

SUPPLEMENTARY MATERIAL

BIOACTIVE MUSHROOM POLYSACCHARIDES AS ANTITUMOR: AN OVERVIEW

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ABSTRACT

Immuno-therapies are gaining more importance to treat certain forms of cancer. The goal of therapies is to enhance person's own IgG, IgA, IgM, IgD, IgE and macrophages to combat with neoplastic cells hence the effectiveness of the immune system. Since, early civilization mushrooms are considered as potent food as well as medicine. Mushrooms are well known for their bioactive compounds such as chizophyllan, lentinan, grifolan, PSP (polysaccharide-peptide complex) and PSK (polysaccharide-protein complex) which are considered as medicines against malignancy. They prevent oncogenesis by the direct effect on tumor metastasis and exhibits antitumor effects by the induction of immune response in host. Mushroom polysaccharides have promising future for treatment of cancers due to their mode of action and efficacy. Also there are some hurdles during this treatment, but it will start a new era of safer and effective medicine based on mushroom polysaccharides.

Keywords: Antitumor; Immuno-therapy; Mushroom; Polysaccharides

Suppl. File1. List of company producing anti-cancer formulation from mushroom.

Name of Company	Mode of action from mushroom	Name of country	Site
Zhejiang Fangge Pharmaceutical & Healthcare Products Co. Ltd.	<i>G. frondosa</i> , <i>L. edodes</i> , <i>G. lucidum</i> , <i>A. blazei</i> , <i>Cordyceps sinensis</i> and <i>H. erinaceus</i>	China	http://mushroom.en.alibaba.com/
FineCo Ltd	Anti-cancer formulations from medicinal mushrooms	Korea	www.fineco.net
Aloha medicinal Inc.	Cancer-inhibiting <i>Ganoderma</i> capsules	USA	www.alohamedicinals.com
Qingyuan Jingyuan Mushroom Polysaccharide Product Company.,Ltd	<i>Polyporus frondosus</i> mushroom extracts, Shiitake mushroom extracts, glossy ganoderma mushroom extracts, small pine mushroom extracts, Polystictus mushroom extracts, Chinese caterpillar mushroom extracts, monkeyhead mushroom extracts, Oyster cap mushroom extracts etc	China	http://www.mushroomextract.com/gsjjen.html
WHOSH Ltd	<i>Ganoderma Lucidum</i> Polysaccharide	China	http://www.whoshasia.com/ganoderma-lucidum-polysaccharide

Suppl. File 2. List of company producing commercial formulation from mushroom.

Name of Company	Mode of action from mushroom	Name of country	Site
Mushroom Science	Medicinal mushroom supplements	Japan	http://mushroomscience.com/
Fungi pefecti	Host Defense® Mushroom Supplements	USA	http://www.fungi.com/host-defense.html
Mycological Research Laboratories	All mushroom products	United Kingdom	http://www.mycologyresearch.com/
Yancheng Shennong Healthcare Food stuffs Co., Ltd. Jiangsu	Joint Soft gel of <i>Ganoderma Lucidum</i> Spore Oil	China	http://ycshennong.en.made-in-china.com/product/MbBmWgcJJorx/China-Anti-Cancer-Spore-Oil.html