

APPENDIX III: *IN VITRO* CYTOTOXICITY

a) CaSki Cell Line

Compounds	Concentrations (μM)				
	0	0.1	1	10	100
Prunasin 6'- <i>O</i> -gallate (1)	100.00 \pm 5.74	87.75 \pm 4.80	89.81 \pm 2.70	79.67 \pm 4.90	77.26 \pm 6.13
Prunasin 2',6'-di- <i>O</i> -gallate (2)	100.00 \pm 5.74	88.35 \pm 7.29	96.99 \pm 0.97	80.12 \pm 2.35	66.82 \pm 3.52
Prunasin 3',6'-di- <i>O</i> -gallate (3)	100.00 \pm 8.42	101.75 \pm 8.40	96.18 \pm 3.58	87.93 \pm 6.09	85.83 \pm 9.17
Prunasin 4',6'-di- <i>O</i> -gallate (4)	100.00 \pm 8.42	106.44 \pm 4.34	96.91 \pm 8.04	91.18 \pm 6.54	88.06 \pm 3.81
Prunasin 2',3',6'-tri- <i>O</i> -gallate (5)	100.00 \pm 5.74	102.96 \pm 5.77	89.41 \pm 2.99	86.45 \pm 7.03	62.40 \pm 0.70
Prunasin 3',4',6'-tri- <i>O</i> -gallate (6)	100.00 \pm 5.74	84.19 \pm 5.88	71.54 \pm 4.53	68.98 \pm 2.81	64.61 \pm 2.56
Prunasin 2',3',4',6'-tetra- <i>O</i> -gallate (7)	100.00 \pm 5.74	95.78 \pm 3.18	86.04 \pm 5.46	82.08 \pm 4.03	74.70 \pm 5.40
6- <i>O</i> -Galloyl-D-glucose (8)	100.00 \pm 5.74	76.56 \pm 6.78	69.23 \pm 0.75	64.86 \pm 7.43	59.89 \pm 2.77
3, 6-Di- <i>O</i> -galloyl-D-glucose (9)	100.00 \pm 5.74	72.29 \pm 7.50	68.88 \pm 5.88	67.27 \pm 3.54	66.67 \pm 3.14
1,2,3-Tri- <i>O</i> -galloyl- β -D-glucose (10)	100.00 \pm 5.74	70.98 \pm 5.19	67.67 \pm 9.96	68.42 \pm 1.94	64.01 \pm 6.86
1,4,6-Tri- <i>O</i> -galloyl- β -D-glucose (11)	100.00 \pm 5.74	97.29 \pm 7.16	91.42 \pm 5.21	79.92 \pm 7.50	79.97 \pm 3.49
3,4,6-Tri- <i>O</i> -galloyl-D-glucose (12)	100.00 \pm 8.42	85.32 \pm 3.98	71.28 \pm 2.40	67.45 \pm 5.45	67.36 \pm 3.75
1,2,3,6-Tetra- <i>O</i> -galloyl- β -D-glucose (13)	100.00 \pm 8.42	78.73 \pm 4.20	80.07 \pm 9.99	71.28 \pm 3.07	73.92 \pm 5.05
1,2,3,4,6-Penta- <i>O</i> -galloyl- β -D-glucose (14)	100.00 \pm 8.42	70.22 \pm 7.82	63.35 \pm 5.59	63.22 \pm 2.61	61.56 \pm 1.87

6- <i>O</i> -Galloyl-2,3- <i>O</i> -(<i>S</i>)- hexahydroxydiphenoyl-D-glucose (15)	100.00 ± 8.42	67.77 ± 5.14	62.74 ± 4.62	60.22 ± 6.00	56.24 ± 3.89
Praecoxin B (16)	100.00 ± 8.42	72.01 ± 3.81	67.14 ± 5.18	64.49 ± 7.54	56.28 ± 1.67
Pterocarinin C (17)	100.00 ± 5.74	63.28 ± 1.95	63.00 ± 4.61	61.91 ± 4.46	50.73 ± 2.07
Casuarinin (18)	100.00 ± 5.74	100.10 ± 5.92	85.49 ± 4.19	95.68 ± 7.29	86.04 ± 5.08
3'- <i>O</i> -Methyl-3,4-methylenedioxyellagic acid 4'- <i>O</i> -β-D-glucopyranoside (19)	100.00 ± 8.42	110.32 ± 3.91	72.77 ± 1.48	65.80 ± 0.64	37.58 ± 0.74
3,3',4-Tri- <i>O</i> -methylellagic acid 4'- <i>O</i> -β-D- glucopyranoside (20)	100.00 ± 8.42	82.42 ± 0.47	69.78 ± 2.83	62.58 ± 1.58	35.80 ± 0.86
Gallic acid (21)	100.00 ± 5.74	72.29 ± 6.13	70.73 ± 6.79	73.09 ± 3.37	32.28 ± 1.33
Gallic acid methyl ester (22)	100.00 ± 5.74	73.80 ± 1.34	84.49 ± 1.68	79.59 ± 3.22	61.30 ± 6.43
Camptothecin (Positive Control)	100.00 ± 8.42	63.67 ± 1.98	60.20 ± 0.39	46.52 ± 1.75	27.05 ± 1.61

b) HCT 116 Cell Line

Compounds	Concentrations (μM)				
	0	0.1	1	10	100
Prunasin 6'- <i>O</i> -gallate (1)	100.00 \pm 3.31	101.35 \pm 4.34	92.59 \pm 5.87	98.59 \pm 7.16	62.63 \pm 2.39
Prunasin 2',6'-di- <i>O</i> -gallate (2)	100.00 \pm 3.31	97.75 \pm 1.06	101.10 \pm 1.59	90.54 \pm 3.32	36.34 \pm 3.11
Prunasin 3',6'-di- <i>O</i> -gallate (3)	100.00 \pm 3.31	96.98 \pm 1.12	83.60 \pm 1.76	74.93 \pm 3.45	49.78 \pm 0.84
Prunasin 4',6'-di- <i>O</i> -gallate (4)	100.00 \pm 3.31	96.30 \pm 0.26	88.58 \pm 3.53	73.95 \pm 0.89	35.27 \pm 1.74
Prunasin 2',3',6'-tri- <i>O</i> -gallate (5)	100.00 \pm 3.31	104.18 \pm 1.75	101.52 \pm 3.26	70.08 \pm 4.40	37.25 \pm 3.44
Prunasin 3',4',6'-tri- <i>O</i> -gallate (6)	100.00 \pm 3.31	97.87 \pm 4.82	98.99 \pm 4.33	97.87 \pm 1.66	38.96 \pm 2.40
Prunasin 2',3',4',6'-tetra- <i>O</i> -gallate (7)	100.00 \pm 3.31	98.71 \pm 1.86	96.45 \pm 0.78	97.20 \pm 1.01	32.37 \pm 0.46
6- <i>O</i> -Galloyl-D-glucose (8)	100.00 \pm 3.31	99.75 \pm 0.77	94.87 \pm 1.95	98.16 \pm 1.77	85.56 \pm 4.56
3, 6-Di- <i>O</i> -galloyl-D-glucose (9)	100.00 \pm 3.31	92.07 \pm 3.38	85.77 \pm 2.20	85.46 \pm 7.89	41.53 \pm 5.71
1,2,3-Tri- <i>O</i> -galloyl- β -D-glucose (10)	100.00 \pm 3.31	111.00 \pm 2.06	106.91 \pm 3.66	106.93 \pm 2.23	106.30 \pm 2.35
1,4,6-Tri- <i>O</i> -galloyl- β -D-glucose (11)	100.00 \pm 3.31	91.21 \pm 1.90	88.61 \pm 1.55	78.01 \pm 1.32	41.44 \pm 1.95
3,4,6-Tri- <i>O</i> -galloyl-D-glucose (12)	100.00 \pm 3.31	103.27 \pm 3.41	92.09 \pm 2.62	92.19 \pm 0.84	39.00 \pm 5.14
1,2,3,6-Tetra- <i>O</i> -galloyl- β -D-glucose (13)	100.00 \pm 3.31	96.27 \pm 2.09	88.92 \pm 3.99	86.65 \pm 3.65	30.30 \pm 1.80
1,2,3,4,6-Penta- <i>O</i> -galloyl- β -D-glucose (14)	100.00 \pm 3.31	97.06 \pm 1.35	98.10 \pm 2.84	92.55 \pm 3.05	36.21 \pm 1.89
6- <i>O</i> -Galloyl-2,3- <i>O</i> -(<i>S</i>)- hexahydroxydiphenoyl-D-glucose (15)	100.00 \pm 3.31	90.48 \pm 2.35	89.00 \pm 6.96	86.13 \pm 2.38	42.65 \pm 3.42
Praecoxin B (16)	100.00 \pm 3.31	92.54 \pm 5.77	88.64 \pm 1.16	83.81 \pm 3.09	33.32 \pm 0.95

Pterocarinin C (17)	100.00 ± 3.31	92.27 ± 3.89	89.75 ± 3.84	89.23 ± 1.44	33.09 ± 1.91
Casuarinin (18)	100.00 ± 3.31	102.50 ± 0.57	102.05 ± 1.39	98.50 ± 1.29	25.68 ± 0.68
3'- <i>O</i> -Methyl-3,4-methylenedioxyellagic acid 4'- <i>O</i> -β-D-glucopyranoside (19)	100.00 ± 3.31	92.52 ± 4.37	89.28 ± 4.55	89.62 ± 1.17	7.73 ± 1.37
3,3',4-Tri- <i>O</i> -methylellagic acid 4'- <i>O</i> -β-D-glucopyranoside (20)	100.00 ± 3.31	93.23 ± 0.47	92.09 ± 2.83	81.59 ± 1.58	5.04 ± 0.86
Gallic acid (21)	100.00 ± 3.31	99.11 ± 3.84	106.00 ± 3.15	91.33 ± 3.74	43.90 ± 2.19
Gallic acid methyl ester (22)	100.00 ± 3.31	95.75 ± 2.38	100.55 ± 3.85	82.05 ± 2.55	51.26 ± 2.18
Camptothecin (Positive Control)	100.00 ± 3.31	76.88 ± 0.83	50.19 ± 1.50	36.22 ± 1.62	17.65 ± 1.73

c) MCF 7 Cell Line

Compounds	Concentrations (μM)				
	0	0.1	1	10	100
Prunasin 6'- <i>O</i> -gallate (1)	100 \pm 3.63	84.41 \pm 6.23	92.30 \pm 4.11	89.30 \pm 2.55	88.37 \pm 1.46
Prunasin 2',6'-di- <i>O</i> -gallate (2)	100 \pm 3.63	93.33 \pm 2.67	79.12 \pm 1.05	82.36 \pm 5.03	88.83 \pm 0.89
Prunasin 3',6'-di- <i>O</i> -gallate (3)	100 \pm 3.63	91.01 \pm 1.53	87.28 \pm 2.22	85.56 \pm 2.50	75.65 \pm 3.02
Prunasin 4',6'-di- <i>O</i> -gallate (4)	100 \pm 3.63	93.36 \pm 0.35	83.15 \pm 2.55	67.53 \pm 3.58	51.24 \pm 2.03
Prunasin 2',3',6'-tri- <i>O</i> -gallate (5)	100 \pm 3.63	95.01 \pm 3.34	100.43 \pm 0.96	93.82 \pm 1.55	99.97 \pm 1.98
Prunasin 3',4',6'-tri- <i>O</i> -gallate (6)	100 \pm 3.63	96.23 \pm 4.01	82.33 \pm 3.65	69.24 \pm 1.21	62.14 \pm 1.53
Prunasin 2',3',4',6'-tetra- <i>O</i> -gallate (7)	100 \pm 3.63	93.79 \pm 2.50	80.74 \pm 1.80	87.31 \pm 0.77	82.19 \pm 2.51
6- <i>O</i> -Galloyl-D-glucose (8)	100 \pm 3.63	100.00 \pm 2.44	99.31 \pm 3.45	90.78 \pm 3.12	79.85 \pm 0.70
3, 6-Di- <i>O</i> -galloyl-D-glucose (9)	100 \pm 3.63	104.36 \pm 2.38	88.01 \pm 2.02	77.27 \pm 2.46	73.84 \pm 3.57
1,2,3-Tri- <i>O</i> -galloyl- β -D-glucose (10)	100 \pm 3.63	101.16 \pm 0.93	94.28 \pm 2.21	87.78 \pm 0.88	89.63 \pm 0.75
1,4,6-Tri- <i>O</i> -galloyl- β -D-glucose (11)	100 \pm 3.63	99.31 \pm 2.66	103.01 \pm 1.53	86.16 \pm 2.66	78.99 \pm 1.03
3,4,6-Tri- <i>O</i> -galloyl-D-glucose (12)	100 \pm 3.63	101.65 \pm 3.24	101.59 \pm 1.44	101.16 \pm 1.06	100.13 \pm 2.27
1,2,3,6-Tetra- <i>O</i> -galloyl- β -D-glucose (13)	100 \pm 3.63	102.44 \pm 1.77	86.12 \pm 1.95	78.63 \pm 0.63	73.93 \pm 2.29
1,2,3,4,6-Penta- <i>O</i> -galloyl- β -D-glucose (14)	100 \pm 3.63	99.01 \pm 3.43	86.79 \pm 2.16	84.84 \pm 1.84	81.37 \pm 1.03
6- <i>O</i> -Galloyl-2,3- <i>O</i> -(<i>S</i>)- hexahydroxydiphenoyl-D-glucose (15)	100 \pm 3.63	99.60 \pm 2.46	98.35 \pm 3.14	90.49 \pm 1.22	76.15 \pm 2.59
Praecoxin B (16)	100 \pm 3.63	99.77 \pm 1.11	98.48 \pm 3.39	99.34 \pm 3.28	83.35 \pm 1.80

Pterocarinin C (17)	100 ± 3.63	99.94 ± 1.38	95.24 ± 2.05	90.06 ± 2.25	82.06 ± 0.62
Casuarinin (18)	100 ± 3.63	87.68 ± 2.12	84.61 ± 2.29	87.64 ± 3.20	72.91 ± 1.51
3'- <i>O</i> -Methyl-3,4-methylenedioxyellagic acid 4'- <i>O</i> -β-D-glucopyranoside (19)	100 ± 3.63	97.82 ± 3.87	92.63 ± 4.02	88.17 ± 2.69	77.67 ± 0.64
3,3',4-Tri- <i>O</i> -methylellagic acid 4'- <i>O</i> -β-D-glucopyranoside (20)	100 ± 3.63	101.45 ± 2.26	86.03 ± 2.10	70.23 ± 3.23	64.19 ± 2.46
Gallic acid (21)	100 ± 3.63	87.97 ± 2.81	85.20 ± 1.64	95.87 ± 1.54	28.44 ± 3.12
Gallic acid methyl ester (22)	100 ± 3.63	94.05 ± 0.87	87.02 ± 2.55	91.44 ± 3.56	73.64 ± 0.81
Camptothecin (Positive Control)	100 ± 3.63	86.49 ± 0.57	63.59 ± 0.87	44.17 ± 0.87	23.03 ± 0.87