Immunomodulation in Middle-Aged Humans Via the Ingestion of Physta® Standardized Root Water Extract of Eurycoma longifolia Jack-A Randomized, Double-Blind, Placebo-Controlled, Parallel Study.

George A1, Suzuki N2, Abas AB1, Mohri K3, Utsuyama M4,5, Hirokawa K4,5, Takara T6.

1Research and Development Department, Biotropics Malaysia Berhad, Lot 21, Jalan U1/19 Section U1, Hicom-Glenmarie Industrial Park, 40150, Shah Alam, Selangor, Malaysia.
2Research and Development Department, ORTHOMEDICO Inc., Tokyo Medical & Dental University M&D Tower 25F, 1-5-45, Yushima, Bunkyo, Tokyo, 113-8519, Japan.
3Meiji Pharmaceutical University, 2-522-1 Noshio, Kiyose, Tokyo, 204-8588, Japan.
4Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University, 1-5-45 Yushima, Bunkyo, Tokyo, 113-8519, Japan.
5Institute for Health and Life Science Co., Ltd., Tokyo Medical and Dental University Open Laboratory, Medical Research Institute, Surugadai Bldg, 2-3-10, Surugadai, Kanda, Chiyoda, Tokyo, 101-0062, Japan.
6Seishinkai Medical Association Inc., Takara Medical Clinic, Taisei Bldg 9F, 2-3-2, Higashi-Gotanda, Shinagawa, Tokyo, 141-0022, Japan.

Abstract This study was aimed to investigate the capacity of a standardized root water extract of Eurycoma longifolia (Tongkat Ali, TA), Physta® to modulate human immunity in a middle-aged Japanese population. This randomized, double-blind, placebo-controlled, parallel study was conducted for 4 weeks. Eighty-four of 126 subjects had relatively lower scores according to Scoring of Immunological Vigor (SIV) screening. Subjects were instructed to ingest either 200 mg/day of TA or rice powder as a placebo for 4 weeks [TA and Placebo (P) groups] and to visit a clinic in Tokyo twice (weeks 0 and 4). SIV, immunological grade, immunological age, and other immune parameters were measured. Eighty-three subjects completed the study; 40 in the TA group and 41 in the P group were statistically analyzed, whereas two were excluded from the analyses. At week 4, the SIV and immunological grade were significantly higher in the TA group than those in P group (p < 0.05). The numbers of total, naïve, and CD4+ T cells were also higher in the TA group than those in P group (p < 0.05). No severe adverse events were observed. The results suggest that ingestion of the root water extract of TA (Physta®) enhances comprehensive immunity in both middle-aged men and women. This study is registered in UMIN-CTR (UMIN000011753). Copyright © 2016 John Wiley & Sons, Ltd.

Keywords:
Scoring of Immunological Vigor; Tongkat Ali; comprehensive immunity; eurycomanone