# Report EDPs HCV for the meeting in 07/22/21

Differential Evolution for all pacientes - long term results

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#### Remarks



#### 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

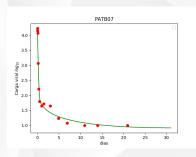
- The prediction is shown together with all the experimental values (Figure on the Right).
- We belive we can justify the failures to represent after 30 days due to having very small or non detectable values.

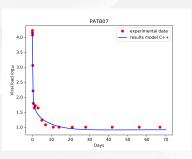


#### Table: Parameters - patients (B arm)

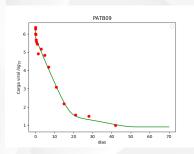
Pat	$\epsilon_{\Gamma}$	$\epsilon_{\alpha}$	$\epsilon_{S}$	α	r	δ	$\mu_{c}$	ρ	θ	σ	С	error
B07	0.219	0.216	0.13	25.92	2.24	0.116	1.892	13.84	1.26	1.88	11.88	0.05
B09	0.28	0.668	0.649	34.85	0.288	0.507	0.241	11.978	1.967	1.51	16.15	0.046
B08	0.759	0.701	0.547	30.82	7.706	0.074	1.405	13.481	1.181	1.089	13.287	0.037
B16	0.91	0.497	0.9395	29.405	7.69	0.14	1.846	13.93	1.92	1.18	11.14	0.047
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	0.951	0.8996	0.787	54.54	1.188	1.818	0.159	5.961	1.39	1.576	10.201	0.086
mean	0.501	0.72	0.619	34.68	4.297	0.49	0.88	11.8	1.469	1.4697	12.21	
std	0.295	0.223	0.227	12.074	2.8299	0.5902	0.639	2.277	0.326	0.235	1.833	

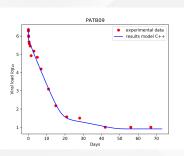




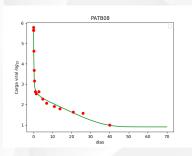


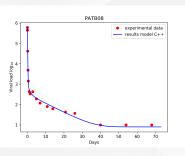




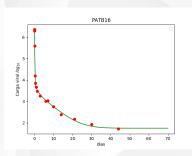


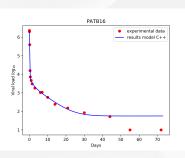




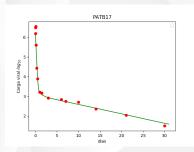


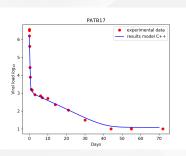




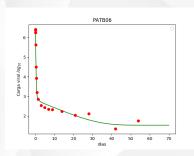


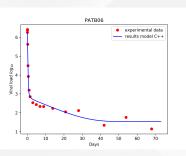




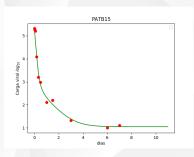


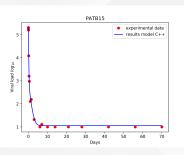




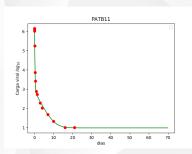


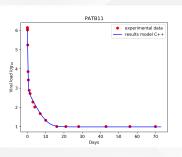




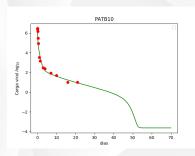


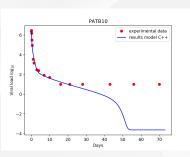














#### Table: Parameters - patients (C arm)

Pat	$\epsilon_{\Gamma}$	$\epsilon_{\alpha}$	$\epsilon_{S}$	$\alpha$	r	δ	μc	ρ	θ	σ	С	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	0.87	0.412	0.654	41.451	1.819	1.948	1.6597	2.661	1.232	1.661	10.14	0.059
mean	0.494	0.731	0.596	36.61	3.808	0.527	1.4402	8.863	1.389	1.569	12.433	
std	0.234	0.168	0.286	11.24	1.541	0.540	0.422	4.041	0.263	0.296	4.218	



