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The use of natural compounds for the targeting and chemoprevention of ovarian cancer

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1 **The use of natural compounds for the targeting and chemoprevention of ovarian**
2 **cancer¹**

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22 Running title: Natural products and ovarian cancer.

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¹ Abbreviations: ABCG2, ATP-binding cassette G2; AE, Amla extracts; Akt, protein kinase B; ALDH1, aldehyde dehydrogenase 1; ARE, antioxidant-response element; ARHI, Aplasia Ras homolog member I; AP1, activator protein 1; Bax, Bcl2 associated X protein; Bcl2, B-cell lymphoma 2; CAIX (and CA9), carbonic anhydrase protein 9; Cdk, cyclin-dependent kinase; CSC, cancer stem-like cell; CXCR4, C-X-C chemokine receptor type 4; CXCL12, CXC chemokine ligand 12; DFOG, 7-difluoromethoxyl-5,4'-di-n-octylgenistein; EGCG, epigallocatechin 3-gallate; EGFR, epidermal growth factor receptor; EpCAM, epithelial cell adhesion antigen; ERK 1/2, extracellular signal-regulated kinase 1/2; FOXO3a, forkhead box O3a; GSK-3 β , glycogen synthase kinase-3 β ; HIF-1 α , hypoxia inducible factor 1 α ; IL, interleukin; IRF1, interferon-regulatory factor 1; LPA, lysophosphatidic acid; MAPK, mitogen activated protein kinases; mTOR, mammalian target of rapamycin; MMPs, matrix metalloproteinases; MYD88, myeloid differentiation primary response gene 88; Oct4, octamer-binding transcription factor 4; PARP, poly(ADP)ribose polymerase; Pax6, paired box 6; PI3K, phosphoinositide 3-kinase; pro-MMP2, pro-matrix metalloproteinase 2; Rho A, Ras homologue A; ROS, reactive oxygen species; SERCA, sarco/endoplasmic reticulum calcium ATPase; STAT3, signal transducers and activators of transcription 3; TF3, theaflavin-3, 3'-digallate; TNF- α , tumor necrosis factor α ; TRAIL, TNF receptor apoptosis-inducing ligand; VEGFA, vascular endothelial growth factor A; WFA, Withaferin-A; XRE, xenobiotic-response element.

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