

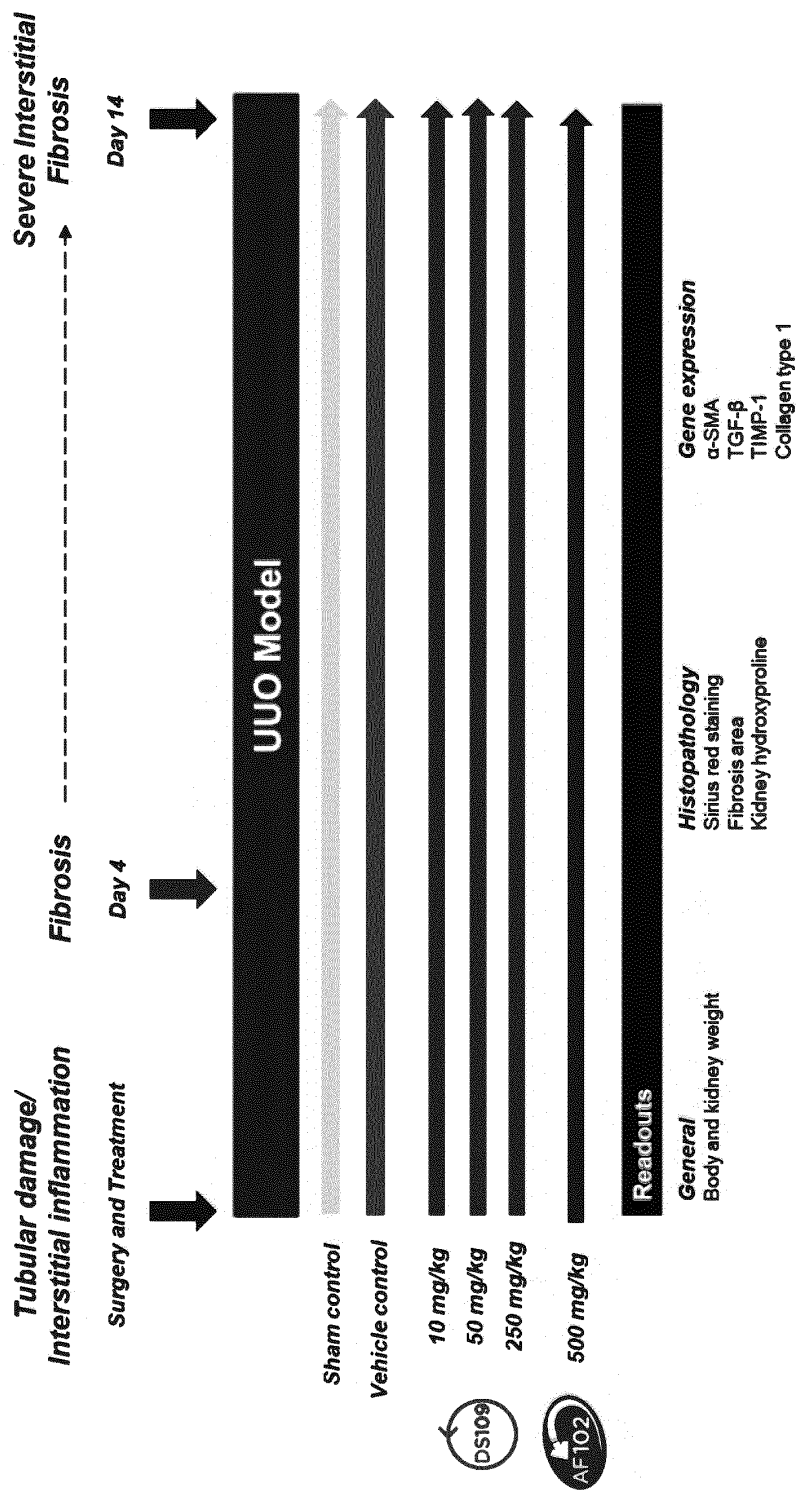


Figure 1

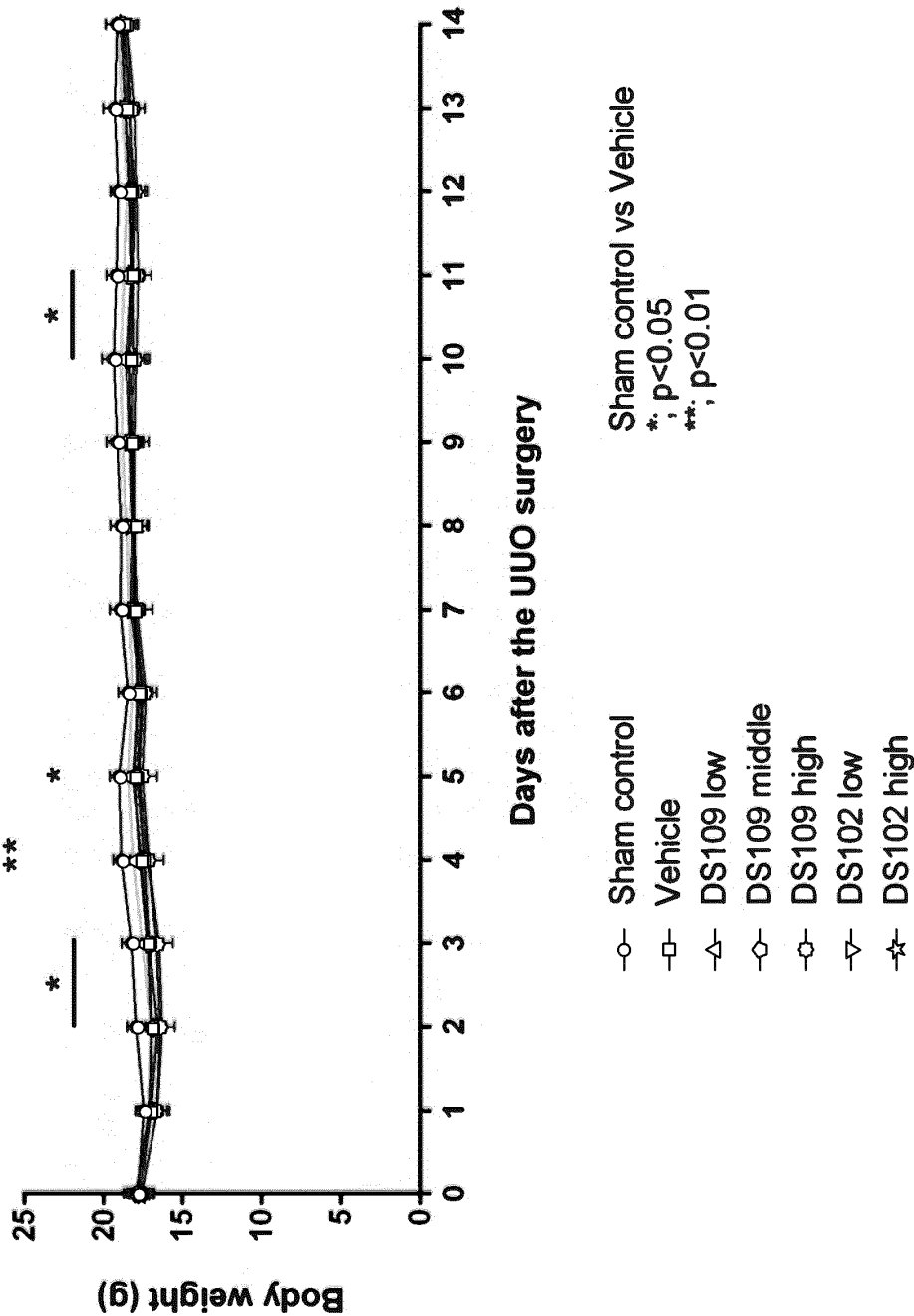


Figure 2

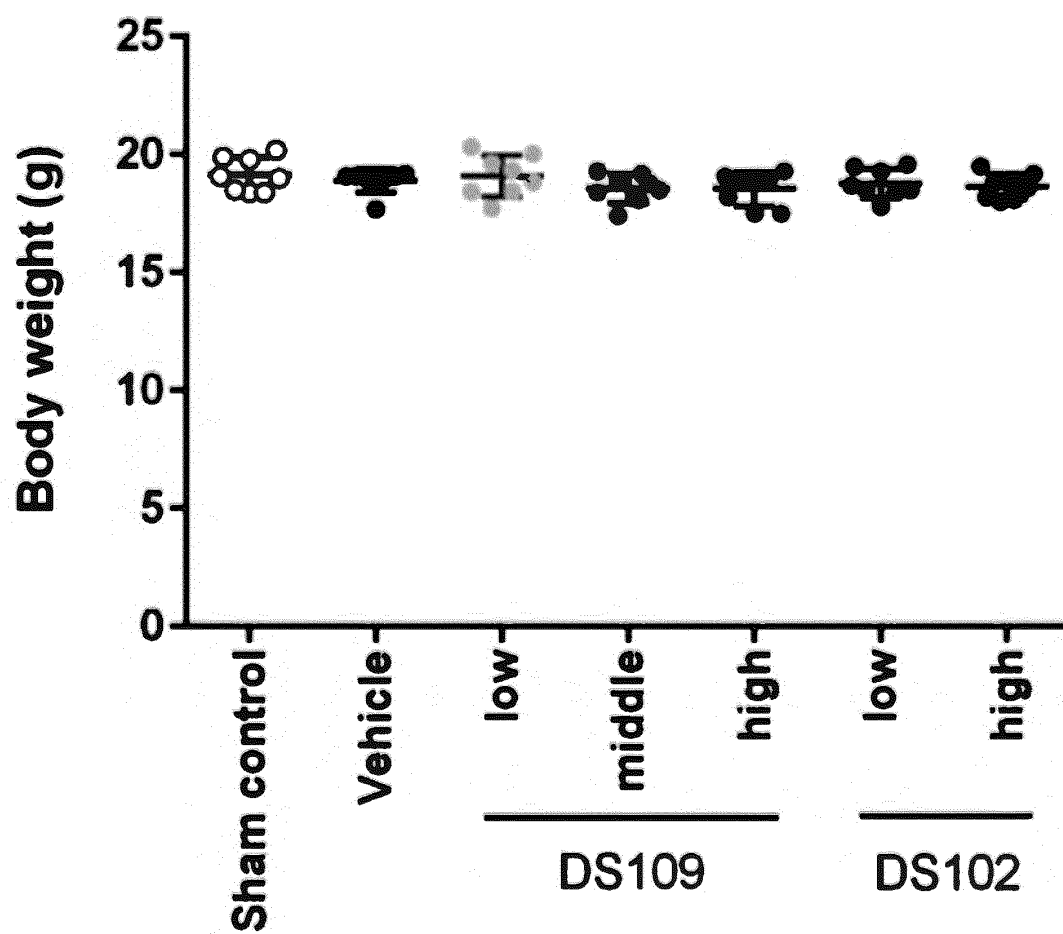
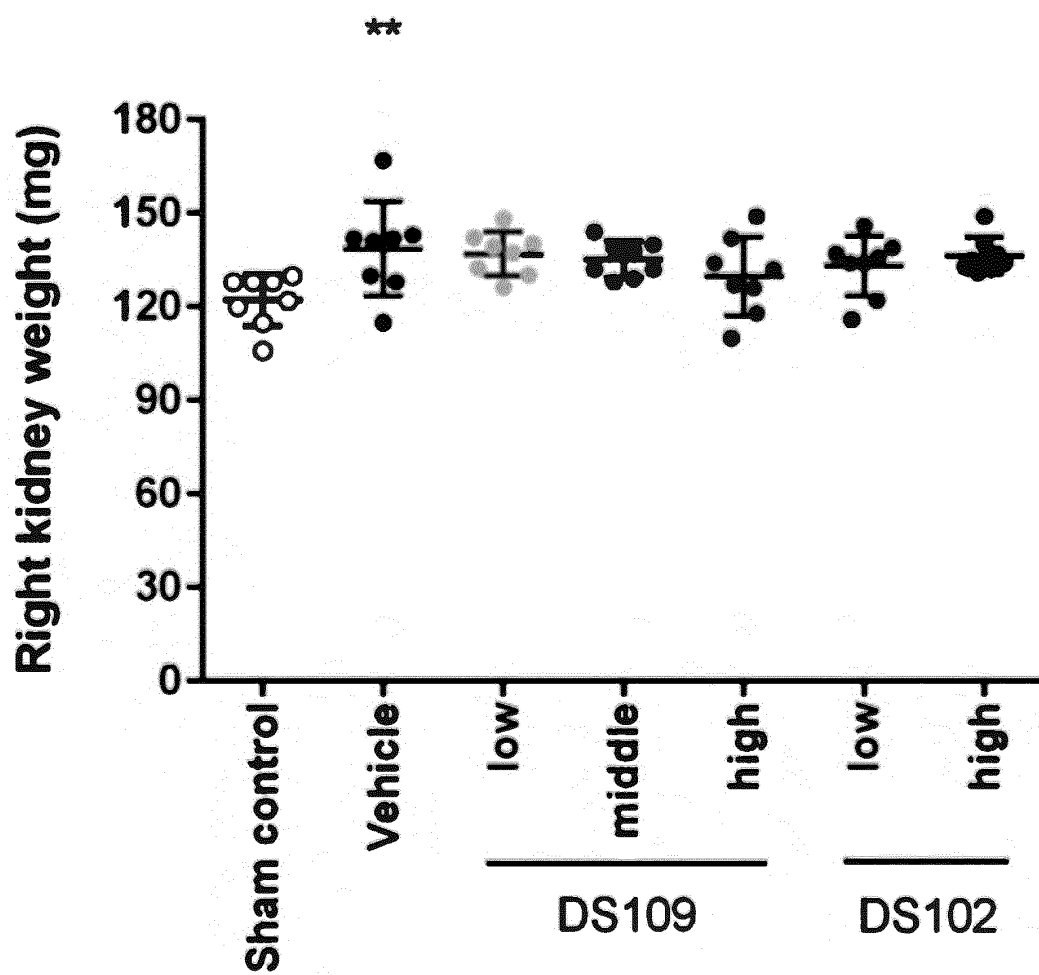
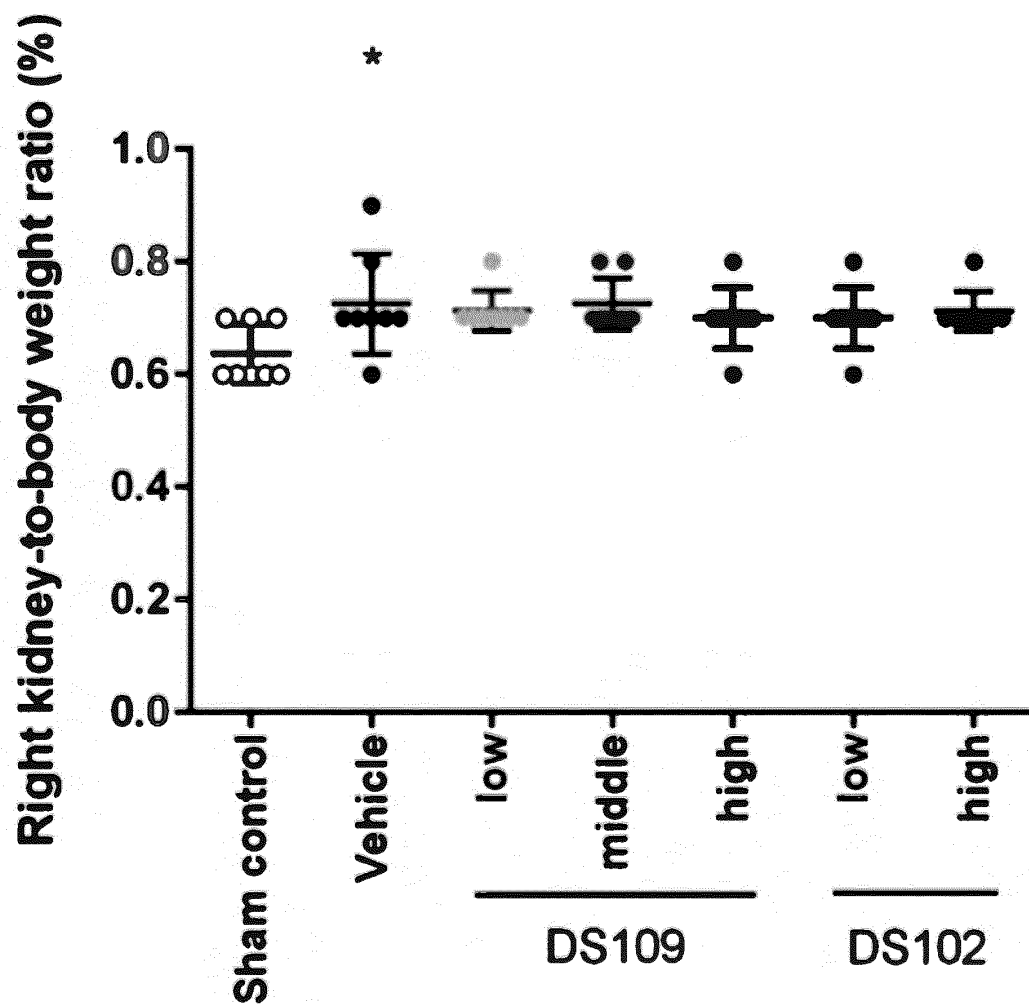


Figure 3



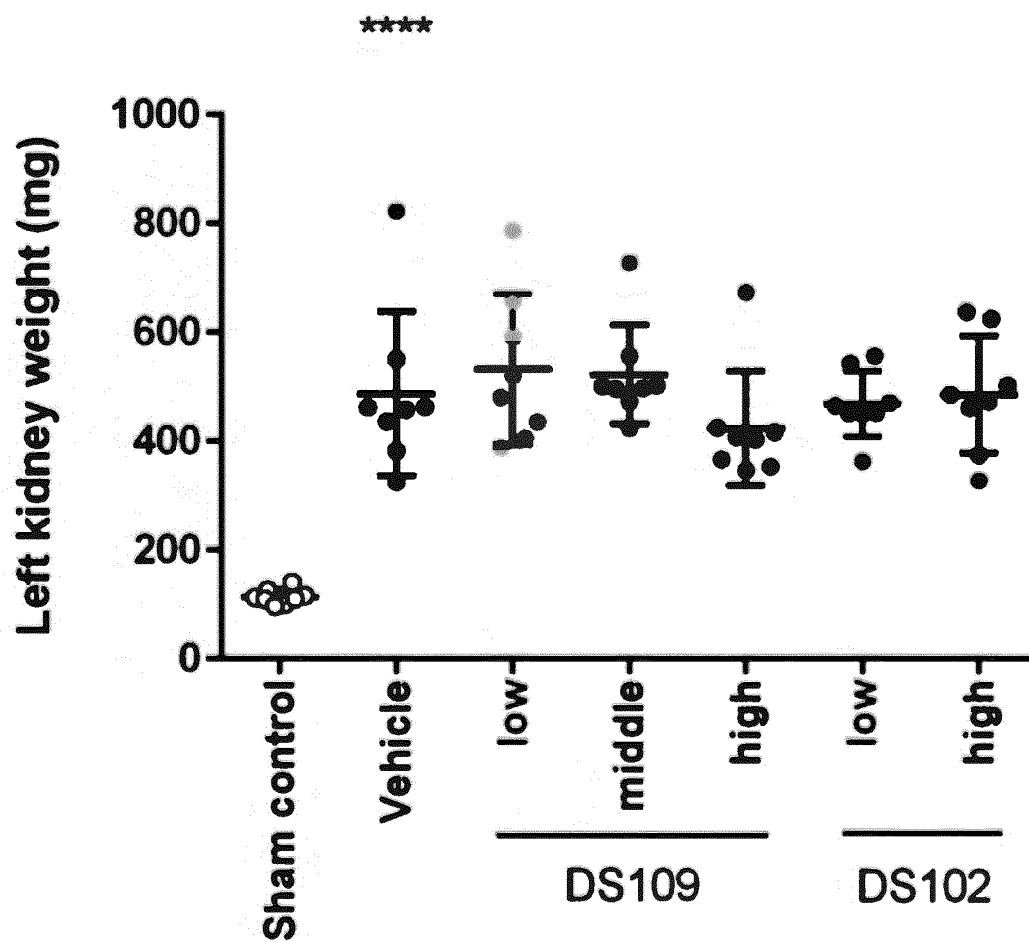
**; $p < 0.01$ (vs Sham control)

Figure 4A



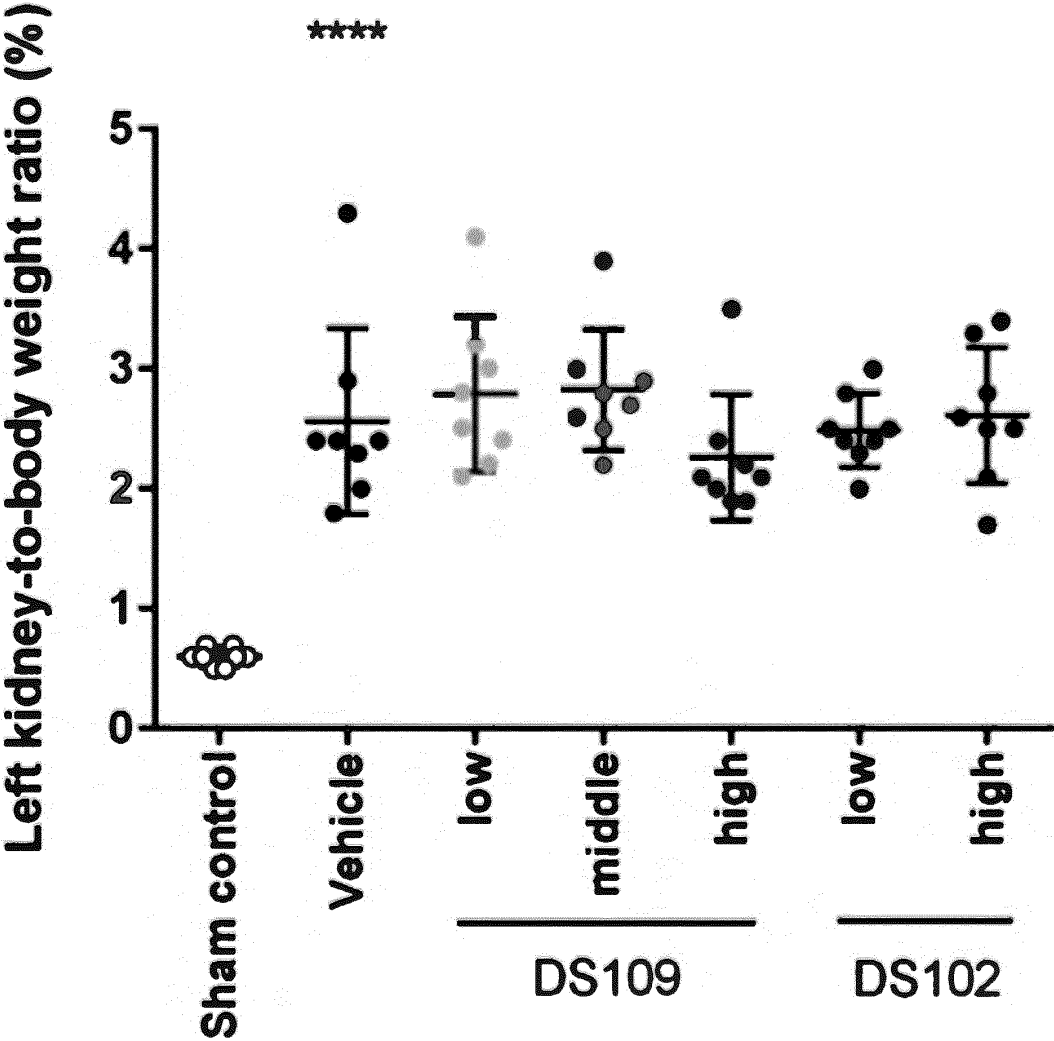
*; $p < 0.05$ (vs Sham control)

Figure 4B



****; $p < 0.0001$ (vs Sham control)

Figure 4C



****; $p < 0.0001$ (vs Sham control)

Figure 4D

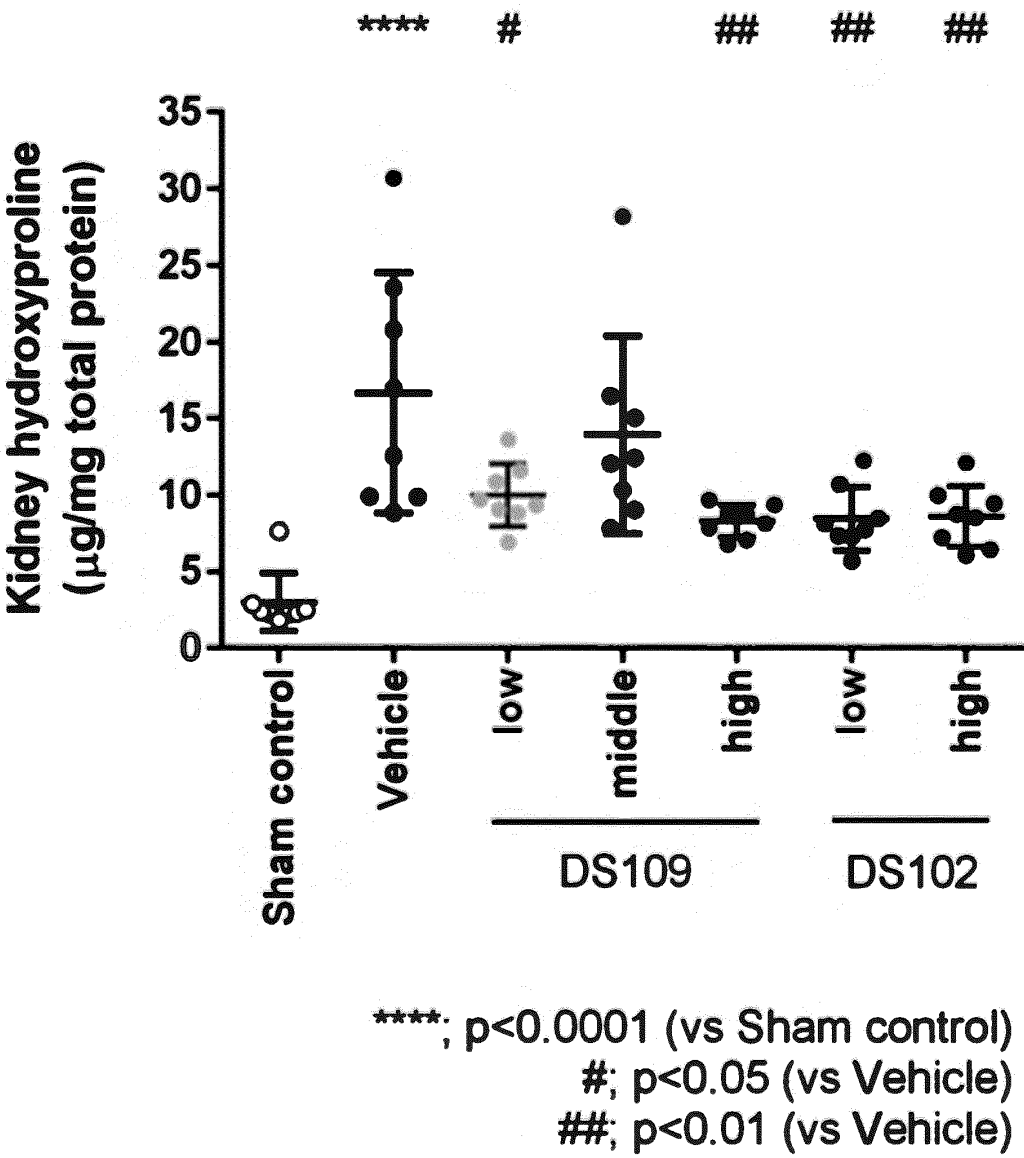


Figure 5

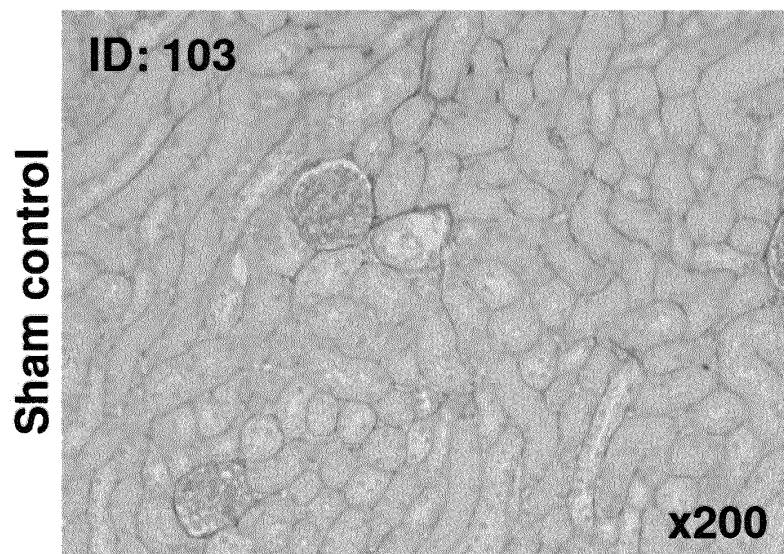


Figure 6A

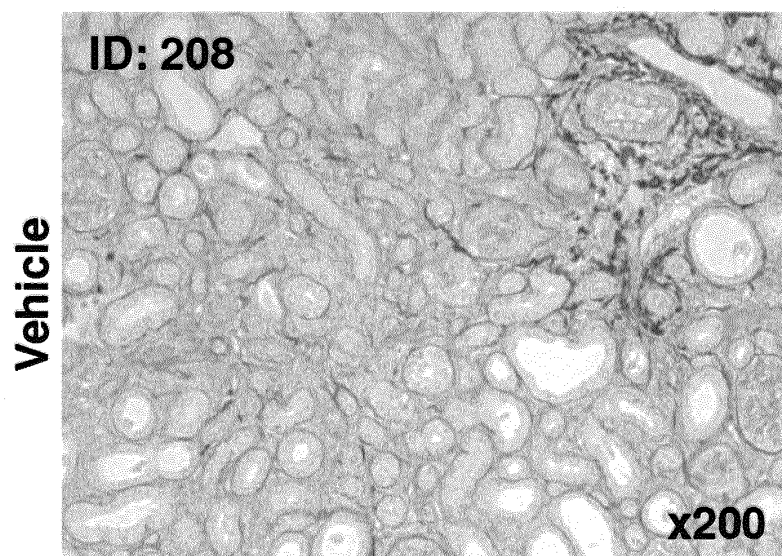


Figure 6B

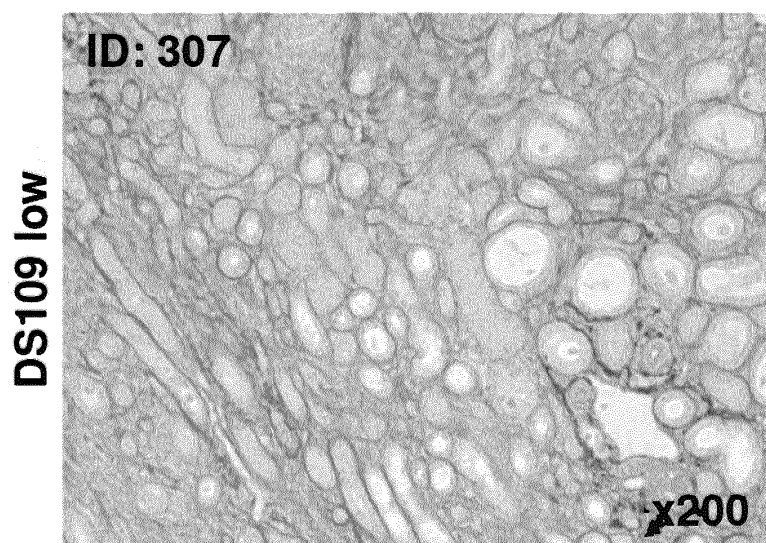


Figure 6C

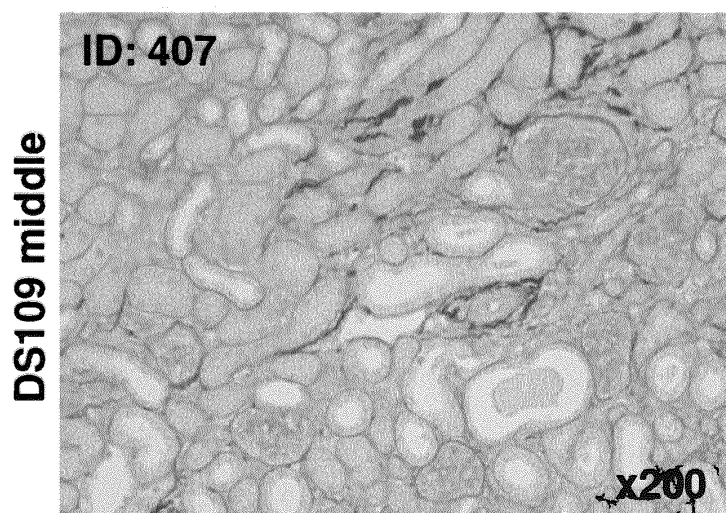


Figure 6D

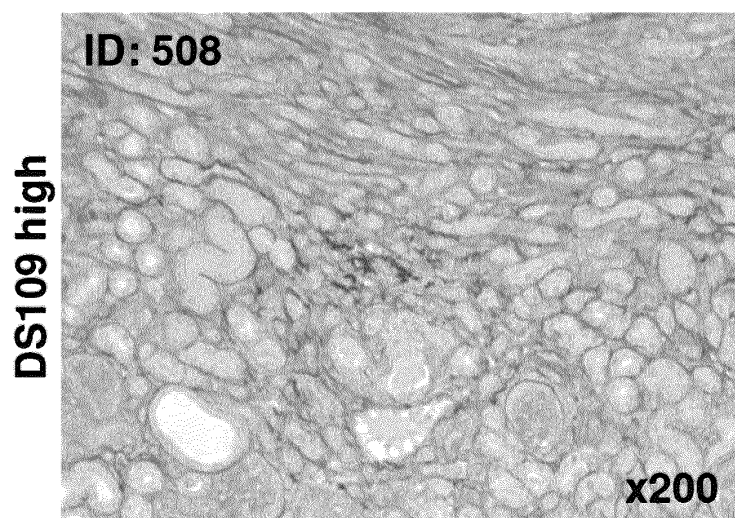


Figure 6E

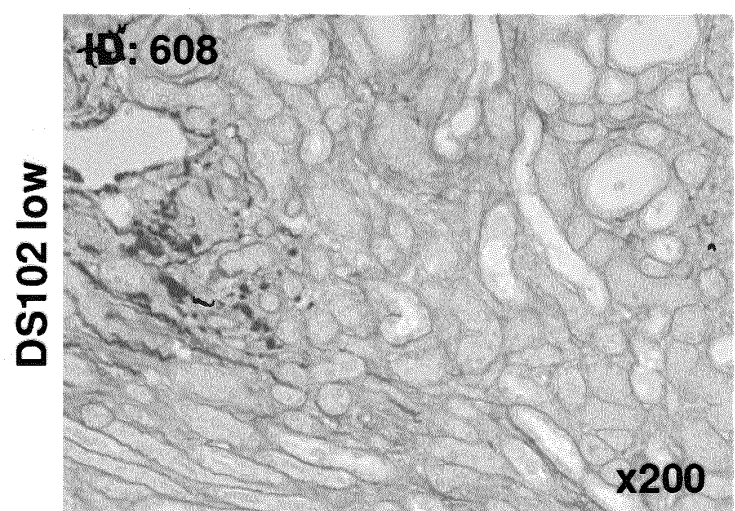


Figure 6F

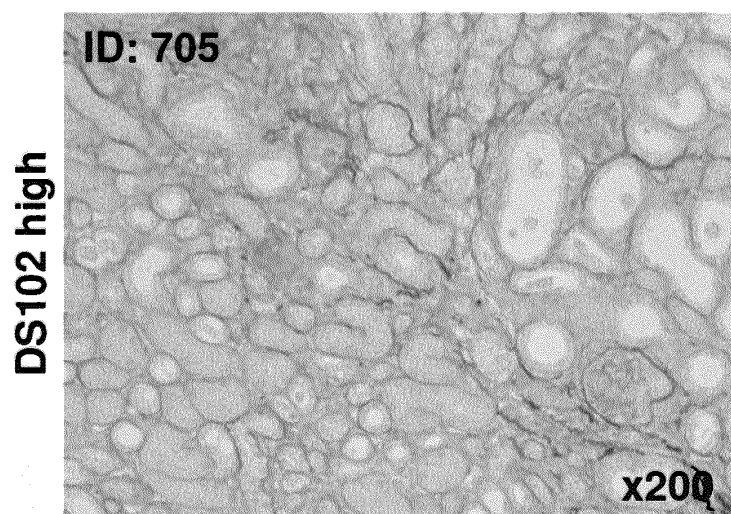
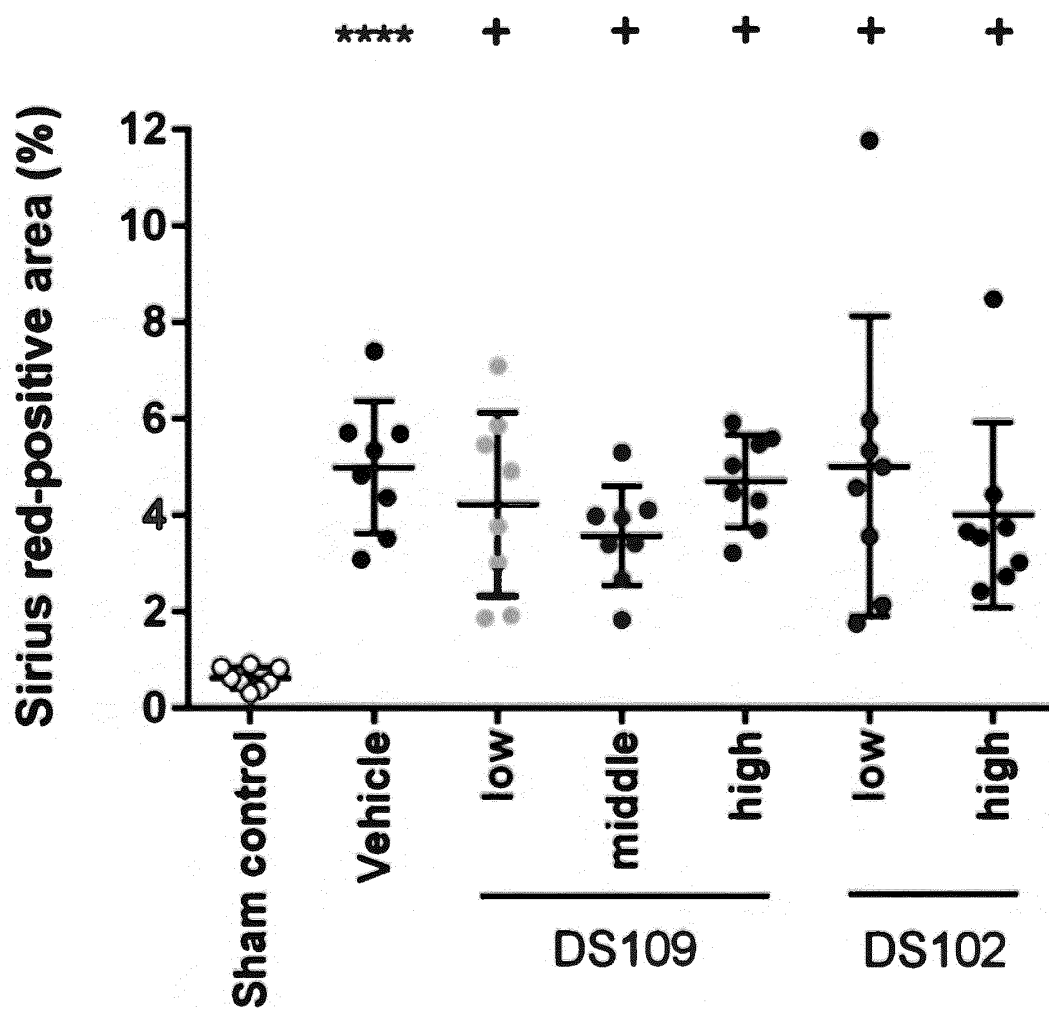


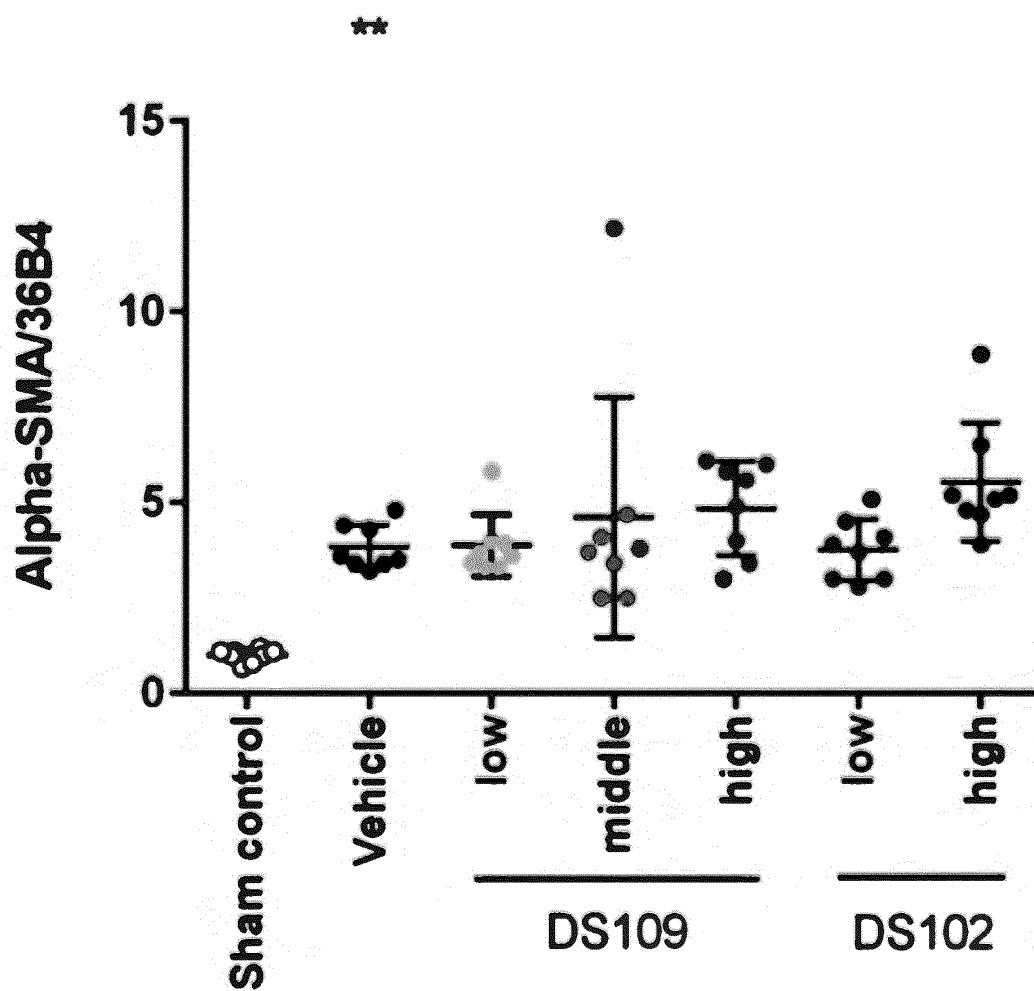
Figure 6G



****; $p < 0.0001$ (vs Sham control)
+; $p < 0.1$ (vs Vehicle)

Figure 7

Alpha-SMA



**; $p < 0.01$ (vs Sham control)

Figure 8A

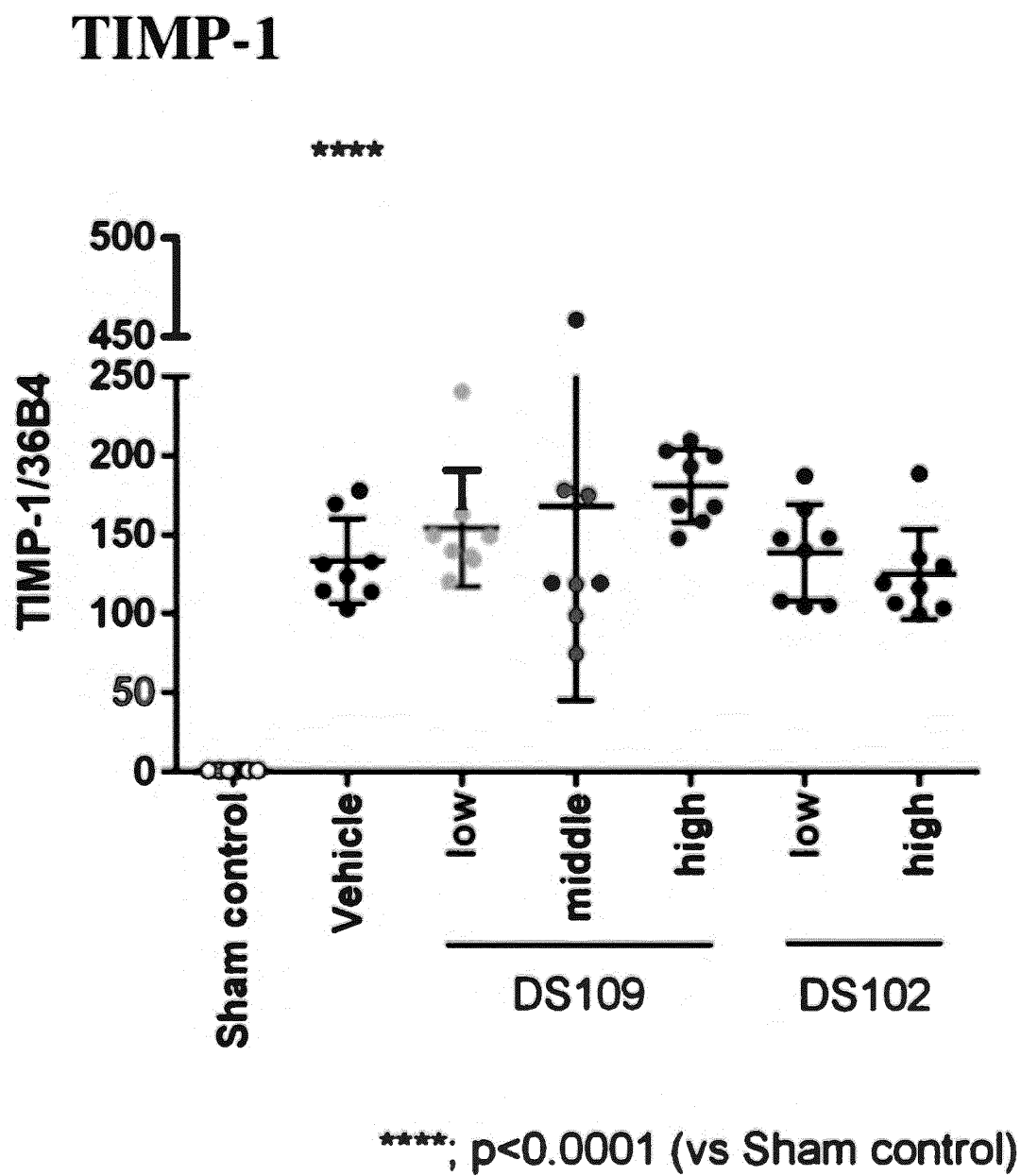
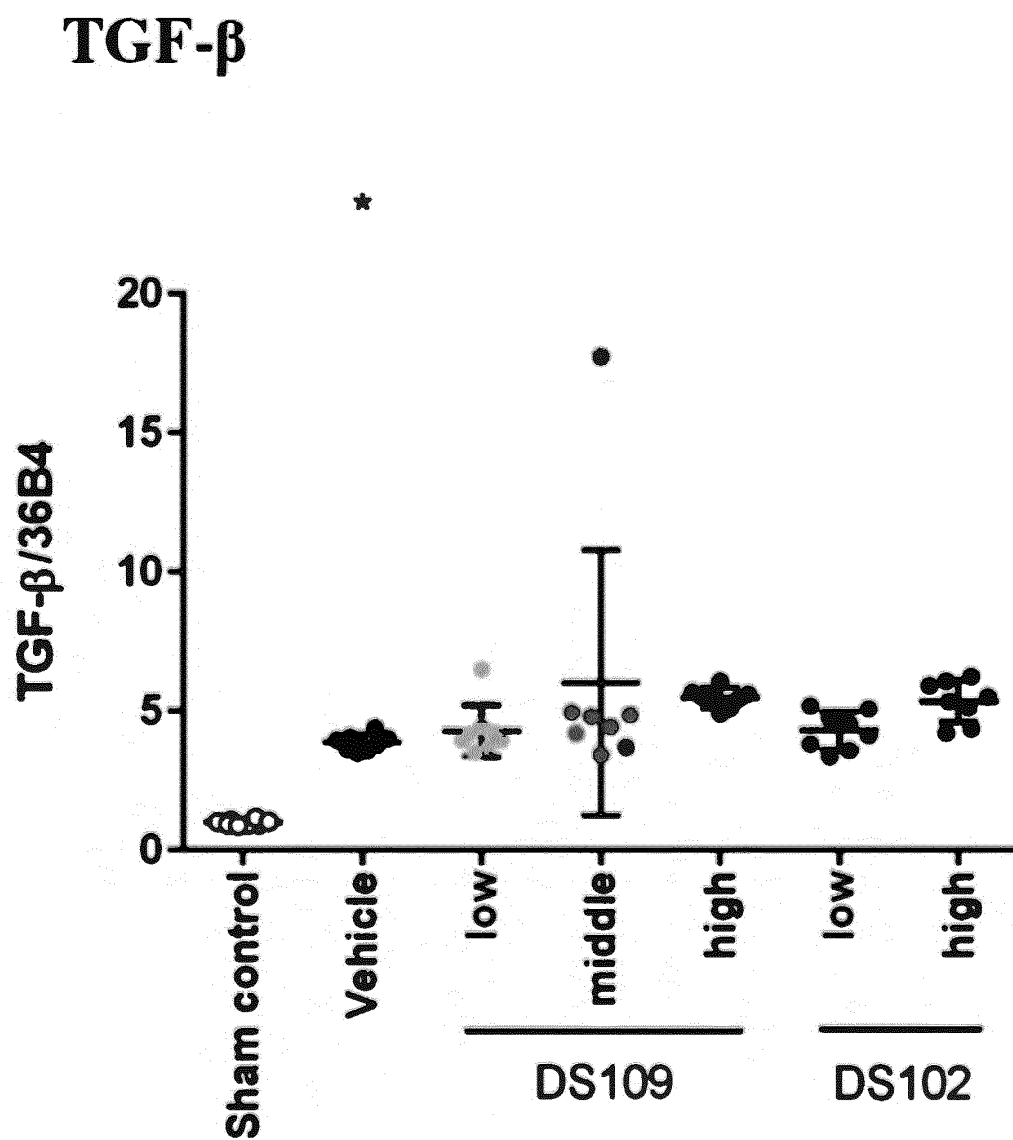


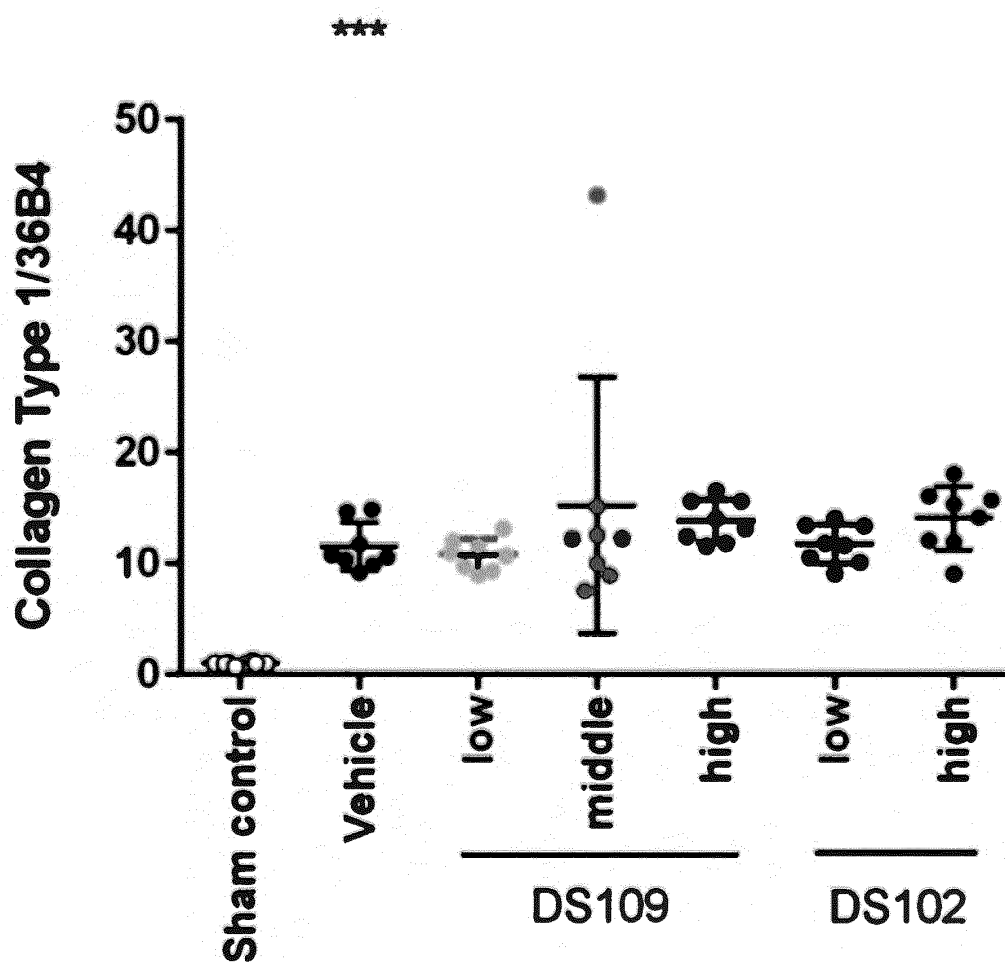
Figure 8B



*; $p < 0.05$ (vs Sham control)

Figure 8C

Collagen Type 1



***; $p < 0.001$ (vs Sham control)

Figure 8D

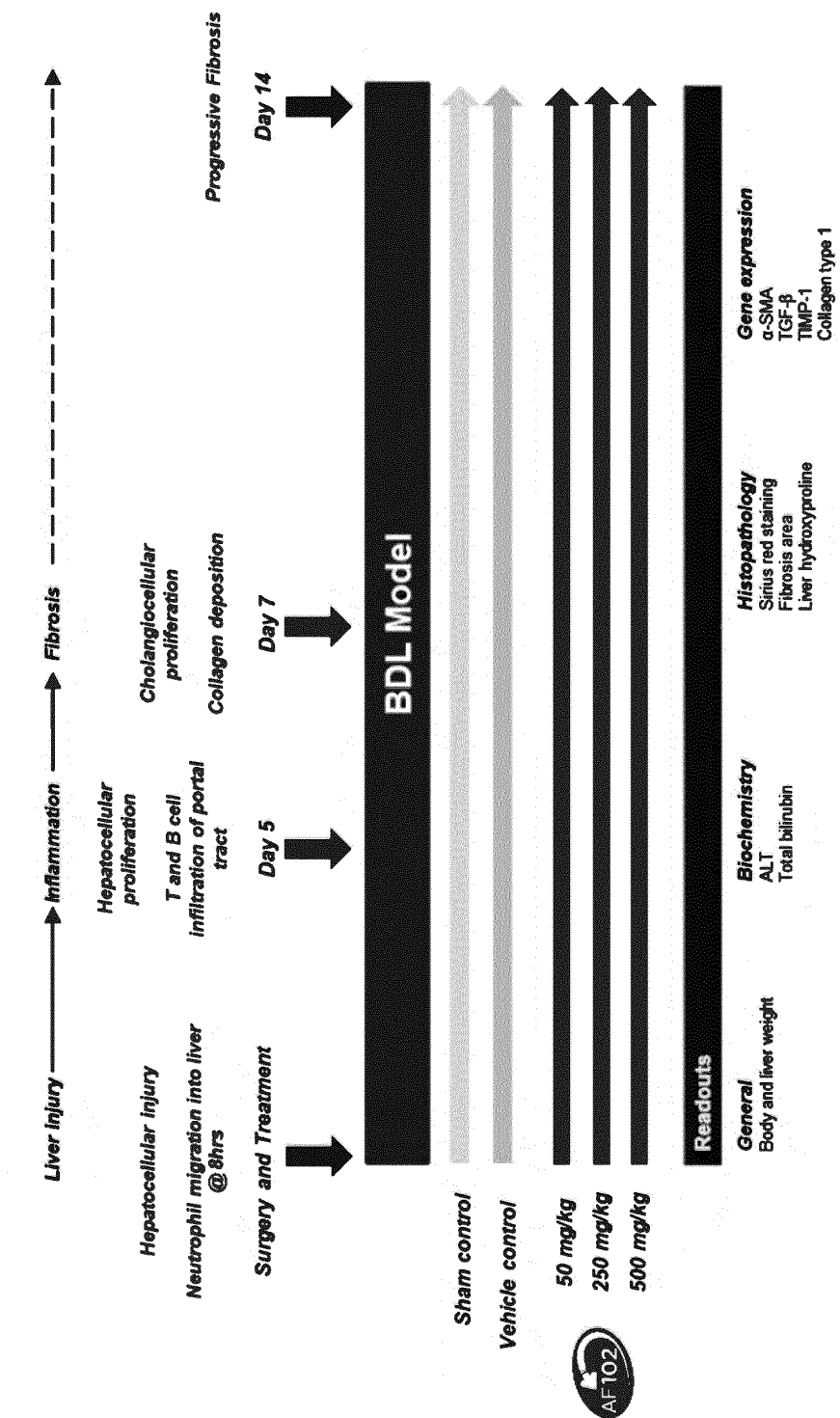


Figure 9

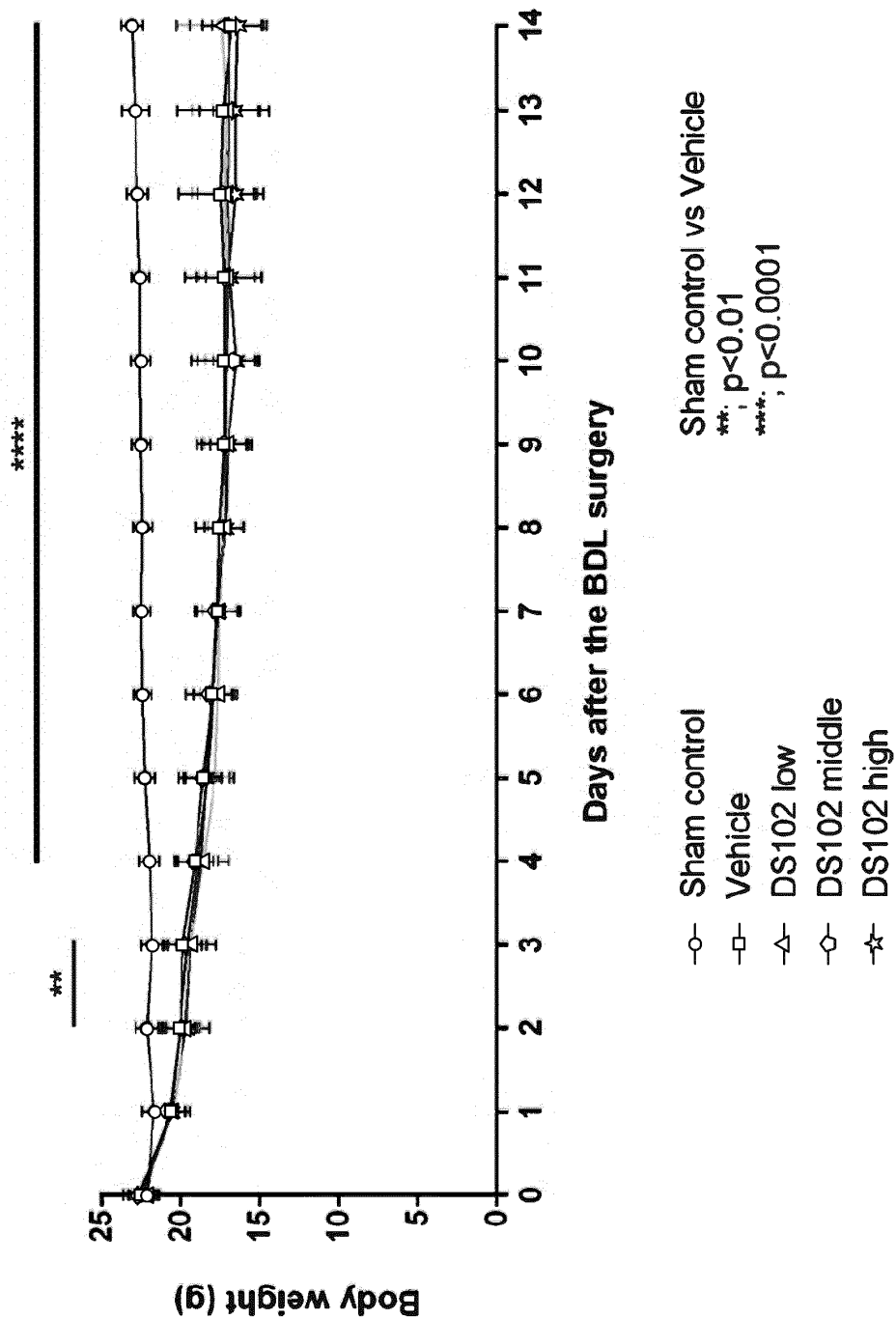


Figure 10

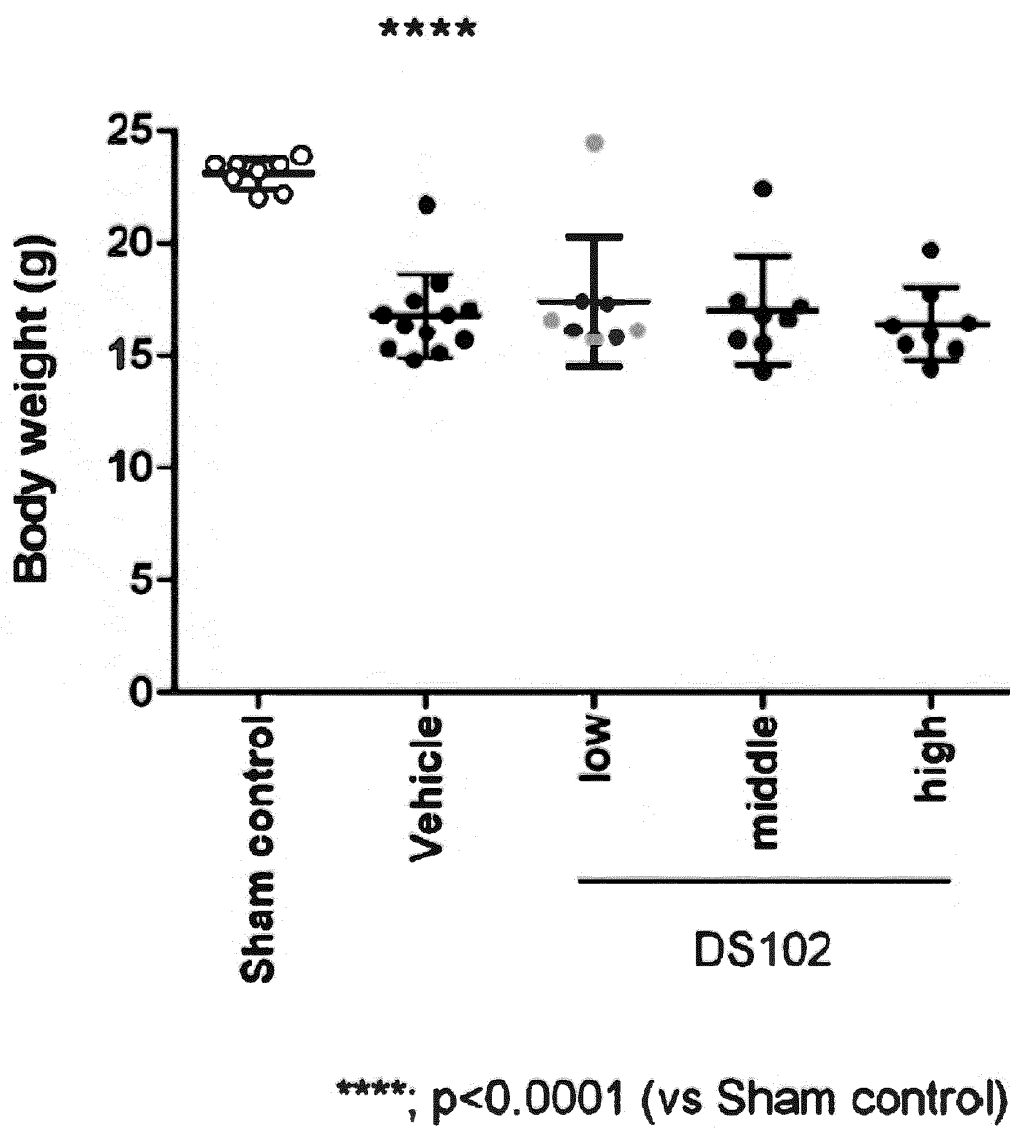


Figure 11

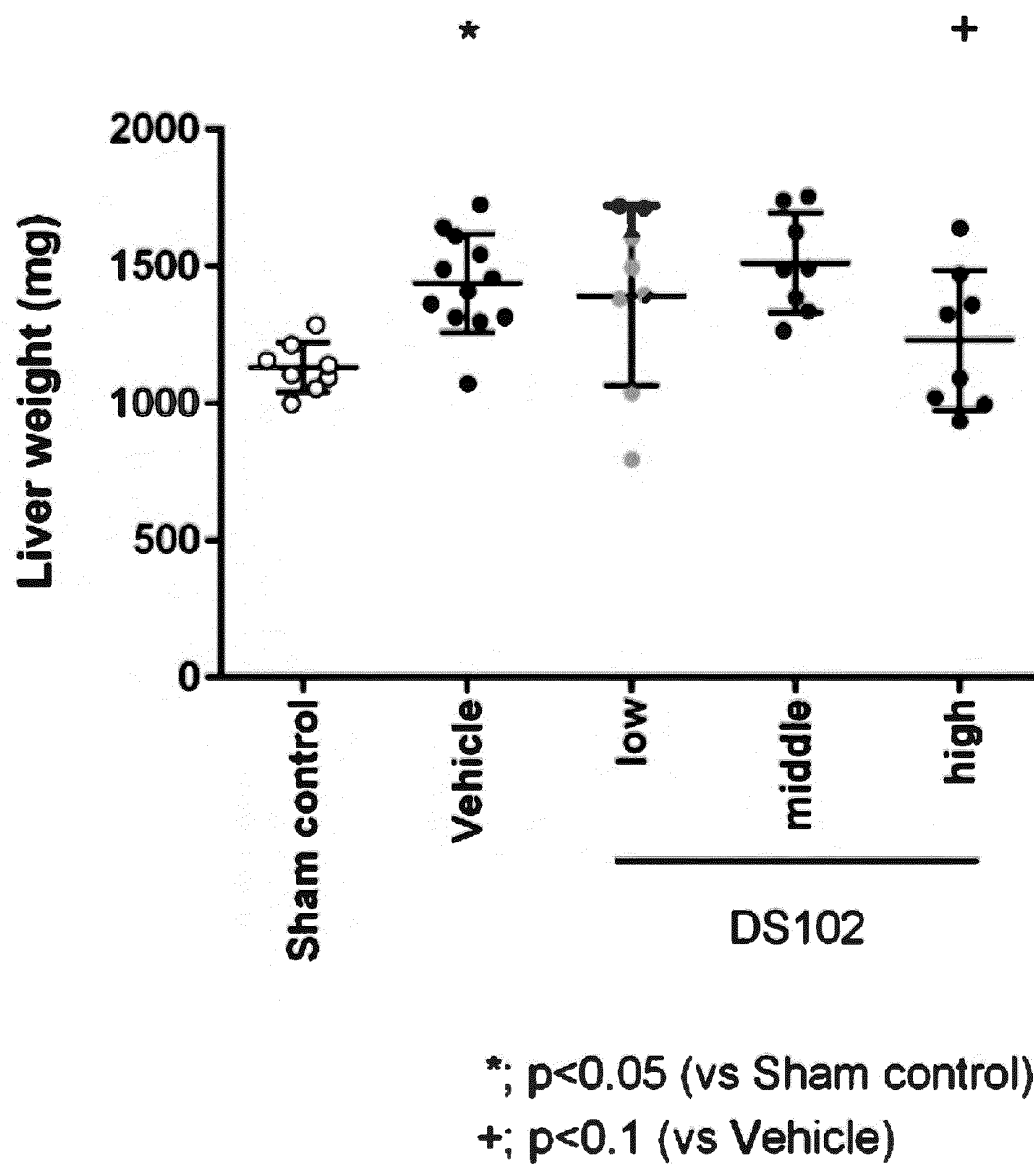
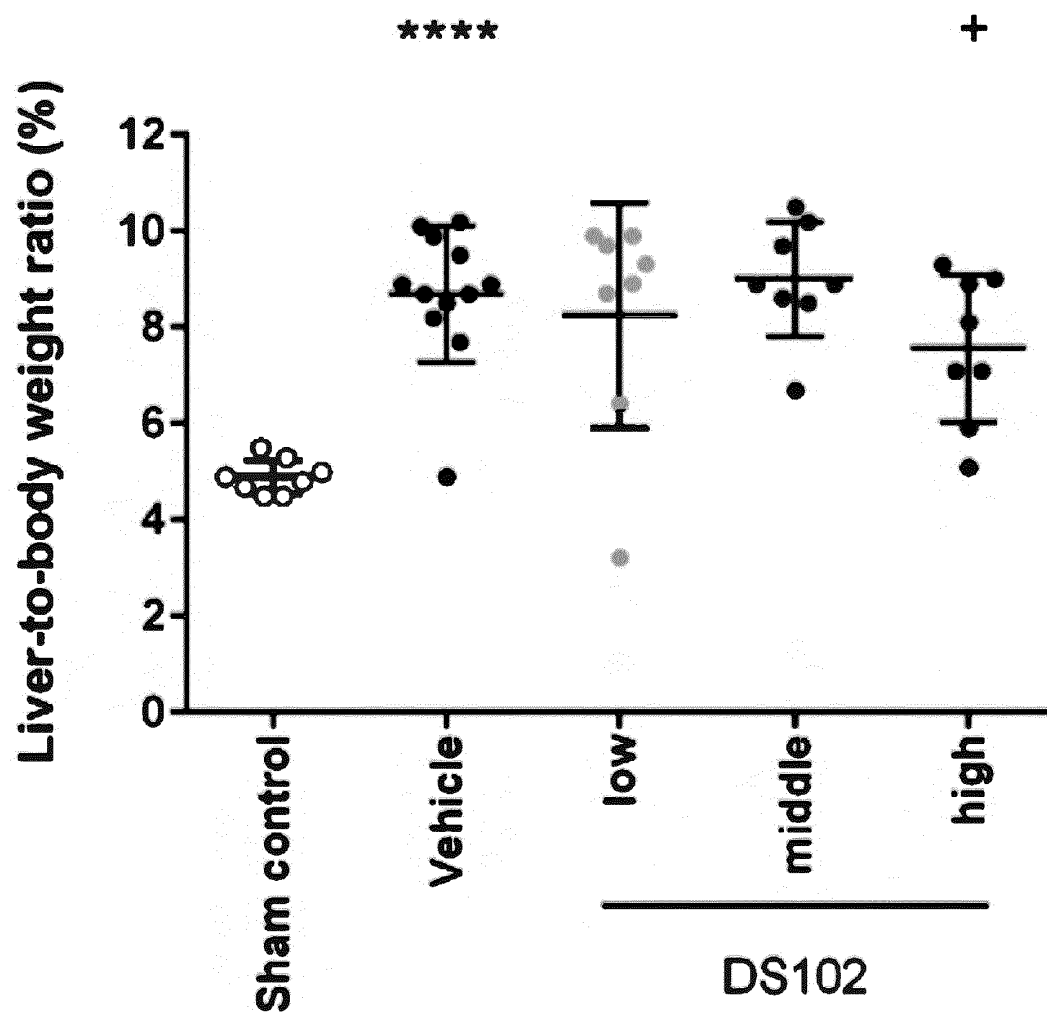


Figure 12A



*****, $p < 0.0001$ (vs Sham control)

+, $p < 0.1$ (vs Vehicle)

Figure 12B

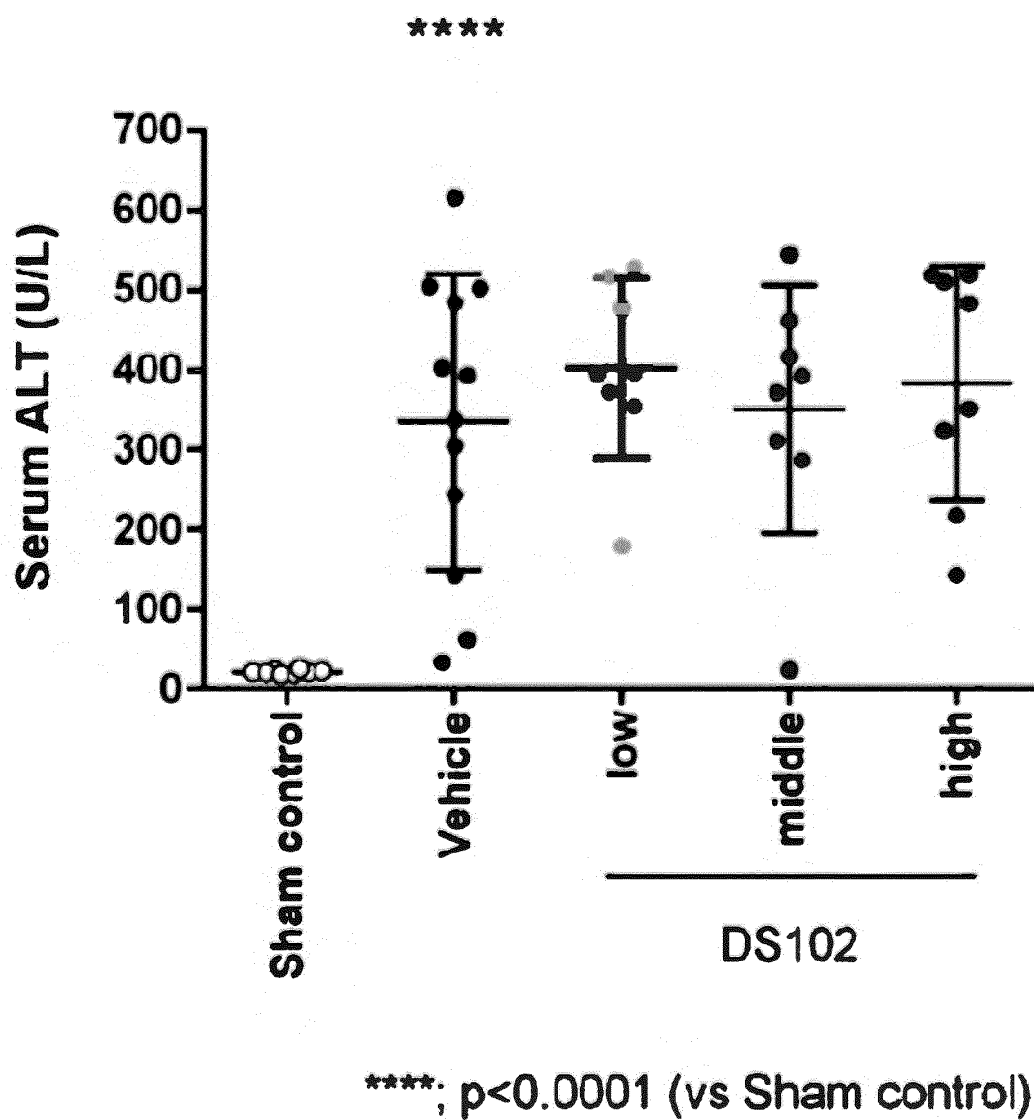
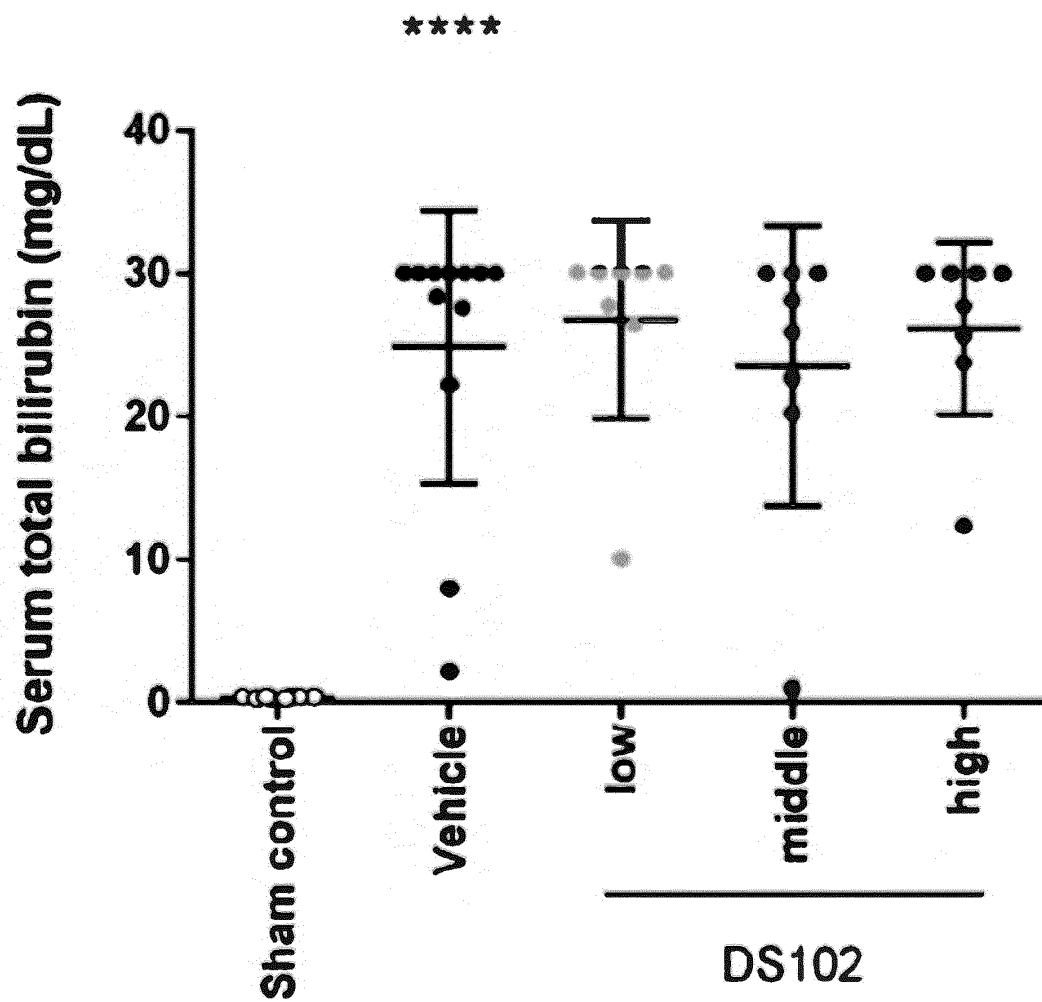


Figure 13



****, $p < 0.0001$ (vs Sham control)

Figure 14

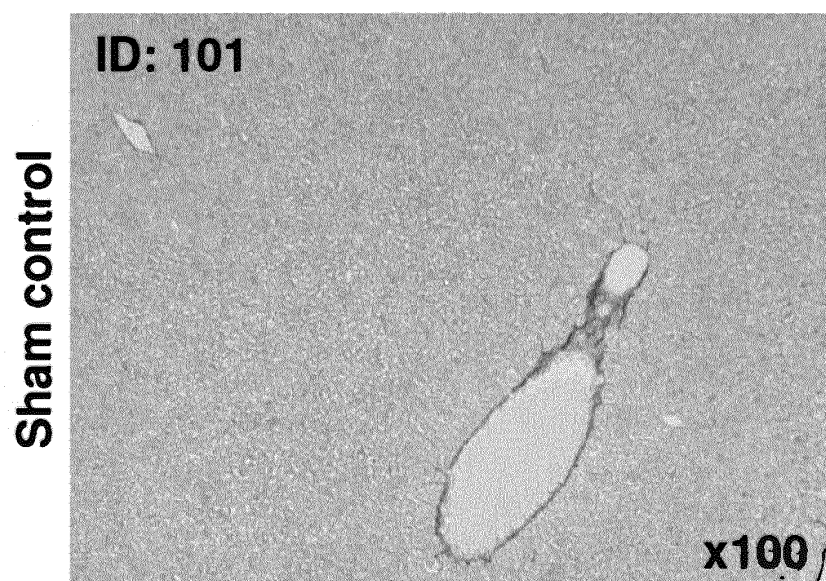


Figure 15A

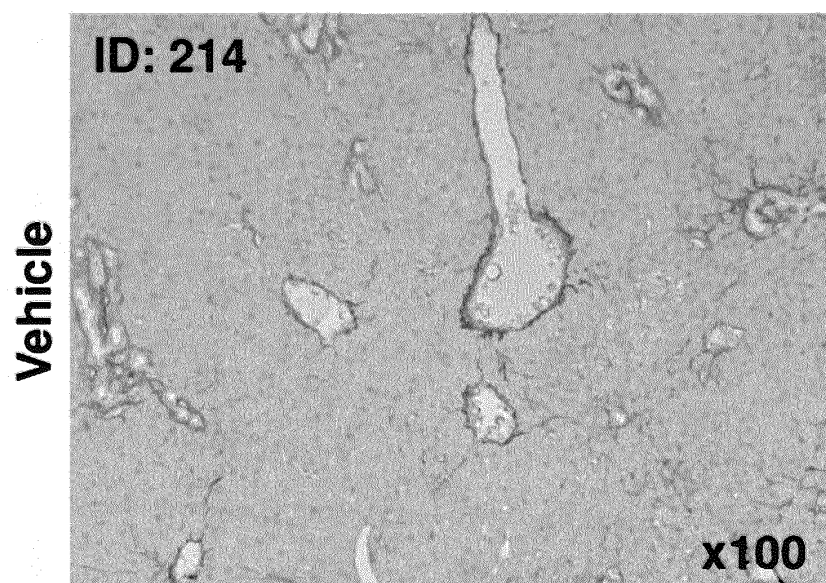


Figure 15B

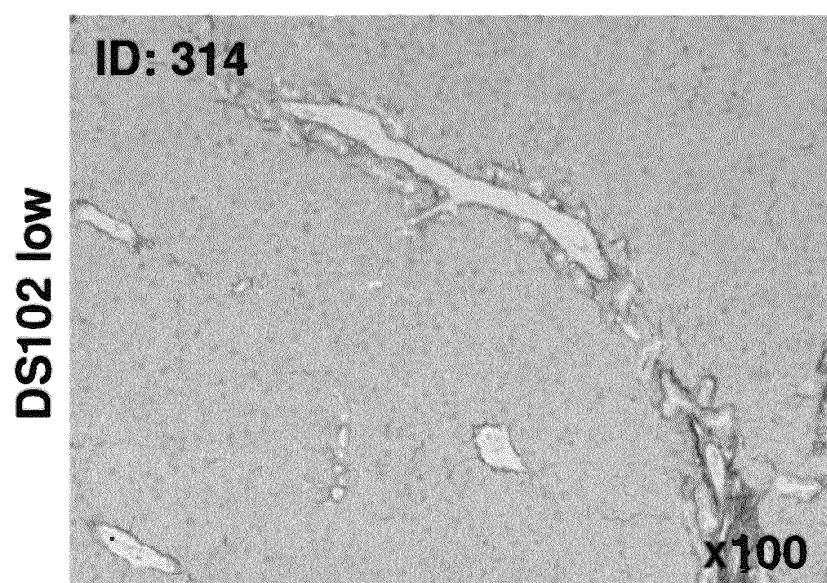


Figure 15C

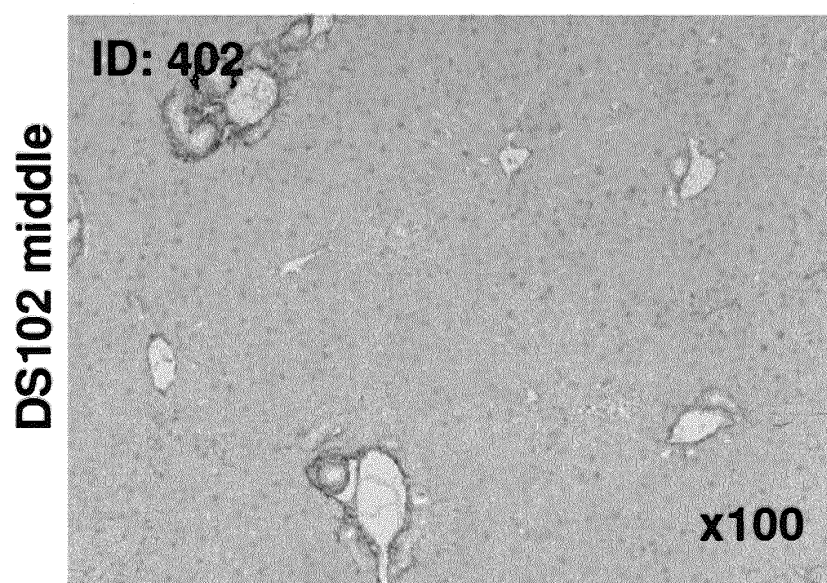


Figure 15D

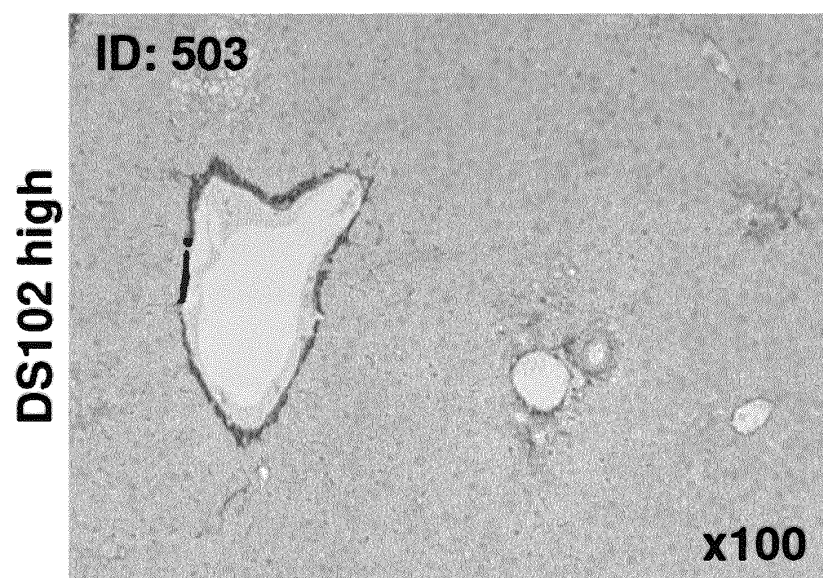
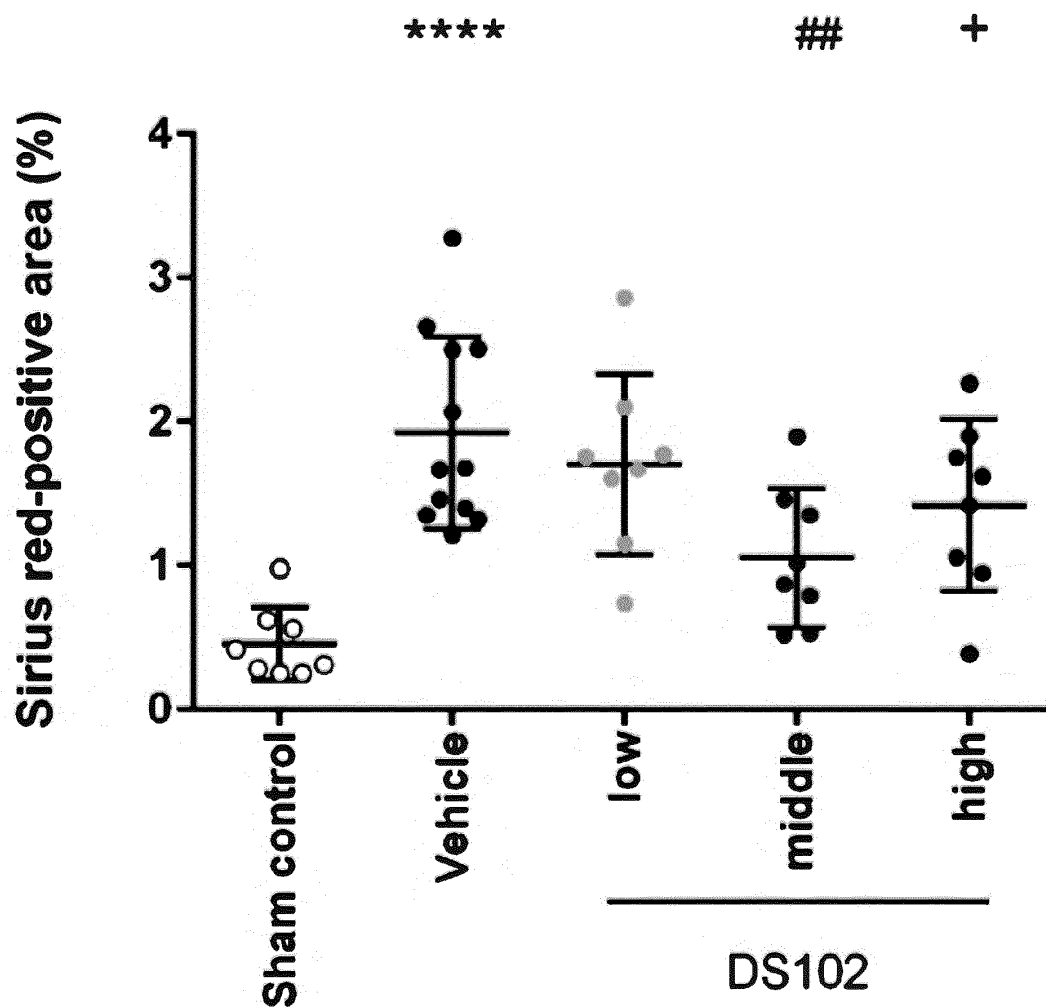


Figure 15E



*****, $p < 0.0001$ (vs Sham control)

##, $p < 0.01$ (vs Vehicle)

+, $p < 0.1$ (vs Vehicle)

Figure 16

Alpha-SMA

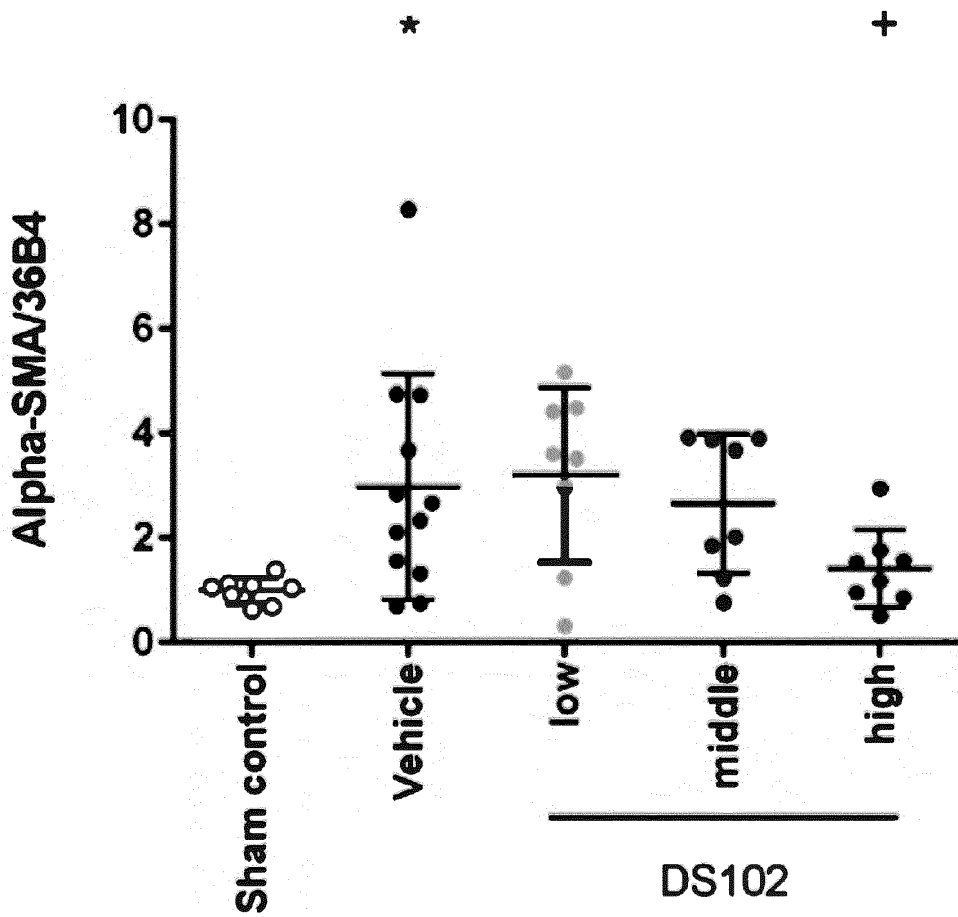
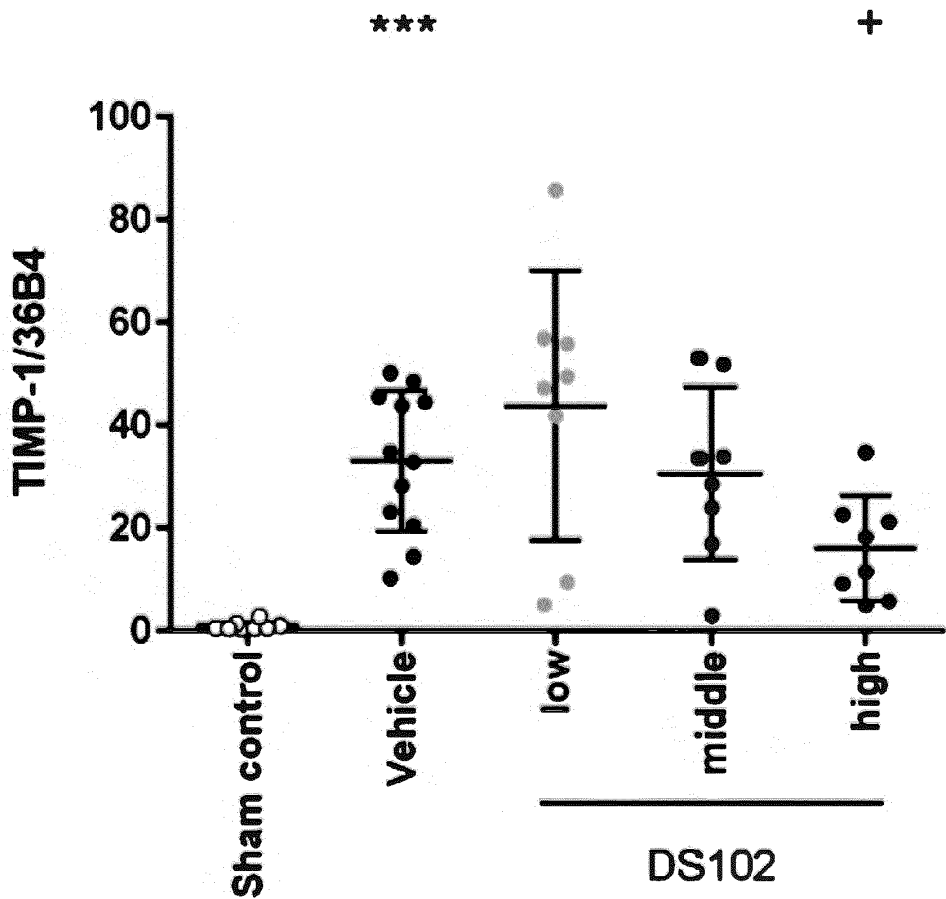


Figure 17A

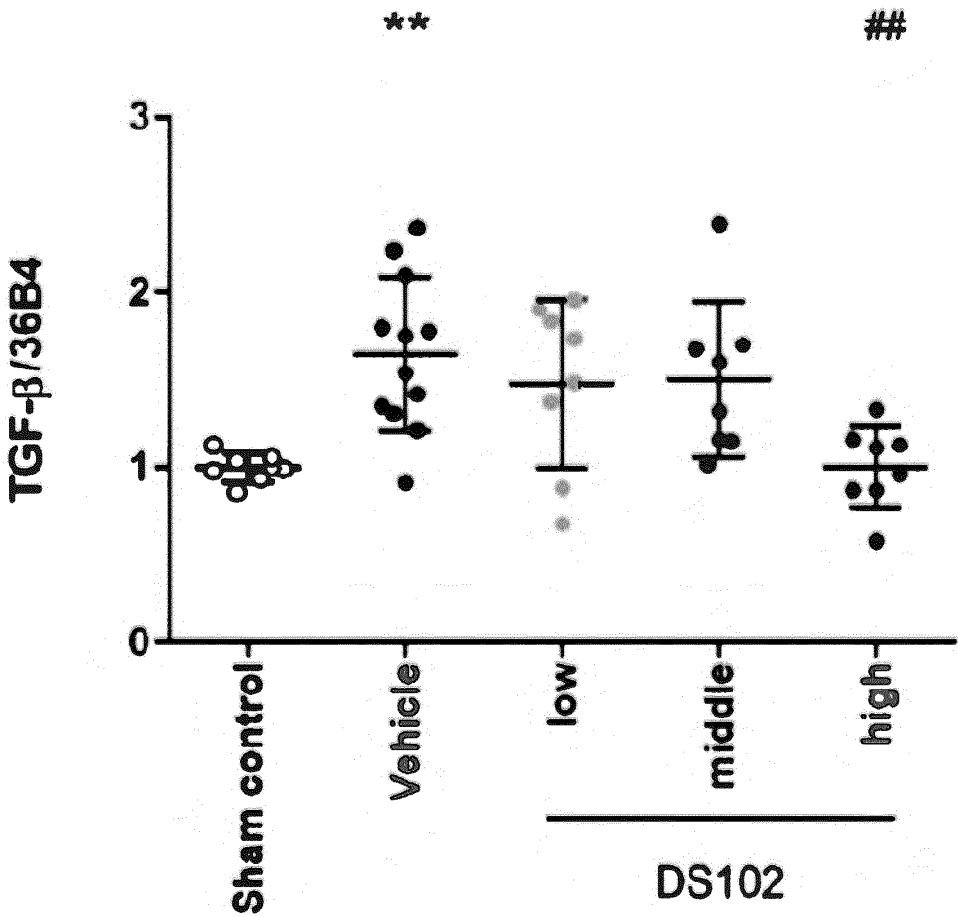
TIMP-1



***; $p < 0.001$ (vs Sham control)
+; $p < 0.1$ (vs Vehicle)

Figure 17B

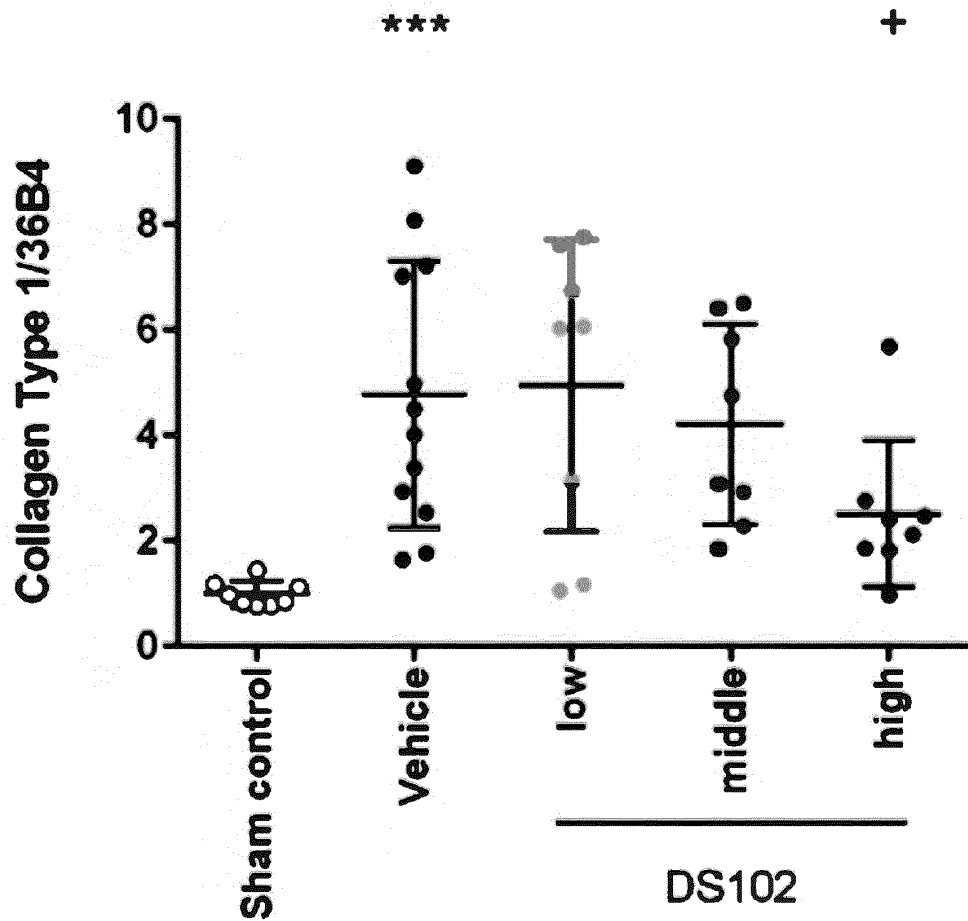
TGF-β



**; p<0.01 (vs Sham control)
##; p<0.01 (vs Vehicle)

Figure 17C

Collagen Type 1



***; $p < 0.001$ (vs Sham control)
+; $p < 0.1$ (vs Vehicle)

Figure 17D

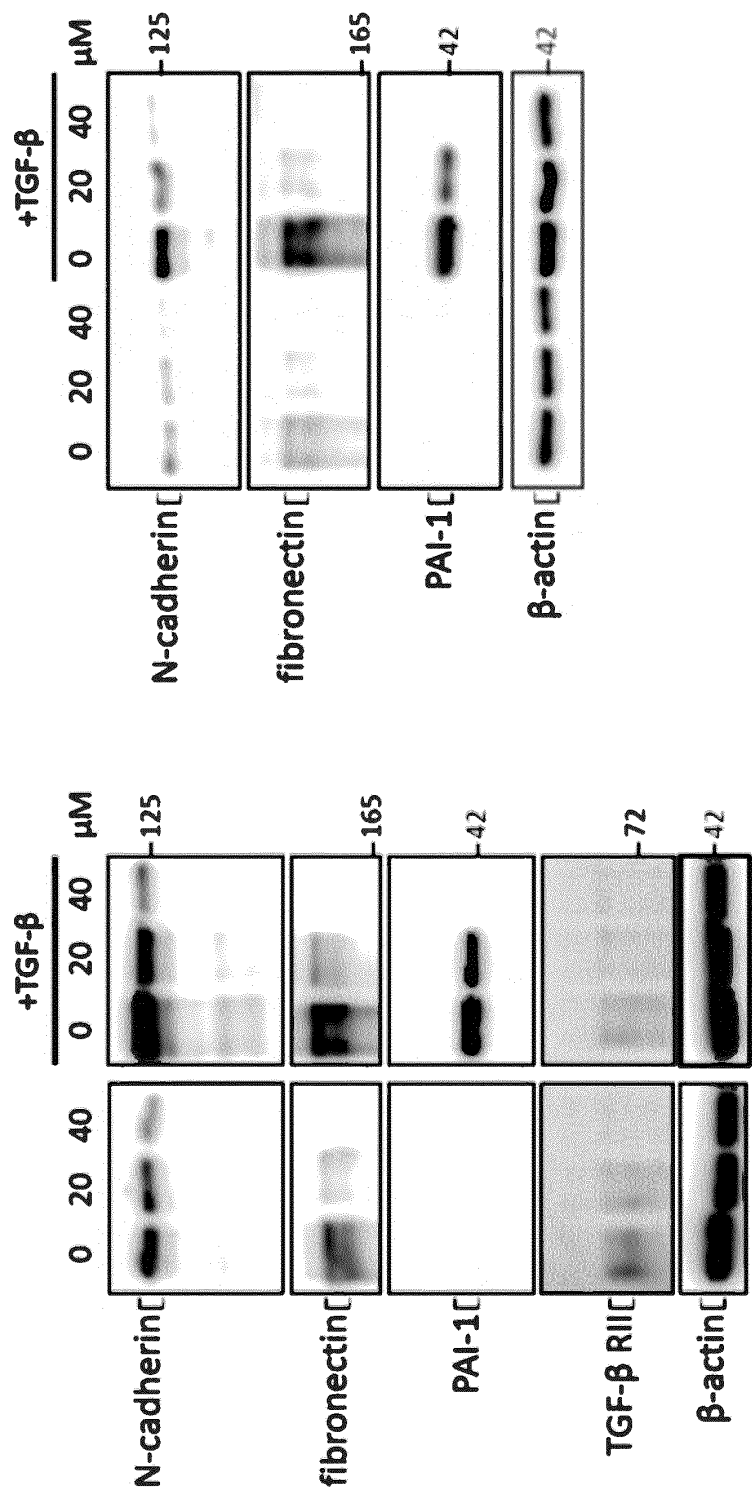


Figure 18A

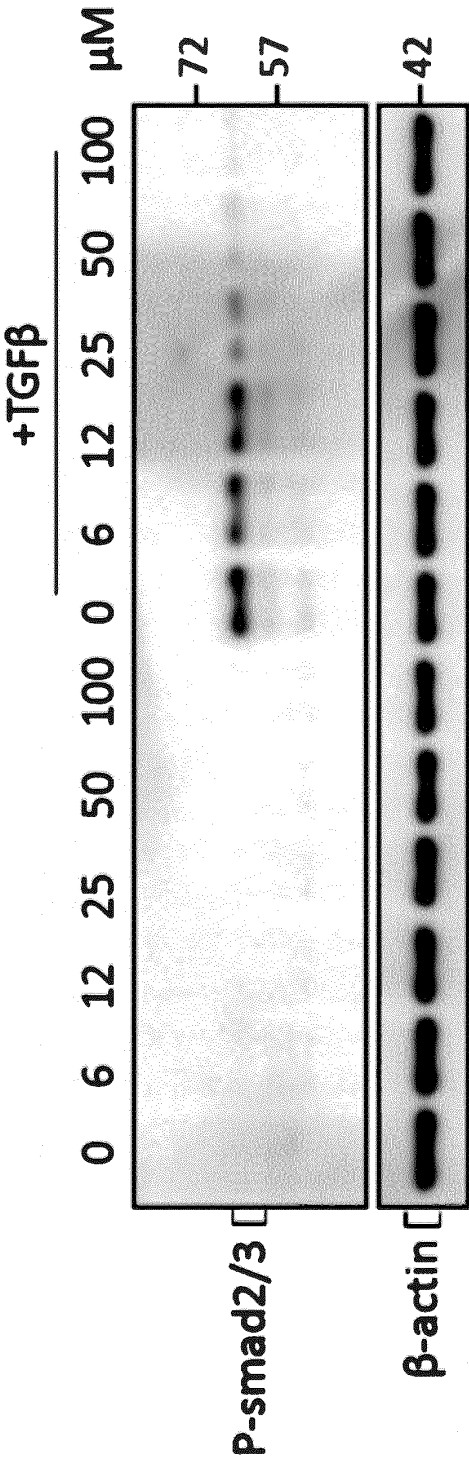


Figure 18B

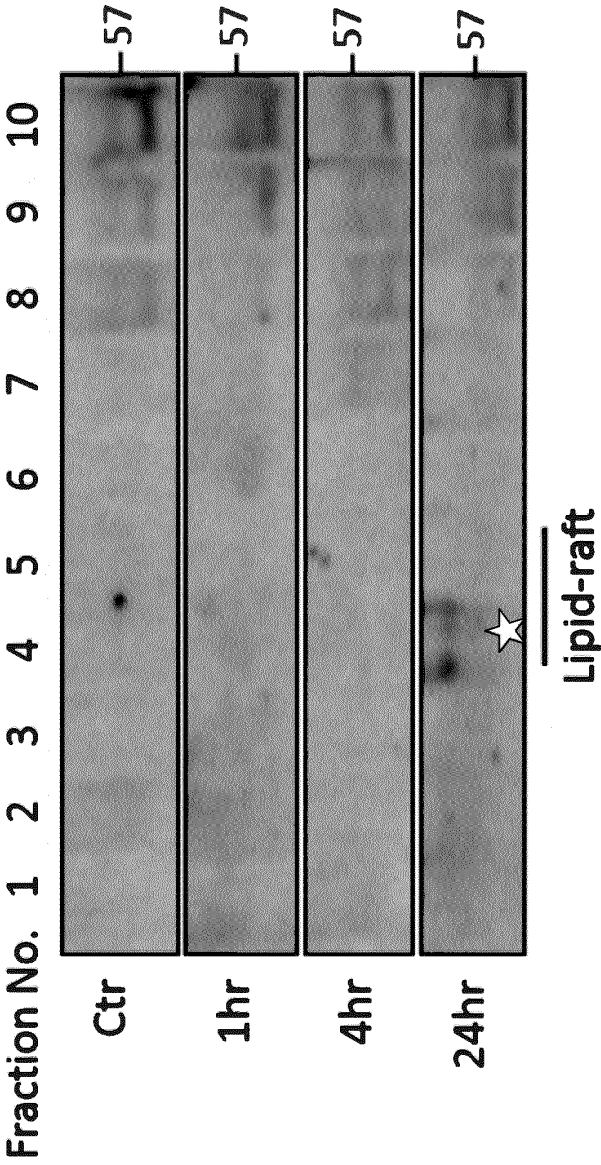


Figure 18C

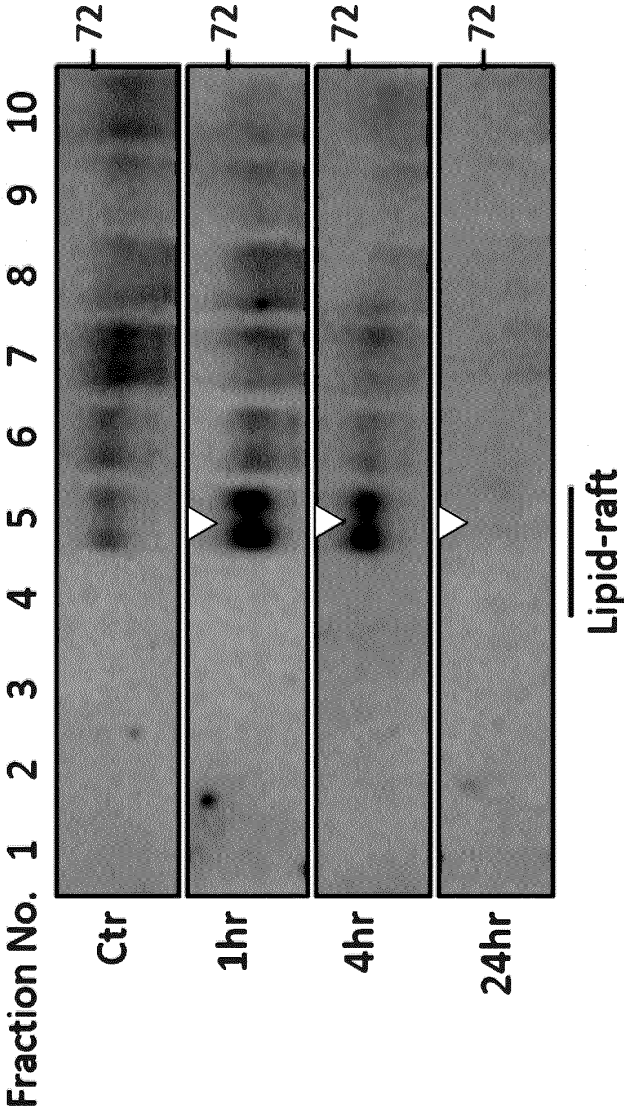


Figure 18D

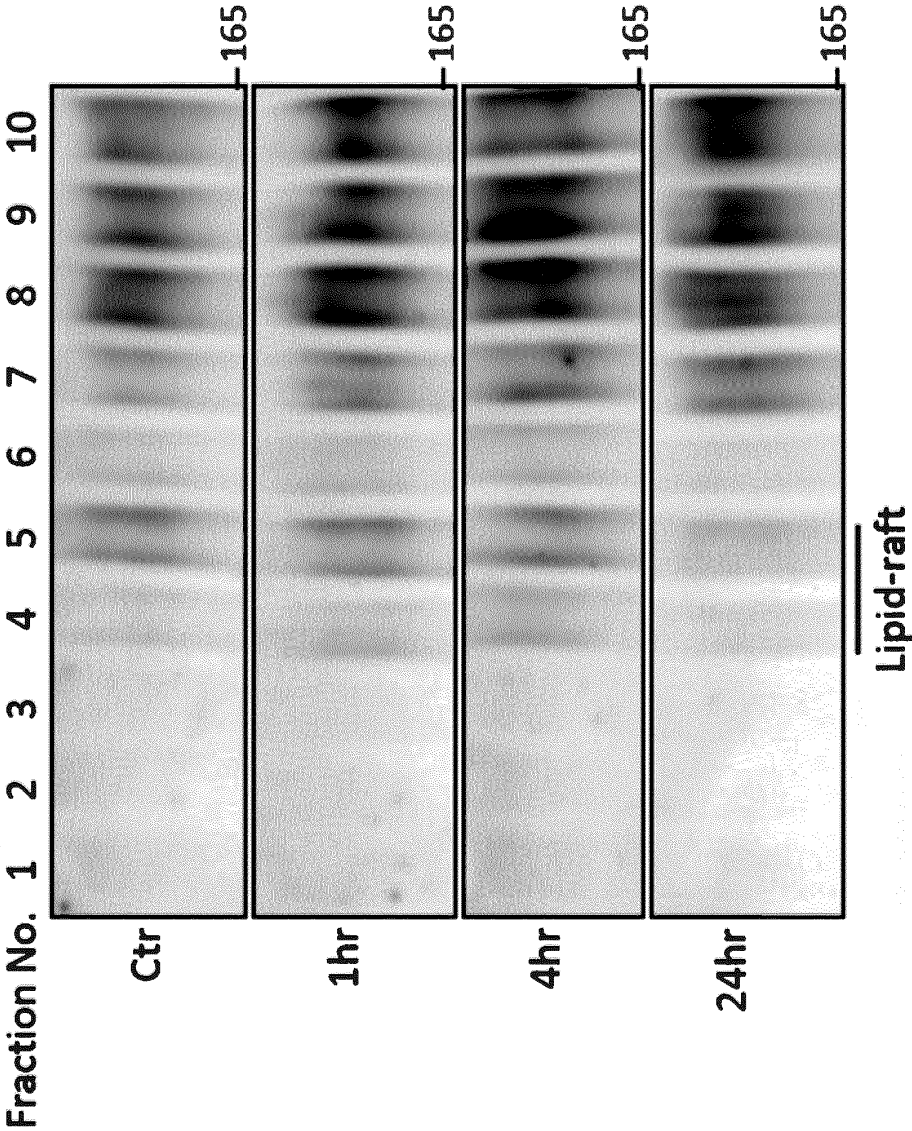


Figure 18E

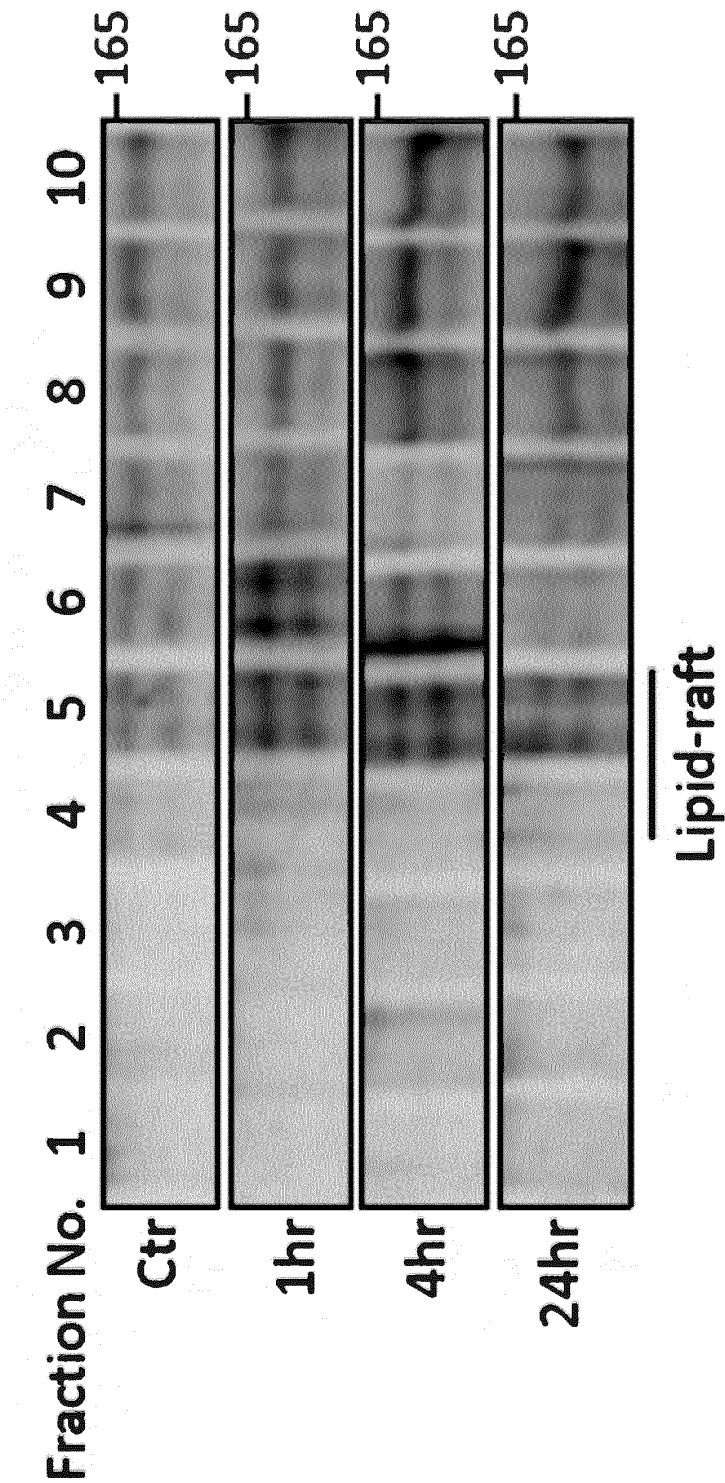


Figure 18F

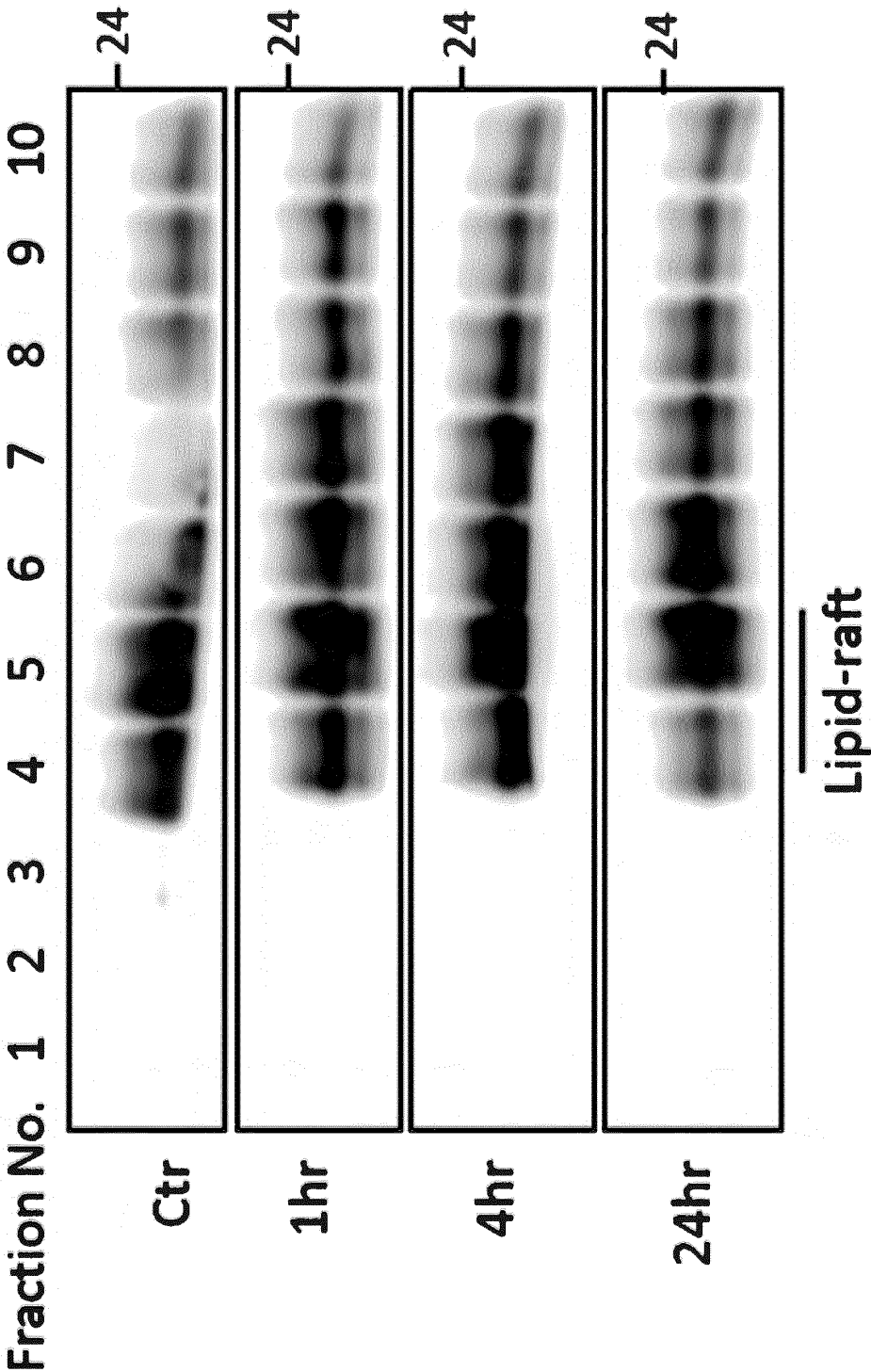


Figure 18G

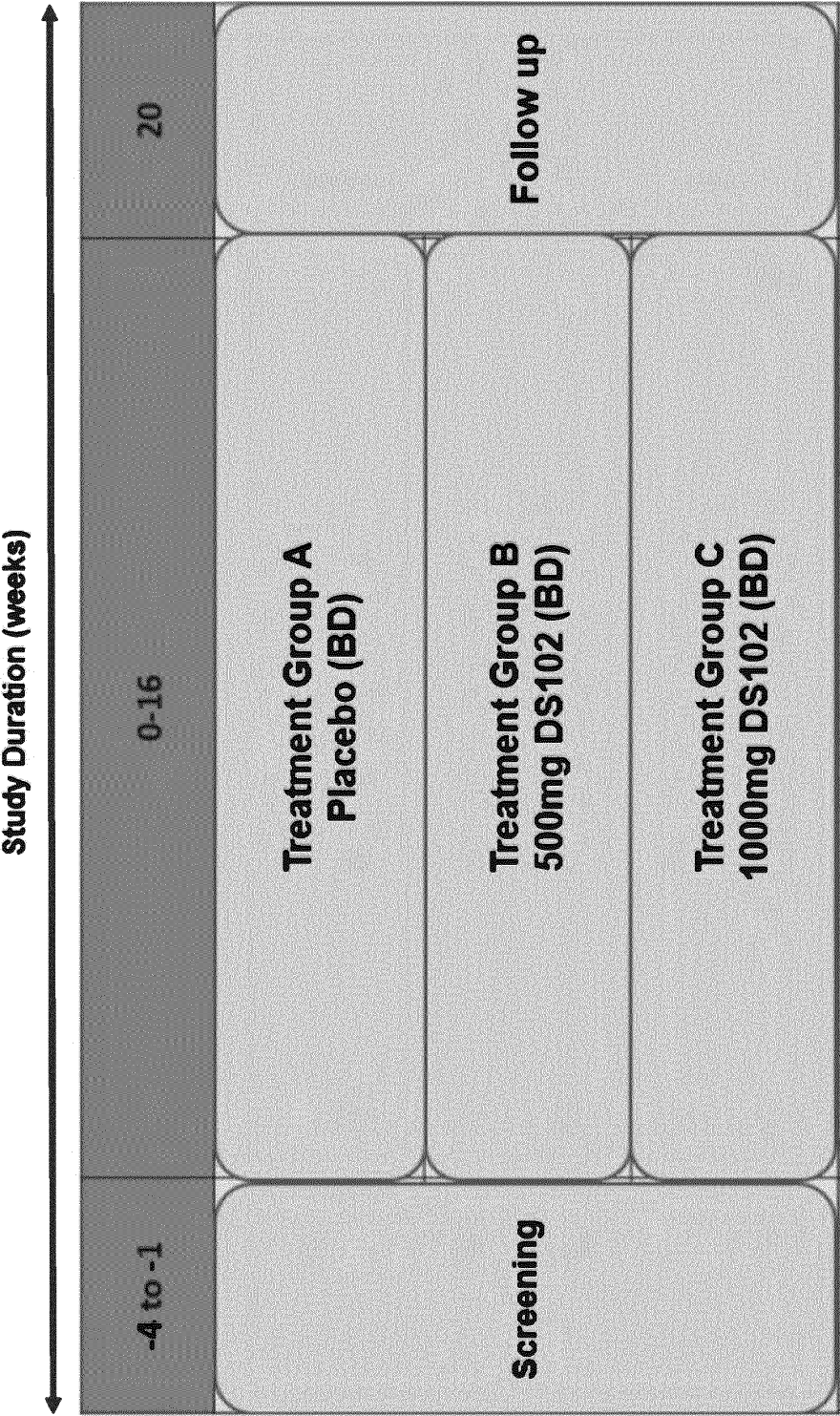


Figure 19

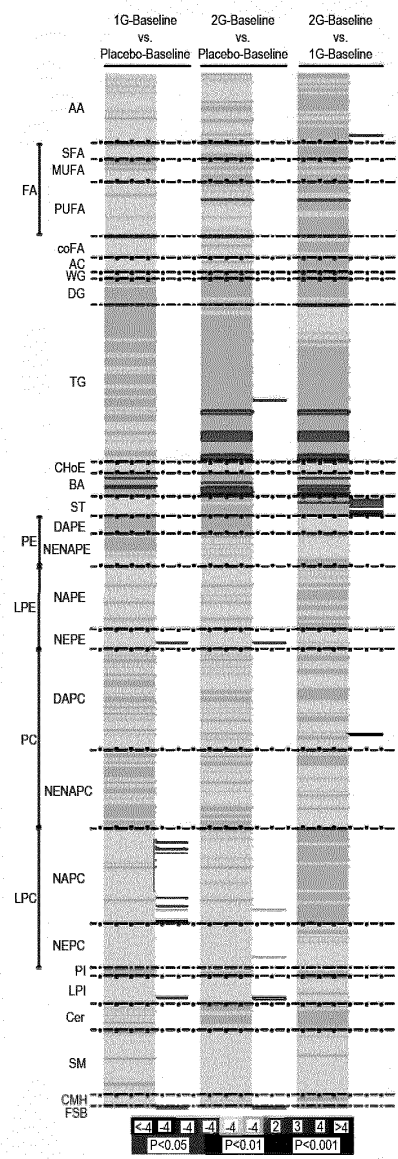


Figure 20

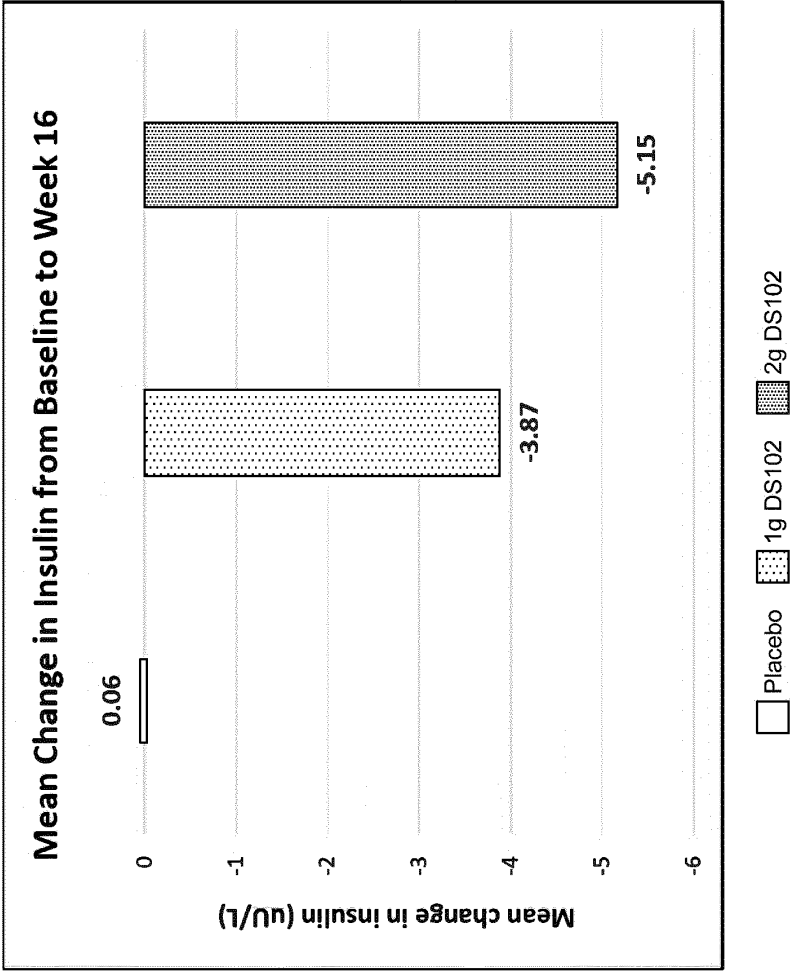


Figure 21A

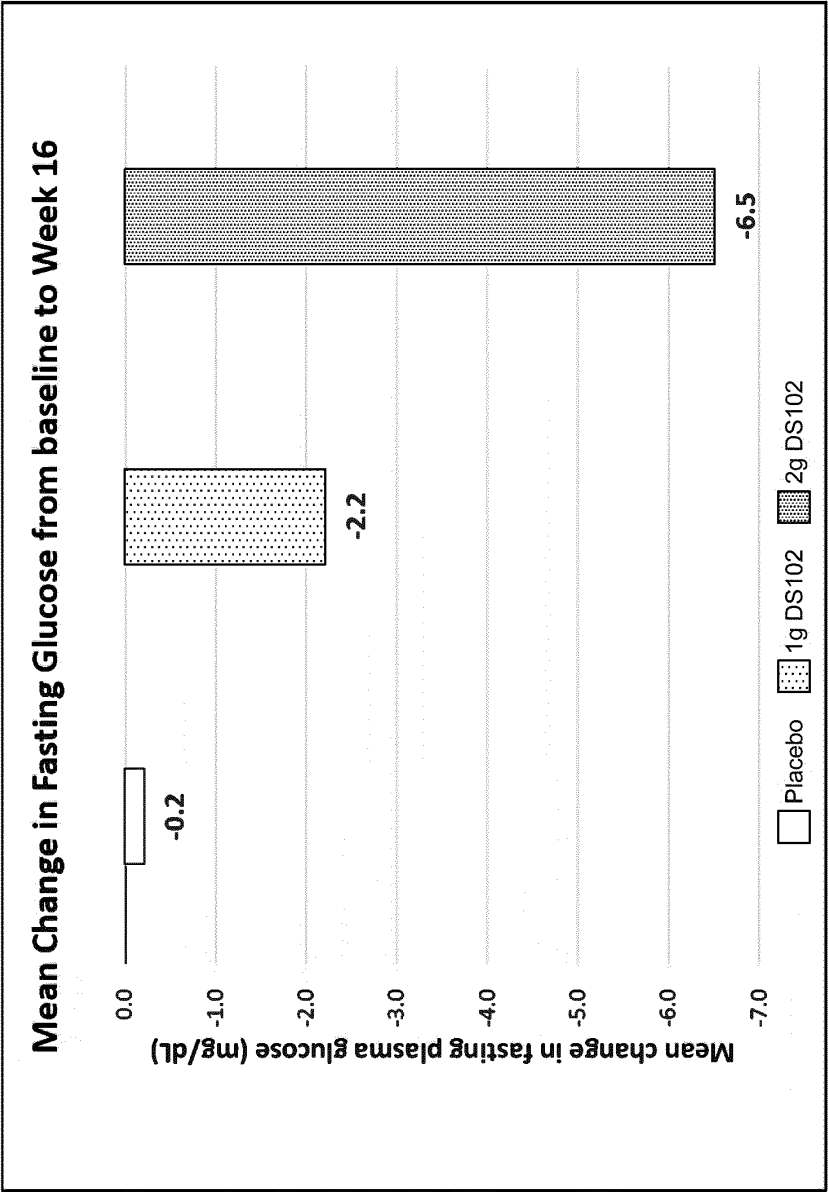
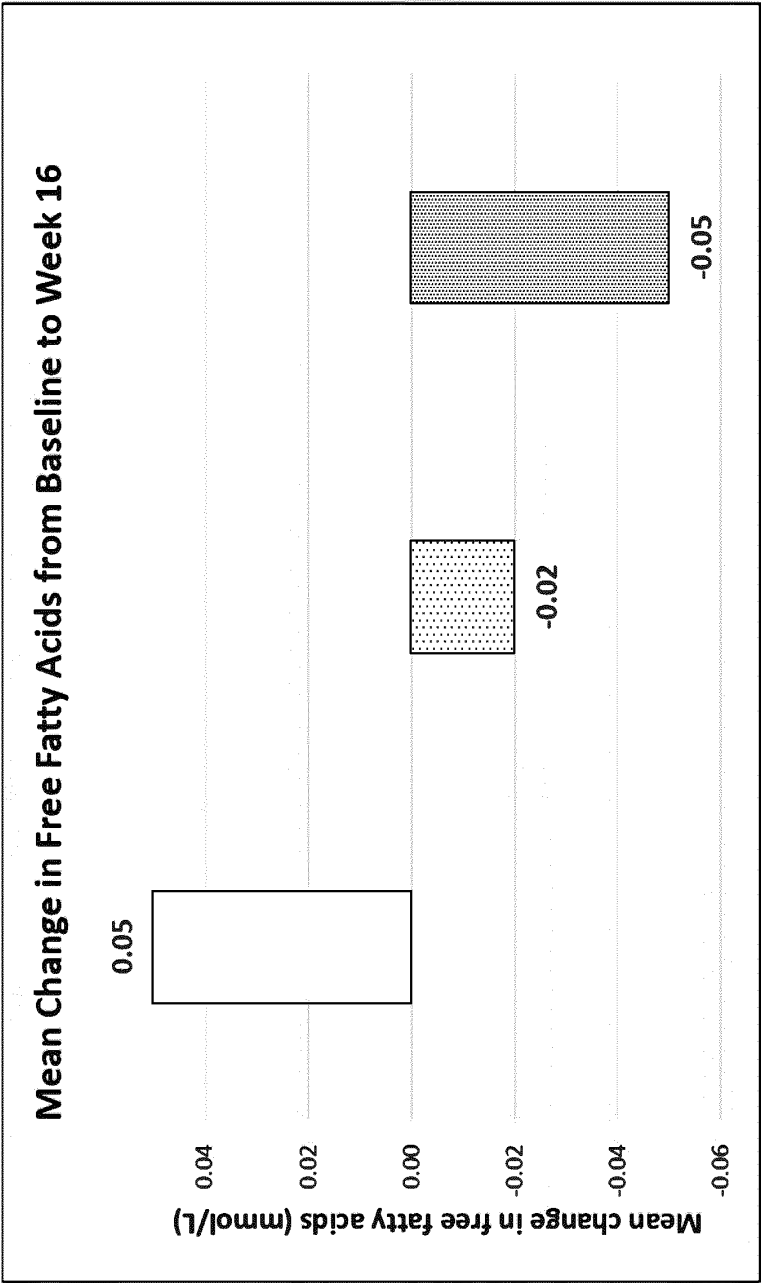


Figure 21B



□ Placebo ▤ 1g DS102 ▨ 2g DS102

Figure 21C

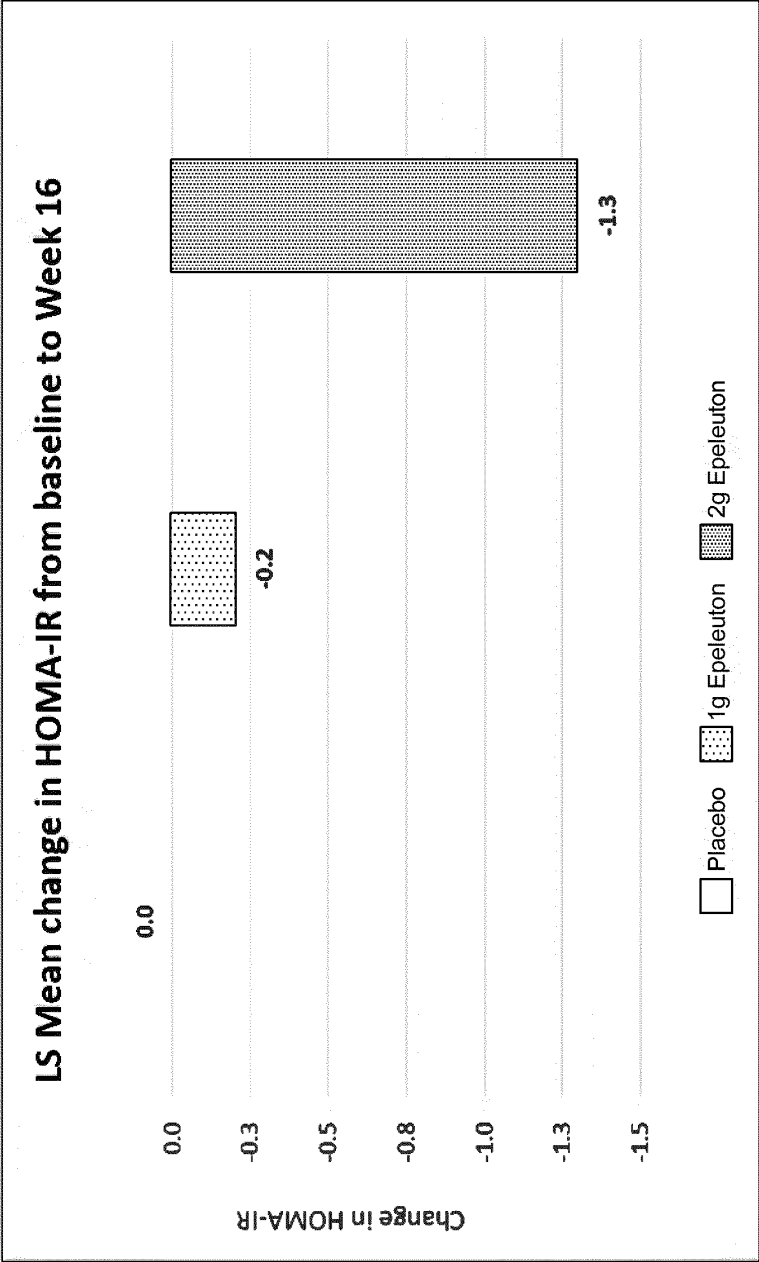


Figure 22A

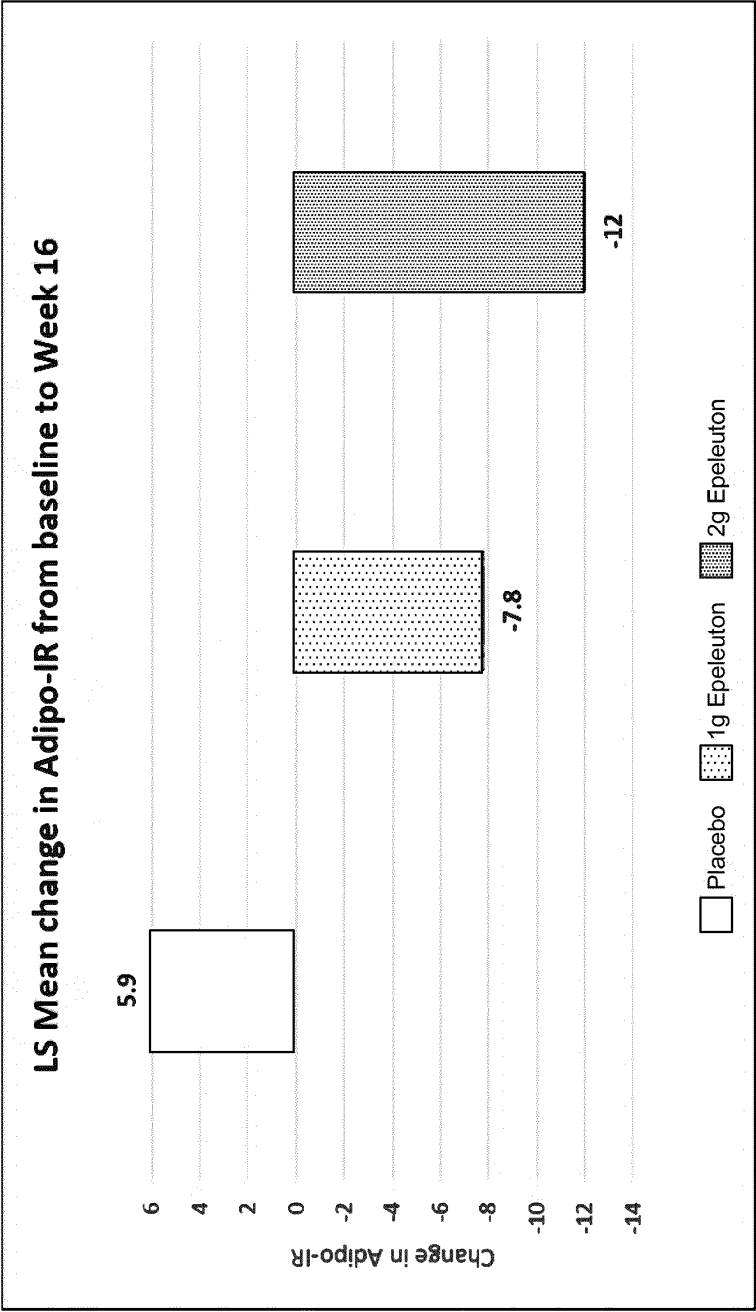
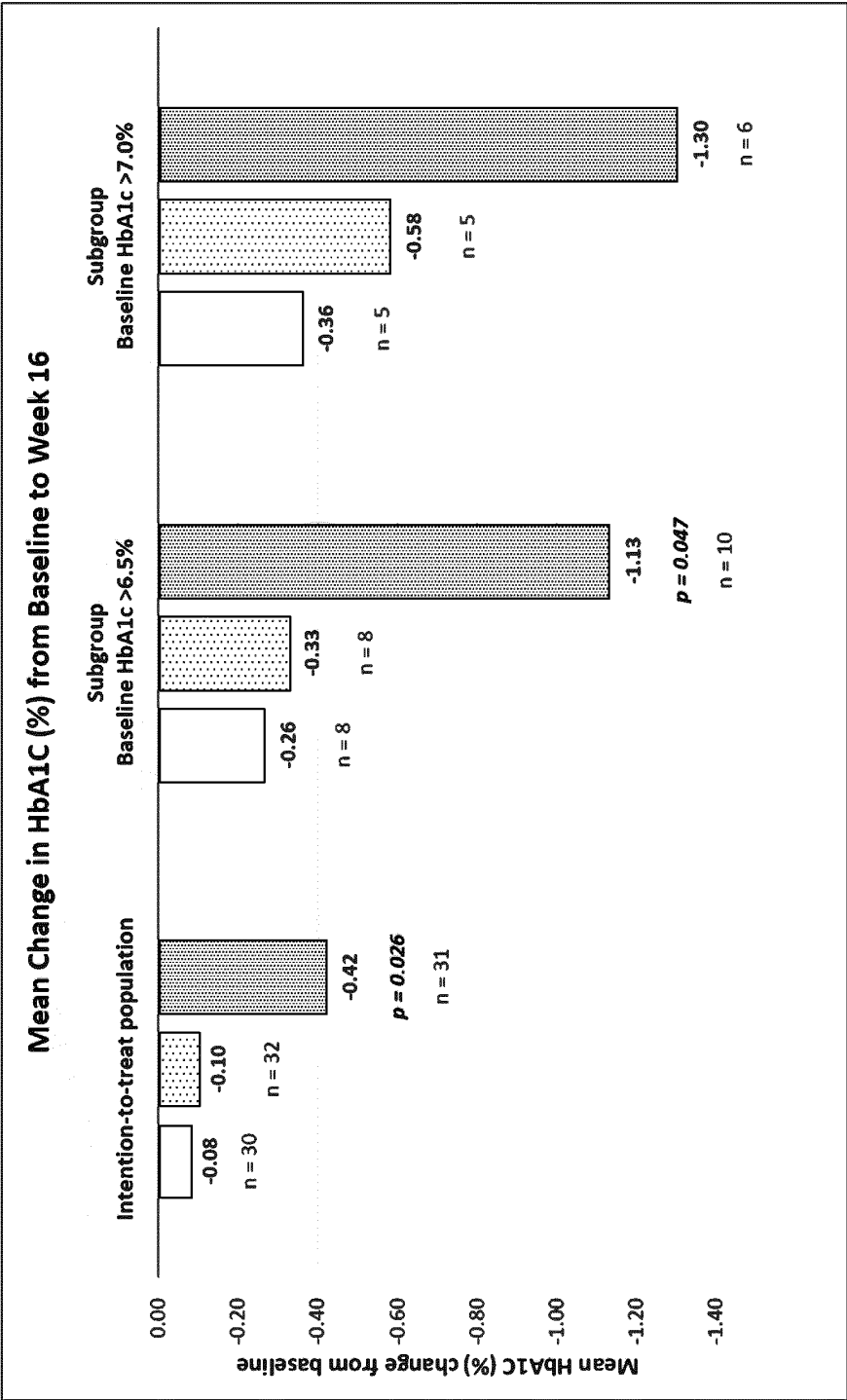


Figure 22B



□ Placebo ▨ 1g DS102 ▩ 2g DS102

Figure 23A

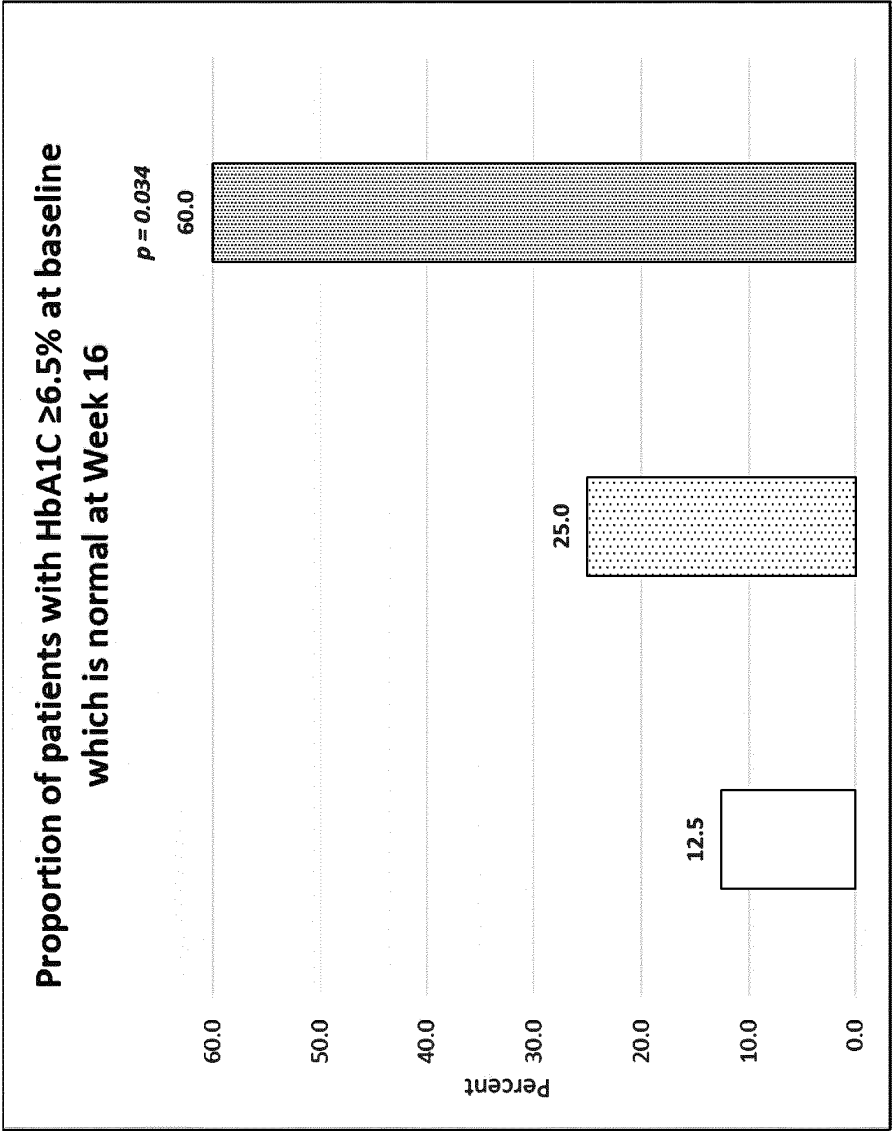


Figure 23B

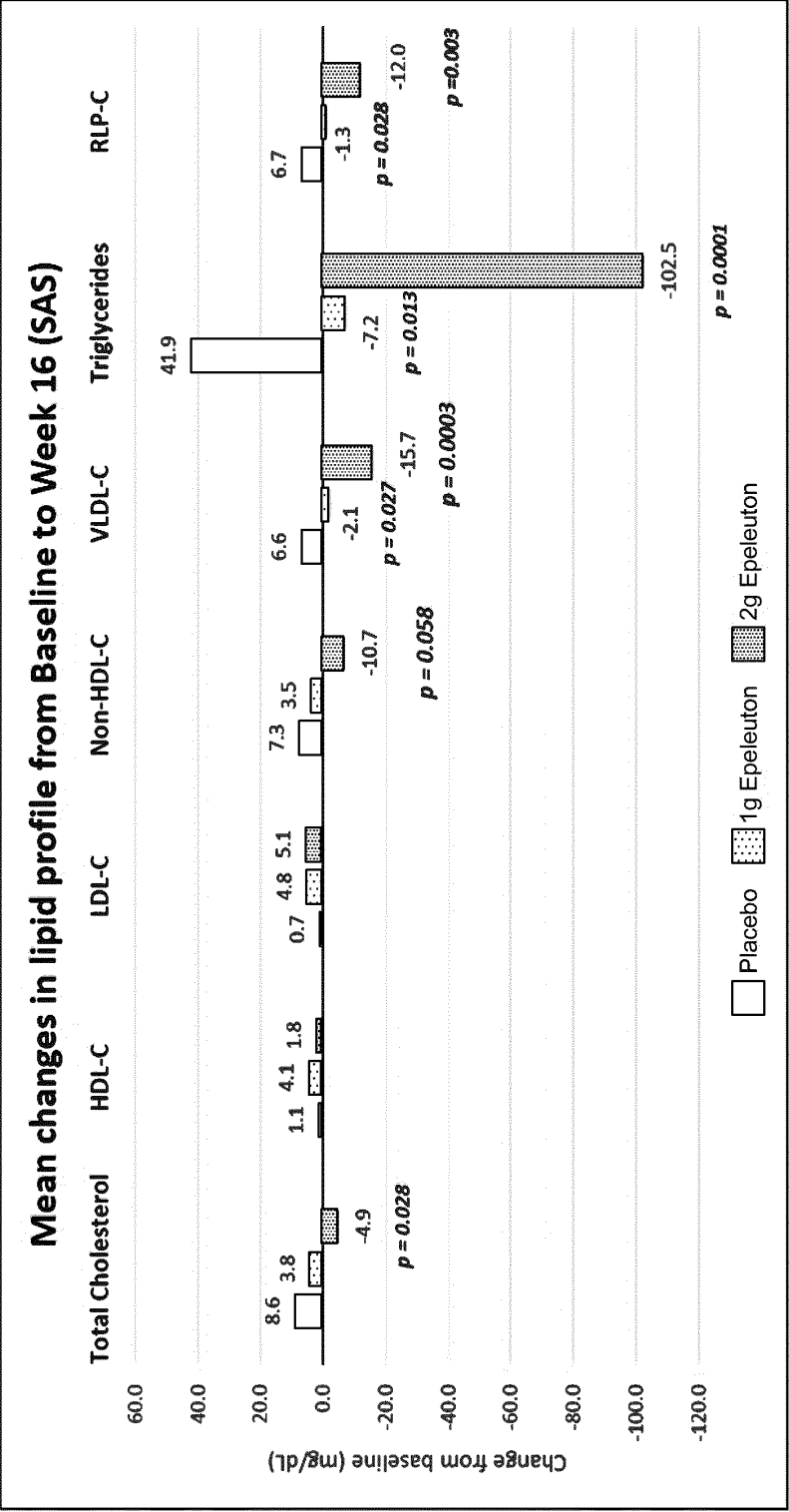


Figure 24A

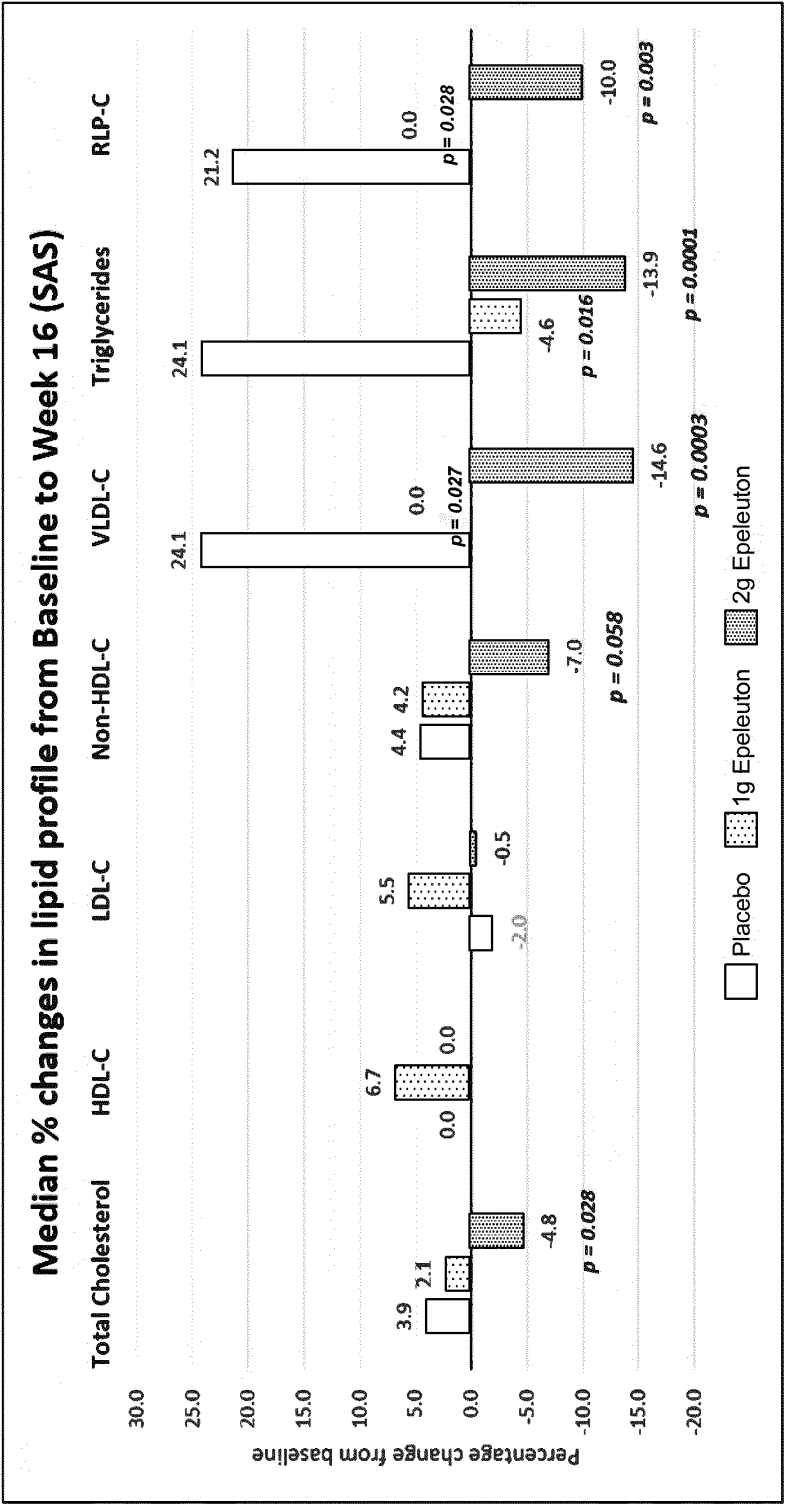


Figure 24B

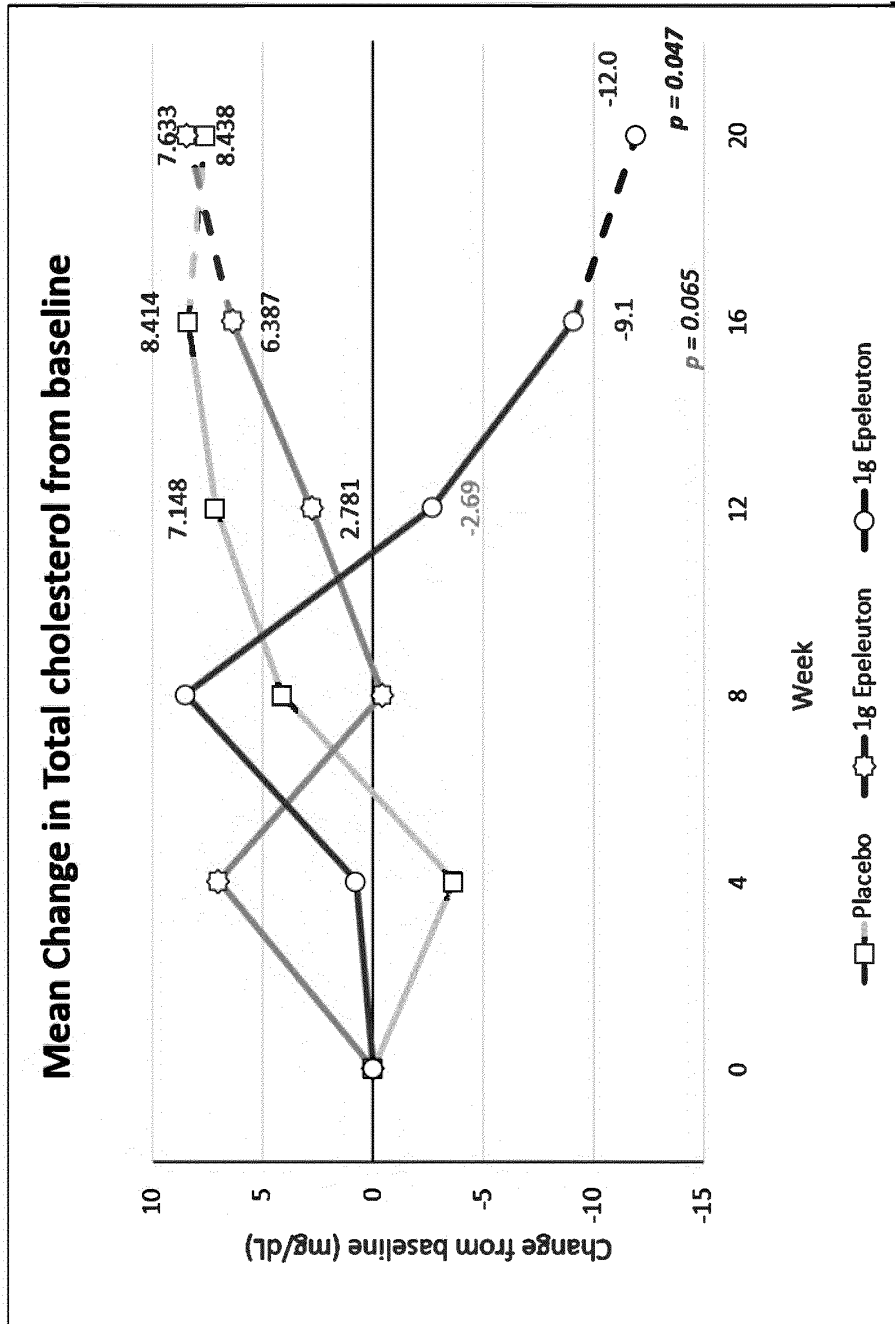


Figure 25A

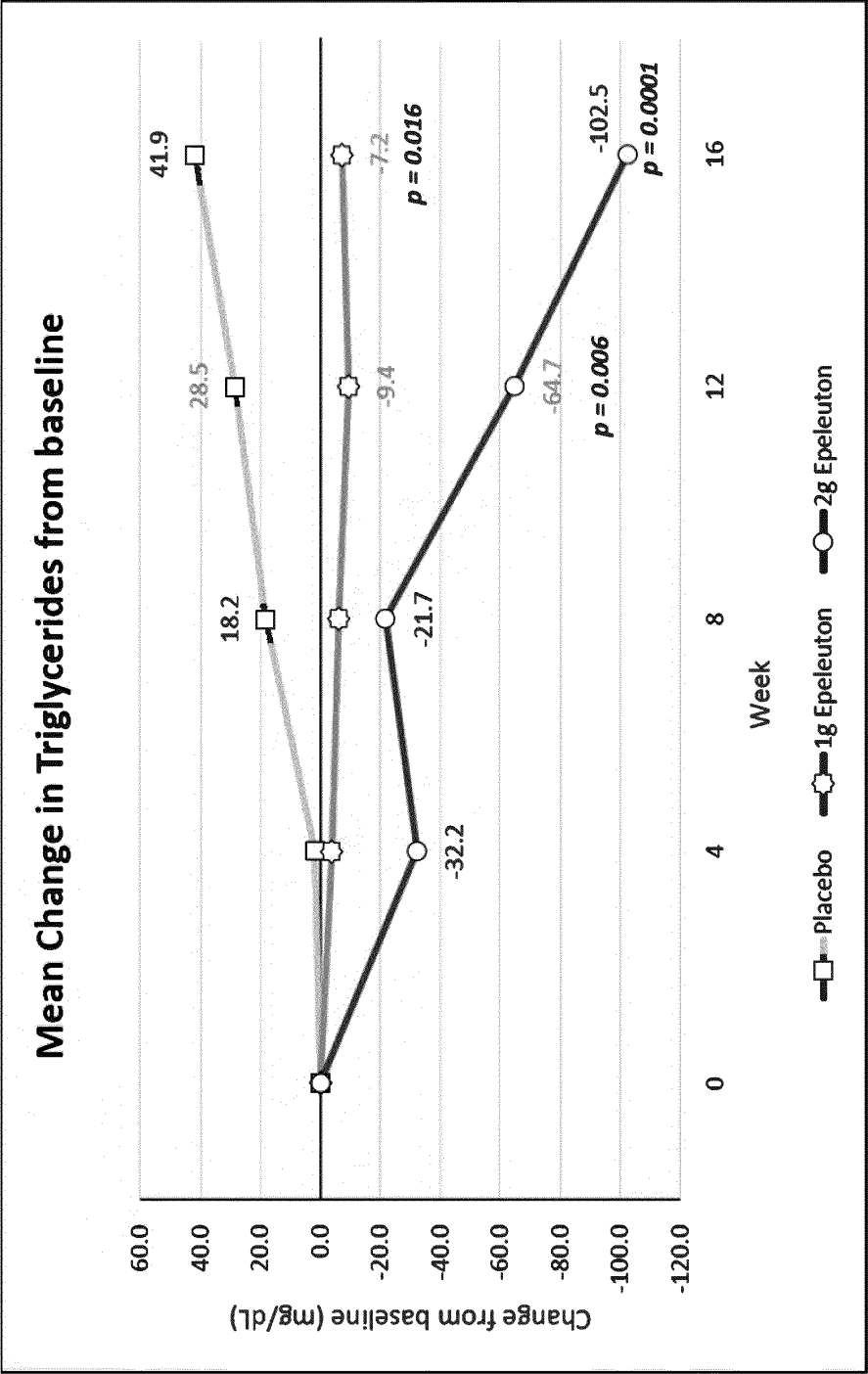


Figure 25B

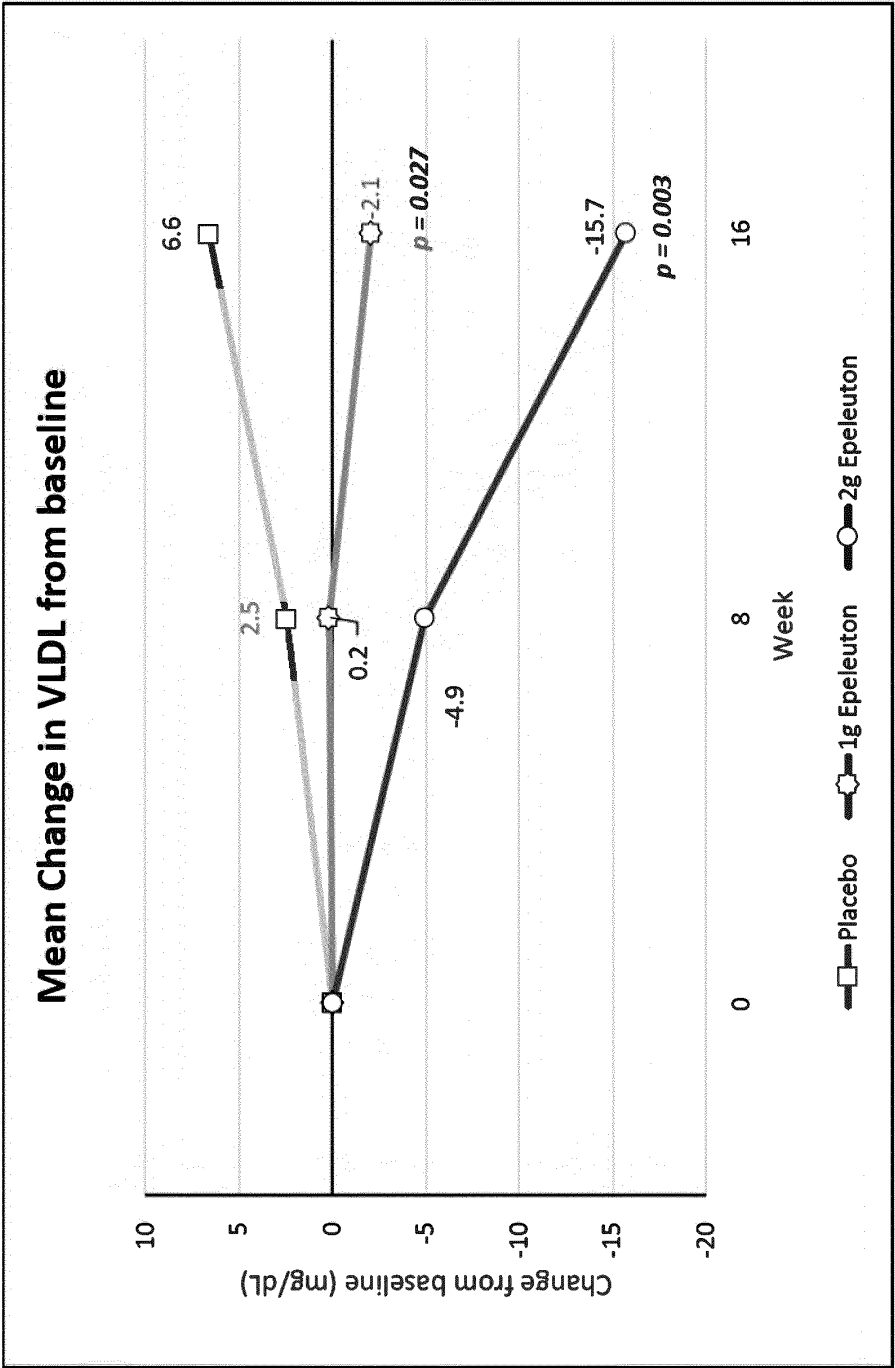


Figure 25C

2G						
Class	Metabolite	Code OWL	Week 8 vs. Baseline log ₂ (fold- change)	Student's t-test (p-value)	Week 16 vs. Baseline log ₂ (fold- change)	Student's t-test (p-value)
AA	Phenylalanine	AA18	-0.02	4.09E-01	-0.14	2.84E-02
	Glutamic Acid	AA02	-0.01	7.04E-01	-0.13	3.30E-02
	Serine	AA05	-0.14	1.37E-02	-0.03	2.85E-01
	Taurine	AA09	-0.25	5.98E-03	-0.10	1.51E-01
	Sarcosine	AA22	0.01	5.17E-01	-0.08	3.76E-02
	Hypotaurine	AA26	-0.33	9.78E-04	-0.20	1.49E-02
	Asp-Phe	AA31	-0.33	5.11E-03	-0.19	2.75E-01
	Gly-DL-Phe	AA25	-0.15	1.43E-02	0.12	7.31E-01
	AC(18:2n6)	AC10	-0.11	5.70E-02	-0.06	3.40E-02
	DG(32:2)	DG04	0.50	1.57E-01	-0.13	3.77E-02
DG	DG(34:1)	DG06	0.19	7.18E-01	-0.12	4.63E-02
	DG(34:2)	DG07	0.20	7.70E-01	-0.08	2.99E-02
	DG(36:3)	DG09	0.05	6.67E-01	-0.22	2.95E-02
	DG(36:4)	DG10	-0.08	1.21E-01	-0.21	3.07E-02
	DG(36:4)	DG11	0.33	3.12E-02	0.11	8.46E-01
	ChoE(18:3)	ChoE09	0.30	1.50E-01	0.44	4.30E-02
	Glycochenodeoxycholic acid	BA16H	0.56	6.37E-01	-0.12	1.50E-02
	Glycochenodeoxycholic acid	BA17H	0.89	2.72E-01	-0.31	3.61E-02
	PE(O-16:0/18:1)	MEMAPE01	0.30	4.78E-01	0.49	4.27E-02
	PE(P-18:1/18:2)	MEMAPE17	0.49	1.18E-01	0.64	4.23E-02
LPE	PE(18:3/0:0)	MAPE21	1.14	8.25E-03	0.52	8.09E-02
	PE(P-20:0/0:0)	MAPE18	0.31	3.48E-01	0.35	2.49E-02
PC	PC(30:0)	DAPC47	0.50	3.48E-02	0.28	5.20E-01
	PC(31:0)	DAPC45	0.31	2.56E-03	0.22	7.51E-02
	PC(16:0/18:0)	DAPC06	0.18	4.86E-02	0.17	3.45E-01
	PC(34:3)	DAPC39	0.63	2.33E-02	0.58	1.06E-01
	PC(17:0/18:2)	DAPE14	0.23	2.95E-02	0.27	7.42E-02
	PC(37:2)	DAPE23	0.41	1.27E-02	0.44	1.25E-02
	PC(O-16:0/18:2)	MEMAPC07	0.35	8.56E-03	0.53	1.11E-01
	PC(O-18:0/18:2)	MEMAPC12	0.45	3.30E-02	0.68	4.01E-02
	PC(O-18:1/18:2)	MEMAPC13	0.26	3.90E-02	0.40	1.17E-01
	PC(O-18:2/20:4)	MEMAPC28	0.34	3.59E-02	0.21	4.69E-01
Glycerophospholipids	PC(P-16:0/22:6)	MEMAPC29	0.32	4.52E-02	0.17	5.39E-01
	PC(18:3/0:0)	MAPC22	0.49	2.76E-03	0.46	1.65E-02
	PC(O-0/18:3)	MAPC21	0.76	3.57E-03	0.64	1.25E-02
	PC(O-18:0/0:0)	MEPC04	0.19	4.11E-01	0.33	2.40E-02
	PC(P-18:0/0:0)	MEPC07	0.27	2.36E-01	0.42	3.17E-02
	PC(P-18:1/0:0)	MEPC08	0.28	1.14E-01	0.46	1.65E-02
	PC(P-20:1/0:0)	MEPC14	0.37	3.77E-01	0.60	2.40E-02
	PC(P-20:2/0:0)	MEPC15	0.38	1.46E-01	0.65	2.45E-02
	PI(18:0/18:2)	DAPI04	0.33	2.73E-02	0.36	1.74E-01
	LPI(18:1)	MAPI06	0.53	2.32E-01	0.60	7.32E-03
LPI	LPI(22:6)	MAPI13	0.46	4.06E-02	0.33	1.65E-01
FSB	Sphingosine-1-phosphate	FSB01	0.08	4.11E-02	0.05	9.40E-01

Figure 26

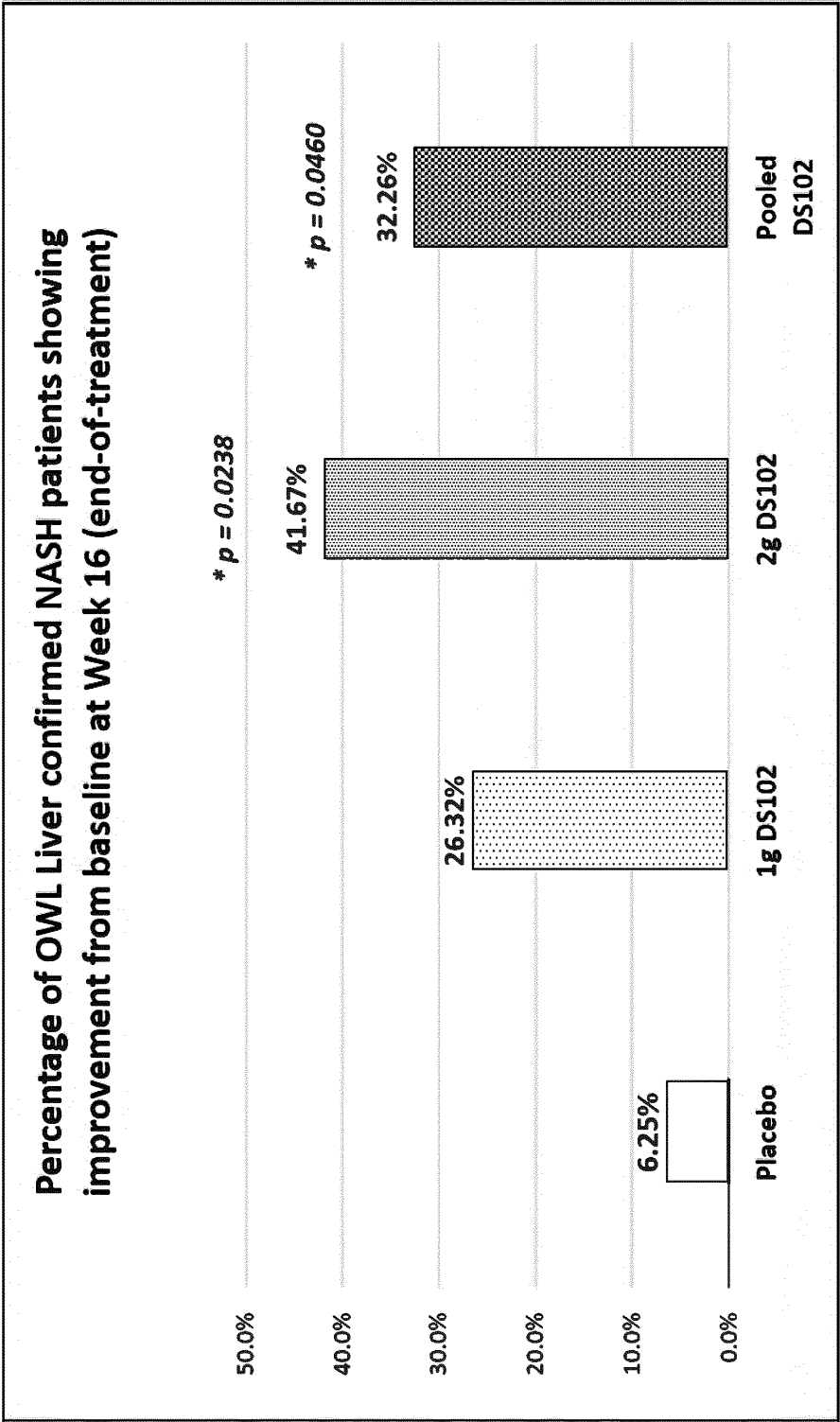


Figure 27

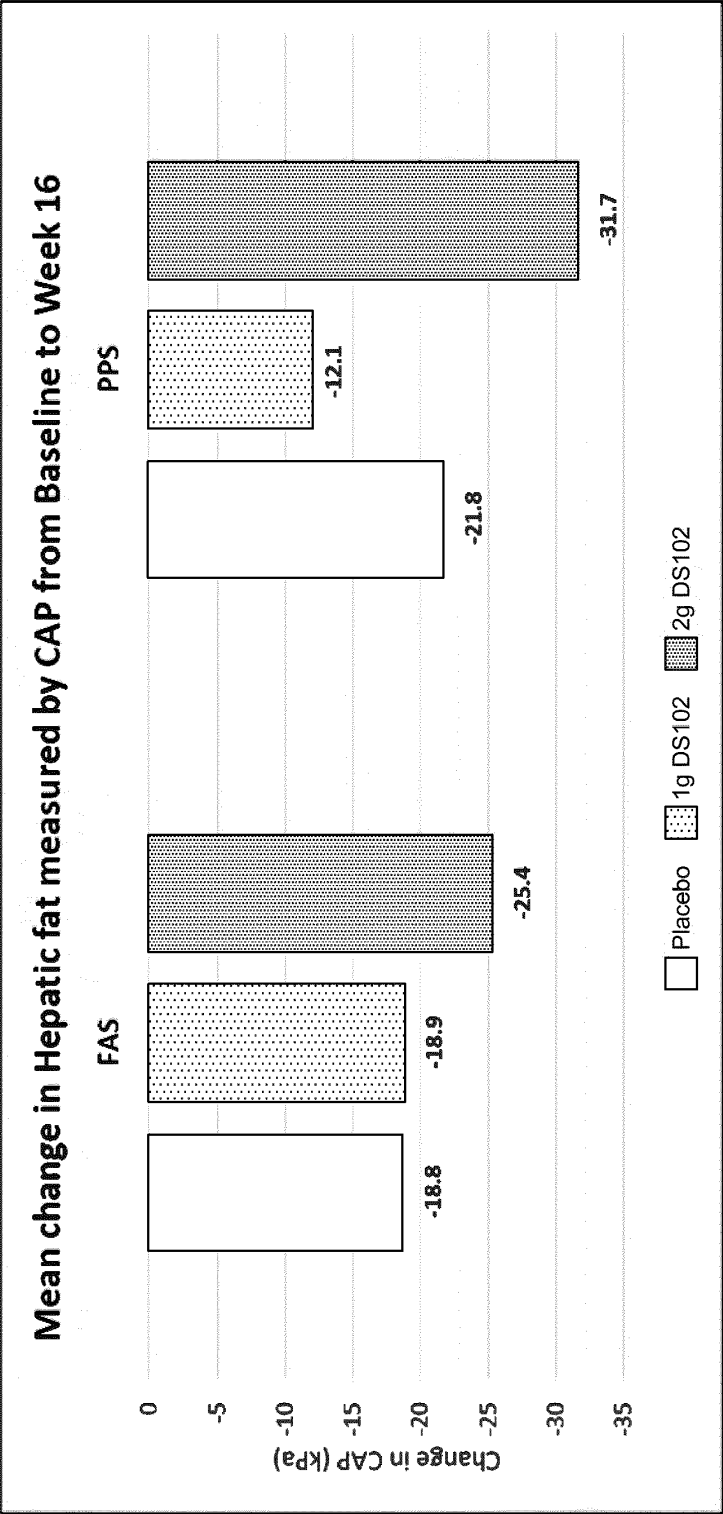


Figure 28

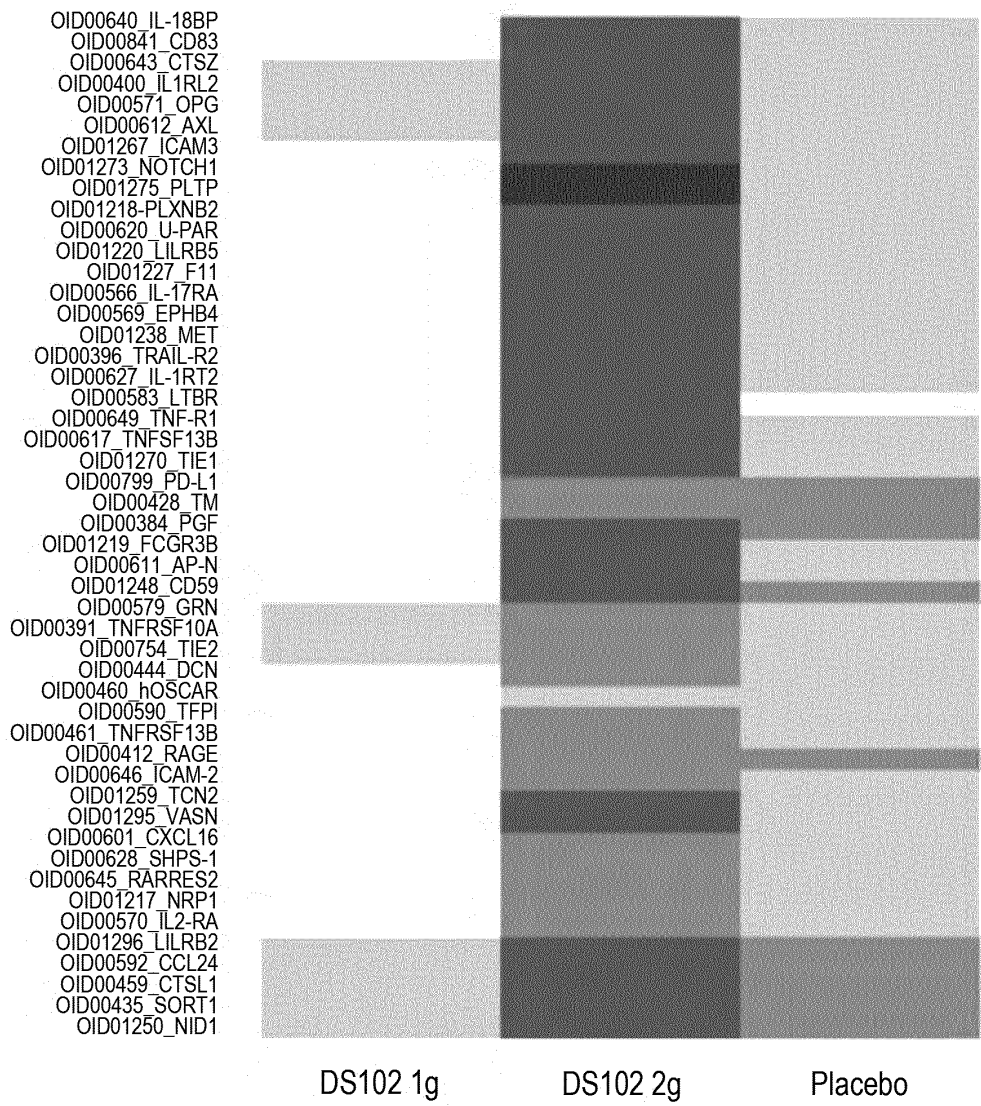


Figure 29A



Figure 29B

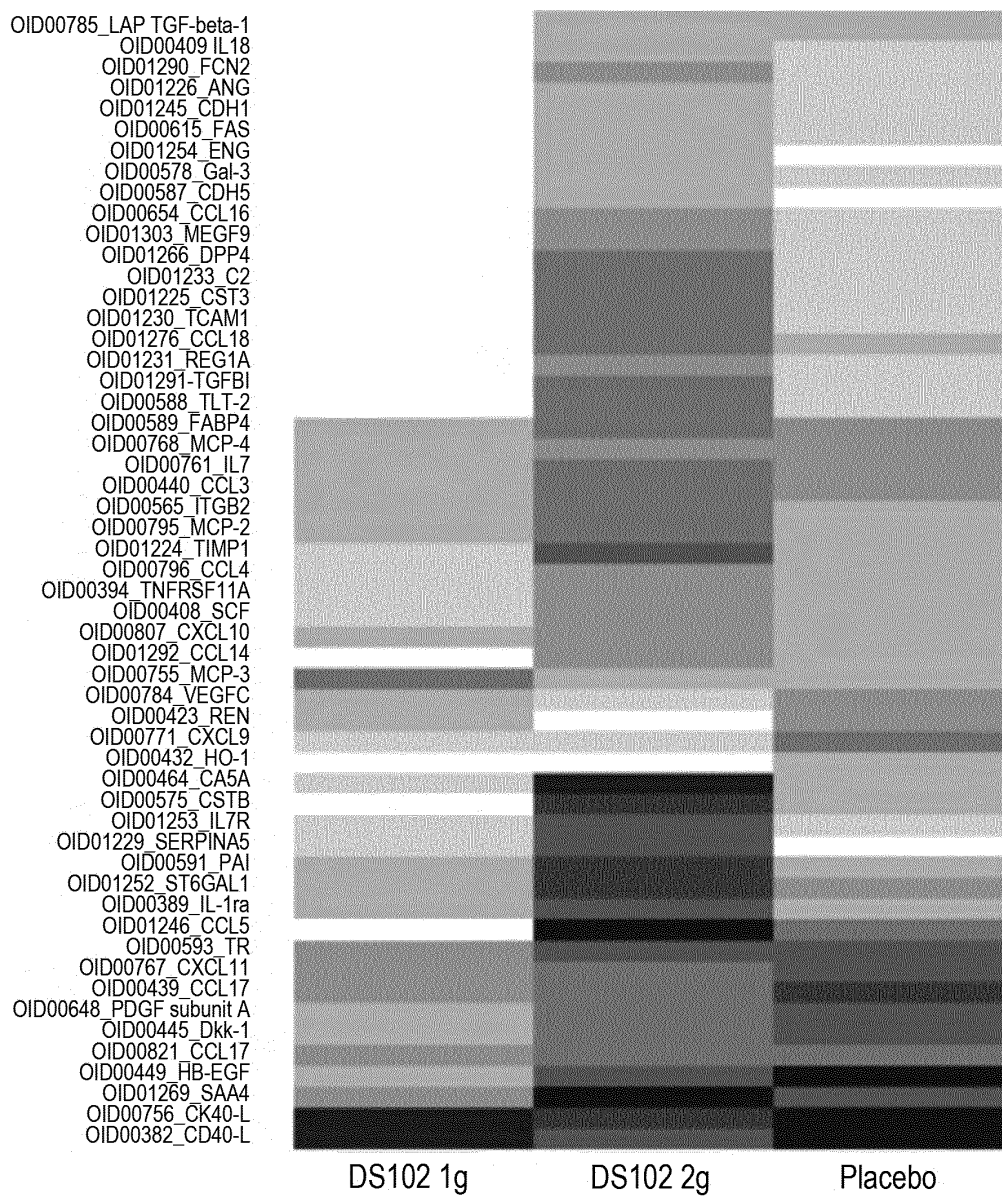


Figure 29C

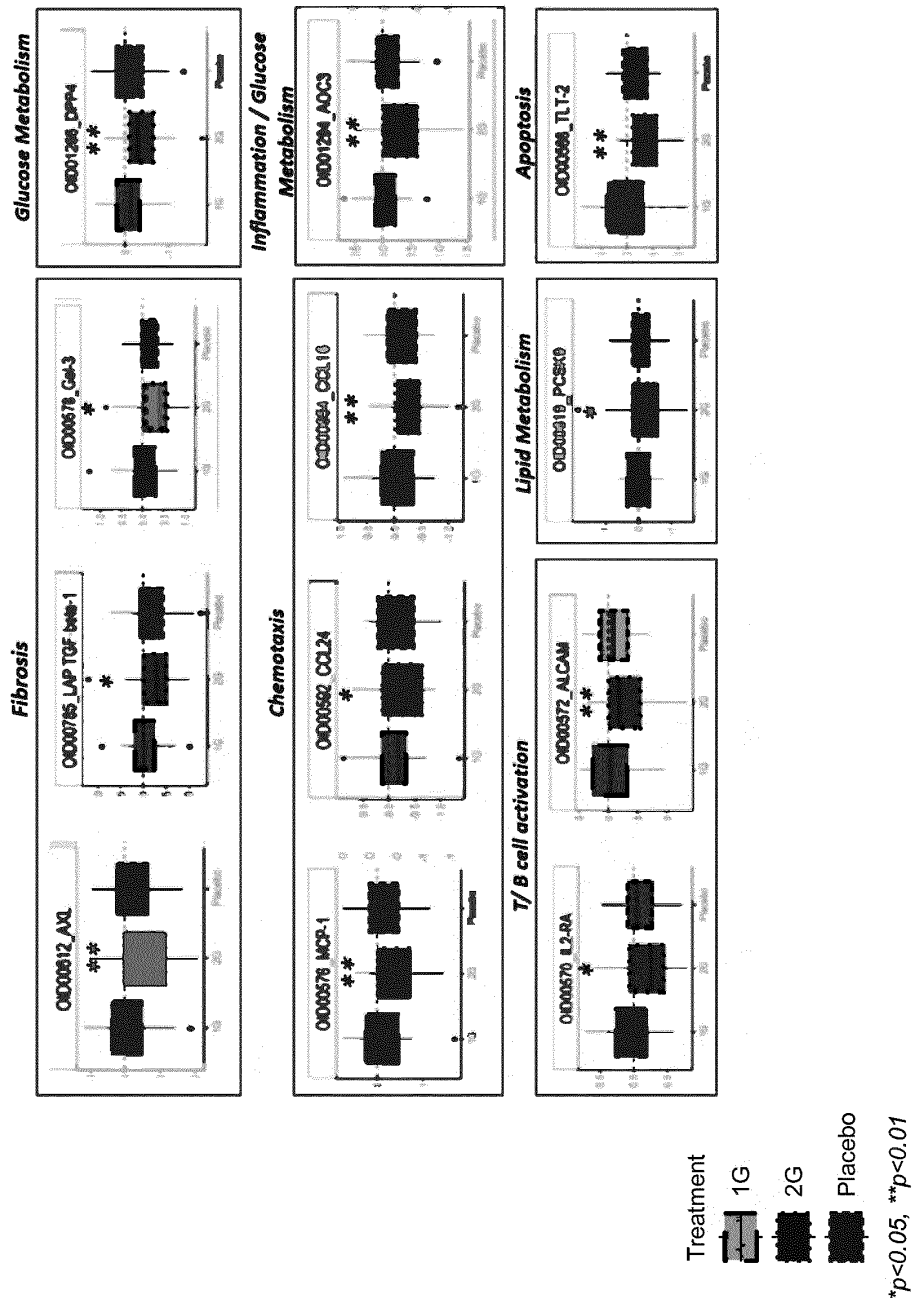


Figure 30

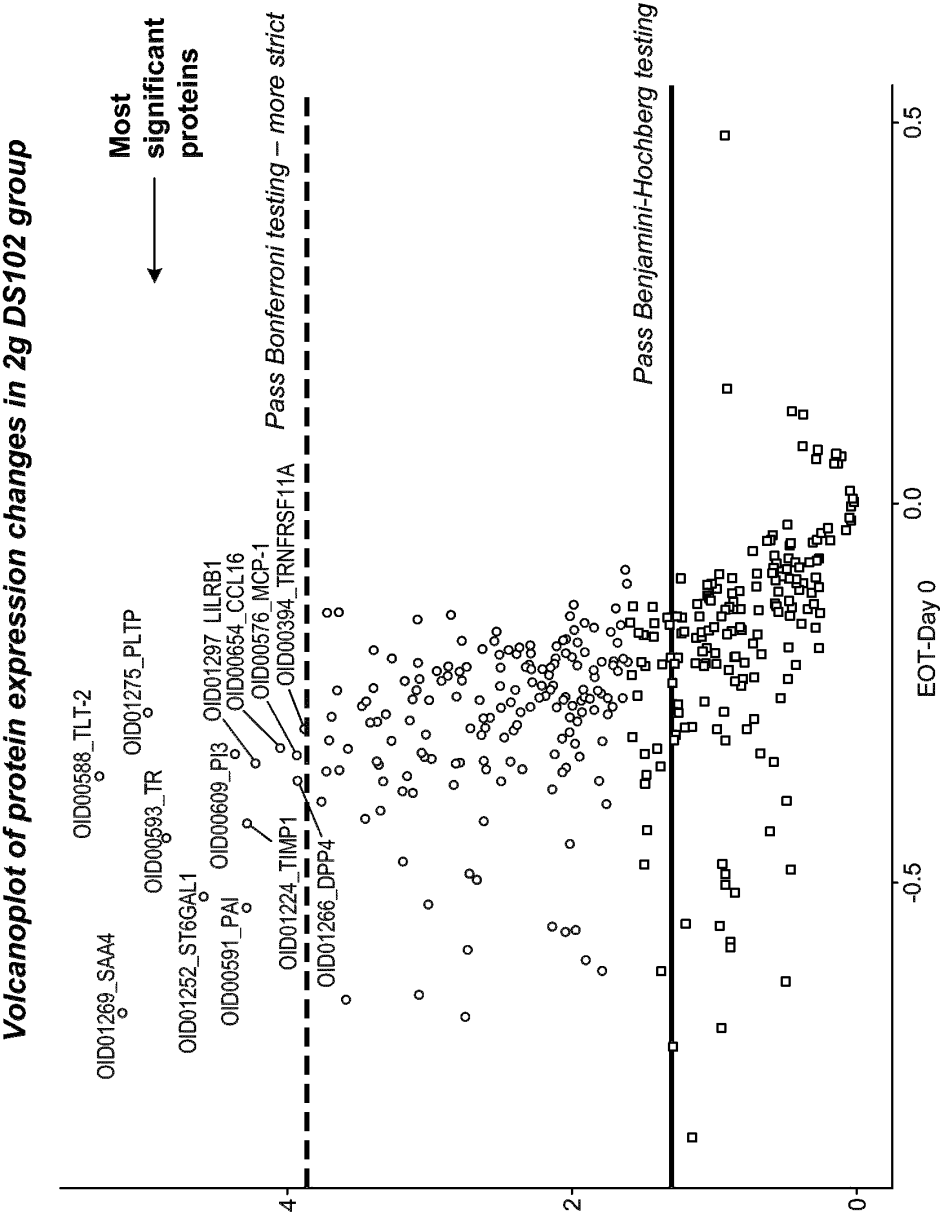


Figure 31

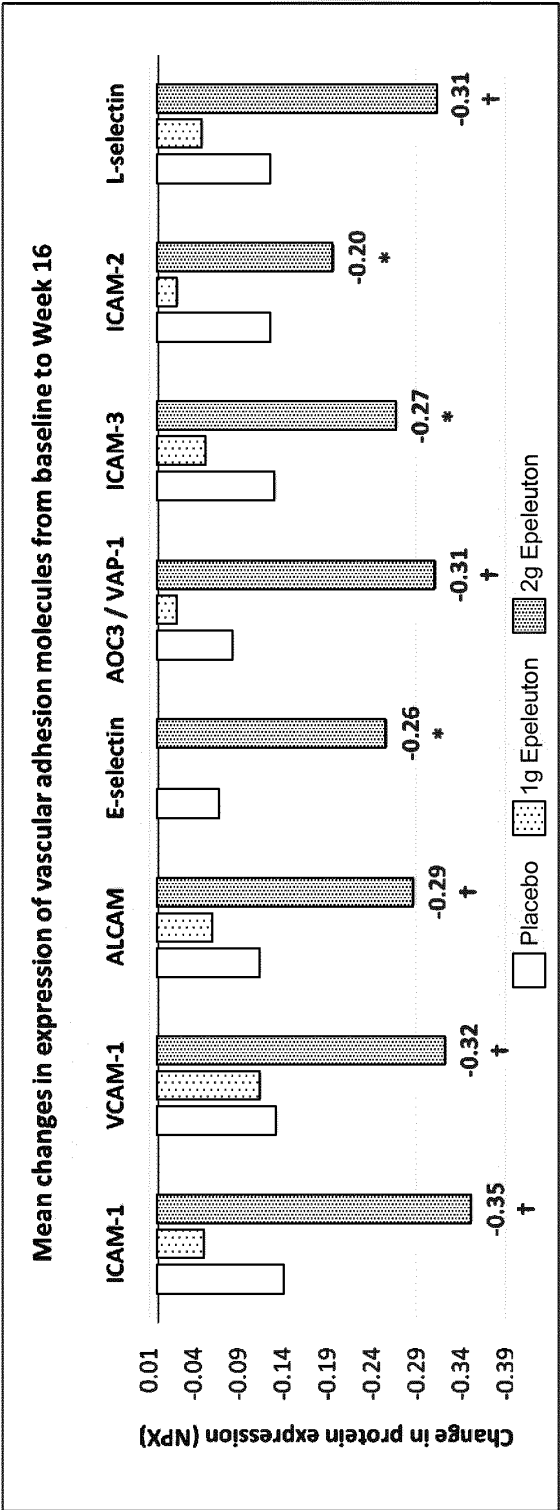
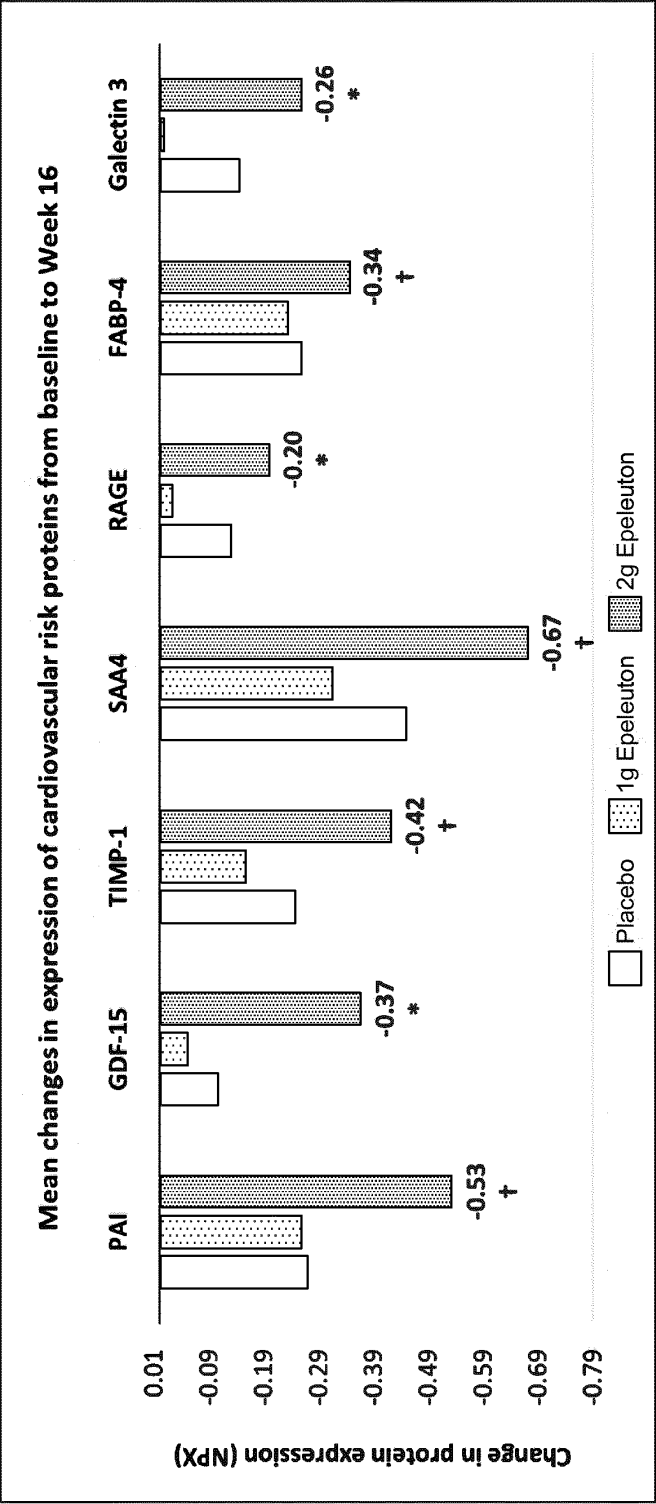


Figure 32



p denotes adjusted *p*-values of changes in protein expression from baseline, no significant change in placebo or 1g DS102 groups. * - *p*<0.05, † - *p*<0.01
NPX – Normalised protein expression, PAI – Plasminogen activator inhibitor, GDF-15 – Growth differentiation factor 15, TIMP-1 – Tissue inhibitor of metalloproteinases, SAA4 – Serum amyloid A4, RAGE – Receptor for advanced glycosylation products, FABP4 – Fatty acid binding protein 4

Figure 33

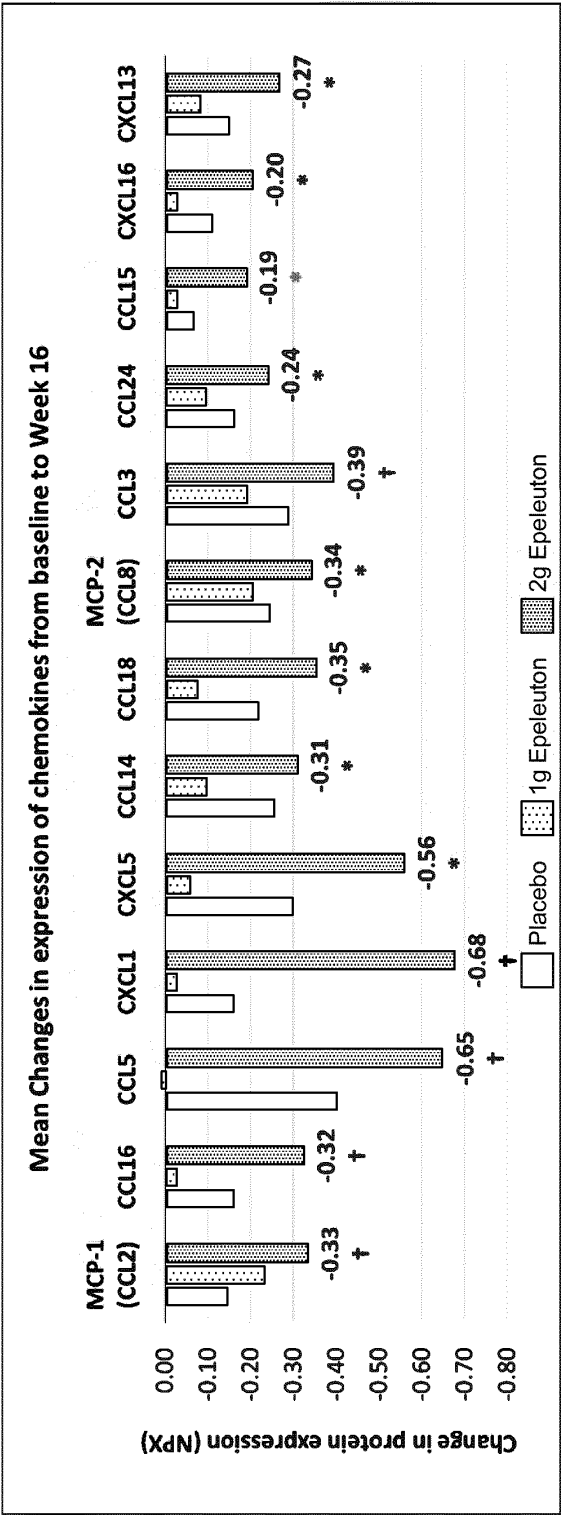


Figure 34

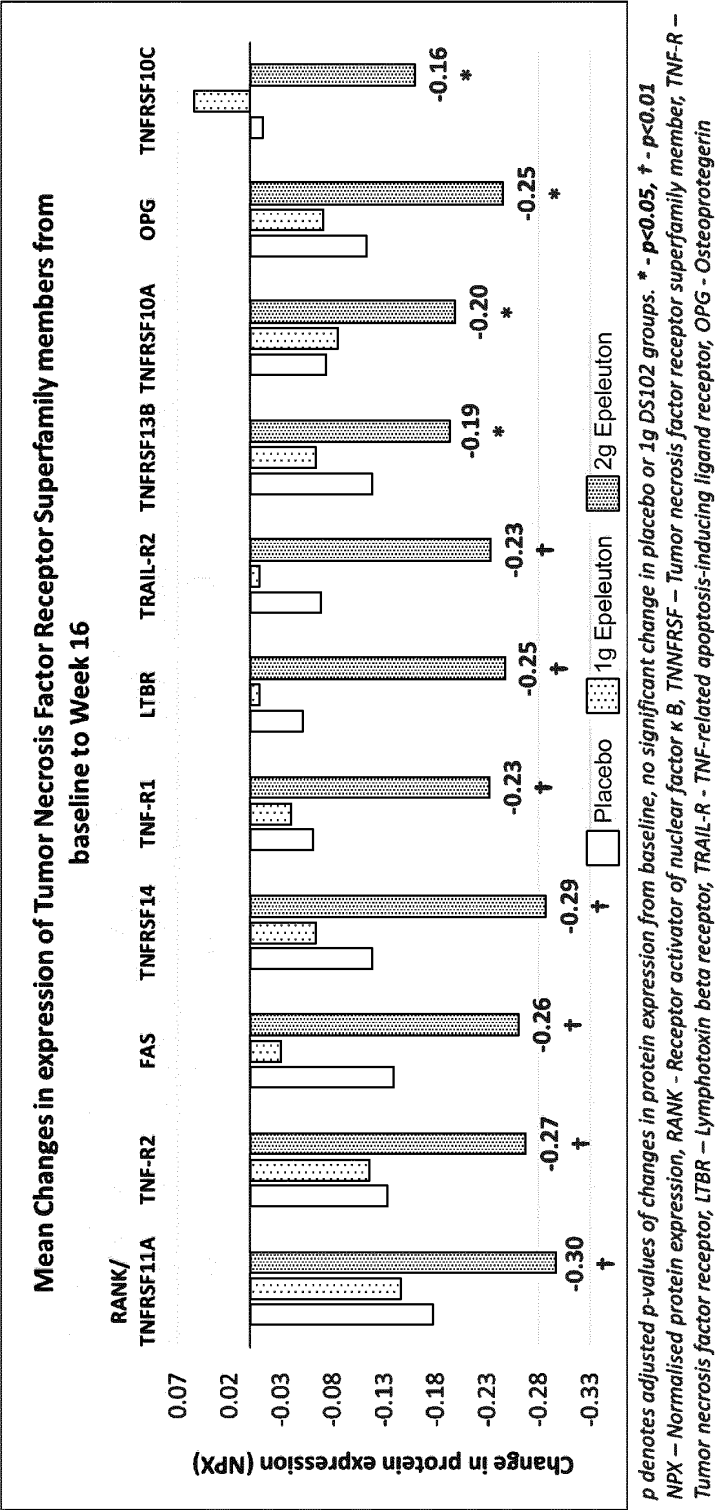


Figure 35

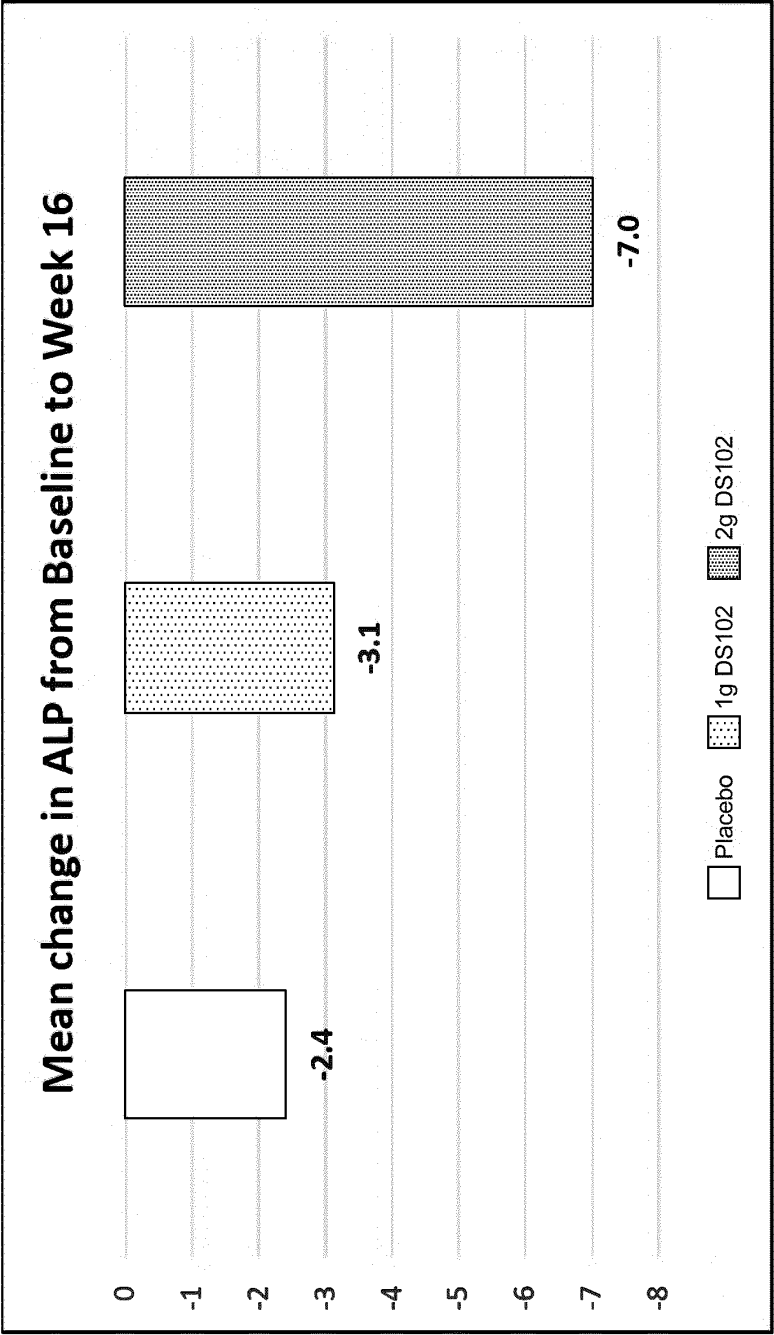


Figure 36A

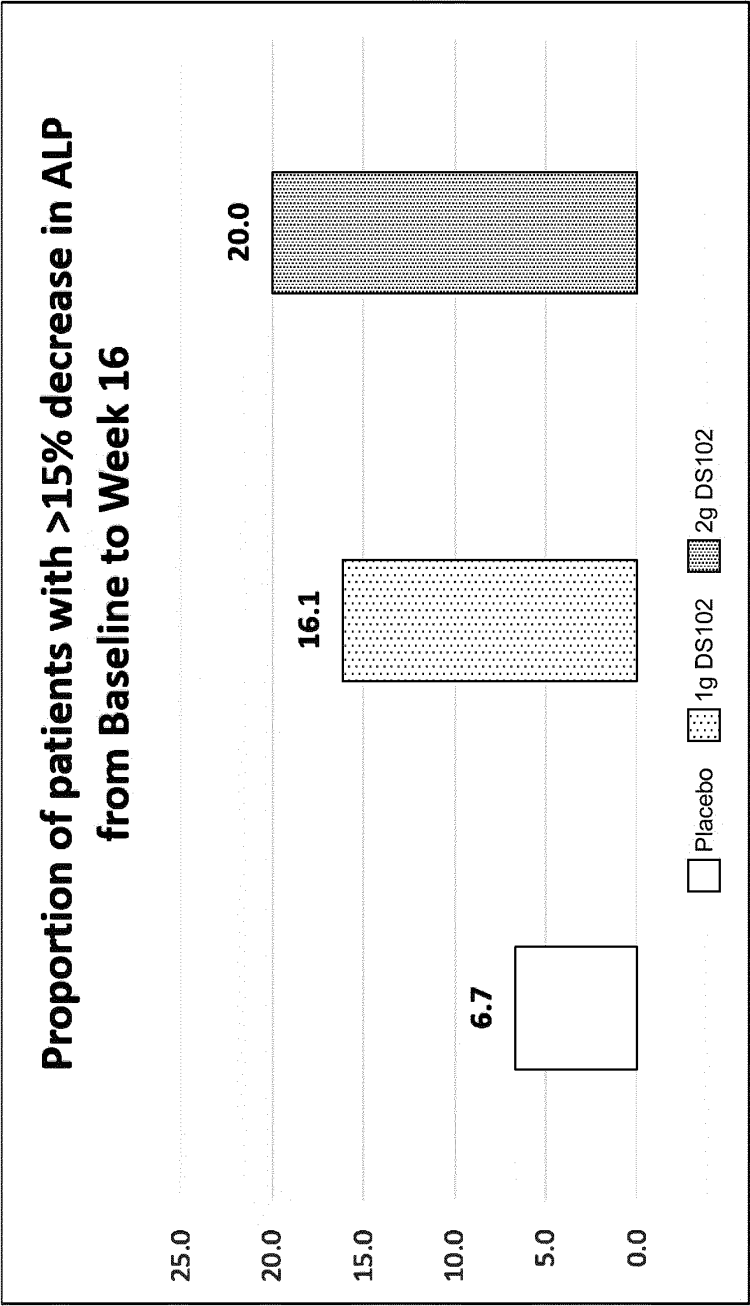


Figure 36B

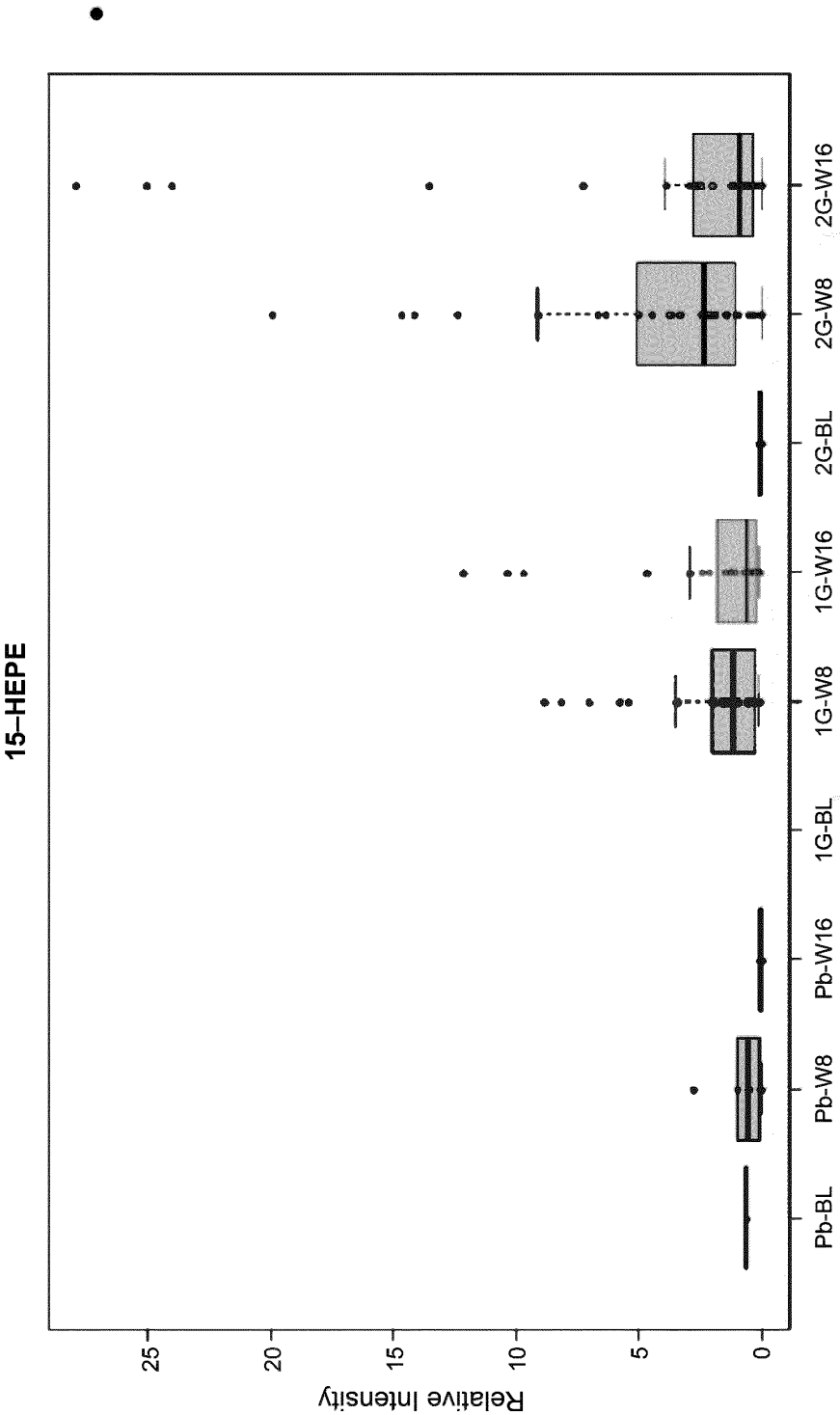


Figure 37

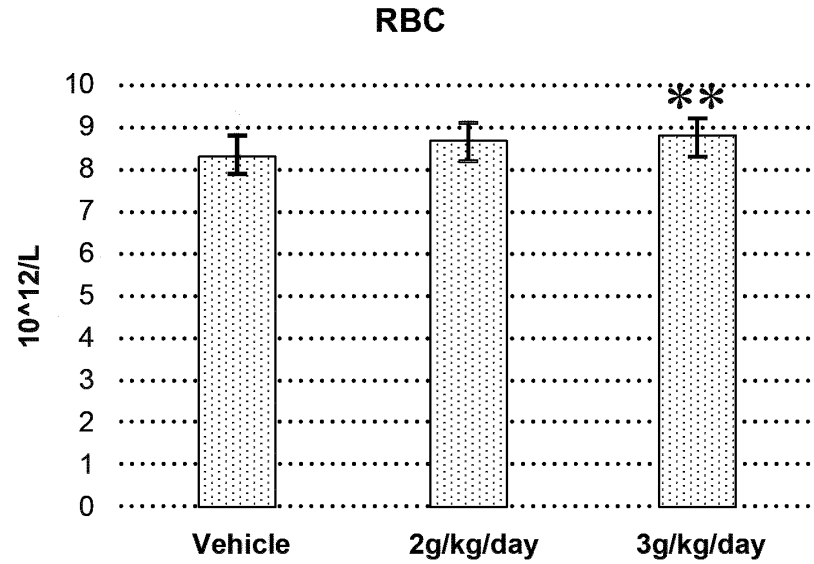


Figure 38A

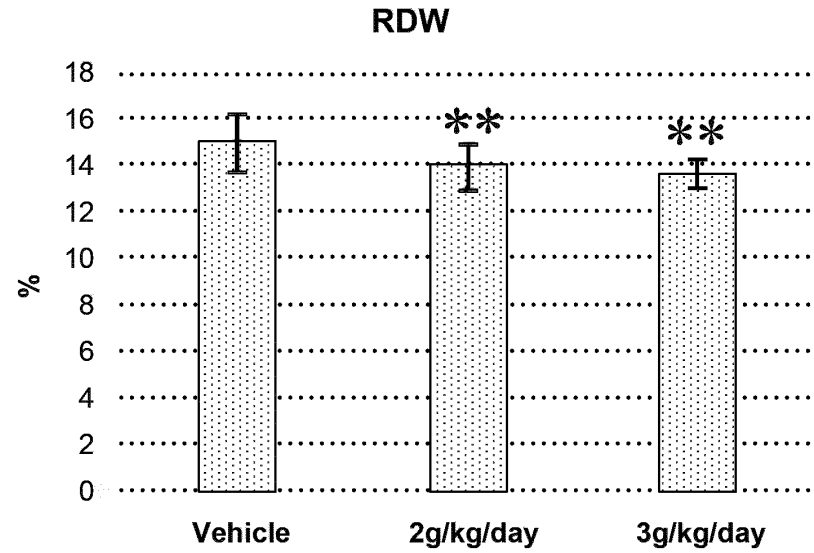


Figure 38B

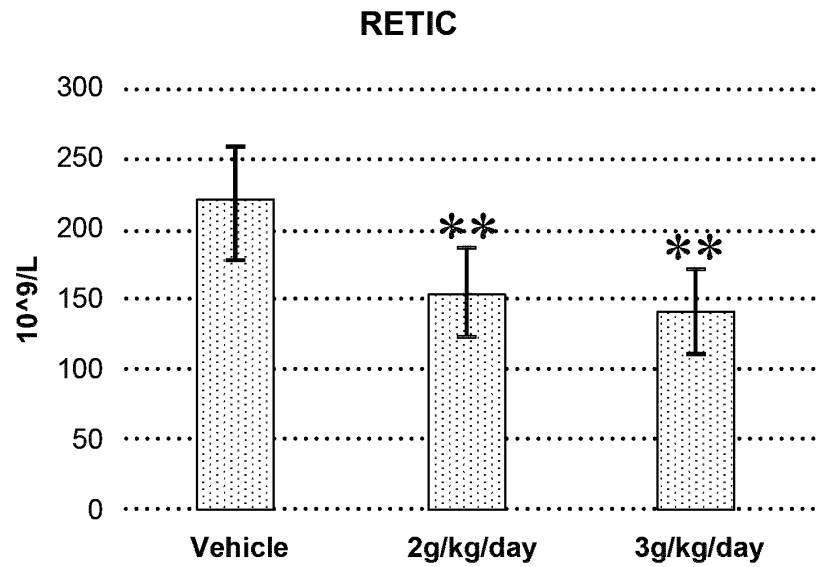


Figure 38C

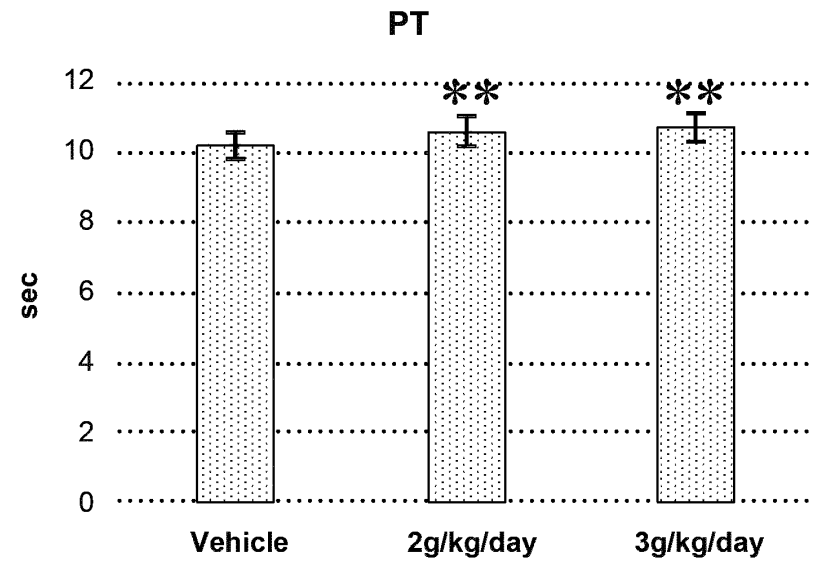


Figure 39A

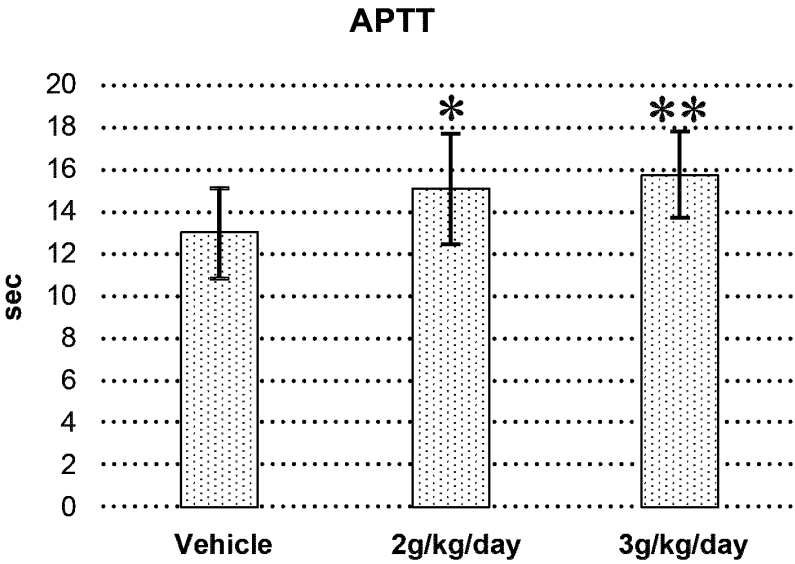


Figure 39B

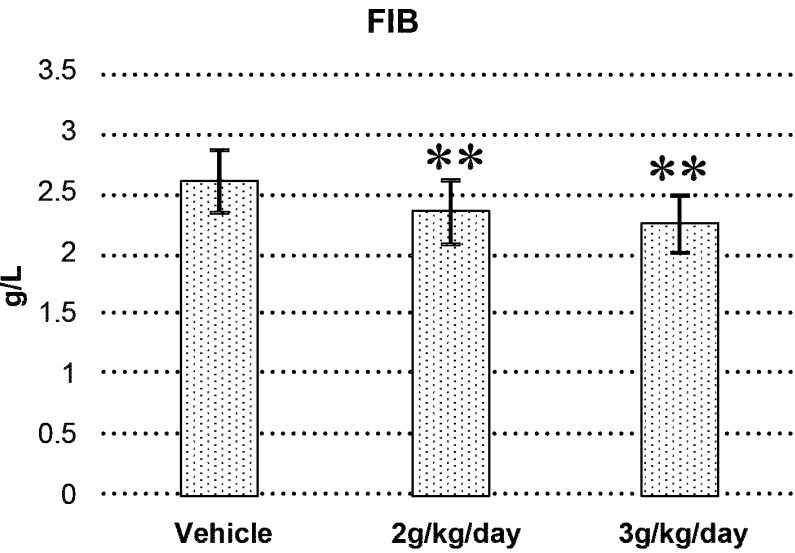


Figure 39C