

The 7th Conference on Bioinformatics, 3-5 January 2018





Molecular effects of Ganoderma lucidum: a bioinformatical approach

M. Shojaee^{a*}, F Taghavi Rad^{a,b}, M Moheimani^a, S Mohammadi^a, R Beheshtifar^a, F Aboomahboob^c, E Doudafkan^a

a Molecular R&D section, Masir-e-Sabz clinic, Tehran, Iran.

b Molecular biology department, Islamic Azad University – Ahar branch, Ahar, East Azerbaijan province, Iran.

c Farhangian school, karaj, alborz province, Iran. *Mahdieh.shojaee@yahoo.com

Abstract: Ganoderma lucidum is one of the most important medicinal fungi in traditional Chinese medicine. Beneficial effects of bioactive compounds of this fungus have proven many times in different diseases like breast cancer, diabetes, and multiple sclerosis [1]. Investigating molecular targets of G. lucidum's compounds became an interesting area of research in recent years [2,3]. In this paper, all these data will be reviewed and some suggested molecular targets will be examined based on bioinformatical approaches.

Keywords: Biochemical pathways; Bioinformatics; Ganoderma lucidum; Molecular targets

References

- [1] Barbieri, Antonio, et al. "Anticancer and Anti-Inflammatory Properties of Ganoderma lucidum Extract Effects on Melanoma and Triple-Negative Breast Cancer Treatment." *Nutrients* 9.3 (2017): 210.
- [2] Kao, Chi HJ, et al. "A comparison of the gene expression profiles and pathway network analyses after treatment of Prostate cancer cell lines with different Ganoderma lucidum based extracts." *Functional Foods in Health and Disease* 4.5 (2014): 182-207.
- [3] Martínez-Montemayor, Michelle M., et al. "Ganoderma lucidum (Reishi) inhibits cancer cell growth and expression of key molecules in inflammatory breast cancer." *Nutrition and cancer*63.7 (2011): 1085-1094.