



Supplementary Materials

Article

# Bioprospecting of natural compounds from Brazilian Cerrado biome plants in human cervical cancer cell lines

Marcela N. Rosa<sup>1</sup>, Larissa R. V. e Silva<sup>1</sup>, Giovanna B. Longato<sup>1,2</sup>, Adriane F. Evangelista<sup>1</sup>, Izabela N. F. Gomes<sup>1</sup>, Ana Laura V. Alves<sup>1</sup>, Bruno G. de Oliveira<sup>3</sup>, Fernanda E. Pinto<sup>3</sup>, Wanderson Romão<sup>3</sup>, Allisson R. de Rezende<sup>4</sup>, Arali A. C. Araújo<sup>4</sup>, Lohanna S. F. M. Oliveira<sup>5</sup>, Alessandra A. de M. Souza<sup>5</sup>, Stephanie C. Oliveira<sup>5</sup>, Rosy Iara M. de A. Ribeiro<sup>5</sup>, Viviane A. O. Silva<sup>1</sup>, Rui M. Reis<sup>1,6,7\*</sup>

<sup>1</sup> Molecular Oncology Research Center, Barretos Cancer Hospital, Barretos, São Paulo, Brazil; nr.marcela2@gmail.com (M.N.R.); larirussoveloso@yahoo.com.br (L.R.V.S.); adriane.feijo@gmail.com (A.F.E.); izabela.faria.tk@hotmail.com (I.N.F.G.); alves.anav@gmail.com (A.L.V.A.); vivianeaos@gmail.com (V.A.O.S)

<sup>2</sup> Research Laboratory in Molecular Pharmacology and Bioactive Compounds, São Francisco University, Bragança Paulista, São Paulo, Brazil; giovanna.longato@usf.edu.br (G.B.L.)

<sup>3</sup> Petroleomic and Forensic Laboratory, Chemistry Department, Federal University of Espírito Santo, Vitória, ES, Brazil; brunoliveir\_ra20@msn.com (B.G.O.); fernandapinto80@gmail.com (F.E.P.); wandersonromao@gmail.com (W.R.)

<sup>4</sup> University of the state of Minas Gerais (UEMG), Ituiutaba, MG, Brazil; rodrigues.allisson@gmail.com (A.R.R.); arali.dacov@gmail.com (A.A.C.A.)

<sup>5</sup> Laboratory of Experimental Pathology, Federal University of São João del Rei—CCO/UFSJ, Divinópolis, Brazil; loh.franca@gmail.com (L.S.F.M.O.); aleapms@gmail.com (A.A.M.S.); rosy@ufs.edu.br (R.I.M.A.R.)

<sup>6</sup> Life and Health Sciences Research Institute (ICVS), School of Medicine, University of Minho, Braga, Portugal;

<sup>7</sup> ICVS/3B's- PT Government Associate Laboratory, Braga/Guimarães, Portugal;

\* Correspondence: ruireis.hcb@gmail.com; Tel.: +55 173 321 6600;



**Table S1 (Supplementary Materials) Cell lines.**

Cell line	Tissue	Histologic type	Gender	Age	Supplier	Culture medium*
1 HaCat <sup>#</sup>	Skin	Keratinocyte	Male	62	ATCC	DMEM
2 C33A <sup>#</sup>	Uterine cervix	Squamous cell carcinoma	Female	66	ATCC	DMEM
3 HtTA-1	Uterine cervix	Adenocarcinoma	Female	31	ECACC	DMEM
4 HR5	Uterine cervix	Adenocarcinoma	Female	31	ECACC	DMEM
5 HR5-CL11	Uterine cervix	Adenocarcinoma	Female	31	ECACC	DMEM
6 Bu25TK	Uterine cervix	Adenocarcinoma	Female	31	ECACC	DMEM
7 C4-I	Uterine cervix	Squamous cell carcinoma	Female	41	ECACC	DMEM

\*Medium was supplemented with 1% Penicillin/Streptomycin and 10% fetal bovine serum (FBS). ATCC (American Type Culture Collection). ECACC (European Collection of Authenticated Cell Cultures). <sup>#</sup>Kindly provided by Dra. Luisa Lina Villa.

**Table S2 (Supplementary Materials) IC<sub>50</sub> values (µg/mL)<sup>a</sup> of all crude extracts in human cell lines.**

Crude extracts or chemotherapeutic	Uterine cervix cancer cells					Normal cells
	HR5	HR5-CL11	HtTA-1	Bu25TK	C33	HaCat
<i>Tapirira guianensis</i> (1)	49.25 ± 13.38	37.19 ± 21.66	27.65 ± 11.30	48.91 ± 1.31	-	-
<i>Astronium fraxinifolium</i> (2)	133.50 ± 36.84	82.54 ± 14.96	90.17 ± 6.94	108.40 ± 5.44	-	-
<i>Xylopia aromatica</i> (3)	38.67 ± 11.91	39.78 ± 8.41	13.81 ± 11.44	29.23 ± 10.72	-	-
<i>Ammonia crassiflora</i> (7)	14.60 ± 1.63	15.36 ± 1.92	2.70 ± 0.99	13.97 ± 0.04	-	64.73 ± 5.9
<i>Siparuna guianensis</i> (8)	-	-	-	-	37.91 ± 15.80	-
<i>Achyrocline alata</i> (10)	-	-	24.65 ± 13.55	-	-	-
<i>Bauhinia variegata</i> (14-I)	-	-	50.36 ± 9.17	-	-	-
<i>Bauhinia variegata candida</i> (15-I)	-	-	73.52 ± 7.86	-	-	-
<i>Bauhinia unguolata</i> (16-I)	-	-	153.50 ± 35.85	-	-	-
<i>Miconia cuspidata</i> (17)	-	-	-	-	66.80 ± 0.00	-
<i>Miconia albicans</i> (18)	-	-	-	-	40.65 ± 5.06	-
<i>Miconia chamissois</i> (19)	-	-	-	-	33.53 ± 0.13	-
<i>Stryphnodendron adstringens</i> (21-I)	-	-	25.09 ± 11.38	-	-	92.07 ± 2.35
Cisplatin	N.D.	1.98 ± 0.03	18.55 ± 3.60	12.3 ± 0.99	-	4.6 ± 1.48

<sup>a</sup> Values represent mean ± S.D. - (Not tested).