

## **SUPPLEMENTARY DATA (Tables and Figure)**

- **Supplementary Table 1: Results from liver function test (SuperChem).**
- **Supplementary Table 2: Results from complete blood count (CBC).**
- **Supplementary Table 3: Results from complete blood count (differential).**
- **Supplementary Figure S1. Histopathological organ analysis.**

**Supplementary Table 1: Results from liver function test (SuperChem).**

Shown are values from individual Balb/c mice (without xenotransplanted tumor cells). Three animals remained untreated; three animals received vehicle; three animals received 30 mg/kg NEO212; three animals received 60 mg/kg NEO212. Treatment was via subcutaneous injection once daily for 7 consecutive days. Eleven days after the end of the treatment cycle, animals were euthanized and blood was collected.

Blood samples were analyzed by SuperChem, a comprehensive blood chemistry panel that provides a good overview of many of the body's functions. Besides the liver function values summarized below, several additional physiological parameters were analyzed; however, no significant differences were found between the groups of NEO212-treated animals and those that did not receive the drug.

<b>Component</b>	<b>Untreated</b>	<b>Vehicle</b>	<b>NEO212 30*</b>	<b>NEO212 60*</b>
ALT (IU/L)	42	26	27	30
	42	30	27	34
	42	51	34	57
AST (IU/L)	98	68	84	76
	118	120	84	138
	162	369	180	144
ALP (IU/L)	86	69	84	72
	104	75	84	74
	126	90	90	108
Bilirubin (mg/dL)	0.2	0.1	0.2	0.2
	0.2	0.2	0.3	0.2
	0.3	0.3	0.3	0.3

\* mg/kg

ALT: alanine transaminase; AST: aspartate transaminase; ALP: alkaline phosphatase. All numbers are arranged by increasing values in each group.

**Supplementary Table 2: Results from complete blood count (CBC).**

Shown are values from individual Balb/c mice (without xenotransplanted tumor cells). Three animals remained untreated; three animals received vehicle; three animals received 30 mg/kg NEO212; three animals received 60 mg/kg NEO212. Treatment was via subcutaneous injection once daily for 7 consecutive days. Eleven days after the end of the treatment cycle, animals were euthanized and blood was collected.

<b>Component</b>	<b>Untreated</b>	<b>Vehicle</b>	<b>NEO212 30*</b>	<b>NEO212 60*</b>
WBC (x10 <sup>3</sup> /uL)	1.5	1.5	3.2	1.6
	1.9	1.5	4.0	2.0
	2.1	2.5	5.6	2.9
RBC (x10 <sup>6</sup> /uL)	7.0	8.4	7.6	8.1
	7.6	8.6	8.1	8.6
	9.4	9.5	8.9	8.8
HGB (g/dL)	13.7	14.5	14.2	14.5
	13.9	14.6	14.9	14.6
	15.4	15.4	15.0	14.8
HCT (%)	43	48	46	49
	46	51	48	51
	55	55	52	51

\* mg/kg

WBC: white blood cells; RBC: red blood cells; HGB: hemoglobin; HCT: hematocrit.  
All numbers are arranged by increasing values in each group.

**Supplementary Table 3: Results from complete blood count (CBC) with differential**

Shown are values from individual Balb/c mice (without xenotransplanted tumor cells). Three animals remained untreated; three animals received vehicle; three animals received 30 mg/kg NEO212; three animals received 60 mg/kg NEO212. Treatment was via subcutaneous injection once daily for 7 consecutive days. Eleven days after the end of the treatment cycle, animals were euthanized and blood was collected.

Absolute numbers:

<b>Component</b>	<b>Untreated</b>	<b>Vehicle</b>	<b>NEO212 30*</b>	<b>NEO212 60*</b>
Neutrophils (x10 <sup>3</sup> /uL)	0.19	0.30	0.32	0.34
	0.29	0.35	0.40	0.38
	0.60	0.38	1.40	0.55
Lymphocytes (x10 <sup>3</sup> /uL)	0.75	1.05	2.53	1.17
	1.63	1.10	3.36	1.56
	1.76	1.95	3.42	2.12
Monocytes (per uL)	42	30	40	0
	76	105	224	128
	105	225	560	145
Eosinophiles (per uL)	0	0	96	0
	0	0	200	60
	45	25	224	87

Percent values:

<b>Component</b>	<b>Untreated</b>	<b>Vehicle</b>	<b>NEO212 30*</b>	<b>NEO212 60*</b>
Neutrophils (%)	10	12	10	19
	14	23	10	19
	40	25	25	19
Lymphocytes (%)	50	70	61	73
	84	73	79	73
	86	78	84	78
Monocytes (%)	2	2	1	0
	4	7	7	5
	7	9	10	8
Eosinophiles (%)	0	0	3	0
	0	0	4	3
	3	1	5	3

\* mg/kg

All numbers are arranged by increasing values in each group.

**Supplementary Figure S1.** Histopathological organ analysis.

At the end of the in vivo experiment presented in Fig. 7, several animals from vehicle-treated and NEO212-treated groups were euthanized, and organs were collected for histopathological analysis. Organs were placed in 10% formalin for 24-48 hours. Thereafter, tissues were embedded in paraffin and cut into sections of 5 microns thickness. Slides were then stained using standard hematoxylin-eosin (H&E) stains, and evaluated under a light microscope. Representative photos are shown; no signs of organ damage could be detected in animals treated with NEO212.

Supplementary Figure S1

