

Figure S1. The results of body weight increase of mice in the acute systematic assay at 0, 24, 48 and 72 h post-injection. SC, sodium chloride; CSO, cottonseed oil.

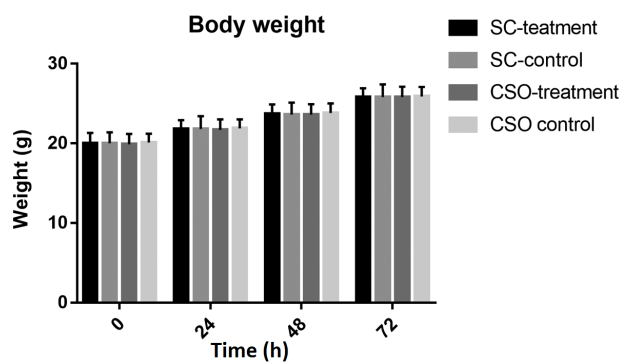


Table SI. Results of the three-way ANOVAs concerning each variable as dependent variable for the interactions between time, mixing ratio and injection volume (tests of within-subjects effects).

A, Weight, g					
Type of model	Sums of Sqs	Df	Mean Sqs	F value	P-value
Time	3.229	3.753	.860	2.229	0.065
Time/baseline	1.482	3.753	.395	1.055	0.378
Time/ratio	6.817	3.753	1.817	4.854	0.001
Time/volume	5.259	3.753	1.401	3.745	0.007
Time/ratio/volume	2.156	3.753	0.575	1.535	0.197
Error (time)	67.406	217.669	0.310	-	-
B, Skin score					
Type of model	Sums of Sqs	Df	Mean Sqs	F value	P-value
Time	9.167	3.361	2.727	3.188	0.021
Time/ratio	14.333	3.361	4.264	4.985	0.002
Time/volume	4.990	3.361	1.485	1.735	0.156
Time/ratio/volume	3.990	3.361	1.187	1.387	0.246
Error (time)	126.521	147.889	0.856	-	-
C, Remaining size, cm ³					
Type of model	Sums of Sqs	Df	Mean Sqs	F value	P-value
Time	0.711	2.913	0.244	79.169	<0.001
Time/ratio	0.051	2.913	0.018	5.709	0.001
Time/volume	0.005	2.913	0.002	0.508	0.672
Time/ratio/volume	0.004	2.913	0.002	0.492	0.683
Error (time)	0.395	128.172	0.003	-	-
D, Macrophage count					
Type of model	Sums of Sqs	Df	Mean Sqs	F value	P-value
Time	7809804.028	1.639	4765862.492	18.350	<0.001
Time/ratio	110,609.252	1.639	67,498.299	0.260	0.729
Time/volume	30,874.371	1.639	18,840.806	0.073	0.898
Time/ratio/volume	213,544.538	1.639	130,313.629	0.502	0.574
Error (time)	8,512,230.626	32.774	259,725.600	-	-
E, Neutrophils count					
Type of model	Sums of Sqs	Df	Mean Sqs	F value	P-value
Time	1.017x107	1.741	5,842,114.924	21.878	<0.001
Time/ratio	1,685,066.084	1.741	968,131.769	3.626	0.043
Time/volume	351,843.505	1.741	202,146.894	0.757	0.460
Time/ratio/volume	487,289.337	1.741	279,965.452	1.048	0.353
Error (time)	9,295,474.091	34.811	267,029.402		

DF, degrees of freedom; Sums of Sqs, sequential sums of squares; Mean Sqs, mean squares; F, test statistics.

Table SII. The results of the three-way ANOVAs concerning each variable as dependent variable for the interactions between time, mixing ratio and injection volume (tests of between-subjects effects).

A, Weight, g					
Type of model	Sums of Sqs	Df	Mean Sqs	F value	P-value
Intercept	29.145	1	29.145	9.451	0.003
Baseline	178.566	1	178.566	57.904	<0.001
Ratio	82.107	1	82.107	26.625	<0.001
Volume	64.188	1	64.188	20.814	<0.001
Ratio/volume	59.601	1	59.601	19.327	<0.001
Error	148.023	48	3.084	-	-
B, Skin score					
Type of model	Sums of Sqs	Df	Mean Sqs	F value	P-value
Intercept	48.167	1	48.167	16.582	<0.001
Ratio	6.000	1	6.000	2.066	0.158
Volume	1.760	1	1.760	0.606	0.440
Ratio/volume	1.260	1	1.260	0.434	0.514
Error	127.813	44	2.905	-	-
C, Remaining size					
Type of model	Sums of Sqs	Df	Mean Sqs	F value	P-value
Intercept	18.792	1	18.792	429.707	<0.001
Ratio	0.878	1	0.878	20.076	<0.001
Volume	0.529	1	0.529	12.107	<0.001
Ratio/volume	0.001	1	0.001	0.027	0.871
Error	1.924	44	0.044	-	-
D, Macrophage count					
Type of model	Sums of Sqs	Df	Mean Sqs	F value	P-value
Intercept	1.414x107	1	1.414x107	146.309	<0.001
Ratio	104.533	1	104.533	0.001	0.974
Volume	32,555.469	1	32,555.469	0.337	0.568
Ratio/volume	32,216.532	1	32,216.532	333	0.570
Error	1,932,258.828	20	96,612.941	-	-
E, Neutrophil count					
Type of model	Sums of Sqs	Df	Mean Sqs	F value	P-value
Intercept	9,876426.824	1	9,876,426.824	99.191	<0.001
Ratio	439,408.334	1	439,408.334	4.413	0.049
Volume	92,016.493	1	92,016.493	0.924	0.348
Ratio/volume	50,620.073	1	50,620.073	0.508	0.484
Error	1,991,400.262	20	99,570.013	-	-

DF, degrees of freedom; Sums of Sqs, sequential sums of squares; Mean Sqs, mean squares; F, test statistics.

Table SIII. Detailed results of simple effect of ratio/injection volume and the effects of ratio, injection volume and time.

A, Weight			
Ratio/volume, ml	Mean difference	Standard error	P-value
0.1 vs. 0.15	0.077	0.275	0.781
0.1 vs. 0.15	-1.976	0.379	<0.001
1:1 vs. 1:3	-0.031	0.277	0.913
1:1 vs. 1:3	-2.084	0.370	<0.001
B, Skin score			
Ratio/volume, ml	Mean difference	Standard error	P-value
0.1 vs. 0.15	0.135	0.174	0.440
C, Remaining size			
Ratio/volume, ml	Mean difference	Standard error	P-value
0.1 vs. 0.15	0.079	0.023	<0.001
C, Macrophage count			
Ratio/volume, ml	Mean difference	Standard error	P-value
Ratio			
1:1 vs. 1:3	-1.867	56.749	0.974
Volume, ml			
0.1 vs. 0.15	32.942	56.749	0.568
Time			
T2 vs. T1	-92.281	35.521	0.159
T3 vs. T1	-161.557	29.155	<0.001
D, Neutrophil count			
Ratio/volume, ml	Mean difference	Standard error	P-value
T4 vs. T1	174.980	72.252	0.224
T5 vs. T1	552.265	136.180	0.006
0.1 vs. 0.15 ml	-55.382	57.611	0.348
T1-T5, weeks 1, 2, 3, 5, 7 post-injection.			

Table SIV. Results of simple effects of time/ratio and time/injection volume.

A, Weight				
Comparison level	Comparison	Mean difference	Standard error	P-value
Time=1	1:1 vs. 1:3	-0.989	0.163	<0.001
Time=2	1:1 vs. 1:3	-0.402	0.242	0.104
Time=3	1:1 vs. 1:3	-1.152	0.252	<0.001
Time=4	1:1 vs. 1:3	-1.479	0.255	<0.001
Time=5	1:1 vs. 1:3	-1.161	0.282	<0.001
Time=6	1:1 vs. 1:3	-0.945	0.292	0.002
Time=7	1:1 vs. 1:3	-1.270	0.284	<0.001
Ratio=1:1	T2 vs. T1	0.974	0.135	<0.001
	T3 vs. T1	1.388	0.131	<0.001
	T4 vs. T1	2.306	0.148	<0.001
	T5 vs. T1	2.987	0.174	<0.001
	T6 vs. T1	3.331	0.172	<0.001
	T7 vs. T1	3.737	0.189	<0.001
	T2 vs. T1	0.387	0.135	0.127
Ratio=1:3	T3 vs. T1	1.551	0.131	<0.001
	T4 vs. T1	2.196	0.148	<0.001
	T5 vs. T1	3.160	0.174	<0.001
	T6 vs. T1	3.288	0.172	<0.001
	T7 vs. T1	4.018	0.189	<0.001
	T2 vs. T1	-0.378	0.168	0.029
Time=1	0.1 vs. 0.15 ml	-0.756	0.248	0.004
Time=2	0.1 vs. 0.15 ml	-1.159	0.258	<0.001
Time=3	0.1 vs. 0.15 ml	-1.235	0.262	<0.001
Time=4	0.1 vs. 0.15 ml	-1.040	0.290	<0.001
Time=5	0.1 vs. 0.15 ml	-1.011	0.300	0.002
Time=6	0.1 vs. 0.15 ml	-1.069	0.291	0.001
Volume=0.1 ml	T2 vs. T1	0.492	0.137	0.018
	T3 vs. T1	1.079	0.133	<0.001
	T4 vs. T1	2.123	0.150	<0.001
	T5 vs. T1	2.743	0.177	<0.001
	T6 vs. T1	2.993	0.174	<0.001
	T7 vs. T1	3.532	0.191	<0.001
	T2 vs. T1	0.869	0.137	<0.001
Volume=0.15 ml	T3 vs. T1	1.860	0.133	<0.001
	T4 vs. T1	2.979	0.150	<0.001
	T5 vs. T1	3.404	0.177	<0.001
	T6 vs. T1	3.626	0.174	<0.001
	T7 vs. T1	4.224	0.191	<0.001

B, Skin score

Comparison level	Comparison	Mean difference	Standard error	P-value
Time=1	1:1 vs. 1:3	-0.500	0.205	0.019
Time=2	1:1 vs. 1:3	-0.625	0.277	0.029
Time=3	1:1 vs. 1:3	-0.083	0.330	0.015
Time=4	1:1 vs. 1:3	-0.524	0.245	0.032
Time=5	1:1 vs. 1:3	0.083	0.311	0.790
Time=6	1:1 vs. 1:3	0.125	0.178	0.486
Time=7	1:1 vs. 1:3	0.125	0.185	0.503
Ratio=1:	T2 vs. T1	-0.042	0.181	1.00
	T3 vs. T1	0.083	0.206	1.000
	T4 vs. T1	0.083	0.187	1.000
	T5 vs. T1	0.333	0.245	0.996

Table SIV. Continued.

B, Skin score				
Comparison level	Comparison	Mean difference	Standard error	P-value
	T6 vs. T1	0.125	0.186	1.000
	T7 vs. T1	0.167	0.189	1.000
	T2 vs. T1	0.083	0.181	0.757
	T3 vs. T1	0.417	0.206	1.000
	T4 vs. T1	0.125	0.187	1.000
	T5 vs. T1	-0.250	0.245	1.000
	T6 vs. T1	-0.500	0.186	0.245
	T7 vs. T1	-0.458	0.189	0.428
C, Remaining size				
Comparison level	Comparison	Mean difference	Standard error	P-value
Time=1	1:1 vs. 1:3	0.058	0.022	0.012
Time=2	1:1 vs. 1:3	0.074	0.022	0.002
Time=3	1:1 vs. 1:3	0.104	0.025	<0.001
Time=4	1:1 vs. 1:3	0.119	0.025	<0.001
Time=5	1:1 vs. 1:3	0.107	0.027	<0.001
Time=6	1:1 vs. 1:3	0.128	0.027	<0.001
Time=7	1:1 vs. 1:3	0.126	0.026	<0.001
Ratio=1:1	T2 vs. T1	-0.032	0.010	0.061
	T3 vs. T1	-0.051	0.013	0.008
	T4 vs. T1	-0.070	0.014	<0.001
	T5 vs. T1	-0.094	0.015	<0.001
	T6 vs. T1	-0.089	0.016	<0.001
	T7 vs. T1	-0.102	0.016	<0.001
	T2 vs. T1	-0.048	0.010	0.001
Ratio=1:3	T3 vs. T1	-0.097	0.013	<0.001
	T4 vs. T1	-0.130	0.014	<0.001
	T5 vs. T1	-0.143	0.015	<0.001
	T6 vs. T1	-0.159	0.016	<0.001
	T7 vs. T1	-0.170	0.016	<0.001
D, Neutrophils				
Comparison level	Comparison	Mean difference	Standard error	P-value
Time=1	1:1 vs. 1:3	-535.789	246.330	0.042
Time=2	1:1 vs. 1:3	225.307	152.302	0.155
Time=3	1:1 vs. 1:3	40.658	42.031	0.345
Time=4	1:1 vs. 1:3	-5.363	37.322	0.887
Time=5	1:1 vs. 1:3	120.680	83.805	0.165
Ratio=1:1	T2 vs. T1	-438.202	225.658	0.497
	T3 vs. T1	-497.982	169.784	0.079
	T4 vs. T1	-488.057	163.953	0.072
	T5 vs. T1	-375.689	191.400	0.482
Ratio=1:3	T2 vs. T1	-748.684	225.658	0.034
	T3 vs. T1	-1074.420	169.784	<0.001
	T4 vs. T1	-198.482	163.953	<0.001
	T5 vs. T1	-1032.158	191.400	<0.001

Table SV. Cell proliferation rates of L929 cells from the MTT assay at 48 h.

Group	Mean	RGR, %	Cytotoxic reaction grade
Minimum essential medium control	0.950	-	-
Treatment	0.901	95	1
Negative control	0.892	94	1
Positive control	0.014	1	4

Cytotoxic reaction grading: 0, $\geq 100\%$; 1, 80-99%; 2, 50-79%; 3, 30-49%; and 4, 0-29%. RGR, relative growth rate; negative control, polyethylene extraction; positive control 10% DMSO.

Table VI. Skin score of intradermal test on rabbits at 24, 48 and 72 h post-injection.

Group	24 h	48 h	72 h
Negative treatment	0	0	0
Negative control	0	0	0
Difference	0	0	0
Positive treatment	0	0	0
Positive control	0	0	0
Difference	0	0	0

Skin evaluations using a scoring system combining erythema and swelling of local tissue. If the difference is greater than 1 at any time point, it means that the intradermal test is unqualified.