Author's response to reviews

Title: Attenuation of microvascular function in those with cardiovascular disease is similar in patients of Indian Asian and European descent

Authors:

William D Strain (david.strain@pms.ac.uk)
Alun D Hughes (a.hughes@imperial.ac.uk)
Jamil Mayet (j.mayet@imperial.ac.uk)
Andrew Wright (andrew.wright@st-marys.nhs.uk)
Jaspal Kooner (j.kooner@imperial.ac.uk)
Nish Chaturvedi (n.chaturvedi@imperial.ac.uk)
Angela C Shore (a.shore@pms.ac.uk)

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Authors response to reviewer’s comments

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We thank the reviewer’s for their comments and suggestions and have endeavoured to answer all the points raised, in turn.

**Reviewer 1 (changes highlighted in Red)**

_I would recommend Authors to reconsider their interpretation of data focusing on the existence of a “trend” (type II error?) towards an ethnicity effect. This may well be accounted for by a difference in metabolic-glycemic control (see page 6), but could also reflect other mechanisms, such as the presence of molecular or autonomic changes, that might also be ethnicity related._

We agree that we cannot identify mechanisms from this study specifically whether dysglycaemia represents a pathway to microvascular dysfunction or is simply a confounder. We have expanded on this in the discussion (Page 6, para 2)

_Finally the impact of expected multifactorial complexity of the “aetiopathogenetic process” on microvascular function might be only partially explored by the technique employed by these Authors._

We agree that a longitudinal approach is required to explore the pathogenic process. This manuscript serves as a “hypothesis generating” paper in order to justify the long term commitment (and expense) required to fully explore this approach. We have added a sentence to this effect in the discussion (p6 para 3)

**Conclusion change the sentence ”We have demonstrated... “ with "We did not detect...”**

This has been changed

**Reviewer 2 (Change in Blue)**

_It is interesting that microvascular function did not show any significant correlations with any established vascular risk factor except HbA1c and insulin. The authors should comment on this finding. Did microvascular function as assessed by the method used in this study (skin Laser doppler fluximetry) correlate with vascular risk factors in previous studies? If not, this might be a limitation of the method since it might suggest that it is not an appropriate predictor of atherosclerotic vascular disease. Please make a comment on this issue._

This lack of association between skin microvascular measures and conventional risk factors has previously been demonstrated in other populations and ethnic groups. This has now been included in the results section (p5 para 3). Despite
this we have previously demonstrate an association with left ventricular hypertrophy and renal function, and have an article under consideration looking at associations with cardiac remodeling. Other groups have demonstrated similar results. This is why we believe the microcirculation represents an independent risk factor, rather than a surrogate marker of other more conventional risk factors. This latter comment has been accented in the discussion (p6 para 3).

Once again we thank you for the opportunity to clarify the points raised

David