Author's response to reviews

Title: DECADE-pilot: Decision aid, action planning, and follow up support for patients to reduce the 10-year risk of cardiovascular diseases. A protocol of a randomized controlled pilot trial

Authors:

Iris Tinsel (iris.tinsel@uniklinik-freiburg.de)

Achim Siegel (achim.siegel@uniklinik-freiburg.de)

Claudia Schmoor (claudia.schmoor@uniklinik-freiburg.de)

Anika Buchholz (ani.buchholz@uke.de)

Wilhelm Niebling (wilhelm.niebling@uniklinik-freiburg.de)

Version: 3 Date: 04 Jul 2017

Author’s response to reviews:

Dear Mr. Lancaster

Thank you for your review. The new changes are reported in this point-by-point response and highlighted within the manuscript in yellow.

Yours sincerely

Iris Tinsel

Abstract page 2 lines 9-11. In the background please put the feasibility objectives first and remove testing of effects between groups which is the aim of the main trial eg ‘The objectives of this trial are to test the feasibility of the study design in preparation for the main trial including the usability and acceptance of DECADE and initial data to ascertain that change can be observed in these patients.’

Answer: we changed the sentence in “The objectives of this trial are to test (1) the feasibility of the study design in preparation for the main trial including (2) the usability and acceptance of DECADE, and (3) initial data to ascertain that changes can be observed in these patients.”

Page 2 line 14 please insert ‘potential’ before effect as testing effectiveness is the aim of the main trial. Also the same on page 5 line 18, and page 9 line 34, page 9 line 40, page 10 line 39.
Answer: changed as suggested.

Page 7 lines 33 and 36 please change to Data Collection (not assessment

Answer: changed as suggested. Furthermore we changed “assessment” into “collection” on page 8, line 30.

Page 9 lines 49-59 it does not make sense to test for baseline differences between randomised groups as they are from the same population and this has been debated much in the literature. Please delete this paragraph to line 56. On line 56 rather than ‘effect’ please consider replacing with ‘correlation’.

Answer: It is not intended to test for baseline differences between randomized groups. It is just intended to give a description of baseline characteristics in both groups. The paragraph page 9, line 49 ff.: “Due to the randomization at the patient level, we can assume that sociodemographic and clinical data will be evenly distributed between the DECADE group and the Arriba group. Nevertheless we will analyze potential differences between both groups regarding age, gender, educational level, and occupational status, as well as health status (clinical data and patient reported outcomes) at baseline. Linear regression models will be used to adjust the analyses of the intervention effect for the respective baseline values. The effect of baseline characteristics on the primary endpoint ‘patient activation’ (PAM-13D) will be analyzed.” was changed to “Due to the randomization at the patient level, we can assume that sociodemographic and clinical data will be evenly distributed between the DECADE group and the Arriba group. Nevertheless we will describe potential differences between both groups regarding age, gender, educational level, and occupational status, as well as health status (clinical data and patient reported outcomes) at baseline. The relationship of baseline characteristics with the primary endpoint ‘patient activation’ (PAM-13D) will be described. Potential factors identified as prognostic will be considered in the planned multi-center trial.”

In general statistical comparisons between groups are not recommended in the CONSORT extension to pilot trials (Eldridge et al PFS 2016) but rather results for each randomised group should be described separately whenever possible unless a clear rationale has been provided otherwise eg needing to adjust for covariates for some reason. Please consider this on page 9. Why does the potential effect of the intervention need to be estimated? A trend could be seen in each group separately. Is this needed for planning the most appropriate outcome measure or for sample size considerations? Focus should be on confidence interval estimation rather than hypothesis testing in a small underpowered study.

Answer: As proposed by the CONSORT extension to pilot trials, our focus is on confidence intervals rather than hypothesis testing. Besides a descriptive analysis of the endpoints separately in the randomized treatment groups, the potential effect will be estimated with confidence intervals from a linear regression model adjusted for specified baseline characteristics to facilitate sample size planning of the main trial. We regard adjustment for the main covariates as necessary since the occurrence of chance imbalances has a larger influence on treatment effect estimation in small trials as compared to large trials.
We changed the sentence page 9, line 34-37 “The effect of the intervention will be estimated in a linear regression model with 95% confidence interval, including as independent factors the intervention, GP practice, CVR score, and the PAM-13D score at T0.” to “The change in the PAM-13D score in the randomized groups and the potential effect of the intervention on this change will be estimated in a linear regression model with 95% confidence intervals, including as independent factors the intervention, GP practice, CVR score, and the PAM-13D score at T0. This will be done to facilitate sample size planning of the main trial.”