



# A Novel Technique for Individualized Treatment of Breast Cancer during Diagnostic Biopsy to Determine its Potential for Treatment with Glucosodiene

**Maher M. Akl<sup>1\*</sup> and Amr Kamel Ahmed<sup>2</sup>**

<sup>1</sup>Department of Chemistry, Mansoura University, Egypt

<sup>2</sup>The public health department, Riyadh First Health Cluster, Saudia Arabia

**\*Corresponding author:** Maher Monir Akl, Department of Chemistry, Faculty of Science, Mansoura University, 35516, Mansoura, Egypt, Tel: +201020432031; Email: maherakl555@gmail.com

**Letter to Editor**

**Volume 8 Issue 2**

**Received Date:** October 18, 2023

**Published Date:** October 27, 2023

**DOI:** 10.23880/cclsj-16000186

**Keywords:** Breast Cancer; Glucosodiene; Biopsy

**Abbreviation:** TNBC: Triple-Negative Breast Cancer

## Letter to Editor

Breast cancer remains a significant challenge in the field of oncology, particularly the aggressive triple-negative breast cancer (TNBC) subtype, accounting for 15-20% of cases. TNBC lacks estrogen, progesterone, and HER2 receptors, making it difficult to target with conventional therapies. In light of this, there is an urgent need to explore novel treatment approaches that can effectively address the unique characteristics of TNBC [1].

Our hypothesis focuses on a novel technique that involves obtaining a diagnostic biopsy sample from the patient and subsequently performing an *ex vivo* tissue culture. This technique enables the assessment of the potential therapeutic efficacy of Glucosodiene, an alkaline glucose isomer [2-4], in treating breast cancer. Glucosodiene has shown promising results in previous studies, particularly in a case report by Ahmed A [5], where it demonstrated effectiveness in treating metastatic TNBC of the bone following mastectomy and axillary clearance.

The primary objective of our hypothesis is to evaluate the viability of utilizing this individualized treatment approach during the diagnostic biopsy phase to determine the potential for Glucosodiene as a targeted therapy. By assessing the

response of the patient's tumor tissue to Glucosodiene *ex vivo*, we aim to establish a personalized treatment plan for TNBC patients, resulting in improved clinical outcomes. We believe that our hypothesis makes a valuable contribution to the field of breast cancer research by proposing a novel technique that can guide treatment decisions during the diagnostic biopsy stage. This approach has the potential to optimize therapeutic strategies by identifying patients who are likely to benefit from Glucosodiene-based treatments and sparing others from potentially ineffective therapies.

## Statements and Declarations

The authors declare that there are no conflicts of interest.

## References

1. Lehmann BD, Bauer JA, Chen X, Sanders ME, Chakravarthy AB, et al. (2011) Identification of human triple-negative breast cancer subtypes and preclinical models for selection of targeted therapies. *J Clin Invest* 121(7): 2750-2767.
2. Akl MM (2023) Targeting Cancerous Tumors through their Metabolic Activity via Glucose Receptors in the Tumor; Known as the Alkaline Glucosodiene Molecules Theory. *Clinical and Experimental Cancer Research and Therapeutics* 1(1).
3. Akl MM, Abou El, Naga AM (2023) Toxic chemotherapeutic nutrition of cancer cells by alkaline glucosodiene

molecules via targeting metabolic of cancerous tumors: a promising theory for cancer treatment. *Cancer Adv* 6: e23010.

4. Akl MM, Ahmed A (2023) Developing the theory of Toxic Chemotherapeutic Nutrition for Cancer Cells: Glucosodiene Polymer Structure, Safety, Efficacy, and Human Outcomes in Targeting Tumors via Glucose

Mutation. *Research Square*.

5. Ahmed A (2023) Targeting the Warburg Effect with Glucosodiene: A Case Report of a 43-year-old Female after Mastectomy of the right breast and axillary clearance with Successful First Case Treatment for Metastatic Triple Negative Breast Cancer (TNBC) of Bone.

