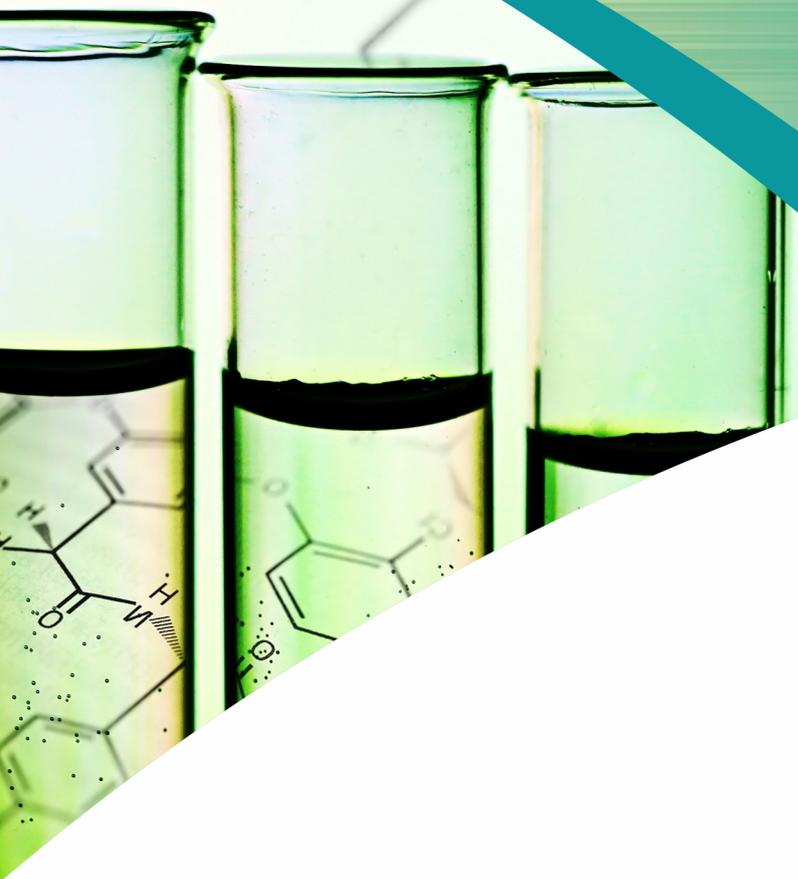


VOLUME | ISSUE | YEAR  
16 | 1 | 2022  
eISSN: 2151-6081 . pISSN: 1819-3471



# RESEARCH JOURNAL OF **Phytochemistry**

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All these abstracts were presented at the AICTE sponsored e-Conference on Phytopharmaceuticals held on August 6, 2020 by School of Pharmaceutical Education and Research, Jamia Hamdard, New Delhi.

# Review on: Immunomodulatory Effect of Ashwagandha on Cyclophosphamideinduced Toxicity

Arnab Sadhukhan<sup>1</sup> and Moumita Chowdhury<sup>2</sup>

<sup>1</sup>Guru Nanak Institute of Pharmaceutical Science and Technology, Kolkata

<sup>2</sup>Guru Nanak Institute of Pharmaceutical Science and Technology, Kolkata

## ABSTRACT

**Aim and background:** Cyclophosphamide is well known anticancer drug used for the treatment of several types of cancer like breast cancer, leukemia, ovarian cancer. But cyclophosphamide reduces the production of blood cells from bone marrow. This review focuses on how the aqueous extract of immunomodulator plant Ashwagandha was used to combat the cyclophosphamide induced toxicity.

**Methods:** Firstly, after administration of cyclophosphamide @250mg/kg b.w. (tablet) orally by gastric intubation method and total count of WBC, ALC, Platelets, RBC is recorded. Secondly, Ashwagandha (300mg/kg b.w.) administered five days prior to cyclophosphamide administration and continued for ten days and parameters recorded again.

**Results:** In the first case marked reduction in total count of WBC, ALC, platelets and slight reduction in RBC was observed on fourth day. In second case prior administration of Ashwagandha resulted in significant increase in total count of WBC, ALC, platelets. No significant statistical difference in the RBC count was seen during the study period.

**Conclusion:** Thus, this review shows that therapeutic potency of Ashwagandha ameliorate the toxicity produced during cancer chemotherapy by mitigating the bone marrow depression.



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