Letter to the Editor

The rapidly emerging role of zerumbone in attenuating tumor growth in systemic malignancies

I read with great interest the recent article by Beattie et al. in a recent issue of *Molecular Nutrition & Food Research* [1]. The article is highly thought provoking. Interestingly, the past few years have seen the emergence of new data that clearly indicates that zerumbone is highly effective in mitigating tumor growth in a number of systemic malignancies besides ovarian and cervical carcinomas.

For instance, zerumbone is highly effective in augmenting apoptosis in hepatocellular carcinomas. It does this by decreasing Bcl-2 expression in hepatocellular carcinomas and thereby altering the Bax/Bcl-2 ratio [2, 3]. Similarly, zerumbone attenuates NF kappaB expression in colonic adenocarcinomas and thereby accentuates apoptosis in these malignant cells besides decreasing their multiplicity [4]. Similarly, zerumbone decreases CXCL12-induced local invasion as well as metastasis in breast carcinomas secondary to attenuation of cellular expression of CXCR4 [5].

Zerumbone also induces mitochondria regulated apoptosis in T-acute lymphoblastic leukemia as is evident by the increase in cellular caspase 3 and thereby decreases proliferation in these tumors [6]. Similarly, zerumbone oral administration inhibits pulmonary carcinogenesis by modulating heme oxygenase -1 expression.

Clearly, zerumbone is highly effective in attenuating tumor growth in a number of systemic malignancies and may very well alter cancer management in the near future.

The author has declared no conflict of interest.

References

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