

World Congress on

ALLERGY AND IMMUNOTHERAPY

May 16-17, 2018 Osaka, Japan

Isolated baicalein flavonoid from *Desmodium triflorum* Linn attenuates allergen-induced airway inflammation and oxidative stress in asthma**Vedpal¹, S P Dhanabal¹, Shainesh Antony² and Ashish Wadwani¹**¹JSS Academy Higher Education and Research, India²Kerala Govt. University, India

Pro-inflammatory cytokines regulate the magnitude of allergic reactions during asthma. Tumor necrosis factor (TNF- α), interleukin-14 (IL-14) and interleukin-13 (IL-13) play a crucial role in aggravating the inflammatory conditions during allergic asthma. In addition, oxidative stress contributes to the pathogenesis of asthma by altering the physiological condition resulting in the development of asthmatics status. In the present study, the isolated baicalin flavonoid from *Desmodium triflorum* Linn, was evaluated, in vivo for its potential to suppress TNF-Alpha, IL-4 and IL-13 using ovalbumin (OVA) induced allergic asthma in Balb/C mice. Oral administration of 100 and 200 mg/kg, isolated baicalin flavonoid significantly reduced the OVA induced total and differential leucocyte count, TNF-a, IL-4, IL-13, nitrate, MDA, MPO and TPL levels in the lung lavage samples. Collectively, these findings suggest that isolated baicalin flavonoid from *Desmodium triflorum* is a potent immunomodulator due to flavonoids and suppresses key Th2 cytokines production and oxidative stress in OVA-induced asthma.

Biography

Vedpal is working as a Professor in Ooty University, India.

vedparihar@gmail.com

Notes: