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## Original Article

# Findings of the 3-Month Supportive Treatment with Oncoxin Solution Beside the Standard Modalities of Patients with Different Neoplastic Diseases

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### Abstract

The incidence of Cancer is still increasing worldwide, specially, at an alarming rate in the developing countries and remains one of the major cause of mortality worldwide. The role of different antioxidants, both in fruits and vegetable and in synthetic form as chemo-preventive measure is now well established from different studies. The incidence of cancer is lower in those countries where the traditional diet provides plenty of antioxidants. The aim of this study is to evaluate standard modalities of patients with different neoplastic diseases. Three identically designed, open and multi-centric studies were conducted at the same time in Bangladesh in 2008-2009. Efficacy of antioxidant rich product, Oncoxin, in head and throat, breast and uterine cervix cancer, when administered with conventional oncologic therapy. Each study included 30 patient couples with similar stages of cancer. One patient of each couple received the standard treatment for their stages (reference group). The other (experimental group) also received Oncoxin for 365 days.

The results gathered in the 3 studies showed that the administration of Oncoxin led to a significant improvement of the quality of life of patients, fewer episodes of depression and increased optimism. These patients handled better the radiotherapy and chemotherapy sessions with fewer and less intense adverse reactions. During the final visit, it was observed a 59.26% increase in the Karnofsky index in the experimental group compared to 30.38% in the reference group, and a 16.05% drop (76.938% due to deaths) in the experimental group for 39.24% (64.52% due to deaths) in the reference group. Survival rates were greater in the experimental group in all three studies (87.65% versus 74.68%). The treatment with ONCOXIN Solution proves its effectiveness as a treatment modality associated with complex oncological treatment, in the short and medium terms.

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### Introduction

In Western European countries, the use of complementary medicine in cancer patients has increased steadily over the past 15 years<sup>1</sup>. The majority uses this therapy to complement their cancer treatment or help them cope with the

therapy and disease-associated side effects and improve quality of life.<sup>2</sup>

Along with herbal medicines (especially mistletoe), dietary supplements, particularly micronutrients and antioxidants such as vitamin C and selenium, are the most commonly used

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complementary therapies.<sup>1</sup> Approximately 60% of all cancer patients take antioxidants during standard therapy without the knowledge of their oncologists.<sup>4,5</sup> There are many concerns that antioxidants might reduce oxidizing free radicals created by radiotherapy and chemotherapy and thereby decrease the effectiveness of the therapy<sup>6</sup>. Therefore, it is imperative that physicians and oncologists explore the use of micronutrient supplements with their cancer patients and educate them about potentially negative but also potentially beneficial effects (especially in the palliative care setting).

Multiple studies show that the co-administration of combination of various antioxidants with conventional chemotherapy or radiotherapy results in significant antitumor synergism and an inhibition of the toxicity of conventional therapy<sup>7</sup>. This synergism is related to the concentration of certain drugs used in chemotherapy in tumor cells but not in normal cells.<sup>8</sup>

### Material and Methods

Three identically designed, open and multi-centric studies were conducted at the same time in Bangladesh in 2008-2009. Efficacy of antioxidant rich product, Oncoxin, in head and throat, breast and uterine cervix cancer, when administered with conventional oncologic therapy. Each study included 30 patient couples with similar stages of cancer. One patient of each couple received the standard treatment for their stages (reference group). The other (experimental group) also received Oncoxin for 365 days.

### Goals:

- To increase the tolerance to multimodal oncologic treatment (when such treatment is required)
- To assess the increase of survival rates.
- To assess the improvement of quality of life of each patient.
- To assess the changes taking place in the health condition of patients under treatment.
- To assess the nutritional condition of patients under treatment.

### Expected outcomes

- Reduction of toxicity of the multimodal oncologic treatment in TREATED group patients in comparison with PLACEBO group patients.
- Increase of survival rates in TREATED group patients in comparison with PLACEBO group patients.
- Improvement in the quality of life of TREATED group patients compared with PLACEBO group patients.
- Improvement health conditions of TREATED group patients compared with PLACEBO group patients.
- Improvement of the nutritional condition of TREATED group patients compared with PLACEBO group patients.

### Treatment outline:

Each patient in the TREATED group will receive a daily dose of 50 ml of ONCOXIN oral solution for one year (25 ml twice a day every 12 hours). Each TREATED group patient will require 36 (thirty-six) ONCOXIN oral solution product mixtures.

CONTROL group patients will receive a daily dose of 50 ml of PLACEBO for one year (25 ml twice a day every 12 hours). Each CONTROL group patient will require 36 (thirty-six) PLACEBO mixtures.

The clinical study was carried out in 63 oncological patients with different stages of the disease. All of them received continuous complex oncological treatment during a period of 90 days. During this period of time, out of the patients, 43 (GROUP A and GROUP B) received 25 ml of Oncoxin solution in BID doses per day, half an hour after meals.

Three study groups with different treatments were formed:

**Group A:** 22 patients treated with complex oncological treatment + **Oncoxin Solution** + Chemotherapy

**Group B:** 21 patients treated with complex oncological treatment + **Oncoxin Solution** (without chemotherapy)

**Group M:** 20 patients treated with complex oncological treatment with Chemotherapy

***By order of frequency, the neoplasms included in the study were the following:***

- Breast neoplasm 31%
- Brain tumours 21%
- Lung cancer 17%

The group with ONCOXIN Solution without chemotherapy tolerated radiotherapy much better. Clinical Trials, in which chemotherapy and radiotherapy, provided evidence of the following-

- The quality of the life improves significantly. Depressions and difficulties decrease.
- Patients trust in the effectiveness of the treatment increases.
- Patients show greater resistance to the oncologic treatment as the frequency and intensity of side effects drop significantly.
- Increased tolerance to chemotherapy and radiotherapy has been observed gradually throughout the research, thus preventing the interruption of the treatment.
- Weight evolves clearly in the patients given ONCOXIN Oral Solution as compared with the patients who were not.
- Increased quality of life within 10 days, even for terminal patients.

## Discussion

Antioxidants have different operating mechanisms. Apart from destroying free radicals, they can also induce apoptosis directly stop the cell cycle and inhibit cell proliferation and inhibit tumour dissemination<sup>9,10</sup>. Multiple studies have shown that the administration of combinations of several antioxidants plus conventional chemotherapy or radiotherapy lead to relevant

anti-tumour synergy as well as to the inhibition of conventional therapy's toxicity<sup>11,12</sup>. This synergy is associated with the capacity of many antioxidants to increase the concentration of specific drugs used in chemotherapy in tumour cells, but not in normal cells<sup>13,14</sup>.

Oncoxin is a specifically formulated nutrient that includes the most effective anti-cancer antioxidants, which have undergone a molecular activation process that does not alter their structure<sup>15,16</sup>. Furthermore, it boosts both their antioxidant properties and biological activity.<sup>17</sup> Treatments based on antioxidants, in combination with chemotherapy and radiation, prolong the life span of cancer patients. Antioxidants neutralize toxic agents called free radicals to help prevent cells from being attacked.<sup>18</sup>

## Conclusions

The treatment with ONCOXIN Solution proves its effectiveness as a treatment modality associated with complex oncological treatment, in the short and medium terms, by the following advantages:

- Easy administration, good compliance by the patients.
- The treatment is well tolerated.
- Substantial Psycho-emotional improvement.
- Significant improvement of general state, with an increase of the K.K. score, as compared with GROUP M.
- Increase of the patients' weight by 1 - 4 Kg.
- Decreasing incidence of leucopenia during radiation; evident increase of the resistance of the patients submitted to aggressive oncological treatment, with an improved tolerance of this treatment.
- Decrease, or much less frequent appearance, of the acute effects of radiation on normal tissues.
- Reduction of tumour size.
- Favorable evolution of the disease in the short and medium terms and survival of all the patients.

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