

## **SWAT analyses**

Data from medication event monitoring systems (MEMs) are used to measure adherence to medication. For this study, AARDEX software is used to store medication adherence data from MEMs, whilst bottle weight data is measured separately and routinely.

This study within a study (SWAT) will investigate if the inexpensive and pragmatic measure of bottle weight measurements, is as effective as MEMs for measuring compliance to medication in individual patients, and in groups of patients.

For individual patients, MEMs and difference in bottle weight values will be explored, and discrepancies between datasets measured. Summary statistics for differences in bottle weight will be measured according to good ( $\geq 80\%$ ), moderate (50% - 79%) and bad ( $<50\%$ ) MEMs adherence. Summary statistics will include mean, min, max, standard deviation, median and interquartile range. Pearson's correlation will be used to measure the relationship between MEMs data and difference in bottle weight data.

Summary statistics including mean and standard deviation will also be calculated for groups of patients. These statistics will be used to examine if bottle weight provides a sufficient approximation of adherence to medication for a group of people in a trial.