Author's response to reviews

Title: Phosphorylation of a splice variant of Collapsin Receptor Mediated Protein 2 in the nucleus of tumour cells links Cyclin Dependent Kinase-5 to oncogenesis.

Authors:

Nicola J Grant Dr (nicolagrant85@yahoo.co.uk)
Phil J Coates Dr (p.j.coates@dundee.ac.uk)
Yvonne L Woods Dr (y.woods@nhs.net)
Susan E Bray Dr (s.e.bray@dundee.ac.uk)
Nicholas A Morrice Dr (Nick.Morrice@sciex.com)
C James Hastie Dr (c.j.hastie@dundee.ac.uk)
Douglas J Lamont Dr (d.j.lamont@dundee.ac.uk)
Francis A Carey Professor (frank.carey@nhs.net)
Calum Sutherland Dr (c.d.sutherland@dundee.ac.uk)

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Author's response to reviews: see over
Dear Editor,

Please find attached the revised manuscript entitled “Phosphorylation of a splice variant of Collapsin Receptor Mediated Protein 2 in the nucleus of tumour cells links Cyclin Dependent Kinase-5 to oncogenesis,” by Nicola Grant and colleagues.

We thank the two reviewers for their input and suggestions and hope the following corrections are acceptable to them.

**Referee 1** did not request any changes.

**Referee 2** minor points:
1) Several recent articles link Cdk5 to the process of tumorigenesis, Authors should cite them and give more elaborated background on Cdk5 and cancer

We acknowledge that we did not provide a description of the literature on Cdk5 and cancer. Our feeling was that the paper was already very long and the literature on this topic was extensive and included a great deal of controversy with no recent reviews that we could find. Therefore we thought it could be difficult to write a concise, fair description of the topic. However we agree that the topic deserves attention and as such we have added a new section (highlighted in yellow) to the introduction in an attempt to summerise major aspects of Cdk5 in cancer, including several additional references to original research and reviews (although not that recent).

2) In Fig. 1D, authors have to define the Y-axis on the graph.

We apologise for the oversight and thank the referee for noticing the error. The Y-axis is now labeled in revised figure 1.

3) In Fig. 5, Supl Fig. 1B, Supl Fig 2, Supl Fig 3, authors adjusted contrast of images to very high level. It is not acceptable, they have to adjust contrast as of Fig 2, not more than that.

We agree the contrast in some of the blots has ended up at a very high level as many of the experiments listed involved immunoblots of highly purified proteins which made obtaining lower contrast on the Licor Odyssey challenging. In some cases we have had to rerun the gels with lower amounts of samples in order to allow us to reduce the contrast.

We now provide revised versions of Fig 5, S1B, S2 and S3 where the contrast has been reduced.
4) In all the graphical images, authors should give number of times experiments performed and should add SEM or SD with p-value.

We have added SEM to Figure 1A-D (new revised Fig 1), added p values where applicable to text, and updated all figure legends to state the number of experiments in every case.

**Editorial request:** Note the manuscript was transferred from Cancer Research but we have now modified the structure to meet the author instructions of BMC Cancer. This includes moving Methods to before the Results section.

I hope that you will now consider the manuscript acceptable for publication.

Yours sincerely

Dr Calum Sutherland
University of Dundee