

Supp. 3: Mean ( $\pm$ SD) inhibition percentage and half maximal inhibition ( $IC_{50}$ ) values for 5- fluorouracil, cisplatin and doxorubicin treated colorectal cancer cells in 2D and 3D culture models ( $n = 6$ ).

**Caco-2**

Drug	Conc. $\mu\text{g mL}^{-1}$	2D			$IC_{50}$ 2D	3D			$IC_{50}$ 3D	Sig.
		Mean ( $\pm$ SD) Inhibition (%)				Mean ( $\pm$ SD) Inhibition (%)				
5FU	500	63.5	$\pm$	2.3	18.2	53.5	$\pm$	1.3	100.6	**
	250	61.5	$\pm$	1.4		49.5	$\pm$	1.3		**
	125	59.7	$\pm$	2.4		41.5	$\pm$	1.6		**
	62.5	55.5	$\pm$	1.9		6.6	$\pm$	1.2		**
	33.3	39.9	$\pm$	1.7		4.5	$\pm$	1.8		**
	16.6	10.0	$\pm$	1.3		3.9	$\pm$	1.2		**
Cisplatin	1000	89.8	$\pm$	2.2	107.0	81.8	$\pm$	1.9	315.9	**
	500	90.3	$\pm$	2.4		74.7	$\pm$	2.5		**
	250	82.2	$\pm$	2.5		36.8	$\pm$	1.7		**
	125	52.1	$\pm$	2.7		24.2	$\pm$	1.7		**
	62.5	31.6	$\pm$	2.1		24.8	$\pm$	1.8		**
	33.3	22.8	$\pm$	1.9		25.4	$\pm$	1.2		NS
	16.6	5.0	$\pm$	1.5		4.7	$\pm$	1.1		NS
Doxorubicin	250	77.2	$\pm$	1.3	27.1	57.3	$\pm$	1.5	47.6	**
	125	76.4	$\pm$	1.5		54.1	$\pm$	1.2		**
	62.5	73.7	$\pm$	1.6		43.7	$\pm$	1.9		**
	31.3	57.6	$\pm$	1.5		11.3	$\pm$	1.2		**
	15.6	8.7	$\pm$	1.5		4.5	$\pm$	1.7		*
	7.8	7.6	$\pm$	1.6		3.3	$\pm$	1.4		*

**HCT-116**

Drug	Conc. $\mu\text{g mL}^{-1}$	2D			$IC_{50}$ 2D	3D			$IC_{50}$ 3D	Sig.
		Mean ( $\pm$ SD) Inhibition (%)				Mean ( $\pm$ SD) Inhibition (%)				
5FU	500	90.3	$\pm$	2.2	69.7	79.0	$\pm$	2.2	207.9	**
	250	89.8	$\pm$	2.2		60.4	$\pm$	0.9		**
	125	79.2	$\pm$	2.5		26.6	$\pm$	1.4		**
	62.5	51.1	$\pm$	1.9		19.7	$\pm$	2.3		**
	33.3	30.6	$\pm$	1.9		18.9	$\pm$	1.8		**
	16.6	22.8	$\pm$	3.2		18.4	$\pm$	1.8		NS
Cisplatin	1000	82.7	$\pm$	1.7	115.4	74.7	$\pm$	1.9	319.5	**
	500	83.2	$\pm$	1.5		67.6	$\pm$	2.4		**
	250	75.0	$\pm$	2.3		29.6	$\pm$	1.9		**

	125	44.0	±	1.8		17.1	±	1.7		**
	62.5	23.5	±	1.3		17.7	±	1.5		**
	33.3	15.7	±	1.4		18.3	±	1.9		NS
	16.6	1.0	±	1.9		2.9	±	1.8		NS
<b>Doxorubicin</b>	250	96.0	±	2.1	<b>34.5</b>	88.0	±	1.8	<b>82.9</b>	**
	125	96.5	±	1.9		80.9	±	1.3		**
	62.5	88.4	±	1.7		43.0	±	1.9		**
	31.3	57.3	±	1.4		30.4	±	2.7		**
	15.6	36.8	±	1.9		31.0	±	1.9		**
	7.8	29.0	±	2.4		31.6	±	1.8		NS

### SW-480

Drug	Conc. $\mu\text{g mL}^{-1}$	2D Mean ( $\pm$ SD) Inhibition (%)		IC <sub>50</sub> 2D	3D Mean ( $\pm$ SD) Inhibition (%)		IC <sub>50</sub> 3D	Sig.
<b>5FU</b>	500.0	80.2	± 1.7	<b>51.7</b>	56.1	± 1.9	<b>88.7</b>	**
	250.0	79.3	± 2.1		50.0	± 2.1		**
	125.0	71.5	± 1.9		40.2	± 2.0		**
	62.5	53.6	± 2.2		28.8	± 1.7		**
	33.3	36.1	± 0.9		17.7	± 1.6		**
	16.6	21.8	± 1.3		13.0	± 1.5		**
<b>Cisplatin</b>	1000.0	56.3	± 2.2	<b>53.8</b>	50.0	± 1.4	<b>199.3</b>	**
	500.0	56.3	± 1.8		45.0	± 1.7		**
	250.0	56.3	± 1.7		38.0	± 2.0		**
	125.0	51.0	± 1.9		10.0	± 2.3		**
	62.5	36.4	± 2.1		6.5	± 1.9		**
	33.3	6.5	± 1.9		6.5	± 1.6		NS
	16.6	0.7	± 1.7		6.4	± 1.5		*
<b>Doxorubicin</b>	500.0	79.6	± 1.4	<b>55.3</b>	59.8	± 2.6	<b>95.8</b>	**
	250.0	79.8	± 1.9		56.6	± 1.6		**
	125.0	77.1	± 2.4		46.1	± 1.9		**
	62.5	60.0	± 2.0		13.7	± 2.1		**
	33.3	11.1	± 1.0		6.9	± 2.3		*
	16.6	10.0	± 1.9		5.7	± 1.8		*

LS174T

Drug	Conc. µg mL <sup>-1</sup>	2D Mean (±SD) Inhibition (%)			IC <sub>50</sub> 2D	3D Mean (±SD) Inhibition (%)			IC <sub>50</sub> 3D	Sig.
5FU	500	76.0	±	1.4	69.7	58.3	±	1.4	207.9	**
	250	75.1	±	1.7		56.5	±	1.6		**
	125	67.2	±	2.1		51.3	±	1.9		**
	62.5	49.4	±	1.6		32.4	±	2.4		**
	33.3	31.8	±	1.5		12.2	±	1.2		**
	16.6	17.6	±	1.3		9.8	±	1.6		**
Cisplatin	1000	60.0	±	1.7	115.4	50.0	±	2.5	319.5	**
	500	58.0	±	1.4		46.0	±	2.6		**
	250	56.3	±	1.9		38.0	±	1.5		**
	125	52.0	±	1.2		3.1	±	1.7		**
	62.5	36.4	±	2.1		1.0	±	2.1		**
	33.3	6.5	±	2.2		0.5	±	1.3		**
	16.6	0.7	±	1.4		0.0	±	1.6		NS
Doxorubicin	250	85.1	±	1.5	34.5	77.1	±	1.5	82.9	**
	125	85.6	±	1.9		70.0	±	1.3		**
	62.5	77.5	±	1.5		32.1	±	1.6		**
	31.3	46.5	±	1.3		19.5	±	1.4		**
	15.6	25.9	±	2.2		20.1	±	1.8		**
	7.8	18.1	±	1.6		20.7	±	1.2		NS

HCT-8

Drug	Conc. µg mL <sup>-1</sup>	2D Mean (±SD) Inhibition (%)			IC <sub>50</sub> 2D	3D Mean (±SD) Inhibition (%)			IC <sub>50</sub> 3D	Sig.
5FU	500	66.3	±	2.3	88.59	61.1	±	1.3	59.31	**
	250	61.7	±	1.4		59.2	±	1.3		NS
	125	46.9	±	2.4		54.0	±	1.6		**
	62.5	22.9	±	1.9		38.2	±	1.2		**
	33.3	10.3	±	1.7		18.0	±	1.8		**
	16.6	3.57	±	1.3		12.5	±	1.2		**
Cisplatin	1000	62.5	±	2.2	54.44	59.2	±	1.9	172.70	NS
	500	60.5	±	2.4		55.2	±	2.5		*
	250	58.7	±	2.5		47.2	±	1.7		**
	125	54.5	±	2.7		22.4	±	1.7		**
	62.5	38.9	±	2.1		13.2	±	1.8		**
	33.3	8.98	±	1.9		9.7	±	1.2		NS

	16.6	3.12	±	1.5		9.2	±	1.1		**
<b>Doxorubicin</b>	250	83.4	±	1.3	<b>34.53</b>	79.9	±	1.5	<b>107.40</b>	*
	125	83.9	±	1.5		59.4	±	1.2		**
	62.5	75.8	±	1.6		25.5	±	1.9		**
	31.3	44.8	±	1.5		18.2	±	1.2		**
	15.6	24.2	±	1.5		18.6	±	1.7		**
	7.8	16.4	±	1.6		18.9	±	1.4		NS