Design of study

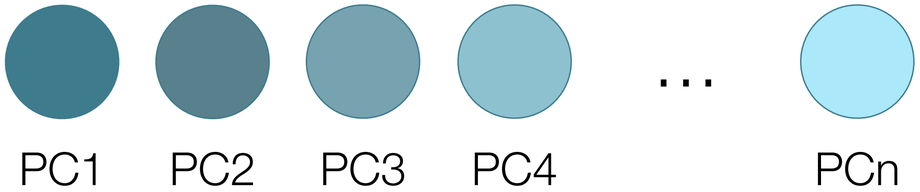
Work in progress

25 clinical features

Baseline PCA

Feature selection using Shapley value reconstruction error model.
Identifying features causing the supra threshold reconstruction error (x)

25 - x clinical features



Design of study

Work in progress

Surgical response

“Duration of response” was calculated based on patient’s **surgery date** and **self-reported time of pain recurrence**. Patients with no pain recurrence were followed for a maximum of 5 years.

- **“Responder”** = Patient with ≥50% reduction in pain, assessed by the pain numeric ranking scale (NRS), and a score of I-III on the BNI scale.
- **“Non-responder”** = Patient with <50% reduction in pain, assessed by the pain numeric ranking scale (NRS), and a score of IV-V on the BNI scale.
- **“Pain recurrence”** was defined as reversion of pain to a score of IV-V on the BNI scale.

Pain grade

Selection of **principal components** was conducted in consecutive manner (highest to lowest λ) to account for a 95% threshold of cumulative explained variance.

- Statistical testing (Spearman correlations) of PCs and duration of response to determine the best ‘pain grade’.
- PC weights provided insight on important variables.

NB! PCA and surgical response data are independent, so there is no leaking of information about the outcome !