Application

• Precision Listening[®] brain technology is a 10-minute EEG test conducted on a baby while they are naturally sleeping to predict language impairment from infancy.

- EEG signals are analyzed by a patented AI-enabled predictive algorithm.
- Results indicate if the baby requires immediate attention for intervention, close monitoring for re-evaluation, or is in the typical language developmental range.



to predict Language Impairment



Three Intervention Options after EEG Test (Precision Listening®)

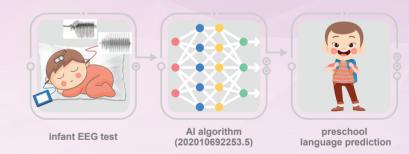
Our Invention

Our invention is a 10-minute automatic brain test for babies to forecast whether they will grow up to have language impairment (marketed under the trade name **Precision Listening**®). It serves as an indicator for prescription of early intervention to reduce the impairment's impact.

Background

- About 25% of children experience some form of language impairment.
- Early intervention administered in infancy and early toddlerhood is more effective than intervention prescribed in later childhood.
- Behavioural tests are not reliable to access infant's language development until they are 3 or 4 years old.
- Brain tech enables testing to predict language impairment in infancy, much earlier than current clinical behavioural testing.

Baby EEG (Precision Listening®) to Forecast Language Ability in Preschool Years



Innovation

 Precision Listening[®]: An electroencephalography (EEG) test enabled by AI prediction algorithms to provide prognostic indications of language developmental outcome. (PRC Patent No. 202010692253.5.)

• Precision Listening[®] measures how precise an infant's nervous system encodes and differentiates speech sounds, and makes a prediction about the infant's language abilities in preschool years.

Invented by linguists, cognitive neuroscientists and paediatricians at The Chinese University of Hong Kong based on a large and growing sample of infants (e.g., Wong et al., 2021).

