

8<sup>th</sup> World Congress on

# BREAST CANCER & THERAPIES

July 16-17, 2018 Melbourne, Australia

## Tumor combating effect of Lactoferricin B peptide

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Breast cancer is the most common cancer affecting women; survival depends on early diagnosis and treatment. The common choices of treatment are surgery, radiotherapy, hormonal therapy and chemotherapy. Lactoferricin B (Lfcin B) is a 25-mer natural peptide obtained from milk protein lactoferrin and has demonstrated anti-cancer properties. Tumor was induced in the mammary pad of immunocompromized mice by injecting human breast cancer cells, MDA-MB-231 in the breast pad and allowing developing into tumors. The establishment of tumor was confirmed by IVIS in vivo imaging system, which detects the GFP fluorescence from the implanted cells. Once the tumors were palpable, they were injected with lactoferricin B peptide intratumorally (3-5 mg/mouse/day) for 3 subsequent days. The mice were sacrificed 15 days post treatment. The harvested tumors injected with peptide showed a remarkable decrease in size and weight compared to tumors injected with vehicle control PBS. Our studies suggest that Lfcin B can be developed as a potential therapy for breast cancer, especially against drug resistant tumor cells.

### Biography

Ebenezer Chitra has completed her PhD from National Institute of Immunology, Jawaharlal Nehru University, New Delhi, India. She did her Post-doctoral Fellowship in National Health Research Institutes, Taiwan working on cell signaling in cancer. Currently, she is a Faculty in the School of Health Sciences in International Medical University. Her research interest is in cancer biology.

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