Electronic Supplementary Material (ESI) for Materials Advances. This journal is © The Royal Society of Chemistry 2023

Epidermal Growth Factor Receptor Targeted Doxorubicin and Vitexin Loaded Niosomes for Enhanced Breast Cancer Therapy

S. Malathi¹, Valappil Sisila^{2#}, V. Singaravel^{3#}, Nandakumar Venkatesan^{4,5}, Iqbal Pakrudheen^{6,7}, R. Dhanaraj³, Niraikulam Ayyadurai², V. Bhuvarahamurthy³, S. Narayana Kalkura^{1*}

¹Crystal Growth Centre, Anna University, Guindy, Chennai 600025, India.

²Biochemistry & Biotechnology, CSIR-Central Leather Research Institute,

Adyar, Chennai – 600020, India

³Department of Medical Biochemistry, Post-graduate Institute of Basic Medical Sciences, University of Madras, Taramani, Chennai 600113, India

⁴Department of Pediatrics, Obstetrics, and Gynaecology, University of Valencia, Valencia, 46010, Spain ⁵ Sri Ramachandra Faculty of Engineering and Technology, Sri Ramachandra Institute of Higher Education and Research, Chennai 600116, India

Department of Chemistry, CMR Institute of Technology, Bengaluru 560037, India
 Centre of Excellence- Sensors & Nanoelectronics, CMR Institute of Technology, Bengaluru 560037, India

Equal contribution

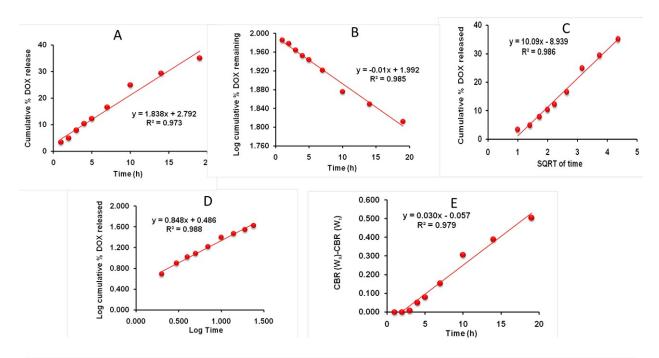


Figure S1. Kinetics of drug release of NIOD formulations (A) Zero order; (B) First order; (C) Higuchi model; (D) Korsemeyer - Peppas model; (E) Hixson Crowell model

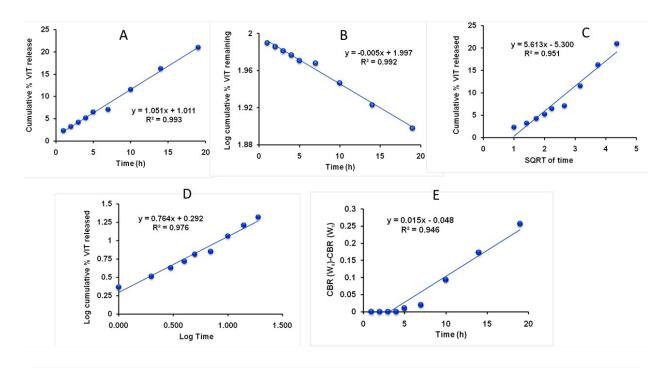


Figure S2. Kinetics of drug release of NIOV formulations (A) Zero order; (B) First order; (C) Higuchi model; (D) Korsemeyer - Peppas model; (E) Hixson Crowell model

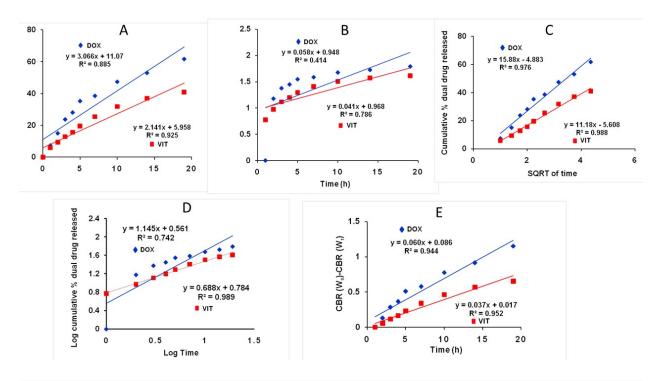


Figure S3. Kinetics of drug release of NIODV formulations (A) Zero order; (B) First order; (C) Higuchi model; (D) Korsemeyer - Peppas model; (E) Hixson Crowell model

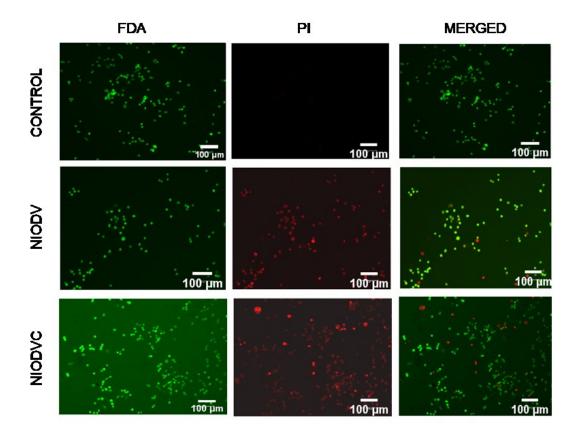


Figure S4. FDA/PI staining assay of niosome induced apoptosis in MDA-MB-231 cells.