

## Supplement 5: Patient, disease and treatment characteristics related to complete hearing

### recovery

	Total		No/incomplete recovery		Complete recovery	
	n (%) <sup>a</sup>	range <sup>b</sup>	n (%) <sup>a</sup>	range <sup>b</sup>	n (%) <sup>a</sup>	range <sup>b</sup>
Cases	458 (100)	458-458	248 (54.1)	243-259	210 (45.9)	199-215
<b>Patient characteristics</b>						
Age (mean (SD))	58.7 (16.0)	58.7-58.7	60.4 (15.7)	59.7-60.9	56.7 (16.0)	56.3-57.6
Sex						
Male	243 (53.1)	243-243	125 (50.4)	122-131	118 (56.2)	112-121
Female	215 (46.9)	215-215	123 (49.6)	120-132	92 (43.8)	83-95
Ethnicity						
White	404 (88.2)	404-404	221 (88.9)	216-232	183 (87.4)	172-188
Non-white	54 (11.8)	54-54	28 (11.1)	26-30	26 (12.6)	24-28
Smoking status						
Smoker	49 (10.7)	44-54	27 (11.0)	24-33	22 (10.3)	17-26
Ex-smoker	119 (26.0)	112-127	67 (27.1)	62-73	52 (24.7)	46-58
Never smoked	290 (63.3)	280-298	154 (61.9)	146-163	136 (64.9)	125-143
Alcohol consumption						
None	159 (34.6)	148-169	88 (35.3)	80-94	71 (33.9)	62-78
Moderate	277 (60.5)	267-288	149 (60.1)	143-159	128 (61.0)	120-136
Hazardous	22 (4.9)	20-29	12 (4.7)	10-16	11 (5.1)	8-14
Harmful	0 (0.0)	0-1	0 (0.0)	0-1	0 (0.0)	0-1
Occupation						
Higher occupations	188 (41.0)	178-199	105 (42.1)	97-112	83 (39.6)	73-95
Intermediate occupations	94 (20.6)	87-103	52 (20.9)	46-59	42 (20.2)	36-48
Small employers/own account workers	36 (7.8)	30-42	16 (6.6)	14-22	19 (9.1)	15-25
Lower supervisory/technical occupations	42 (9.1)	35-47	22 (9.0)	19-29	19 (9.2)	14-24
Semi-routine/routine occupations	74 (16.2)	67-86	39 (15.6)	34-44	36 (17.0)	28-43
Never worked/long-term unemployed	25 (5.4)	21-29	14 (5.8)	13-18	10 (4.8)	7-15
Educational level						
Primary or less	16 (3.6)	12-21	9 (3.5)	7-13	8 (3.7)	5-12

Secondary	224 (49.0)	208-236	117 (47.1)	108-126	107 (51.2)	95-115
Tertiary or further education	217 (47.5)	207-233	123 (49.4)	116-132	95 (45.1)	85-108
<b>Cardiovascular disease</b>						
No	289 (63.1)	289-289	162 (65.2)	157-170	127 (60.6)	119-132
Yes	169 (36.9)	169-169	87 (34.8)	84-94	82 (39.4)	75-85
<b>Dementia</b>						
No	456 (99.6)	456-456	246 (99.2)	241- 257	210 (100.0)	199-215
Yes	2 (0.4)	2-2	2 (0.8)	2-2	0 (0.0)	0-0
<b>Cancer</b>						
No	438 (95.6)	438-438	235 (94.7)	230-245	203 (96.8)	193-208
Yes	20 (4.4)	20-20	13 (5.3)	13-15	7 (4.6)	5-7
<b>Region</b>						
North East England	36 (7.9)	36-36	20 (8.2)	20-23	16 (7.5)	13-16
North West England	38 (8.3)	38-38	20 (8.2)	18-24	18 (8.4)	14-20
Yorkshire and The Humber	7 (1.5)	7-7	6 (2.4)	6-6	1 (0.1)	1-1
East Midlands	29 (6.3)	29-29	12 (5.0)	12-15	17 (7.9)	14-17
West Midlands	88 (19.2)	88-88	38 (15.5)	37-43	50 (23.6)	45-51
East of England	43 (9.4)	43-43	26 (10.3)	25-28	17 (8.3)	15-18
South East England	12 (2.6)	12-12	6 (2.4)	6-7	6 (2.9)	5-6
Wessex	10 (2.2)	10-10	7 (2.9)	7-8	3 (1.3)	2-3
South West England	42 (9.2)	42-42	18 (7.4)	18-20	24 (11.3)	22-24
Severn	34 (7.4)	34-34	22 (8.8)	21-25	12 (5.8)	9-13
Oxford	38 (8.3)	38-38	26 (10.5)	26-26	12 (5.7)	12-12
London - North Thames	39 (8.5)	39-39	24 (9.6)	23-27	15 (7.2)	12-16
London - South Thames	19 (4.1)	19-19	8 (3.3)	8-9	11 (5.2)	10-11
Wales	23 (5.0)	23-23	13 (5.4)	13-15	10 (4.6)	8-10

### **Disease characteristics**

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<b>Aural fullness</b>						
No	381 (83.2)	381-381	203 (81.8)	197-214	178 (84.9)	167-184
Yes	77 (16.8)	77-77	45 (18.2)	45-47	32 (15.1)	30-32
<b>Tinnitus</b>						
No	202 (44.1)	202-202	105 (42.4)	102-116	97 (46.2)	86-100
Yes	256 (55.9)	256-256	143 (57.6)	139-149	113 (53.8)	107-117
<b>Vertigo</b>						
No	355 (77.5)	355-355	177 (71.3)	173-185	178 (84.8)	170-182
Yes	103 (22.5)	103-103	71 (28.7)	67-79	32 (15.2)	24-36

<b>Nausea</b>						
No	451 (98.5)	451-451	244 (98.4)	239-255	207 (98.6)	196-212
Yes	7 (1.5)	7-7	4 (1.6)	4-5	3 (1.4)	2-3
<b>Imbalance</b>						
No	442 (96.5)	442-442	239 (96.1)	233-250	203 (97.0)	192-209
Yes	16 (3.5)	16-16	10 (3.9)	9-13	6 (3.0)	3-7
<b>Dizziness</b>						
No	435 (95.0)	435-435	238 (95.7)	232-248	197 (94.2)	187-203
Yes	23 (5.0)	23-23	11 (4.3)	10-15	12 (5.8)	8-13
<b>Precipitating illness</b>						
No	389 (84.9)	389-389	210 (84.6)	204-219	179 (85.3)	170-185
Yes	69 (15.1)	69-69	38 (15.4)	36-42	31 (14.7)	27-33
PTA baseline (dB mean (SD))	21.6 (13.0)	21.6-21.6	21.4 (12.7)	21.0-21.7	21.9 (13.3)	21.5-22.3
<b>Pattern of hearing loss</b>						
Ascending	33 (7.2)	33-33	9 (3.8)	9-12	24 (11.2)	21-24
Descending	178 (38.9)	178-178	107 (43.0)	103-113	71 (33.9)	65-75
Flat	164 (35.8)	164-164	92 (37.1)	89-98	72 (34.2)	66-75
Irregular	83 (18.1)	83-83	40 (16.0)	39-45	43 (20.6)	38-44
<b>Severity of hearing loss</b>						
Mild (25–40 dB)	52 (11.4)	52-52	18 (7.4)	18-20	34 (16.1)	32-34
Moderate (41–70 dB)	172 (37.6)	172-172	81 (32.7)	78-87	91 (43.3)	85-94
Severe (71–95 dB)	146 (31.9)	146-146	83 (33.5)	81-88	63 (29.9)	58-65
Profound (>95 dB)	88 (19.2)	88-88	65 (26.4)	63-72	22 (10.7)	16-25

### Treatment characteristics

<b>Time from onset to first steroid treatment</b>						
No steroid treatment	33 (7.2)	33-33	26 (10.5)	26-27	7 (3.3)	6-7
Within first 7 days	268 (58.5)	268-268	109 (43.8)	104-116	159 (76.0)	152-164
Between 8 and 14 days	71 (15.5)	71-71	44 (17.7)	42-48	27 (12.9)	23-29
After 14 days	86 (18.8)	86-86	69 (28.0)	69-73	16 (7.8)	13-17
<b>First steroid treatment</b>						
No steroid treatment	33 (7.2)	33-33	26 (10.5)	26-27	7 (3.3)	6-7
Oral	378 (82.5)	378-378	202 (81.4)	197-211	176 (83.9)	167-181
IT	47 (10.3)	47-47	20 (8.1)	18-23	27 (12.8)	24-29
Ever IT steroids	189 (41.3)	189-189	95 (38.4)	90-103	94 (44.7)	86-99

Numbers represent n (%) unless indicated otherwise.

<sup>a</sup> Pooled cases are rounded to the nearest number.

<sup>b</sup> Range (lowest and highest value) of means or cases across 100 multiple imputed datasets.

