

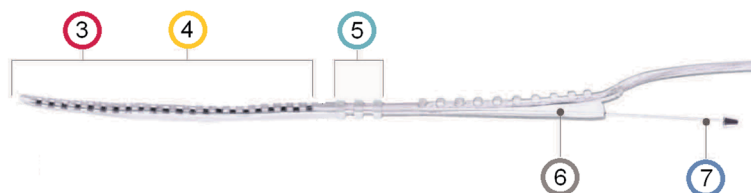
## Supplementary Appendix

### (A) Banded array



- ① 22 full-band platinum electrode contacts spread over 16.4 mm active array.
- ② 10 stiffening rings to aid insertion.

### (B) Contour array



- ③ 22 half-band platinum electrode contacts spread over 15 mm active array.
- ④ Pre-curved design for perimodiolar placement.
- ⑤ 3 silicone ribs to indicate insertion depth.
- ⑥ Handle and optimised lead angle for electrode orientation and ease of surgical handling.
- ⑦ Stylet to keep electrode straight during first insertion phase using AOS technique.

### (C) Contour Advance array



- ⑧ Softtip for minimal insertion trauma.
- ⑨ White marker to facilitate AOS insertion.

**Supplementary Figure A1.** Schematics of each array type included in this study. (A) The electrode pads of the Banded array range from approximately 0.38 mm<sup>2</sup> (electrode 22 at apex) to 0.59 mm<sup>2</sup> (electrode 1 at base). (B) The electrode pads of the Contour array range from approximately 0.21 mm<sup>2</sup> (electrode 22 at apex) to 0.23 mm<sup>2</sup> (electrode 1 at base). (C) The surface area of the Contour Advance array electrode pads is equivalent to the Contour array. Changes 3 through 7 listed for the Contour array are also relevant for the Contour Advance array (reproduced and modified with permission from Cochlear Ltd.).