### **Reviewer Report**

Title: Human Leukaemia cells (HL-60) proteomic and biological signatures underpinning cryo-damage are differentially modulated by novel cryo-additives.

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Reviewer name: Stefania Angelucci

### **Reviewer Comments to Author:**

The authors have carefully analyzed the proteome changes of cryopreserved HL-60 cells discovering key proteins for the CPA modulation of cryo-storage, but almost confirming the efficiency of new molecules as CPA like nigerose or salidroside to be employed for cryo-damage reduction. So the topic of investigation of this manuscript is of great interest for scientific community and clinical relevance. Details of the work are sufficient to allow replication of the work by another laboratory. Moreover I found it technically satisfactory and more importantly the authors described data much well supported by a statistical evaluation. So the paper is suitable for publication..

#### Methods

Are the methods appropriate to the aims of the study, are they well described, and are necessary controls included? Choose an item.

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Are the conclusions adequately supported by the data shown? Choose an item.

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## **Quality of Written English**

Please indicate the quality of language in the manuscript: Acceptable

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