Supplemental Table 1

Mean growth delay as calculated from the data presented in Supplemental Figure 4B and for the 15 Gy and 12.5 Gy treatments in U87-MG-shp53 and U87-MG-shLuc spheroids, respectively, which showed a regrowth capacity of >75%.

Note: Growth delay is an invalid readout at higher doses because the fraction of spheroids that reaches the analytical end volume of interest ($5xV_{irrad}$) is critically reduced to <50%.

U87-MG-shp53

	Growth delay (d)					
Irradiation (Gy)	**0**	**5**	**10**	**12.5**	**15**	**15****
+ Arg	0	4.2	12.2	15.4	20.4	20.4 (100%)
- Arg	7.3	9.5	15.8	31.0	52.8*	43.2 (76.9%)**
- Arg + Cit	7.3	9.6	16.1	27.3	46.2*	38.9 (83.3%)**

U87-MG-shLuc

	Growth delay (d)					
Irradiation (Gy)	**0**	**5**	**10**	**12.5**		**12.5****
+ Arg	0	5.1	11.2	12.2		12.2 (100%)
- Arg	7.5	9.1	21.6	40.0*		35.9 (83.0%)**
- Arg + Cit	4.2	9.0	23.2	41.1*		40.3 (96.0%)**

*Estimated (minimal) growth delay for the entire spheroid population in the respective treatment arm; the growth delay for spheroids not reaching the analytical endvolume ($5xV_{irrad}$) was set to 61 days according to the period of post-treatment monitoring.

**Growth delay was also calculated for the selective spheroid subpopulation (%) in each treatment arm which reached $5xV_{irrad}$.