

Ponatinib and gossypol act in synergy to suppress colorectal cancer cells by modulating apoptosis/autophagy crosstalk and inhibiting the FGF19/FGFR4 axis

Running title: Ponatinib combined with gossypol suppresses colorectal cancer cells

Naglaa M. El-Lakkany^{1*}, Hadeel H. Elkattan¹, Alaa E. Elsis²

¹Department of Pharmacology, Theodor Bilharz Research Institute, Warrak El-Hadar, Imbaba, Giza 12411, Egypt

²Department of Pharmacology and Toxicology, Faculty of Pharmacy, Tanta University, Tanta, Egypt

Corresponding Author:

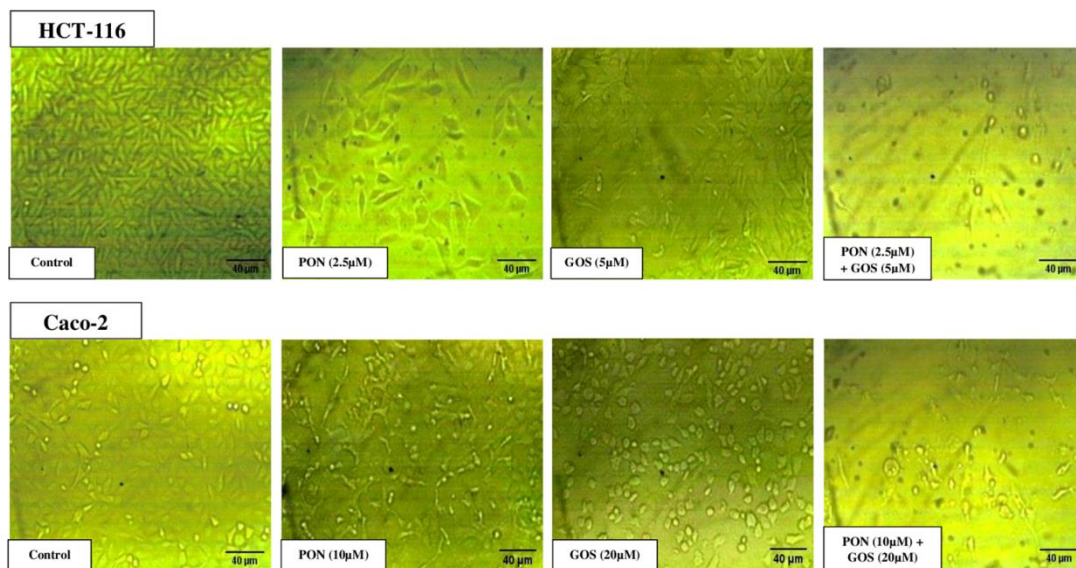
Prof. Dr./ Naglaa M. El-Lakkany

Postal address: 1 El-Nile St., Warrak El-Hadar, Imbaba P. O. Box 30, Giza 12411, Egypt.

Postal code: Giza 12411

Fax No.: 00202 35408125

E-mails: n.ellakkany@tbri.gov.eg & naglaellakkany@gmail.com



Supplementary Figure. Effect of ponatinib and/or gossypol on HCT-116 and Caco-2 morphological changes after 48 h. Treatment with PON (IC_{50}), GOS (IC_{50}) or a combination of both induced morphological changes characteristic of cell death, particularly in combination (magnification: $\times 10$). PON: ponatinib, GOS: gossypol.