Author's response to reviews

Title: Induction of selective cytotoxicity and apoptosis in human T4-lymphoblastoid cell line (CEMss) by Boesenbergin A isolated from Boesenbergia rotunda rhizomes involves mitochondrial pathway, activation of caspase 3 and G2/M phase cell cycle arrest

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

I would like to submit the revision of manuscript (MS: 1369001113825925) for the publication in your esteemed journal

**Manuscript Title:**

Induction of selective cytotoxicity and apoptosis in human T4-lymphoblastoid cell line (CEMss) by Boesenbergin A isolated from Boesenbergia rotunda rhizomes involves mitochondrial pathway, activation of caspase 3 and G2/M phase cell cycle arrest

The changes that I have made are in the section of methods with the addition of a few sentences.

- **Original :**

  **Cytotoxicity of Boesenbergin A on proliferated primary human blood lymphocytes**

  The ability of Boesenbergin A to act selectively on cancer cells especially leukemia was evaluated by comparing the cytotoxicity of this compound towards primary human blood lymphocytes. Briefly, blood was collected into the cell preparation tube containing sodium citrate (BD Vacutainer®, New Jersey, 6 USA). After collection, tube was stood upright for 20 min at room temperature to allow it to equilibrate and later centrifuged at 1200xg for 20 min. Mononuclear cells and platelets underneath the plasma layer were collected using a pipette and transferred into 15mL centrifuge tube. Cells were washed twice with PBS and cultured in complete Quantum PBL media with phytohemagglutinin (PAA, Pasching, Austria) containing 10% FBS supplemented with 100 U/ml penicillin and 100 μg/ml streptomycin at 37 °C in 5% CO2 atmosphere. Primary human blood lymphocytes were treated at various concentrations of Boesenbergin A in triplicates and cell viability was measured using MTT assay after 48 h of incubation.

- **Edited version :**

  **Cytotoxicity of Boesenbergin A on proliferated primary human blood lymphocytes**

  The ability of Boesenbergin A to act selectively on cancer cells especially leukemia was evaluated by comparing the cytotoxicity of this compound towards primary human blood
lymphocytes. Briefly, blood was collected into the cell preparation tube containing sodium citrate (BD Vacutainer®, New Jersey, 6 USA). After collection, tube was stood upright for 20 min at room temperature to allow it to equilibrate and later centrifuged at 1200xg for 20 min. Mononuclear cells and platelets underneath the plasma layer were collected using a pipette and transferred into 15mL centrifuge tube. Cells were washed twice with PBS and cultured in complete Quantum PBL media with phytohemagglutinin (PAA, Pasching, Austria) containing 10% FBS supplemented with 100 U/ml penicillin and 100 μg/ml streptomycin at 37 °C in 5% CO2 atmosphere. Primary human blood lymphocytes were treated at various concentrations of Boesenbergin A in triplicates and cell viability was measured using MTT assay after 48 h of incubation. The cell lines use as normal cells were human peripheral blood lymphocyte obtained from normal healthy donors after informed consent was given. This project was approved by the medical research ethics committee (founded in 2002) of the medical Faculty of UPM at a meeting on April 12, 2012 (UPM 2564/004/12)

Thank you

Ng Kuan Beng