Hassan Yankuzo et al., J Pharmacovigilance 2014, 2:5
http://dx.doi.org/10.4172/2329-6887.S1.015

OMICS Group Conferences
Accelerating Scientific Discovery

3rd International Conference and Exhibition on
Pharmacovigilance & Clinical Trials
October 27-29, 2014 Hyderabad International Convention Centre, India

Effect of a bioactive sub-fraction of *Strobilanthes crispus* (SCD-/F3) in NMU-induced rat mammary tumors

Hassan Yankuzo, Nik Soriani Yaacob, Sutha Devaraj and **Lai Choon Sheen**
Universiti Sains Malaysia, Malaysia

Strobilanthes crispus (*S. crispus*) commonly called "Pecah kaca" or "jin batu" in Malay, is a well-known medicinal plant used for treatment of various ailments. Results of our preliminary *in vitro* studies have shown that a dichloromethane sub-fraction of *S. crispus* (SCD-/F3) demonstrated significant apoptosis on MCF-7 and MDA-MB-231 human breast cancer cells without affecting normal breast epithelial cells (MCF-10A). Therefore this study aimed to further investigate the effect SCD-/F3 in N-methyl-N-Nitrosourea (NMU)-induced rat mammary tumor model in comparison with untreated control. Rats bearing mammary tumors (beginning at 10 mm tumor size) were administered with SCD-/F3 (40 mg/kg) by oral gavage daily for 8 weeks, while the untreated control (n=5) were administered equal volume of the vehicle. Animals were sacrificed at the end of treatment and blood samples were collected by cardiac puncture and processed for the analysis of full blood count (FBC), serum total protein, aspartate aminotransferase (AST), alanine aminotransferase (ALT), alkaline phosphatase (ALP), calcium, urea, and creatinine. Data were analyzed using SPSS version 20 and expressed as median and interquartile ranges (IQR) or mean (SD). The results showed significant regression of mammary tumors and normalization of FBC parameters in SCD-/F3-treated animals compared to the untreated control. Overall data suggest potential effect of SCD-/F3 in experimental rat mammary tumors; thus further research to identify the active principles of SCD-/F3 and its mechanism of biological activity is highly recommended.

Biography

Muhammad Hassan Yankuzo, a trainee lecturer with Usmanu Danfodiyo University (UDU) Sokoto, Nigeria. Born on 15th June 1976 in Nigeria, and graduated as medical doctor (M. B. B. S) from UDU Teaching Hospital in 2004.completed Houseman ship training in 2005 followed by national service in 2006. Married with three children. Graduated with masters in medical science (MMD. Sc) from International Islamic University Malaysia (IIUM) in 2011 and currently pursuing PhD at University Science Malaysia (USM). My research experience involve cell culture and in vivo (diabetic and breast cancer rats' model) aspects. I attended several workshops, national and international conferences and published some papers in peer reviewed journals.

hyankuzo@yahoo.com