

## Resveratrol potentiates the *in vitro* and *in vivo* anti-tumoral effects of curcumin in head and neck carcinomas

### Supplementary Material

Supplementary Table 1: Effect of water in BALB/c mice: complete blood count (CBC) and clinical chemistry parameters.

CBC	Reference values	Mean $\pm$ SD pre-treatment	Mean $\pm$ SD 4 weeks post- injection
RBC ( $10^6/\text{mm}^3$ )	6.0-12.0	10.9 $\pm$ 0.5	11.2 $\pm$ 1.1
MCV ( $\mu\text{m}^3$ )	43.0-58.0	45.8 $\pm$ 0.6	46 $\pm$ 0.5
HCT (%)	35.0-60.0	50.1 $\pm$ 1.9	51.7 $\pm$ 4.7
PLT ( $10^3/\text{mm}^3$ )	250-1200	956.3 $\pm$ 57.7	1106.7 $\pm$ 187.6
MPV ( $\mu\text{m}^3$ )	4.0-7.0	6 $\pm$ 0.3	5.8 $\pm$ 0.1
WBC ( $10^3/\text{mm}^3$ )	5.0-12.0	9.4 $\pm$ 0.3	22.1 $\pm$ 2.9
HGB (g/dl)	9.0-19.0	16 $\pm$ 0.7	15.8 $\pm$ 1.6
MCH (Pg)	15.0-19.0	14.7 $\pm$ 0.1	14.1 $\pm$ 1.1
MCHC (g/dl)	34.0-39.0	32 $\pm$ 0.4	30.6 $\pm$ 2.1
RDW (%)	0-99.9	14.8 $\pm$ 0.4	16.5 $\pm$ 1
LYM (%)	50.0-75.0	54.5 $\pm$ 7	11.8 $\pm$ 5.8
MID (%)	5.0-15.0	7.8 $\pm$ 1.6	5.7 $\pm$ 0.6
GRAN (%)	15.0-40.0	37.8 $\pm$ 7.2	84.2 $\pm$ 8.7
LYM ( $10^3/\text{mm}^3$ )	4.0-10.0	5.2 $\pm$ 0.9	2.3 $\pm$ 1.9
MID ( $10^3/\text{mm}^3$ )	0-2.0	0.7 $\pm$ 0.2	0.9 $\pm$ 0.7
GRAN ( $10^3/\text{mm}^3$ )	0.5-6.0	3.5 $\pm$ 0.6	18.3 $\pm$ 2.5
PCT (%)	0-99.9	0.6 $\pm$ 0	0.6 $\pm$ 0.1
PDW (%)	0-99.9	9 $\pm$ 0.5	8.6 $\pm$ 0.2
<b>Clinical Chemistry</b>			
CHOL (mg/dl)	50-120	118 $\pm$ 46.5	133 $\pm$ 17.1
TRI (mg/dl)	80-200	158 $\pm$ 79.5	205 $\pm$ 6.2
GOT (U/l)	20-250	125 $\pm$ 102.2	146 $\pm$ 93.1
GPT (U/l)	20-100	30.7 $\pm$ 3.8	30.2 $\pm$ 0.5
BUN (mg/dl)	10-40	22.7 $\pm$ 4	38 $\pm$ 1.7
LDH (U/l)	300-900	897 $\pm$ 315,2	2283.3 $\pm$ 367.4

Abbreviations: SD: Standard Deviation; RBC: Red Blood Cells; MCV: Mean Corpuscular Volume; HCT: Hematocrit; PLT: Platelets; MPV: Mean Platelet Volume; WBC: White Blood Cells; HGB: Hemoglobin; MCH: Mean Corpuscular Hemoglobin; MCHC: Mean Corpuscular Hemoglobin Concentration; RDW: Red Cell Distribution Width; LYM: Lymphocytes; MID: Minimum Inhibitory Dilution; GRAN: Granulocytes; PCT: Plateletcrit; PDW: Platelet Distribution Width; CHOL: cholesterol; TRI: triglycerides; GOT: serum Glutamic Oxaloacetic Transaminase; GPT: serum Glutamic Pyruvic Transaminase; BUN: Blood Urea Nitrogen; LDH: Lactate Dehydrogenase.

**Supplementary Table 2: Effect of corn oil in BALB/c mice: complete blood count (CBC) and clinical chemistry parameters.**

<b>CBC</b>	<b>Reference values</b>	<b>Mean <math>\pm</math> SD pre-treatment</b>	<b>Mean <math>\pm</math> SD 4 weeks post- injection</b>
RBC ( $10^6/\text{mm}^3$ )	6.0-12.0	10.8 $\pm$ 1.9	9.9 $\pm$ 1.1
MCV ( $\mu\text{m}^3$ )	43.0-58.0	49.8 $\pm$ 1.2	51.1 $\pm$ 0.6
HCT (%)	35.0-60.0	51.7 $\pm$ 7.7	51.0 $\pm$ 5.2
PLT ( $10^3/\text{mm}^3$ )	250-1200	521.3 $\pm$ 207.5	605 $\pm$ 312.8
MPV ( $\mu\text{m}^3$ )	4.0-7.0	6.5 $\pm$ 0.5	6.4 $\pm$ 0.3
WBC ( $10^3/\text{mm}^3$ )	5.0-12.0	10.1 $\pm$ 1.6	28.6 $\pm$ 8.9
HGB (g/dl)	9.0-19.0	16.4 $\pm$ 0.6	14.6 $\pm$ 1.9
MCH (Pg)	15.0-19.0	12.9 $\pm$ 0.4	14.6 $\pm$ 0.3
MCHC (g/dl)	34.0-39.0	26.5 $\pm$ 1.2	28.6 $\pm$ 1
RDW (%)	0-99.9	24.3 $\pm$ 0.8	16.2 $\pm$ 0.8
LYM (%)	50.0-75.0	61.1 $\pm$ 5.6	26.6 $\pm$ 7.5
MID (%)	5.0-15.0	10.2 $\pm$ 1.3	11.9 $\pm$ 5.2
GRAN (%)	15.0-40.0	23.0 $\pm$ 4.4	61.5 $\pm$ 12.4
LYM ( $10^3/\text{mm}^3$ )	4.0-10.0	5.7 $\pm$ 1.5	7.3 $\pm$ 4
MID ( $10^3/\text{mm}^3$ )	0-2.0	1 $\pm$ 0.3	3.2 $\pm$ 2.8
GRAN ( $10^3/\text{mm}^3$ )	0.5-6.0	2.2 $\pm$ 0.8	18.1 $\pm$ 4.1
PCT (%)	0-99.9	0.7 $\pm$ 0.3	0.4 $\pm$ 0.2
PDW (%)	0-99.9	9.8 $\pm$ 1	9.6 $\pm$ 0.4
<b>Clinical Chemistry</b>			
CHOL (mg/dl)	50-120	162 $\pm$ 7	173.3 $\pm$ 14
TRI (mg/dl)	80-200	88.3 $\pm$ 6.7	100 $\pm$ 4
GOT (U/l)	20-250	146 $\pm$ 76.9	180 $\pm$ 111.1
GPT (U/l)	20-100	27.3 $\pm$ 7	24.9 $\pm$ 0.9
BUN (mg/dl)	10-40	32 $\pm$ 2	54.7 $\pm$ 4.6
LDH (U/l)	300-900	768.7 $\pm$ 165.2	3872.0 $\pm$ 1155.5

Abbreviations: SD: Standard Deviation; RBC: Red Blood Cells; MCV: Mean Corpuscular Volume; HCT: Hematocrit; PLT: Platelets; MPV: Mean Platelet Volume; WBC: White Blood Cells; HGB: Hemoglobin; MCH: Mean Corpuscular Hemoglobin; MCHC: Mean Corpuscular Hemoglobin Concentration; RDW: Red Cell Distribution Width; LYM: Lymphocytes; MID: Minimum Inhibitory Dilution; GRAN: Granulocytes; PCT: Plateletcrit; PDW: Platelet Distribution Width; CHOL: cholesterol; TRI: triglycerides; GOT: serum Glutamic Oxaloacetic Transaminase; GPT: serum Glutamic Pyruvic Transaminase; BUN: Blood Urea Nitrogen; LDH: Lactate Dehydrogenase.

**Supplementary Table 3: Lack of side effects of RES in BALB/c mice: complete blood count (CBC) and clinical chemistry parameters.**

<b>CBC</b>	<b>Reference values</b>	<b>Mean <math>\pm</math> SD pre-treatment</b>	<b>Mean <math>\pm</math> SD 4 weeks post- injection</b>
RBC ( $10^6/\text{mm}^3$ )	6.0-12.0	9.8 $\pm$ 1	11.3 $\pm$ 1.1
MCV ( $\mu\text{m}^3$ )	43.0-58.0	49.6 $\pm$ 1.1	51.8 $\pm$ 0.9
HCT (%)	35.0-60.0	53.2 $\pm$ 5.9	58.3 $\pm$ 4.7
PLT ( $10^3/\text{mm}^3$ )	250-1200	733.3 $\pm$ 76.4	1023.7 $\pm$ 190.5
MPV ( $\mu\text{m}^3$ )	4.0-7.0	6.5 $\pm$ 0.5	6.9 $\pm$ 0.4
WBC ( $10^3/\text{mm}^3$ )	5.0-12.0	9.9 $\pm$ 1.3	42.2 $\pm$ 11.8
HGB (g/dl)	9.0-19.0	15.8 $\pm$ 0.8	16.7 $\pm$ 1.6
MCH (Pg)	15.0-19.0	13.3 $\pm$ 0.6	14.7 $\pm$ 0.3
MCHC (g/dl)	34.0-39.0	26.7 $\pm$ 1.9	28.5 $\pm$ 1
RDW (%)	0-99.9	19.8 $\pm$ 4.3	16.6 $\pm$ 0.4
LYM (%)	50.0-75.0	52.5 $\pm$ 2.5	17.8 $\pm$ 7.3
MID (%)	5.0-15.0	9.5 $\pm$ 1.3	8.1 $\pm$ 0.9
GRAN (%)	15.0-40.0	25.8 $\pm$ 5.1	74.2 $\pm$ 8.1
LYM ( $10^3/\text{mm}^3$ )	4.0-10.0	5.3 $\pm$ 0.6	5.7 $\pm$ 1.6
MID ( $10^3/\text{mm}^3$ )	0-2.0	1 $\pm$ 0.3	2.8 $\pm$ 1.7
GRAN ( $10^3/\text{mm}^3$ )	0.5-6.0	2.8 $\pm$ 1.9	33.7 $\pm$ 8.5
PCT (%)	0-99.9	0.7 $\pm$ 0.3	0.7 $\pm$ 0.1
PDW (%)	0-99.9	10 $\pm$ 0	10.5 $\pm$ 0.7
<b>Clinical Chemistry</b>			
CHOL (mg/dl)	50-120	150 $\pm$ 8.7	157.3 $\pm$ 10.1
TRI (mg/dl)	80-200	88.7 $\pm$ 5.5	128 $\pm$ 38.2
GOT (U/l)	20-250	77.7 $\pm$ 11.2	104 $\pm$ 42.3
GPT (U/l)	20-100	31.0 $\pm$ 3.6	34.2 $\pm$ 4
BUN (mg/dl)	10-40	31.7 $\pm$ 3.5	45.3 $\pm$ 4.6
LDH (U/l)	300-900	751.7 $\pm$ 47.5	3046.7 $\pm$ 732.5

Abbreviations: SD: Standard Deviation; RBC: Red Blood Cells; MCV: Mean Corpuscular Volume; HCT: Hematocrit; PLT: Platelets; MPV: Mean Platelet Volume; WBC: White Blood Cells; HGB: Hemoglobin; MCH: Mean Corpuscular Hemoglobin; MCHC: Mean Corpuscular Hemoglobin Concentration; RDW: Red Cell Distribution Width; LYM: Lymphocytes; MID: Minimum Inhibitory Dilution; GRAN: Granulocytes; PCT: Plateletcrit; PDW: Platelet Distribution Width; CHOL: cholesterol; TRI: triglycerides; GOT: serum Glutamic Oxaloacetic Transaminase; GPT: serum Glutamic Pyruvic Transaminase; BUN: Blood Urea Nitrogen; LDH: Lactate Dehydrogenase.

**Supplementary Table 4: Lack of side effects of CUR in BALB/c mice: complete blood count (CBC) and clinical chemistry parameters.**

<b>CBC</b>	<b>Reference values</b>	<b>Mean <math>\pm</math> SD pre-treatment</b>	<b>Mean <math>\pm</math> SD 4 weeks post- injection</b>	<b>Mean <math>\pm</math> SD 8 weeks post- injection</b>
RBC ( $10^6/\text{mm}^3$ )	6.0-12.0	10.3 $\pm$ 1.5	11.3 $\pm$ 0.3	10.6 $\pm$ 0.8
MCV ( $\mu\text{m}^3$ )	43.0-58.0	49.8 $\pm$ 1.6	48.1 $\pm$ 2.7	45.9 $\pm$ 3.4
HCT (%)	35.0-60.0	52.2 $\pm$ 6.3	54.4 $\pm$ 4.6	49 $\pm$ 7
PLT ( $10^3/\text{mm}^3$ )	250-1200	728.3 $\pm$ 84.6	871 $\pm$ 108.9	966 $\pm$ 109.5
MPV ( $\mu\text{m}^3$ )	4.0-7.0	6.5 $\pm$ 0.5	6.3 $\pm$ 0.7	6 $\pm$ 0.4
WBC ( $10^3/\text{mm}^3$ )	5.0-12.0	10.3 $\pm$ 2	17.4 $\pm$ 4.3	19.3 $\pm$ 4.7
HGB (g/dl)	9.0-19.0	15.8 $\pm$ 0.8	17 $\pm$ 0.4	15.1 $\pm$ 1.6
MCH (Pg)	15.0-19.0	13.3 $\pm$ 0.6	15.1 $\pm$ 0.2	14.2 $\pm$ 0.6
MCHC (g/dl)	34.0-39.0	26.7 $\pm$ 1.9	31.4 $\pm$ 2	31 $\pm$ 1.1
RDW (%)	0-99.9	23.5 $\pm$ 1.5	16.8 $\pm$ 1.6	17.2 $\pm$ 0.9
LYM (%)	50.0-75.0	57 $\pm$ 2.6	43.7 $\pm$ 4.4	23.7 $\pm$ 6.9
MID (%)	5.0-15.0	9.5 $\pm$ 1.3	5.5 $\pm$ 0.9	7.3 $\pm$ 1.2
GRAN (%)	15.0-40.0	25 $\pm$ 5	50.8 $\pm$ 3.5	69 $\pm$ 7.9
LYM ( $10^3/\text{mm}^3$ )	4.0-10.0	5.5 $\pm$ 0.5	8.4 $\pm$ 2.7	4.3 $\pm$ 0.7
MID ( $10^3/\text{mm}^3$ )	0-2.0	1.1 $\pm$ 0.4	1.2 $\pm$ 0.6	1.4 $\pm$ 0.3
GRAN ( $10^3/\text{mm}^3$ )	0.5-6.0	2.8 $\pm$ 1.3	7.9 $\pm$ 6.3	13.6 $\pm$ 4.5
PCT (%)	0-99.9	0.5 $\pm$ 0.5	0.6 $\pm$ 0.1	0.6 $\pm$ 0.1
PDW (%)	0-99.9	10 $\pm$ 0.5	9.5 $\pm$ 1.3	9 $\pm$ 0.7
<b>Clinical Chemistry</b>				
CHOL (mg/dl)	50-120	151.7 $\pm$ 12.6	162.7 $\pm$ 28.1	125.3 $\pm$ 34.9
TRI (mg/dl)	80-200	125 $\pm$ 51.1	161.3 $\pm$ 56	116 $\pm$ 41.3
GOT (U/l)	20-250	113.3 $\pm$ 32.1	134.7 $\pm$ 20.1	112 $\pm$ 87.2
GPT (U/l)	20-100	42 $\pm$ 13.1	49.5 $\pm$ 13.9	31.1 $\pm$ 16.6
BUN (mg/dl)	10-40	32 $\pm$ 2	46.7 $\pm$ 12.9	55.3 $\pm$ 17.9
LDH (U/l)	300-900	751.7 $\pm$ 147.5	2921.3 $\pm$ 1169.6	1037.3 $\pm$ 273

Abbreviations: SD: Standard Deviation; RBC: Red Blood Cells; MCV: Mean Corpuscular Volume; HCT: Hematocrit; PLT: Platelets; MPV: Mean Platelet Volume; WBC: White Blood Cells; HGB: Hemoglobin; MCH: Mean Corpuscular Hemoglobin; MCHC: Mean Corpuscular Hemoglobin Concentration; RDW: Red Cell Distribution Width; LYM: Lymphocytes; MID: Minimum Inhibitory Dilution; GRAN: Granulocytes; PCT: Plateletcrit; PDW: Platelet Distribution Width; CHOL: cholesterol; TRI: triglycerides; GOT: serum Glutamic Oxaloacetic Transaminase; GPT: serum Glutamic Pyruvic Transaminase; BUN: Blood Urea Nitrogen; LDH: Lactate Dehydrogenase.

**Supplementary Table 5: Lack of side effects of RES+CUR in BALB/c mice: complete blood count (CBC) and clinical chemistry parameters.**

<b>CBC</b>	<b>Reference values</b>	<b>Mean <math>\pm</math> SD pre-treatment</b>	<b>Mean <math>\pm</math> SD 4 weeks post- injection</b>	<b>Mean <math>\pm</math> SD 8 weeks post- injection</b>
RBC ( $10^6/\text{mm}^3$ )	6.0-12.0	10.5 $\pm$ 1.3	10.6 $\pm$ 0.5	10.4 $\pm$ 0.7
MCV ( $\mu\text{m}^3$ )	43.0-58.0	51.6 $\pm$ 1.9	53.8 $\pm$ 0.2	47.6 $\pm$ 2.9
HCT (%)	35.0-60.0	51.5 $\pm$ 5.7	57.3 $\pm$ 2.9	49.8 $\pm$ 2.4
PLT ( $10^3/\text{mm}^3$ )	250-1200	734 $\pm$ 75.3	766.3 $\pm$ 99.2	716.7 $\pm$ 245.4
MPV ( $\mu\text{m}^3$ )	4.0-7.0	6.3 $\pm$ 0.6	6.1 $\pm$ 0.3	6.5 $\pm$ 0.3
WBC ( $10^3/\text{mm}^3$ )	5.0-12.0	12.5 $\pm$ 1.5	13.9 $\pm$ 1	6.5 $\pm$ 1.3
HGB (g/dl)	9.0-19.0	16 $\pm$ 0.6	16.4 $\pm$ 0.9	14.8 $\pm$ 0.9
MCH (Pg)	15.0-19.0	14.4 $\pm$ 1.3	15.4 $\pm$ 0.2	14.2 $\pm$ 1
MCHC (g/dl)	34.0-39.0	26.5 $\pm$ 1.7	28.6 $\pm$ 0.2	29.7 $\pm$ 0.6
RDW (%)	0-99.9	20.6 $\pm$ 4.2	16.7 $\pm$ 0.8	16.2 $\pm$ 2.1
LYM (%)	50.0-75.0	51.9 $\pm$ 6.2	38.3 $\pm$ 5.6	50.5 $\pm$ 5.6
MID (%)	5.0-15.0	11.1 $\pm$ 2.6	10.1 $\pm$ 3.2	11.3 $\pm$ 3.2
GRAN (%)	15.0-40.0	32.2 $\pm$ 8.5	51.6 $\pm$ 8.8	38.2 $\pm$ 2.5
LYM ( $10^3/\text{mm}^3$ )	4.0-10.0	5.6 $\pm$ 0.7	4.4 $\pm$ 1.7	3.3 $\pm$ 1
MID ( $10^3/\text{mm}^3$ )	0-2.0	1.4 $\pm$ 0.6	1.5 $\pm$ 0.4	0.7 $\pm$ 0.1
GRAN ( $10^3/\text{mm}^3$ )	0.5-6.0	3.4 $\pm$ 2.2	8 $\pm$ 2.1	2.4 $\pm$ 0.3
PCT (%)	0-99.9	0.3 $\pm$ 0.3	0.5 $\pm$ 0.1	0.5 $\pm$ 0.2
PDW (%)	0-99.9	9.2 $\pm$ 0.7	9.1 $\pm$ 0.4	9.7 $\pm$ 0.4
<b>Clinical Chemistry</b>				
CHOL (mg/dl)	50-120	139.3 $\pm$ 17.9	137.3 $\pm$ 8.3	159.3 $\pm$ 23.9
TRI (mg/dl)	80-200	92 $\pm$ 7.2	68 $\pm$ 28	146.7 $\pm$ 70.2
GOT (U/l)	20-250	122 $\pm$ 25.5	100 $\pm$ 27.7	148 $\pm$ 125.8
GPT (U/l)	20-100	31.3 $\pm$ 5.8	27 $\pm$ 1.7	48.8 $\pm$ 26
BUN (mg/dl)	10-40	35.7 $\pm$ 4	44 $\pm$ 4	53.3 $\pm$ 2.3
LDH (U/l)	300-900	996 $\pm$ 451.7	1581.3 $\pm$ 330.1	910.7 $\pm$ 445.5

Abbreviations: SD: Standard Deviation; RBC: Red Blood Cells; MCV: Mean Corpuscular Volume; HCT: Hematocrit; PLT: Platelets; MPV: Mean Platelet Volume; WBC: White Blood Cells; HGB: Hemoglobin; MCH: Mean Corpuscular Hemoglobin; MCHC: Mean Corpuscular Hemoglobin Concentration; RDW: Red Cell Distribution Width; LYM: Lymphocytes; MID: Minimum Inhibitory Dilution; GRAN: Granulocytes; PCT: Plateletcrit; PDW: Platelet Distribution Width; CHOL: cholesterol; TRI: triglycerides; GOT: serum Glutamic Oxaloacetic Transaminase; GPT: serum Glutamic Pyruvic Transaminase; BUN: Blood Urea Nitrogen; LDH: Lactate Dehydrogenase.