

**S2 Table. Comparison of model predictions for low-dose treatment schedules.**

Model	Group	nadir			
		D1-5 100		D1-5 400	
M1	35 PMs	1.6	$\pm 0.8$	0.3	$\pm 0.2$
		(0.0	3.6)	(0.0	0.8)
M2	35 PMs	1.7	$\pm 0.8$	0.3	$\pm 0.2$
		(0.5	3.7)	(0.1	1.0)
M3	35 PMs	1.8	$\pm 0.9$	0.4	$\pm 0.2$
		(0.8	4.3)	(0.2	1.1)
M4	35 PMs	1.7	$\pm 1.0$	0.4	$\pm 0.2$
		(0.8	4.9)	(0.2	1.1)
M5	35 PMs	1.7	$\pm 1.1$	0.4	$\pm 0.2$
		(0.7	5.5)	(0.2	1.0)
M6	35 PMs	1.5	$\pm 1.1$	0.4	$\pm 0.3$
		(0.9	5.9)	(0.2	1.2)
M7	35 PMs	0.5	$\pm 0.5$	0.1	$\pm 0.3$
		(0.1	3.4)	(0.0	1.0)
M8	35 PMs	0.1	$\pm 0.1$	0.1	$\pm 0.1$
		(0.0	0.4)	(0.0	0.4)
M9	35 PMs	0.7	$\pm 0.4$	0.2	$\pm 0.1$
		(0.1	1.6)	(0.0	0.5)
M10	35 PMs	2.1	$\pm 1.3$	0.6	$\pm 0.4$
		(0.6	5.8)	(0.1	1.8)
M11	35 PMs	1.6	$\pm 1.1$	0.4	$\pm 0.2$
		(0.9	5.5)	(0.2	1.0)
M12	35 PMs	2.4	$\pm 1.2$	0.7	$\pm 0.5$
		(0.8	5.8)	(0.1	2.1)

As in Table 4, predicted *nadir* values for different treatment schedules are shown, based on underlying mathematical models M1–M12. Shown are the values of median, standard deviation, minimum and maximum (in brackets) for two low-dose schedules. Both assume a continuous infusion throughout days 1 to 5, with either 100  $mg/m^2$  or 400  $mg/m^2$  Ara-C per day. No clinical observations are available to compare these predictions, but they give additional insight on the possibility to discriminate models M1–M12 and a general trend showing that for 100  $mg/m^2$  per day despite of M7-M9 almost all nadir values are above 1  $G/L$ . The nadir values for the low-dose infusion with 400  $mg/m^2$  Ara-C per day are in the same range compared to the results of the high-dose schedules (Two further personalised cycles were excluded because for some models no recovery after chemotherapy was observed). The simulated nadirs above 1  $G/L$  for the low-dose schedule (100  $mg/m^2$ ) reflect the lower toxic effects represented by required hospitalisation due to fever and neutropenia and platelet transfusions compared to the low-dose (400  $mg/m^2$ ) and high-dose schedules explored in [3]. As M7-M9 are not able to reflect the lower toxic effects through higher nadir values, the simulation study serves as an indicator that the secondary effect of Ara-C may not be an Ara-C induced reduction of the transition rate.