

# 4<sup>th</sup> World Congress on Cancer Science & Therapy

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## Ambovex oral sublingual spray as immuno-therapy trial for HCC among Egyptian patients

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Novel immunotherapy strategies are employed to render cancer more immunogenic, generate antigen-specific or nonspecific immune activation, and/or manipulate the tumor micro- environment. A number of immunotherapeutic trials have been tried for this purpose. Ambovex is a botanical medicine derived from the plants belonging to the family Ranunculaceae and have immune-modulating effect. In this pilot study we used Ambovex as an immunotherapy trial for treating Egyptian patients with un-resectable HCC. We included 148 patients with post-HCV liver cirrhosis and HCC unfit for any of the available treatment modalities. They were divided into 2 groups: Group 1 (88 patients) for treatment and group 2 (60 patients) as control. After their consent, group 1 received Ambovex sublingual oral spray (20 buuffs tid) for 4 months. Group 2, received glucose-saline sublingual spray as placebo. Both groups were followed up for one year. In group I there was tumor regression and significant decrease in AFP in 40.9%, and 28.4% showed stable tumor size and AFP level, however 30.7% showed disease progression. In group II, no patients showed tumor stabilization. At one year follow-up, 69.3% were still living in group I compared to 35% in group II. From this study, we concluded that Ambovex with its immune- modulating effect have initial promising results in treating HCC. Further controlled, randomized, multicenter studies are needed to confirm these results.

### Biography

Hosny Salama got experience in diagnosis and treatment of HCC through his work for 35 years at Hepatology Department, Cairo University. He was selected director for the Department on 1991. He supervised 63 MS and 28 MD thesis with 65 National and International publication. He published the first study done in Egypt using RF in HCC on 2003. He established the Egyptian Societies of Stem Cell Therapy and Study of NASH and its Complication and was selected as president.

## Phytochemicals potently inhibit migration of metastatic triple negative breast cancer cells

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Metastatic triple negative breast cancer (TNBC) is an aggressive malignancy that comprises 15-20% of breast cancers in the US but claims disproportionately high patient mortality. Migration of cells is an essential process toward metastatic progression of the disease; however, existing chemotherapeutic compounds do not effectively inhibit cell migration. We explored the potency of a series of natural compounds, phytochemicals, to block the motility of TNBC cells. We used a novel, high throughput cell migration assay technology to robotically generate a migration niche of well-defined size within each well of standard microwell plates. This approach enabled screening a collection of phytochemicals, each compound at a wide range of sub-lethal concentrations, on the migration of two metastatic TNBC cells. Our screening showed that phytochemicals can effectively interfere with deregulated cell motility. Specially, fisetin and quercetin potently blocked migration of both MDA-MB-231 and MDA-MB-157 TNBC cells. Our results suggested that the anti-migratory property of these compounds is in part due to the scavenging of intracellular reactive oxygen species (ROS) and interference with MAPK signaling pathway.

### Biography

Hossein Tavana has developed robotically operated, high throughput microtechnologies to expedite compound screening against breast cancer cells. These technologies enable identifying compounds that block the growth and compromise the viability of cancer cells in 3D tumor spheroid models, and inhibit the migration of metastatic breast cancer cells. He was selected as one of Top 20 Young Investigator Frontiers in Bioengineering in 2013 and as a Young Innovator in Cellular and Molecular Bioengineering in 2014. He has published five book chapters, over 30 peer-reviewed journal articles, and filed five US patents. His research is funded by NIH and NSF.