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Table D1A: µg/ml Serum Lidocaine & MEGX concentration data as a function of time, T0 = immediately after completion of infiltration.

Lidocaine / Time (hours)	0	2	4	6	8	10	12	14	16	18	24	AUC ∞	Cmax	mg/kg
1 No Lipo (35.1 mg/kg)	0.14	0.8	1.2	2.1	3.1	3.3	2.8	2.8	2.5	2.6	1.2	54.5	3.3	35.1
2 No Lipo (35.1 mg/kg)	0.32	1.1	1.7	2.4	3.4	3.2	3.4	3.2	2.2	2.1	1.3	57.7	3.4	35.1
3 Lipo (34.7 mg/kg)	0.26	0.84	1.4	2	2.5	2.1	1.8	1.7	1.4	0.89	0.66	35.3	2.5	34.7
1 No Lipo MEGX	0	0	0.14	0.42	0.76	0.79	1	1	1	1.2	0.76			
2 No Lipo MEGX	0	0.11	0.17	0.24	0.47	0.58	0.7	0.79	0.77	0.71	0.55			
3 Lipo MEGX	0	0	0.15	0.22	0.36	0.35	0.4	0.31	0.28	0.21	0.19			

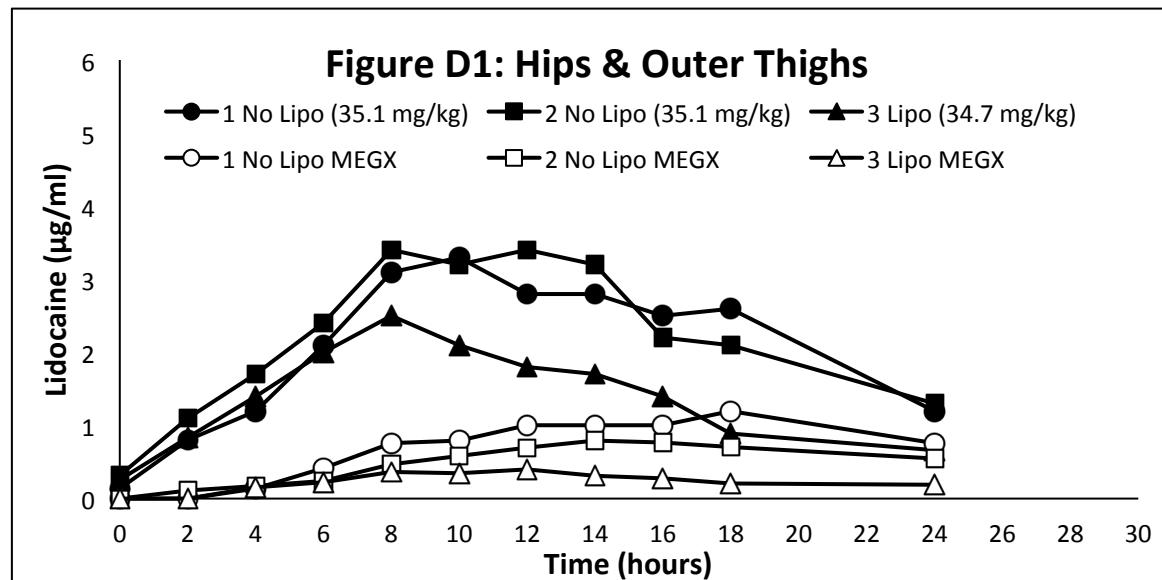


Figure D1: Serum concentrations of lidocaine & corresponding metabolite MEGX as a function of time, with no liposuction & with liposuction.

Table D1B: Calculation of AUC (See Appendix Text S7: Technique for Calculating AUC ∞)

$$AUC_{24} = f(0) + 2\sum f(2j) j:1-8 + 4f(18) + 3f(24) \quad j=1 \text{ to } 8, \text{ where } AUC_{24} + AUC_{24,\infty} = AUC_{\infty}$$

	f(0)	$2\sum f(2i)$	$4f(18)$	$3f(24)$	AUC ₂₄	AUC _{24,∞}	AUC ∞
1 No Lipo (35.1 mg/kg)	0.14	37.2	10	3.6	50.94	3.6	54.54
2 No Lipo (35.1 mg/kg)	0.32	41.2	8.4	3.9	53.82	3.9	57.72
3 Lipo (34.7 mg/kg)	0.26	27.48	3.56	2	33.3	2	35.3

Supplement 2, page 2: Subject 2: Inner Thighs & Knees: 3 studies, 2 with no liposuction & 1 with liposuction

Table D2A: $\mu\text{g/ml}$ Serum Lidocaine & MEGX concentration data as a function of time, T_0 = immediately after completion of infiltration.

Lidocaine / Time (hours)	0	2	4	6	8	10	12	14	16	18	24	AUC_{∞}	Cmax	mg/kg
1 No Lipo (31.4mg/kg)	0	0.91	1.1	1.2	1.9	1.9	1.6	1.5	1.2	0.98	0.64	29.4	1.9	31.4
2 No Lipo (31.2 mg/kg)	0	0.78	0.88	1.3	1.8	2.1	2	2.1	1.6	1.2	0.84	35	2.1	31.2
3 Lipo (31.4mg/kg Lido)	0	0.79	1.2	1.1	1.4	2.1	1.6	1.7	1.1	1.3	0.62	31	2.1	31.4
1 No Lipo MEGX	0	0	0	0	0	0.56	0.55	0.59	0.55	0.5	0			
2 No Lipo MEGX	0	0	0	0	0	0.61	0.66	0.76	0.68	0.62	0			
3 Lipo MEGX	0	0	0	0	0.53	0	0.57	0.64	0.54	0.56	0			

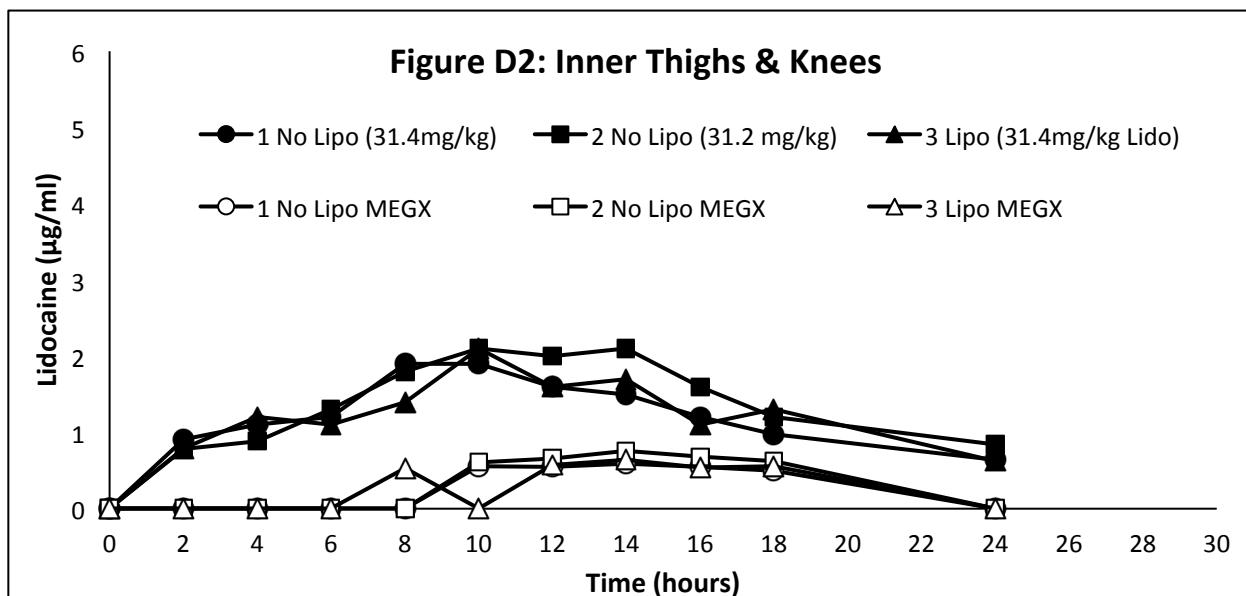


Figure D2: Serum concentrations of lidocaine & corresponding metabolite MEGX as a function of time, with no liposuction & with liposuction.

Table D2B: Calculation of AUC (See Appendix Text S7: Technique for Calculating AUC_{∞})

$$AUC_{24} = f(0) + 2 \sum f(2j) j:1-8 + 4f(18) + 3f(24) j=1 \text{ to } 8, \text{ where } AUC_{24} + AUC_{24,\infty} = AUC_{\infty}$$

	f(0)	$2\sum f(2i)$	$4f(18)$	$3f(24)$	AUC ₂₄	AUC _{24,∞}	AUC _∞
1 No Lipo (31.4mg/kg)	0	22.62	2.96	1.92	27.5	1.92	29.42
2 No Lipo (31.2 mg/kg)	0	25.12	4.8	2.52	32.44	2.52	34.96
3 Lipo (31.4mg/kg Lido)	0	21.98	5.2	1.86	29.04	1.86	30.9

Supplement 2, page 3: Subject 3: Hips & Back: 3 studies, 2 with no liposuction & 1 with liposuction

Table D3A: µg/ml Serum Lidocaine & MEGX concentration data as a function of time, T0 = immediately after completion of infiltration.

Lidocaine / Time (hours)	0	2	4	6	8	10	12	14	16	18	24	AUC ∞	Cmax	mg/kg
1 No Lipo (45.2 mg/kg)	0.46	1.2	1.6	2.9	3.8	4	4.1	2.9	2.6	1.9	1.2	61.5	4.1	45.2
2 No Lipo (25.1 mg/kg)	0.21	0.63	0.75	1	1.9	2.7	2.7	2.1	2.4	1.8	0.86	42	2.7	25.1
3 Lipo (45.6 mg/kg)	0.48	0.97	1.5	2	3.7	4.2	4	2.7	1.5	1	0.5	48.6	4.2	45.6
1 No Lipo MEGX	0	0.14	0.24	0.52	0.91	1.1	1.3	1	0.86	0.77	0.47			
2 No Lipo MEGX	0	0.12	0.26	0.45	0.89	1.2	1.2	0.95	0.58	0.38	0.19			
3 Lipo MEGX	0	0	0.13	0.17	0.33	0.57	0.6	0.54	0.52	0.46	0.35			

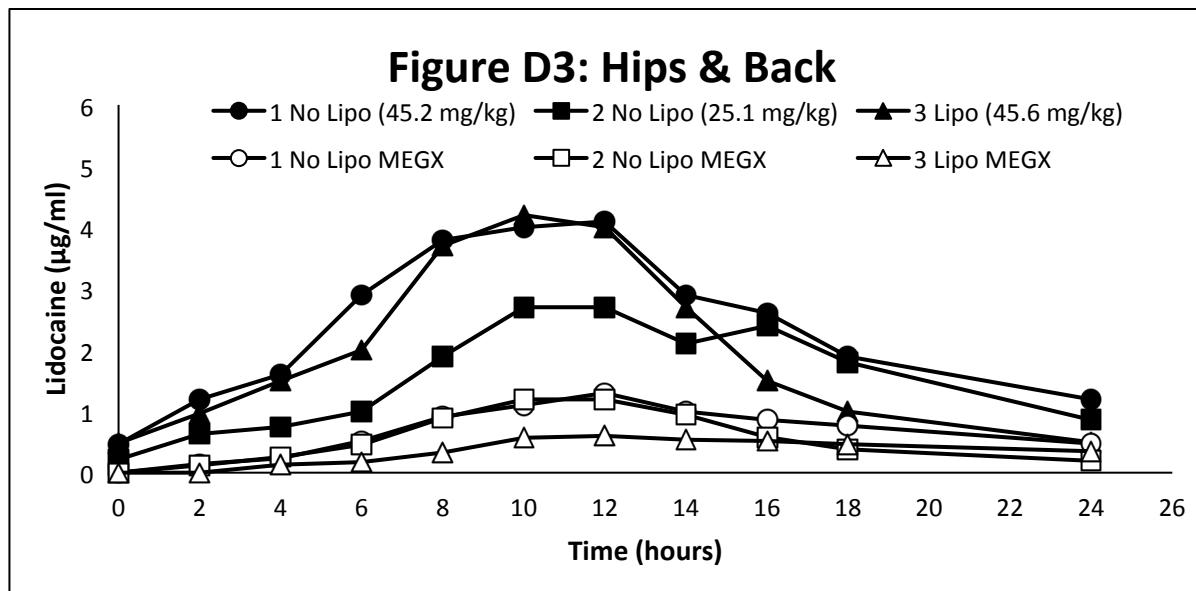


Figure D3: Serum concentrations of lidocaine & corresponding metabolite MEGX as a function of time, with no liposuction & with liposuction.

Table D3B: Calculation of AUC (See Appendix Text S7: Technique for Calculating AUC ∞)

$$AUC_{24} = f(0) + 2\sum f(2j) \quad j:1-8 + 4f(18) + 3f(24) \quad j=1 \text{ to } 8, \text{ where } AUC_{24} + AUC_{24,\infty} = AUC_{\infty}$$

	f(0)	2Σf(2i)	4f(18)	3f(24)	AUC ₂₄	AUC _{24,∞}	AUC _∞
1 No Lipo (45.2 mg/kg)	0.46	46.2	7.6	3.6	57.86	3.6	61.46
2 No Lipo (25.1 mg/kg)	0.21	28.36	7.2	2.58	38.35	3.6	41.95
3 Lipo (45.6 mg/kg)	0.48	41.14	4	1.5	47.12	1.5	48.62

Supplement 2, page 4: Subject 4: Hips & Outer Thighs: 3 studies, 2 with no liposuction & 1 with liposuction

Table D4A: µg/ml Serum Lidocaine & MEGX concentration data as a function of time, T0 = immediately after completion of infiltration.

Lidocaine / Time (hours)	0	2	4	6	8	10	12	14	16	18	24	AUC ∞	Cmax	mg/kg
1 No Lipo (45 mg/kg)	0	0.63	1	1.3	1.9	2.5	2.9	3.5	3.4	3.2	1.8	57.9	3.5	45
2 No Lipo (45 mg/kg)	0.24	0.8	1.4	2.2	2.8	3.2	2.9	3.1	3.6	2.6	1.4	59	3.6	45
3 Lipo (52 mg/kg)	0	0.5	1	1.5	2	2.3	2.8	2.5	2	1.7	0.77	40.6	2.8	52
1 No Lipo MEGX	0	0	0.16	0.22	0.28	0.41	0.49	0.6	0.7	0.72	0.46			
2 No Lipo MEGX	0	0	0.18	0.35	0.44	0.56	0.56	0.52	0.65	0.62	0.34			
3 Lipo MEGX	0	0	0.17	0.32	0.35	0.43	0.56	0.54	0.42	0.38	0.23			

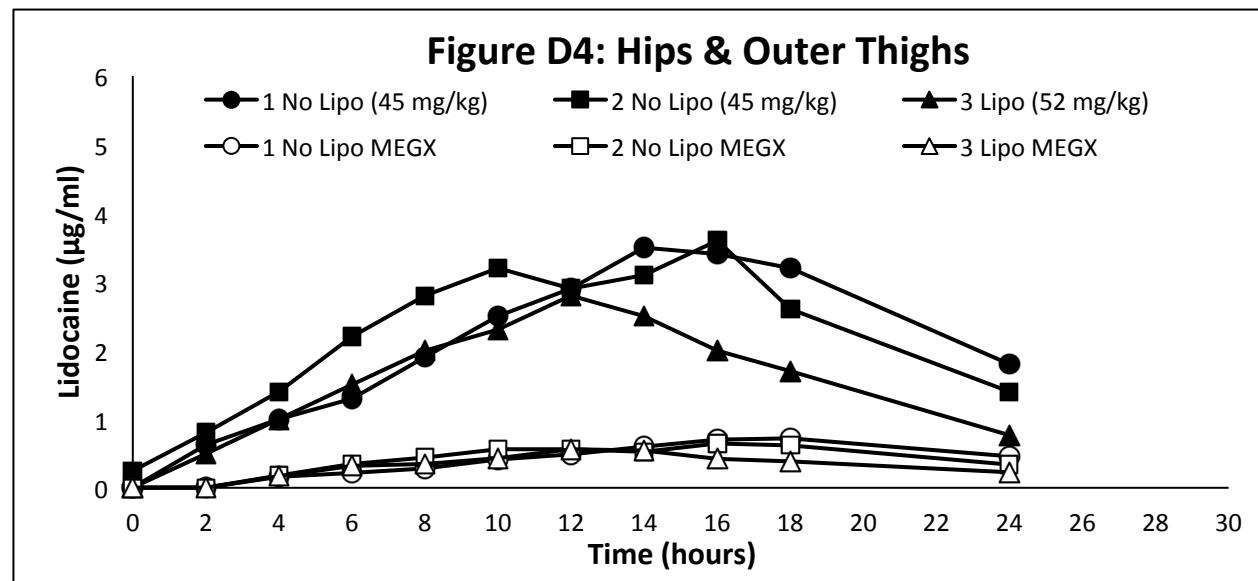


Figure D4: Serum concentrations of lidocaine & corresponding metabolite MEGX as a function of time, with no liposuction & with liposuction.

Table D4B: Calculation of AUC (See Appendix Text S7: Technique for Calculating AUC ∞)

$$AUC_{24} = f(0) + 2\sum f(2j) j:1-8 + 4f(18) + 3f(24) \quad \text{where } AUC_{24} + AUC_{24,\infty} = AUC_{\infty}$$

	f(0)	2 Σ f(2i)	4f(18)	3f(24)	AUC ₂₄	AUC _{24,∞}	AUC ∞
1 No Lipo (45 mg/kg)	0	34.26	12.8	5.4	52.46	5.4	57.86
2 No Lipo (45 mg/kg)	0.24	40	10.4	4.2	54.84	4.2	59.04
3 Lipo (52 mg/kg)	0	29.2	6.8	2.3	38.3	2.3	40.6

Supplement 2, page 5: Subject 5: Hips & Outer Thighs: 3 studies, 2 with no liposuction & 1 with liposuction

Table D5A: µg/ml Serum Lidocaine & MEGX concentration data as a function of time, T0 = immediately after completion of infiltration.

Lidocaine / Time (hours)	0	2	4	6	8	10	12	14	16	18	24	AUC ∞	Cmax	mg/kg
1 No Lipo (45 mg/kg)	0	0.6	0.68	1	1.3	1.7	1.8	2	2	2.2	1.5	44.5	2.2	45
2 No Lipo (45 mg/kg)	0	0.6	1.1	1.4	2.2	2.5	2.7	3.2	2.8	2.6	1.9	60.5	3.2	45
3 Lipo (45 mg/kg)	0	0.45	0.82	0.81	0.87	1.3	1.3	1.5	1.7	1.7	0.65	27.6	1.7	45
1 No Lipo MEGX	0	0	0.11	0.17	0.25	0.35	0.44	0.49	0.54	0.59	0.47			
2 No Lipo MEGX	0	0	0.14	0.22	0.28	0.4	0.48	0.6	0.58	0.5	0.5			
3 Lipo MEGX	0	0	0.14	0.19	0.17	0.31	0.42	0.42	0.42	0.49	0.3			

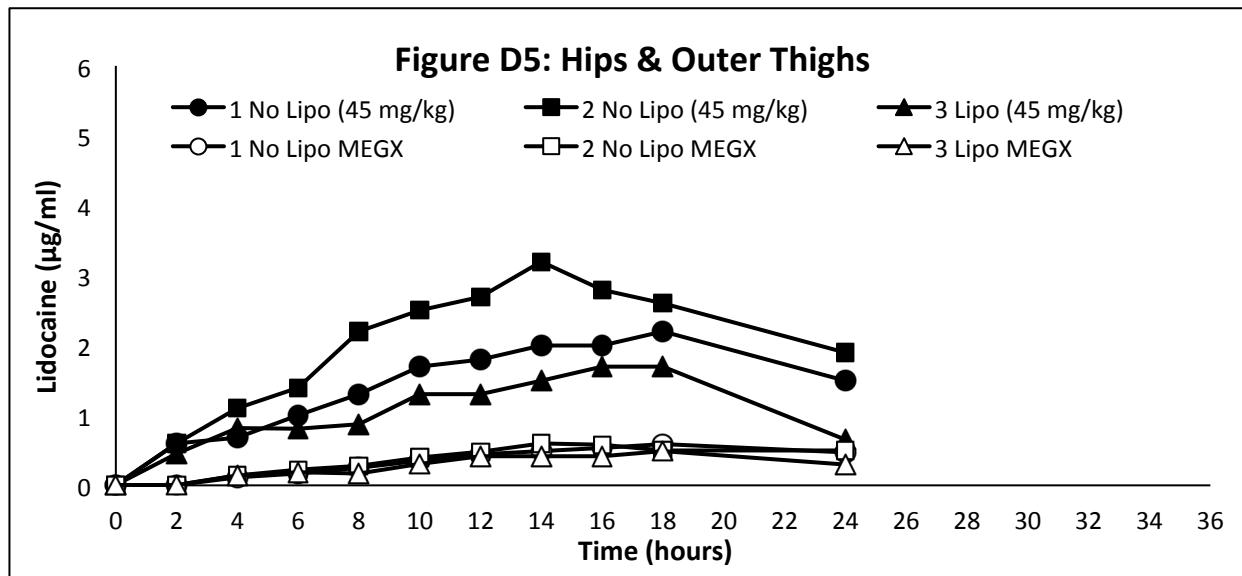


Figure D5: Serum concentrations of lidocaine & corresponding metabolite MEGX as a function of time, with no liposuction & with liposuction.

Table D5B: Calculation of AUC (See Appendix Text S7: Technique for Calculating AUC ∞)

AUC $24 = f(0) + 2\sum f(2j) j:1-8+ 4f(18) + 3f(24) j=1$ to 8, where AUC $24 + AUC_{24,\infty} = AUC\infty$

	f(0)	$2\sum f(2i)$	$4f(18)$	$3f(24)$	AUC 24	AUC 24∞	AUC ∞
1 No Lipo (45 mg/kg)	0	22.16	8.8	4.5	35.46	9	44.46
2 No Lipo (45 mg/kg)	0	33	10.4	5.7	49.1	11.4	60.5
3 Lipo (45 mg/kg)	0	17.5	6.8	1.95	26.25	1.3	27.55

Supplement 2, page 6: Subject 6: Hips & Outer Thighs: 3 studies, 2 with no liposuction & 1 with liposuction

Table Data-6A: µg/ml Serum Lidocaine & MEGX concentration data as a function of time, T0 = immediately after completion of infiltration.

Lidocaine /Time (hours)	0	2	4	6	8	10	12	14	16	18	24	AUC ∞	cmax	mg/kg
1 No Lipo (45 mg/kg)	0.22	0.77	1.4	1.9	2.9	2.2	2.4	2.1	2	1.7	1	44.4	2.9	45
2 No Lipo (22.5 mg/kg)	0.33	0.28	0.5	0.75	1.3	1	1.4	1.3	1.2	0.93	0.25	21	1.4	22.5
3 Lipo (46.1 mg/kg)	0	0.74	1	1.3	1.8	1.6	1.8	1.8	1.6	1.5	0.73	33.7	1.8	46.1
1 No Lipo MEGX	0	0.17	0.26	0.58	0.73	0.68	0.88	0.66	0.59	0.7	0.49			
2 No Lipo MEGX	0	0	0.1	0.17	0.23	0.26	0.43	0.45	0.45	0.37	0.2			
3 Lipo MEGX	0	0.11	0.21	0.37	0.43	0.5	0.53	0.66	0.62	0.54	0.28			

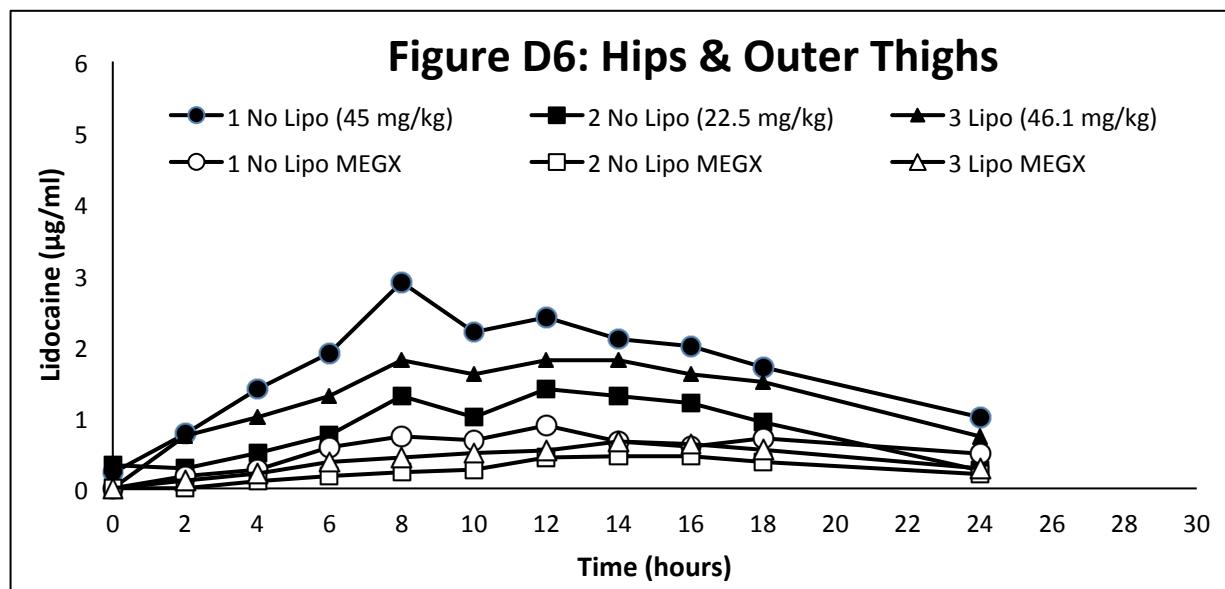


Figure D6: Serum concentrations of lidocaine & corresponding metabolite MEGX as a function of time, with no liposuction & with liposuction.

Table D6B: Calculation of AUC (See Appendix Text S7: Technique for Calculating AUC ∞)

$$AUC_{24} = f(0) + 2\sum f(2j) \quad j=1-8 + 4f(18) + 3f(24) \quad j=1 \text{ to } 8, \text{ where } AUC_{24} + AUC_{24,\infty} = AUC\infty$$

	f(0)	2Σf(2i)	4f(18)	3f(24)	AUC ₂₄	AUC _{24,∞}	AUC ∞
1 No Lipo (45 mg/kg)	0.22	31.34	6.8	3	41.36	3	44.36
2 No Lipo (22.5 mg/kg)	0.33	15.46	3.72	0.75	20.26	0.75	21.01
3 Lipo (46.1 mg/kg)	0	23.28	6	2.2	31.48	2.2	33.68

Supplement 2, page 7: Subject 7: Abdomen: 3 studies, 2 with no liposuction & 1 with liposuction

Table D7A: µg/ml Serum Lidocaine & MEGX concentration data as a function of time, T0 = immediately after completion of infiltration.

Lidocaine /Time (hours)	0	2	4	6	8	10	12	14	16	18	24	AUC ∞	Cmax	mg/kg
1 No Lipo (38.7 mg/kg)	0.11	0	0.9	1.3	1.4	1.9	1.5	1.7	1.9	1.7	0.88	33.4	1.9	38.7
2 No Lipo (38.7 mg/kg)	0.18	0.95	1	1.3	2.2	2.7	1.9	2	1.9	2.1	1.3	44.3	2.7	38.7
3 Lipo (38.4 mg/kg)	0.13	0.61	0.88	1	1.3	1.6	1.5	1.7	1.6	1.6	0.82	31.9	1.7	38.4
1 No Lipo MEGX	0	0	0.13	0.21	0.22	0.31	0.36	0.44	0.49	0.49	0.32			
2 No Lipo MEGX	0	0	0	0.18	0.26	0.34	0.34	0.36	0.34	0.43	0.29			
3 No Lipo MEGX	0	0	0.1	0.13	0.18	0.21	0.19	0.2	0.26	0.25	0.22			

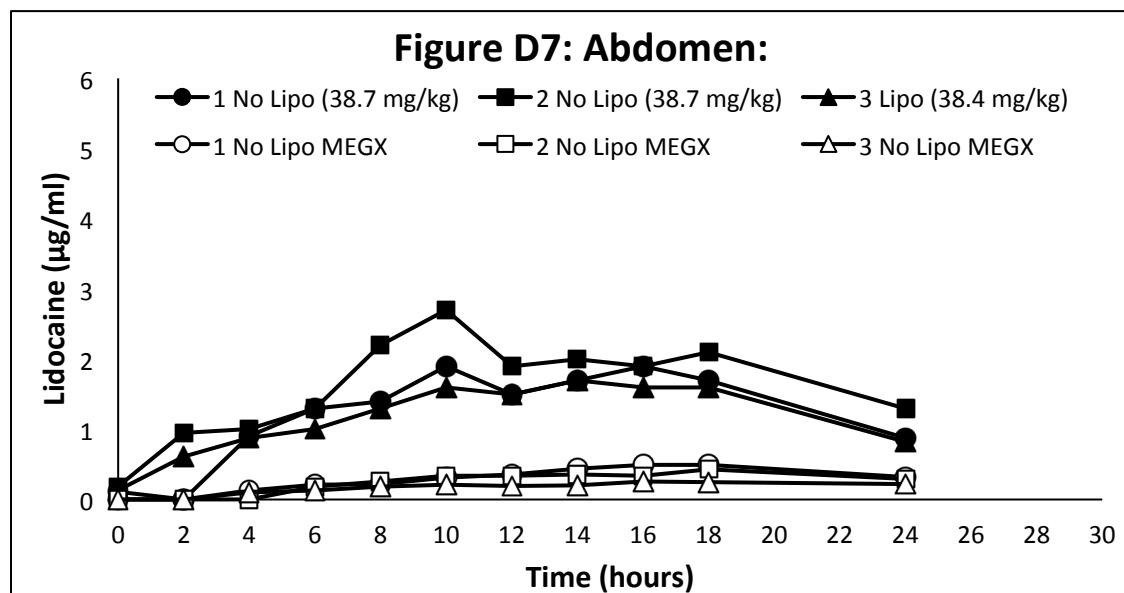


Figure D7: Serum concentrations of lidocaine & corresponding metabolite MEGX as a function of time, with no liposuction & with liposuction.

Table D7B: Calculation of AUC (See Appendix Text S7: Technique for Calculating AUC ∞)

$$AUC_{24} = f(0) + 2\sum f(2j) j:1-8 + 4f(18) + 3f(24) \quad j=1 \text{ to } 8, \text{ where } AUC_{24} + AUC_{24,\infty} = AUC_{\infty}$$

	f(0)	$2\sum f(2i)$	$4f(18)$	$3f(24)$	AUC ₂₄	AUC _{24,∞}	AUC ∞
1 No Lipo (38.7 mg/kg)	0.11	21.2	6.8	2.64	30.75	2.64	33.39
2 No Lipo (38.7 mg/kg)	0.18	27.9	8.4	3.9	40.38	3.9	44.28
3 Lipo (38.4 mg/kg)	0.13	20.38	6.4	2.46	29.37	2.46	31.83

Supplement 2, page 8: Subject 8: Outer Thighs, Inner Thighs & Knees: 3 studies, 2 with no liposuction & 1 with liposuction

Table D8A: µg/ml Serum Lidocaine & MEGX concentration data as a function of time, T0 = immediately after completion of infiltration.

Lidocaine /Time (hours)	0	2	4	6	8	10	12	14	16	18	24	AUC ∞	Cmax	mg/kg
1 No Lipo (45 mg/kg)	0.22	0.77	0.78	1.2	1.9	3.4	4.3	3.2	2.9	2.4	1	52.7	4.3	45
2 No Lipo (22.5 mg/kg)	0	0.25	0.27	0.51	1	1.9	1.7	1.6	1.6	1.3	0.53	26	1.9	22.5
3 Lipo (45 mg/kg)	0.38	0.71	1.1	1.6	1.6	2.1	2.3	2.1	1.6	1.2	0.56	34.8	2.3	45
1 No Lipo MEGX	0	0.1	0.12	0.17	0.25	0.35	0.61	0.67	0.57	0.6	0.34			
2 No Lipo MEGX	0	0	0	0.1	0.12	0.26	0.29	0.29	0.29	0.25	0.14			
3 Lipo MEGX	0	0	0	0.15	0.19	0.24	0.34	0.41	0.29	0.27	0.13			

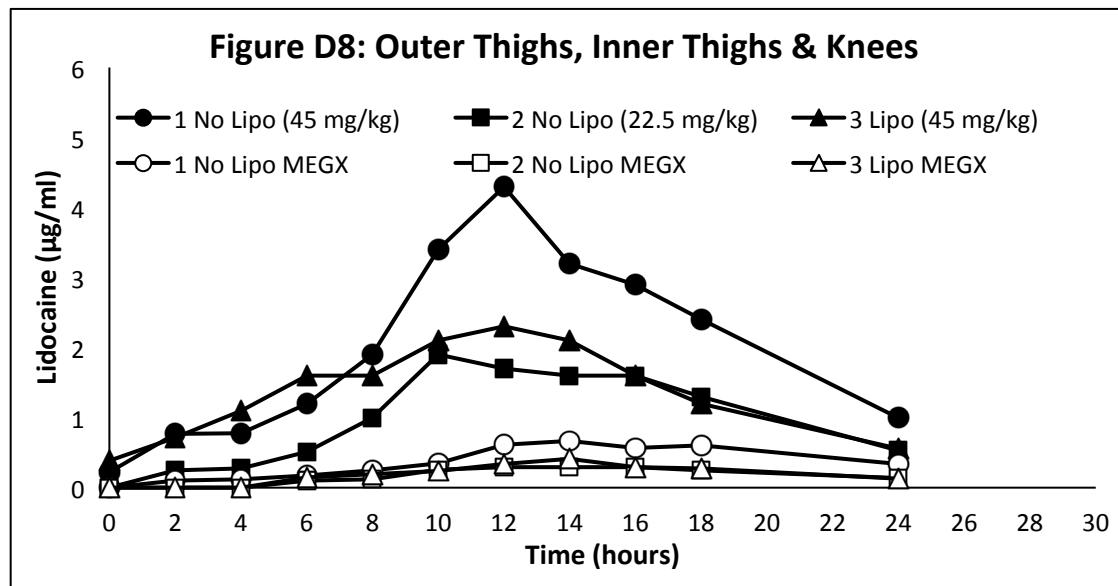


Figure D8: Serum concentrations of lidocaine & corresponding metabolite MEGX as a function of time, with no liposuction & with liposuction.

Table D8B: Calculation of AUC (See Appendix Text S7: Technique for Calculating AUC ∞)

$$AUC_{24} = f(0) + 2\sum f(2j) \text{ for } j=1 \text{ to } 8 + 4f(18) + 3f(24), \text{ where } AUC_{24} + AUC_{24,\infty} = AUC_{\infty}$$

	f(0)	2Σf(2i)	4f(18)	3f(24)	AUC ₂₄	AUC _{24,∞}	AUC _∞
1 No Lipo (45 mg/kg)	0.22	36.9	9.6	3	49.72	3	52.72
2 No Lipo (22.5 mg/kg)	0	17.66	5.2	1.59	24.45	1.59	26.04
3 Lipo (45 mg/kg)	0.38	26.22	4.8	1.68	33.08	1.68	34.76

Supplement 2, page 9: Subject 9: Abdomen: 3 studies, 2 with no liposuction & 1 with liposuction

Table D9A: µg/ml Serum Lidocaine & MEGX concentration data as a function of time, T0 = immediately after completion of infiltration.

Lidocaine /Time (hour)	0	2	4	6	8	10	12	14	16	18	24	AUC ∞	Cmax	mg/kg
1 No Lipo (45 mg/kg)	0.12	0.65	0.83	1.1	2.2	3.1	3	3.6	3.3	3.3	2.4	70.3	3.6	45
2 No Lipo (45 mg/kg)	0.13	0.54	0.62	0.83	1.4	2.2	3.3	3.5	4.2	3.3	2.7	70.8	4.2	45
3 Lipo (45 mg/kg)	0.15	0.43	0.65	0.96	1.7	1.3	1.6	2.4	1.4	1.2	0.88	33.8	2.4	45
1 No Lipo MEGX	0	0	0	0.15	0.26	0.31	0.43	0.58	0.58	0.58	0.38			
2 No Lipo MEGX	0	0	0	0.11	0.14	0.19	0.36	0.42	0.56	0.4	0.47			
3 Lipo MEGX	0	0	0.12	0.18	0.36	0.51	0.57	0.41	0.57	0.52	0.32			

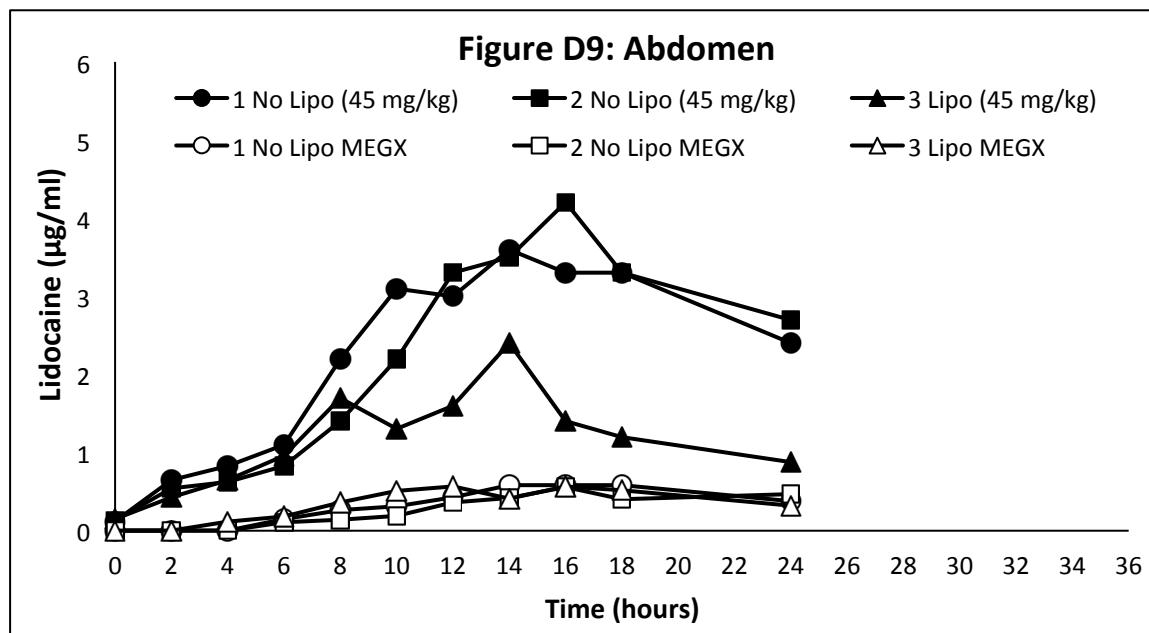


Figure D9: Serum concentrations of lidocaine & corresponding metabolite MEGX as a function of time, with no liposuction & with liposuction.

Table D9B: Calculation of AUC (See Appendix Text S7: Technique for Calculating AUC ∞)

$$AUC_{24} = f(0) + 2\sum f(2j) j:1-8 + 4f(18) + 3f(24) \quad j=1 \text{ to } 8, \text{ where } AUC_{24} + AUC_{24,\infty} = AUC_{\infty}$$

	f(0)	$2\sum f(2i)$	$4f(18)$	$3f(24)$	AUC ₂₄	AUC _{24,∞}	AUC _∞
1 No Lipo (45 mg/kg)	0.12	35.56	13.2	7.2	56.08	14.4	70.48
2 No Lipo (45 mg/kg)	0.13	33.18	13.2	8.1	54.61	16.2	70.81
3 Lipo (45 mg/kg)	0.15	20.88	4.8	2.64	28.47	5.3	33.77

Supplement 2, page 10: Subject 10: Breast/Breasts: 3 studies, 2 with no liposuction (Unilateral) & 1 with liposuction (Bilateral)

Table D10A: µg/ml Serum Lidocaine & MEGX concentration data as a function of time, T0 = immediately after completion of infiltration.

Lidocaine / Time (hours)	0	2	4	6	8	10	12	14	16	18	24	AUC ∞	Cmax	mg/kg
1 No Lipo (20mg/kg)	0	0.23	0.3	0.45	0.54	0.62	0.75	1.2	0.92	1.2	1.2	25.6	1.2	20
2 No Lipo (20mg/kg)	0	0	0.31	0.23	0.34	0.47	0.58	0.73	1	1.3	1.6	26.9	1.6	20
3 Lipo (40.5mg/kg)	0	0.31	0.6	0.7	1.5	2.1	2.3	3	2.7	2.1	0.73	37.7	2.7	40.5
1 No Lipo MEGX	0	0	0	0	0	0	0	0.11	0.16	0.17	0.2			
2 No Lipo MEGX	0	0	0	0	0	0	0	0	0	0.14	0.24	0.25		
3 Lipo MEGX	0	0	0	0	0.15	0.24	0.39	0.52	0.47	0.38	0.16			

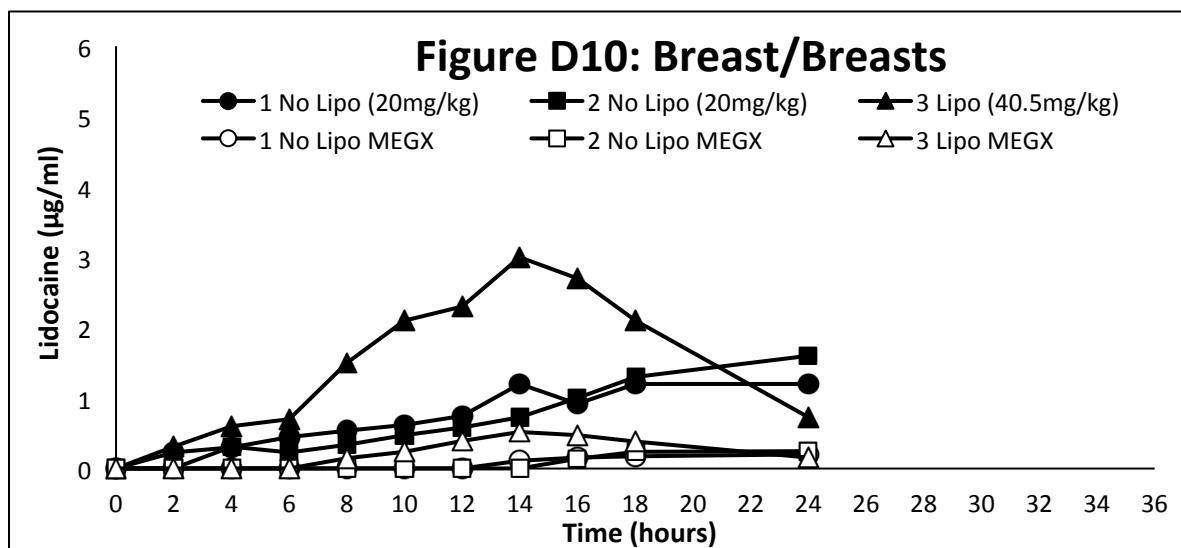


Figure D10: Serum concentrations of lidocaine & corresponding metabolite MEGX as a function of time, with no liposuction & with liposuction.

Table D10B: Calculation of AUC (See Appendix Text S7: Technique for Calculating AUC ∞)

$$AUC_{24} = f(0) + 2\sum f(2j) j:1-8 + 4f(18) + 3f(24) \quad j=1 \text{ to } 8, \text{ where } AUC_{24} + AUC_{24,\infty} = AUC\infty$$

	f(0)	$2\sum f(2i)$	$4f(18)$	$3f(24)$	AUC ₂₄	AUC _{24,∞}	AUC ∞
1 No Lipo (20mg/kg)	0	10.02	4.8	3.6	18.42	7.2	25.62
2 No Lipo (20mg/kg)	0	7.32	5.2	4.8	17.32	9.6	26.92
3 Lipo (40.5mg/kg)	0	26.42	8.4	2.19	37.01	0.73	37.74

Supplement 2, page 11: Subject 11: Breast (Unilateral): 3 studies, 2 with no liposuction & 1 with liposuction

Table D11A: µg/ml Serum Lidocaine & MEGX concentration data as a function of time, T0 = immediately after completion of infiltration.

Lido Conc / Time (hours)	0	2	4	6	8	10	12	14	16	18	24	AUC ∞	Cmax	mg/kg
1 No Lipo (19.2mg/kg)	0	0.28	0.4	0.5	0.83	1	1.3	1.6	1.3	1.5	0.62	24.2	1.6	19.2
2 No Lipo (19.4mg/kg)	0	0.28	0.33	0.44	0.55	0.73	0.72	0.86	1.4	1.3	1	21.8	1.4	19.4
3 Lipo (19.4mg/kg)	0	0.15	0.24	0.28	0.4	0.58	0.79	0.96	0.96	0.97	0.44	15.2	0.96	19.2
1 No Lipo MEGX	0	0	0	0	0	0.1	0.15	0.2	0.24	0.29	0.13			
2 No Lipo MEGX	0	0	0	0	0	0	0	0.12	0.16	0.18	0.17			
3 Lipo MEGX	0	0	0	0	0	0	0	0	0.11	0.16	0.1			

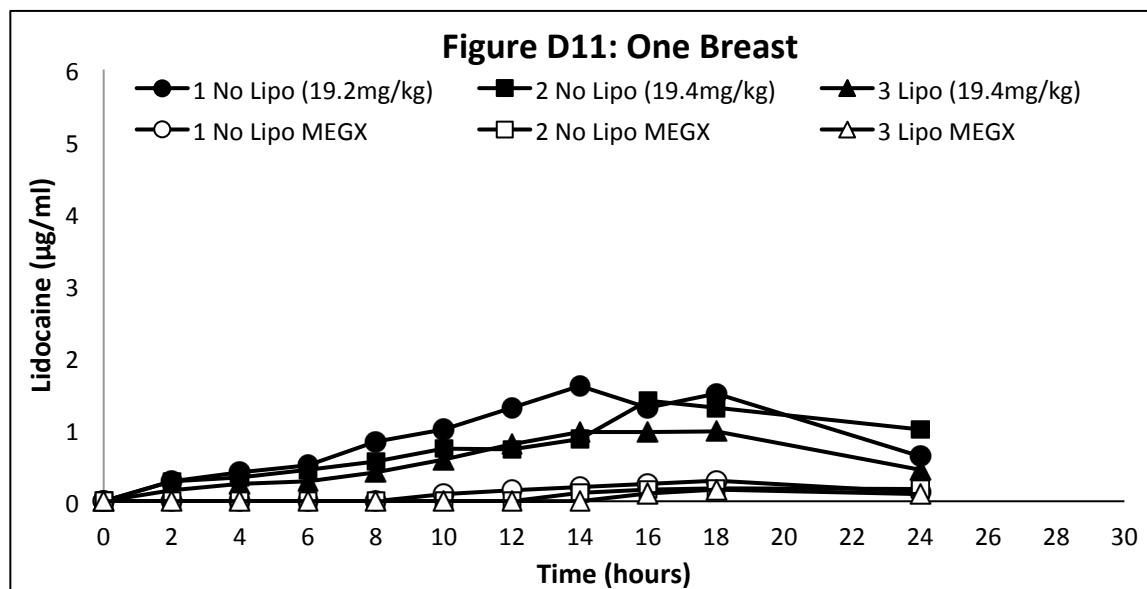


Figure D11: Serum concentrations of lidocaine & corresponding metabolite MEGX as a function of time, with no liposuction & with liposuction.

Table D11B: Calculation of AUC (See Appendix Text S7: Technique for Calculating AUC ∞)

$$AUC_{24} = f(0) + 2\sum f(2j) \quad j=1-8 + 4f(18) + 3f(24) \quad j=1 \text{ to } 8, \text{ where } AUC_{24} + AUC_{24,\infty} = AUC_{\infty}$$

	f(0)	2Σf(2i)	4f(18)	3f(24)	AUC ₂₄	AUC _{24,∞}	AUC _∞
1 No Lipo (19.2mg/kg)	0	14.42	6	1.86	22.28	1.86	24.14
2 No Lipo (19.4mg/kg)	0	10.62	5.2	3	18.82	3	21.82
3 Lipo (19.4mg/kg)	0	8.72	3.88	1.32	13.92	1.32	15.24

Supplement 2, page 12: Subject 12: Abdomen: 3 studies, 2 with no liposuction & 1 with liposuction

Table D12A: $\mu\text{g}/\text{ml}$ Serum Lidocaine & MEGX concentration data as a function of time, T0 = immediately after completion of infiltration.

Lido Conc/Time	0	2	4	6	8	10	12	14	16	18	24	AUC ∞	Cmax	mg/kg
1 No Lipo (45mg/kg)	0	0.79	1	1.1	1.6	3.2	3	3	4.3	3.5	2	62	4.3	45
2 No Lipo (45mg/kg)	0	0.82	0.96	1.4	1.9	2.6	3.4	3.7	3.9	4.4	3.8	77.4	4.4	45
3 Lipo (45mg/kg)	0.2	1	1.3	2.1	2.8	3.5	3.8	3.7	3.4	3.7	1.6	67.8	3.8	45
1 No Lipo MEGX	0	0	0	0	0.1	0.15	0.23	0.36	0.36	0.34	0.41			
2 No Lipo MEGX	0	0	0	0	0	0.12	0.2	0.21	0.25	0.27	0.24			
3 Lipo MEGX	0	0	0	0	0.12	0.17	0.18	0.22	0.23	0.22	0.15			

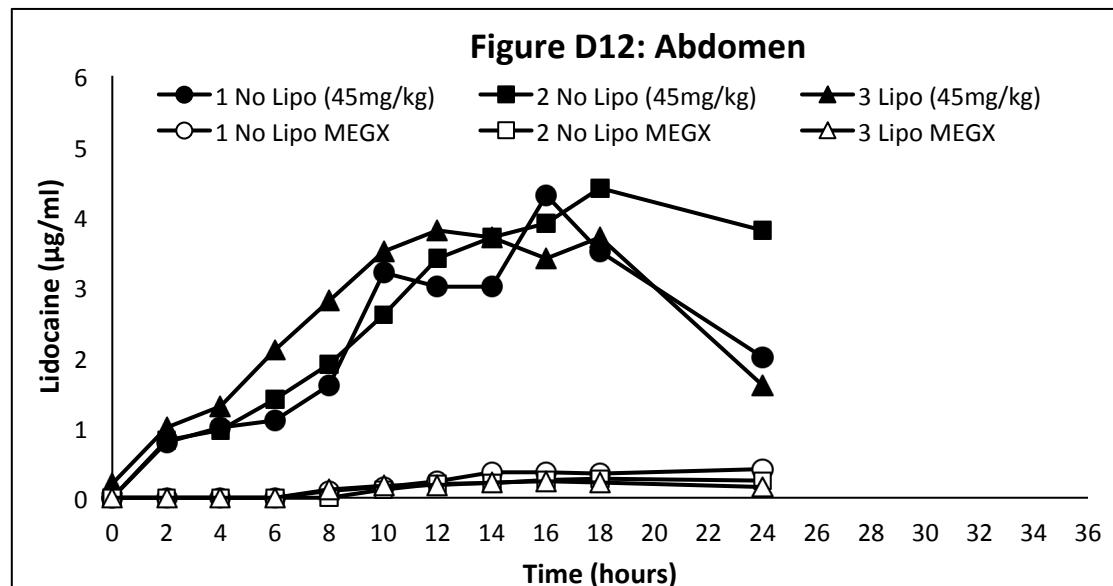


Figure D12: Serum concentrations of lidocaine & corresponding metabolite MEGX as a function of time, with no liposuction & with liposuction.

Table D12B: Calculation of AUC (See Appendix Text S7: Technique for Calculating AUC ∞)

$$\text{AUC}_{24} = f(0) + 2 \sum_{j=1}^{8} f(2j) + 4f(18) + 3f(24) \quad j=1 \text{ to } 8, \text{ where } \text{AUC}_{24} + \text{AUC}_{24,\infty} = \text{AUC}\infty$$

	f(0)	$2\sum f(2i)$	$4f(18)$	$3f(24)$	AUC ₂₄	AUC _{24,∞}	AUC ∞
1 No Lipo (45mg/kg)	0	35.98	14	6	55.98	6	61.98
2 No Lipo (45mg/kg)	0	37.36	17.6	11.2	66.16	11.2	77.36
3 Lipo (45mg/kg)	0.2	43.2	14.8	4.8	63	4.8	67.8

Supplement 2, page 13: Subject 13: Abdomen: 2 studies, 1 with no liposuction & 1 with liposuction

Table D13A: $\mu\text{g/ml}$ Serum Lidocaine & MEGX concentration data as a function of time, T0 = immediately after completion of infiltration.

Lidocaine / Time (hours)	0	2	4	6	8	10	12	14	16	18	24	AUC ∞	Cmax	mg/kg
1 No Lipo (45mg/kg)	0	0.1	0.65	1.5	2.1	3.7	3.2	3.6	2.9	1.9	0.86	48.3	3.7	45.7
2 Lipo (45mg/kg)	0	0.2	1.8	1.8	2.8	2.4	2.1	1.2	1.6	1.3	0	33	2.8	44.5
1 No Lipo MEGX	0	0	0	0	0	0.64	0.72	0.73	0.65	0.66	0			
2 Lipo MEGX	0	0	0	0.56	0.79	0.76	0.71	0.55	0	0	0			

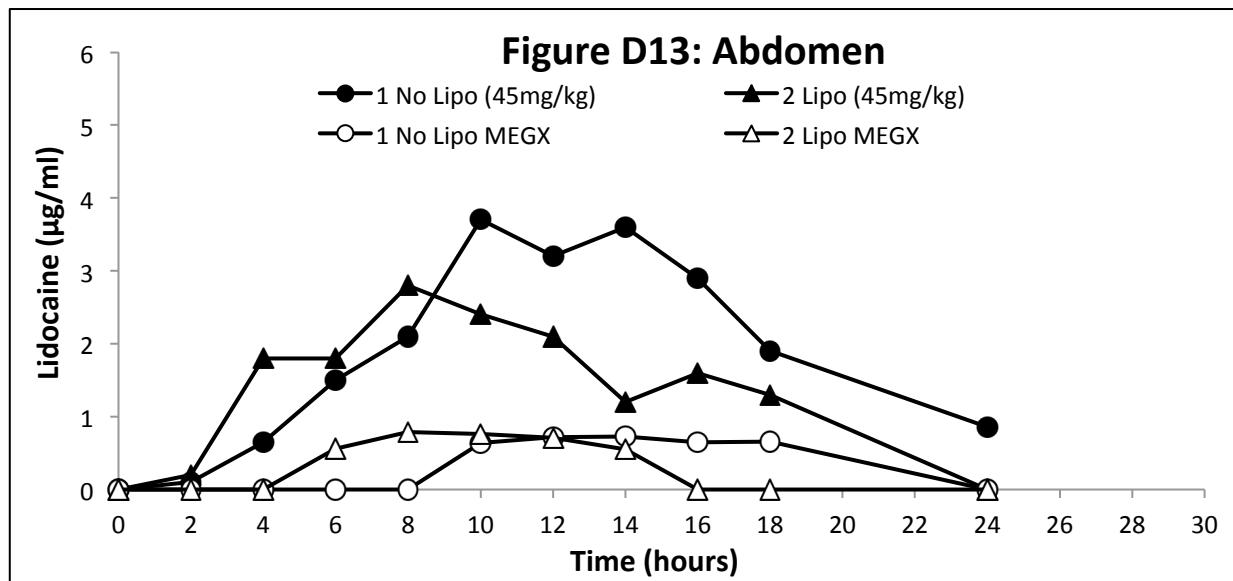


Figure D13: Serum concentrations of lidocaine & corresponding metabolite MEGX as a function of time, with no liposuction & with liposuction.

Table D13B: Calculation of AUC (See Appendix Text S7: Technique for Calculating AUC ∞)

$$\text{AUC}_{24} = f(0) + 2 \sum_{j=1}^{8} f(2j) + 4f(18) + 3f(24), \text{ where } \text{AUC}_{24} + \text{AUC}_{24,\infty} = \text{AUC}\infty$$

	f(0)	$2\sum f(2i)$	$4f(18)$	$3f(24)$	AUC ₂₄	AUC _{24,∞}	AUC ∞
45mg/kg: No Lipo	0	35.5	7.6	2.58	45.68	2.58	48.26
45mg/kg: Lipo	0	27.8	5.2	0	33	0	33

Supplement 2, page 14: Subject 14: Hips & Outer Thighs: 2 studies, 1 with no liposuction & 1 with liposuction

Table D14A: µg/ml Serum Lidocaine & MEGX concentration data as a function of time, T0 = immediately after completion of infiltration.

Lidocaine / Time (hours)	0	2	4	6	8	10	12	14	16	18	24	AUC ∞	Cmax	mg/kg
1 No Lipo (45mg/kg)	0.22	0.43	0.77	1.2	2.2	2.2	2.7	3.3	3.4	2.5	1.2	49.6	3.4	45
2 No Lipo (22.5mg/kg)	0	0.36	0.48	0.78	0.99	1.1	1.2	1.8	1.5	1.6	0.62	26.5	1.8	22.5
3 Lipo (45mg/kg)	0.2	0.64	1	1.3	2.2	2.7	2.1	1.6	1.6	1.4	0.64	35.7	2.7	45
1 No Lipo MEGX	0	0	0.17	0	0.37	0.56	0.85	1.1	1.1	1.3	1.2	0.6		
2 No Lipo MEGX	0	0	0.11	0.14	0.19	0.27	0.29	0.32	0.43	0.45	0.26			
3 Lipo MEGX	0	0	0.17	0.3	0.47	0.7	0.65	0.66	0.62	0.54	0.25			

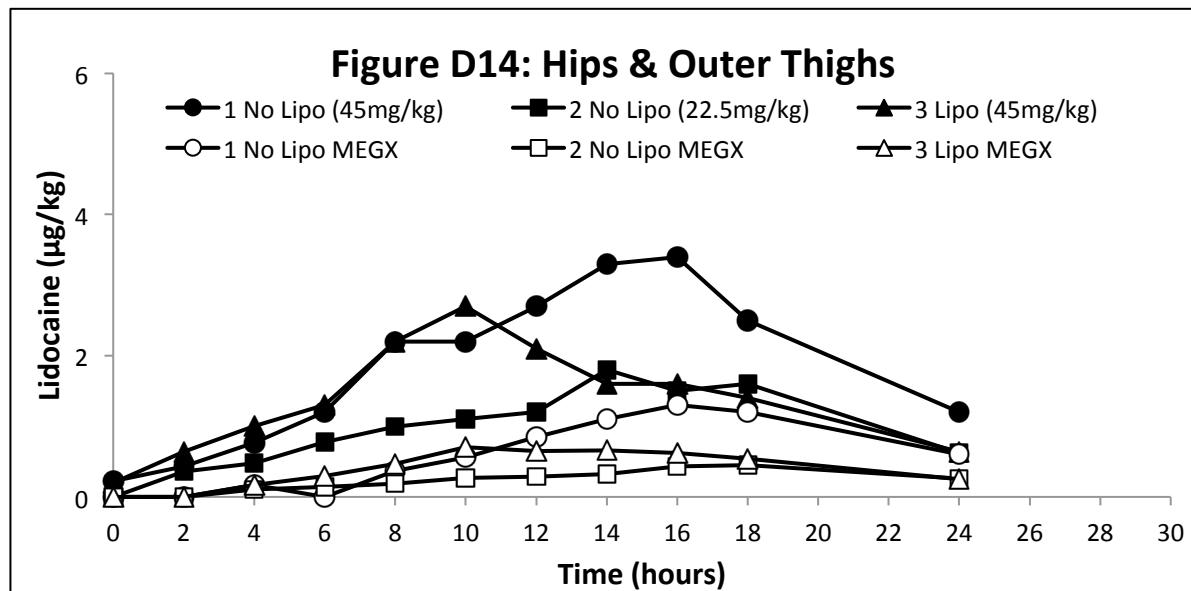


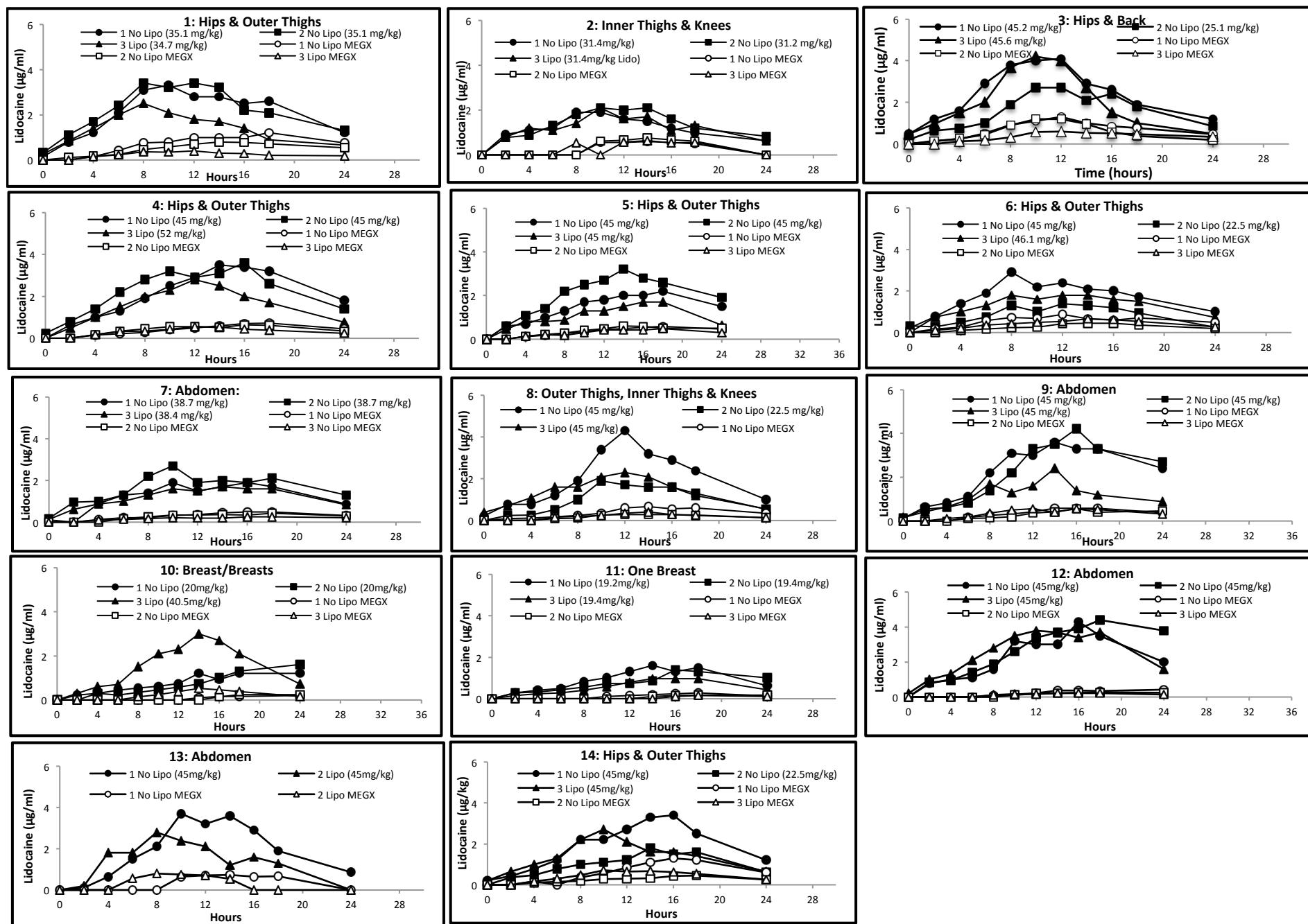
Figure D14: Serum concentrations of lidocaine & corresponding metabolite MEGX as a function of time, with no liposuction & with liposuction.

Table D14B: Calculation of AUC (See Appendix Text S7: Technique for Calculating AUC ∞)

$$AUC_{24} = f(0) + 2\sum f(2j) \quad j=1-8 + 4f(18) + 3f(24) \quad j=1 \text{ to } 8, \text{ where } AUC_{24} + AUC_{24,\infty} = AUC_{\infty}$$

	f(0)	2Σf(2i)	4f(18)	3f(24)	AUC ₂₄	AUC _{24,∞}	AUC _∞
1 No Lipo (45mg/kg)	0.22	32.4	10	3.6	46	3.6	49.6
2 No Lipo (22.5mg/kg)	0	16.42	6.4	1.86	24.68	1.86	26.54
3 Lipo (45mg/kg)	0.2	26.28	5.6	1.92	33.8	1.92	35.72

Supplement 2, page 15: Tables D1 through D14 collected on one page for easy comparison.



Supplemental 2, page 16, data D16: Lidocaine-Time Data, All Subjects Without Liposuction

Patient # & Study # (Lidocaine dosage)	Body Area	Time (hours)											AUC ∞	Cmax	mg/kg
		0	2	4	6	8	10	12	14	16	18	24			
1-1 No Lipo (35.1 mg/kg)	H-OT	0.14	0.8	1.2	2.1	3.1	3.3	2.8	2.8	2.5	2.6	1.2	54.5	3.3	35.1
1-2 No Lipo (35.1 mg/kg)	H-OT	0.32	1.1	1.7	2.4	3.4	3.2	3.4	3.2	2.2	2.1	1.3	57.7	3.4	35.1
2-1 No Lipo (31.4mg/kg)	I(T/K)	0	0.91	1.1	1.2	1.9	1.9	1.6	1.5	1.2	0.98	0.64	29.4	1.9	31.4
2-2 No Lipo (31.2 mg/kg)	I(T/K)	0	0.78	0.88	1.3	1.8	2.1	2	2.1	1.6	1.2	0.84	35	2.1	31.2
3-1 No Lipo (45.2 mg/kg)	H-F	0.46	1.2	1.6	2.9	3.8	4	4.1	2.9	2.6	1.9	1.2	61.5	4.1	45.2
3-2 No Lipo (25.1 mg/kg)	Rt:H-F	0.21	0.63	0.75	1	1.9	2.7	2.7	2.1	2.4	1.8	0.86	42	2.7	25.1
4-1 No Lipo (45 mg/kg)	H-OT	0	0.63	1	1.3	1.9	2.5	2.9	3.5	3.4	3.2	1.8	57.9	3.5	45
4-2 No Lipo (45 mg/kg)	H-OT	0.24	0.8	1.4	2.2	2.8	3.2	2.9	3.1	3.6	2.6	1.4	59	3.6	45
5-1 No Lipo (45 mg/kg)	H-OT	0	0.6	0.68	1	1.3	1.7	1.8	2	2	2.2	1.5	44.5	2.2	45
5-2 No Lipo (45 mg/kg)	H-OT	0	0.6	1.1	1.4	2.2	2.5	2.7	3.2	2.8	2.6	1.9	60.5	3.2	45
6-1 No Lipo (45 mg/kg)	H-OT	0.22	0.77	1.4	1.9	2.9	2.2	2.4	2.1	2	1.7	1	44.4	2.9	45
6-2 No Lipo (22.5 mg/kg)	H-OT	0.33	0.28	0.5	0.75	1.3	1	1.4	1.3	1.2	0.93	0.25	21	1.4	22.5
7-1 No Lipo (38.7 mg/kg)	Abd	0.11	0	0.9	1.3	1.4	1.9	1.5	1.7	1.9	1.7	0.88	33.4	1.9	38.7
7-2 No Lipo (38.7 mg/kg)	Abd	0.18	0.95	1	1.3	2.2	2.7	1.9	2	1.9	2.1	1.3	44.3	2.7	38.7
8-1 No Lipo (45 mg/kg)	2 OT, I(TK)	0.22	0.77	0.78	1.2	1.9	3.4	4.3	3.2	2.9	2.4	1	52.7	4.3	45
8-2 No Lipo (22.5 mg/kg)	1 OT, I(TK)	0	0.25	0.27	0.51	1	1.9	1.7	1.6	1.6	1.3	0.53	26	1.9	22.5
9-1 No Lipo (45 mg/kg)	Abd	0.12	0.65	0.83	1.1	2.2	3.1	3	3.6	3.3	3.3	2.4	70.3	3.6	45
9-2 No Lipo (45 mg/kg)	Abd	0.13	0.54	0.62	0.83	1.4	2.2	3.3	3.5	4.2	3.3	2.7	70.8	4.2	45
10-1 No Lipo (20mg/kg)	L Brst	0	0.23	0.3	0.45	0.54	0.62	0.75	1.2	0.92	1.2	1.2	25.6	1.2	20
10-2 No Lipo (20mg/kg)	L Brst	0	0	0.31	0.23	0.34	0.47	0.58	0.73	1	1.3	1.6	26.9	1.6	20
11-1 No Lipo (19.2mg/kg)	L Brst	0	0.28	0.4	0.5	0.83	1	1.3	1.6	1.3	1.5	0.62	24.2	1.6	19.2
11-2 No Lipo (19.4mg/kg)	L Brst	0	0.28	0.33	0.44	0.55	0.73	0.72	0.86	1.4	1.3	1	21.8	1.4	19.4
12-1 No Lipo (45mg/kg)	Abd	0	0.79	1	1.1	1.6	3.2	3	3	4.3	3.5	2	62	4.3	45
12-2 No Lipo (45mg/kg)	Abd	0	0.82	0.96	1.4	1.9	2.6	3.4	3.7	3.9	4.4	3.8	77.4	4.4	45
13-1 No Lipo (45mg/kg)	H-OT	0	0.1	0.65	1.5	2.1	3.7	3.2	3.6	2.9	1.9	0.86	48.3	3.7	45.7
14-1 No Lipo (45mg/kg)	H-OT	0.22	0.43	0.77	1.2	2.2	2.2	2.7	3.3	3.4	2.5	1.2	49.6	3.4	45
14-2 No Lipo (22.5mg/kg)	H-OT	0	0.36	0.48	0.78	0.99	1.1	1.2	1.8	1.5	1.6	0.62	26.5	1.8	22.5

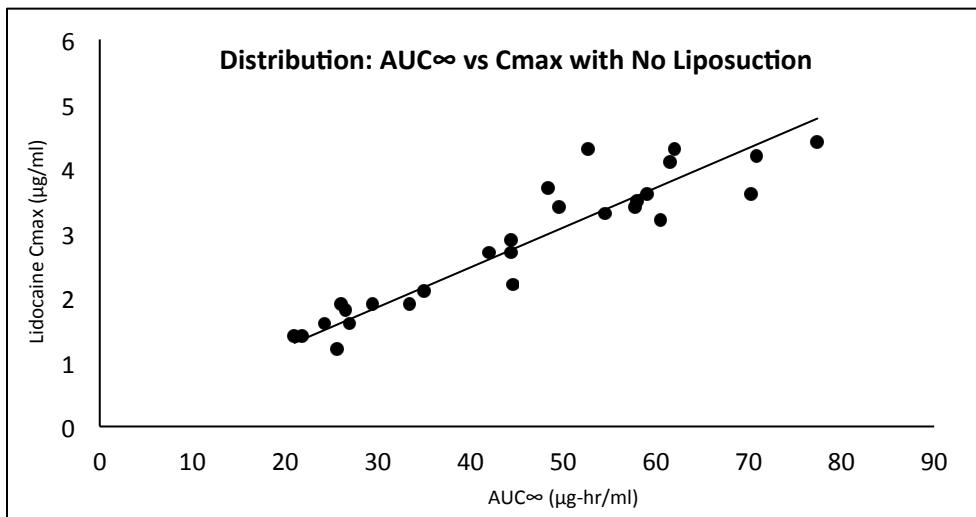


Table D16A: Without Liposuction: This table is a summary of lidocaine concentration-time data for all subjects when there was no liposuction following tumescent infiltration. Also shown are the corresponding together with the resulting AUC ∞ & Cmax.

Figure D16A: Shows a close and rather predictable linear relationship between Cmax & AUC ∞ . This figure merely provides a graphic view of all the data associated with tumescent infiltration without liposuction. This figure does not represent a linear regression graph. If a subject had 2 tumescent infiltration procedures without liposuction, then both results are represented in this figure.

Supplement 2, page 17, data D17: All Serum Lidocaine Concentrations over 24 hours with Liposuction, AUC ∞ , Cmax, Dosage

Lidocaine Dosage With Liposuction (Lipo)	Time (hours)														
Patient # & Study #	Area	0	2	4	6	8	10	12	14	16	18	24	AUC ∞	Cmax	mg/kg
1-3 Lipo (34.7 mg/kg)	H-OT	0.26	0.84	1.4	2	2.5	2.1	1.8	1.7	1.4	0.89	0.66	35.3	2.5	34.7
2-3 Lipo (31.4mg/kg Lido)	I(T/K)	0	0.79	1.2	1.1	1.4	2.1	1.6	1.7	1.1	1.3	0.62	31	2.1	31.4
3-3 Lipo (45.6 mg/kg)	H-F	0.48	0.97	1.5	2	3.7	4.2	4	2.7	1.5	1	0.5	48.6	4.2	45.6
4-3 Lipo (52 mg/kg)	H-OT	0	0.5	1	1.5	2	2.3	2.8	2.5	2	1.7	0.77	40.6	2.8	52
5-3 Lipo (45 mg/kg)	H-OT	0	0.45	0.82	0.81	0.87	1.3	1.3	1.5	1.7	1.7	0.65	27.6	1.7	45
6-3 Lipo (46.1 mg/kg)	H-OT	0	0.74	1	1.3	1.8	1.6	1.8	1.8	1.6	1.5	0.73	33.7	1.8	46.1
7-3 Lipo (38.4 mg/kg)	Abd	0.13	0.61	0.88	1	1.3	1.6	1.5	1.7	1.6	1.6	0.82	31.9	1.7	38.4
8-3 Lipo (45 mg/kg)	OT, I(TK)	0.38	0.71	1.1	1.6	1.6	2.1	2.3	2.1	1.6	1.2	0.56	34.8	2.3	45
9-3 Lipo (45 mg/kg)	Abd	0.15	0.43	0.65	0.96	1.7	1.3	1.6	2.4	1.4	1.2	0.88	33.8	2.4	45
10-3 Lipo (40.5mg/kg)	2Brst	0	0.31	0.6	0.7	1.5	2.1	2.3	3	2.7	2.1	0.73	37.7	2.7	40.5
11-3 Lipo (19.4mg/kg)	L Brst	0	0.15	0.24	0.28	0.4	0.58	0.79	0.96	0.96	0.97	0.44	15.2	0.96	19.4
12-3 Lipo (45mg/kg)	Abd	0.2	1	1.3	2.1	2.8	3.5	3.8	3.7	3.4	3.7	1.6	67.8	3.8	45
13-3 Lipo (45mg/kg)	H-OT	0	0.2	1.8	1.8	2.8	2.4	2.1	1.2	1.6	1.3	0	33	2.8	44.5
14-3 Lipo (45mg/kg)	H-OT	0.2	0.64	1	1.3	2.2	2.7	2.1	1.6	1.6	1.4	0.64	35.7	2.7	45

Table D17. Lidocaine serum concentrations with liposuction for all subjects as a function of time (hours).

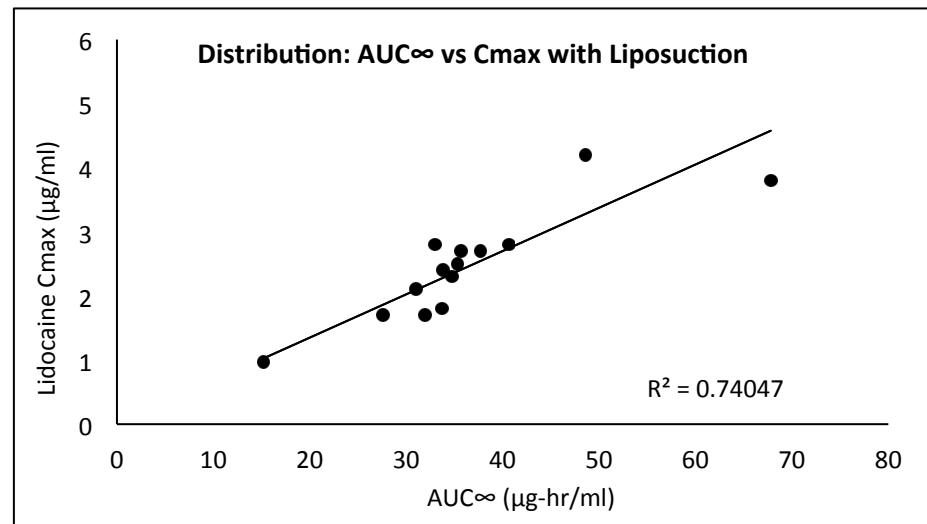


Figure D17. There is a close association between AUC ∞ and Cmax, without liposuction.

Table D17: With Liposuction: This table is a summary of lidocaine concentration-time data for all subjects when there was no liposuction following tumescent infiltration. Also shown are the corresponding AUC ∞ & Cmax.

Figure D17: With Liposuction: Shows a close a linear relationship between Cmax & AUC ∞ . This figure provides a graphic view of all the data associated with tumescent infiltration without liposuction. Figure SDC 19b does represent a linear regression graph having a coefficient of determination $R^2 = 0.74$.

Supplement 2, page 18, data D18: Subject's Height Weight Drugs AUC Cmax Tmax

Patient # Study #	Body Area	Lido mg/Bag	Epi mg/L	Clonidine mg	Atropine mg	wt kg	Ht m	m ²	Lido mg	Lido mg/kg	BMI kg/m ²	Cmax	Tmax	AUC ∞
01-1	H-OT	700	1	0	0.3	59.65	1.59	2.53	2100	35.1	23.6	3.3	10	54.5
01-2	H-OT	700	0.5	0	0.3	59.65	1.59	2.53	2100	35.1	23.6	3.4	8	57.7
02-1	I(T/K)	700	1	0	0	62.14	1.68	2.81	1956	31.4	22.1	1.9	8	29.4
02-2	I(T/K)	700	0.5	0	0	62.6	1.68	2.81	1956	31.2	22.3	2.1	10	35
03-1	H-F	1000	1	0	0	83.6	1.78	3.17	3782	45.2	26.4	4.1	12	61.5
03-2	Rt:H-F	1000	1	0	0	82.7	1.78	3.17	2073	25.1	26.1	2.7	11	42
04-1	H-OT	1000	1	0.1	0	70.22	1.625	2.64	3159	45	26.6	3.5	14	57.9
04-2	H-OT	1000	0.5	0.1	0	70.22	1.625	2.64	3171	44.98	26.6	3.6	16	59
05-1	H-OT	800	1	0.1	0	74.84	1.75	3.06	3375	45	24.5	2.2	18	44.5
05-2	H-OT	800	1	0.1	0	75.52	1.75	3.06	3406	45	24.7	3.2	14	60.5
06-1	H-OT	1000	1	0.1	0.3	68.5	1.69	2.85	3090	45.04	24	2.9	8	44.4
06-2	H-OT	1000	1	0.1	0.3	68.6	1.69	2.85	1539	22.5	24.07	1.4	12	21
07-1	Abd	1000	1	0.1	0	64.86	1.72	2.96	2514	38.68	21.9	1.9	10	33.4
07-2	Abd	1000	0.5	0.1	0	65.32	1.72	2.96	2531	38.68	22.07	2.7	10	44.3
08-1	2 OT, I(TK)	1000	1	0	0	55.91	1.67	2.79	2516	45	20.04	4.3	12	52.7
08-2	1 OT, I(TK)	1000	1	0	0	54.1	1.67	2.79	1217	22.5	19.4	1.9	10	26
09-1	Abd	1000	1	0.1	0	70.76	1.6	2.56	3189	45	27.6	3.6	14	70.3
09-2	Abd	1000	1	0.1	0	70.76	1.6	2.56	3189	45	27.6	4.2	16	70.8
10-1	L Brst	1000	1	0.1	0	100	1.73	2.99	2018	20	33.4	1.2	14	25.6
10-2	L Brst	1000	1	0.1	0	100	1.73	2.99	2028	20	33.4	1.6	24	26.9
11-1	L Brst	1000	1	0.1	0	79.1	1.65	2.72	1522	19.2	29.1	1.6	14	24.2
11-2	L Brst	1000	1	0.1	0	80	1.65	2.72	1549	19.4	29.4	1.4	16	21.8
12-1	Abd	1000	1	0	0	80.73	1.575	2.48	3640	45	32.46	4.3	16	62
12-2	Abd	1000	1	0	0	80.97	1.575	2.48	3651	45	32.66	4.4	18	77.4
13-2	H-OT	1000	1	0	0	66.4	1.63	2.66	2957	44.53	25	3.7	10	48.3
14-1	H-OT	1000	1	0	0.3	76.4	1.75	3.06	3436	45	24.95	3.4	16	49.6
14-2	H-OT	1000	1	0	0.3	76.4	1.75	3.06	1718	22.5	24.95	1.8	14	26.5

Table D16A: Without Liposuction: Summary Data for All Subjebjects Weight, Height, Drugs, Cmax, Tmax, AUC

Patient # Study #	Area	Lido (mg/bag)	Epi mg/bag	Clonidine mg	Atropine mg	kg	m	m ²	Lido mg	Lido mg/kg	BMI	Cmax	Tmax	AUC ∞	Aspirate ml	Supranat ml	Infranat ml
01-3	H-OT	700	1	0	0.3	59.65	1.59	2.53	2074	34.7	23.6	2.5	8	35.3	1950	1750	200
02-3	I(T/K)	700	1	0	0	63.05	168	2.81	1984	31.4	22.44	2.1	10	31	1100	750	350
03-3	H-F	1000	1	0	0	83.6	1.78	3.17	3900	46.65	26.3	4.2	10	48.6	1900	1250	650
04-3	H-OT	1000	1	0.1	0	70.22	1.63	2.64	3159	52	26.6	2.8	12	40.6	2425	2000	425
05-3	H-OT	800	1	0.1	0	75.52	1.75	3.06	3405	45	24.7	1.7	16	27.6	2220	1845	525
06-3	H-OT	1000	1	0.1	0.3	69.09	1.69	2.85	3190	46.1	24.24	1.8	12	33.7	2080	1840	240
07-3	Abd	1000	1	0.1	0	66.22	1.72	2.96	2550	38.43	22.37	1.7	14	31.9	1300	950	350
08-3	OT, I(TK)	1000	1	0	0.3	55.2	1.67	2.79	2516	45.6	19.8	2.3	12	34.8	1525	1395	130
09-3	Abd	1000	1	0.1	0	71.21	1.6	2.56	3319	46.6	27.8	2.4	14	33.8	2700	1875	825
10-3	2Brst	1000	1	0.1	0	101	1.73	2.99	4122	40.49	33.8	2.7	16	37.7	2500	1450	1050
11-3	L Brst	1000	1	0.1	0	81.1	1.65	2.72	1572	19.4	29.8	0.97	18	15.2	700	450	250
12-3	Abd	1000	1	0.1	0	81.65	1.58	2.48	3674	45	32.92	3.8	12	67.8	2800	2260	540
13-2	H-OT	1000	1	0	0	66.4	1.63	2.66	2993	45.74	25	2.8	8	33	2550	2200	350
14-3	H-OT	1000	1	0.1	0.3	76.4	1.75	3.06	3436	45	24.95	2.7	10	35.7	3300	2900	400

Table D16B: With Liposuction: Summary Data for All Subjebjects Weight, Height, Drugs, Cmax, Tmax, AUC

Supplement 2, page 19, data D19: Comparison of AUC_{∞} without & with liposuction by paired t-test

Subject #	No Liposuction AUC	Liposuction AUC
1	54.5	35.3
2	29.4	31
3	61.5	48.6
4	57.9	40.6
5	44.5	27.6
6	44.4	33.7
7	33.4	31.9
8	52.7	34.8
9	70.3	33.8
10	-	-
11	24.2	15.2
12	62	67.8
13	48.3	33
14	49.6	35.7

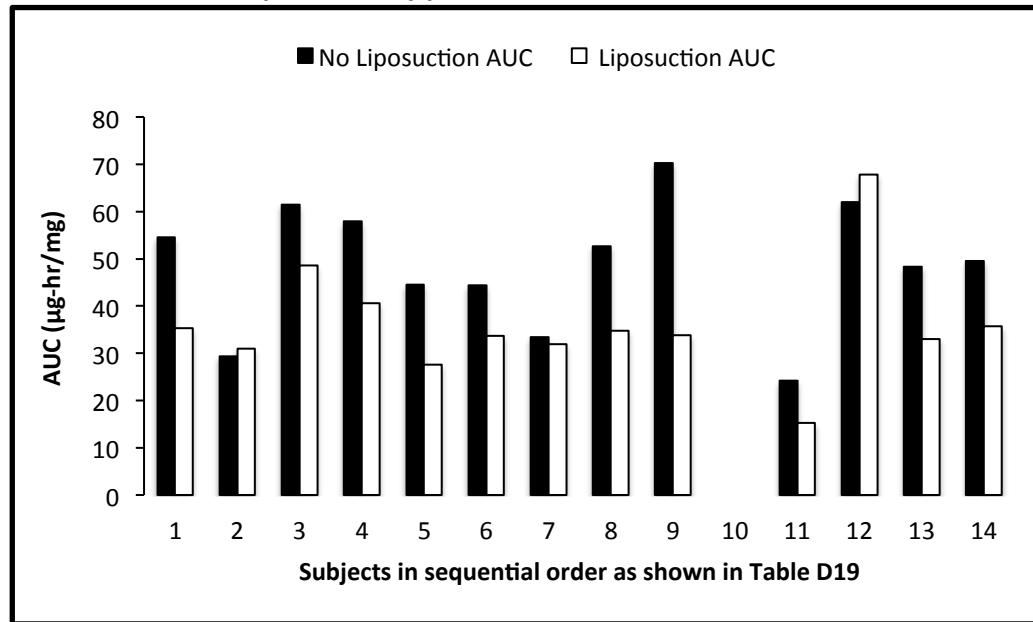


Table D19: 13 of the 14 subjects had same mg/kg dosage of lidocaine with no liposuction and with liposuction. If a patient had 2 no-liposuction studies with the same mg/kg dosage of lidocaine then the study with the lowest AUC was chosen for comparison with the AUC with liposuction, thus reducing the probability of a significant difference (e.g. Type I error). Subject 10 had 20mg/kg both times without liposuction and 40.5mg/kg with liposuction.

Figure D19. There was a significant difference ($p=0.001$) between AUCs without liposuction and AUCs with liposuction, indicating that data derived from liposuction patients cannot be used to estimate a maximum safe mg/kg dosage of tumescent lidocaine for surgeries not involving liposuction. The difference between AUC without liposuction and AUC with liposuction at equal mg/kg dosages of lidocaine was assessed within individuals using a paired t-test. When an individual had two distinct tumescent infiltrations without liposuction, the smaller of the two AUCs was selected for comparison with the corresponding AUC with liposuction. This choice reduced the probability of finding a significant difference between AUCs without liposuction and AUCs with liposuction.

Supplement 2, page 20, data D20: Comparison of Cmax without & with liposuction by paired t-test

Subject #	No Liposuction Cmax	Liposuction Cmax
1	3.3	2.5
2	1.9	2.1
3	4.1	4.2
4	3.5	2.8
5	2.2	1.7
6	2.9	1.8
7	1.9	1.7
8	4.3	2.3
9	3.6	2.4
10	-	-
11	1.6	0.96
12	4.3	3.8
13	3.7	2.8
14	3.4	2.7

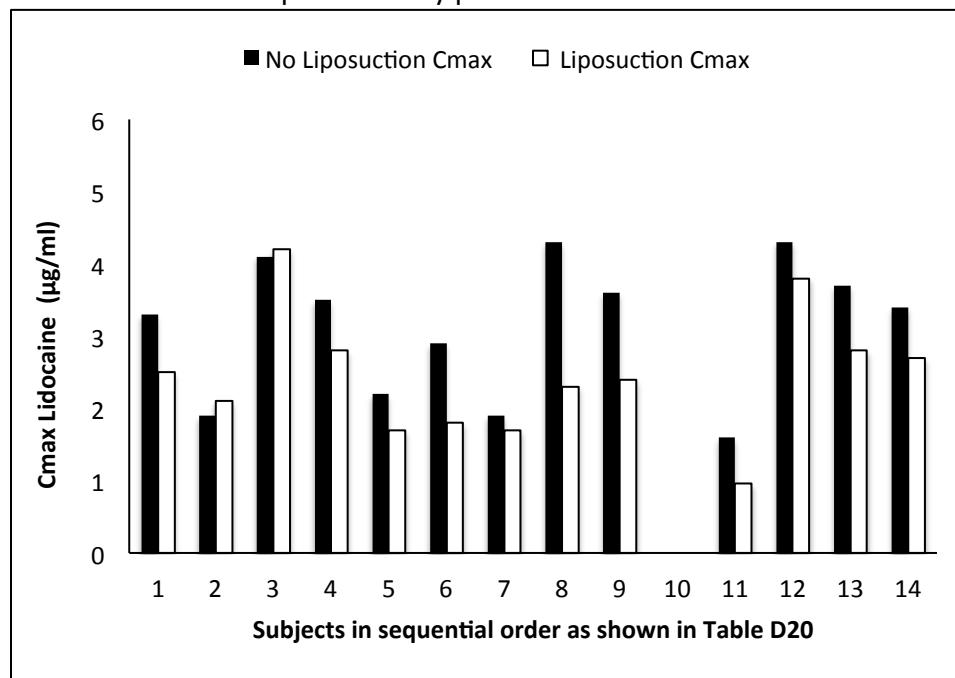


Table D20: 13 of the 14 subjects had same mg/kg dosage of lidocaine with no liposuction and with liposuction. If a patient had 2 no-liposuction studies with the same mg/kg dosage of lidocaine then the study with the lowest Cmax was chosen for comparison with the Cmax with liposuction, thus reducing the probability of a significant difference (e.g. Type I error). Subject 10, who had 20mg/kg both times without liposuction and 40.5mg/kg with liposuction, was not included in this analysis.

Figure D20. There was a significant difference ($p=0.001$) between Cmax without liposuction and Cmax with liposuction, indicating that data derived from liposuction patients cannot be used to estimate a maximum safe mg/kg dosage of tumescent lidocaine for surgeries not involving liposuction. The difference between Cmax without liposuction and Cmax with liposuction at equal mg/kg dosages of lidocaine was assessed within individuals using a paired t-test. When an individual had two distinct tumescent infiltrations without liposuction, the smaller of the two Cmax was selected for comparison with the corresponding Cmax with liposuction. This choice reduced the probability of finding a significant difference between Cmax without liposuction and Cmax with liposuction.

Supplement 2, page 21, data D21: Mean Serum Concentration over time. Lidocaine Dosage = 45mg/kg: No Liposuction

Table D21A	Time (hours)										AUC ∞	
	0	2	4	6	8	10	12	14	16	18	24	
3-1 No Lipo (45.2 mg/kg)	0.46	1.2	1.6	2.9	3.8	4	4.1	2.9	2.6	1.9	1.2	61.5
4-1 No Lipo (45 mg/kg)	0	0.63	1	1.3	1.9	2.5	2.9	3.5	3.4	3.2	1.8	57.9
4-2 No Lipo (45 mg/kg)	0.24	0.8	1.4	2.2	2.8	3.2	2.9	3.1	3.6	2.6	1.4	59
4 Mean Concentration	0.12	0.715	1.2	1.75	2.35	2.85	2.9	3.3	3.5	2.9	1.6	58.45
5-1 No Lipo (45 mg/kg)	0	0.6	0.68	1	1.3	1.7	1.8	2	2	2.2	1.5	44.5
5-2 No Lipo (45 mg/kg)	0	0.6	1.1	1.4	2.2	2.5	2.7	3.2	2.8	2.6	1.9	60.5
5 Mean Concentration	0	0.6	0.89	1.2	1.75	2.1	2.25	2.6	2.4	2.4	1.7	52.5
6-1 No Lipo (45 mg/kg)	0.22	0.77	1.4	1.9	2.9	2.2	2.4	2.1	2	1.7	1	44.4
8-1 No Lipo (45 mg/kg)	0.22	0.77	0.78	1.2	1.9	3.4	4.3	3.2	2.9	2.4	1	52.7
9-1 No Lipo (45 mg/kg)	0.12	0.65	0.83	1.1	2.2	3.1	3	3.6	3.3	3.3	2.4	70.3
9-2 No Lipo (45 mg/kg)	0.13	0.54	0.62	0.83	1.4	2.2	3.3	3.5	4.2	3.3	2.7	70.8
9 Mean Concentration	0.125	0.595	0.725	0.965	1.8	2.65	3.15	3.55	3.75	3.3	2.55	70.55
12-1 No Lipo (45mg/kg)	0	0.79	1	1.1	1.6	3.2	3	3	4.3	3.5	2	62
12-2 No Lipo (45mg/kg)	0	0.82	0.96	1.4	1.9	2.6	3.4	3.7	3.9	4.4	3.8	77.4
12 Mean Concentration	0	0.805	0.98	1.25	1.75	2.9	3.2	3.35	4.1	3.95	2.9	69.7
13-1 No Lipo (45mg/kg)	0	0.1	0.65	1.5	2.1	3.7	3.2	3.6	2.9	1.9	0.86	48.3
14-1 No Lipo (45mg/kg)	0.22	0.43	0.77	1.2	2.2	2.2	2.7	3.3	3.4	2.5	1.2	49.6

Table D21B: Condensed Version of Table D21A

Patient # & Study #	0	2	4	6	8	10	12	14	16	18	24	AUC ∞
3-1 No Lipo (45.2 mg/kg)	0.46	1.2	1.6	2.9	3.8	4	4.1	2.9	2.6	1.9	1.2	61.5
4 Mean Concentration	0.12	0.715	1.2	1.75	2.35	2.85	2.9	3.3	3.5	2.9	1.6	58.45
5 Mean Concentration	0	0.6	0.89	1.2	1.75	2.1	2.25	2.6	2.4	2.4	1.7	52.5
6-1 No Lipo (45 mg/kg)	0.22	0.77	1.4	1.9	2.9	2.2	2.4	2.1	2	1.7	1	44.4
8-1 No Lipo (45 mg/kg)	0.22	0.77	0.78	1.2	1.9	3.4	4.3	3.2	2.9	2.4	1	52.7
9 Mean Concentration	0.125	0.595	0.725	0.965	1.8	2.65	3.15	3.55	3.75	3.3	2.55	70.55
12 Mean Concentration	0	0.805	0.98	1.25	1.75	2.9	3.2	3.35	4.1	3.95	2.9	69.7
13-1 No Lipo (45mg/kg)	0	0.1	0.65	1.5	2.1	3.7	3.2	3.6	2.9	1.9	0.86	48.3
14-1 No Lipo (45mg/kg)	0.22	0.43	0.77	1.2	2.2	2.2	2.7	3.3	3.4	2.5	1.2	49.6
MeanValue, No Lipo	0.1365	0.7985	1.2995	1.9865	2.855	3.6	4.02	4.19	4.355	2.55	1.56	56.4111

Table D21A presents data from among the 9 subjects who received 45mg/kg at least once without liposuction and once with liposuction. When a subject received 45 mg/kg without liposuction on 2 separate occasions, then the mean concentration at each time point was used for that patient's contribution to the overall mean serum lidocaine concentration without liposuction. The highlighted data represent either 1) the mean serum lidocaine concentration at each time-point when a subject received 45mg/kg without liposuction on 2 occasions, or 2) the single occasion when the subject received 45mg/kg without liposuction. **Table D21B** is the condensed version of Table D21A. The bottom line of Table D21B is the overall mean serum lidocaine concentration without liposuction as a function of time.

Supplement 2, page 22, data D22: Mean Serum Lidocaine Concentration as a function of time, 45mg/kg lidocaine dosage, with Liposuction

Table D22	Time											AUC ∞	Cmax	mg/kg
	0	2	4	6	8	10	12	14	16	18	24			
Patient # & Study #	0	2	4	6	8	10	12	14	16	18	24			
4-3 Lipo (45.6 mg/kg)	0.48	0.97	1.5	2	3.7	4.2	4	2.7	1.5	1	0.5	48.6	4.2	45.6
5-3 Lipo (52 mg/kg)	0	0.5	1	1.5	2	2.3	2.8	2.5	2	1.7	0.77	40.6	2.8	52
6-3 Lipo (45 mg/kg)	0	0.45	0.82	0.81	0.87	1.3	1.3	1.5	1.7	1.7	0.65	27.6	1.7	45
7-3 Lipo (46.1 mg/kg)	0	0.74	1	1.3	1.8	1.6	1.8	1.8	1.6	1.5	0.73	33.7	1.8	46.1
9-3 Lipo (45 mg/kg)	0.38	0.71	1.1	1.6	1.6	2.1	2.3	2.1	1.6	1.2	0.56	34.8	2.3	45
10-3 Lipo (45 mg/kg)	0.15	0.43	0.65	0.96	1.7	1.3	1.6	2.4	1.4	1.2	0.88	33.8	2.4	45
13-3 Lipo (45mg/kg)	0.2	1	1.3	2.1	2.8	3.5	3.8	3.7	3.4	3.7	1.6	67.8	3.8	45
14-3 Lipo (45mg/kg)	0	0.2	1.8	1.8	2.8	2.4	2.1	1.2	1.6	1.3	0	33	2.8	44.5
15-3 Lipo (45mg/kg)	0.2	0.64	1	1.3	2.2	2.7	2.1	1.6	1.6	1.4	0.64	35.7	2.7	45
Mean Value, With Lipo	0.159	0.625	1.079	1.49	2.087	2.37	2.42	2.21	1.91	1.64	0.743	39.5		

Table D22. Mean serum lidocaine concentrations at each point in time (hours), with liposuction, among patients who received 45mg/kg tumescent lidocaine both without and with liposuction.

Supplement 2, page23, data D23: Comparison of the Mean Serum Lidocaine Concentrations over time at 45mg/kg

Time (hours)

	0	2	4	6	8	10	12	14	16	18	24	AUC(0,24)	AUC(24,∞)	AUC∞
Mean Lido Conc Without Lipo	0.166	0.679	0.99	1.507	2.27	2.92	3.145	3.095	3.035	2.594	1.701	51.06	5.1	56.16
Mean Lido Conc With Lipo	0.159	0.625	1.079	1.49	2.087	2.37	2.42	2.21	1.91	1.64	0.743	37.34	3.4	40.74

Table D23. Mean Serum Lidocaine Conc at each time point among subjects who received 45mg/kg both without liposuction & with liposuction. Data derived from Table D21B & Tabe D22.

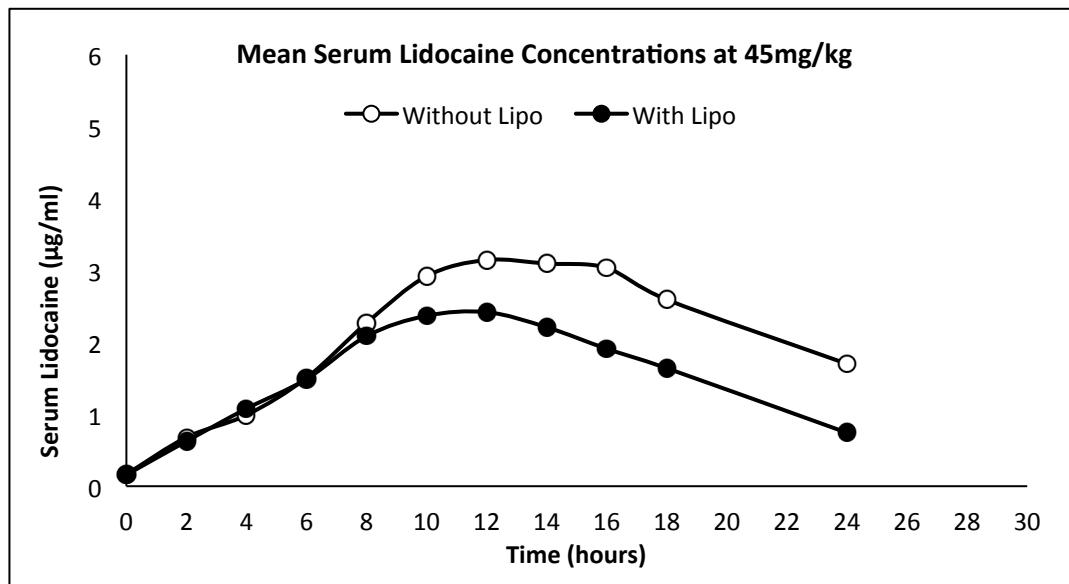


Figure D23 is a comparison of mean serum concentrations of tumescent lidocaine over time, with no liposuction and with liposuction. The AUC ∞ 's, without and with liposuction at 45mg/kg were compared in two ways.

1) The AUC ∞ of the curve consisting of the mean serum lidocaine concentrations at each time point without liposuction (56.2 μ g·hr/ml) is 28% greater than the AUC ∞ of the mean serum lidocaine concentrations at each time point with liposuction (40.7 μ g·hr/ml). See tabke D23.

2) The mean of all AUC ∞ 's without liposuction (56.4·hr/ml) is 30% greater than the mean of all AUC ∞ 's with liposuction (39.5 μ g·hr/ml). See data from Tables D21B & D22.

Thus Liposuction reduces the systemic bioavailability of tumescent lidocaine by removing approximately 30% of subcutaneous tumescent lidocaine before it can be absorbed. See Figure 1 in text.

Supplement 2, page 24 data D24: Correlation between mg/kg Dosage of Tumescent Lidocaine and Cmax, without Liposuction

Table D24A		
Patient # Study #	mg/kg	Cmax
01-1	35.1	3.3
01-2	35.1	3.4
02-1	31.4	1.9
02-2	31.2	2.1
03-1	45.2	4.2
03-2	25.1	2.7
04-1	45	3.5
04-2	45	3.6
05-1	45	2.2
05-2	45	3.2
06-1	45	2.9
06-2	22.5	1.4
07-1	38.7	1.9
07-2	38.7	2.7
08-1	45	4.3
08-2	22.5	1.9
09-1	45	3.6
09-2	45	4.2
10-1	20	1.2
10-2	20	1.6
11-1	19.2	1.6
11-2	19.4	1.4
12-1	45	4.3
12-2	45	4.4
13-2	45	3.7
14-1	45	3.4
14-2	22.5	1.8

Table D24A shows all the studies without liposuction with mg/kg lidocaine dosage and corresponding Cmax .

Table D24B		
Table S21B	No Liposuction	
Subject	mg/kg	Cmax
1	35.1	3.4
2	31.2	2.1
3	25.1	2.7
4	45	3.6
5	45	3.2
6	22.5	1.4
7	38.7	2.7
8	22.5	1.9
9	45	4.2
10	20	1.6
11	19.4	1.6
12	45	4.4
13	45	3.7
14	22.5	1.8

Table D24B shows the list of the selected subset of studies from Table D24A. When a patient participated in 2 studies, only one of the results was used for linear regression analysis in order to satisfy the assumption of statistical independence. For each patient the smallest mg/kg dosage was selected in order to maximize the range of dosages for the linear regression model. When a patient received the same mg/kg dosage of lidocaine for both studies, then the largest Cmax was chosen. Note: The criteria for choosing Cmax in D20 (comparing Cmax) and D24 (linear regression) are different.

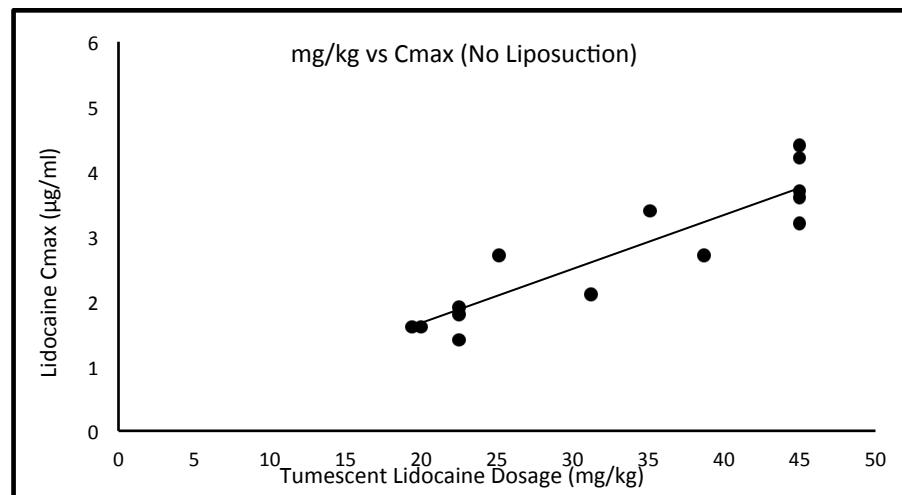


Figure D24 (Figure 3A in text). Linear Correlation ($R^2 = 0.830$, $R = 0.91$) without liposuction between mg/kg dosage of tumescent lidocaine and Cmax. We used linear regression analysis to define Cmax as a function of the mg/kg dosage of tumescent lidocaine. When a patient participated in 2 studies, only one set of results were used for statistical analysis in order to satisfy the assumption of statistical independence. For each patient the smallest mg/kg dosage was selected in order to maximize the range of dosages for the linear regression model. When a patient received the same mg/kg dosage of lidocaine for both studies, then the largest Cmax was chosen. This choice maximized the estimated Cmax for a mg/kg dosage, thus reducing the chance of underestimating the risk of lidocaine toxicity (Type I error).

Supplement 2, page 25, data D25: Correlation between mg/kg Dosage of Tumescent Lidocaine and Cmax, with Liposuction

Table D25		
With Liposuction		
Subject	mg/kg	Cmax
1	34.7	2.5
2	31.4	2.1
3	45.6	2.7
4	52	2.8
5	45	1.7
6	46.1	1.8
7	38.4	1.7
8	45	2.3
9	45	2.4
10	40.5	2.7
11	19.4	0.96
12	45	3.8
13	45	2.8
14	45	2.7

Table D25 lists the mg/kg dosage of tumescent lidocaine and the resulting Cmax for all studies **with liposuction**.

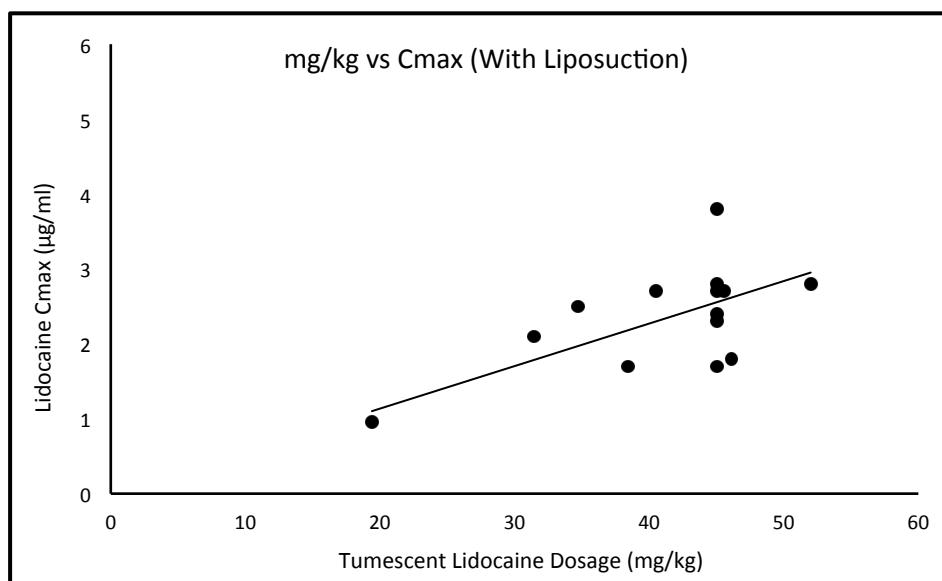


Figure D25. Linear Correlation between mg/kg dosage of tumescent lidocaine and Cmax with liposuction ($R = 0.59$, $R^2 = 0.347$). Because liposuction removes lidocaine before it can be absorbed into systemic circulation, liposuction acts as a confounding variable and reduces the correlation between the mg/kg dosage of tumescent lidocaine and the resulting Cmax.

Supplment 2, page 26, data D26: Correlation between mg Dose of Tumescent Lidocaine and resulting Cmax, without Liposuction

Table D26A			
Patient # Study #	Lido (mg)	Lido (mg/kg)	Cmax
01-1	2100	35.1	3.3
01-2	2100	35.1	3.4
02-1	1956	31.4	1.9
02-2	1956	31.2	2.1
03-1	3782	45.2	4.1
03-2	2073	25.1	2.7
04-1	3159	45	3.5
04-2	3159	44.98	3.6
05-1	3375	45	2.2
05-2	3406	45	3.2
06-1	3090	45.04	2.9
06-2	1539	22.5	1.4
07-1	2514	38.68	1.9
07-2	2531	38.68	2.7
08-1	2516	45	4.3
08-2	1217	22.5	1.9
09-1	3189	45	3.6
09-2	3184	45	4.2
10-1	2018	20	1.2
10-2	2018	20	1.6
11-1	1522	19.2	1.6
11-2	1549	19.4	1.4
12-1	3633	45	4.3
12-2	3645	45	4.4
13-2	2957	44.53	3.7
14-1	3436	45	3.4
14-2	1718	22.5	1.8

Table D26A. All of the infiltration studies without liposuction. Highlighted cells were selected for linear regression analysis of mg & Cmax, using the same subsets of studies selected in Table D24A for linear regression analysis of mg/kg & Cmax.

Table D26B			
Patient # Study #	Lido (mg)	Lido (mg/kg)	Cmax
01-2	2100	35.1	3.4
02-2	1956	31.2	2.1
03-2	2073	25.1	2.7
04-2	3159	44.98	3.6
05-2	3406	45	3.2
06-2	1539	22.5	1.4
07-2	2531	38.68	2.7
08-2	1217	22.5	1.9
09-2	3184	45	4.2
10-2	2018	20	1.6
11-1	1522	19.2	1.6
12-2	3645	45	4.4
13-2	2957	44.53	3.7
14-2	1718	22.5	1.8

Table D26B. Condensed version of Table D26A showing only the highlighted cells from Table D26A

Table D26C		
Patient # Study #	Lido (mg)	Cmax
01-2	2100	3.4
02-2	1956	2.1
03-2	2073	2.7
04-2	3159	3.6
05-2	3406	3.2
06-2	1539	1.4
07-2	2531	2.7
08-2	1217	1.9
09-2	3184	4.2
10-2	2018	1.6
11-1	1522	1.6
12-2	3645	4.4
13-2	2957	3.7
14-2	1718	1.8

Table D26C. mg-dose data with no liposuction from Table D26B used to plot Figure D26 and to calculate R = 0.88 and $R^2 = 0.777$.

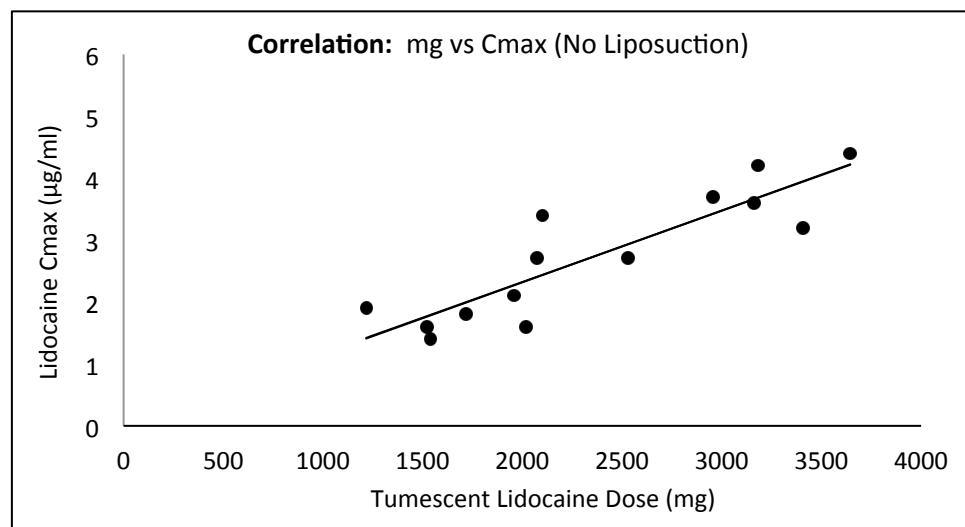


Figure D26. Linear relation between mg dose of tumescent lidocaine and Cmax. R = 0.88 and $R^2 = 0.767$. Without liposuction, there is slightly closer correlation between mg/kg dosage of tumescent lidocaine and Cmax compared to the mg dose of tumescent lidocaine and Cmax.

Supplement 2, page 27, data D27: Correlation between mg Dose of Tumescent Lidocaine and Cmax, with Liposuction

Table D27		
Patient # Study #	Lidocaine mg	Cmax
01-3	2074	2.5
02-3	1984	2.1
03-3	4200	4.2
04-3	3159	2.8
05-3	3405	1.7
06-3	3190	1.8
07-3	2550	1.7
08-3	2516	2.3
09-3	3318.6	2.4
10-3	4122	2.7
11-3	1572	0.97
12-3	3674	3.8
13-2	2993	2.8
14-3	3436	2.7

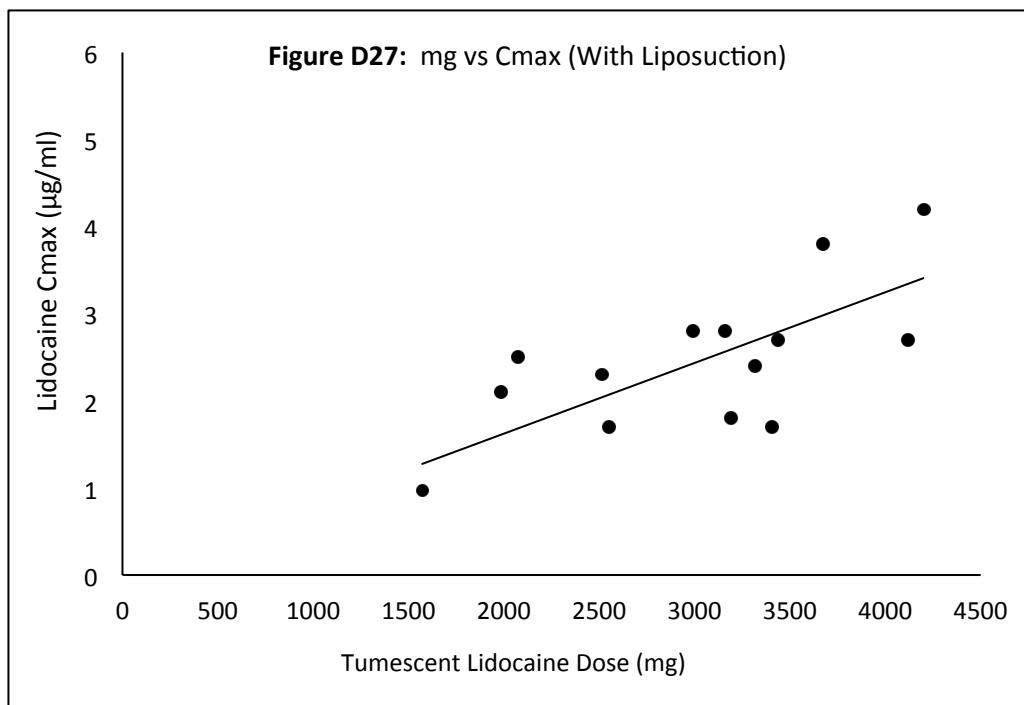


Table D27. mg dose vs Cmax data with liposuction.

Figure D27. mg dose of tumescent lidocaine vs Cmax with liposuction. $R = 0.68$ and $R^2 = 0.46$. With liposuction, there is a slightly closer correlation between mg/kg dosage of tumescent lidocaine vs Cmax compared to the mg dose of tumescent lidocaine vs Cmax

Supplement 2, page 28, data D28: Compares the correlation between **mg/kg** & Cmax vs **mg** & Cmax

Table D28A		
mg/kg Dosage of Lidocaine & Cmax		
	Pearson's Correlation Coefficient (R)	Coefficient of Determination (R^2)
Without Liposuction	R = 0.92	$R^2 = 0.85$
With Liposuction	R = 0.60	$R^2 = 0.36$

Table D28B		
mg Dose of Lidocaine & Cmax		
	Pearson's Correlation Coefficient (R)	Coefficient of Determination (R^2)
Without Liposuction	R = 0.88	$R^2 = 0.77$
With Liposuction	R = 0.66	$R^2 = 0.44$

Table D28A. **mg/kg** Dosage of Lidocaine vs. Cmax. There is a higher correlation between the **mg/kg dosage without liposuction** (Pearson correlation coefficient R = 0.92) of tumescent lidocaine and the resulting peak serum lidocaine concentration Cmax, compared to the **mg/kg dosage with liposuction**, (R = 0.60). Liposuction is confounding factor that removes lidocaine before it can be absorbed and thus reduces both the Pearson correlation coefficient between mg/kg & Cmax and the Coefficient of Determination.

Table D28B. **mg** Dose of Lidocaine vs. Cmax. There is a higher correlation) between the **mg dose without liposuction** (Pearson correlation coefficient R = 0.88of tumescent lidocaine and the resulting peak serum lidocaine concentration Cmax, compared to the **mg dose with liposuction** (R = 0.66). The Coefficient of Determination shows a similar difference. **In the present sample of subjects, mg/kg dosage is slightly better than mg dose for predicting Cmax.**

Pearson correlation coefficient (R) is a measure of the strength and direction of the linear relationship between two variables that is defined as the sample covariance divided by the product of the sample standard deviations. Coefficient of determination ($R^2 = R$ squared) measures the proportion of variability in the sample data that is accounted for by a linear regression model. $R^2=R$ squared can be used for measuring the strength of a linear relationship in **multivariable linear regression** model.

Supplement 2, page 29, data D29: Effect on Serum Lidocaine Concentration of Varying the Epinephrine Concentration in the TLA solution.

Table D29A	Patient#	Body	Lido	Epi	Lido											
	Study#	Area	mg/bag	mg/bag	(mg/kg)	0	2	4	6	8	10	12	14	16	18	24
	01-1	H-OT	700	1	35.1	0.14	0.8	1.2	2.1	3.1	3.3	2.8	2.8	2.5	2.6	1.2
	02-1	I(T/K)	700	1	31.4	0	0.91	1.1	1.2	1.9	1.9	1.6	1.5	1.2	0.98	0.64
	05-1	H-OT	1000	1	45	0	0.63	1	1.3	1.9	2.5	2.9	3.5	3.4	3.2	1.8
	08-1	Abd	1000	1	38.68	0.11	0	0.9	1.3	1.4	1.9	1.5	1.7	1.9	1.7	0.88
	Mean Conc at 1.0mg/bag Epi				37.545	0.0625	0.585	1.05	1.475	2.075	2.4	2.2	2.375	2.25	2.12	1.13

Table D29A. Epinephrine 1mg/bag in TLA: Serum lidocaine concentration as a function of time **without liposuction** among 4 patients.

Table D29B	Patient#	Body	Lido	Epi	Lido											
	Study#	Area	mg/bag	mg/bag	(mg/kg)	0	2	4	6	8	10	12	14	16	18	24
	01-2	H-OT	700	0.5	35.1	0.32	1.1	1.7	2.4	3.4	3.2	3.4	3.2	2.2	2.1	1.3
	02-2	I(T/K)	700	0.5	31.2	0	0.78	0.88	1.3	1.8	2.1	2	2.1	1.6	1.2	0.84
	05-2	H-OT	1000	0.5	44.98	0.24	0.8	1.4	2.2	2.8	3.2	2.9	3.1	3.6	2.6	1.4
	08-2	Abd	1000	0.5	38.68	0.18	0.95	1	1.3	2.2	2.7	1.9	2	1.9	2.1	1.3
	Mean Conc at 0.5mg/bag Epi				37.49	0.185	0.9075	1.245	1.8	2.55	2.8	2.55	2.6	2.325	2	1.21

Table D29B. Epinephrine 0.5mg/bag in TLA: Serum lidocaine conc. **without liposuction** in same 4 patients & same lidocaine dosage as **Table D29A**.

Table D29C

	Epinephrine	Time (hours)										
		0	2	4	6	8	10	12	14	16	18	24
	1mg/bag	0.63	0.585	1.05	1.475	2.075	2.4	2.2	2.38	2.25	2.12	1.13
	0.5mg/bag	0.185	0.908	1.245	1.8	2.55	2.8	2.55	2.6	2.325	2	1.21

Table D26C: A comparison of the mean serum lidocaine concentration among 4 subjects without liposuction after infiltration on separate occasions of solutions containing either 1mg per IV bag or 0.5mg/bag of epinephrine as described in Tables D29A & D29B. For an individual patient, the mg/bag lidocaine concentrations in both tumescent solutions were equal and the total mg/kg dosages of lidocaine were equal on both occasions.

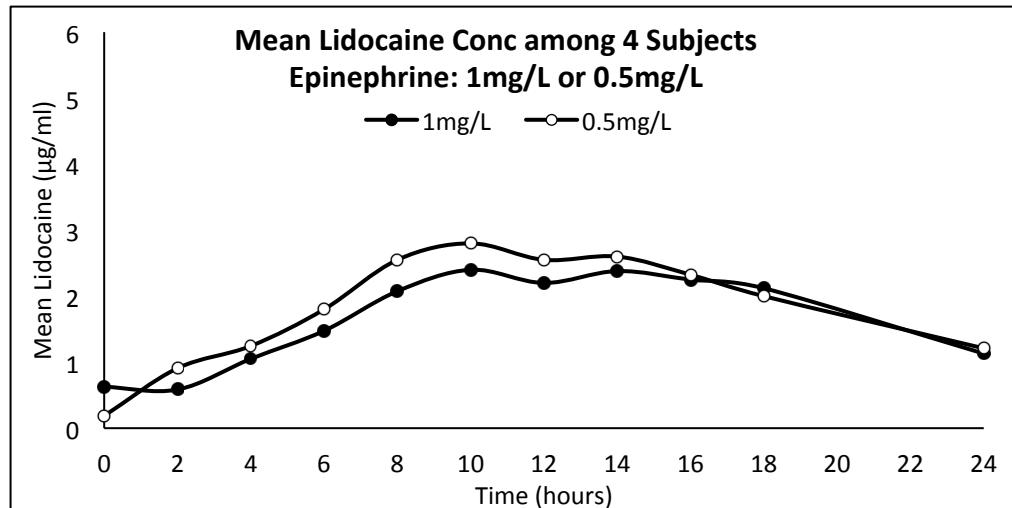


Figure D29: Lower epinephrine concentrations in a TLA solution show a tendency toward higher lidocaine concentrations in serum. It appears that differences in serum lidocaine concentrations after tumescent lidocaine anesthesia containing epinephrine at 0.5mg/bag or 1.0mg/bag were not clinically significant over the range of lidocaine dosages and epinephrine doses delivered to this small sample of 4 patients. For an individual patient, the lidocaine concentrations in the TLA solutions and the total mg/kg dosages of lidocaine were equal on both occasions.

Supplement 2, page 30, data D30: Pulse rate differences (changes), without liposuction: (Pulse After Infiltration) - (Pulse Pre-Infiltration)

Table D30: Pulse Rate vs mg of Epinephrine

Patient# Study#	Before Infiltration Pulse (P0)	Post- Infiltration Pulse (PIP)	Epi mg	PIP - P0	kg	Clonidine mg	Atropine (mg)	Epi mg/L
01-1	75	62	3	-13	59.8	0	0.3	1
01-2	65	77	1.5	12	59.8	0	0.3	0.5
02-1	57	62	2.8	5	62.3	0	0	1
02-2	75	60	1.4	-15	62.7	0	0	0.5
03-1	65	82	3.78	17	83.6	0	0	1
03-2	67	67	2.07	0	82.7	0	0	1
04-1	74	54	3.15	-20	70.2	0.1	0	1
04-2	77	69	1.58	-8	70.4	0.1	0	0.05
05-1	82	80	4.22	-2	75	0.1	0	1
05-2	74	79	4.26	5	75.7	0.1	0	1
06-1	58	62	3.09	4	68.6	0.1	0.3	1
06-2	66	56	1.53	-10	68.4	0.1	0.3	1
07-1	92	68	2.51	-24	65	0.1	0	1
07-2	95	72	1.24	-23	65.5	0.1	0	0.5
08-1	74	73	2.5	-1	55.9	0	0.3	1
08-2	66	75	1.23	9	54.1	0	0.3	1
09-1	62	65	3.19	3	70.9	0.1	0	1
09-2	62	68	3.19	6	70.9	0.1	0	1
10-1	102	78	2.02	-24	100.9	0.1	0	1
10-2	68	64	2.27	-4	101.4	0.1	0	1
11-1	71	63	1.52	-8	79.1	0.1	0	1
11-2	75	71	1.54	-4	80	0.1	0	1
12-1	55	50	3.64	-5	80.9	0	0	1
12-2	63	54	3.65	-9	81.4	0	0	1
13-2	68	62	2.78	-6	66.4	0	0	0.8
14-1	56	66	3.44	10	76.4	0	0.3	0.9
14-2	64	78	1.73	14	76.8	0	0.3	1
Mean	70.66667	67.2962963	2.5493	-3.3704	72.77			

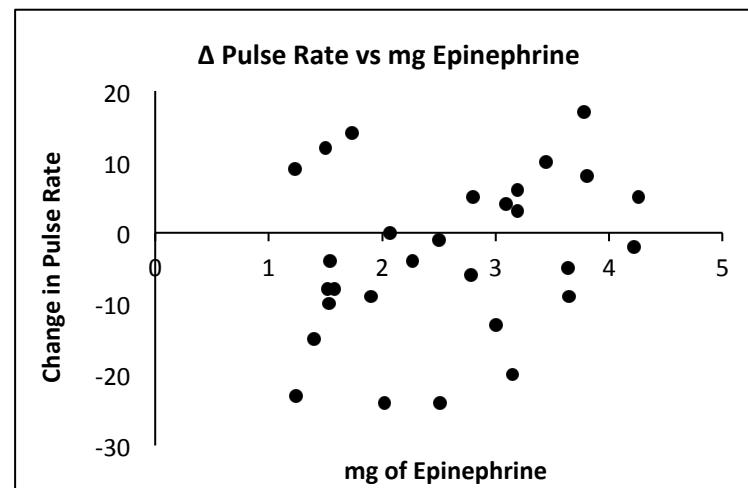


Figure D30. Pulse rate change as a function of total mg dose of epinephrine without liposuction: The mean change of pulse rate (mean Pulse Rate After Infiltration) - (mean Pulse Rate Before Infiltration) = -3.4. Large doses of tumescent epinephrine (range 1.23mg to 4.26mg) are well tolerated when infiltration is done relatively slowly (e.g. \leq 250ml per minute). Some subjects received atropine (0.3mg IV) as prophylaxis against near syncope or syncope. Clonidine and atropine had no apparent effect on the pulse rate change.

Table D30: This table demonstrates the change in pulse rate before infiltration and after infiltration, for all 27 infiltrations without liposuction among 14 subjects as a function of the total mg dose of epinephrine. The mean difference in pulse rate before and after Infiltration was -3.4 . There were no cases of tachycardia.

Supplement 2, page 31, data D31: Pulse rate differences, with lipo: (Pulse Rate After Liposuction) - (Pulse Rate Pre-Infiltration)

Patient# Study#	Before Infiltration Pulse (P0)	After Liposuction Pulse (ALP)	Epi mg	Δ Pulse ALP-P0	kg	Clonidine mg	Atropine (mg)
01-3	85	88	2.96	3	59.65	0	0.3
02-3	55	69	2.83	14	63.05	0	0
03-3	65	74	3.9	9	83.46	0	0
04-3	65	74	3.7	9	70.22	0.1	0
05-3	81	76	4.26	-5	75.52	0.1	0
06-3	58	65	3.19	7	69.09	0.1	0.3
07-3	75	79	2.58	4	66.22	0.1	0
08-3	79	75	2.56	-4	55.2	0	0.3
09-3	62	95	3.32	33	71.21	0.1	0
10-3	85	73	4.01	-12	101	0.1	0
11-3	72	66	1.57	-6	81.1	0.1	0
12-3	85	97	3.68	12	81.65	0.1	0
13-3	70	72	2.86	2	66.4	0	0
14-3	72	72	3.74	0	76.4	0.1	0.3
Mean	72.1	76.8	3.23	4.7	72.9		

Table D31. This table demonstrates the change in pulse rate before infiltration and after liposuction as a function of the total mg dose of epinephrine for all 14 subjects. The (Pulse Rate After Liposuction) and (Pulse Rate Before Infiltration) were not significantly different when compared by paired t-test ($p=0.13$). The table also provides data regarding each subject's weight (kg). Some subjects received clonidine 0.1mg. Some subjects received atropine (0.3mg IV) as prophylaxis against near syncope or syncope. Clonidine and atropine had no apparent effect on the pulse rate change.

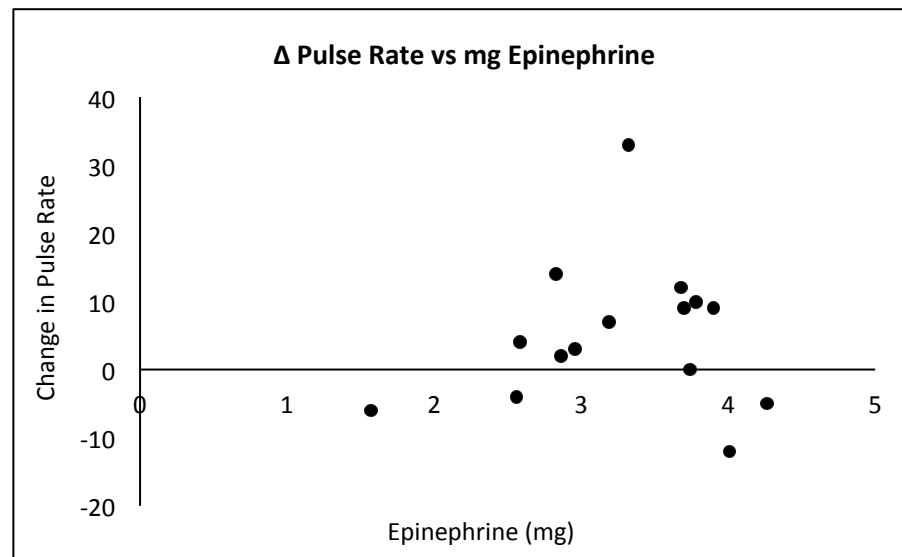


Figure D31. Pulse rate change as a function of total mg dose of epinephrine with liposuction: The mean change of pulse rate (Pulse Rate After Liposuction) - (Pulse Rate Before Infiltration) = +5.07. Liposuction appears to contribute to a slight increase in pulse rate compared to the baseline (control) consisting of tumescent lidocaine anesthesia (TLA) without liposuction. The mean mg dose of epinephrine was 3.23mg (range 1.57mg to 4.26mg). There were no cases of tachycardia.