**Sample Abstract Guidelines:**

1. Abstract Content should be in English
2. The maximum word count should be 250-300 words
3. If your title includes scientific notation, Greek letters, bold, italics, or other special characters/symbols, do make sure they appear correctly.
4. Corresponding details of corresponding author should be correct which will be used for further communication.
5. Abstracts should highlight the major points of your research and should not include tables, figures and references.

**Format**

**Presentation title:** Preparation and Characterization of Aptamer-Conjugated Nanoliposomes Co-loaded with Cisplatin and Gallic Acid for Breast, Lung, and Colorectal Cancer Treatment

**Ali Al-Samydai1; Hamdi Nsairat1, Walhan Alshaer2**

1Pharmacological and Diagnostic Research Center, Faculty of Pharmacy, Al-Ahliyya Amman University, Amman, 19328, Jordan

2Cell Therapy Center, the University of Jordan, Amman, 11942, Jordan

**Corresponding Author name: Ali Al-Samydai**

**Affiliation:** Pharmacological and Diagnostic Research Center, Faculty of Pharmacy, Al-Ahliyya Amman University, Amman, 19328, Jordan

**Ph. No:00962788106069**

**Email ID’s:phalimahmoud2012@ammanu.edu.jo**

**WhatsApp No: 00962788106069**

**Any alternative number:**

**Other Authors if any:**

**Presentation type:** (Oral presentation/ Poster presentation)

**Abstract (250-300 words):**

This research focuses on the development and characterization of aptamer nanoliposomes co-loaded with cisplatin and gallic acid, specifically tailored for targeted cancer therapy. Employing the thin film hydration technique, nanoliposomes were meticulously prepared, showcasing sizes consistently below 200 nm and a significantly low polydispersity index (PDI). Anticipated outcomes involve quantitative assessments, including nanoliposomal size, charge, polydispersity index, and IC50 values against breast, colorectal, and lung cancer cells. The selective efficacy of the nanoliposomes will be quantified, emphasizing their non-disruptive impact on endothelial cells. Advanced imaging techniques (SEM and TEM) will provide numerical insights into the nanoliposomes' spherical morphology. Comprehensive characterization includes a thorough examination of stability, drug release kinetics, and cellular uptake. Presenting concrete data, this innovative formulation holds substantial promise for enhancing cancer therapy precision, minimizing off-target effects, and advancing precision medicine in oncology.

**Biography (150-200 words):**

Dr. Ali Mahmoud Al-Samydai, PhD in Pharmaceutical Nanotechnology, serves as an Assistant Professor at Al-Ahliyya Amman University in the Faculty of Pharmacy, Department of Pharmaceutical and Pharmaceutical Technology. His primary research interest lies in the development of innovative Nanoliposomes and Nanophytosome models. These models aim to create formulations with enhanced activities, promoting improved pharmacokinetic and pharmacodynamic properties when compared to traditional drugs and herbal extracts.

Currently, Dr. Al-Samydai is actively involved in researching the anti-cancer, anti-inflammatory, and wound healing activities of a novel encapsulated phytoconstituent and chemotherapy model in lipid-based nanoparticles. This research aims to enhance the therapeutic efficacy of the formulations.

His academic contributions extend to publishing 55 articles in the field of pharmaceutical sciences and pharmaceutical technology. Notably, 44 of his articles are indexed in SCOPUS, covering the period from 2018 to 2024. Dr. Al-Samydai's commitment to advancing pharmaceutical research and technology is evident in his extensive publication record and ongoing exploration of innovative therapeutic approaches.