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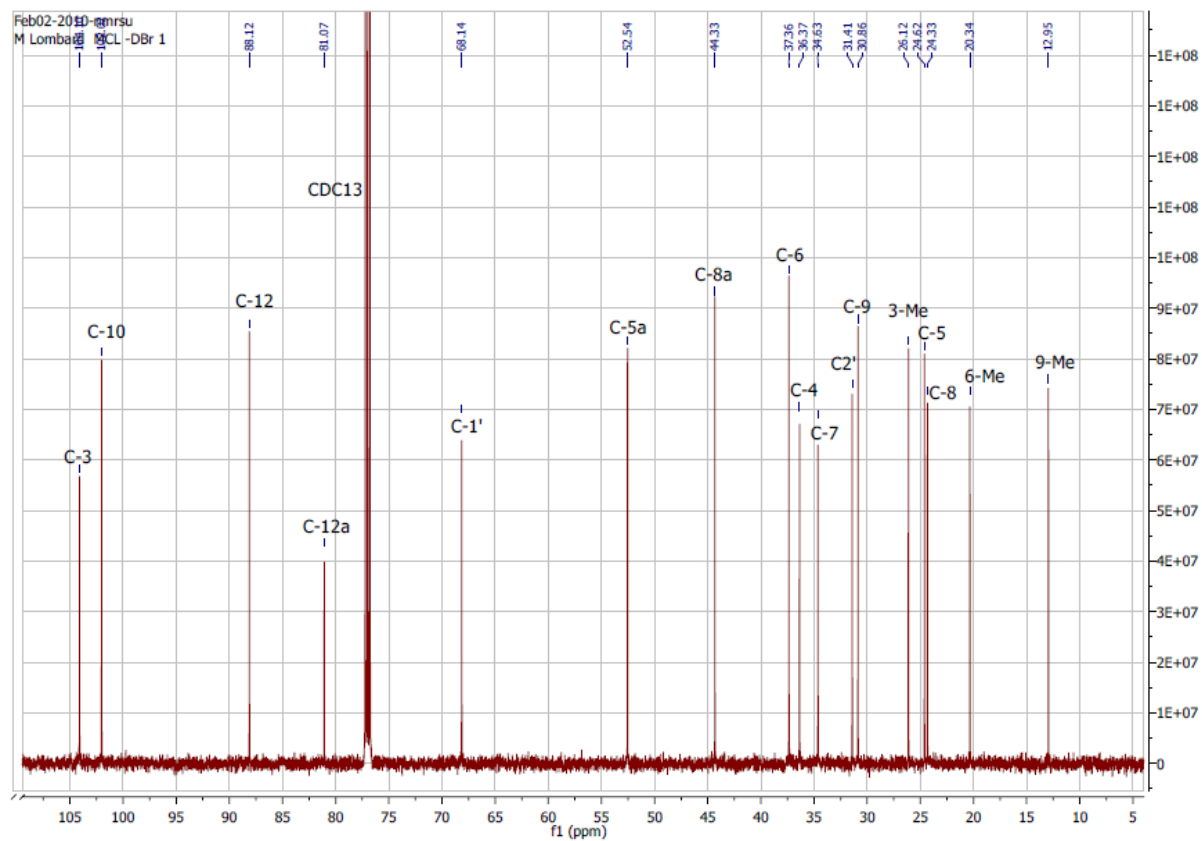
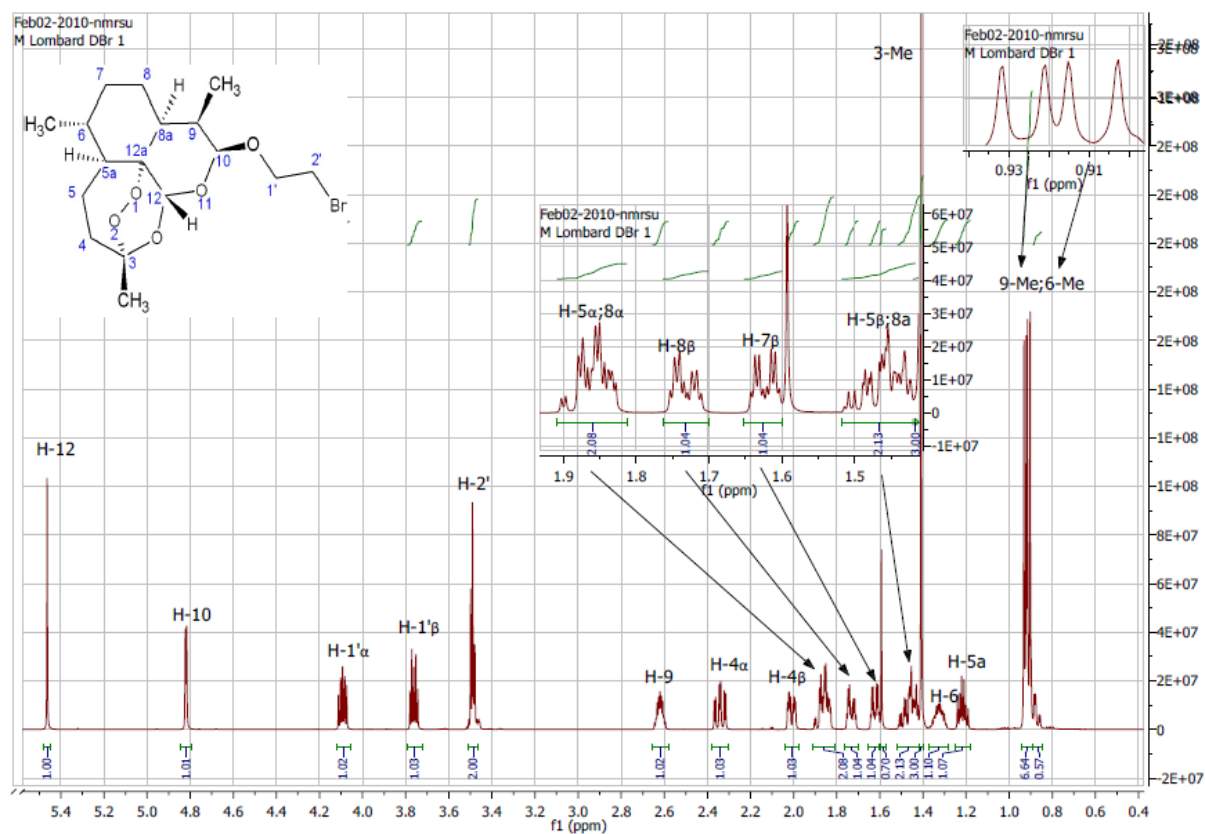
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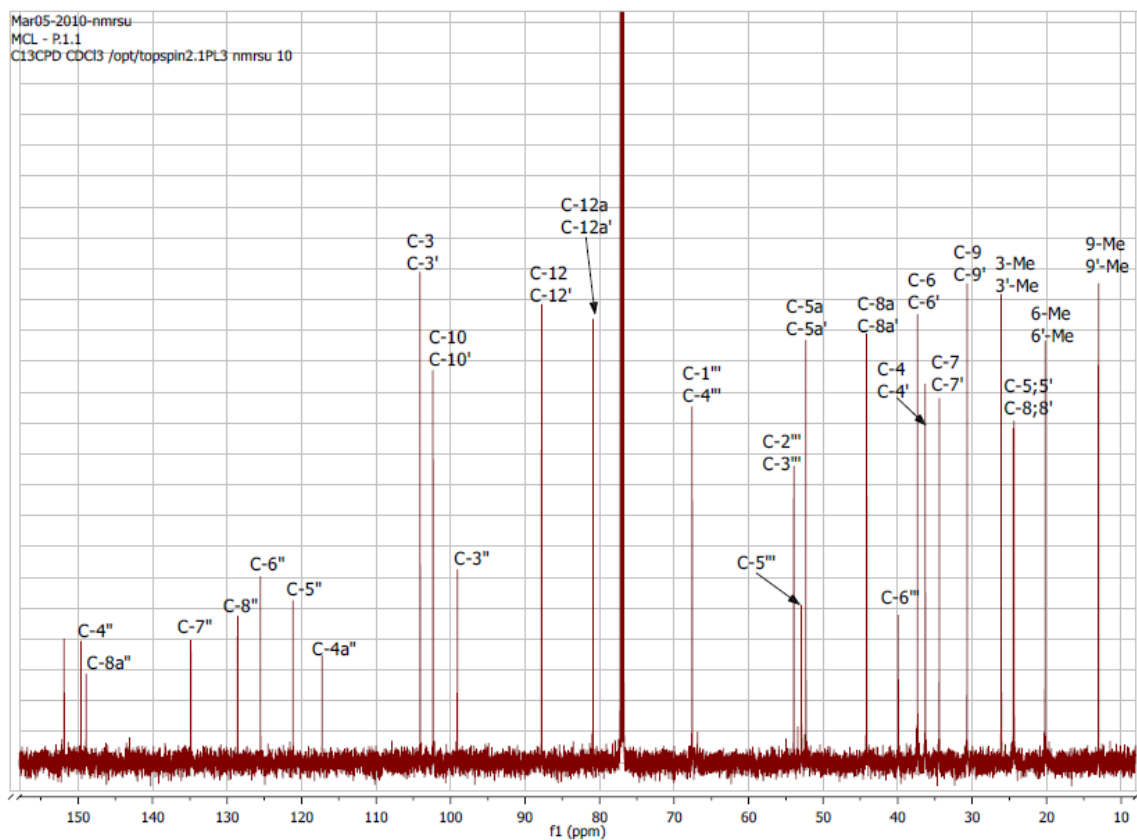
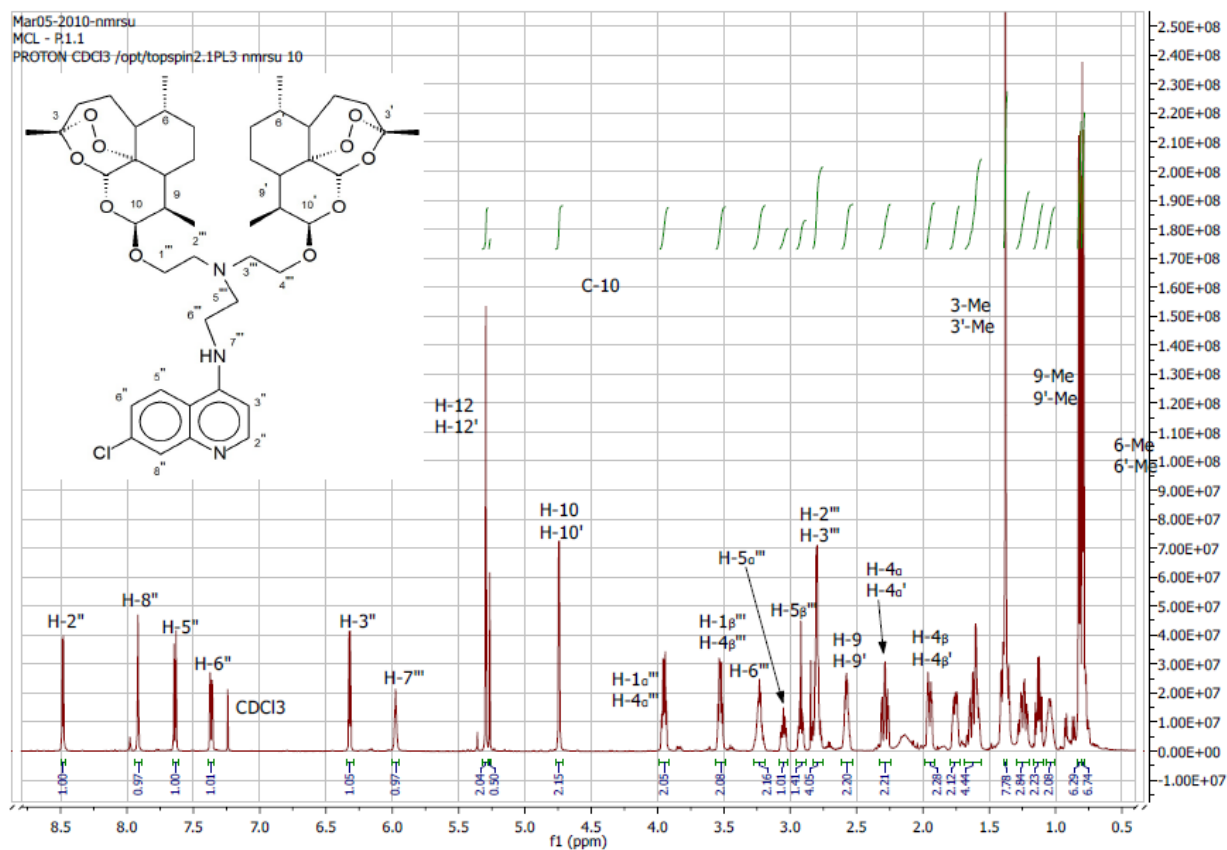
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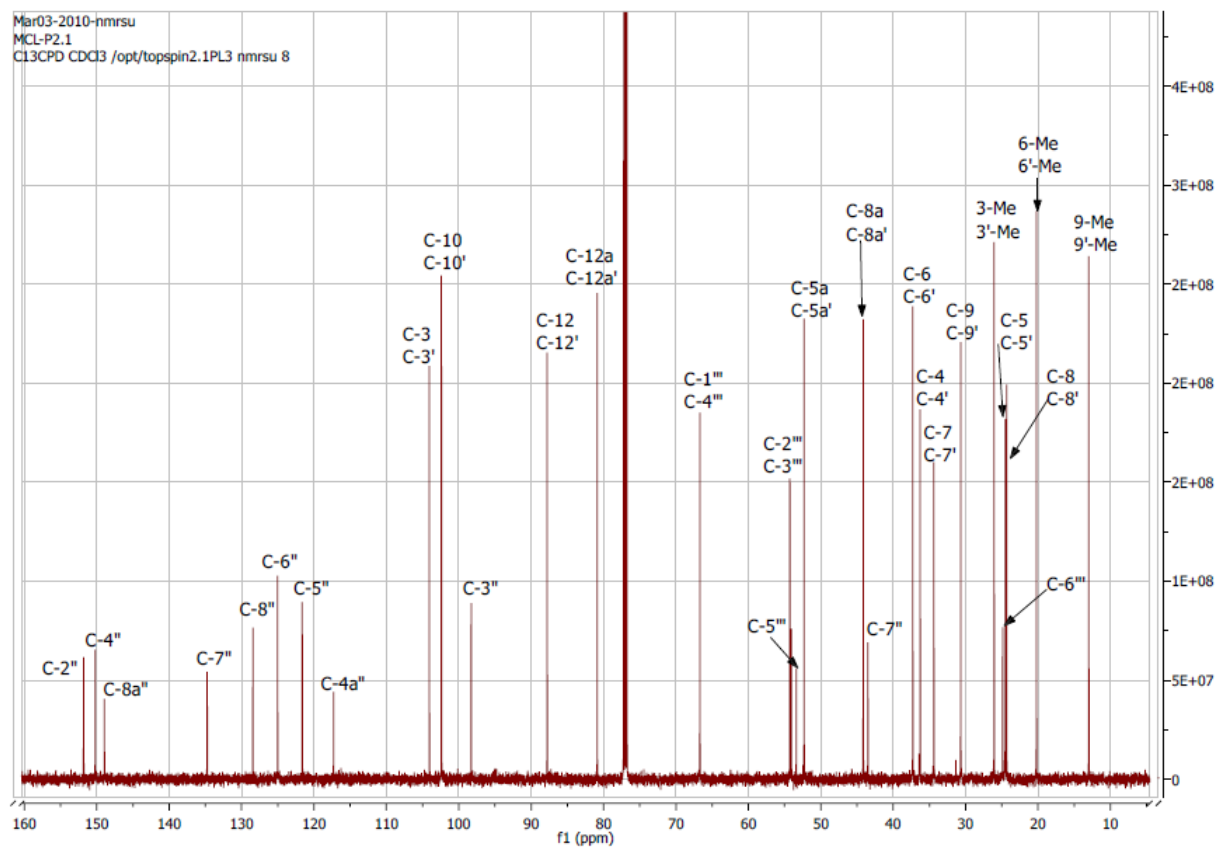
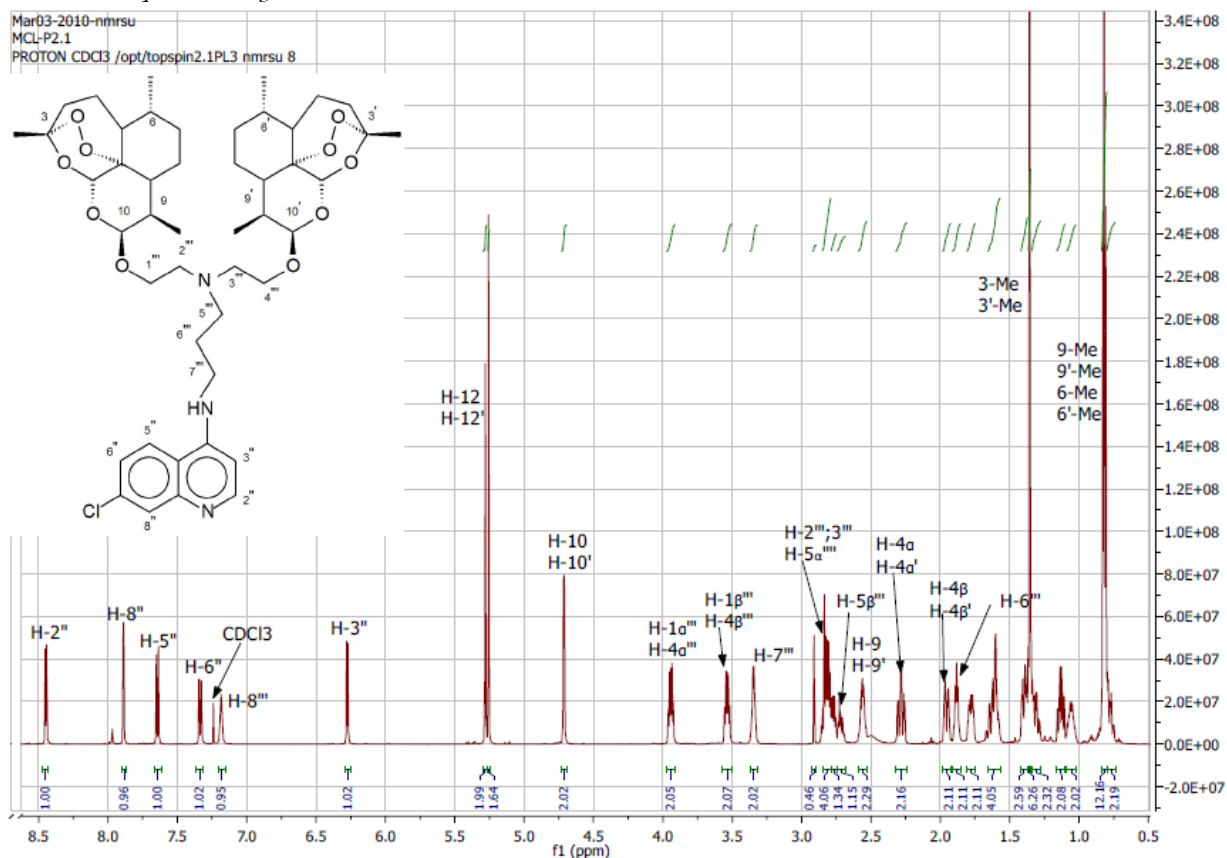
ANNEXURE B

^1H -and ^{13}C -NMR Spectra of the Synthesized Compounds in Article II.

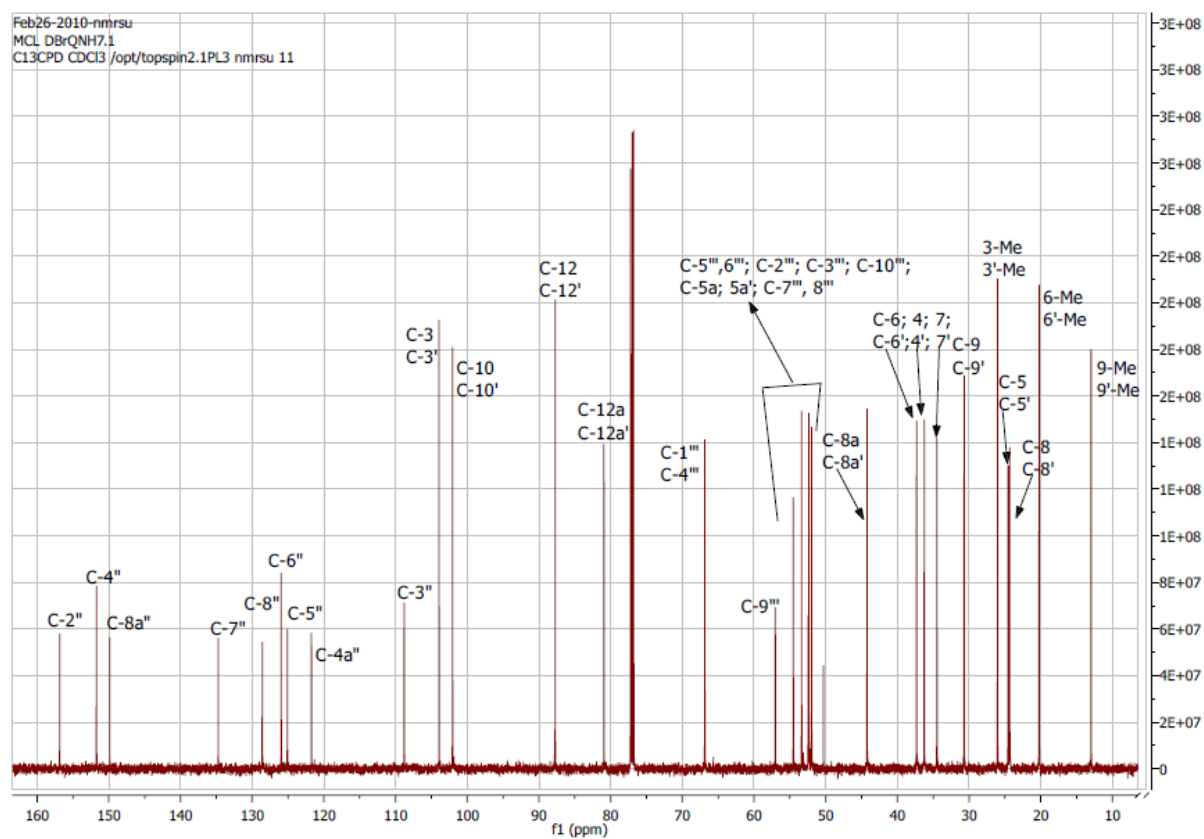
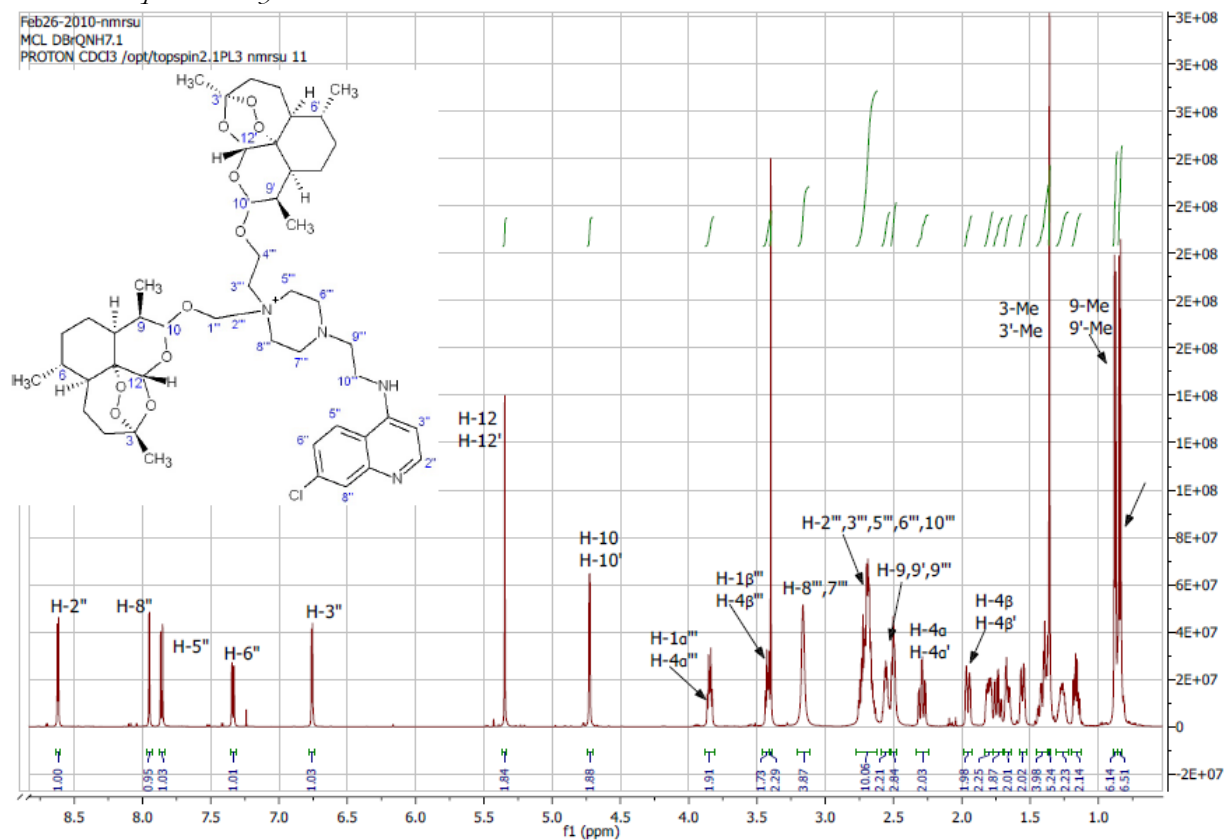
2-(10 β -dihydroartemisinoxy)ethylbromide

Artemisinin-quinoline Hybrid-dimer 7



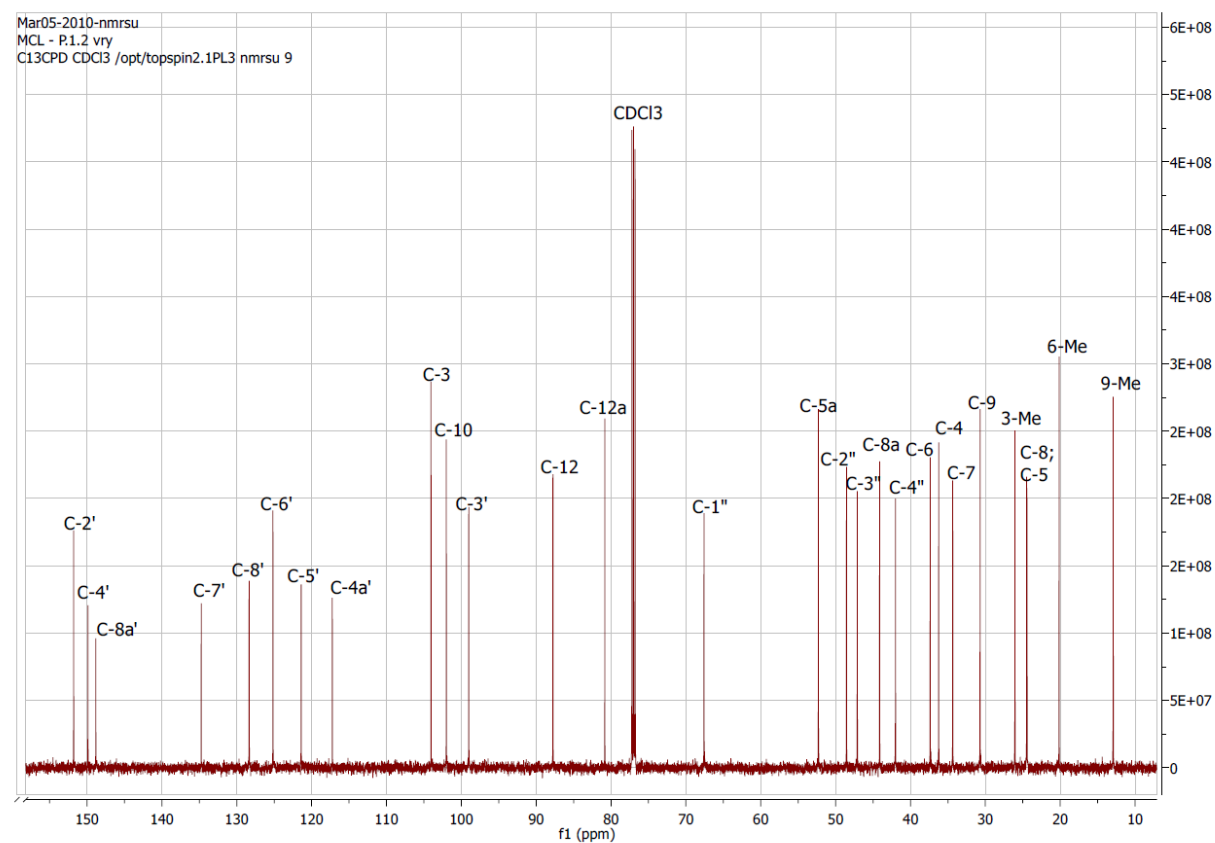
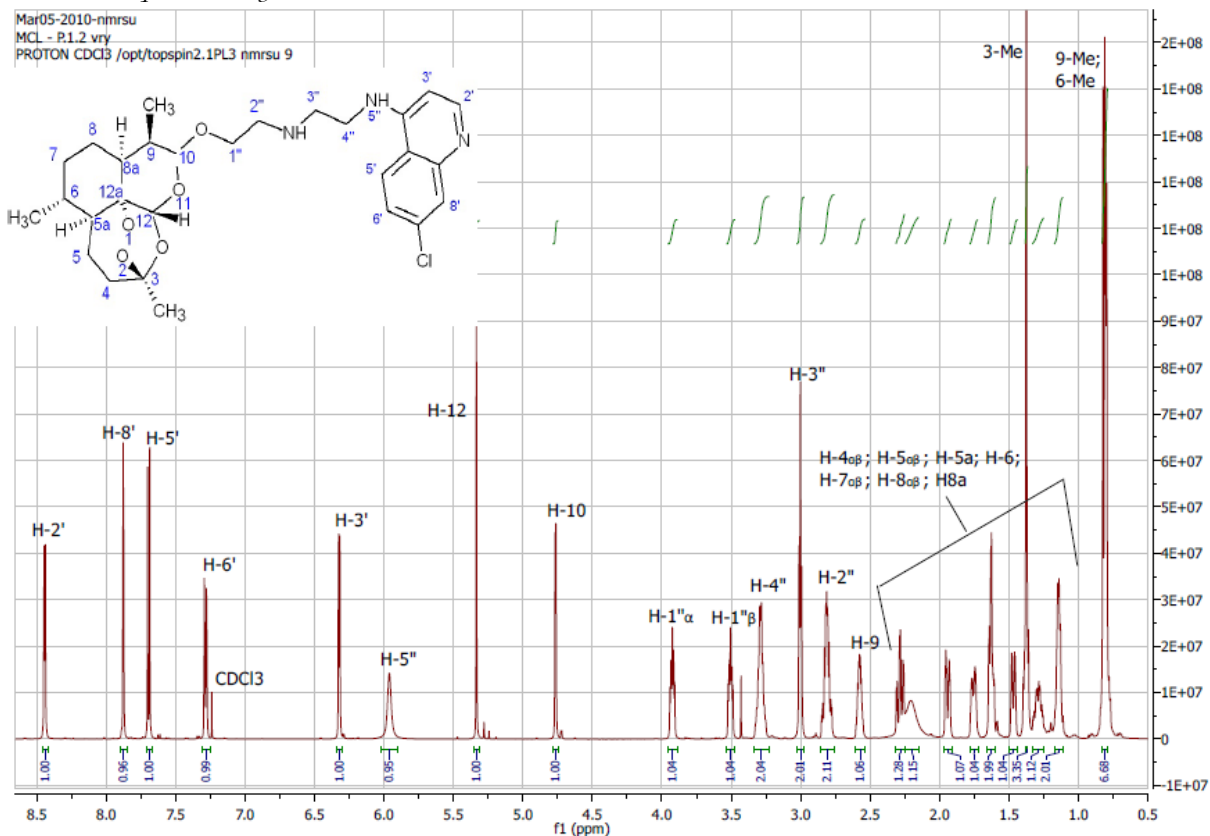
Artemisinin-quinoline Hybrid-dimer 8

Artemisinin-quinoline Hybrid-dimer 10

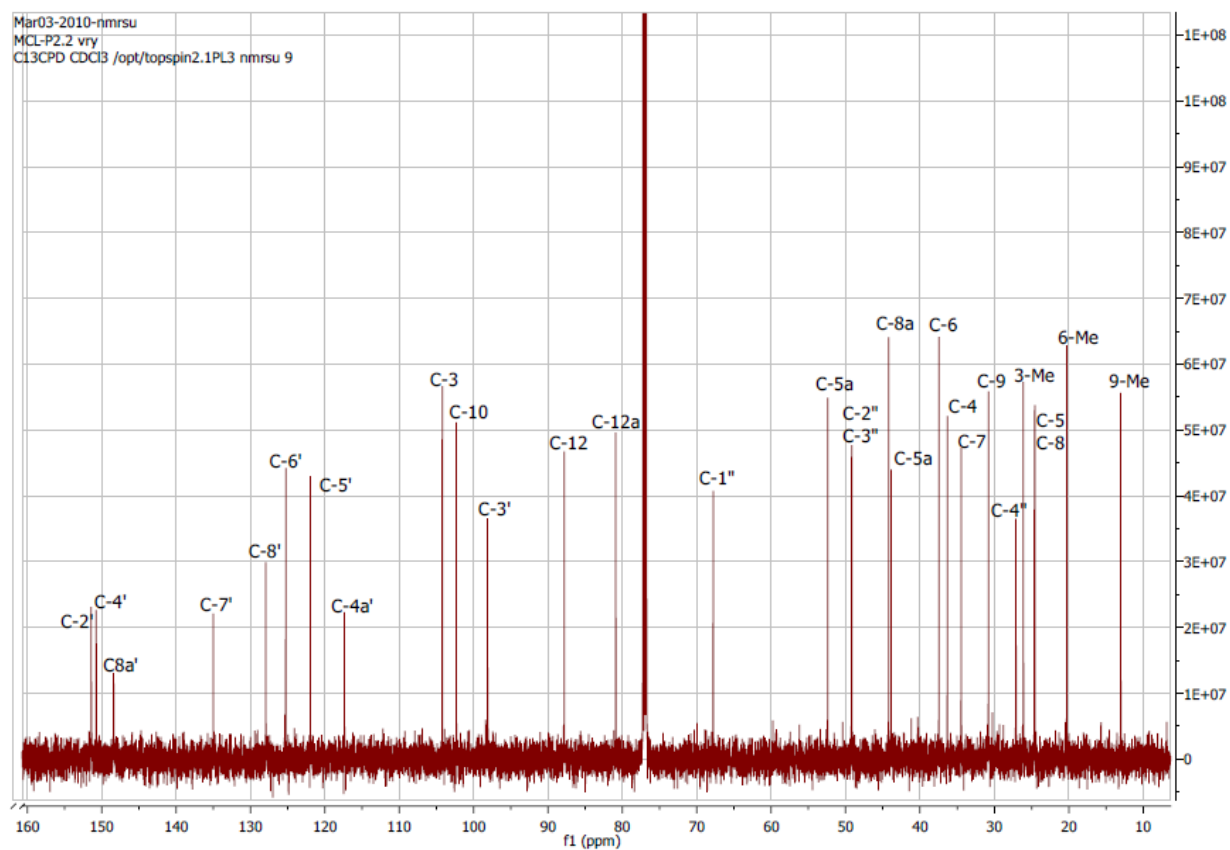
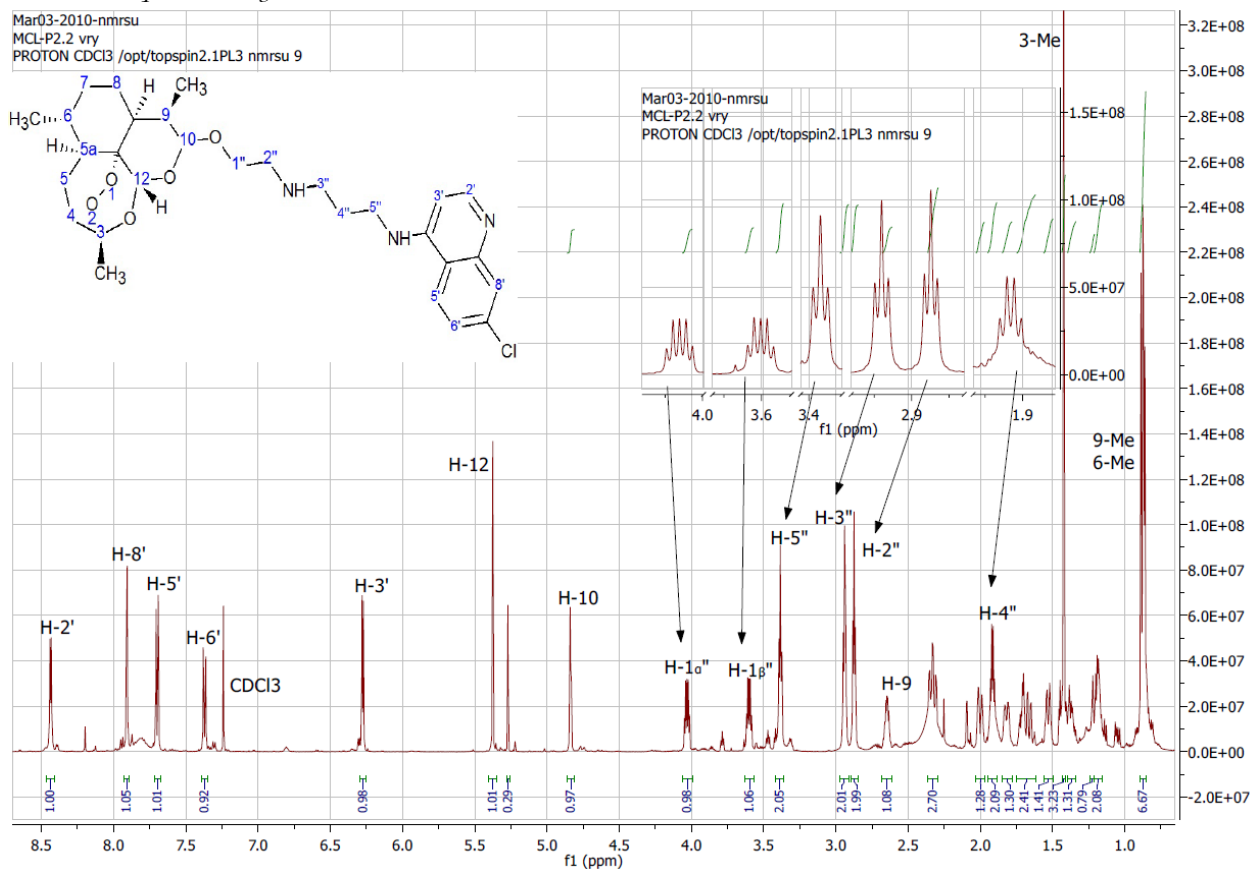


ANNEXURE C

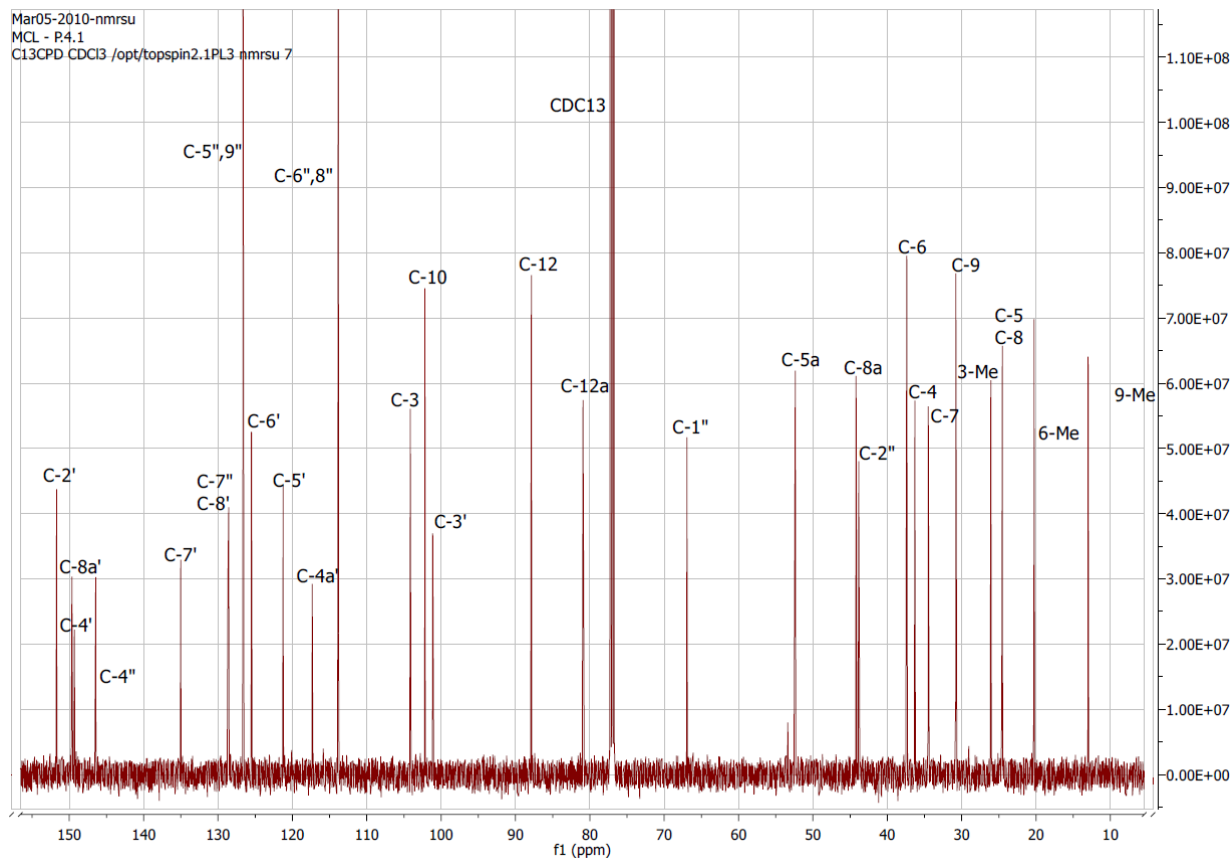
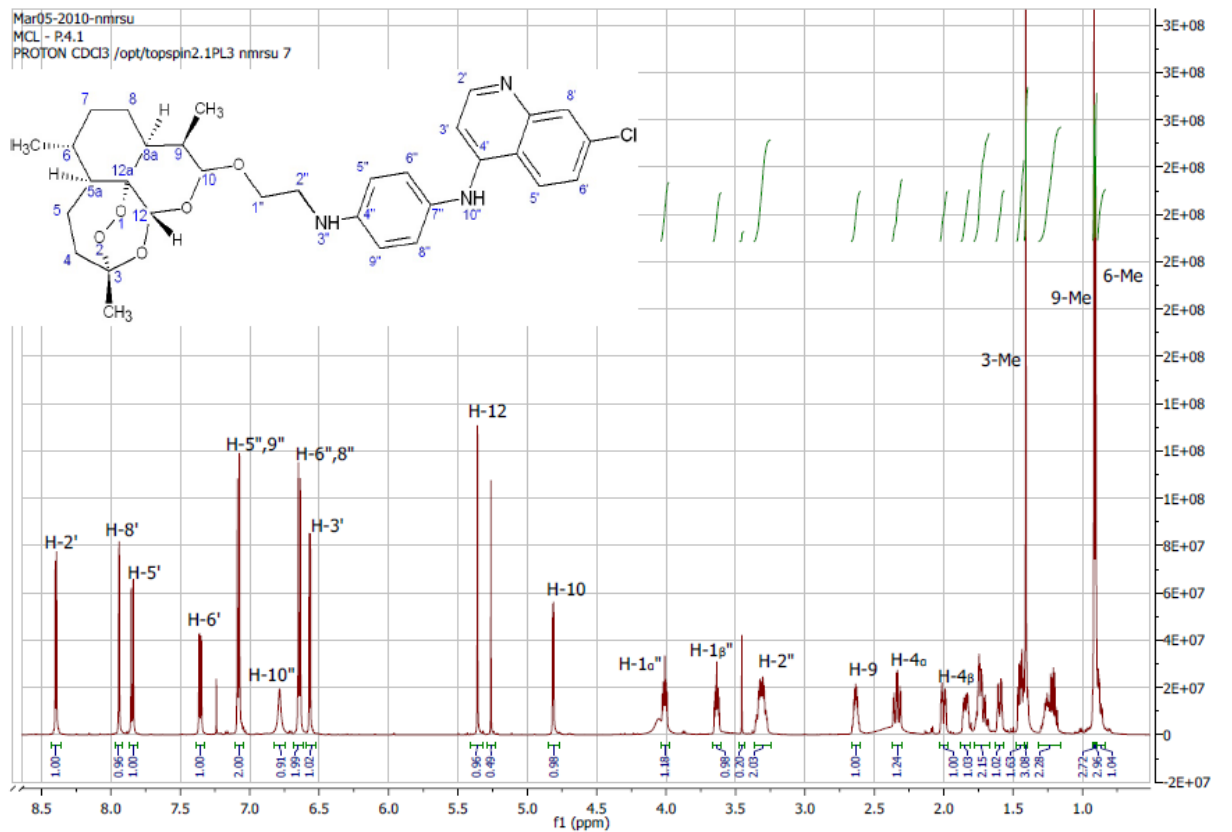
^1H -and ^{13}C -NMR Spectra of the Synthesized Compounds in Article III

Artemisinin-quinoline Hybrid 9

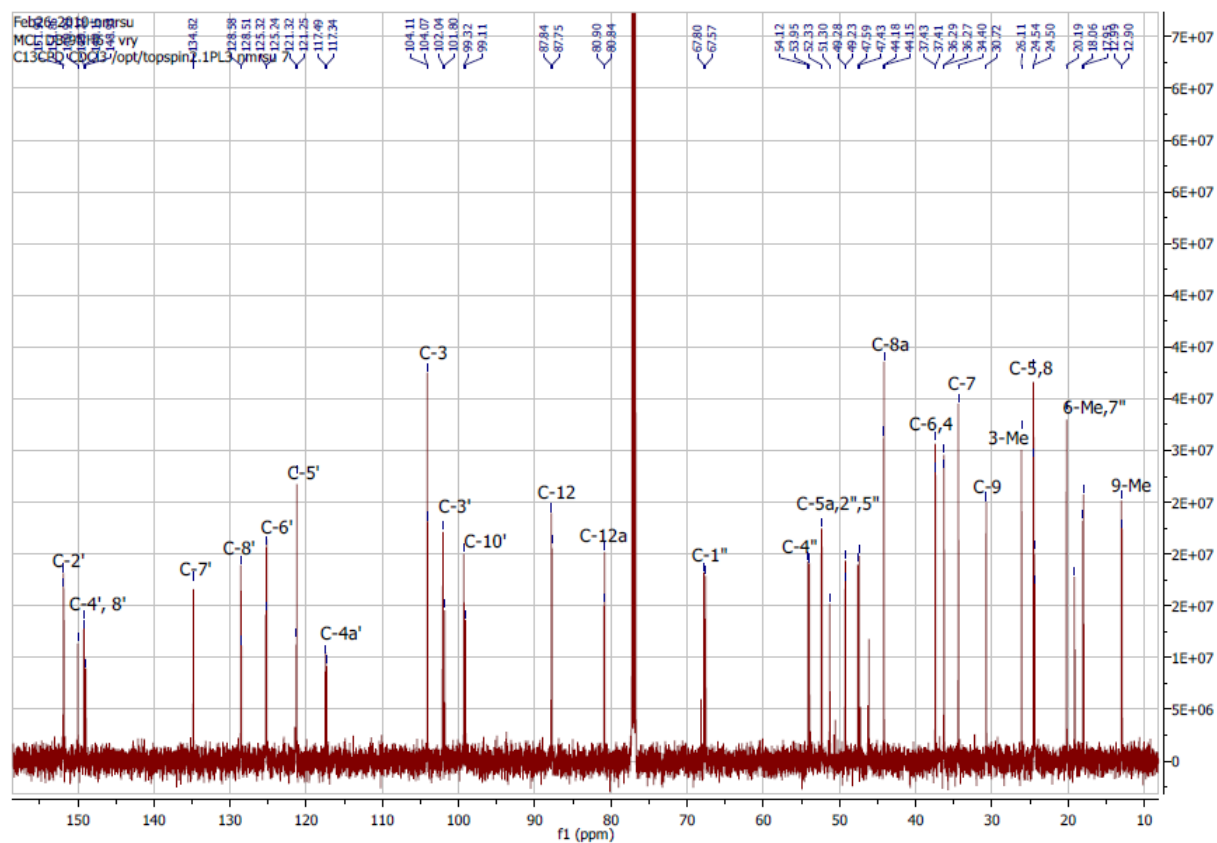
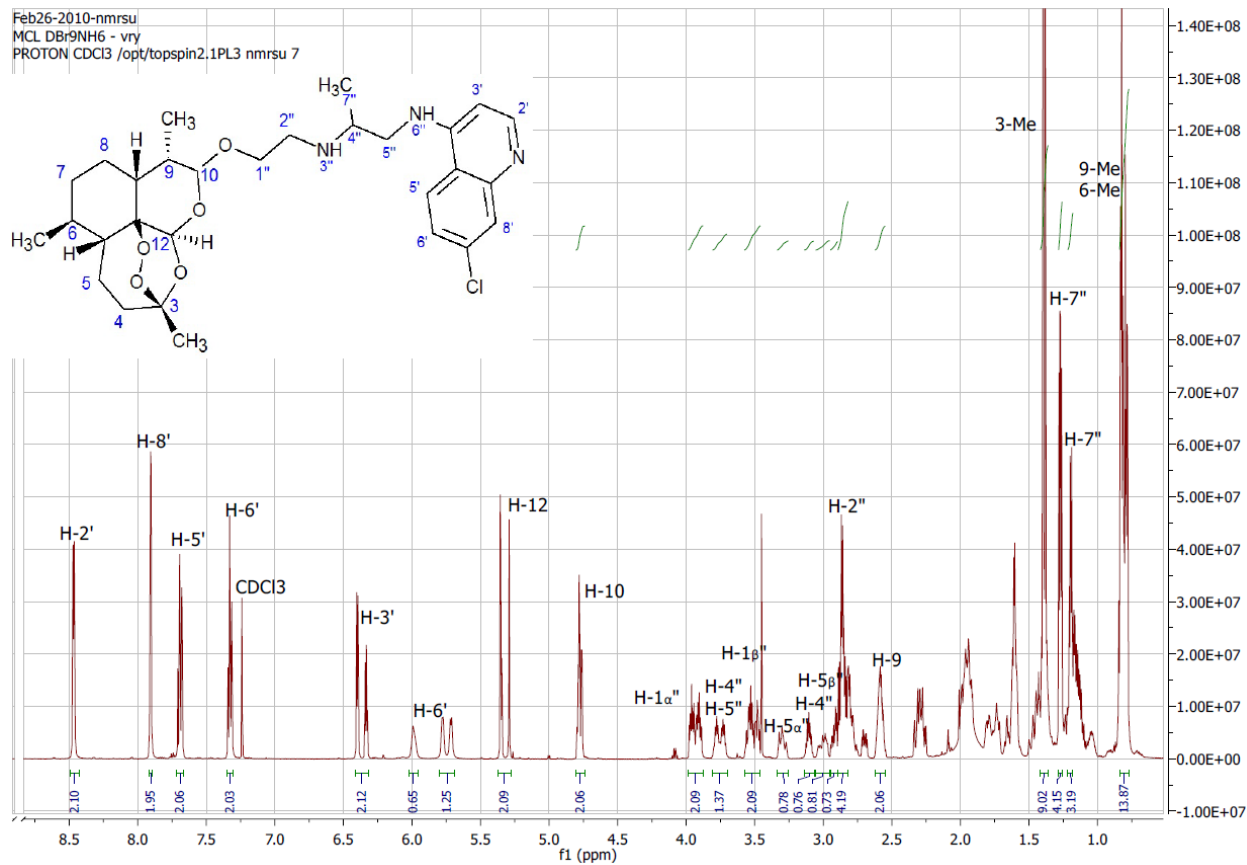
Artemisinin-quinoline Hybrid 10



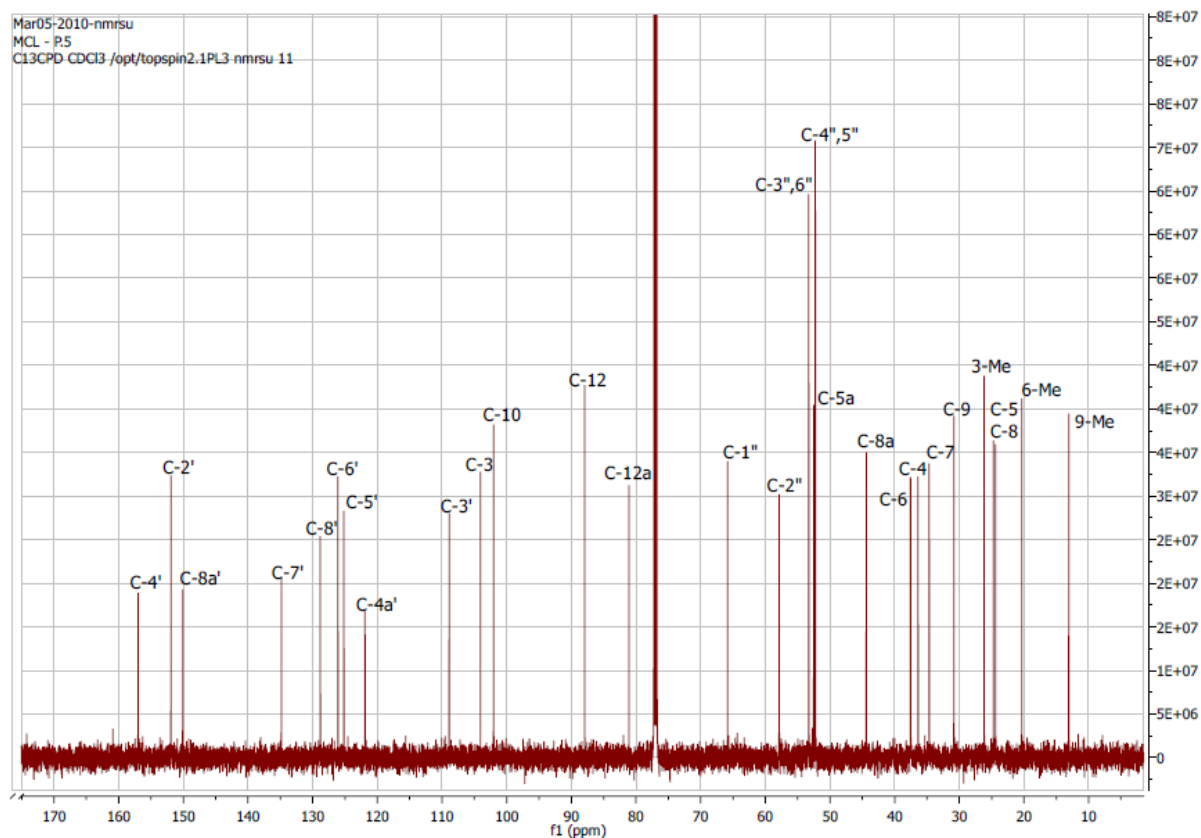
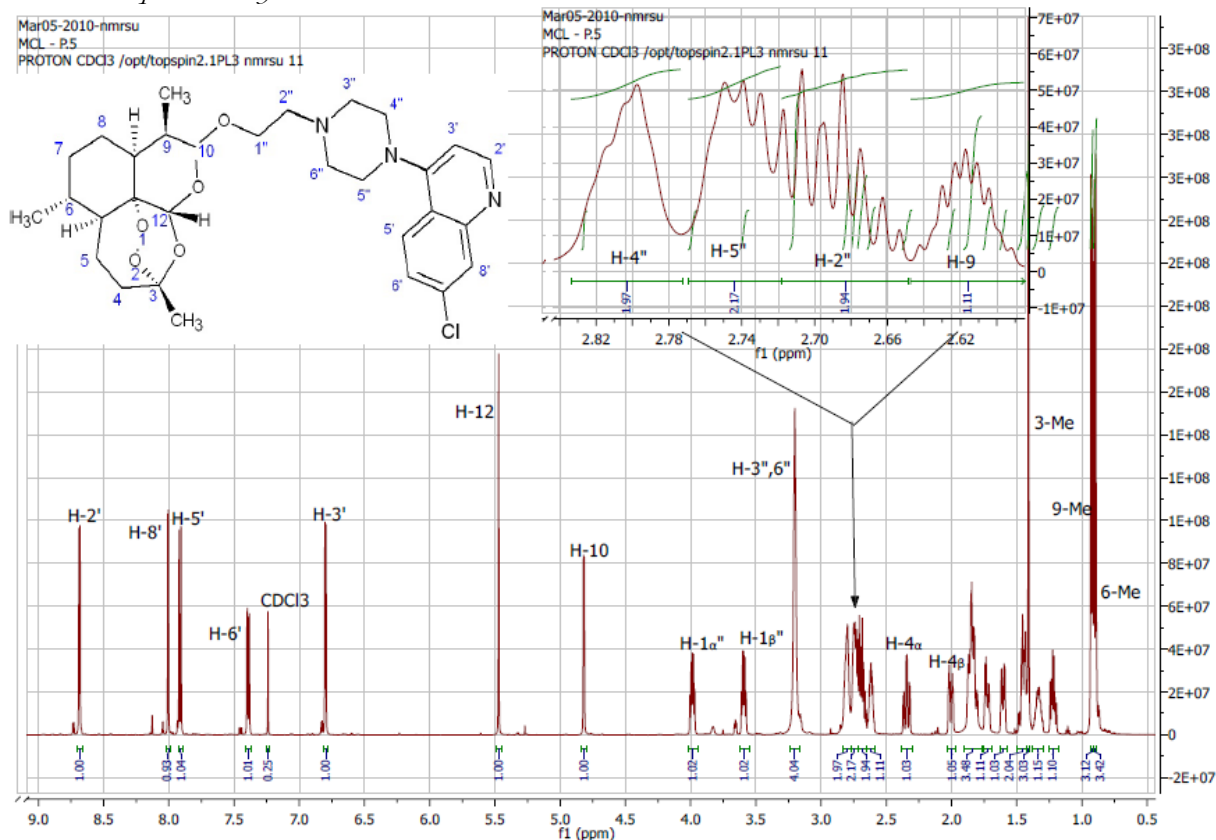
Artemisinin-quinoline Hybrid 11



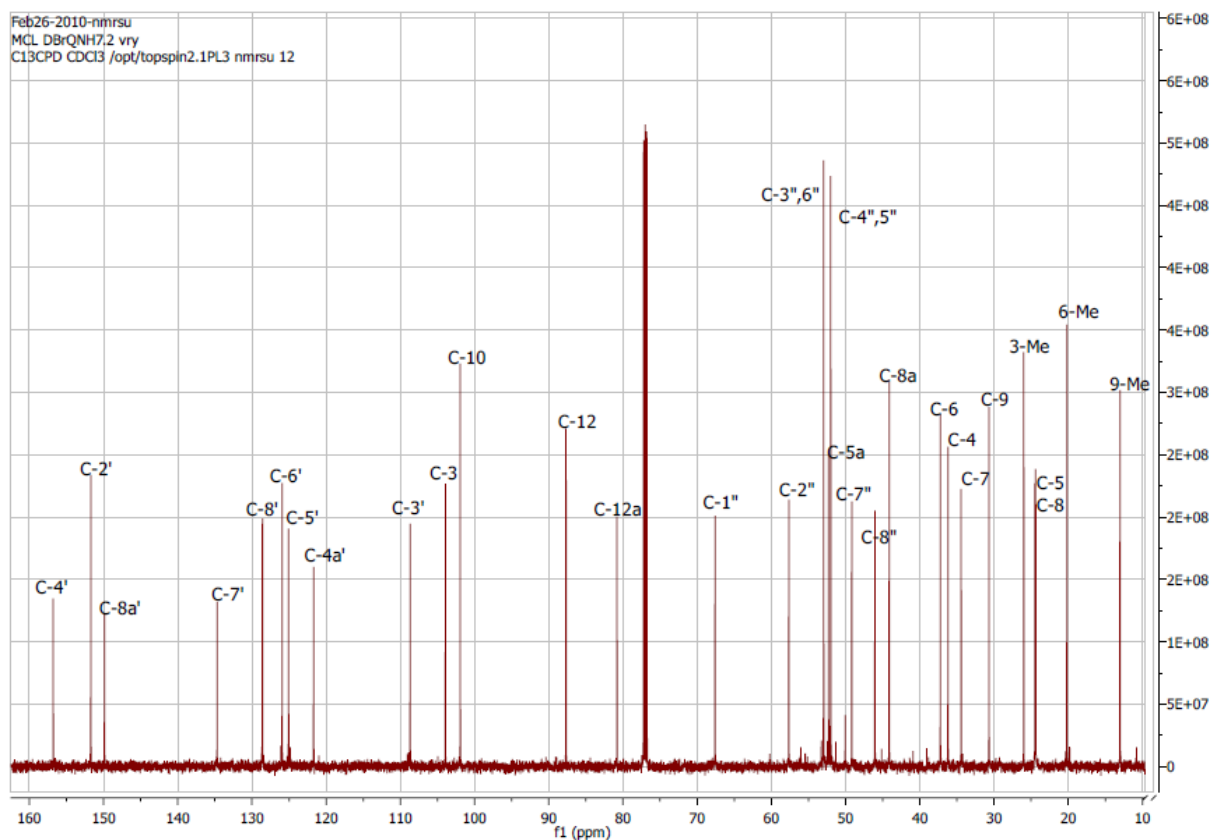
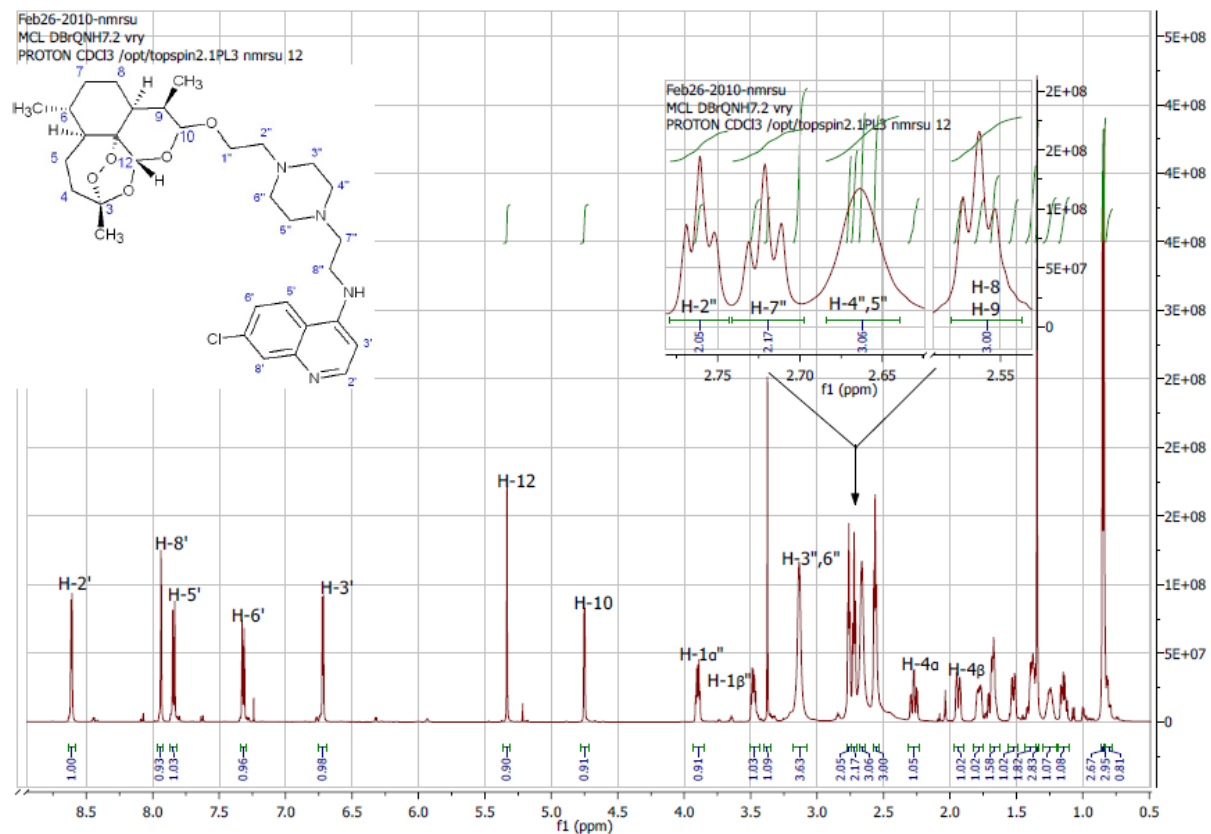
Artemisinin-quinoline Hybrid 12



Artemisinin-quinoline Hybrid 13



Artemisinin-quinoline Hybrid 14



ANNEXURE D

Additional data

Additional file 1 – Raw data of treatment with hybrid 1 by ip route

Parasitaemia of *P. vinckei* infected mice treated during four days (D₁ to D₄) with hybrid 1 by intraperitoneal route at 0.8, 2.5, 7.5 and 15 mg/kg

Treatment D ₁ -D ₄		Parasitaemia (%)													
Dosage ip route (mg/kg)		D ₁	D ₂	D ₃	D ₄	D ₅	D ₇	D ₈	D ₉	D ₁₀	D ₁₁	D ₁₄	D ₁₅	D ₁₇	Mortality
0	Mouse 1	0.6	0.8	4.8	25.4	80.8	dead								D ₇
	Mouse 2	0.7	1.3	3.5	18.1	69.6	dead								D ₇
	Mouse 3	0.9	2.9	21	67	dead									D ₅
	Mean ± SEM	0.73 ± 0.11	1.67 ± 0.78	9.77 ± 6.89	36.83 ± 18.65	83.47 ± 10.87	100								100%
0.8	Mouse 4	0.9	1.5	5.6	24.9	91.1	dead								D ₇
	Mouse 5	1.1	2.3	4.2	21.5	83.4	dead								D ₇
	Mouse 6	0.5	0.5	0.8	3.9	14.7	72	dead							D ₈
	Mean ± SEM	0.83 ± 0.22	1.43 ± 0.64	3.53 ± 1.75	16.77 ± 7.97	63.07 ± 29.74	90.67 ± 11.43	100							100%
2.5	Mouse 7	1.4	0.5	0.8	0.01	1.4	2.2	21.7	54.7	83.3	dead				D ₁₁
	Mouse 8	0.9	0.5	0.8	0.7	3	16.4	81.8	71.7	dead					D ₁₀
	Mouse 9	0.8	0.8	1.2	0.9	4.8	23.1	59.4	87.5	dead					D ₁₀
	Mean ± SEM	1.03 ± 0.23	0.60 ± 0.12	0.93 ± 0.16	0.54 ± 0.33	3.07 ± 1.20	13.90 ± 7.55	54.30 ± 21.48	71.30 ± 11.60	94.43 ± 6.82	100				100%
7.5	Mouse 10	0.6	0.01	0	0	0	0	0	0	0	x				D ₁₁ not of parasitaemia
	Mouse 11	0.9	0.01	0	0	0	0	0	0	0	0	0	0	0	
	Mouse 12	0.5	0.8	0.01	0	0	0	0	0	0.1	0.5	41.4	73.8	100	D ₁₇
	Mean ± SEM	0.67 ± 0.15	0.27 ± 0.32	0	0	0	0	0	0	0.03 ± 0.04	0.25 ± 0.35	20.7 ± 29.7	36.9 ± 52.18	50 ± 70.71	33% after D ₃₀
15	Mouse 13	1.2	0.01	0	0	0	0	0	0	0	0	0	0	0	
	Mouse 14	1.3	0.01	0	0	0	0	0	0	0	0	0	0	0	
	Mouse 15	0.5	0	0	0	0	0	0	0	0	0	x			D ₁₁ not of parasitaemia
	Mean ± SEM	1.00 ± 0.31	0.10 ± 0.00	0	0	0	0	0	0	0	0	0	0	0	0% after D ₃₀

Additional file 2 – Raw data of treatment with hybrid 1 by po route

Parasitaemia of *P. vinckei* infected mice treated during four days (D₁ to D₄) with hybrid 1 by oral route at 2.7, 8.3, 25 and 50 mg/kg

Treatment D ₁ -D ₄		Parasitaemia (%)													
Dosage po route (mg/kg)		D ₁	D ₂	D ₃	D ₄	D ₅	D ₇	D ₈	D ₉	D ₁₀	D ₁₁	D ₁₄	D ₁₅	D ₁₇	Mortality
0	Mouse 16	0.3	0.9	4.3	19	86.8	dead								D ₇
	Mouse 17	0.3	1.2	5	17.5	83.7	dead								D ₇
	Mouse 18	1.1	5.5	33.6	84.2	dead									D ₅
	Mean ± SEM	0.57 ±0.33	2.53 ± 1.82	14.3 ±11.82	40.23 ± 26.93	90.17 ± 6.12	100								100%
2.7	Mouse 19	1.3	6.9	27.4	80.2	dead									D ₅
	Mouse 20	0.7	3.1	33.8	86.4	dead									D ₅
	Mouse 21	0.4	0.8	6.9	36.1	79	dead								D ₇
	Mean ± SEM	0.80 ± 0.32	3.60 ± 2.18	22.7 ± 9.94	67.57 ± 19.39	95.90 ± 5.02	100								100%
8.3	Mouse 22	0.5	2.5	16.3	39.6	95.3	dead								D ₇
	Mouse 23	1	5	22.1	61.5	dead									D ₅
	Mouse 24	1.8	1.5	2.2	7.6	51	64.9	dead							D ₈
	Mean ± SEM	1.10 ± 0.46	3 ± 1.27	13.5 ± 7.24	36.23 ± 19.17	91 ± 19.12	82.45 ± 17.55	100							100%
25	Mouse 25	0.7	0.01	0.01	0	0	0	0	0	0	0,01	9,5	53,1	100	D ₁₇
	Mouse 26	0.5	0.01	0	0	0	0	0	0	0	0	0	0	0	
	Mouse 27	0.6	0.01	0	0	0	0	0	0	0,4	0,6	22,1	61,6	100	D ₁₇
	Mean ± SEM	0.60 ± 0.07	0.01 ± 0.00	0	0	0	0	0	0	0.13 ± 0.16	0.20 ± 0.24	10.5 ± 7.84	38.2 ± 23.61	66.7 ± 40.82	66% after D ₃₀
50	Mouse 28	0.8	0	0	0	0	0	0	0	0	0	0	0	0	
	Mouse 29	0.5	0	0	0	0	0	0	0	0	0	0	0	0	
	Mouse 30	0.5	0	0	0	0	0	0	0	0	0	0	0	0	
	Mean ± SEM	0.65 ± 0.15	0	0	0	0	0	0	0	0	0	0	0	0	0% after D ₃₀