

N-Benzyl-6-Chloro-4-Hydroxy-2-Quinolone-3-Carboxamides: Synthesis, Computational Studies, and Biological Investigation as Anticancer Agents

Sara Jamal Meknas¹, Eveen Al-Shalabi¹, Rima Hajjo^{1,2,3}, Sanaa K. Bardaweel⁴, Ghassan Abushaikha⁵, Kamal Sweidan⁶, Swapnaa Balaji⁷, Amit K. Tiwari⁷, Haizhen A. Zhong⁸, Dima A. Sabbah^{1*}

¹Department of Pharmacy, Faculty of Pharmacy, Al-Zaytoonah University of Jordan, P.O. Box 130, Amman 11733, Jordan; email address: (SJM) sara.meknas.96@gmail.com; (EAS) even.shalabi@zu.edu.jo; (RH) r.hajjo@zu.edu.jo; (DAS) dima.sabbah@zu.edu.jo

²Laboratory for Molecular Modeling, Division of Chemical Biology and Medicinal Chemistry, Eshelman School of Pharmacy, The University of North Carolina at Chapel Hill, Chapel Hill, NC 27599, USA

³National Center for Epidemics and Communicable Disease Control (JCDC), Amman, Jordan

⁴Department of Pharmaceutical Sciences, School of Pharmacy, University of Jordan, Amman 11942, Jordan; email address: s.bardaweel@ju.edu.jo

⁵Department of Medicinal and Biological Chemistry, College of Pharmacy and Pharmaceutical Sciences, University of Toledo, Toledo, Ohio 43606-3390, USA; email address: Ghassan.Abushaikha@utoledo.edu

⁶Department of Chemistry, The University of Jordan, Amman 11942, Jordan; email address: k.sweidan@ju.edu.jo

⁷Department of Pharmacology and Experimental Therapeutics, College of Pharmacy and Pharmaceutical Sciences, University of Toledo, Toledo, Ohio 43614, USA; email address: (SB) swapnaa.balaji@rockets.utoledo.edu; (AKT) amit.tiwari@utoledo.edu atiwari@uams.edu

⁸DSC 309, Department of Chemistry, The University of Nebraska at Omaha, Omaha, NE, USA; email address: (HAZ) hzhong@unomaha.edu

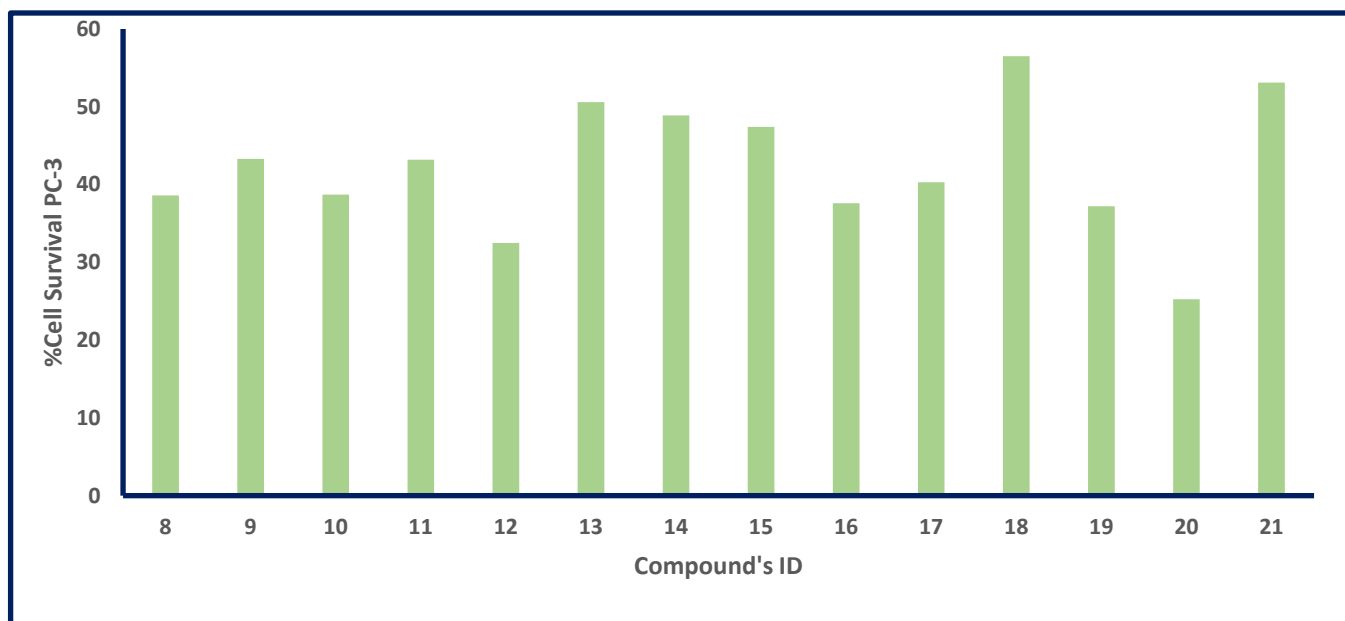


Figure S1. A comparison of the % cell survival of synthesized compounds against PC-3. The compound IDs are on the x-axis and the % cell survival values are on the y-axis.

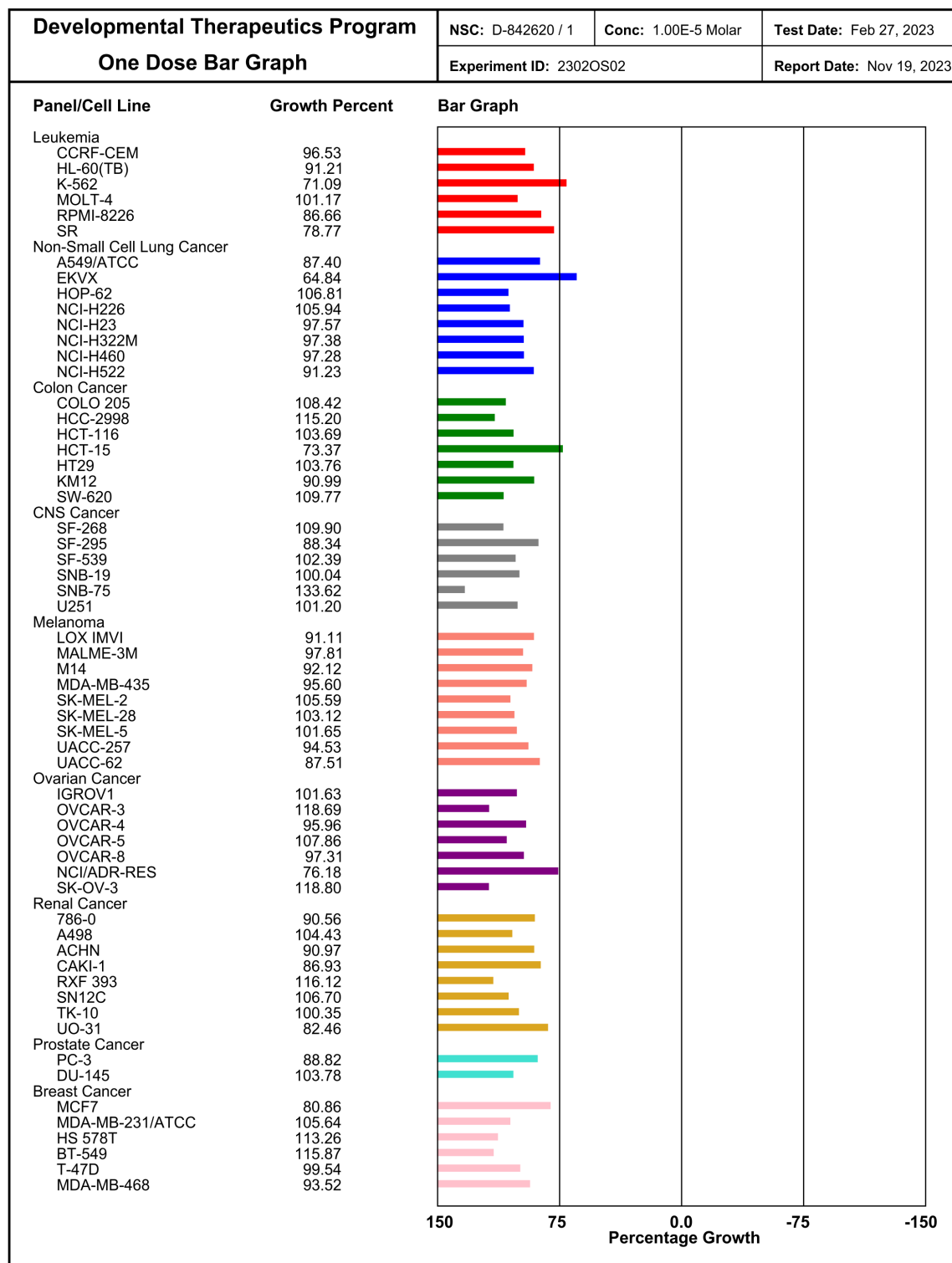


Figure S2. The growth % of analogue **20** against a panel of cancer cells.

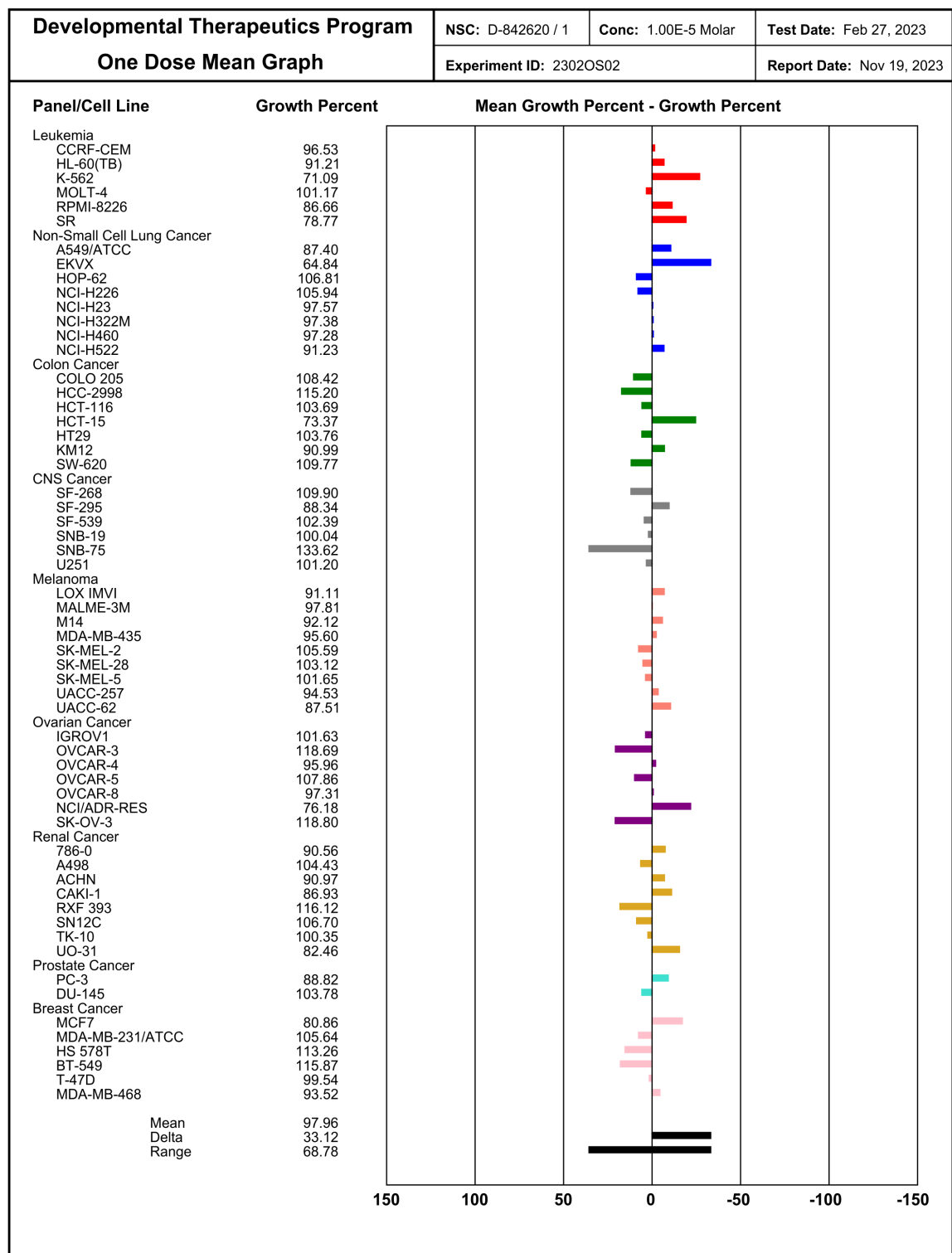


Figure S3. The mean growth % of analogue 20 against a panel of cancer cells.

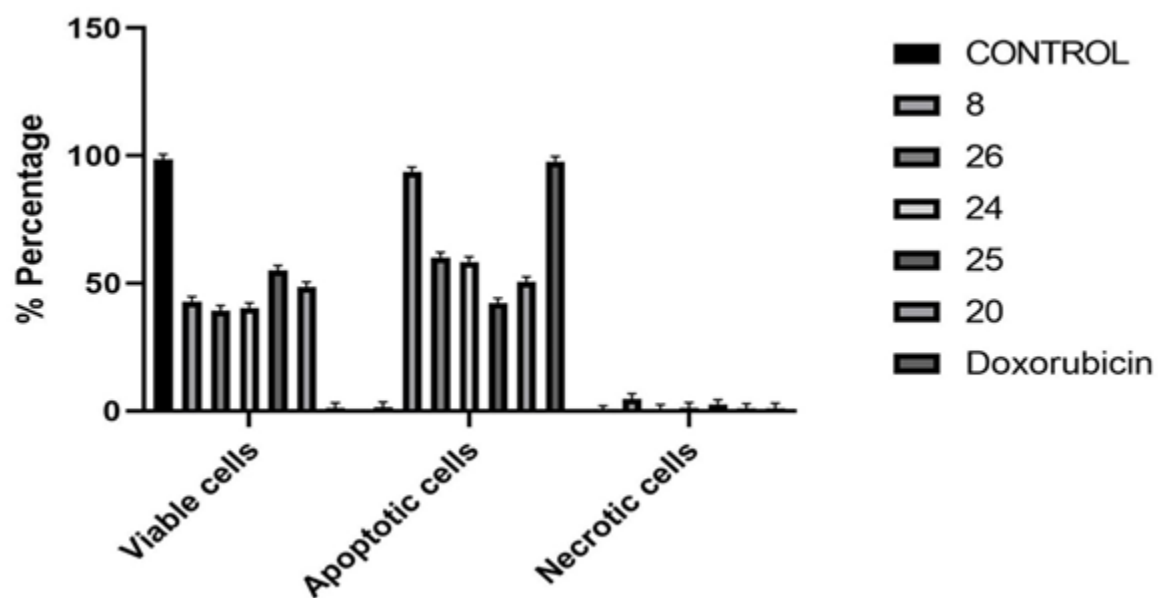


Figure S4. The effect of control, Doxorubicin, 8, 24, 25, and 26 on apoptosis induction in HCT-116 cells.