

APPENDIX N

RAW DATA: ASSR AND PURE TONE THRESHOLDS
(Phase 1) (n=81)

Data Simhealth 02 07 01															
				LEFT EAR					RIGHT EAR						
Machine	Test	Protocol	Sedation	500 Hz	1000 Hz	2000 Hz	3000 Hz	4000 Hz	500 Hz	1000 Hz	2000 Hz	3000 Hz	4000 Hz	Subject	Time
Audera 1	PT threshold			60	80	60	55	65	40	70	60	55	70	1	min.
	ASSR	Asleep	no	.	.	.	.	.	.	65	60	.	.	1	40
ditto	PT threshold			20	45	55	50	50	20	45	40	40	45	2	
	ASSR	Asleep	no	.	.	.	.	.	15	35	35	.	50	2	42
ditto	PT			35	45	50	35	30	30	40	40	35	30	3	
	ASSR	Asleep	no	.	.	.	.	.	.	30	.	.	45	3	12
ditto	PT			10	50	55	55	60	10	45	50	60	50	4	
	ASSR	Asleep	no	.	.	.	.	.	55	50	65	.	60	4	40
ditto	PT			15	25	45	55	65	20	20	25	50	60	5	
	ASSR	Asleep	no	5	20	45	.	75	.	.	.	.	.	5	52
ditti	PT			5	5	40	65	80	5	10	35	70	70	6	
	ASSR	Asleep	no	.	20	55	.	80	.	.	.	.	.	6	18
ditto	PT	Asleep		15	40	50	75	75	25	30	30	50	55	7	
	ASSR		no	.	.	.	.	.	.	.	.	.	.	7	10
"	Pt	Asleep		15	25	30	35	35	15	30	35	30	30	8	
	ASSR		no	20	.	45	.	.	.	.	.	.	.	8	38
"	PT	Asleep		30	45	45	50	50	25	40	40	45	50	9	
	ASSR		no	.	.	.	.	.	40	40	50	.	50	9	23
"	PT	Asleep		20	20	20	30	35	15	25	20	30	30	10	
	ASSR		no	.	.	.	.	.	.	.	.	.	.	10	46
"	PT			30	45	35	40	45	30	40	45	35	45	11	
	ASSR	Asleep	no	.	.	.	.	.	.	50	.	.	.	11	.
"	Pt			35	40	35	35	40	30	30	20	40	45	12	
	ASSR	Asleep	no	.	.	.	.	.	.	.	.	.	55	12	.
				LEFT EAR					RIGHT EAR						
Machine	Test	Protocol	Sedation	500 Hz	1000 Hz	2000 Hz	3000 Hz	4000 Hz	500 Hz	1000 Hz	2000 Hz	3000 Hz	4000 Hz	Subject	Time
Audera 1	PT			10	15	50	55	55	10	15	50	65	50	13	
	ASSR	Awake	no	10	25	60	.	50	10	20	60	.	60	13	48
ditto	PT			40	45	40	70	75	30	45	35	45	55	14	
	ASSR	Awake	no	.	.	.	.	.	45	50	45	.	70	14	59
ditto	PT			20	45	70	80	70	10	35	60	60	55	15	
	ASSR	Awake	no	.	60	.	.	60	20	60	80	.	70	15	60
"	PT			25	35	45	50	50	20	40	45	50	55	16	
	ASSR	Awake	no	15	30	45	.	50	15	45	50	.	55	16	68
"	PT			15	35	40	45	40	5	25	40	45	45	17	
	ASSR	Awake	no	5	35	45	.	40	5	35	45	.	40	17	70
"	PT			25	40	35	30	40	25	40	25	35	35		
	ASSR	Awake	no	0	40	20	.	30	0	25	15	.	30	18	66
"	PT			10	30	45	35	35	5	35	45	35	35		
	ASSR	Awake	no	.	.	.	.	.	0	35	55	.	25	19	51

				LEFT EAR					RIGHT EAR						
Machine	Test	Protocol	Sedation	500 Hz	1000 Hz	2000 Hz	3000 Hz	4000 Hz	500 Hz	1000 Hz	2000 Hz	3000 Hz	4000 Hz	Subject	Time
"	PT			15	35	45	45	40	10	20	35	40	40		
	ASSR	Awake	no	0	45	50	.	45	15	35	45	.	40	20	67
"	PT			15	45	35	25	40	20	50	55	55	50		
	ASSR	Awake	no	10	40	45	.	55	20	55	60	.	60	21	52
"	PT			40	50	55	65	70	25	50	50	60	65		
	ASSR	Awake	no	35	60	60	.	.	.	.	.	.	.	22	75
"	PT			10	30	45	50	50	30	25	40	45	65		
	ASSR	Awake	no	0	35	50	.	55	20	30	50	.	.	23	35
"	PT			50	50	40	15	25	50	50	40	20	15		
	ASSR	Awake	no	55	60	.	.	30	50	60	.	.	15	24	75
"	PT			20	25	45	35	40	5	15	25	25	30		
	ASSR	Awake	no	15	30	50	.	45	0	20	30	.	25	25	48
"	PT			30	45	50	55	55	30	50	50	60	60		
	ASSR	Awake	no	30	50	50	.	60	20	55	55	.	60	26	63
"	PT			20	35	35	40	45	20	35	45	40	45		
	ASSR	Awake	no	30	45	55	.	60	30	40	60	.	45	27	81
"	PT			35	40	35	35	40	30	30	20	40	45		
	ASSR	Awake	no	.	.	.	.	.	.	.	.	.	55	28	32
				LEFT EAR					RIGHT EAR						
Machine	Test	Protocol	Sedation	500 Hz	1000 Hz	2000 Hz	3000 Hz	4000 Hz	500 Hz	1000 Hz	2000 Hz	3000 Hz	4000 Hz	Subject	Time
Biologic	PT			45	55	55	50	50	35	60	55	55	60	29	
	ASSR	Master	no	50	50	60	.	.	45	.	60	.	.		87
ditto	PT			10	30	40	50	40	15	15	35	45	30	30	
	ASSR	ditto	no	35	40	40	50	40	40	40	.	.	.		86
ditto	PT			40	40	35	25	25	45	55	50	50	50	31	
	ASSR	ditto	no	45	40	40	45	.	.	60	35	45	.		77
"	PT			20	30	35	35	25	15	30	40	20	25		
	ASSR	ditto	no	25	40	40	.	20	40	35	30	.	35	32	120
"	PT			10	30	50	55	65	10	20	50	50	65		
	ASSR	ditto	no	20	.	.	.	.	25	40	.	.	65	33	87
"	PT			5	15	50	45	45	5	20	35	40	55		
	ASSR	ditto	no	.	15	.	.	55	.	15	35	.	55	34	80
"	PT			30	40	35	30	25	30	25	35	30	40		
	ASSR	ditto	no	20	25	45	45	50	20	.	45	35	30	35	45
"	PT			10	45	60	45	50	5	45	60	55	60		
	ASSR	ditto	no	35	50	50	45	50	30	30	55	50	70	36	91
"	PT			15	25	55	60	80	5	5	35	50	80		
	ASSR	ditto	no	30	30	65	.	85	30	30	60	.	70	37	120
"	PT			30	40	60	65	65	20	25	30	45	55		
	ASSR	ditto	no	40	45	55	.	.	40	.	30	.	.	38	114
"	PT			20	25	30	55	65	15	25	35	60	90		
	ASSR	ditto	no	.	25	40	.	.	20	40	30	.	.	39	106
"	PT			30	40	50	50	55	25	30	50	50	50		
	ASSR	ditto	no	40	45	45	50	55	50	25	45	30	65	40	90
"	PT			30	45	40	50	35	30	35	30	30	45		
	ASSR	ditto	no	40	35	45	60	30	40	40	35	40	55	41	60
"	PT			15	25	45	45	50	20	30	45	55	55		
	ASSR	ditto	no	40	45	45	60	55	40	35	55	50	.	42	70

Machine	Test	Protocol	Sedation	500 Hz	1000 Hz	2000 Hz	3000 Hz	4000 Hz	500 Hz	1000 Hz	2000 Hz	3000 Hz	4000 Hz	Subject	Time
"	PT			15	20	50	45	45	10	25	30	60	65		
"	ASSR	ditto	no	10	20	60	55	.	20	35	40	.	.	43	75
"	PT			45	65	65	70	75	45	55	55	65	75		
"	ASSR	ditto	no	50	65	65	.	70	50	45	60	.	.	44	40
"	PT			0	30	50	60	55	0	20	30	65	50		
"	ASSR	ditto	no	50	30	.	.	70	55	45	40	.	.	45	75
"	PT			10	45	45	50	50	10	35	45	55	40		
"	ASSR	ditto	no	10	45	50	50	45	5	25	50	40	45	46	65
"	PT			25	20	35	55	60	20	50	50	45	55		
"	ASSR	ditto	no	30	60	60	.	70	.	60	60	60	.	47	50
"	PT			30	45	40	50	40	30	45	40	35	35		
"	ASSR	ditto	no	55	60	55	.	50	50	45	25	55	35	48	68
				LEFT EAR					RIGHT EAR						
Machine	Test	Protocol	Sedation	500 Hz	1000 Hz	2000 Hz	3000 Hz	4000 Hz	500 Hz	1000 Hz	2000 Hz	3000 Hz	4000 Hz	Subject	Time
Audera 2	PT			5	10	30	40	45	10	15	40	40	45		
	ASSR	awake	yes	0	15	40	50	40	0	20	45	45	50	49	
ditto	PT			30	55	60	60	60	35	50	50	60	65		
ditto	ASSR	awake	yes	35	55	60	60	55	30	55	55	50	60	50	45
ditto	PT			15	20	35	40	40	15	30	35	45	50		
ditto	ASSR	awake	yes	30	40	55	.	.	.	.	.	.	.	51	15
ditto	PT			10	20	35	55	50	15	20	35	45	55		
ditto	ASSR	awake	yes	0	30	50	60	50	15	15	50	40	50	52	.
"	PT			20	50	50	50	55	30	50	45	45	55		
"	ASSR	awake	yes	.	50	.	.	.	20	45	45	40	45	53	85
ditto	PT			15	65	75	70	65	30	65	75	75	80		
ditto	ASSR	awake	yes	10	65	70	70	75	30	65	85	80	.	54	60
ditto	PT			5	20	30	35	40	20	30	50	55	50		
ditto	ASSR	awake	yes	0	20	40	40	40	35	40	50	45	50	55	45
"	PT			15	40	45	55	50	15	45	55	50	50		
"	ASSR	awake	yes	15	55	55	50	50	15	50	65	60	60	56	60
"	PT			25	45	55	60	65	25	35	55	65	65		
"	ASSR	awake	yes	30	55	55	60	60	15	35	55	55	55	57	58
"	PT			5	15	15	85	85	15	20	10	75	85		
"	ASSR	awake	yes	10	30	.	100	105	20	30	45	.	105	58	62
"	PT			30	35	30	50	60	30	45	45	55	50		
"	ASSR	awake	yes	35	55	65	65	65	40	55	55	55	55	59	50
"	PT			10	30	45	45	45	10	30	40	50	40		
"	ASSR	awake	yes	15	40	55	50	45	0	35	55	60	45	60	55
"	PT			20	40	45	50	40	5	15	35	40	30		
"	ASSR	awake	yes	0	45	40	25	40	0	15	40	25	30	61	70
				LEFT EAR					RIGHT EAR						
Machine	Test	Protocol	Sedation	500 Hz	1000 Hz	2000 Hz	3000 Hz	4000 Hz	500 Hz	1000 Hz	2000 Hz	3000 Hz	4000 Hz	Subject	Time
Biologic	PT			20	40	60	60	55	10	30	55	55	40		
	ASSR	Master	yes	30	40	60	.	60	25	50	.	.	.	62	130
ditto	PT			35	40	55	55	75	25	40	35	40	65		
ditto	ASSR	Master	yes	30	30	30	.	75	10	45	30	.	55	63	99
"	PT			20	40	45	55	50	10	35	40	45	55		
"	ASSR	Master	yes	30	50	40	.	55	30	40	50	.	60	64	80
"	PT			15	50	50	45	50	20	45	50	45	55		

Machine	Test	Protocol	Sedation	LEFT EAR					RIGHT EAR					Subject	time
				500 Hz	1000 Hz	2000 Hz	3000 Hz	4000 Hz	500 Hz	1000 Hz	2000 Hz	3000 Hz	4000 Hz		
"	ASSR	Master	yes	45	45	45	.	45	45	45	45	.	55	65	85
"	PT			15	25	75	75	75	10	25	55	45	45		
"	ASSR	Master	yes	20	.	75	.	.	30	50	.	.	.	66	129
"	PT			20	55	50	60	60	25	50	55	60	60		
"	ASSR	Master	yes	20	40	40	.	60	30	50	50	.	50	67	85
"	PT			15	40	45	40	40	25	40	45	45	50		
"	ASSR	Master	yes	30	40	40	.	.	50	50	40	.	50	68	90
"	PT			25	45	45	50	35	30	45	45	50	45		
"	ASSR	Master	yes	35	45	45	.	35	.	45	50	.	45	69	80
"	PT			0	25	40	50	60	5	20	35	50	65		
"	ASSR	Master	yes	10	30	50	.	75	20	30	50	.	75	70	85
"	PT			15	20	40	30	25	15	25	45	40	40		
"	ASSR	Master	yes	10	20	20	.	40	20	30	30	.	40	71	80
"	PT			30	40	40	40	50	25	35	55	65	60		
"	ASSR	Master	yes	30	40	40	.	60	50	40	60	.	60	72	90
"	PT			25	40	35	35	40	30	40	40	35	40		
"	ASSR	Master	yes	30	35	30	.	40	35	40	35	.	50	73	85
"	PT			30	40	50	50	60	25	30	50	55	65		
"	ASSR	Master	yes	40	40	50	.	50	40	40	45	.	50	74	114
"	PT			20	45	55	50	50	20	45	45	45	55		
"	ASSR	Master	yes	40	50	60	.	.	50	50	60	.	.	75	80
"	PT			15	40	50	50	50	20	40	45	40	50		
"	ASSR	Master	yes	10	40	40	.	40	10	40	45	.	50	76	70
"	PT			30	30	35	55	50	20	50	60	55	65		
"	ASSR	Master	yes	10	20	40	.	50	40	40	60	.	60	77	66
"	PT			20	40	45	30	30	20	45	35	35	20		
"	ASSR	Master	yes	25	45	25	.	35	20	50	25	.	20	78	70
"	PT			30	40	45	40	45	30	40	45	40	45		
"	ASSR	Master	yes	40	40	30	.	45	40	40	40	.	40	79	145
"	PT			10	35	55	45	35	10	25	40	40	45		
"	ASSR	Master	yes	25	35	55	.	.	25	15	45	.	.	80	72
"	PT			30	60	50	50	45	35	60	55	50	50		
"	ASSR	Master	yes	40	50	50	.	50	50	50	50	.	60	81	75

APPENDIX O

RAW DATA: PSEUDOHYPACUSIC GROUP PURE TONE AND ASSR THRESHOLDS (n=29)

Machine	Test	Protocol	Sedation	Left					Right					Subject no.	Time prep	Time test
				500	1000	2000	3000	4000	500	1000	2000	3000	4000			
Audera	PT 1	awake	no	75	75	90	95	90	50	70	65	85	85	1	8	60
	PT2			.	.	.	.	.	.	.	.	.	.
	Diagnostic			40	60	.	.	.	30	45	45	.	.			
	ASSR			10	15	25	.	20	0	30	15	.	30			
Audera	PT1	awake	no	2	8	62	
	PT 2			95	95	90	95	90	95	95	95	95				95
	Diagnostic			.	105	110	110	.	.	110	110	.				.
	ASSR			65	80	65	.				70
Audera	PT 1	awake	no	3	.	45	
	PT 2			55	60	80	90	95	55	60	55	55				60
	Diagnostic			65	65	80	95	90	50	50	50	50				60
	ASSR			35	60	65	.	95	30	50	50	.				60
Biologic	PT 1	Master	yes	4	.	55	
	PT 2			70	75	90	90	95	90	95	95	95				95
	Diagnostic			.	.	110	.	.	105	110	.	.				.
	ASSR			25	30	30	.	40	15	30	40	.				40
Audera	PT 1	awake	yes	25	20	40	20	40	30	10	20	10	25	5	7	32
	PT 2			40	55	55	50	55	5	10	20	10	35			
	Diagnostic			100	100	100	.	.	100	85	100	.	.			
	ASSR			30	35	50	60	55	15	10	25	40	30			
Auders	PT 1	awake	yes	10	30	50	55	45	25	30	65	60	55	6	.	75
	PT 2			.	.	.	.	.	.	.	.	.	.
	Diagnostic			110	110	110	90	100	110	110	110	.	.			
	ASSR			0	30	50	50	45	0	30	55	35	60			
Audera	PT 1	awake	yes	25	10	35	40	45	25	20	40	40	35	7	.	45
	PT 2			40	40	60	60	90	40	50	60	60	100			
	Diagnostic			80	75	90	100	105	110	105	105	110	110			
	ASSR			0	30	40	45	50	10	20	70	70	30			
Audera	PT 1	awake	yes	25	20	10	60	80	70	55	45	55	70	8	.	53
	PT 2			80	80	100	0	0	0	0	0	0	0			
	Diagnostic			70	80	80	90	110	105	110	110	110	110			
	ASSR			55	55	55	100	100	55	85	110	105	110			
Audera	PT 1	awake	yes	25	20	40	30	50	45	60	25	55	45	9	.	46
	PT 2			50	90	95	95	95	90	95	95	90	100			
	Diagnostic			85	70	95	.	.	110	110	110	.	.			
	ASSR			0	10	20	15	50	30	25	50	50	80			
Audera	PT 1	awake	yes	25	35	25	10	25	20	30	30	20	20	10	.	62
	PT 2			45	60	70	60	70	60	70	70	65	70			
	Diagnostic			90	90	95	105	110	105	100	100	110	110			
	ASSR			.	.	.	.	.	15	35	25	35	30
Audera	PT 1	awake	yes	15	5	15	20	15	15	15	15	25	15	11	.	73
	PT 2			50	60	65	85	90	40	20	40	25	30			
	Diagnostic			70	70	80	.	.	45	60	.	.	.			
	ASSR			50	70	90	100	120	15	25	20	.	.			

Machine	Test	Protocol	Sedation	Left				Right				Subject no.	Time prep	Time test		
				500	1000	2000	3000	4000	500	1000	2000				3000	4000
Audera	PT 1	awake	yes	55	55	15	20	30	5	0	0	20	5	12	.	77
	PT 2			70	55	20	35	35	10	10	5	25	10			
	Diagnostic			80	80	95	110	95	90	90	110	110	55			
	ASSR			65	75	70	80	80	15	25	55	70	70			
Audera	PT 1	awake	yes	15	20	10	10	30	10	15	15	20	30	13	.	73
	PT 2			50	70	65	65	85	45	60	65	70	80			
	Diagnostic			95	100	100	110	.	95	110	110	.	.			
	ASSR			10	40	55	70	80	15	35	75	75	80			
Audera	PT 1	awake	yes	5	45	50	60	55	10	40	45	60	55	14	8	45
	PT 2			25	55	55	65	70	20	55	55	70	60			
	Diagnostic			110	110	110	110	110	110	110	110	110	110			
	ASSR			30	60	65	65	60	40	50	60	75	80			
Audera	PT 1	awake	yes	5	5	0	10	5	5	5	5	5	10	15	.	42
	PT 2			20	30	25	55	60	30	20	15	50	60			
	Diagnostic			100	85	110	110	110	110	110	110	110	110			
	ASSR			10	25	40	45	.	0	30	20	35	.			
Audera	PT 1	awake	yes	10	5	5	5	15	10	0	15	5	0	16	.	40
	PT 2			25	70	75	70	70	40	65	75	70	75			
	Diagnostic			85	90	105	105	110	95	100	105	105	105			
	ASSR			105	90	110	110	110	0	60	55	45	55			
Audera	PT 1	awake	yes	20	25	20	30	30	25	25	30	15	25	17	10	64
	PT 2			20	25	35	20	20	70	75	80	80	75			
	Diagnostic			90	85	110	110	110	110	110	110	110	110			
	ASSR			15	35	50	45	30	60	60	55	35	.			
Audera	PT 1	awake	yes	55	45	30	25	40	45	30	35	20	40	18	.	51
	PT 2			85	75	70	70	70	70	70	75	70	80			
	Diagnostic			100	105	110	100	100	100	105	110	110	110			
	ASSR			40	35	50	35	55	30	25	35	45	80			
Audera	PT 1	awake	yes	15	25	55	65	55	40	25	50	60	60	19	7	30
	PT 2			10	25	55	65	60	15	25	50	60	55			
	Diagnostic			100	100	100	.	.	100	95	95	90	110			
	ASSR			40	35	60	60	55	15	30	60	60	55			
Audera	PT 1	awake	yes	5	0	0	10	5	0	0	0	5	5	20	10	45
	PT 2			20	15	10	20	20	70	90	90	90	95			
	Diagnostic			85	95	100	110	110	95	110	110	110	110			
	ASSR			10	10	25	30	30	5	10	20	20	30			
Audera	PT 1	awake	yes	20	30	35	50	45	25	30	40	45	45	21	8	50
	PT 2			45	45	50	60	65	55	55	60	70	70			
	Diagnostic			70	65	85	.	.	75	85	90	.	.			
	ASSR			0	35	50	60	55	40	55	85	95	110			
Audera	PT 1	awake	yes	22	10	26
	PT 2			.	.	.	.	.	.	.	.	.
	Diagnostic			110	110	110	110	110	110	110	110	110	110			
	ASSR			40	60	70	70	80	40	60	70	70	80			
Audera	PT 1	awake	yes	5	10	5	10	10	0	5	5	0	5	23	10	48
	PT 2			90	95	95	95	95	95	95	95	95	95			
	Diagnostic			105	105	105	110	110	110	110	110	110	110			
	ASSR			0	25	20	35	20	0	5	20	35	30			
Audera	PT 1	awake	yes	35	20	35	20	15	20	20	30	10	30	24	10	35
	PT 2			25	45	40	40	40	85	70	95	95	85			
	Diagnostic			75	65	70	70	80	105	100	110	110	110			
	ASSR			0	30	65	65	55	110	100	110	110	110			

Machine	Test	Protocol	Sedation	Left					Right					Subject no.	Time prep	Time test
				500	1000	2000	3000	4000	500	1000	2000	3000	4000			
Audera	PT 1	awake	yes	0	20	20	30	40	0	25	5	10	5	25	9	37
	PT 2			35	40	35	65	45	25	40	25	45	30			
	Diagnostic			70	60	95	95	100	80	90	90	100	110			
	ASSR			30	40	60	60	55	30	50	50	70	70			
Audera	PT 1	awake	yes	25	25	20	20	20	35	30	40	35	35	26	7	55
	PT 2			10	15	10	5	20	60	60	70	80	80			
	Diagnostic			100	110	110	110	110	100	100	110	110	110			
	ASSR			0	20	25	45	45	0	10	40	45	45			
Audera	PT 1	awake	yes	25	40	20	35	35	50	55	25	50	45	27	5	55
	PT 2			80	90	90	85	85	70	85	80	95	85			
	Diagnostic			90	85	90	.	.	100	100	95	.	.			
	ASSR			60	90	85	75	70	40	70	60	75	85			
Audera	PT 1	awake	yes	20	30	45	50	50	5	30	45	50	50	28	5	32
	PT 2			25	45	60	60	60	25	50	60	65	65			
	Diagnostic			100	100	110	110	110	105	110	110	110	110			
	ASSR			5	50	50	60	45	0	50	60	60	50			
Audera	PT 1	awake	yes	20	40	40	30	35	15	35	35	50	50	29	7	33
	PT 2			55	65	70	70	85	60	65	70	75	85			
	Diagnostic			95	95	95	110	110	110	110	110	110	110			
	ASSR			0	35	25	60	50	30	50	60	40	50			