

Charles Sturt University, Australia

EDUCATION

- 1986 Bachelor of Science (Nutrition), Kunkuk University, Seoul, South Korea
- 1988 Master of Science (Physiology), Utah State University, Logan, Utah, USA
- 1992 PhD (Physiology), Clemson University, Clemson, South Carolina, USA
- 1995 Postdoctoral Research Fellow (Preterm labor), School of Medicine, University of Illinois at Chicago, IL, USA

ACADEMIC APPOINTMENT

- 1996 - 2001 Assistant Professor, School of Oriental Medicine, Dongshin University, South Korea
- 2002 - 2006 Dean, New Zealand College of Oriental Medicine, New Zealand
- 2007 - Present Senior Lecturer, Charles Sturt University, Bathurst, NSW, Australia

HONORS AND SPECIAL RECOGNITION

- 2007 - Present Program leader of the Bachelor of Health Science (Complementary Medicine), Charles Sturt University
- 2013 - 2015 Associate Head of School, School of Biomedical Sciences, Charles Sturt University
- 2017 School Excellence Awards for Sustained Contribution to International Program
- 2018 School Excellence Awards for Research Productivity
- 2018 President of Korean Academy of Scientists and Engineers in Australia
- 2018 Chair of 6th Asia-Korea Conference, Brisbane, Queensland, Australia

PUBLICATIONS

61 articles in refereed journals, 1 book and 2 chapters in edited book since 2011

Evidence-based review of BioBran (RBAC) as a complementary therapy for conventional cancer treatment

Introduction : Conventional cancer treatment, including surgery, chemotherapy, and radiotherapy, may not be sufficient to eradicate all malignant cells and prevent recurrence. Intensive treatment often leads to a depressed immune system, drug resistance, and toxicity, hampering the treatment outcomes. BioBran (RBAC) has been proposed as a plant-based immunomodulator that can restore the body's natural killer cell activity to fight cancer, complementing conventional therapies.

Objectives : To comprehensively review the available evidence on the effects and efficacies of BioBran (RBAC) as a complementary therapy for conventional cancer treatment.

Methods : Systematic search of journal databases reporting the effects of BioBran (RBAC) on cancer and cancer treatment.

Results : Thirty full-text articles and two conference abstracts were included in this review. BioBran (RBAC) has been shown to possess immunomodulating anti-cancer effects and can work synergistically with chemotherapeutic agents *in vitro*. In murine models, BioBran (RBAC) has been shown to prevent against carcinogenic agents, and inhibit tumor growth, either by itself or in combination with other anti-cancer compounds. Fourteen successful BioBran (RBAC) treated clinical cases were found. Eleven clinical studies, including five nonrandomized, pre-post intervention studies and six randomized, control trials (RCTs), reported effects include enhanced immunoprofile, reduced side-effects, improved treatment outcomes, and increased survival rates. There is no report on adverse events on BioBran (RBAC). Most of the clinical trials are small studies with short duration.

Conclusion : There is sufficient evidence suggesting BioBran (RBAC) to be an effective immunomodulator that can complement conventional cancer treatment. However, more well-designed RCTs on BioBran (RBAC) are needed to strengthen the evidence base.