

Supplementary Material 1: Individual patient data

Table 1: individual experimental data

CI	Patient	Electrode	Test					Re-test					Insertion angle	Stakhovskaya reference	Cochlear reference	
			Run1	Run2	Run3	Run4	Geom. mean	Run1	Run2	Run3	Run4	Geom. mean			Test	Re-test
CI422	Pt 1	3	3333	3667	1667	2333	2626	3500	3000	3500	2500	3096	29,21	12358	5676	5676
		7	3500	958	1333	958	1438	1000	1500	1000	1500	1225	95,50	5945	3304	3304
		11	708	1083	1000	958	926	1250	1000	1000	875	1023	161,46	3643	1934	1934
		15	1333	1167	1083	917	1115	438	1000	1000	1250	860	228,02	2157	1124	1124
		19	354	792	667	708	603	312	1000	875	1500	800	290,99	1315	622	622
CI422	Pt 2	3	7000	6667	6000	6333	6489	7500	7500	6000	6500	6844	14,49	14610	7421	7421
		7	583	667	3167	583	921	4000	1375	1625	1625	1952	53,05	9425	3988	3988
		11	375	542	396	250	377	438	562	469	469	482	110,29	5327	2117	2117
		15	354	417	292	208	308	562	469	500	562	522	174,70	3301	1124	1124
		19	229	438	198	250	265	375	500	406	469	435	253,98	1751	622	622
CI422	Pt 3	3	1125	1250	1000	1500	1205	500	750	812	688	677	43,88	10461	5676	5676
		7	1250	1250	1125	1625	1300	500	812	625	750	660	95,88	5929	3304	3304
		11	625	938	812	812	788	812	500	438	406	518	154,71	3830	1934	1934
		15	500	1125	500	812	691	875	406	500	750	604	218,88	2322	1124	1124
		19	688	469	375	438	480	469	500	500	500	492	298,90	1240	622	622
CI422	Pt 4	3	6500	7000	8000	8000	7346	3750	6000	6500	6500	5553	74,29	7404	5676	5676
		7	1750	2750	6500	1625	2670	750	4500	2250	1500	1837	135,21	4427	3304	3304
		11	875	219	875	938	630	1250	875	1375	3000	1457	205,88	2578	1934	1934
		15	234	156	172	141	172	500	141	203	234	241	282,94	1397	1124	1124
		19	141	125	125	141	133	125	156	125	125	132	355,98	809	622	622
CI422	Pt 5	3	4000	4000	3750	4000	3936	3500	3500	4000	4000	3742	94,63	5984	5676	5676
		7	2750	1625	3250	3500	2670	3000	3000	2500	2000	2590	150,79	3943	3304	3304
		11	812	812	938	938	873	938	1875	1250	875	1178	223,92	2229	1934	1934
		15	812	500	875	1000	772	562	562	562	2000	772	308,82	1151	1124	1124
		19	469	438	750	406	500	625	438	469	469	495	419,64	620	622	622
CI422	Pt 6	3	4500	3250	1125	2250	2467	1125	875	500	1250	886	51,54	9588	5676	5676
		7	234	812	312	406	394	938	1500	562	625	838	105,16	5533	3304	3304
		11	234	625	234	234	299	625	938	1000	469	724	178,42	3212	1934	1934
		15	375	500	500	344	424	500	375	500	438	450	263,62	1620	1124	1124
		19	250	281	562	438	363	500	438	344	438	426	348,90	853	622	622
CI422	Pt 7	3	875	1625	1375	1625	1335	5000	2750	5500	4500	4295	75,34	7316	5676	5676
		7	562	938	1375	312	690	875	1125	688	406	724	143,40	4165	3304	3304
		11	688	234	438	1625	582	344	344	344	688	409	221,04	2282	1934	1934
		15	250	250	312	250	264	469	344	312	406	378	316,63	1086	1124	1124
		19	250	234	234	156	215	125	141	141	141	137	446,88	557	622	622
CI422	Pt 8	3	off	off	off	off	off	off	off	off	off	off	off	off	off	off
		7	1750	1500	1750	1375	1585	2250	1000	469	2250	1241	4,57	16354	4548	5358
		11	1500	438	438	562	634	469	312	469	141	314	52,22	9515	2368	2802
		15	438	344	250	281	321	156	188	172	141	163	118,71	5004	999	1683
		19	469	250	250	203	278	156	141	156	141	148	186,88	3003	622	677

Continued:

CI	Patient	Electrode	Exp1					Exp2					Insertion angle	Stakhovskaya reference	Cochlear reference	
			Run1	Run2	Run3	Run4	Geom. mean	Run1	Run2	Run3	Run4	Geom. mean			Exp1	Exp2
CI512	Pt 9	3	4000	5000	6500	3500	4619	6500	6500	6000	5000	5967	29,12	12371	5676	5676
		7	1625	1875	2500	3000	2186	3500	1875	1875	1750	2154	83,94	6635	3304	3304
		11	1500	1500	1500	2000	1612	875	1625	1500	3500	1653	136,88	4372	1934	1934
		15	938	875	1750	1750	1259	1625	1625	1250	1375	1460	189,00	2952	1124	1124
		19	312	500	438	406	408	688	875	688	812	762	248,77	1826	622	622
CI512	Pt 10	3	938	1375	750	1125	1021	3500	3000	3000	2250	2902	37,89	11198	5676	5676
		7	688	688	688	1000	755	1750	1125	1500	1500	1451	113,66	5195	3304	3304
		11	750	688	750	750	734	1000	1125	1500	1750	1311	176,27	3263	1934	1934
		15	1000	625	750	562	716	1750	625	875	1250	1046	233,26	2068	1124	1124
		19	562	812	750	812	726	875	750	875	875	842	290,16	1324	622	622
CI512	Pt 11	3	6000	5500	4500	5000	5220	5500	6000	6000	6000	5871	58,65	8845	5676	5676
		7	2750	1750	3500	3000	2666	4500	3750	4500	3250	3964	120,49	4938	3304	3304
		11	938	750	875	688	807	3750	2750	625	2500	2004	171,51	3381	1934	1934
		15	406	562	469	344	438	562	812	562	625	633	216,89	2359	1124	1124
		19	500	312	250	344	340	1375	625	688	625	780	260,98	1655	622	622
CI512	Pt 12	3	3750	3500	5500	5000	4359	7500	5000	3500	4500	4930	15,02	14522	6486	6486
		7	812	1500	2250	1000	1287	812	1375	1625	469	960	71,20	7668	3680	3680
		11	812	688	625	1000	769	438	1500	500	500	637	148,16	4021	2059	2059
		15	625	875	469	344	545	375	812	562	500	541	224,68	2216	1124	1124
		19	438	219	344	344	326	312	312	406	438	363	284,94	1376	622	622
CI512	Pt 13	3	7000	7500	7500	7500	7372	5500	7500	8000	8000	7168	24,73	13005	5676	7421
		7	7000	6500	5000	5000	5807	6000	7000	6500	7000	6612	79,69	6963	3304	3988
		11	3000	3500	3750	3750	3486	4000	4000	4000	4500	4120	130,85	4572	1934	2117
		15	1875	1750	1875	3500	2154	3000	1875	2500	1750	2227	173,92	3321	1124	1124
		19	2000	1375	1125	1250	1402	1375	1250	1375	1125	1277	213,58	2423	622	622
CI512	Pt 14	3	2500	2750	3500	1875	2592	469	2500	2500	3250	1757	170,00	3419	5676	5676
		7	1000	750	1875	1375	1179	875	1125	2000	1125	1220	228,79	2144	3304	3304
		11	875	875	688	1625	962	438	750	1000	1000	757	282,32	1403	1934	1934
		15	375	625	562	406	481	938	1000	1125	750	943	343,28	890	1124	1124
		19	281	188	312	188	236	234	219	312	312	266	408,95	647	622	622

Legend Table 1:

All data are sorted per patient (page 1: patients 1-8, CI422; page 2: patients 9-14, CI512) and per electrode. The individual data per run per experiment are depicted, with which a geometric mean of the four runs can be calculated. The insertion angle per electrode contact varies per patient, and is depicted in the next column. Based on this insertion angle, a corresponding frequency based on the Stakhovskaya reference (see manuscript text) is calculated. In the next column, the Cochlear references are denoted.

Note that these are the default values for the unmarked cells and are identical for most patients. Numbers in cells with a red background differ from default values, resulting from altered frequency allocations because of switched off electrode contacts. Note that the Cochlear reference can differ per patient between Test and Re-test (Pt 8 and pt 13) electrodes may have been switched off between the experiments. Also note that electrode 3 in Pt 8 is switched off, and therefore has no corresponding Stakhovskaya reference value.

Table 2: Exact data of **Figure 3**.

Table 2a: geometric means of all patients per electrode.

CI type	Electrode	Geometric mean of patients (Hz)		Mean insertion angle (°)
		Test	Re-test	
CI422	3	2952	2731	54,77
	7	1231	1242	97,95
	11	599	670	163,49
	15	428	44	239,04
	19	320	315	325,27
CI512	3	3564	4299	55,90
	7	1840	2140	116,30
	11	1162	1432	174,33
	15	779	1016	230,17
	19	471	628	284,56

Legend:

The geometric means of the data (Table 1 on page 1 of this Supplementary Material) are displayed. These values are the coordinates for the data points in **Figure 3**.

Table 2b: geometric means of Stakhovskaya reference and Cochlear reference.

Electrode	Geometric mean of Stakhovskaya reference line (Hz)	Geometric mean of Cochlear reference line (Hz)
3	10083	5914
7	6376	3496
11	3830	2002
15	2275	1135
19	1386	624

Legend:

The geometric means of the data (Table 1 on page 1 in this Supplementary Material) are displayed. These values are the coordinates for the data points in **Figure 3**.

Supplementary Material to manuscript:

Manuscript Title:

Comparison of place-versus-pitch mismatch between a perimodiolar and lateral wall cochlear implant electrode array in patients with single-sided deafness and a cochlear implant

Authors:

Jeroen P.M. Peters, Edwin Bennink, Gijsbert A. van Zanten

Corresponding author:

Jeroen P.M. Peters, M.D.

Department of Otorhinolaryngology and Head & Neck Surgery

University Medical Center Utrecht

Utrecht, The Netherlands

Tel: +31 88 75 56644

E-mail: h.p.m.peters@umcutrecht.nl