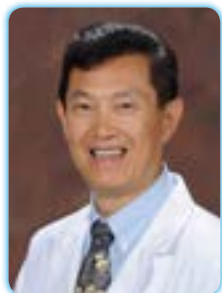


## 2<sup>nd</sup> International Conference on **Clinical Trials and Therapeutic Drug Monitoring**

August 22-24, 2016 Philadelphia, USA



**Stephen Hsu**

Augusta University, USA

### Phase II clinical trials using formulations of compounds derived from tea plant for restoration of salivary function and treating herpes labialis

Previous *in vitro* and *in vivo* studies indicated that catechins from the tea plant (*Camellia sinensis*) possess multi-beneficial effects including a therapeutic effect for herpes simplex virus infections and restoration of salivary functions. To test the efficacy of formulations developed for treating herpes labialis and managing xerostomia, AverTeaX and MighTeaFlow, respectively, two separate double blind, placebo controlled, randomized clinical trials were designed and conducted in two dental institutions located in the US and China. For the AverTeaX herpes labialis trial, the results demonstrated significant reduction of clinical episode duration (median 4.5 days, range 1-11 days vs. 9 days,  $p=0.003$ ) and shortened blistering/ulceration stages within an episode from a median of 3 days to 1 day ( $p=0.0003$ ). Patient's quality of life was also improved and no adverse effect was reported. It is concluded that AverTeaX formulation containing lipophilic catechins inhibited herpes simplex labialis infection effectively with clinical significance. For the MighTeaFlow xerostomia trial, after 8 weeks of therapy of lozenges containing either MighTeaFlow formula with green tea catechins or a placebo, the catechin-containing MighTeaFlow formula resulted in a statistically significant increase in un-stimulated (3.8-fold) and stimulated (2.1-fold) saliva output verses baseline. In contrast, the xylitol-containing placebo failed to modulate saliva output. The results demonstrate that the catechin-containing MighTeaFlow formula partially restored salivary function in xerostomia patients and provided an objective improvement in saliva output. In conclusion, food additive natural compounds derived from tea plant are suitable for medicinal use to provide significantly higher efficacy than currently available medications or OTC products.

### Biography

Stephen Hsu has obtained his PhD degree from the University of Cincinnati. He spent four years at Memorial Sloan-Kettering Cancer Center prior to a 4-year career change as a TV Sports Anchor for ESPN International while teaching at the National University of Singapore. He is a tenured Professor at Georgia Regents University and serves as Course Directors for Nutrition and Biochemistry. He has published more than 60 research articles and 8 books/book chapters. His contribution in translational studies on the benefits of green tea was recognized with multiple awards such as Georgia Bio Innovation Award and IADR/GSK Innovation in Oral Care Award.

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### Notes: