

Hematology – Females									
Parameter	Units	NSG™ (005557)	NRG (007799)	NSG™-SGM3 (013062)	NSG™-DKO (025216)	NBSGW (026622)	NSG™-IL15 (030890)	NSG™-SGM3- IL15 (033216)	NSG™-FLT3 (033367)
White blood cell count (WBC)	10 <sup>3</sup> cells/μL	1.0 ± 0.3	0.6 ± 0.2	1.4 ± 0.1	0.6 ± 0.1	0.5 ± 0.1	0.7 ± 0.5	1.2 ± 0.3	0.3 ± 0.0
Red blood cell count (RBC)	10 <sup>6</sup> cells/μL	8.0 ± 0.3	7.5 ± 0.4	8.7 ± 0.4	8.4 ± 0.5	6.3 ± 0.3	7.8 ± 0.3	8.3 ± 0.1	8.0 ± 0.3
Hemoglobin	g/dL	12.4 ± 0.2	11.5 ± 0.5	12.8 ± 0.4	12.6 ± 0.5	10.1 ± 0.5	11.3 ± 0.6	11.6 ± 0.3	10.9 ± 0.4
Hematocrit	%	39.4 ± 0.9	38.4 ± 2.3	42.8 ± 2.4	40.4 ± 1.9	36.1 ± 1.8	38.9 ± 1.0	39.4 ± 0.3	37.3 ± 1.7
Mean cell volume (MCV)	fL	49.5 ± 0.9	51.1 ± 0.7	49.4 ± 0.5	48.1 ± 1.1	57.6 ± 0.9	50.0 ± 1.1	47.7 ± 0.8	46.9 ± 0.9
Mean cell hemoglobin (MCH)	pg	15.6 ± 0.5	15.4 ± 0.4	14.8 ± 0.5	15.0 ± 0.5	16.1 ± 0.4	14.5 ± 0.4	14.0 ± 0.3	13.7 ± 0.3
Mean cell hemoglobin concentration (MCHC)	g/dL	31.5 ± 0.4	30.1 ± 0.9	30.1 ± 1.1	31.3 ± 0.8	28.0 ± 0.3	29.0 ± 1.2	29.4 ± 0.8	29.3 ± 0.8
Red cell distribution width (RDW)	%	18.2 ± 0.4	19.0 ± 0.6	18.6 ± 0.3	17.0 ± 0.3	18.3 ± 0.6	18.6 ± 0.5	18.2 ± 0.2	18.3 ± 0.4
Platelet count	10 <sup>3</sup> cells/μL	1042 ± 227	991 ± 236	969 ± 331	816 ± 119	702 ± 93	778 ± 96	754 ± 190	866 ± 78
Mean platelet volume (MPV)	fL	4.9 ± 0.1	5.3 ± 0.1	5.3 ± 0.2	4.8 ± 0.1	4.6 ± 0.2	4.6 ± 0.1	4.6 ± 0.1	4.6 ± 0.1
Neutrophils	%	79.7 ± 5.2	63.4 ± 10.0	87.7 ± 1.0	75.5 ± 9.6	58.7 ± 4.3	62.8 ± 7.6	80.0 ± 3.2	55.7 ± 33.2
	10 <sup>3</sup> cells/μL	0.77 ± 0.26	0.39 ± 0.15	1.22 ± 0.12	0.45 ± 0.12	0.31 ± 0.05	0.46 ± 0.36	0.98 ± 0.25	0.20 ± 0.12
Lymphocytes	%	9.7 ± 1.5	14.5 ± 5.2	6.1 ± 1.3	12.8 ± 1.1	21.7 ± 4.3	17.7 ± 4.0	10.9 ± 2.6	15.7 ± 11.0
	10 <sup>3</sup> cells/μL	0.09 ± 0.03	0.08 ± 0.03	0.09 ± 0.02	0.08 ± 0.01	0.11 ± 0.01	0.12 ± 0.08	0.13 ± 0.03	0.05 ± 0.03
Monocytes	%	5.7 ± 3.6	14.7 ± 6.8	4.4 ± 1.8	5.6 ± 4.2	10.5 ± 4.7	14.4 ± 5.8	6.0 ± 2.1	3.2 ± 3.2
	10 <sup>3</sup> cells/μL	0.05 ± 0.02	0.09 ± 0.05	0.06 ± 0.03	0.03 ± 0.03	0.06 ± 0.03	0.08 ± 0.02	0.07 ± 0.03	0.01 ± 0.01
Eosinophils	%	3.7 ± 5.1	6.2 ± 5.0	1.3 ± 0.2	4.2 ± 3.0	6.8 ± 2.9	3.7 ± 1.8	2.5 ± 0.6	5.0 ± 5.0
	10 <sup>3</sup> cells/μL	0.04 ± 0.05	0.04 ± 0.03	0.02 ± 0.00	0.02 ± 0.02	0.04 ± 0.02	0.03 ± 0.03	0.03 ± 0.01	0.02 ± 0.02
Basophils	%	1.13 ± 0.52	1.26 ± 1.01	0.49 ± 0.46	1.94 ± 1.85	2.33 ± 0.63	1.42 ± 0.64	0.6 ± 0.72	0.41 ± 0.41
	10 <sup>3</sup> cells/μL	0.01 ± 0.01	0.01 ± 0.01	0.01 ± 0.01	0.01 ± 0.01	0.01 ± 0.01	0.01 ± 0.02	0.01 ± 0.01	0.00 ± 0.00
Serum Chemistry – Females									
Parameter	Units	NSG™ (005557)	NRG (007799)	NSG™-SGM3 (013062)	NSG™-DKO (025216)	NBSGW (026622)	NSG™-IL15 (030890)	NSG™-SGM3- IL15 (033216)	NSG™-FLT3 (033367)
Albumin	g/dL	3.3 ± 0.2	3.0 ± 0.1	3.0 ± 0.2	3.2 ± 0.1	3.2 ± 0.3	3.3 ± 0.2	3.2 ± 0.2	3.3 ± 0.3
ALT	IU/L	22 ± 2	95 ± 101	24 ± 4	45 ± 44	39 ± 23	31 ± 8	31 ± 14	32 ± 6
AST	IU/L	66 ± 20	143 ± 104	65 ± 28	114 ± 63	79 ± 38	88 ± 17	82 ± 29	72 ± 10
Blood Urea Nitrogen	mg/dL	25 ± 3	24 ± 2	20 ± 2	27 ± 2	28 ± 4	29 ± 2	27 ± 3	31 ± 3
Glucose	mg/dL	214 ± 33	184 ± 26	229 ± 37	206 ± 32	202 ± 23	213 ± 39	211 ± 49	210 ± 20
Cholesterol	mg/dL	90 ± 8	70 ± 6	82 ± 12	84 ± 11	74 ± 8	91 ± 9	86 ± 12	86 ± 11
LDL	mg/dL	3.6 ± 0.7	4.3 ± 0.6	3.6 ± 0.9	3.4 ± 0.5	2.9 ± 0.4	3.7 ± 0.6	3.0 ± 0.5	3.3 ± 0.7
HDL	mg/dL	68 ± 7	54 ± 4	64 ± 9	63 ± 7	57 ± 6	69 ± 6	65 ± 9	65 ± 7
Triglycerides	mg/dL	185 ± 39	114 ± 32	133 ± 49	150 ± 51	130 ± 30	171 ± 37	146 ± 31	155 ± 70
NEFA	mEq/L	1.5 ± 0.2	1.3 ± 0.4	1.5 ± 0.4	1.4 ± 0.4	0.7 ± 0.2	1.4 ± 0.4	1.4 ± 0.5	0.9 ± 0.2
Phosphorus	mg/dL	10.4 ± 1.1	9.9 ± 1.0	9.7 ± 1.4	10.5 ± 1.8	10.6 ± 1.6	11.0 ± 1.7	9.7 ± 1.4	11.5 ± 1.4
T4	μg/dL	5.7 ± 0.8	4.7 ± 0.8	6.8 ± 0.9	6.0 ± 0.8	5.4 ± 1.0	5.6 ± 1.2	6.1 ± 0.9	5.6 ± 1.1
Total Protein	g/dL	5.3 ± 0.3	4.8 ± 0.2	4.8 ± 0.4	5.1 ± 0.2	5.1 ± 0.5	5.4 ± 0.4	5.1 ± 0.4	5.4 ± 0.4
Calcium	mg/dL	10.2 ± 0.3	9.7 ± 0.3	9.9 ± 0.4	10 ± 0.3	10.9 ± 0.8	11.2 ± 0.8	10.4 ± 0.6	11.1 ± 0.7
Sodium	mmol/L	153 ± 1	151 ± 1	151 ± 1	151 ± 2	166 ± 10	168 ± 7	160 ± 7	168 ± 9
Potassium	mmol/L	4.3 ± 0.3	4.6 ± 0.3	4.6 ± 0.4	4.4 ± 0.3	4.8 ± 0.5	4.9 ± 0.2	4.8 ± 0.5	4.9 ± 0.4
Chloride	mmol/L	113 ± 1	113 ± 2	114 ± 1	114 ± 2	124 ± 7	124 ± 5	121 ± 5	125 ± 5
CO2	mmol/L	17.6 ± 1.5	17.4 ± 1.7	15.8 ± 1.1	15.7 ± 1.3	21.1 ± 2.3	18.3 ± 1.9	17.6 ± 1.4	21.1 ± 2.4

Whole blood or serum was collected from the submental route at 8 weeks of age. Values are mean ± standard deviation of 4-5 mice (hematology) or 9-10 mice (chemistry) per sex.

## Hematology & Clinical Chemistry – NSG™ Portfolio

### Hematology – Males

Parameter	Units	NSG™ (005557)	NRG (007799)	NSG™-SGM3 (013062)	NSG™-DKO (025216)	NBSGW (026622)	NSG™-IL15 (030890)	NSG™-SGM3- IL15 (033216)	NSG™-FLT3 (033367)
White blood cell count (WBC)	10 <sup>3</sup> cells/μL	1.2 ± 0.3	1.0 ± 0.5	1.7 ± 0.2	1.0 ± 0.4	0.6 ± 0.1	0.9 ± 0.6	1.0 ± 0.3	0.6 ± 0.1
Red blood cell count (RBC)	10 <sup>6</sup> cells/μL	8.9 ± 0.8	7.8 ± 0.4	8.5 ± 0.3	9.4 ± 0.4	6.5 ± 0.3	7.6 ± 0.2	7.8 ± 0.3	9.1 ± 2.0
Hemoglobin	g/dL	13.3 ± 1.0	11.6 ± 0.5	12.8 ± 0.5	14.0 ± 0.7	10.4 ± 0.6	11.0 ± 0.5	11.1 ± 0.2	12.3 ± 2.2
Hematocrit	%	43.5 ± 4.1	39.9 ± 1.9	41.7 ± 1.3	46.0 ± 1.8	36.7 ± 2.2	37.6 ± 1.0	37.4 ± 1.3	42.8 ± 9.0
Mean cell volume (MCV)	fL	48.7 ± 0.5	51.3 ± 0.6	49.2 ± 0.6	49.0 ± 0.6	56.9 ± 0.5	49.2 ± 0.1	48.2 ± 0.7	47.4 ± 0.6
Mean cell hemoglobin (MCH)	pg	14.9 ± 0.3	15.0 ± 0.4	15.1 ± 0.2	14.9 ± 0.2	16.1 ± 0.2	14.4 ± 0.5	14.2 ± 0.6	13.7 ± 0.6
Mean cell hemoglobin concentration (MCHC)	g/dL	30.7 ± 0.9	29.1 ± 0.7	30.7 ± 0.6	30.5 ± 0.5	28.3 ± 0.4	29.2 ± 1.0	29.6 ± 1.0	28.9 ± 1.0
Red cell distribution width (RDW)	%	18 ± 0.5	19.1 ± 0.3	18.1 ± 0.4	17.4 ± 0.3	17.4 ± 0.3	18.4 ± 0.4	17.9 ± 0.7	18.3 ± 0.4
Platelet count	10 <sup>3</sup> cells/μL	1242 ± 151	1118 ± 148	1216 ± 265	1026 ± 112	759 ± 281	961 ± 154	982 ± 109	986 ± 115
Mean platelet volume (MPV)	fL	4.7 ± 0.1	4.9 ± 0.1	5.1 ± 0.1	5.2 ± 0.1	4.6 ± 0.1	4.7 ± 0.1	4.6 ± 0.1	4.7 ± 0.1
Neutrophils	%	87.0 ± 1.6	76.0 ± 11.2	82.8 ± 7.2	80.4 ± 4.3	66.3 ± 9.8	36.5 ± 24.6	78.2 ± 3.6	67.8 ± 13.7
	10 <sup>3</sup> cells/μL	1.08 ± 0.27	0.76 ± 0.28	1.43 ± 0.15	0.81 ± 0.36	0.39 ± 0.07	0.39 ± 0.31	0.75 ± 0.25	0.40 ± 0.14
Lymphocytes	%	6.8 ± 0.9	14.4 ± 6.4	10.0 ± 4.6	11.6 ± 3.8	17.0 ± 3.0	20.5 ± 16.4	11.0 ± 2.0	21.5 ± 10.1
	10 <sup>3</sup> cells/μL	0.09 ± 0.03	0.16 ± 0.15	0.18 ± 0.09	0.10 ± 0.01	0.10 ± 0.03	0.22 ± 0.22	0.11 ± 0.04	0.13 ± 0.06
Monocytes	%	4.7 ± 1.6	5.9 ± 2.5	5.0 ± 1.3	5.6 ± 0.6	9.2 ± 3.0	8.0 ± 5.5	7.2 ± 2.0	5.7 ± 2.0
	10 <sup>3</sup> cells/μL	0.06 ± 0.02	0.07 ± 0.05	0.09 ± 0.03	0.06 ± 0.02	0.05 ± 0.02	0.09 ± 0.09	0.07 ± 0.04	0.03 ± 0.01
Eosinophils	%	1.3 ± 0.3	3.0 ± 3.0	1.8 ± 1.1	2.2 ± 1.8	6.1 ± 6.6	8.4 ± 8.0	3.0 ± 2.6	3.3 ± 1.4
	10 <sup>3</sup> cells/μL	0.02 ± 0.01	0.04 ± 0.06	0.03 ± 0.02	0.02 ± 0.02	0.04 ± 0.05	0.10 ± 0.09	0.03 ± 0.03	0.02 ± 0.01
Basophils	%	0.26 ± 0.18	0.72 ± 0.64	0.44 ± 0.47	0.21 ± 0.2	1.36 ± 1.38	1.58 ± 1.49	0.65 ± 0.36	1.65 ± 1.75
	10 <sup>3</sup> cells/μL	0.00 ± 0.00	0.01 ± 0.01	0.01 ± 0.01	0.00 ± 0.00	0.01 ± 0.01	0.02 ± 0.02	0.01 ± 0.01	0.01 ± 0.01

### Serum Chemistry – Males

Parameter	Units	NSG™ (005557)	NRG (007799)	NSG™-SGM3 (013062)	NSG™-DKO (025216)	NBSGW (026622)	NSG™-IL15 (030890)	NSG™-SGM3- IL15 (033216)	NSG™-FLT3 (033367)
Albumin	g/dL	3.0 ± 0.1	2.8 ± 0.1	3.0 ± 0.2	2.8 ± 0.2	3.1 ± 0.3	3.1 ± 0.2	3.1 ± 0.3	3.1 ± 0.1
ALT	IU/L	24 ± 4	29 ± 9	37 ± 39	24 ± 7	33 ± 6	36 ± 24	26 ± 5	25 ± 4
AST	IU/L	62 ± 24	82 ± 47	73 ± 31	67 ± 30	63 ± 39	88 ± 74	54 ± 8	64 ± 25
Blood Urea Nitrogen	mg/dL	24 ± 1	25 ± 3	24 ± 2	24 ± 2	28 ± 3	29 ± 3	29 ± 4	28 ± 3
Glucose	mg/dL	254 ± 21	180 ± 29	243 ± 39	219 ± 40	241 ± 25	186 ± 40	230 ± 33	208 ± 20
Cholesterol	mg/dL	128 ± 10	93 ± 8	118 ± 8	105 ± 18	110 ± 10	114 ± 12	121 ± 12	122 ± 9
LDL	mg/dL	1.3 ± 0.3	1.7 ± 0.4	1.4 ± 0.4	1.4 ± 0.5	0.7 ± 0.1	1.1 ± 0.3	0.8 ± 0.2	1.3 ± 0.2
HDL	mg/dL	102 ± 7	74 ± 5	97 ± 7	83 ± 15	86 ± 7	91 ± 7	96 ± 10	92 ± 6
Triglycerides	mg/dL	241 ± 57	192 ± 50	157 ± 46	214 ± 84	213 ± 36	140 ± 56	156 ± 34	232 ± 44
NEFA	mEq/L	1.8 ± 0.4	1.9 ± 0.3	1.8 ± 0.4	1.8 ± 0.5	1.1 ± 0.2	1.2 ± 0.3	1.3 ± 0.3	1.0 ± 0.2
Phosphorus	mg/dL	10.7 ± 1.7	10.4 ± 1.7	9.4 ± 0.8	10.1 ± 1.2	10.9 ± 1.2	12.1 ± 1.6	10.5 ± 1.3	11.3 ± 1.9
T4	μg/dL	5.7 ± 0.7	4.9 ± 0.7	6.1 ± 0.7	5.4 ± 0.7	5.8 ± 0.8	5.0 ± 0.9	6.0 ± 0.8	5.8 ± 0.6
Total Protein	g/dL	5.4 ± 0.3	4.8 ± 0.3	5.1 ± 0.3	4.8 ± 0.3	5.4 ± 0.4	5.4 ± 0.4	5.5 ± 0.5	5.4 ± 0.3
Calcium	mg/dL	10.4 ± 0.2	9.8 ± 0.5	10.3 ± 0.4	9.9 ± 0.4	11.4 ± 0.8	11.4 ± 1	11.2 ± 0.9	11.3 ± 0.7
Sodium	mmol/L	154 ± 1	155 ± 1	152 ± 2	153 ± 1	171 ± 10	171 ± 11	171 ± 10	171 ± 9
Potassium	mmol/L	5.1 ± 0.2	5.2 ± 0.5	5.0 ± 0.3	4.6 ± 0.3	5.3 ± 0.6	5.8 ± 0.4	5.5 ± 0.4	5.5 ± 0.
Chloride	mmol/L	111 ± 1	113 ± 1	112 ± 2	112 ± 2	122 ± 6	126 ± 7	126 ± 6	125 ± 6
CO2	mmol/L	18.5 ± 2.0	17.8 ± 1.7	16.9 ± 2.1	17.9 ± 2.0	26.7 ± 2.5	20.3 ± 3.0	21.4 ± 2.8	23.9 ± 2.5

Whole blood or serum was collected from the submental route at 8 weeks of age. Values are mean ± standard deviation of 4-5 mice (hematology) or 9-10 mice (chemistry) per sex.