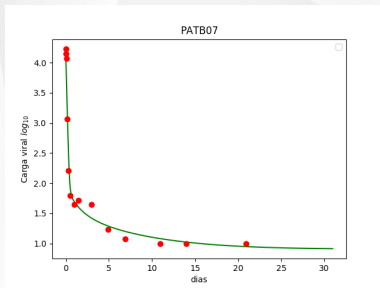
- Performed using up to 54 days of experimental data (Figures on the left)
- Average execution time of each simulation: 17000 seg = 4,72 horas
- maxiter = 30, popsize = 30

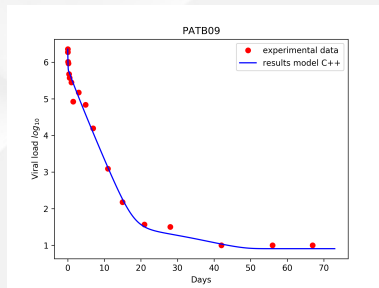
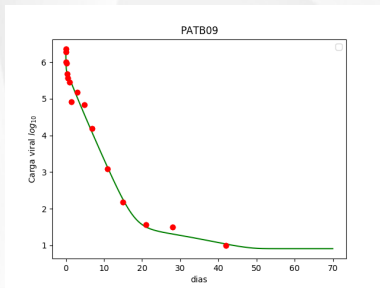
Comments

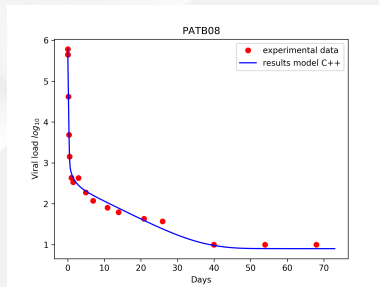
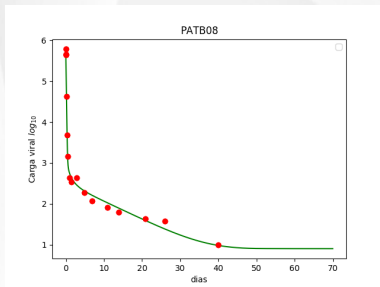
- The prediction is shown together with all the experimental values (Figure on the Right).
- We believe we can justify the failures to represent after 30 days due to having very small or non detectable values.

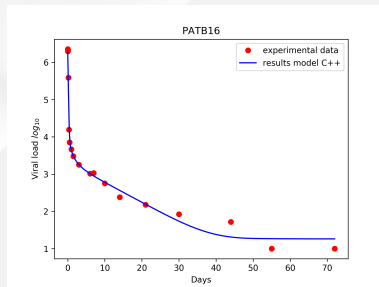
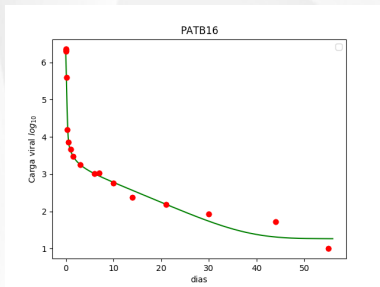
Table: Parameters - patients (B arm)

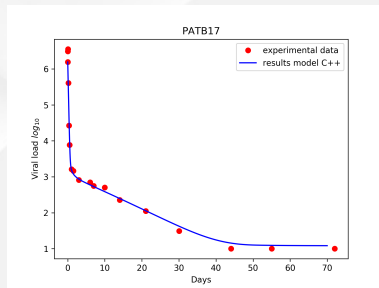
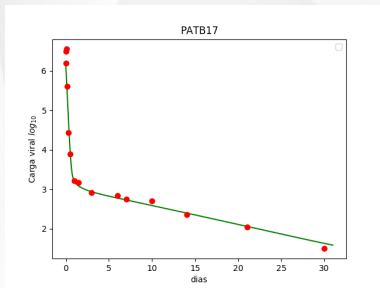
Pat	ϵ_f	ϵ_α	ϵ_S	α	r	δ	μ_C	ρ	θ	σ	c	error
B07	0.219	0.216	0.13	25.92	2.24	0.116	1.892	13.84	1.26	1.88	11.88	0.05
B09	0.28	0.668	0.649	34.85	0.288	0.507	0.241	11.978	1.967	1.51	16.15	0.046
B08	0.759	0.701	0.547	30.82	7.706	0.074	1.405	13.481	1.181	1.089	13.287	0.037
B16	0.746	0.609	0.378	24.17	3.895	0.09	1.321	4.32	1.38	1.25	11.999	0.056
B17	0.61	0.85	0.73	20.55	8.15	0.08	0.82	11.6	1.88	1.56	10.05	0.068
B06	0.196	0.9197	0.764	57.713	2.34	0.067	0.687	11.968	1.213	1.252	11.14	0.058
B15	0.18	0.899	0.64	27.27	4.23	1.25	0.27	12.4	1.22	1.61	13.77	0.059
B11	0.408	0.857	0.386	31.083	4.837	0.386	0.555	11.045	1.194	1.57	12.3	0.054
B10	0.711	0.835	0.214	48.77	1.452	1.62	0.52	4.113	1.524	1.496	10.504	0.083
mean	0.457	0.728	0.49	33.46	3.9	0.466	0.857	10.53	1.424	1.469	12.34	
std	0.235	0.208	0.214	11.48	2.53	0.546	0.532	3.473	0.287	0.223	1.759	



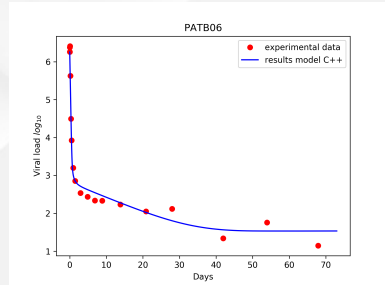
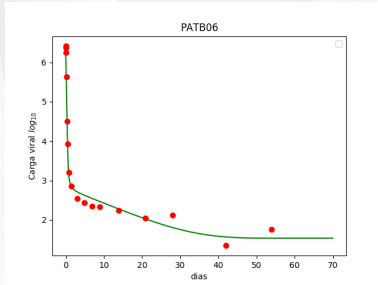


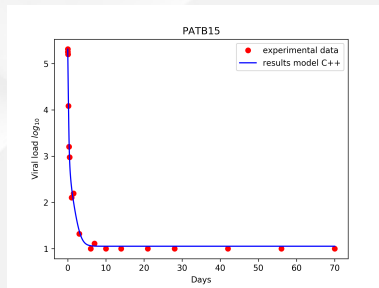
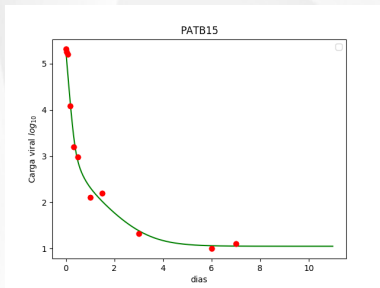


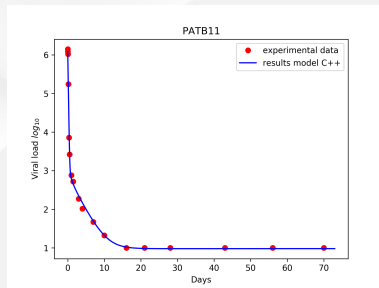
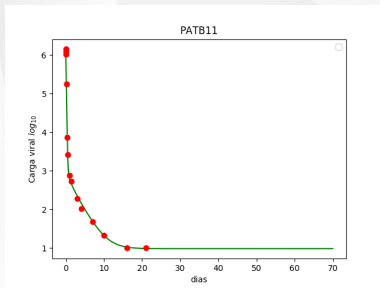




Results B patients







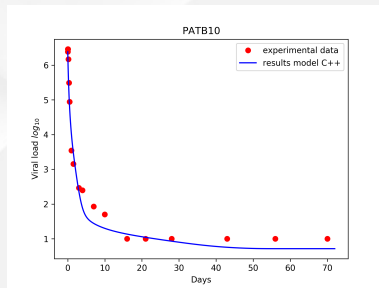
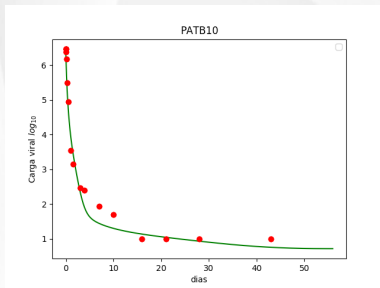


Table: Parameters - patients (C arm)

Pat	ϵ_f	ϵ_α	ϵ_S	α	r	δ	μ_C	ρ	θ	σ	c	error
C05	0.44	0.77	0.74	39.9	2.73	0.079	1.60	7.68	1.02	1.78	10.04	0.0570
C06	0.563	0.873	0.31	52.069	3.612	0.1891	0.546	11.32	1.28	1.93	10.31	0.056
C09	0.74	0.7	0.55	36.58	4.09	0.3	1.31	8.59	1.37	1.78	10.01	0.059
C10	0.27	0.864	0.969	20.9	7.08	0.341	1.62	13.73	1.696	1.85	12.12	0.051
C04	0.366	0.853	0.102	55.47	3.64	0.298	0.888	10.59	1.092	1.004	12.82	0.042
C16	0.11	0.81	0.76	27.44	1.91	0.22	1.92	1.47	1.87	1.29	10.58	0.071
C15	0.723	0.452	0.312	31.17	5.036	0.753	1.71	10.95	1.58	1.276	24.04	0.043
C17	0.364	0.842	0.964	24.5	4.3495	0.617	1.708	12.78	1.359	1.551	11.84	0.057
C14	0.284	0.712	0.135	41.58	0.746	1.56	0.839	4.71	1.204	1.439	12.08	0.055
mean	0.429	0.764	0.538	36.62	3.688	0.484	1.349	9.091	1.386	1.545	12.65	
std	0.199	0.126	0.319	11.24	1.72	0.429	0.45	3.73	0.265	0.297	4.14	

Results C patients

