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## This paper is concerned with Hepato-Cellular Carcinoma (HCC) patients treated naturopathic agents. Patients treated with $\geq$ 4 agents survived significantly longer than patients treated with $\leq$ 3 agents. The great effect is seen in patients treated with at least 4 agents that include *Cordyceps sinensis*. This greater certainty of patient survival without toxic side effects is significant benefit comparing with the conventional therapy. Treatment of HCC with a regimen of $\geq$ 4 agents prepared from natural products is associated with greater certainty of patient survival in a substantial portion of patients. The information dynamic model for certainty of patient survival is derived based on fluid mechanics, where a series of approximate solutions of the flow between two parallel flat walls, one of which is at rest, the other is suddenly accelerated from the rest to a constant velocity are used. The kinetic energy of certainty of patient survival decreases with increasing time, while the potential energy increases with increasing time. Total mechanical energy of patients treated with 4 or more agents is smaller than that treated with 3 or fewer agents. The kinetic energy (potential energy) of patients treated with 4 or more agents treated with 3 or fewer agents.

## **KEYWORDS**

Certainty of Patient Survival; Game Information Dynamic Model; Naturopathic Therapy; Herbal Treatment; Natural Antioxidants; Hepato-Cellular Carcinoma

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## References

- [1] Niwa, Y., Matsuura, H., Murakami, M., Sato, J., Hirai, K. and Sumi, H. (2012) Evidence that naturopathic therapy including Cordyceps sinensis prolongs survival of patients with hepato-cellular carcinoma. Integrative Cancer Therapies (in press). doi:10.1177/1534735412441704
- Bruix, J. and Sherman, M. (2005) Management of hepatocellular carcinoma. Hepatology, 42, 1208-1236. doi:10.1002/hep.20933
- Llovet, J.M., Ricci, S., Mazzaferro, V., et al. (2008) Sorafenib in advanced hepatocellular carcinoma. The New England Journal of Medicine, 359, 378-390. doi:10.1056/NEJMoa0708857
- [4] Niwa, Y., Miyachi, Y., Ishimoto, K. and Kanoh T. (1991) Why are natural plant medicinal products effective in some patients and not in others with the same disease? Planta Medica, 57, 299-304. doi:10.1055/s-2006-960102
- [5] Cunningham, K.G, Manson, W. Spring, F.S. and Hutchinson, S.A. (1950) Cordycepin, a metabolic product isolated from cultures of Cordyceps militaries (Linn.) Link. Nature, 166, 949. doi:10.1038/166949a0
- [6] Jagger, D.V., Kredich, N.M. and Guarrino, A.J. (1961) Inhibition of Ehrlich mouse ascites tumor growth by cordycepin. Cancer Research, 21, 216-220.

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- [7] Nakamura, K., Yoshikawa, N., Yamaguchi, Y., Kagota, S., Shinozuka, K. and Kunitomo, M. (2006) Antitumor effect of cordycepin(3' -deoxyadenosine)on mouse melanoma and lung carcinoma cells involves adenosine A3 receptor stimulation. Anticancer Research, 26, 43-47.
- [8] Niwa, Y. and Sumi, H. (1999) Anti-cancer effect in vitro and clinical efficacy of a cancer therapeutic containing natural herbs, exposed to far infrared-ray heating and fermentation process using Aspergillus oryzae (in Japanese). Journal of Japan Society for Cancer Therapy, 34, 199.
- [9] Hirai, K.I., Koyama, J., Pan, J. et al. (1999) Furanonaphthoquinone analog possessing preferential antitumor activity compared to normal cells. Cancer Detection and Prevention, 23, 539-550. doi:10.1046/j.1525-1500.1999.99052.x
- [10] Itokawa, H., Totsuka, N. Morita, H. et al. (1990) New antitumor principles, casearins A-F, for Casearia sylvestris Sw.(Flacourtiaceae). Chemical and Pharmaceutical Bulletin (Tokyo), 38, 3384-3388. doi:10.1248/cpb.38.3384
- [11] Gu, Y., Fujimiya, Y., Itokawa, Y. et al. (2008) Tumorricidal effects of beta-glucans: Mechanisms include both antioxidant activity plus enhanced systemic and topical immunity. Nutrition and Cancer, 60, 685-691. doi:10.1080/01635580802030884
- [12] Su, Z.Y., Tung, Y.C., Hwang, L.S. and Sheen, L.Y. (2011) Blazeispirol A from Agarcicus blazei fermentation product induces cell death in human hepatoma Hep 3B cells through caspasedependent and caspase-independent pathways. Journal of Agricultural and Food Chemistry, 59, 5109-5116. doi:10.1021/jf104700j
- [13] Zhong, X.H., Wang, L.B. and Sun, D.Z. (2011) Effects of inotodiol extracts from inonotus obliquus on proliferation cycle and apoptotic gene of human lung adenocarcinoma cell line A549. Chinese Journal of Integrative Medicine, 17, 218-223. doi:10.1007/s11655-011-0670-x
- [14] Niwa, Y., Kawahira, K. and Matsumoto, K. (1996) Effect of far infrared ray emitting products and stones on human leukocyte functions, lipid peroxidation, the growth of tumor on mice, drug-induced hepatitis rat, and clinical course and serum lipid peroxide levels of rheumatoid arthritis patients (in Japanese). Japanese Journal of Inflammation, 16, 425-436.
- [15] Iida, H., Nakagawa, T. and Spoerer, K. (2012) Game information dynamic models based on fluid mechanics. Entertainment and Computing, 3, 89-99. doi:10.1016/j.entcom.2012.04.002
- [16] Stokes, G. (1901) On the effect of the internal friction of fluids on the motion of pendulums. Mathematical and Physical Papers, 3, 1-141.
- [17] Schlichting, H. (1968) Boundary-layer theory. 6th Edition, McGraw-Hill, New York.
- [18] Hansen, M. (1928) Die Geschwindigkeitsverteilung in der Grenzschicht ab der I?ngahgestr?mten Platte. Journal of Applied Mathematics and Mechanics, 8, 185-199.
- [19] Tsugé, S. (1974) Approach to origin of turbulence on the basis of two-point kinetic theory. Physics of