

**Table S1. Time domain, frequency domain, and cepstral domain features extracted using the pyAudioAnalysis library**

Feature id	Domain	Feature name	Description
1	Time domain	Zero crossing rate	The rate at which the sign of the signal changes during the frame.
2		Energy	The sum of squares of the signal values normalized by its frame length.
3		Entropy of energy	The measure of abrupt changes in the energy level of the signal.
4	Frequency domain	Spectral centroid	The center of gravity of the spectrum.
5		Spectral spread	The second central moment of the spectrum.
6		Spectral entropy	Entropy of the normalized spectral energies for a set of subframes.
7		Spectral flux	The squared difference between the normalized magnitudes of the spectra of two successive frames.
8		Spectral rolloff	The frequency below which 90% of the magnitude distribution of the spectrum is concentrated.
9–21	Cepstral domain	MFCCs	MFCCs form a cepstral representation where the frequency bands are not linear; instead, they are distributed according to the mel-scale.
22–33	Frequency domain	Chroma vector	A 12-element representation of the spectral energy where the bins represent the 12 equal-tempered pitch classes of western-type music.
34		Chroma deviation	The standard deviation of the 12 chroma coefficients.

MFCC: Mel frequency cepstral coefficient.

Table S2. The final dataset with 138 features and a class variable

Feature id	Feature name	Description
1	wavfile	The name of each recording file
2	healthCode	Health ID of each subject
3–36	features_mean	The mean of each of the 34 features, example: energy_mean spectral_centroid_mean
37–70	delta_features_mean	The change (delta) of the mean of each of the 34 features, example: delta_energy_mean delta_spectral_centroid_mean
71–104	features_std	The standard deviation (std) of each of the 34 features, example: energy_std spectral_centroid_std
105–138	delta_features_std	The change (delta) of the standard deviation (std) of each of the 34 features, example: delta_energy_std delta_spectral_centroid_std
139	class	The supervised learning class variable 1 for people with Parkinson's disease 0 for healthy controls

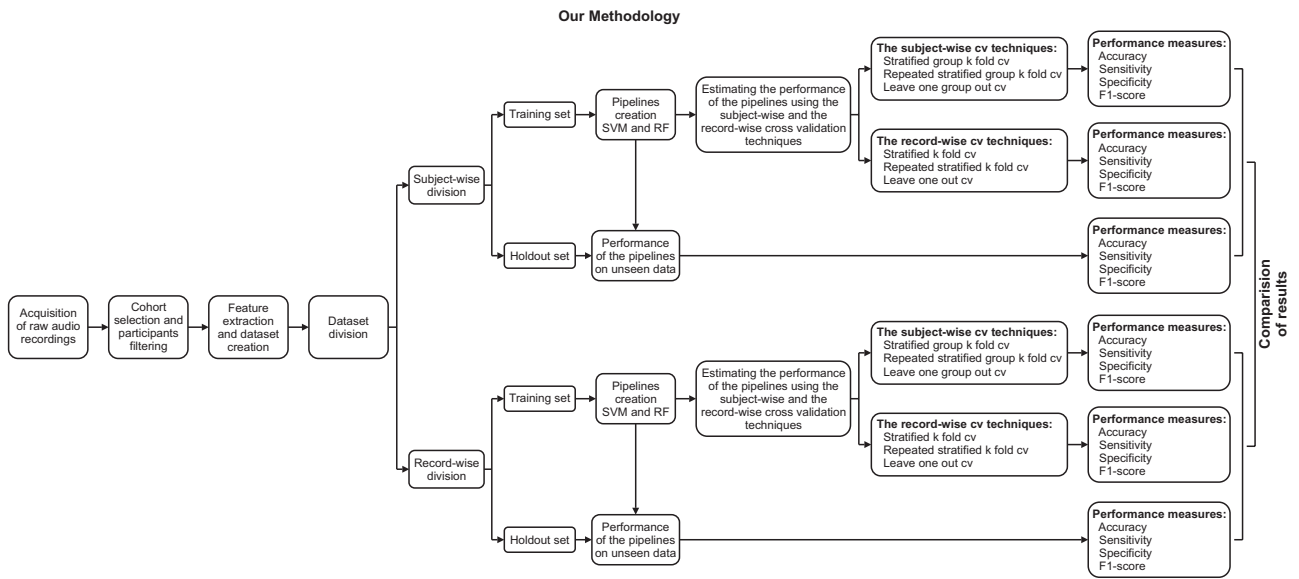


Figure S1. Schematic presentation of the methodology used in this study.