S4 Appendix. Sensitivity analysis for the antibody and statin treatments. The additional sensitivity analysis performed for the parameters associated with the antibody and statin treatments. Here "mRNA H" is HMGCR mRNA, "AE" is extracellular antibodies, "PAB" is PCSK9 bound antibodies, "SE" is extracellular statins, "SI" is internalised statins, "SIH" is HMGCR bound statins. The nominal values are indicated in the first cell under the parameter.

		Percent difference in																			
Parameter	Value	mRNA H	mRNA LDLR	HMGCR	LE	LRB	LI	VE	VRB	VI	RF	RI	Cholesterol	mRNA P	PI	PE	PRB	AE	PAB	SE	SI	SIH
ε_p	2.23E-08	0.01	0.00	0.01	-20.92	-10.04	-10.04	-10.60	1.70	1.70	13.76	3.65	0.00	0.00	0.00	-22.28	-11.59	-98.42	22.94	0.00	0.00	0.00
	2.23E-09	0.01	0.00	0.01	-18.34	-8.80	-8.80	-9.15	1.46	1.46	11.69	3.07	0.00	0.00	0.00	-19.27	-9.83	-85.15	19.85	0.00	0.00	0.00
2,23E-10	2.23E-11	-0.03	-0.01	-0.03	60.23	25.28	25.27	23.28	-3.61	-3.61	-21.81	-4.98	0.01	-0.01	-0.01	51.37	18.35	220.72	-51.45	0.00	0.00	0.00
	2.23E-12	-0.06	-0.02	-0.06	117.59	45.10	45.09	40.60	-6.24	-6.24	-33.31	-7.31	0.01	-0.02	-0.02	92.09	28.09	388.75	-90.61	0.00	0.00	0.00
	2.23E+03	-0.06	-0.02	-0.06	117.59	45.10	45.09	40.60	-6.24	-6.24	-33.31	-7.31	0.01	-0.02	-0.02	92.09	28.09	388.77	-90.61	0.00	0.00	0.00
ε_{-p}	2.23E+02	-0.03	-0.01	-0.03	60.23	25.27	25.27	23.29	-3.61	-3.61	-21.81	-4.98	0.01	-0.01	-0.01	51.38	18.35	220.74	-51.45	0.00	0.00	0.00
2,23E+01	2.23E+00	0.01	0.00	0.01	-18.34	-8.79	-8.79	-9.15	1.46	1.46	11.69	3.07	0.00	0.00	0.00	-19.28	-9.84	-85.15	19.85	0.00	0.00	0.00
	2.23E-01	0.01	0.00	0.01	-20.92	-10.04	-10.03	-10.60	1.70	1.70	13.76	3.66	0.00	0.00	0.00	-22.29	-11.59	-98.42	22.94	0.00	0.00	0.00
	1.00E+15	0.14	0.03	0.14	-85.74	-65.32	-65.33	-55.04	9.34	9.34	143.19	55.44	-0.02	0.03	0.03	-96.76	-92.13	0.00	0.00	0.00	0.00	0.00
$\bar{A}_{E0}$	1.00E+14	0.09	0.02	0.09	-58.46	-38.11	-38.11	-29.52	5.02	5.02	49.00	11.12	-0.01	0.02	0.02	-54.03	-31.50	0.00	0.00	0.00	0.00	0.00
1,00E+13	1.00E+12	-0.01	0.00	-0.01	8.92	4.25	4.25	3.79	-0.66	-0.66	-4.29	-0.84	0.00	0.00	0.00	7.45	2.84	0.00	0.00	0.00	0.00	0.00
	1.00E+11	-0.01	0.00	-0.01	9.84	4.67	4.67	4.17	-0.73	-0.73	-4.71	-0.92	0.00	0.00	0.00	8.21	3.12	0.00	0.00	0.00	0.00	0.00
	2.23E-08	14.64	3.48	-2.44	-9.38	-4.61	-4.61	-4.26	0.77	0.77	5.26	2.79	-2.39	3.48	3.48	-2.58	2.55	0.00	0.00	0.00	-96.98	194.86
ε_S	2.23E-09	11.25	2.70	-1.90	-7.40	-3.61	-3.61	-3.35	0.61	0.61	4.09	2.17	-1.85	2.70	2.70	-2.01	1.99	0.00	0.00	0.00	-74.54	149.77
2,23E-10	2.23E-11	-6.38	-1.64	1.15	4.90	2.29	2.29	2.15	-0.39	-0.39	-2.49	-1.31	1.12	-1.64	-1.64	1.25	-1.26	0.00	0.00	0.00	42.59	-85.58
	2.23E-12	-7.34	-1.89	1.33	5.69	2.65	2.65	2.49	-0.45	-0.45	-2.87	-1.51	1.30	-1.89	-1.89	1.45	-1.46	0.00	0.00	0.00	49.02	-98.49
	2.23E+04	-7.34	-1.89	1.33	5.69	2.65	2.65	2.49	-0.45	-0.45	-2.87	-1.51	1.30	-1.89	-1.89	1.45	-1.46	0.00	0.00	0.00	49.02	-98.49
ε_{-S}	2.23E+03	-6.38	-1.64	1.15	4.90	2.29	2.29	2.15	-0.39	-0.39	-2.49	-1.31	1.12	-1.64	-1.64	1.25	-1.26	0.00	0.00	0.00	42.59	-85.58
2,23E+02	2.23E+01	11.25	2.70	-1.90	-7.40	-3.61	-3.61	-3.35	0.61	0.61	4.09	2.17	-1.85	2.70	2.70	-2.01	1.99	0.00	0.00	0.00	-74.53	149.75
	2.23E+00	14.64	3.48	-2.44	-9.38	-4.61	-4.61	-4.26	0.77	0.77	5.26	2.79	-2.39	3.48	3.48	-2.58	2.55	0.00	0.00	0.00	-96.96	194.82
	2.23E+01	-6.79	-1.75	1.29	-16.50	-12.60	-12.61	-3.84	0.65	0.66	4.68	-0.43	1.20	-1.75	-1.75	-9.49	-5.26	0.00	0.00	-99.99	1048.36	1063.29
CL_S	2.23E+00	26.62	6.08	-4.23	-20.93	-12.20	-12.20	-8.60	1.49	1.49	11.04	5.09	-4.17	6.08	6.08	-6.93	3.35	0.00	0.00	-55.79	597.49	568.03
2,23E-01	2.23E-02	-6.64	-1.71	1.20	5.13	2.40	2.40	2.25	-0.41	-0.41	-2.60	-1.36	1.17	-1.71	-1.71	1.31	-1.32	0.00	0.00	8.50	-89.63	-89.50
	2.23E-03	-7.37	-1.90	1.33	5.72	2.67	2.67	2.50	-0.45	-0.45	-2.88	-1.52	1.30	-1.90	-1.90	1.46	-1.47	0.00	0.00	9.39	-98.96	-98.95
	1.00E+14	412.48	54.19	-57.49	-67.93	-43.91	-43.91	-38.83	6.97	6.97	74.88	46.15	-56.05	54.19	54.19	-30.15	22.18	0.00	0.00	0.00	23.62	-47.45
$\bar{S}_{E0}$	1.00E+13	64.34	13.24	-9.42	-29.91	-15.96	-15.95	-14.43	2.61	2.61	19.91	10.76	-9.20	13.24	13.24	-9.37	8.68	0.00	0.00	0.00	3.23	-6.49
1,00E+12	1.00E+11	-6.71	-1.72	1.21	5.16	2.41	2.41	2.27	-0.41	-0.41	-2.62	-1.38	1.18	-1.72	-1.72	1.32	-1.33	0.00	0.00	0.00	-0.40	0.80
	1.00E+10	-7.38	-1.90	1.33	5.72	2.67	2.67	2.51	-0.45	-0.45	-2.89	-1.52	1.30	-1.90	-1.90	1.46	-1.47	0.00	0.00	0.00	-0.44	0.89