G-TWYST
GM PLANTS TWO YEAR SAFETY TESTING

G-TwYST Study C

a 90-day toxicity study in rats fed GM maize NK603

Statistical report appendices

Paul W. Goedhart & Hilko van der Voet

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WAGENINGEN
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Biometris, one of the largest groups of quantitative scientists in North-Western Europe, develops statistical and mathematical methods for the quantification of biological processes and processes in our living environment. These methods are applied and validated in practice and are often available as software packages. In addition, we provide education at the undergraduate, Master, PhD, and PostDoc levels, as well as training and consultancy for industry. We cover a wide range of application areas, from gene to ecosystem and from product to production chain. Our goal is to bring quantitative methods to life.

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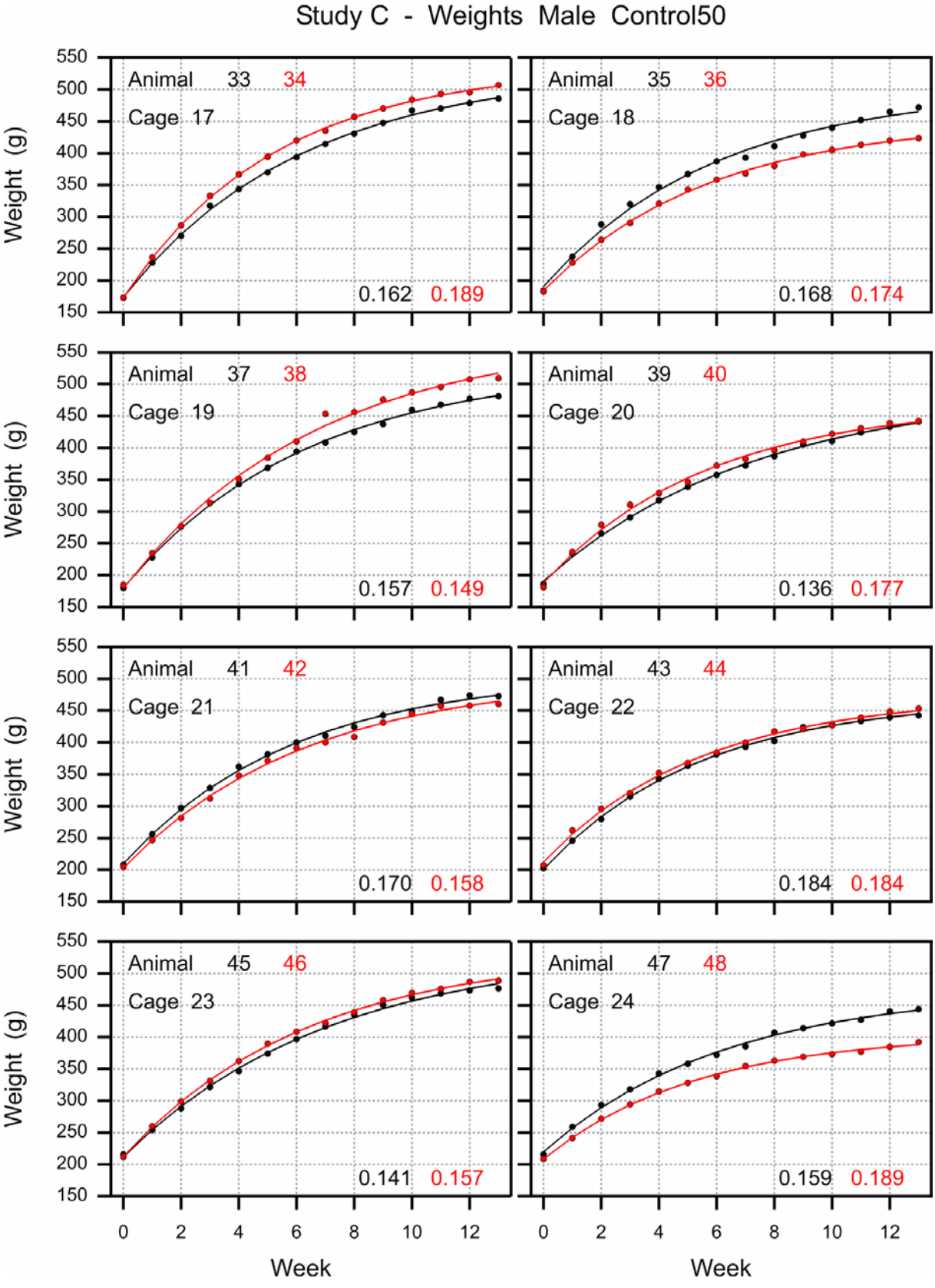
March 2018

Appendices

Appendix 1. Growth curves per animal pair

The feed group and animal numbers are given in the left top corner of the graph, while the estimated growth rate, i.e. $\gamma = -\log(R)$, is given in the right-bottom corner.



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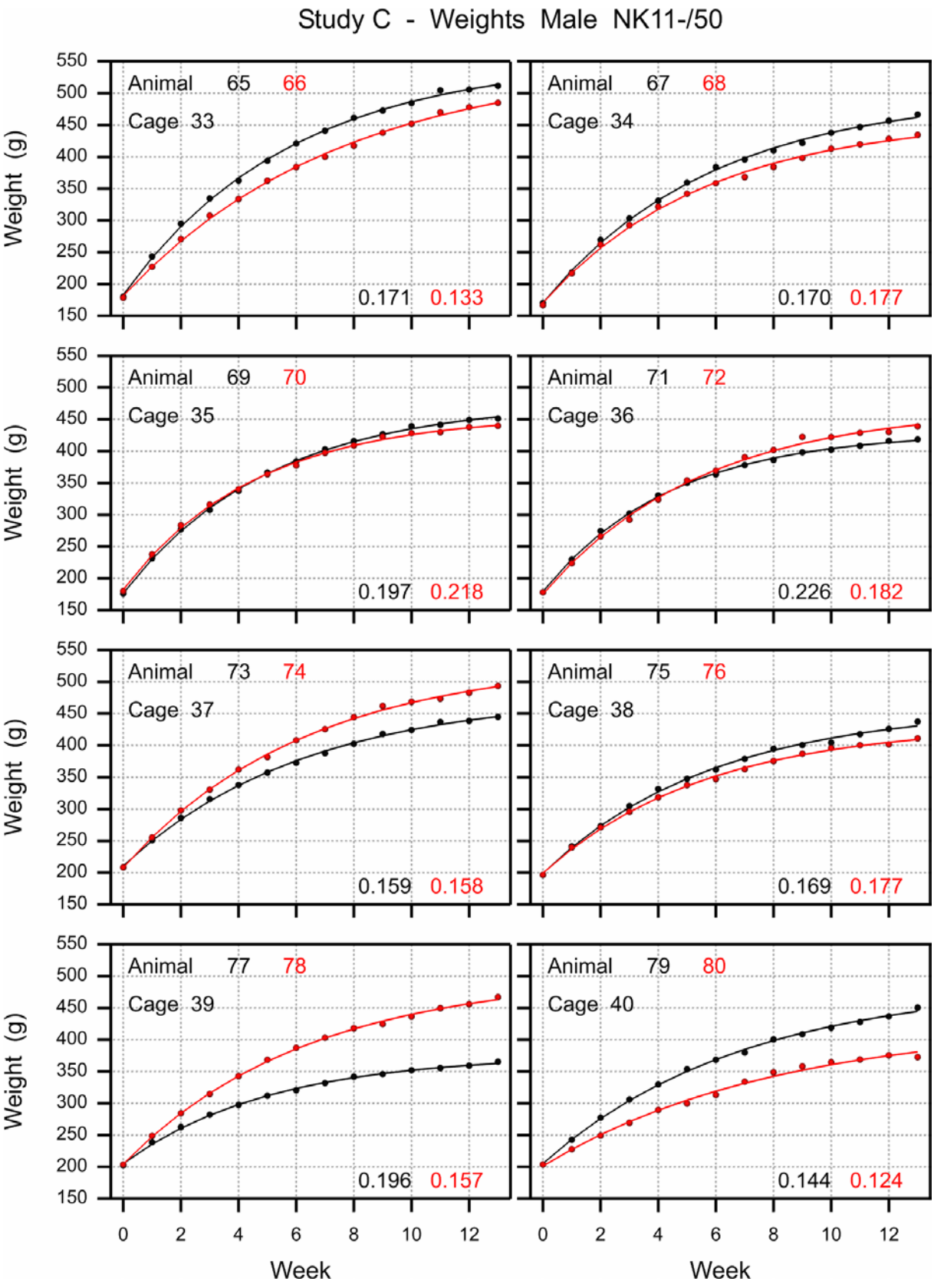

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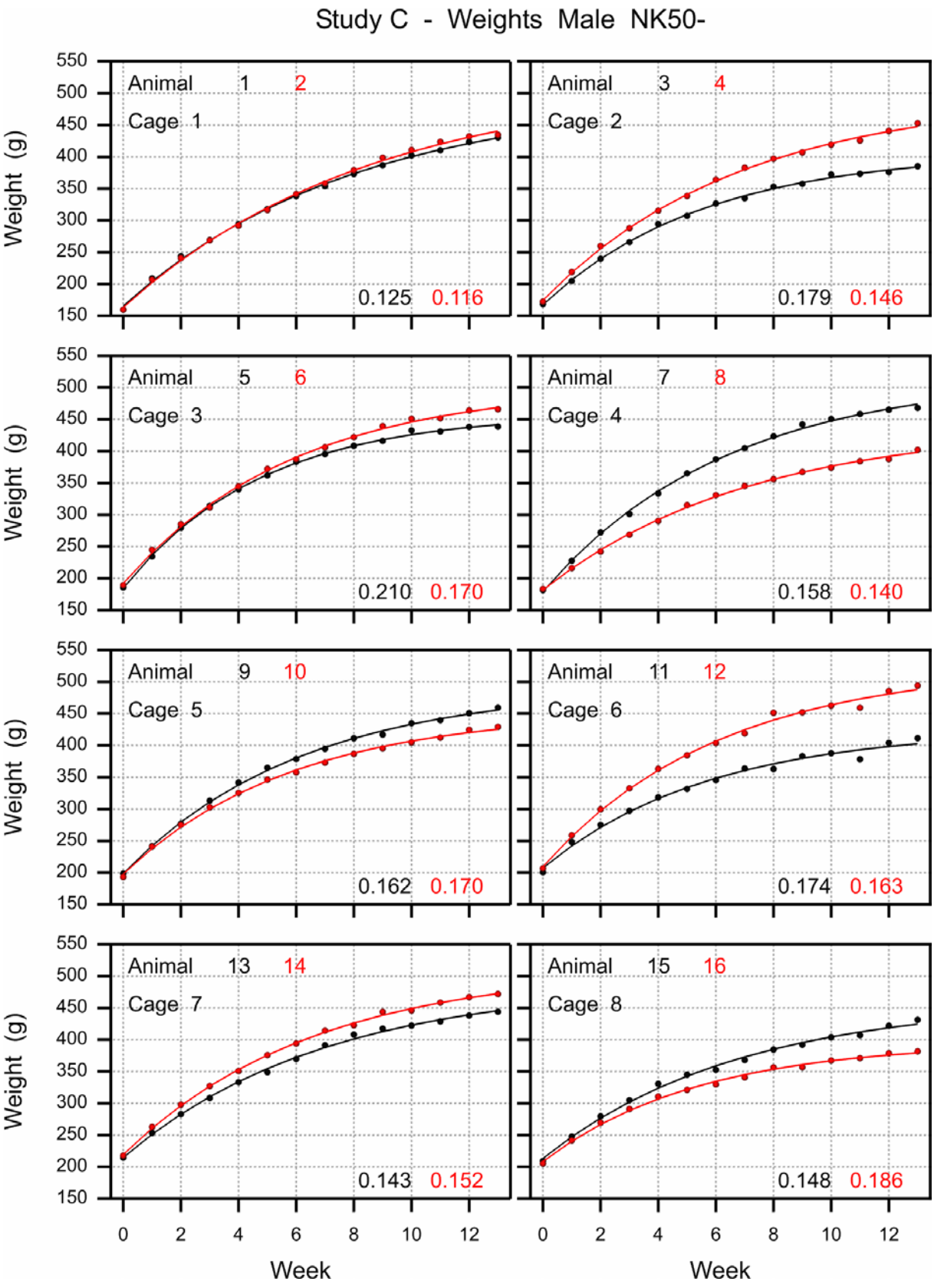

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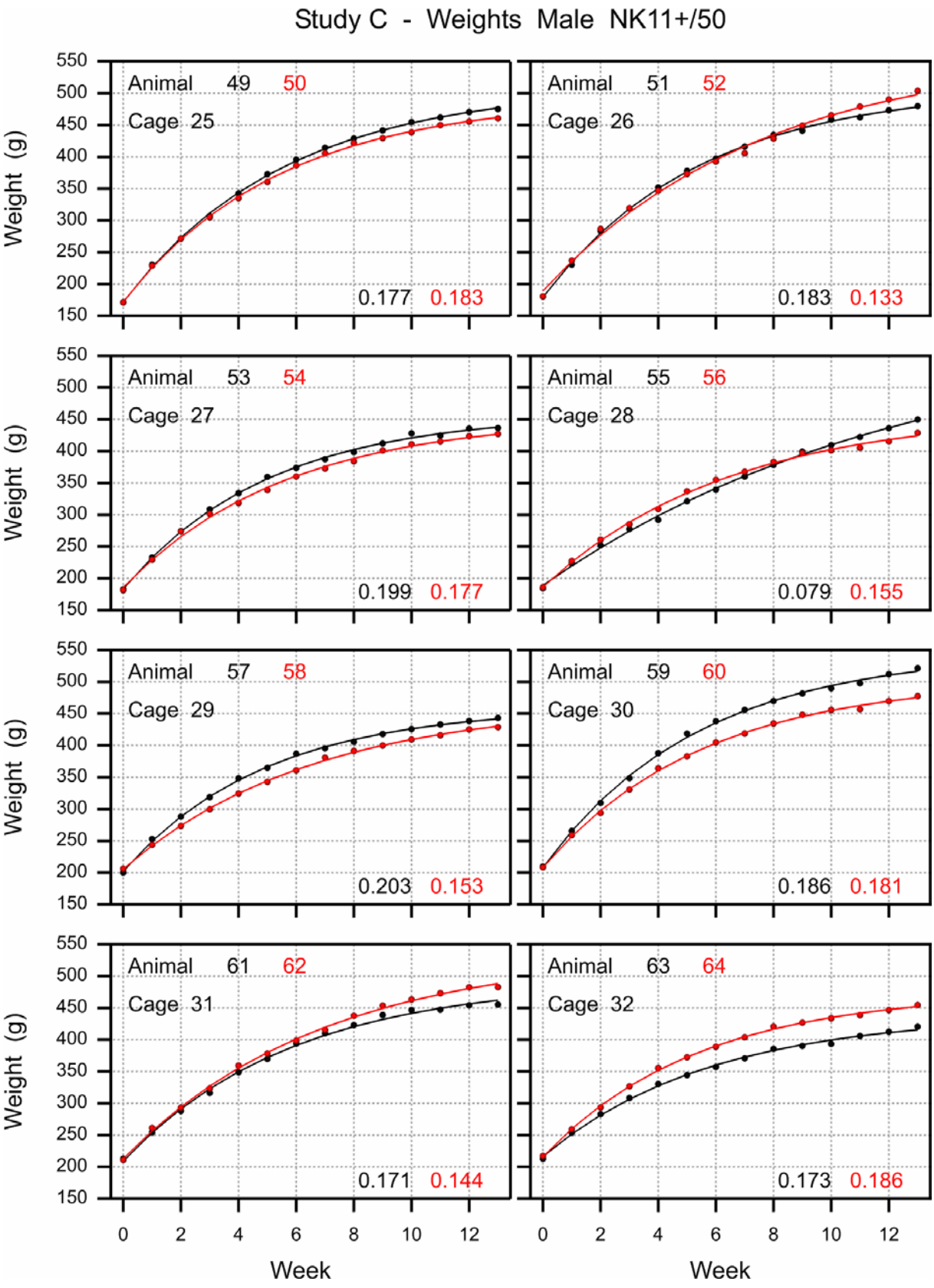

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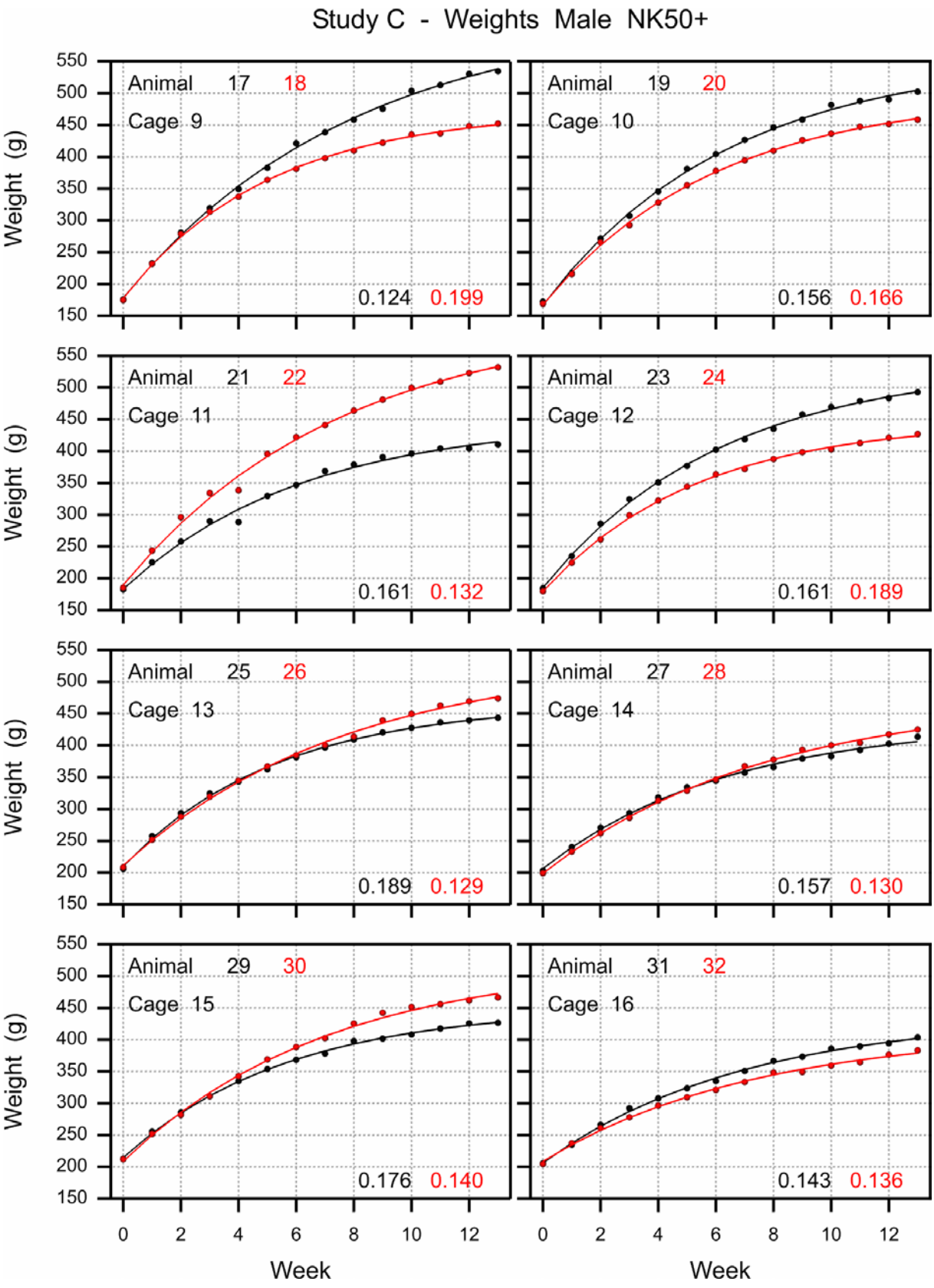

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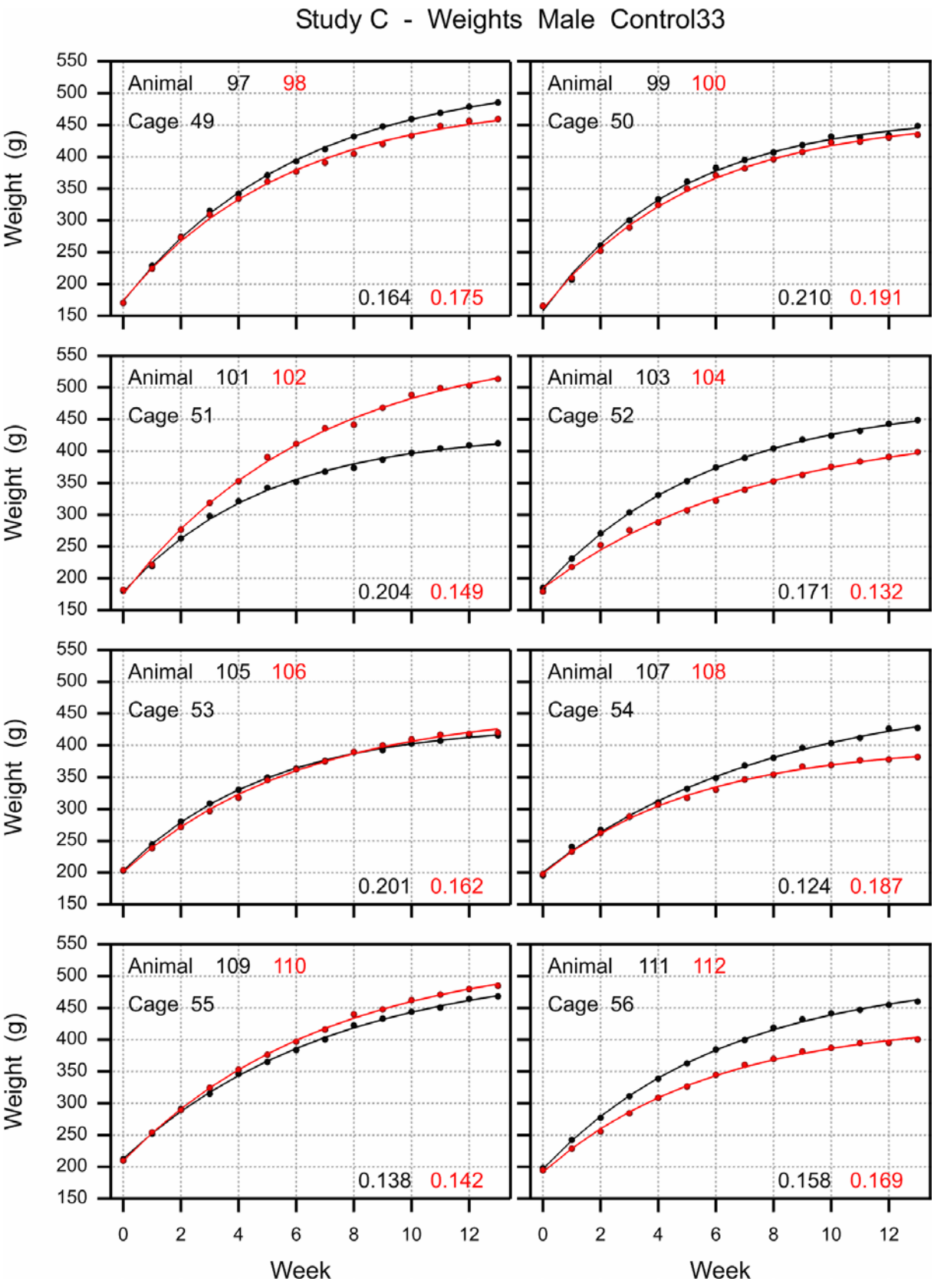

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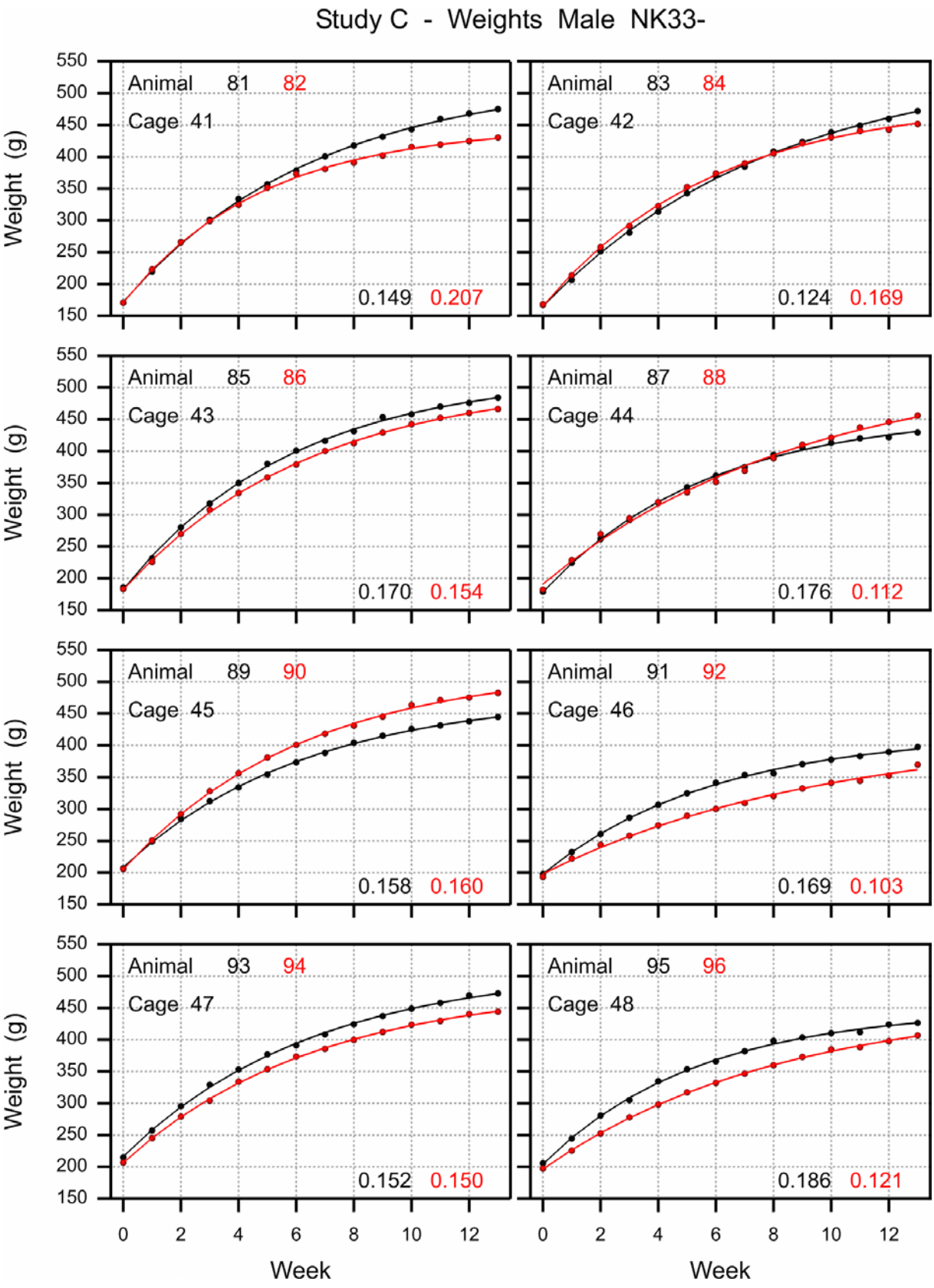

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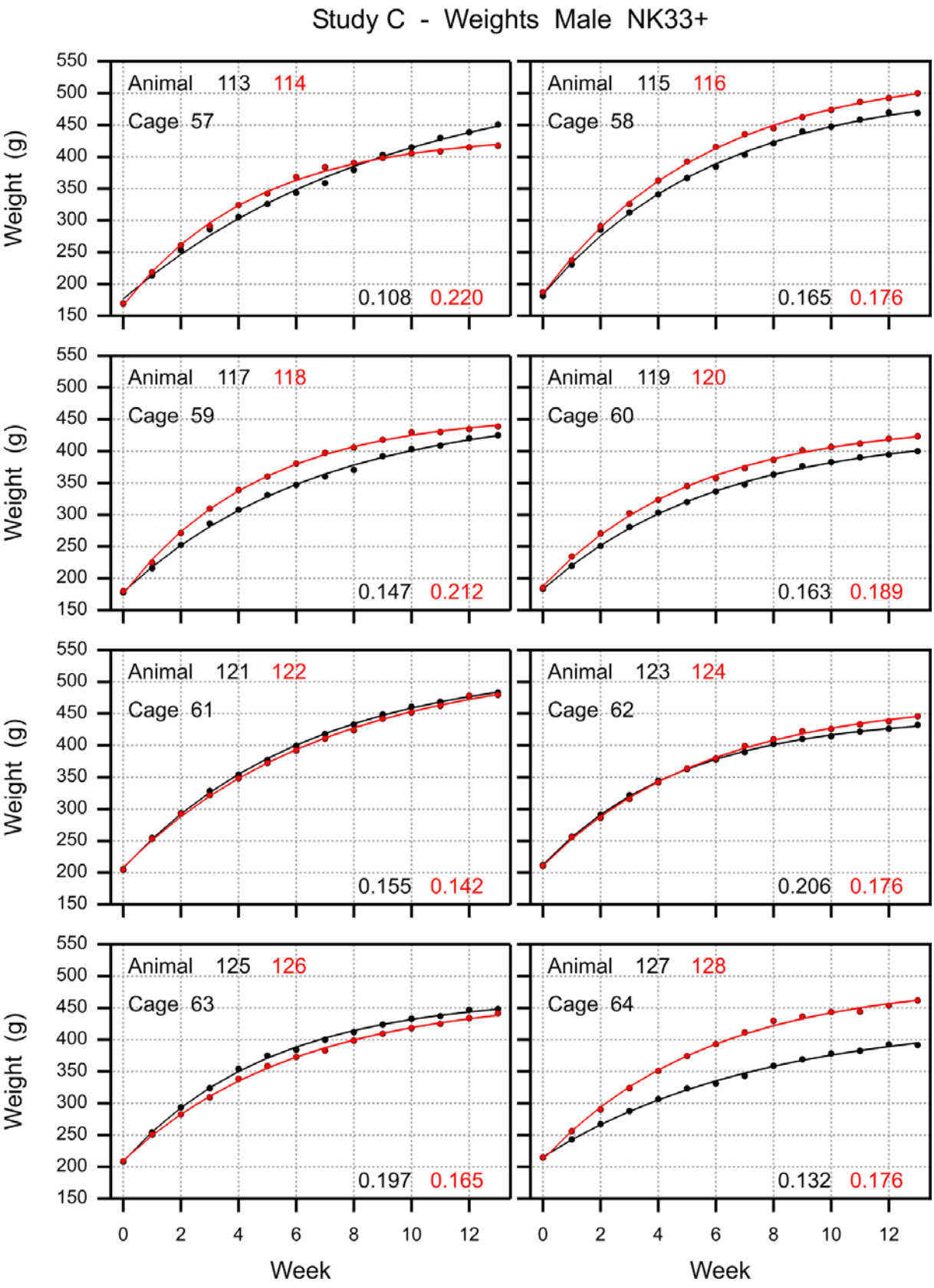

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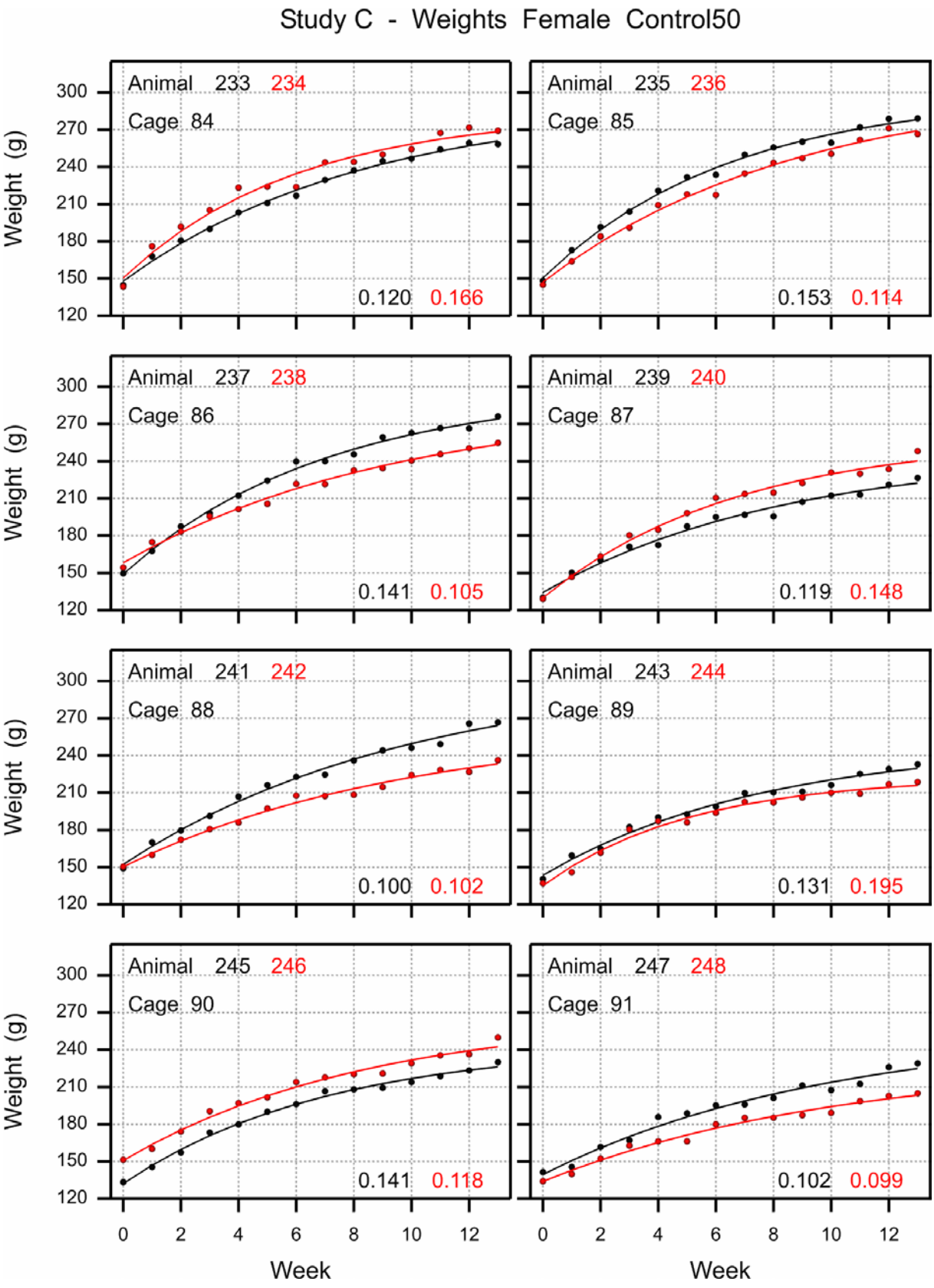

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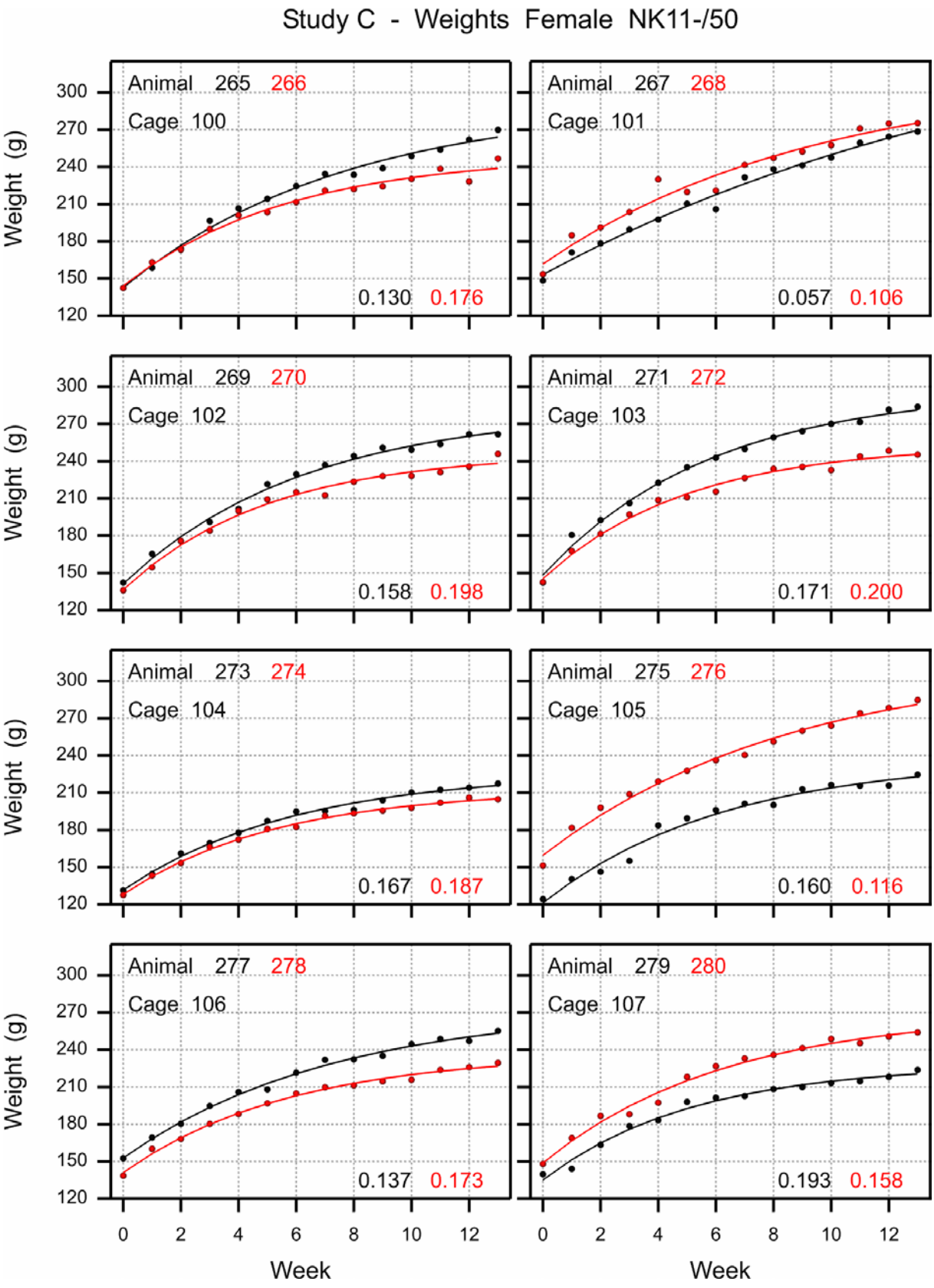

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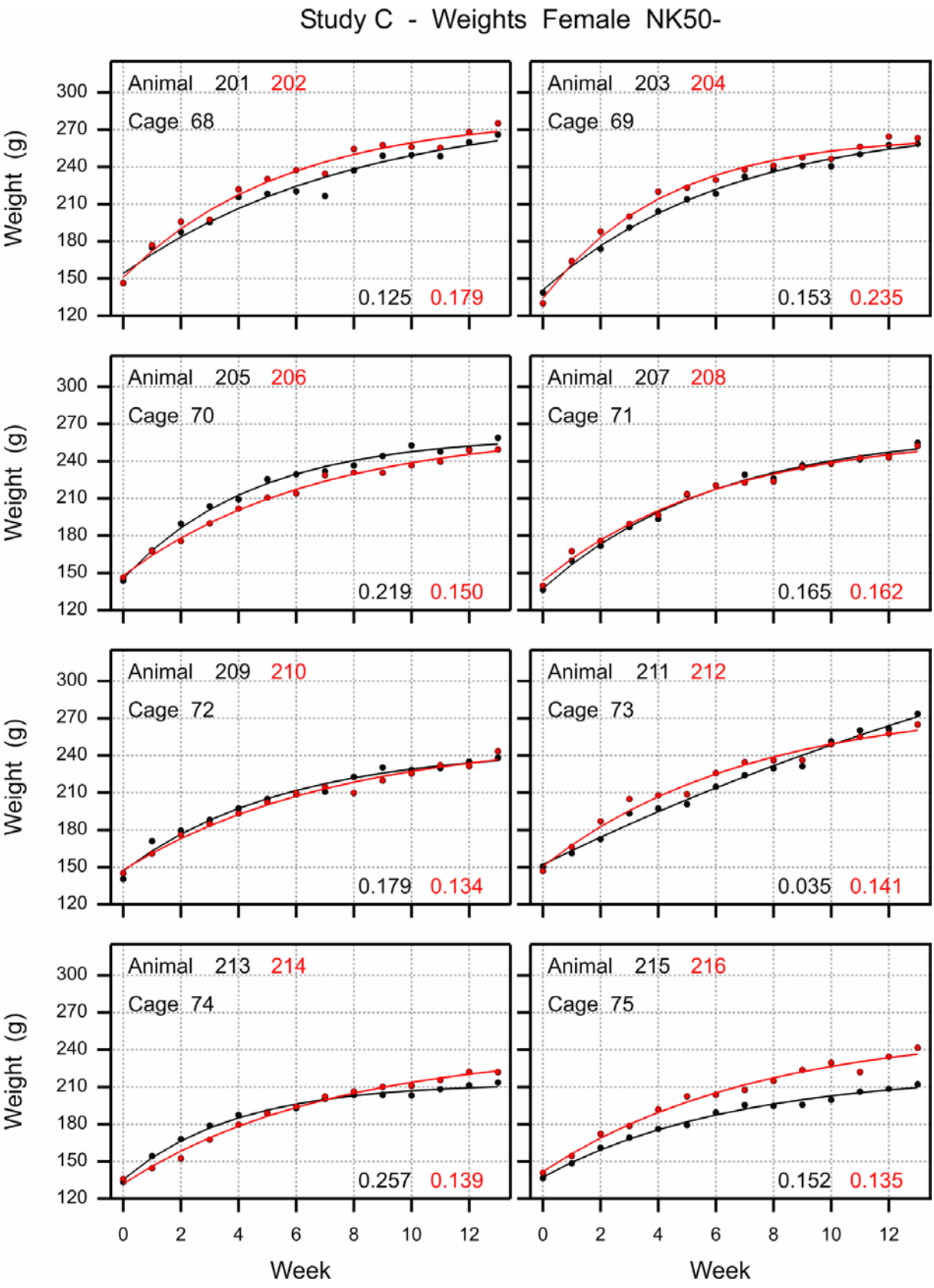

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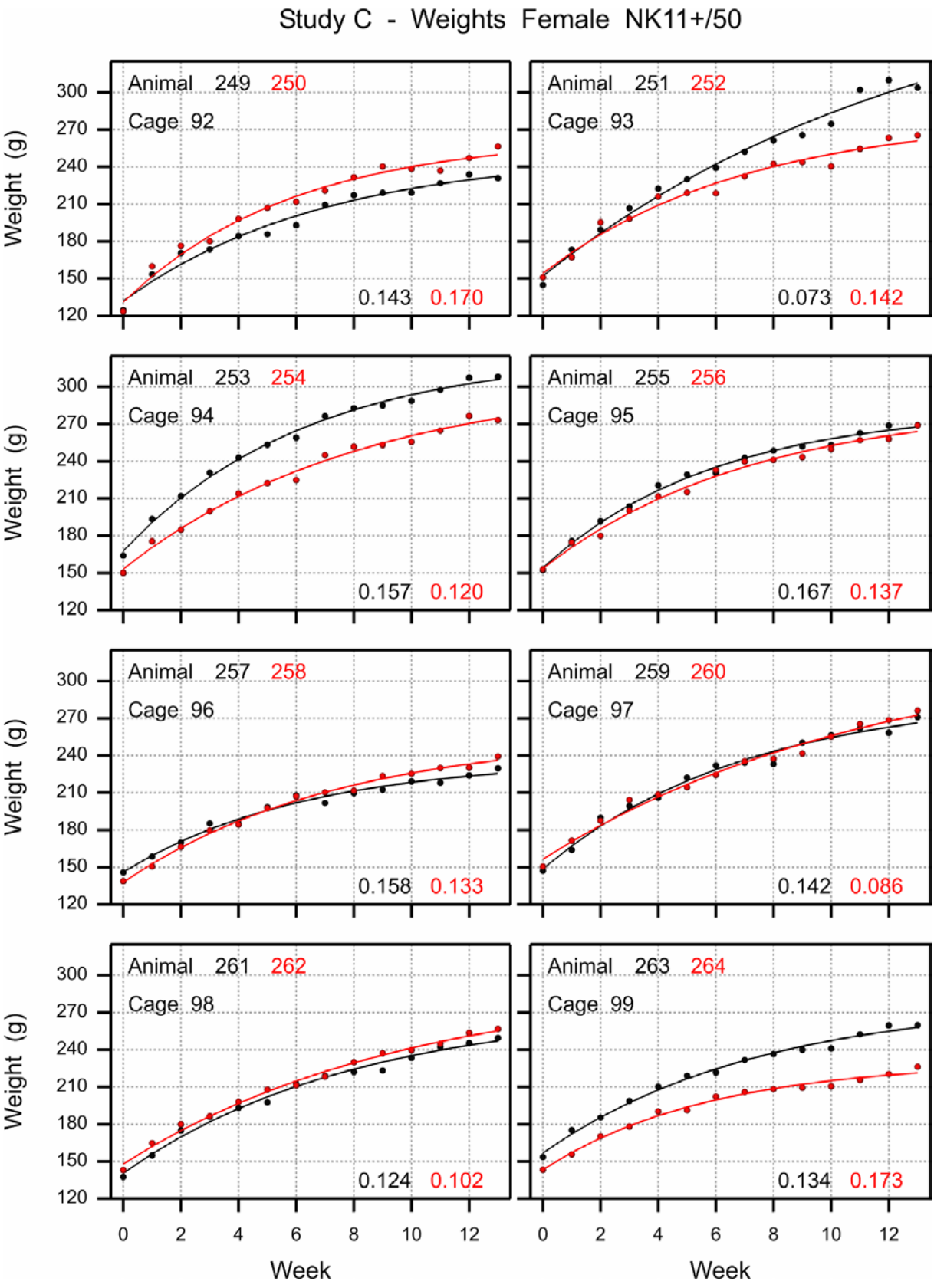

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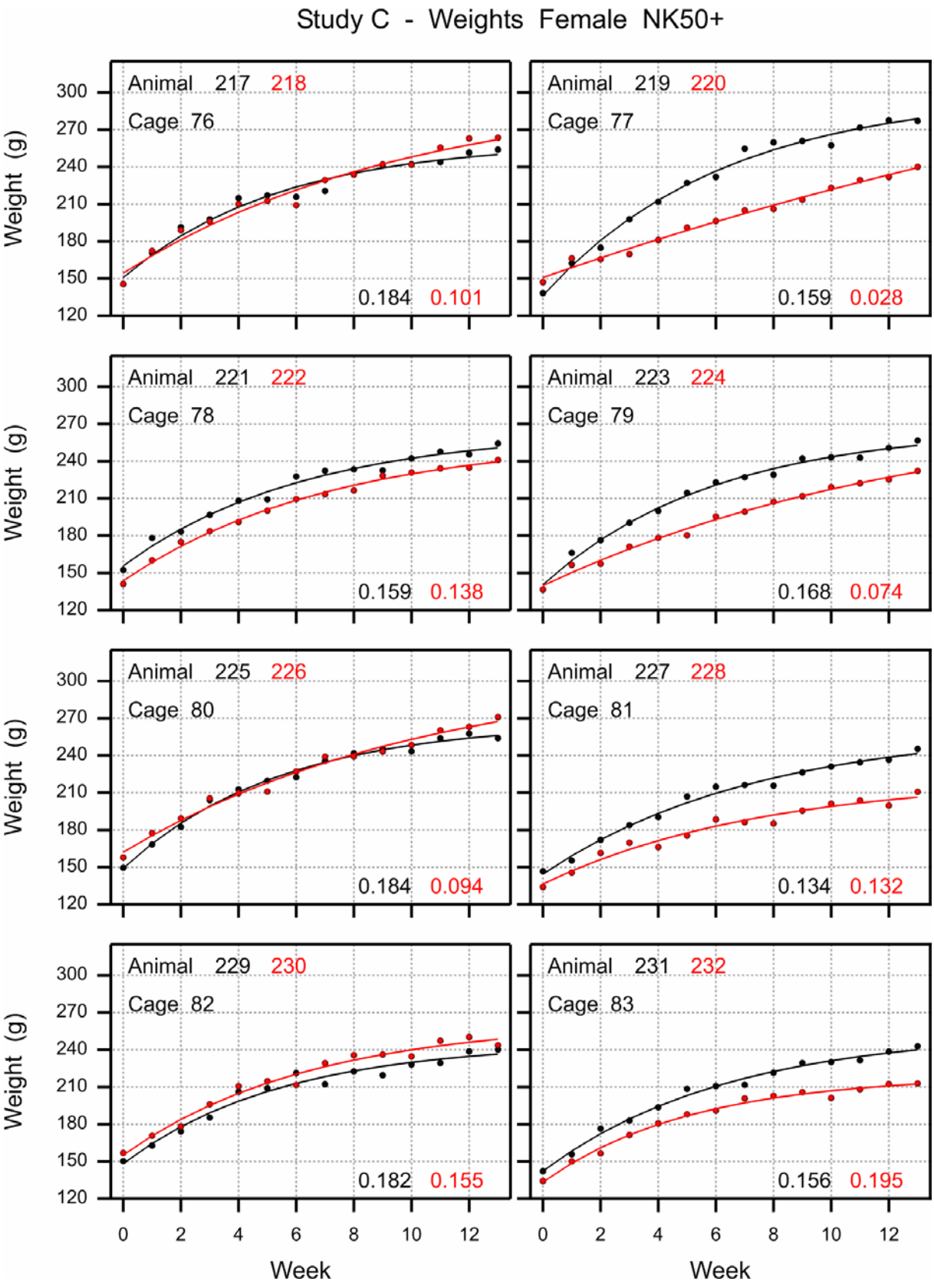

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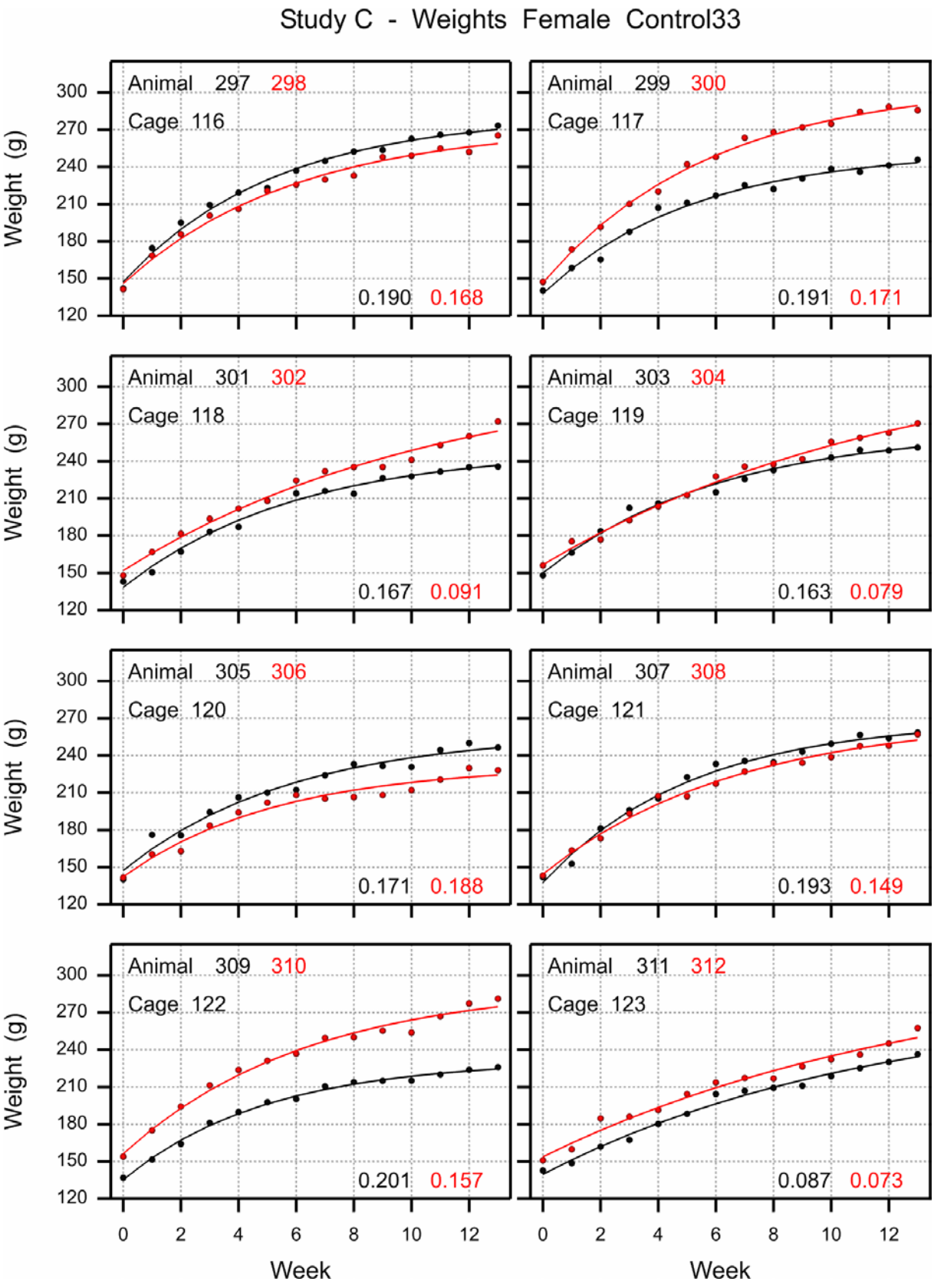

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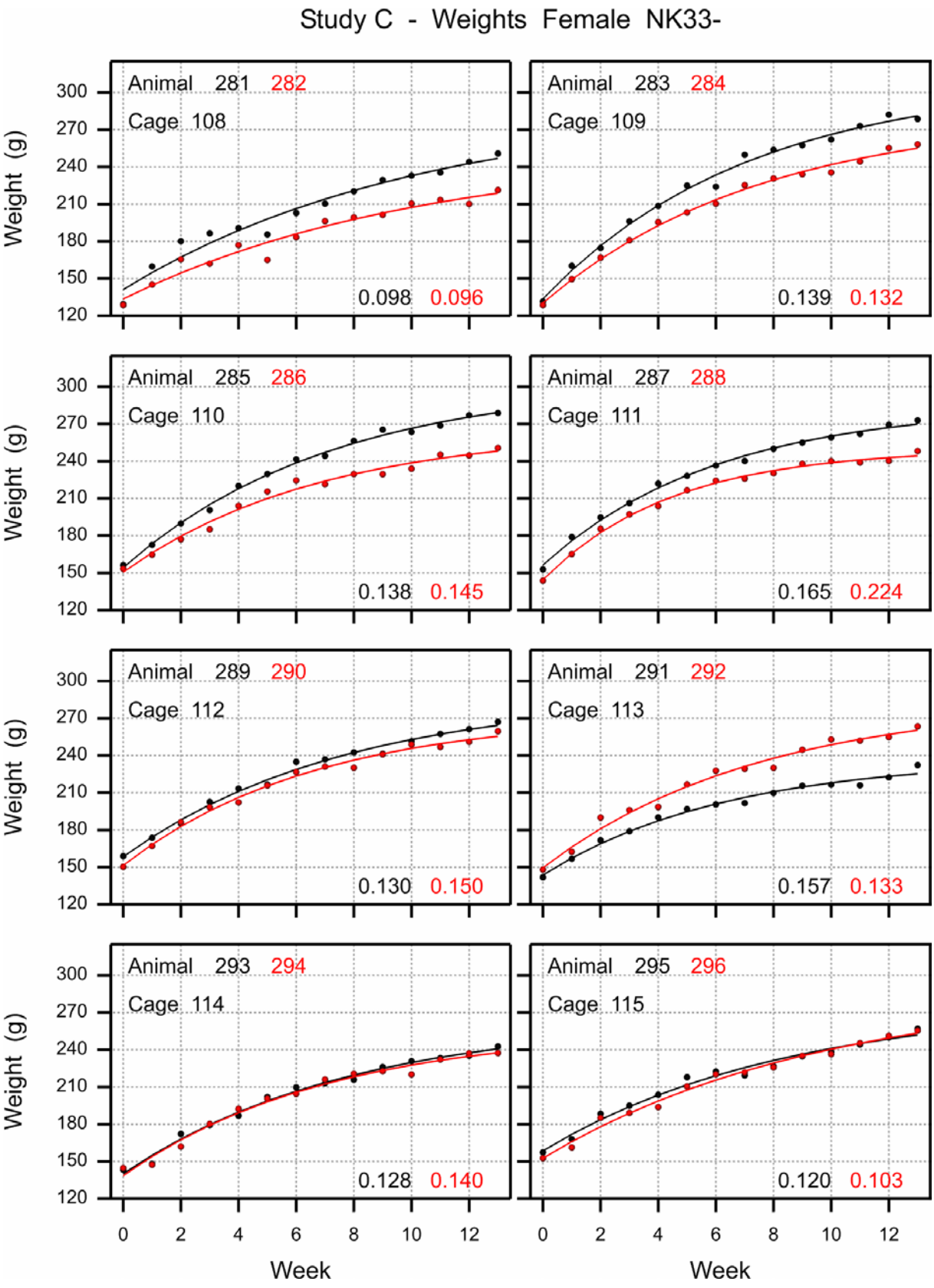

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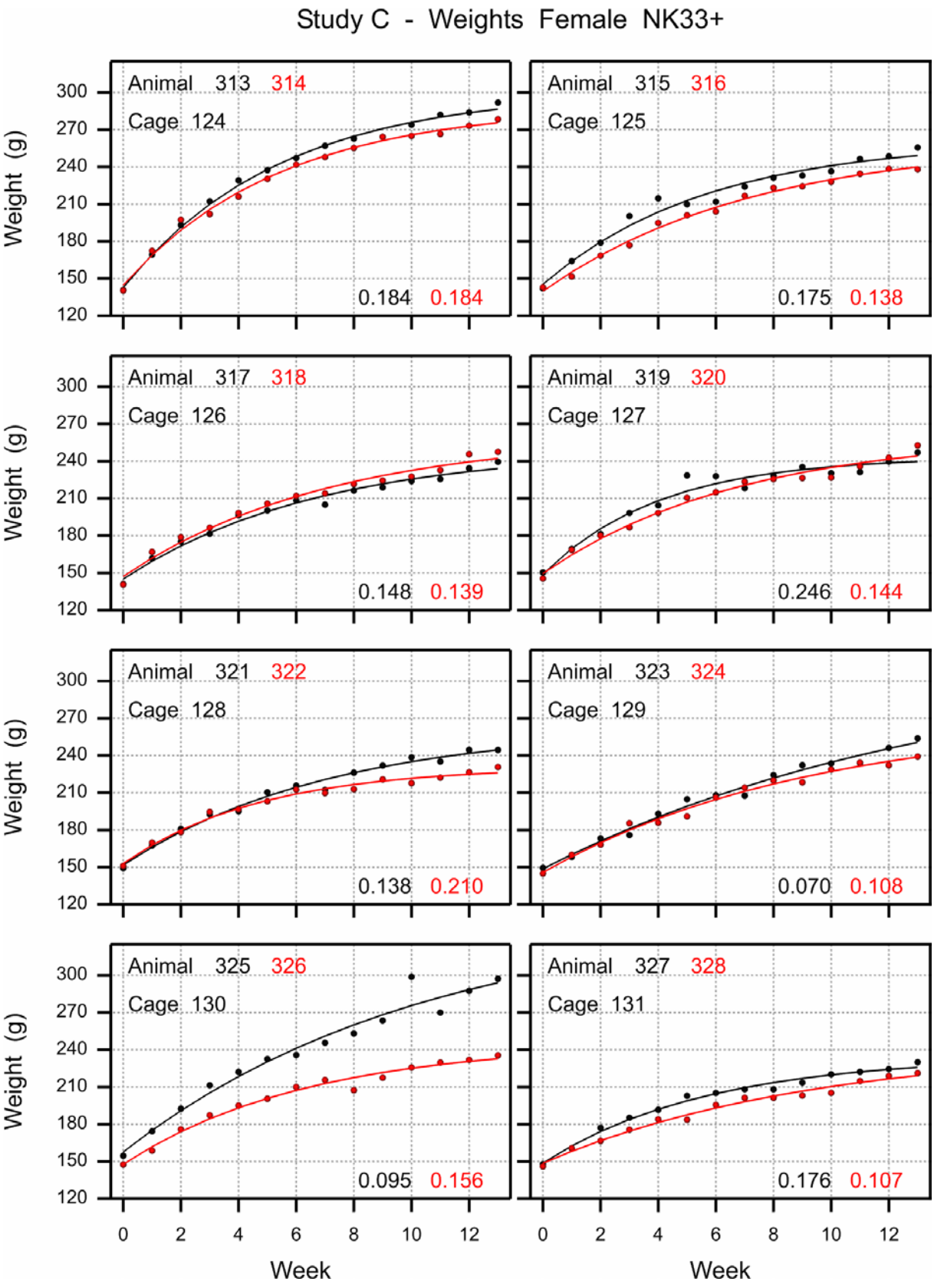

Appendix 2. Feed consumption per cage

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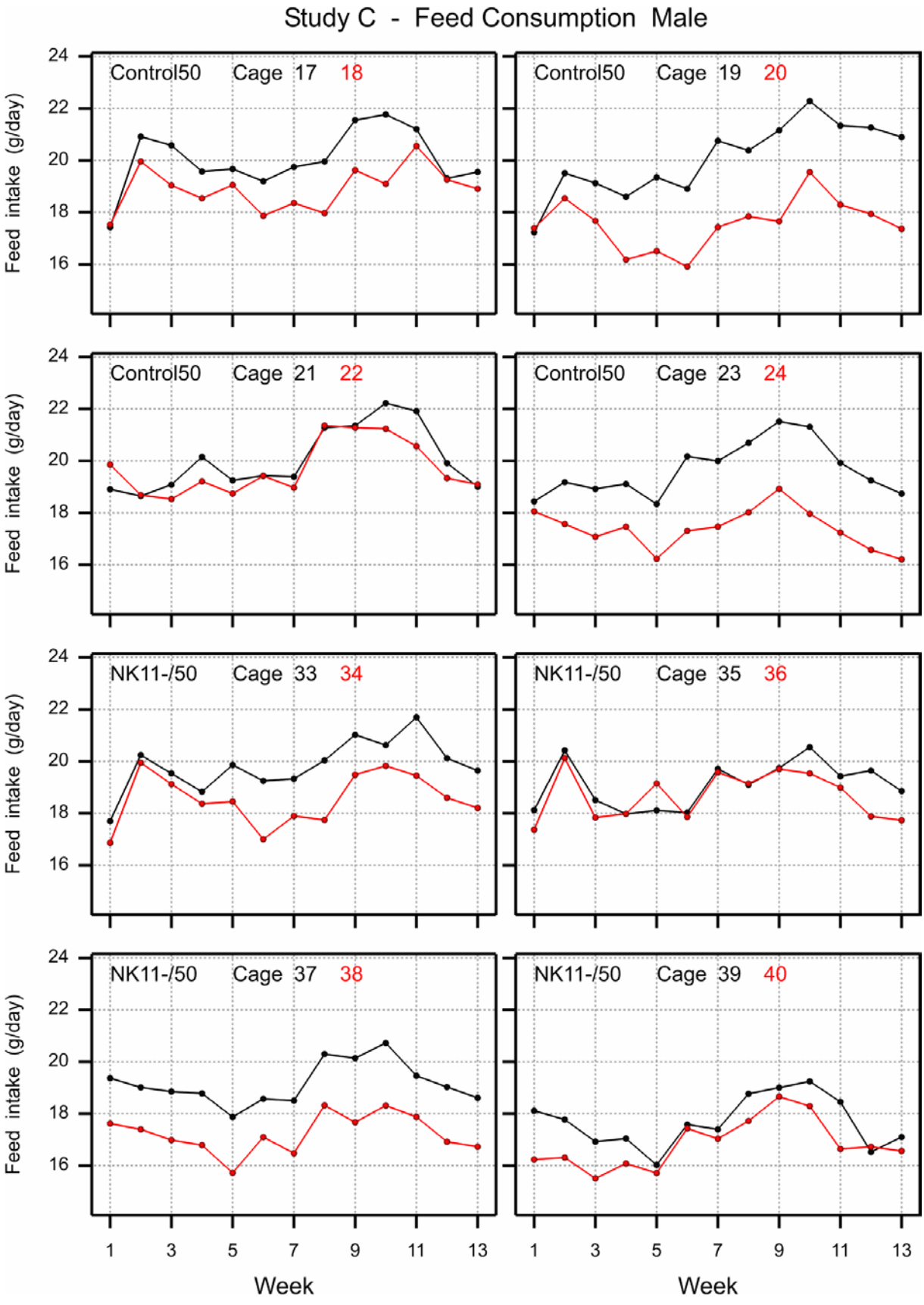

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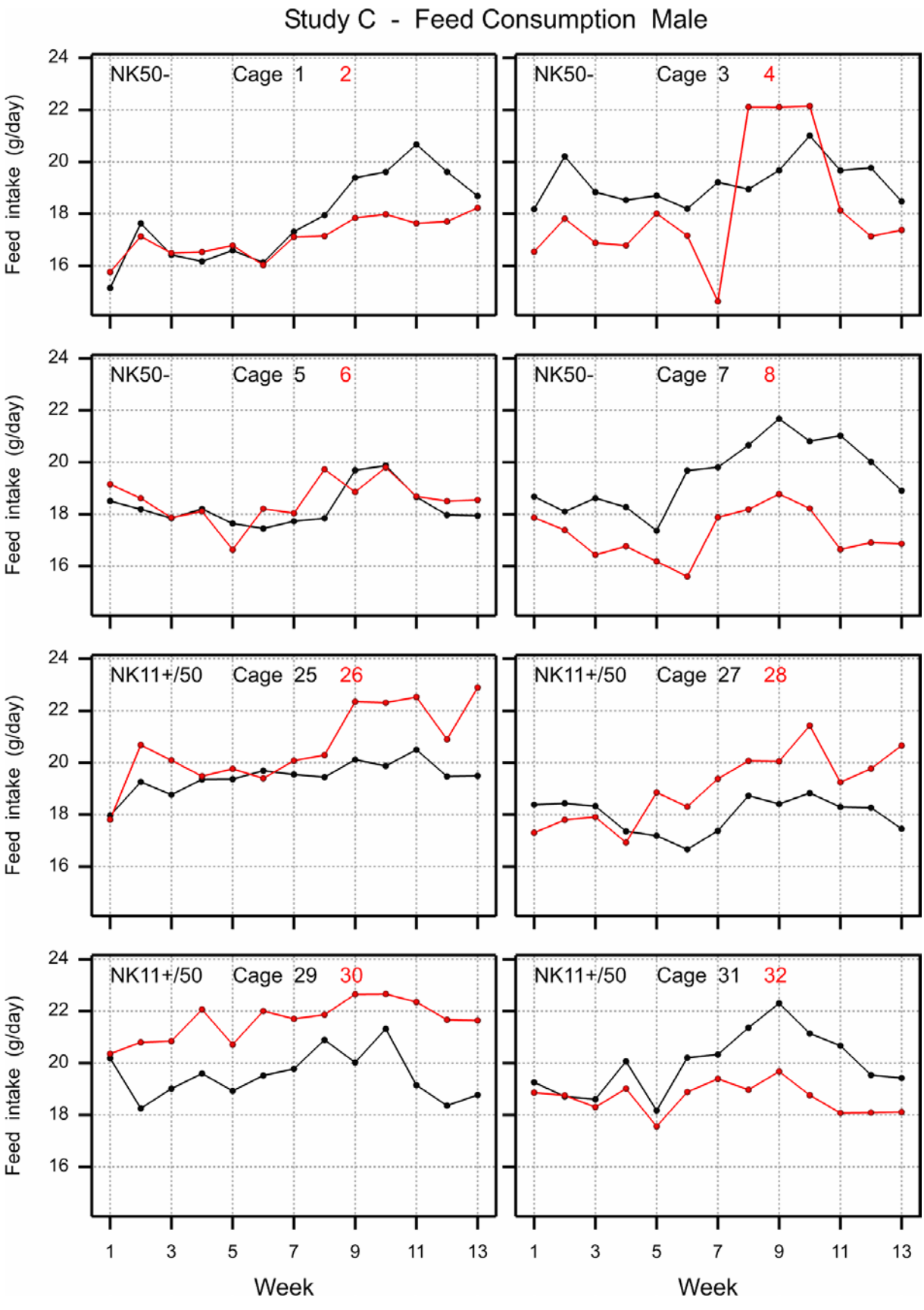

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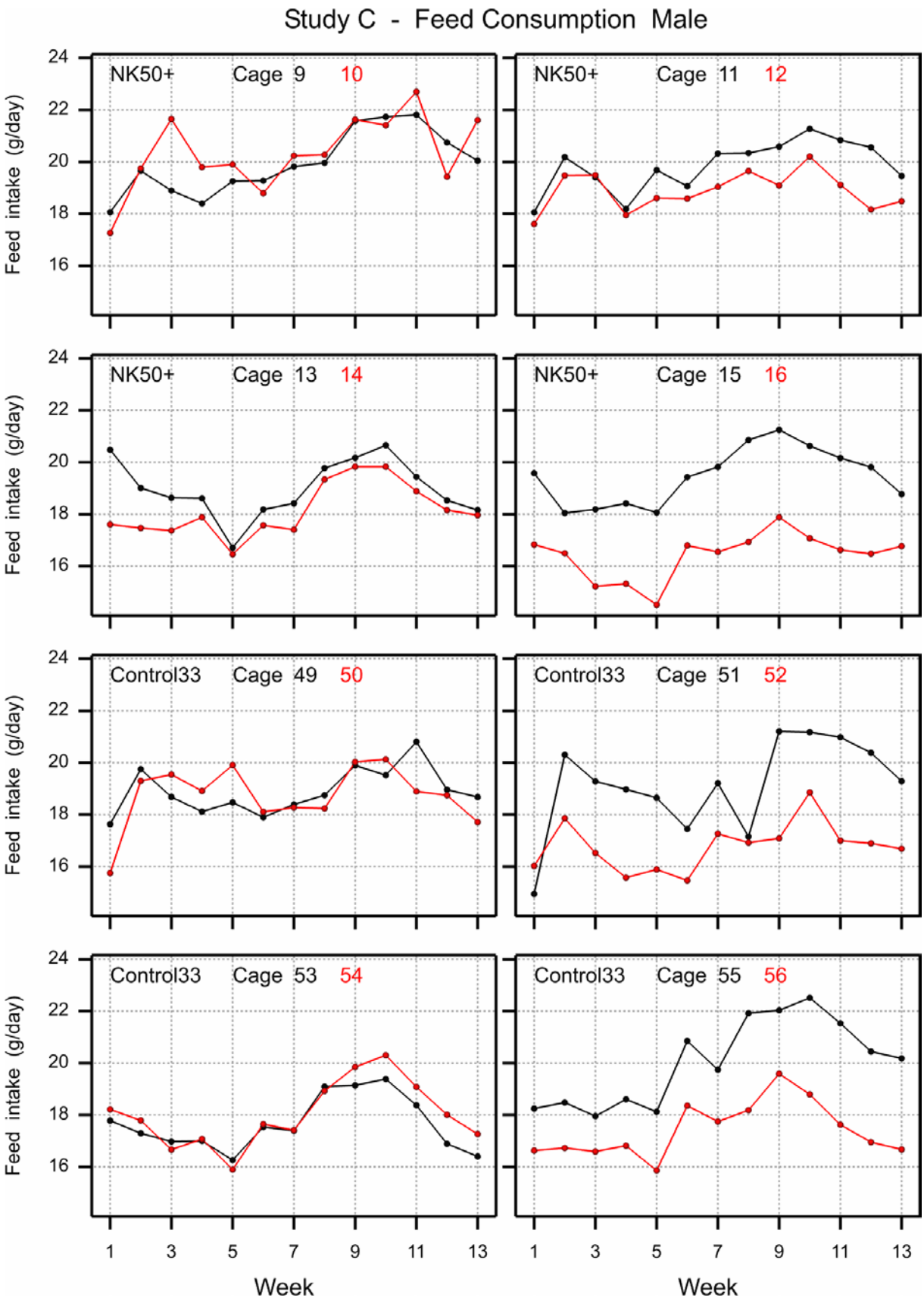

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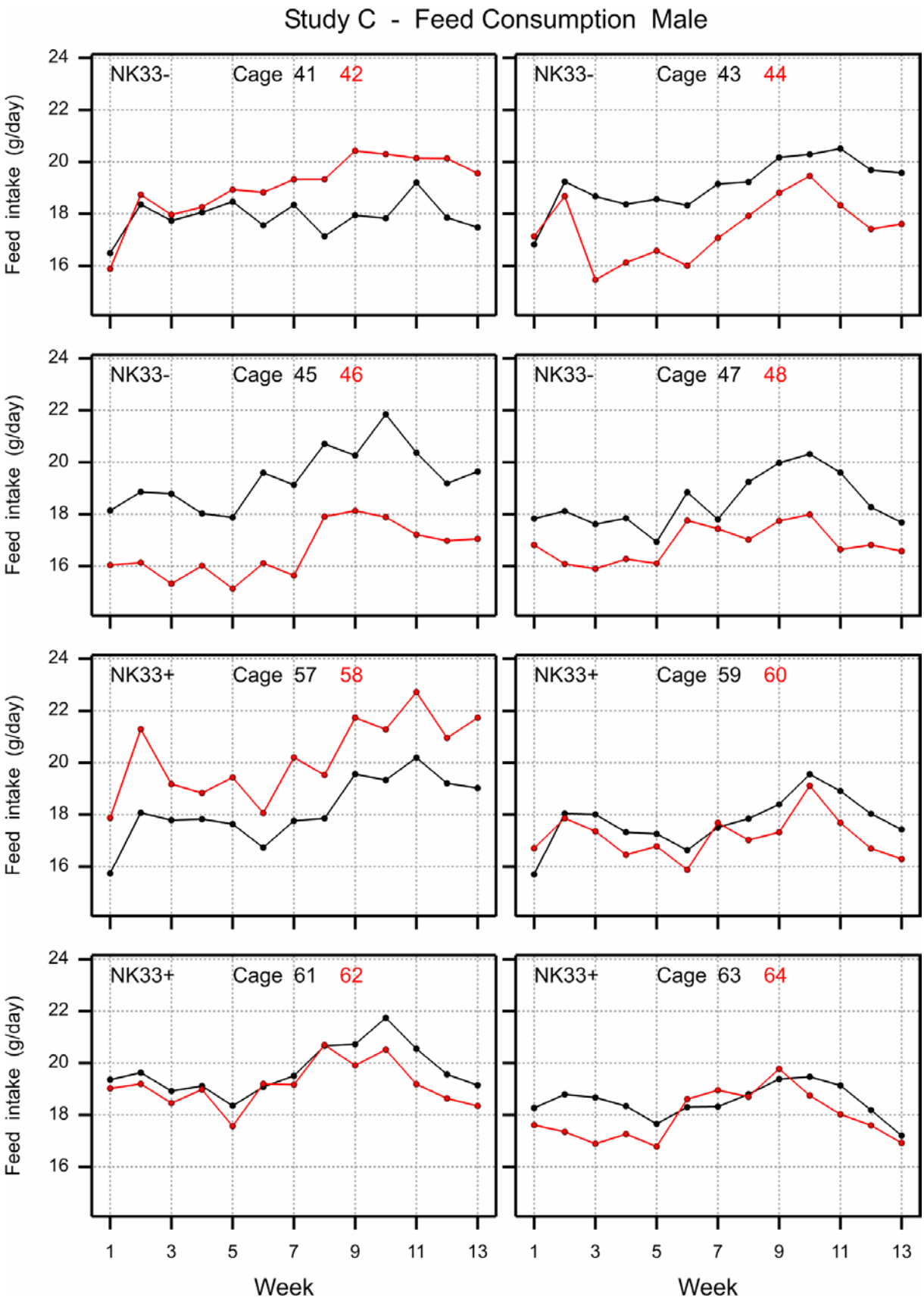

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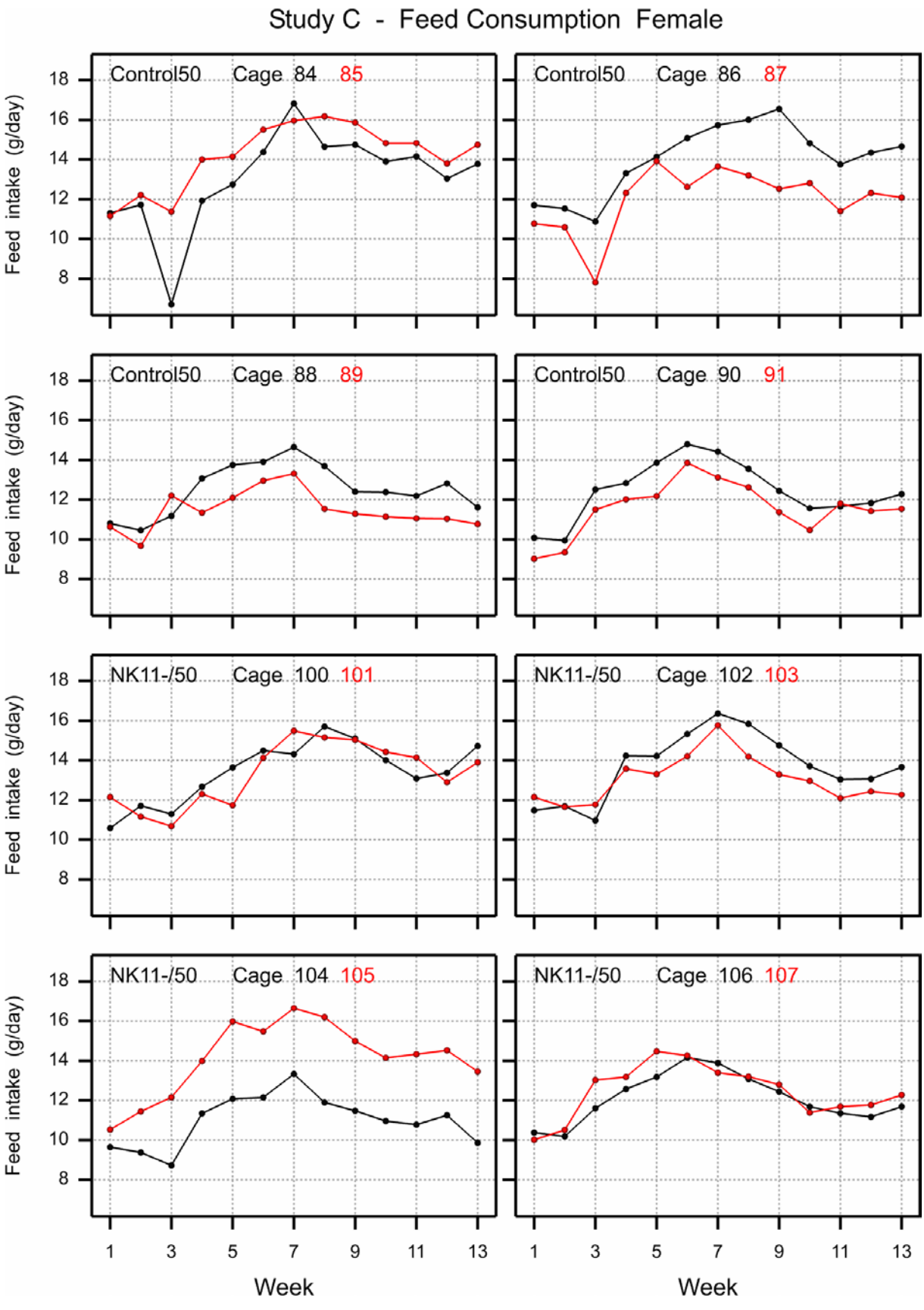

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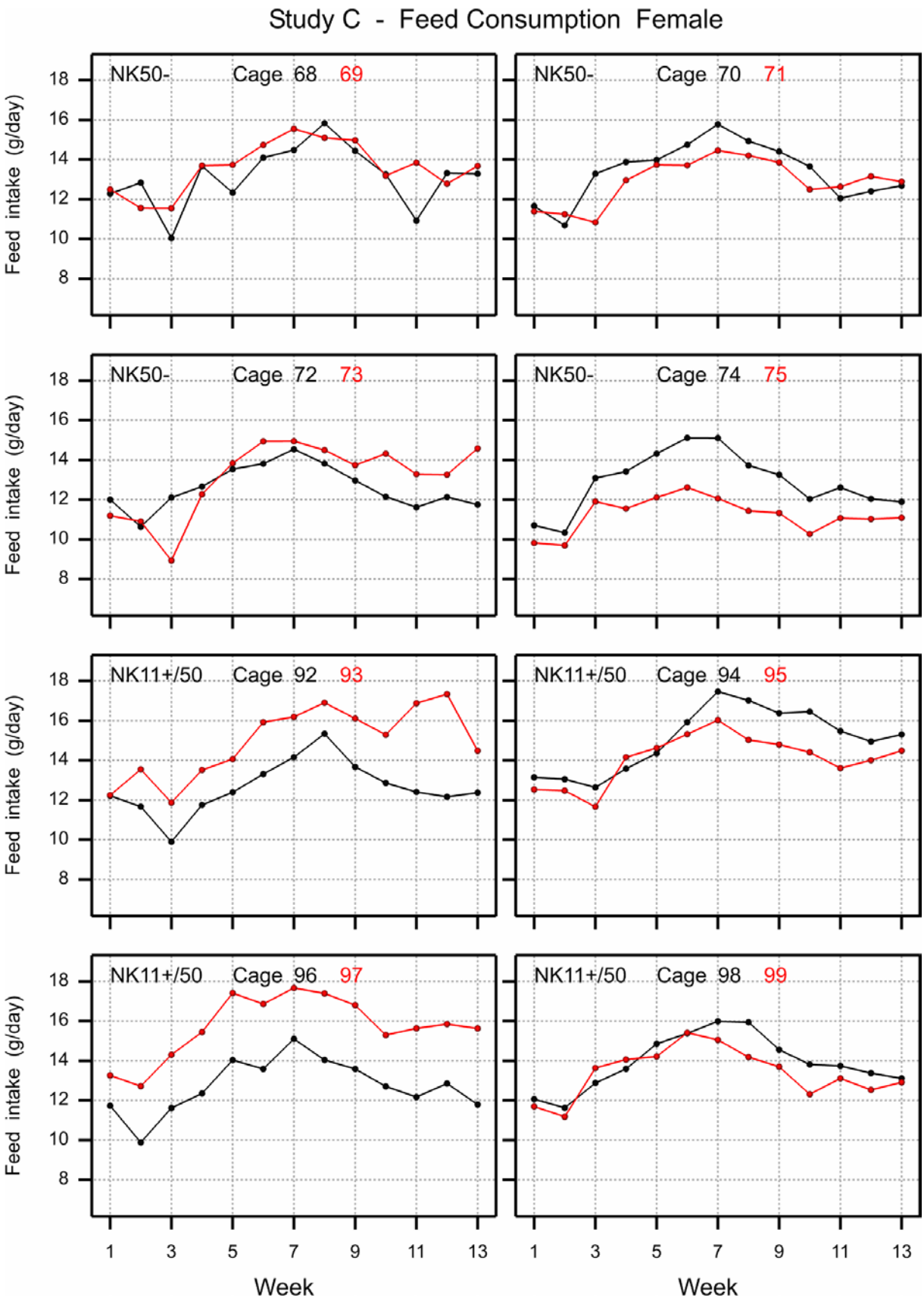

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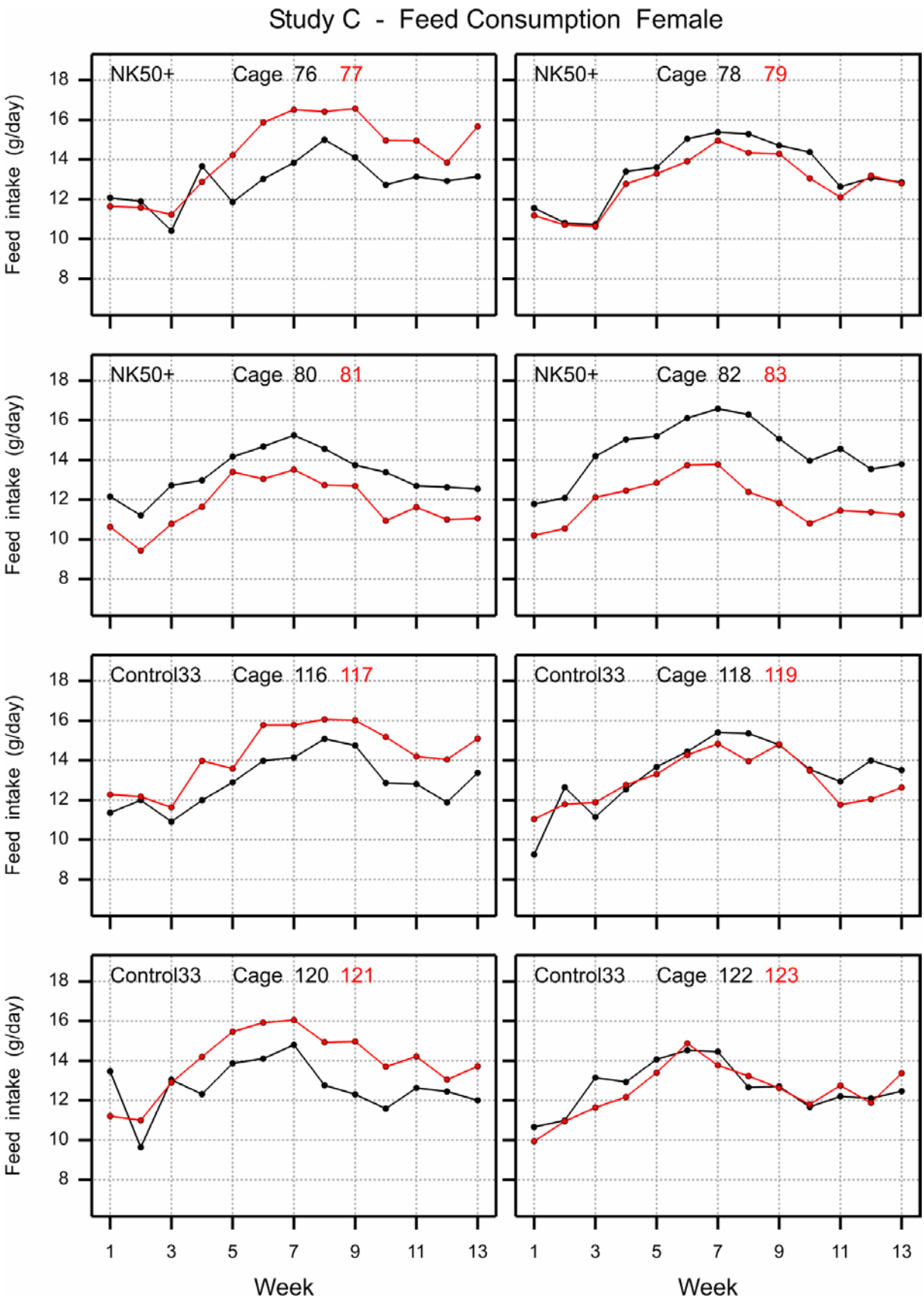

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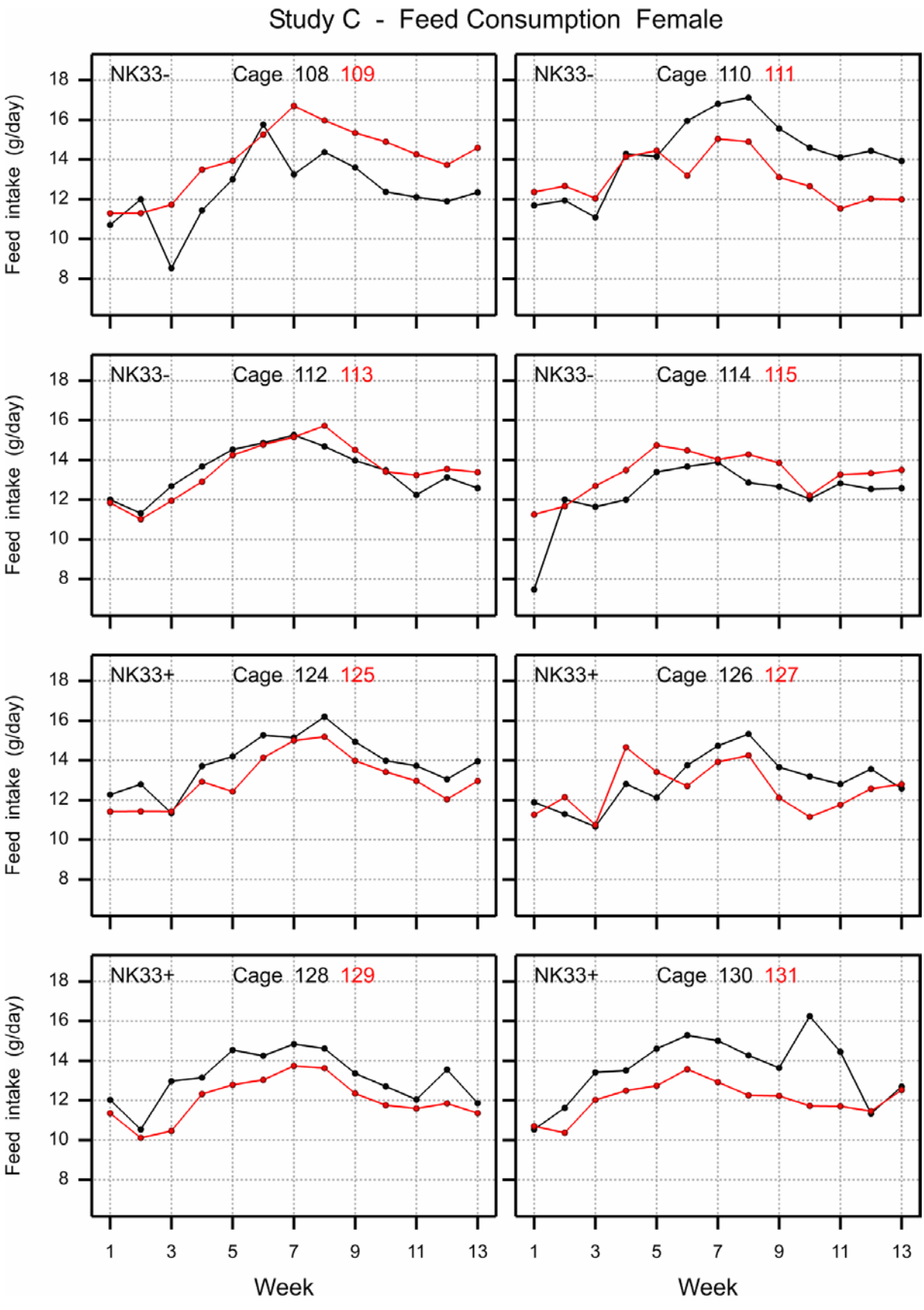
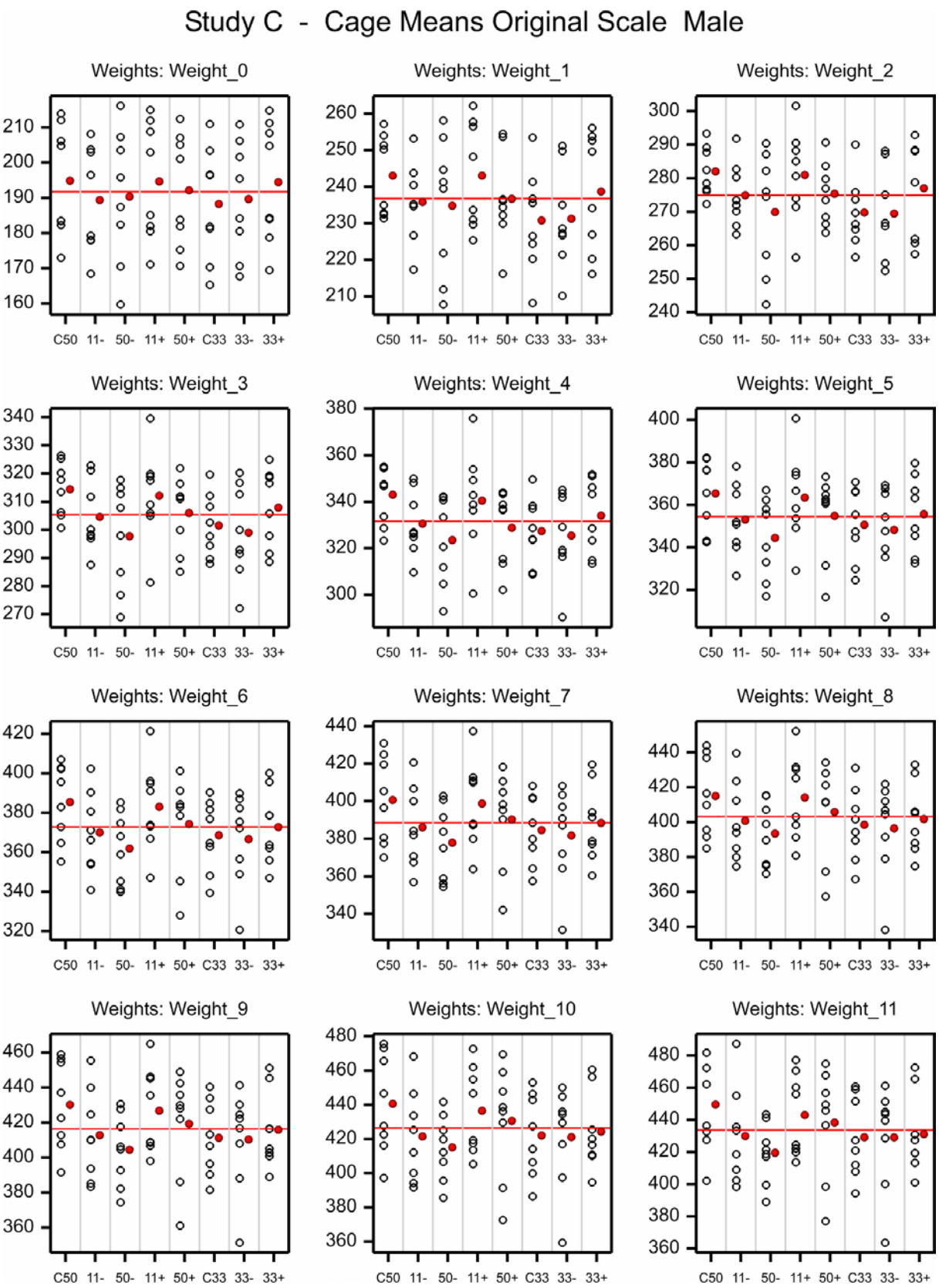


Appendix 3. Graphs of cage means on the original scale

Red symbols denote means for feeding groups while the red line denotes the overall mean.



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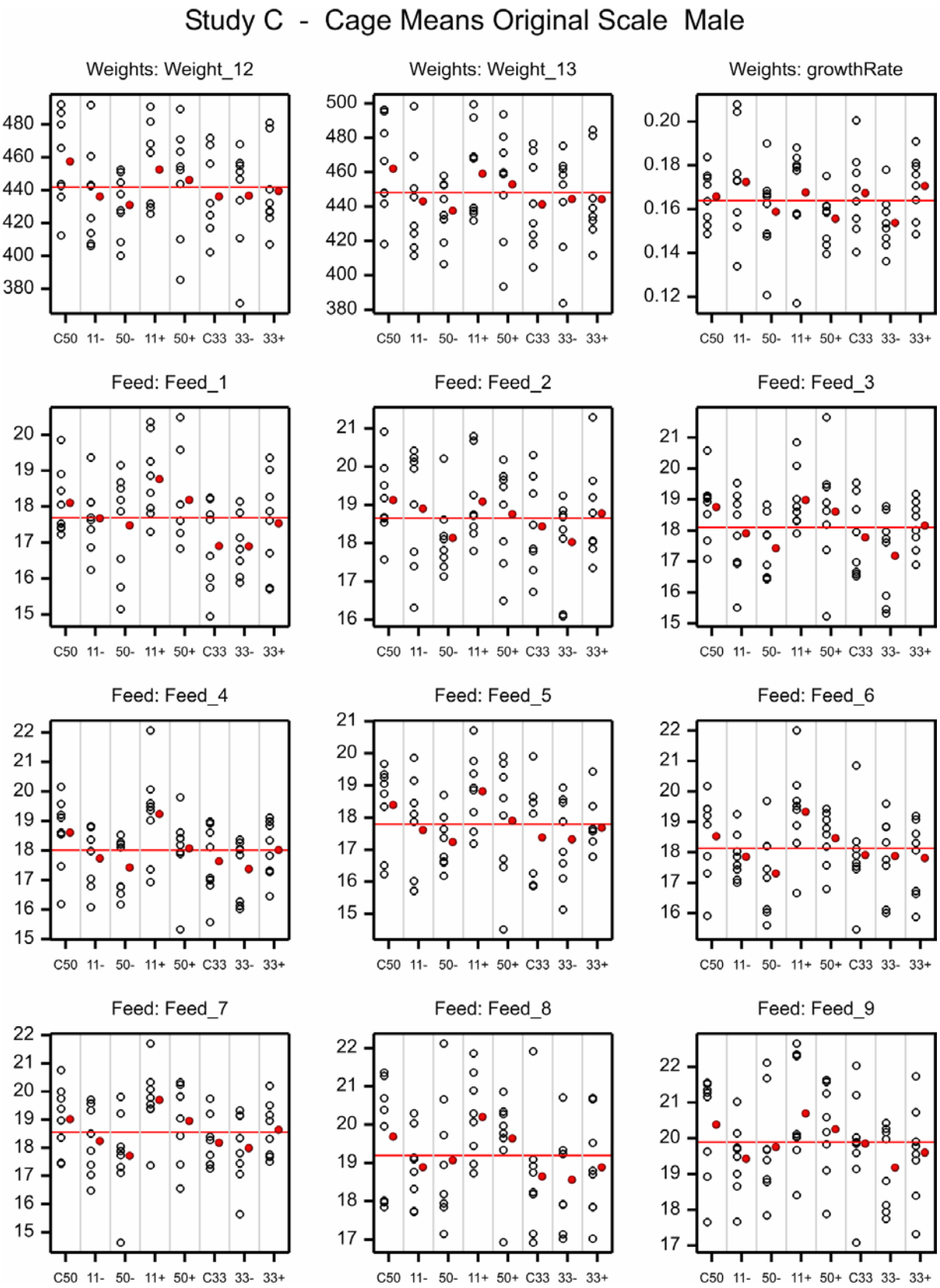

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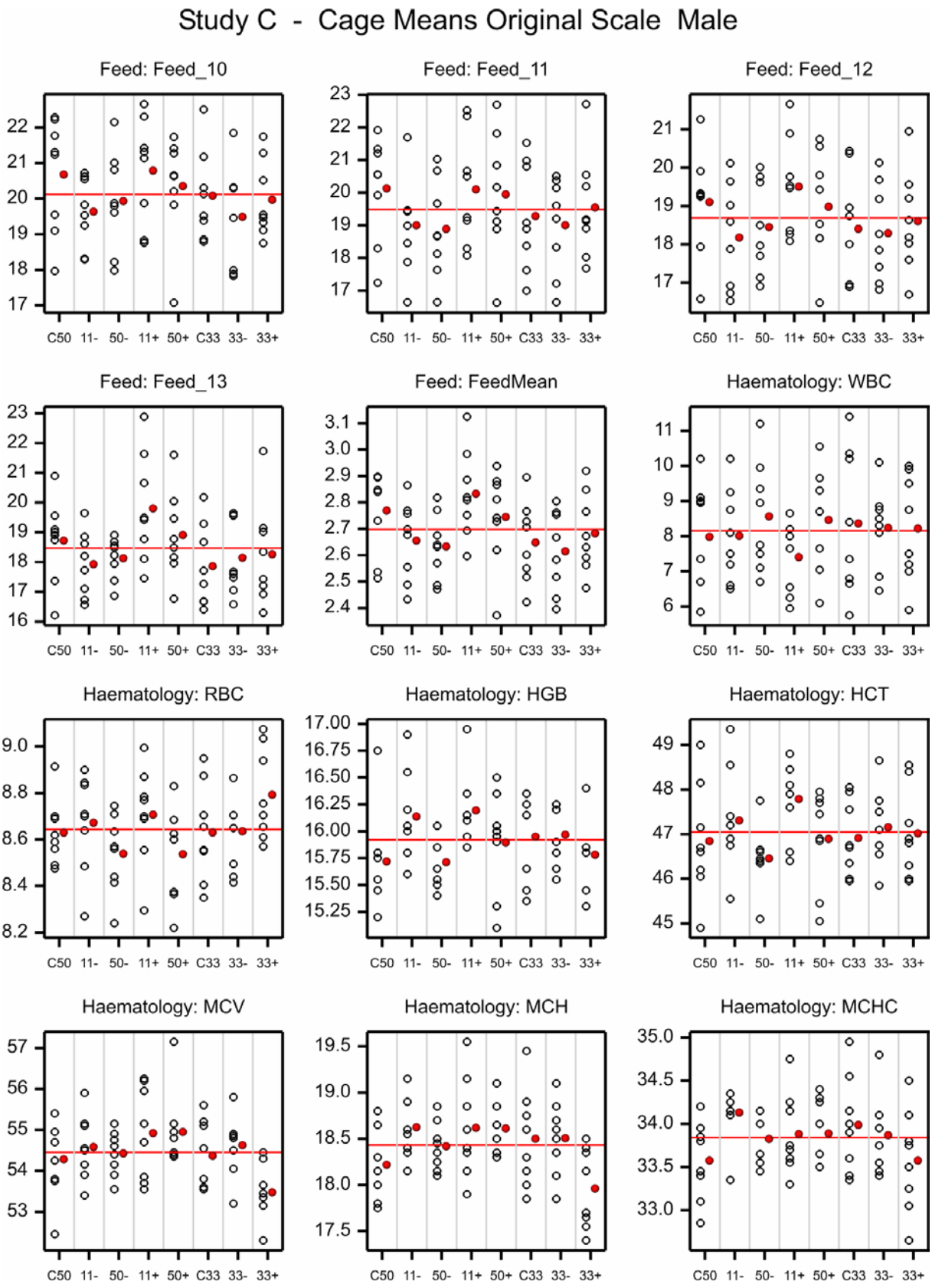

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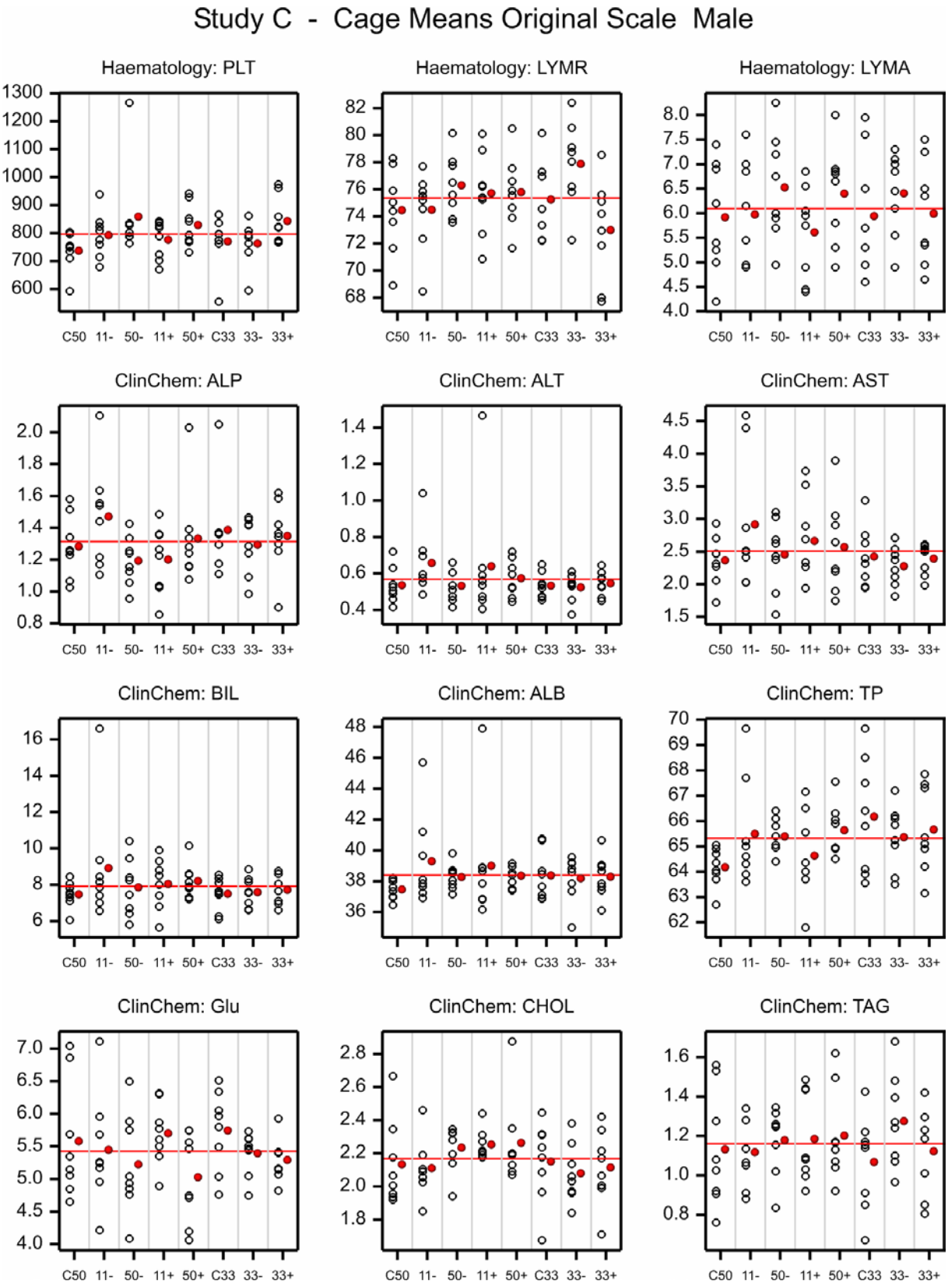

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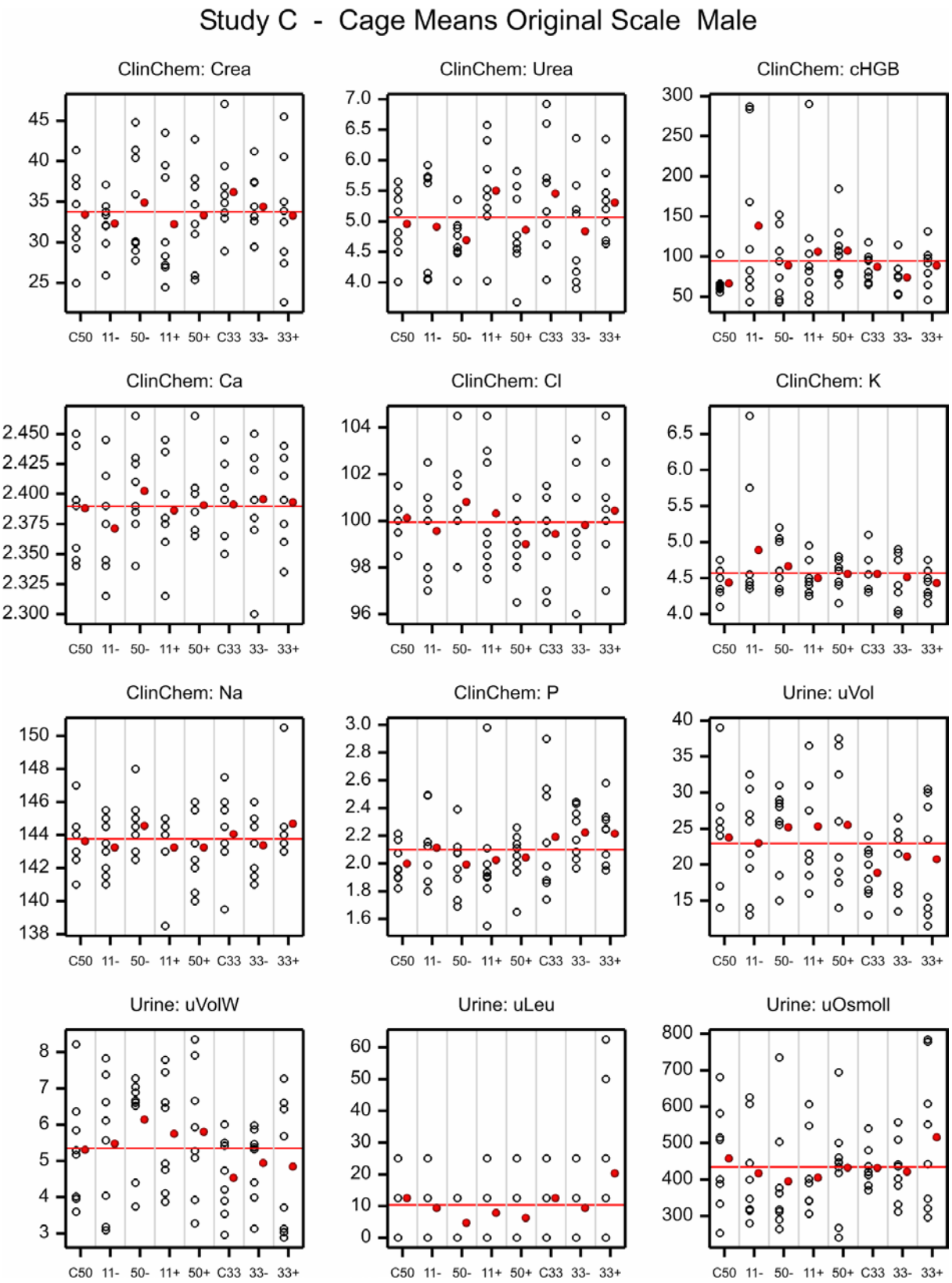

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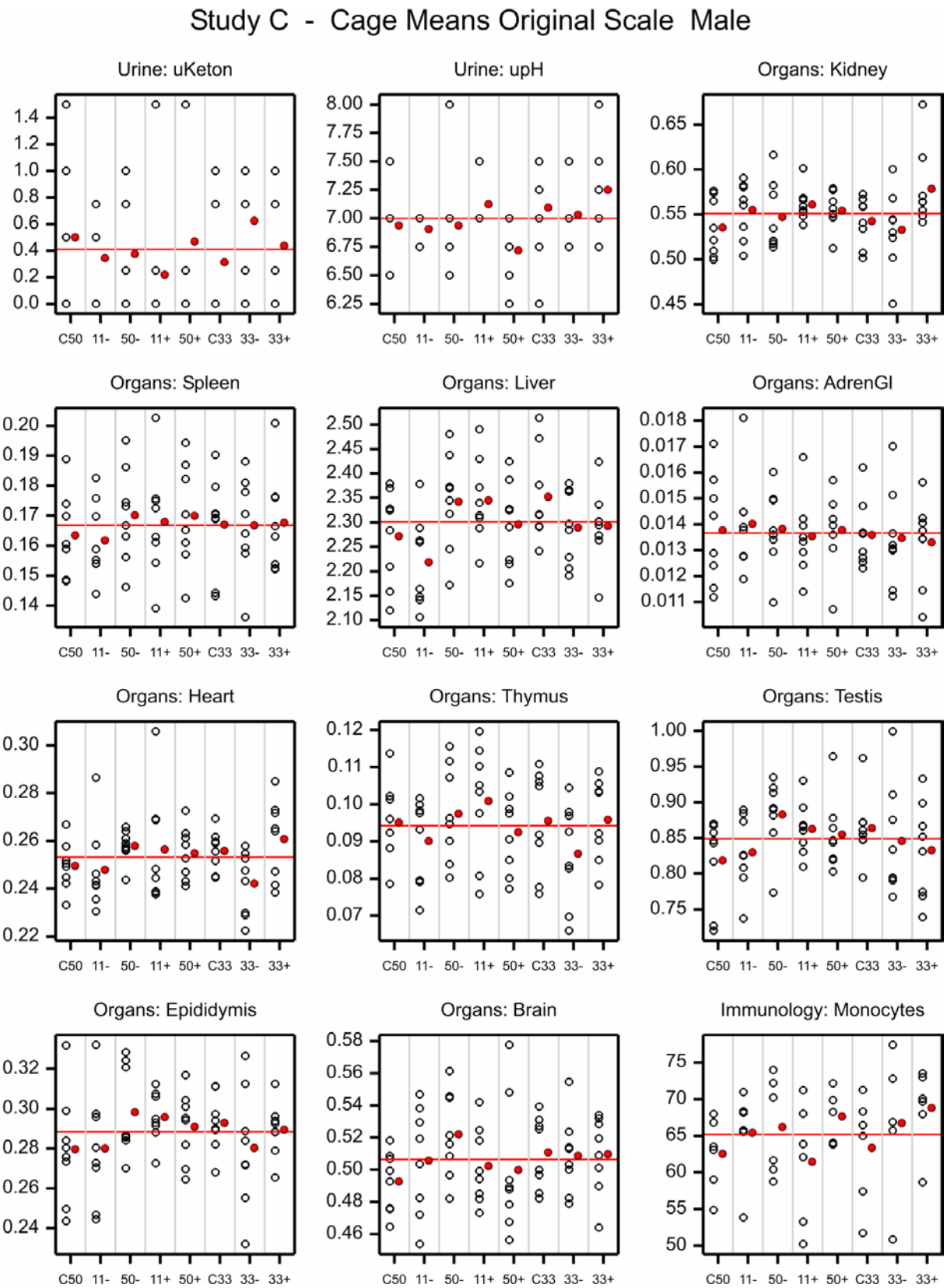

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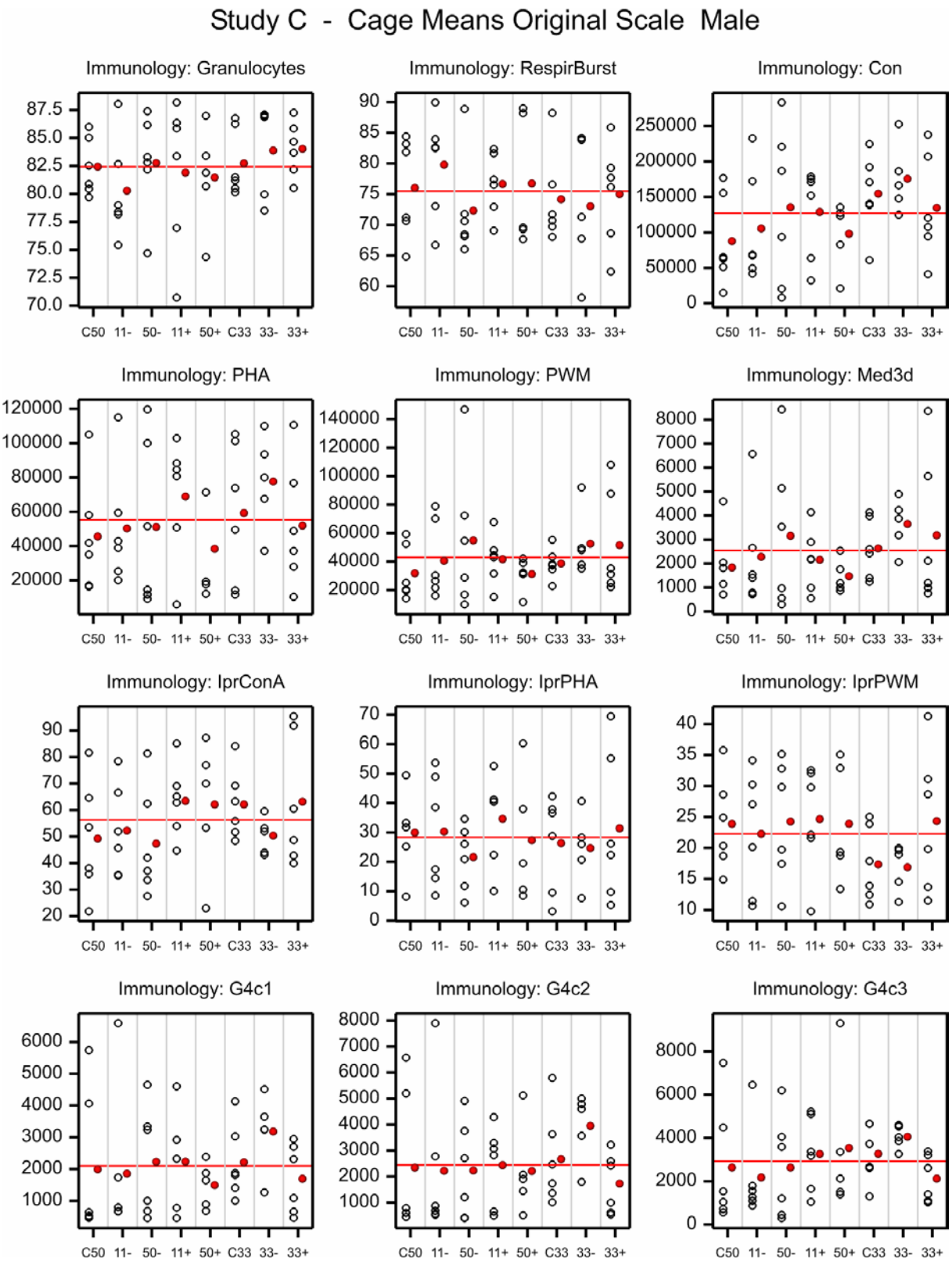

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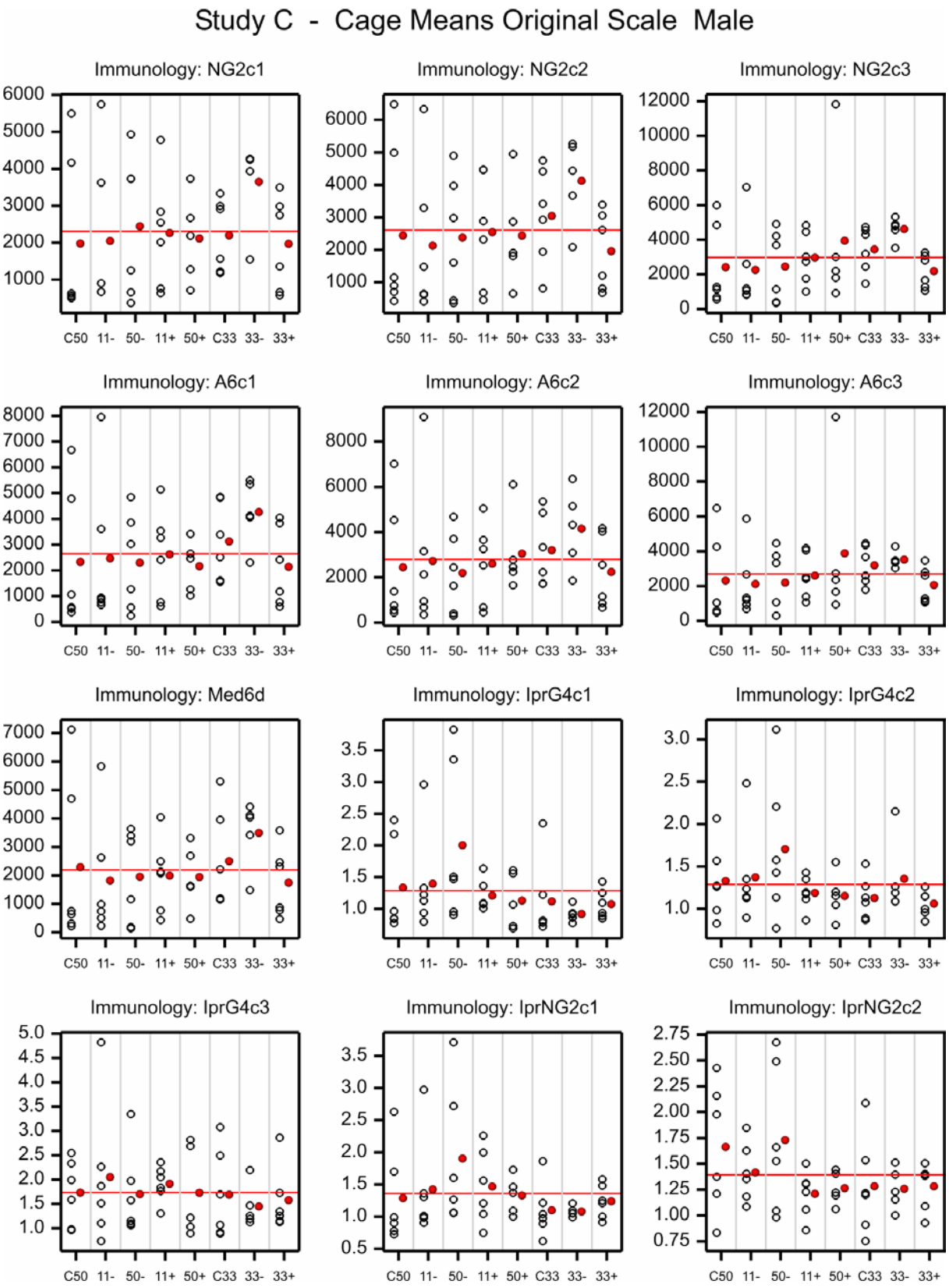

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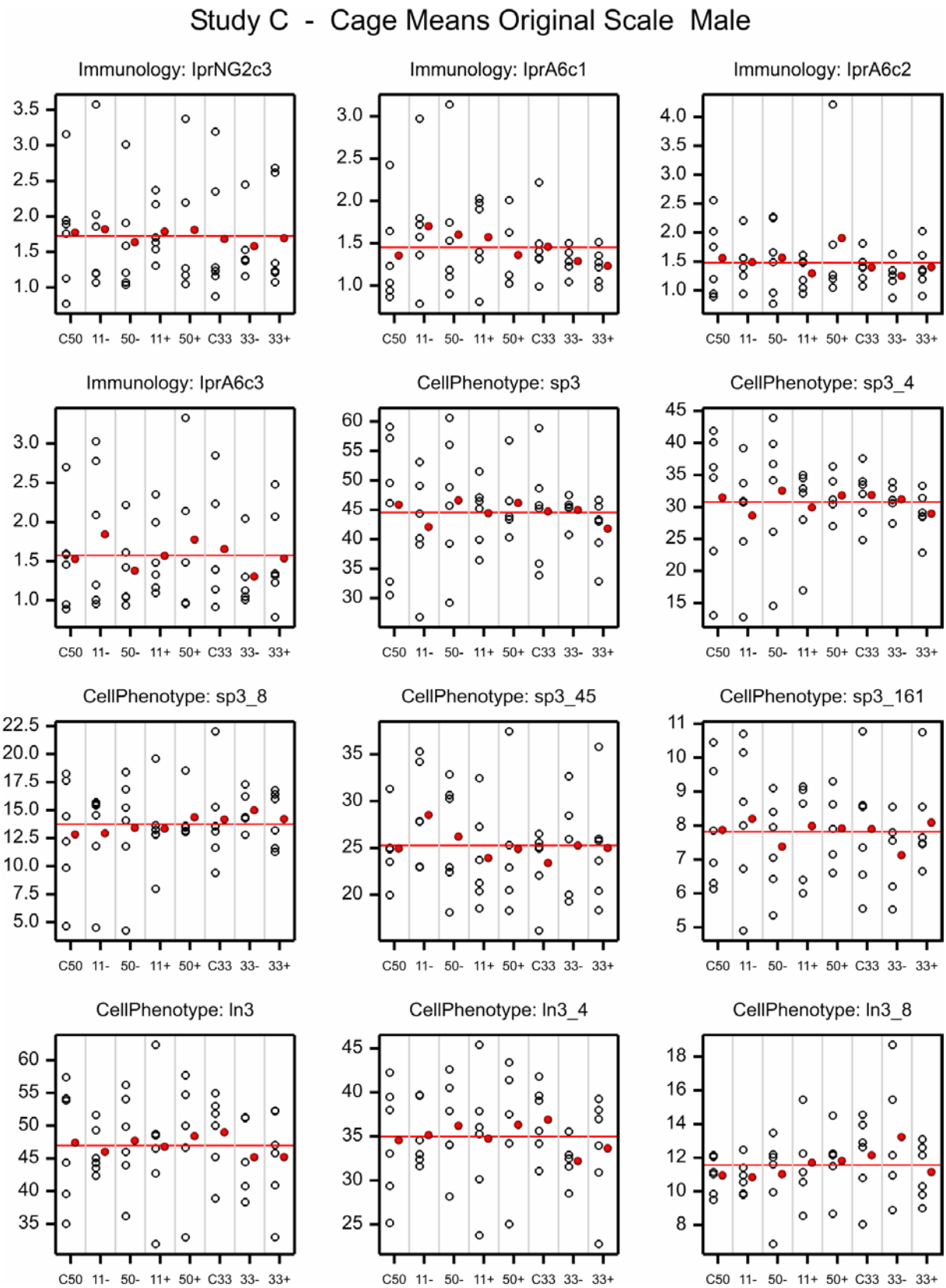

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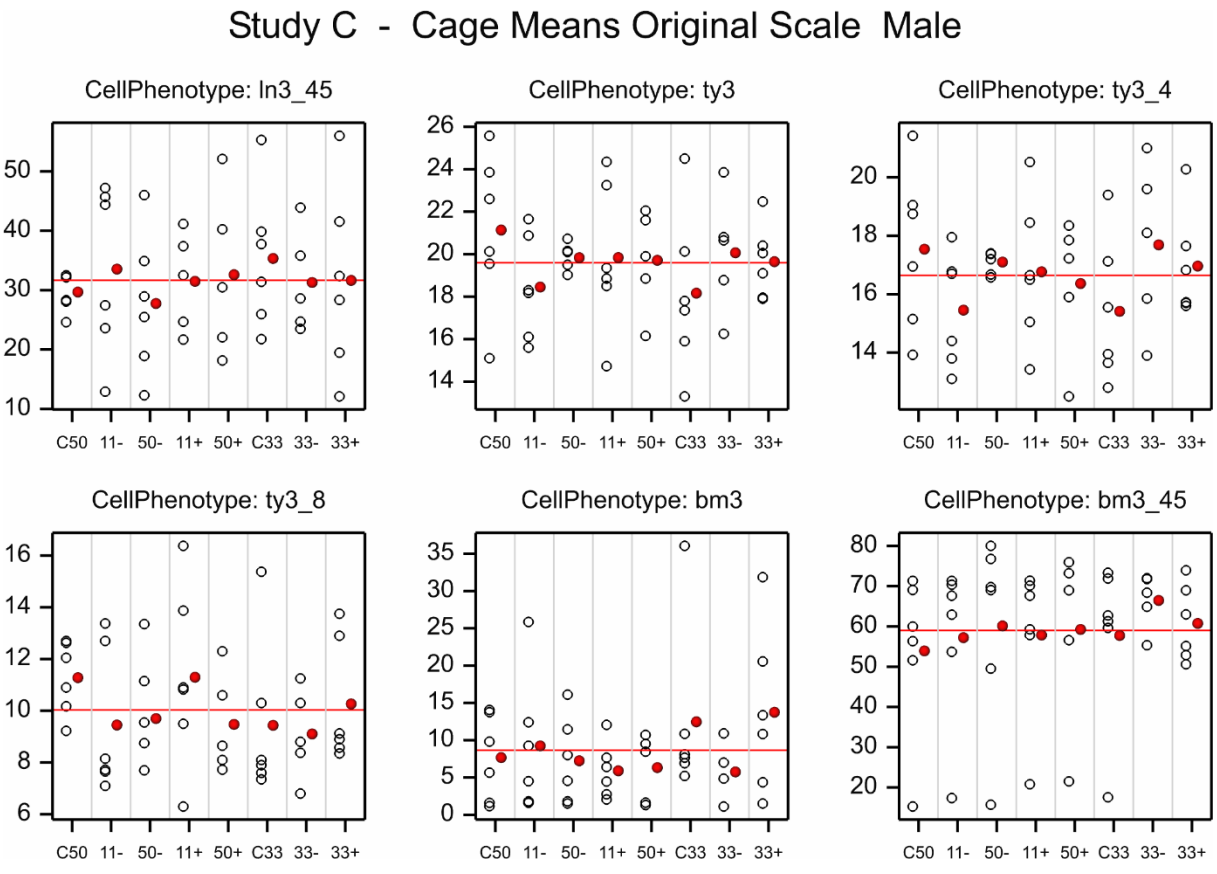

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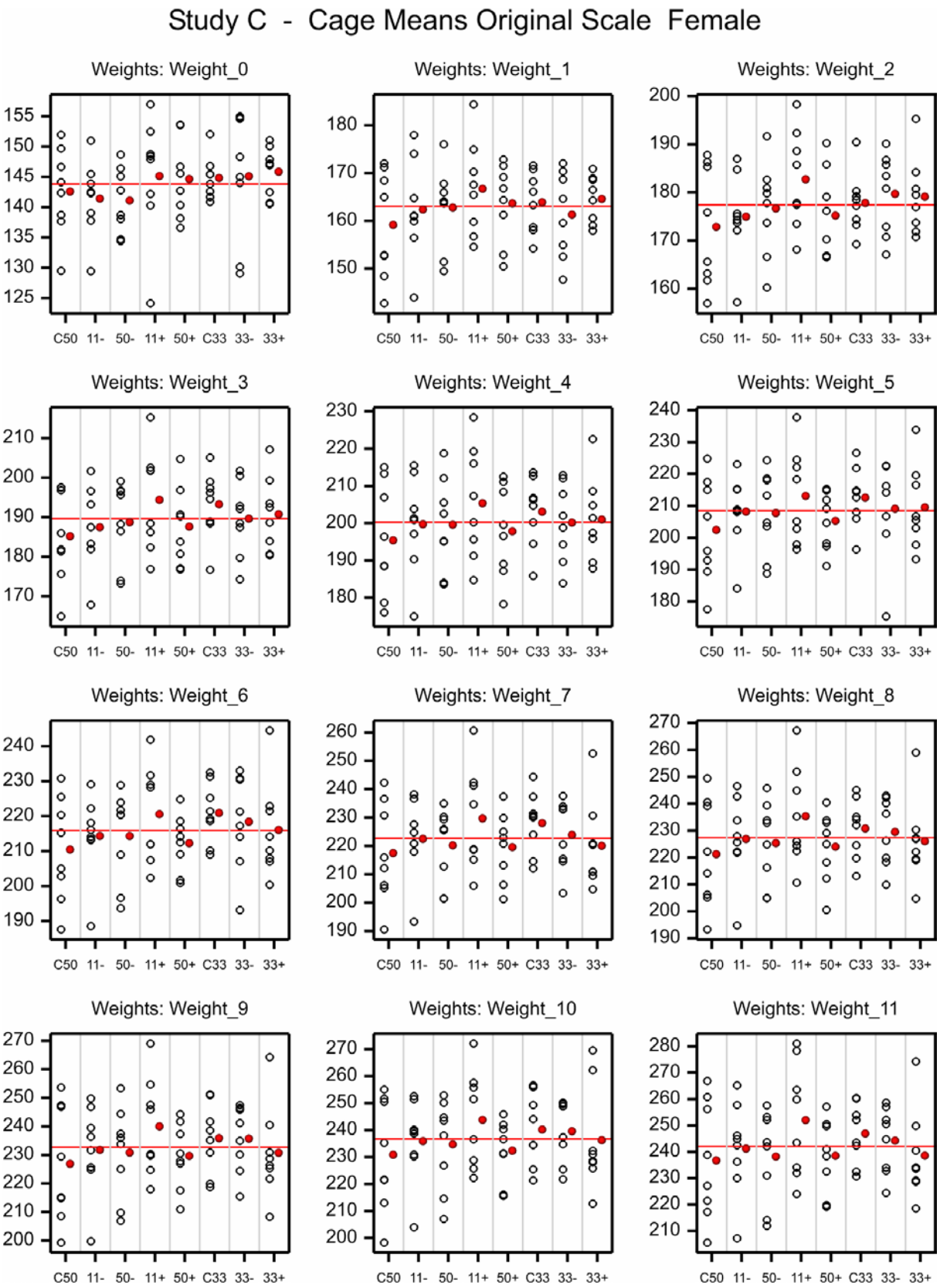

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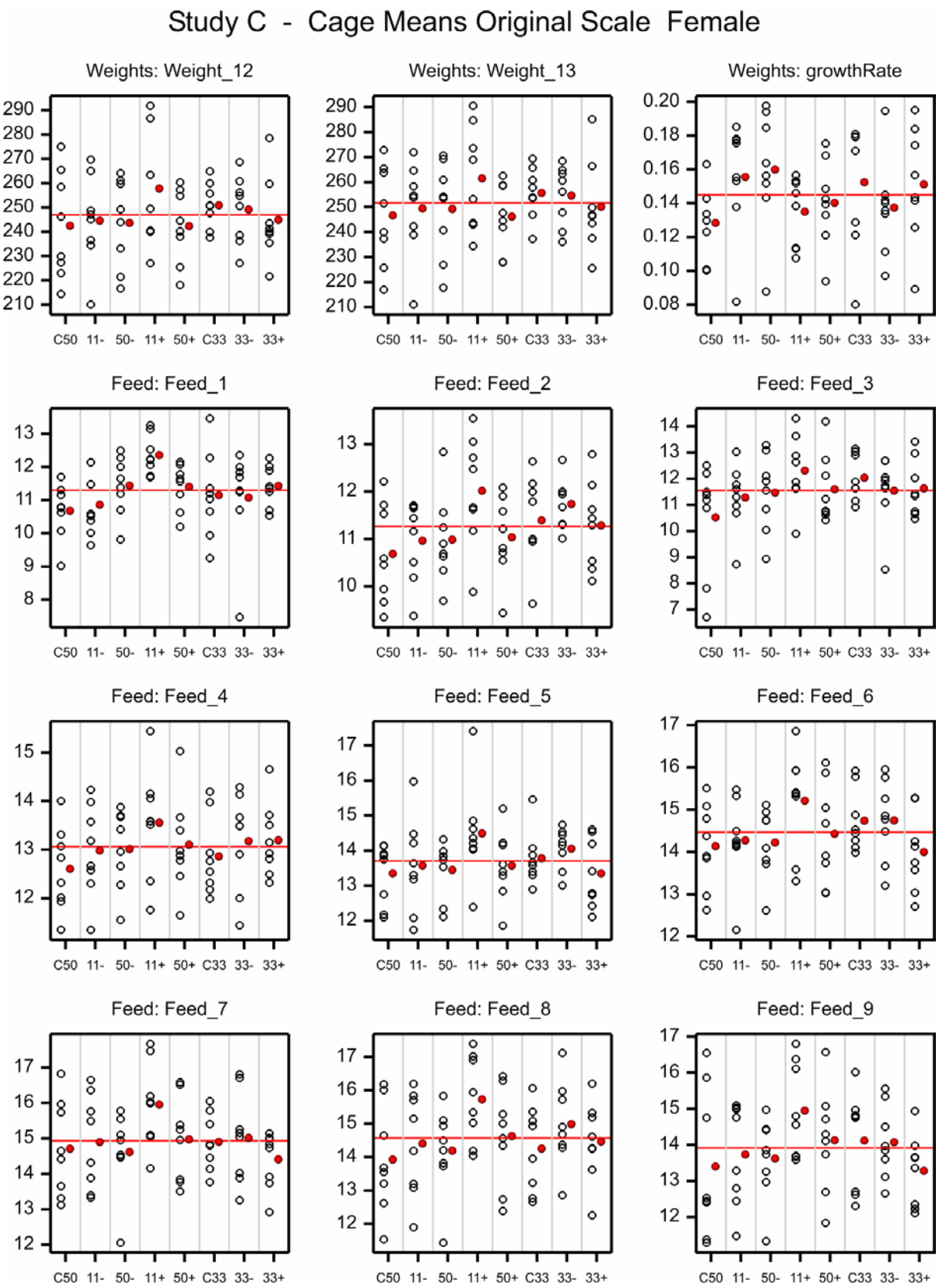

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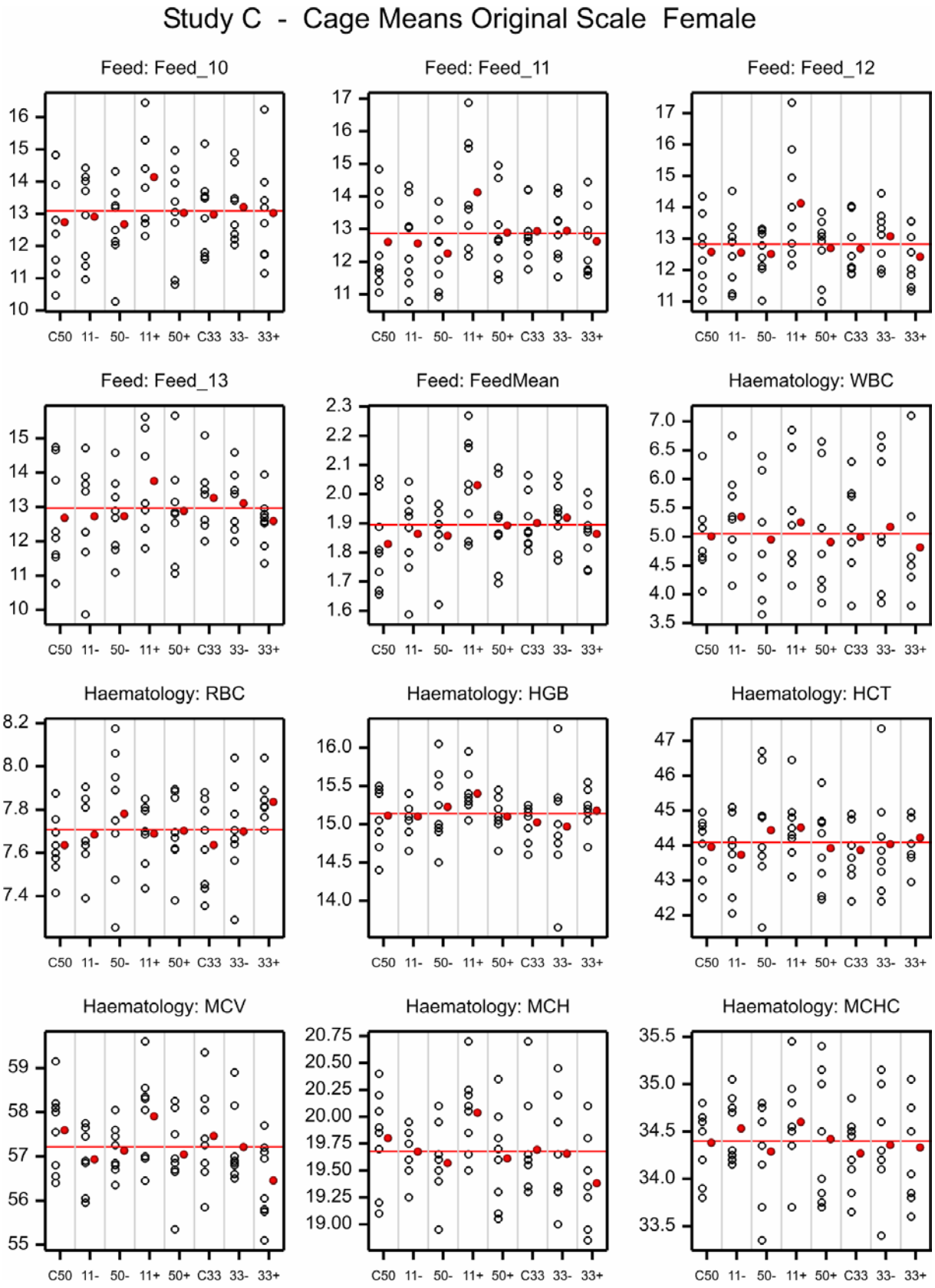

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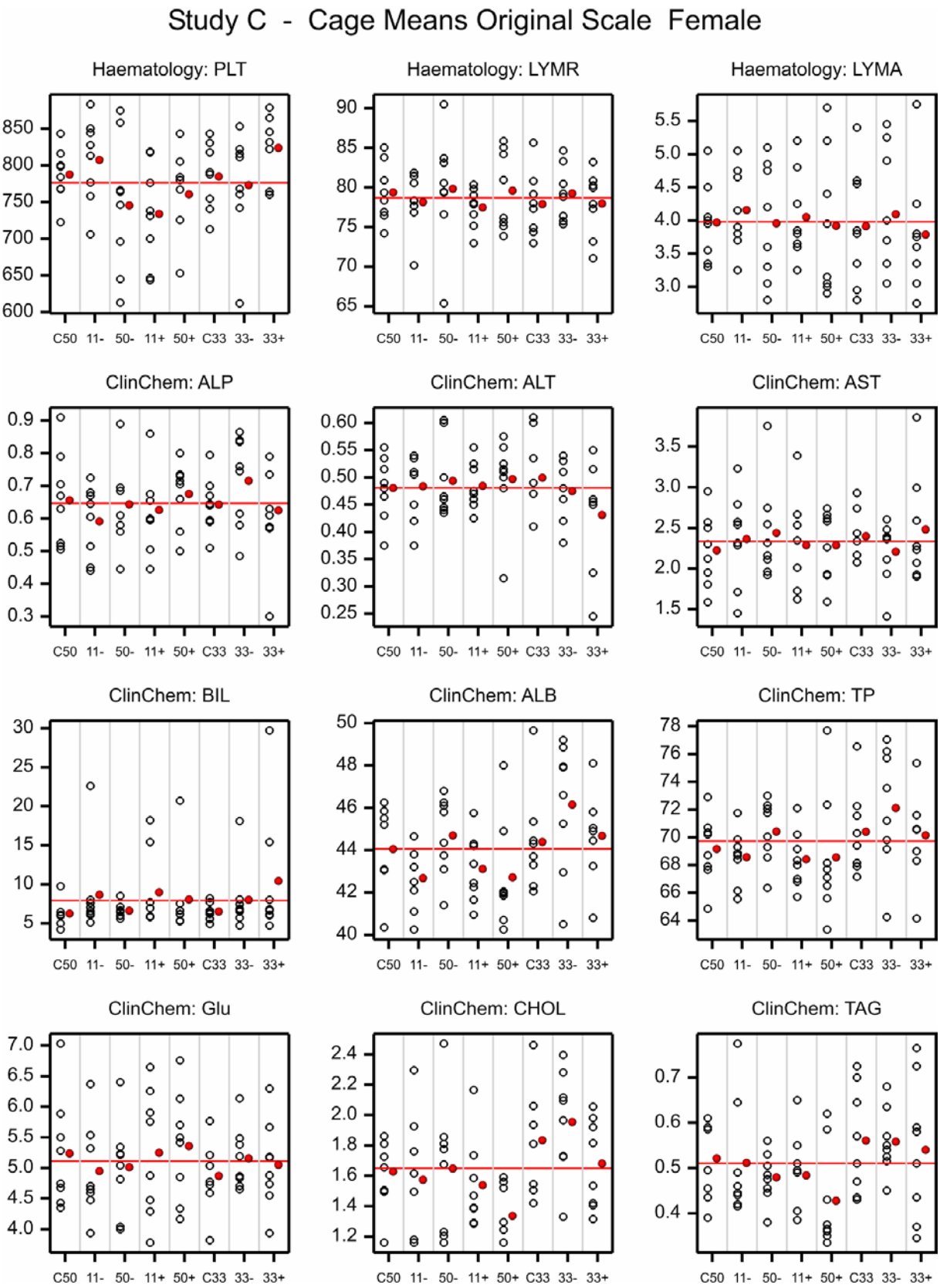

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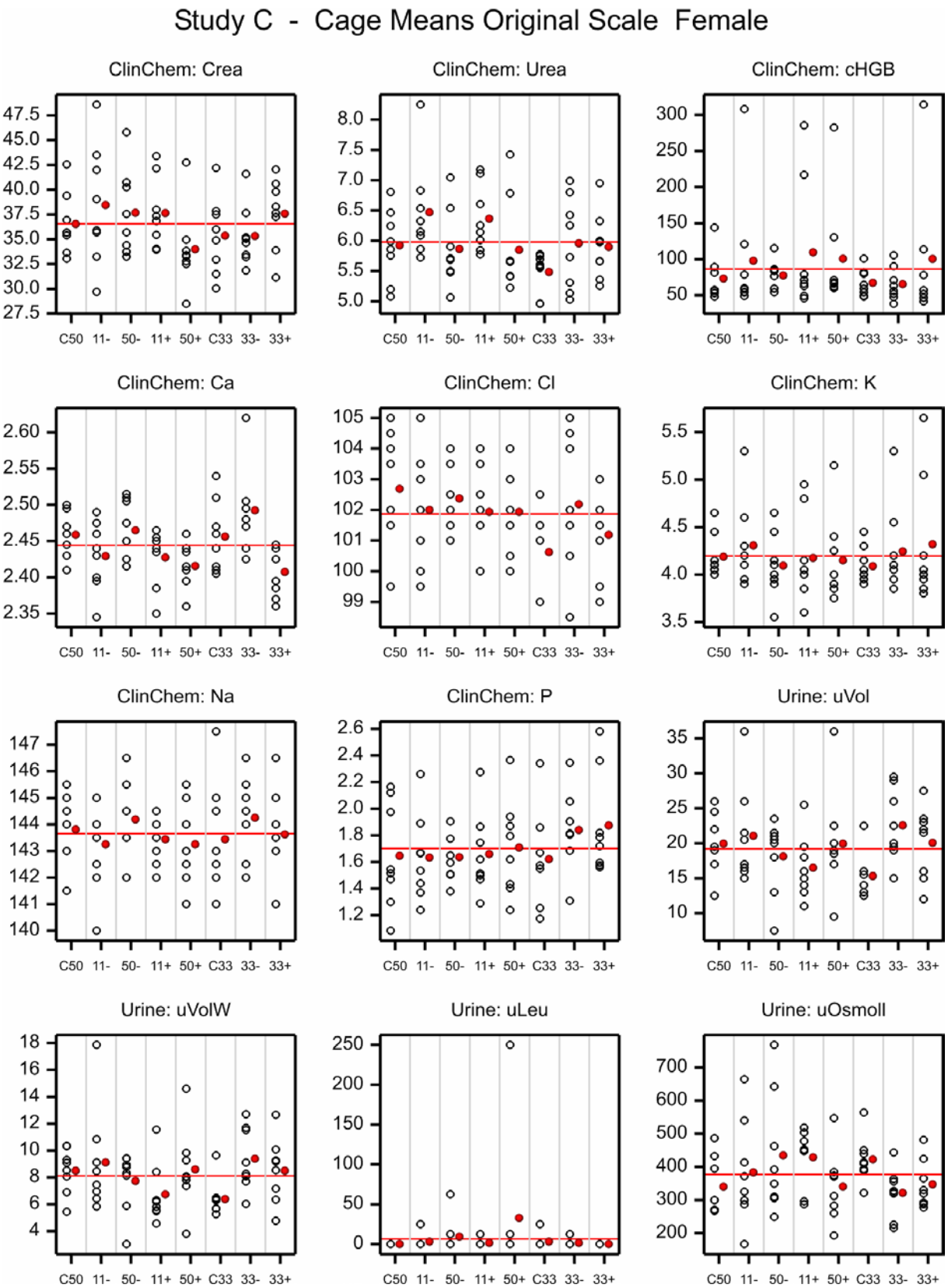

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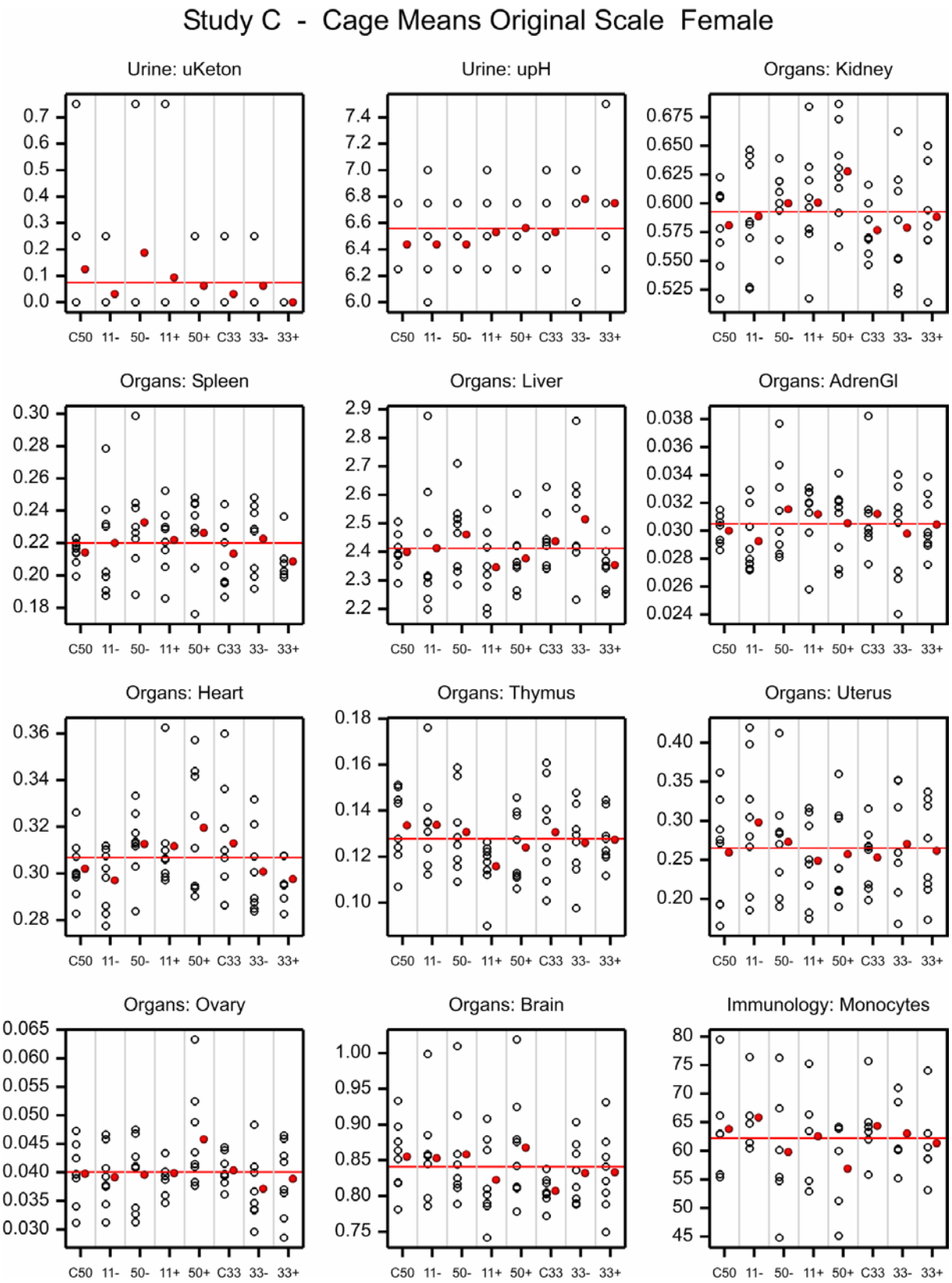

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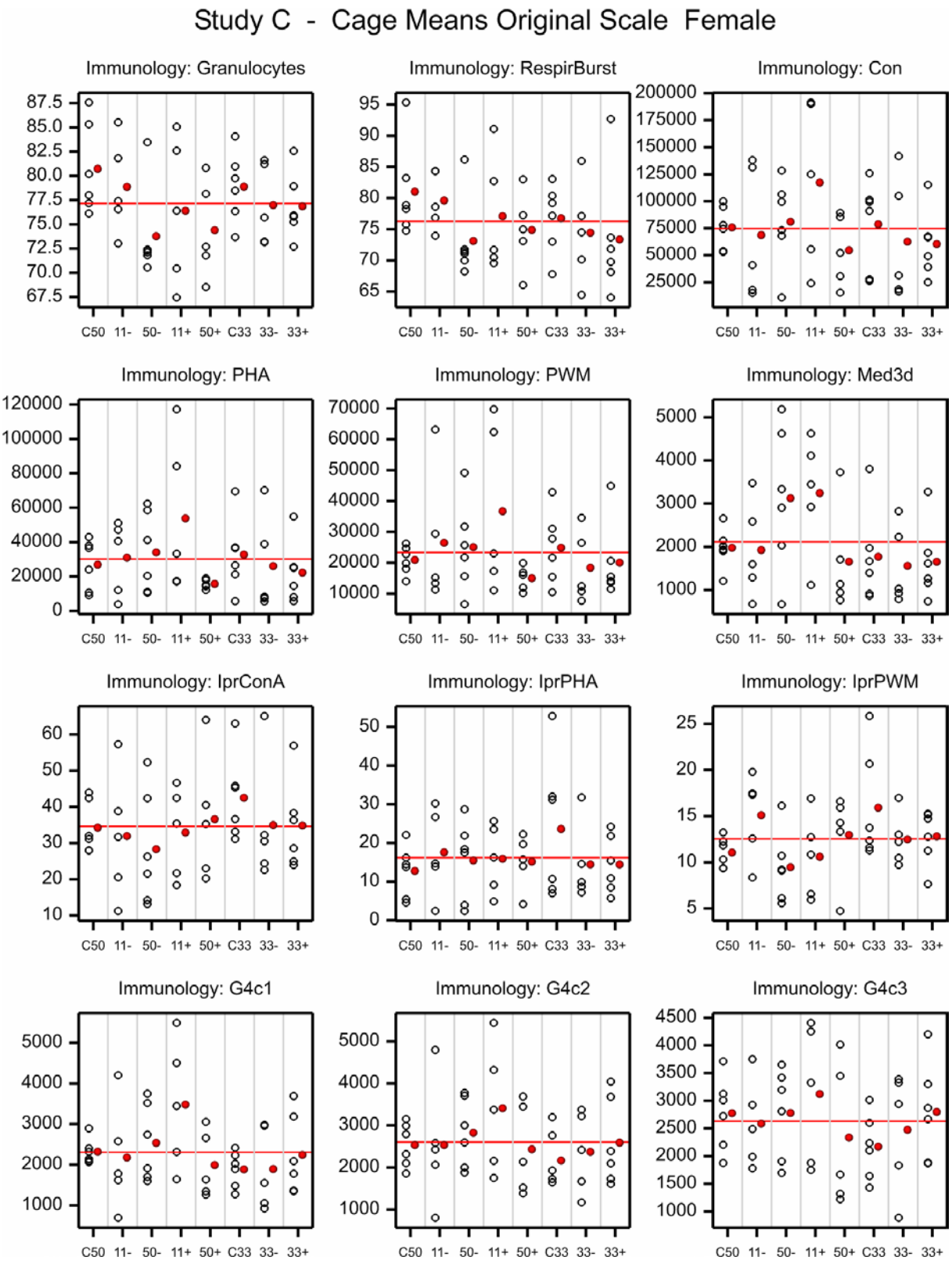

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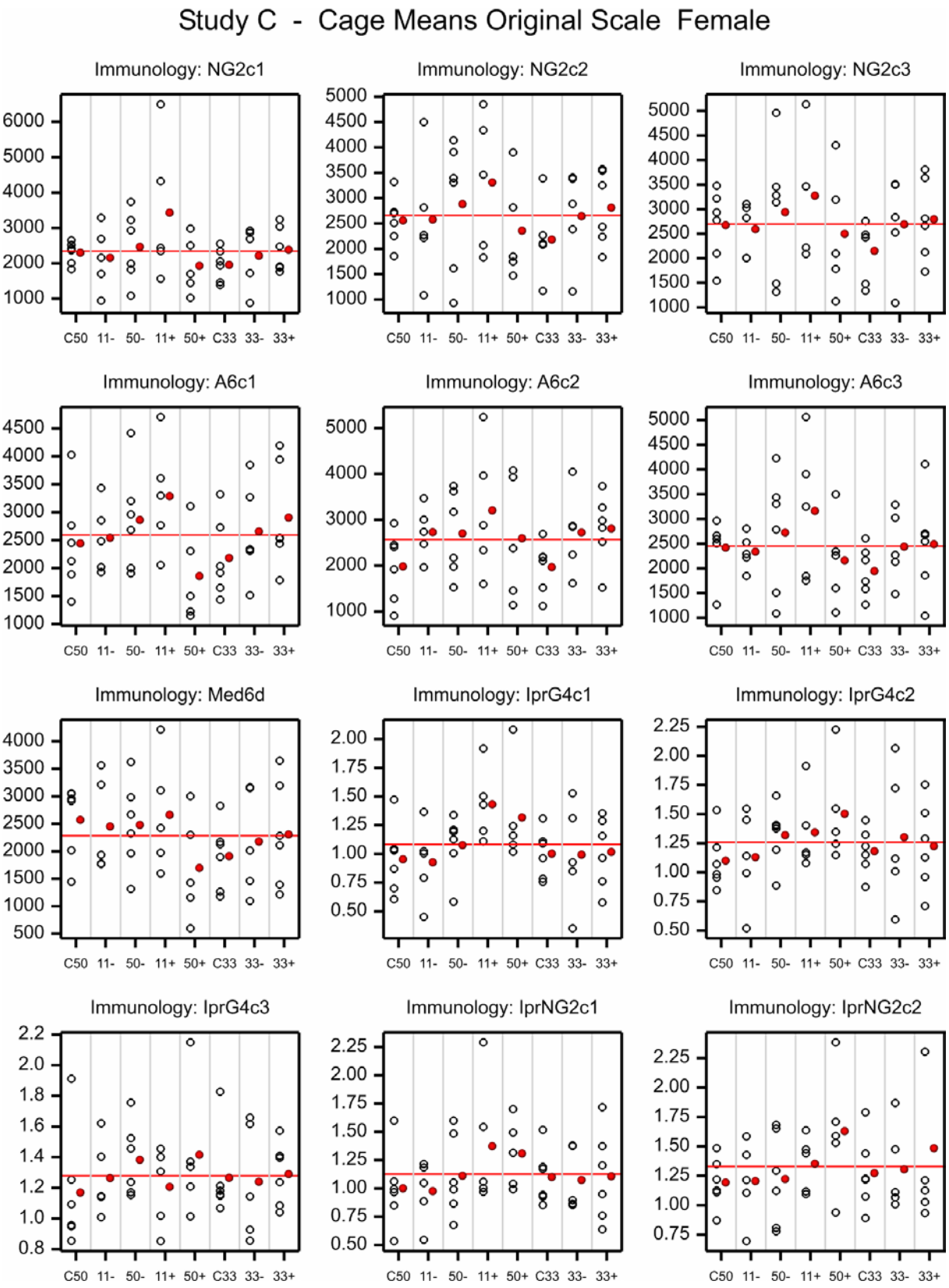

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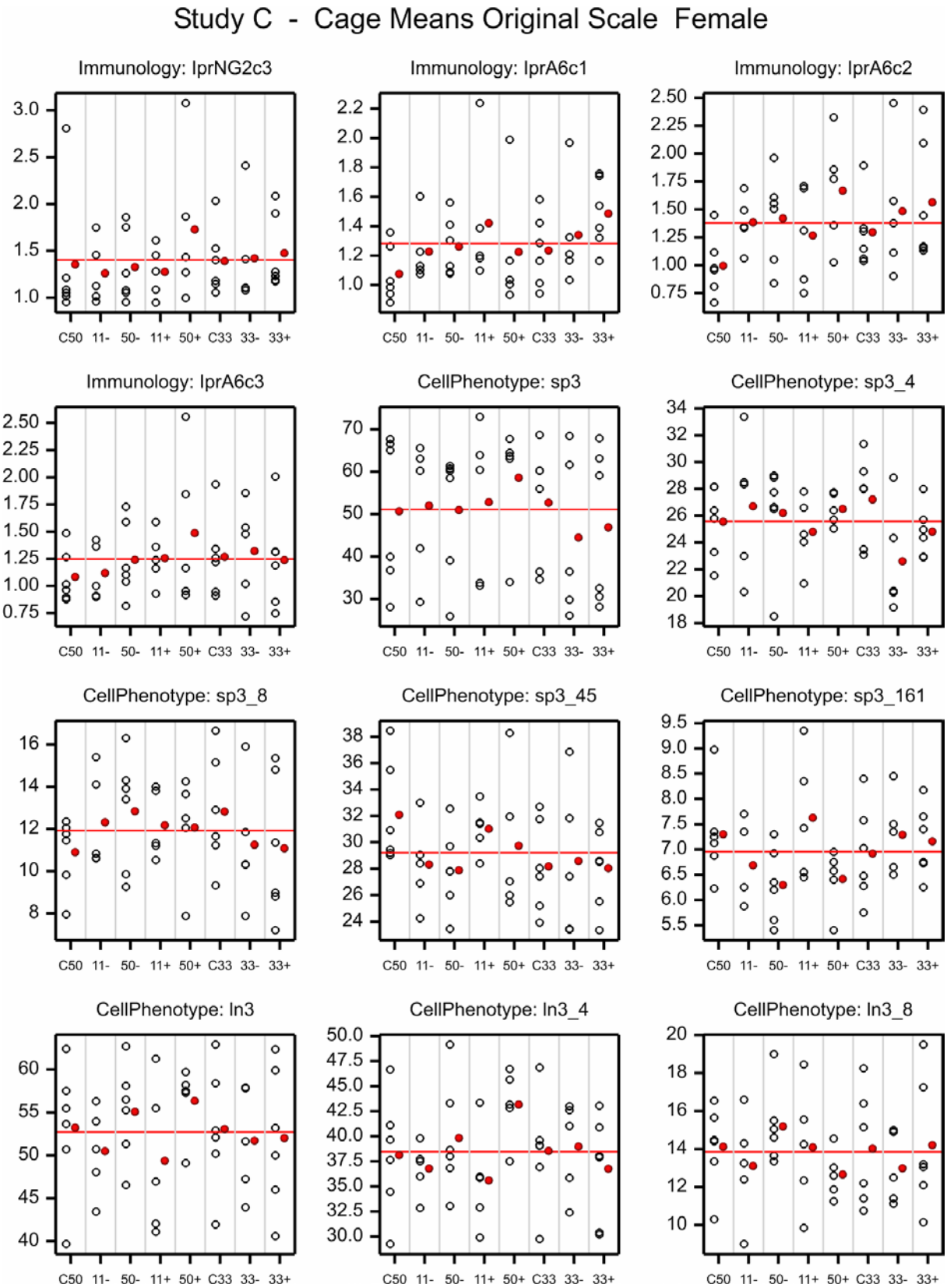
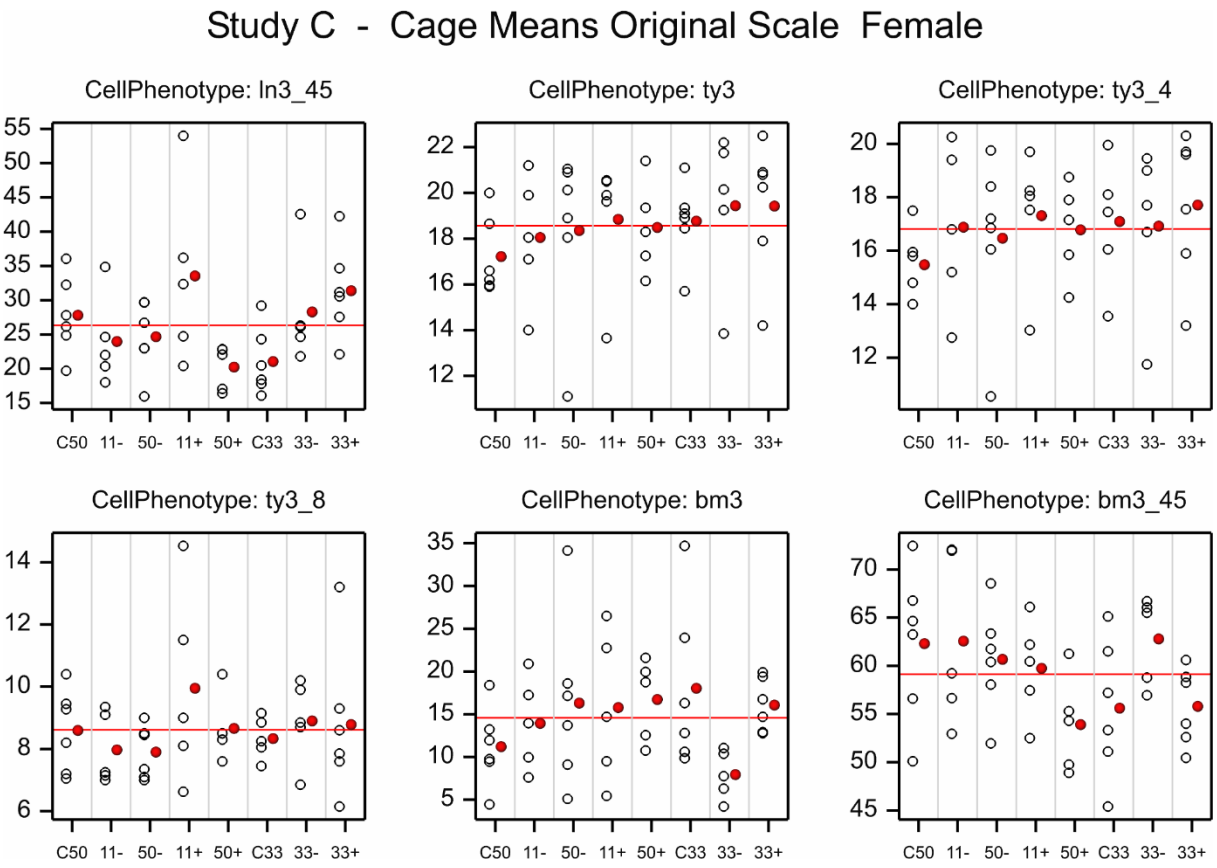


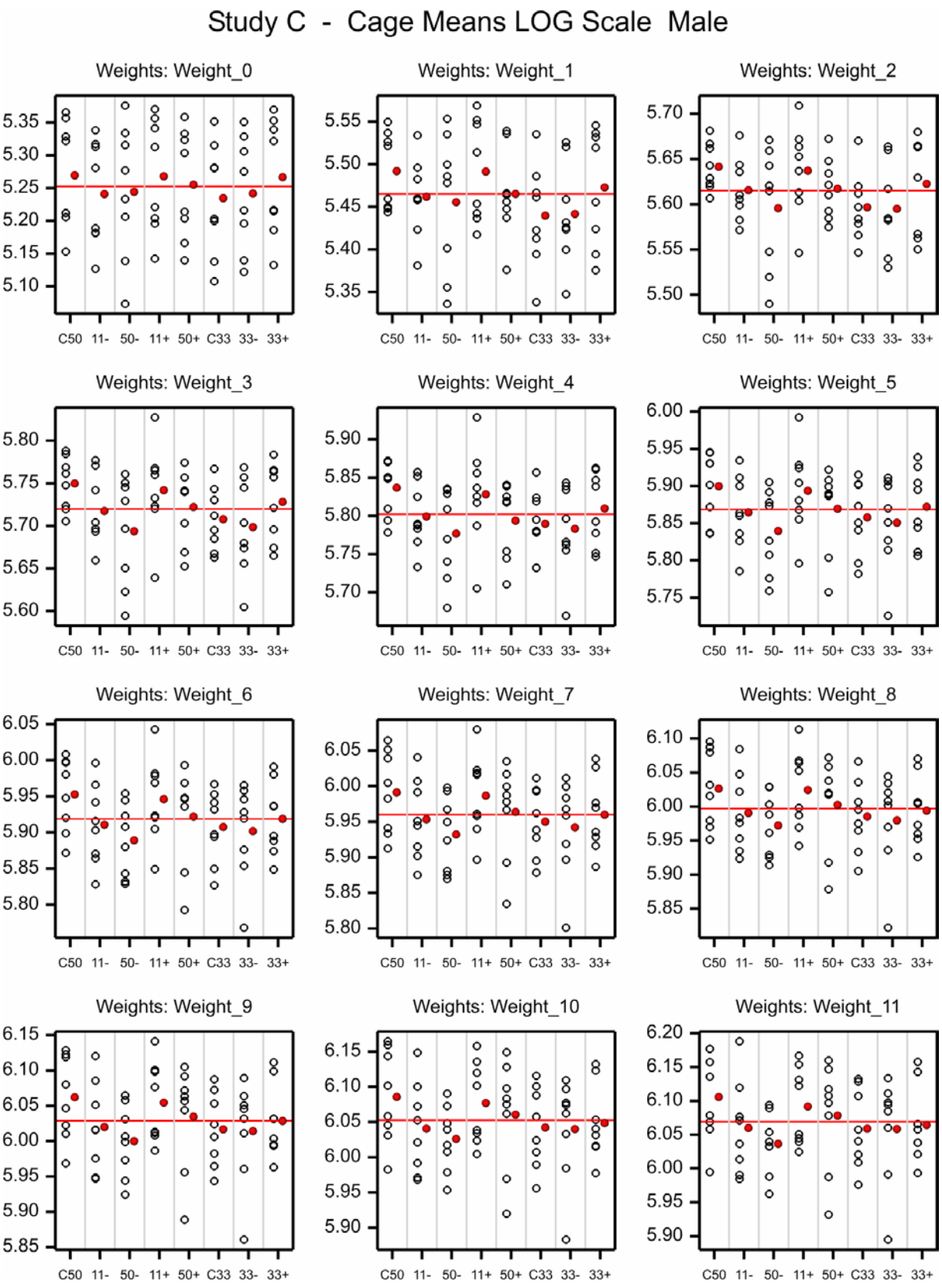
Appendix 3. Graphs of cage means on the original scale (continued)

Red symbols denote means for feeding groups while the red line denotes the overall mean.



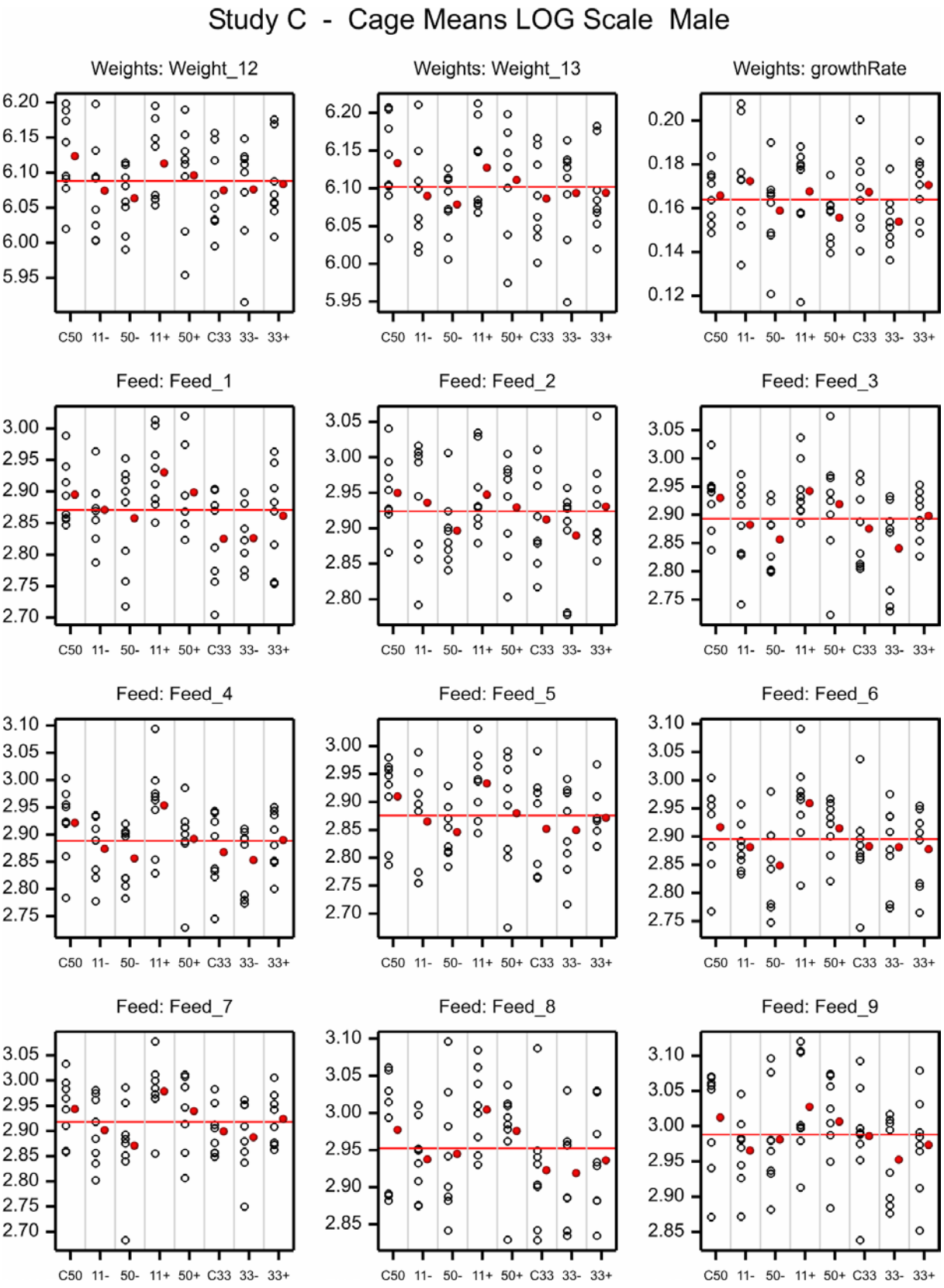
Appendix 4. Graphs of cage means on the log scale

Red symbols denote means for feeding groups while the red line denotes the overall mean.



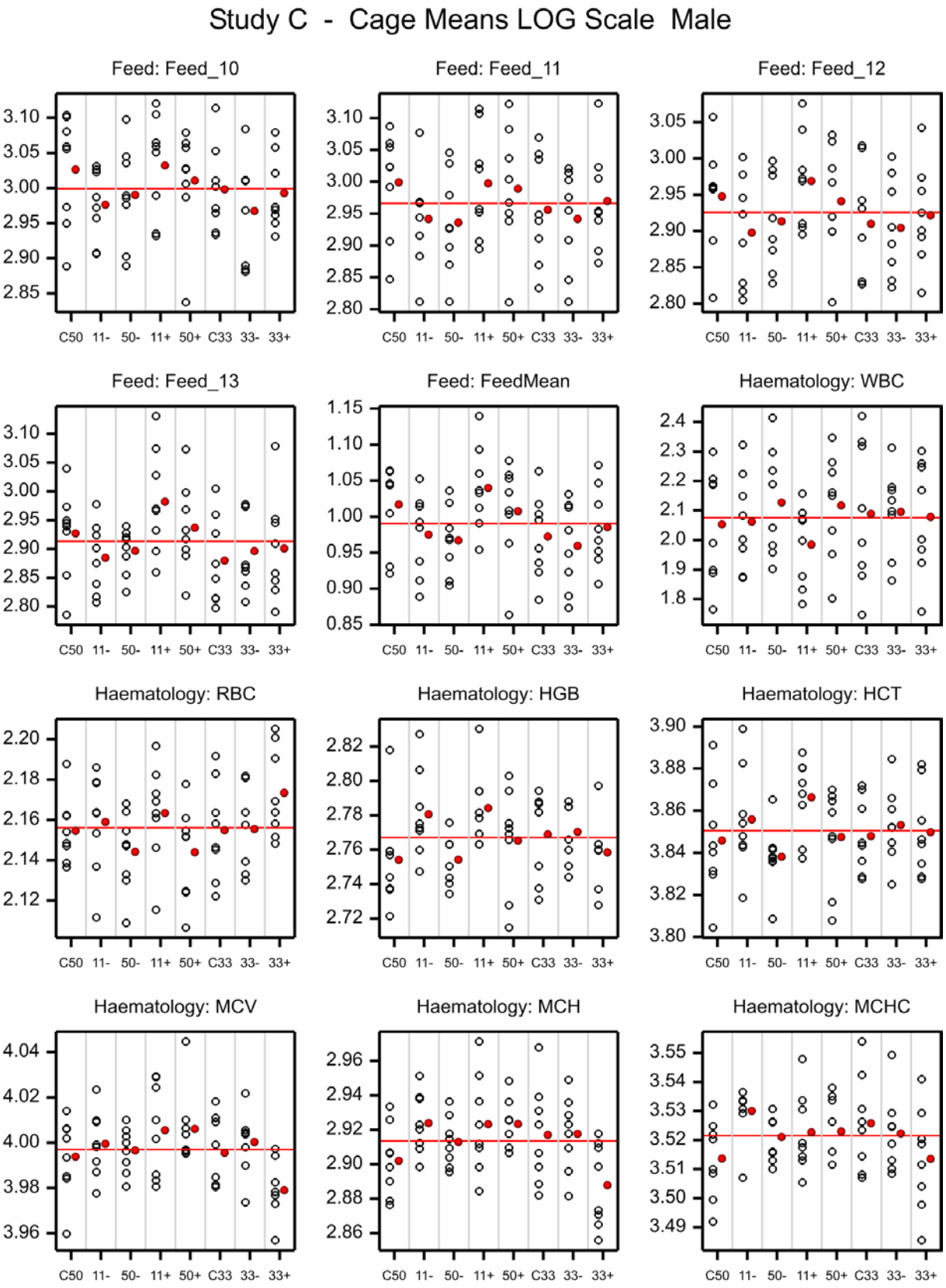
Appendix 4. Graphs of cage means on the log scale (continued)

Red symbols denote means for feeding groups while the red line denotes the overall mean.



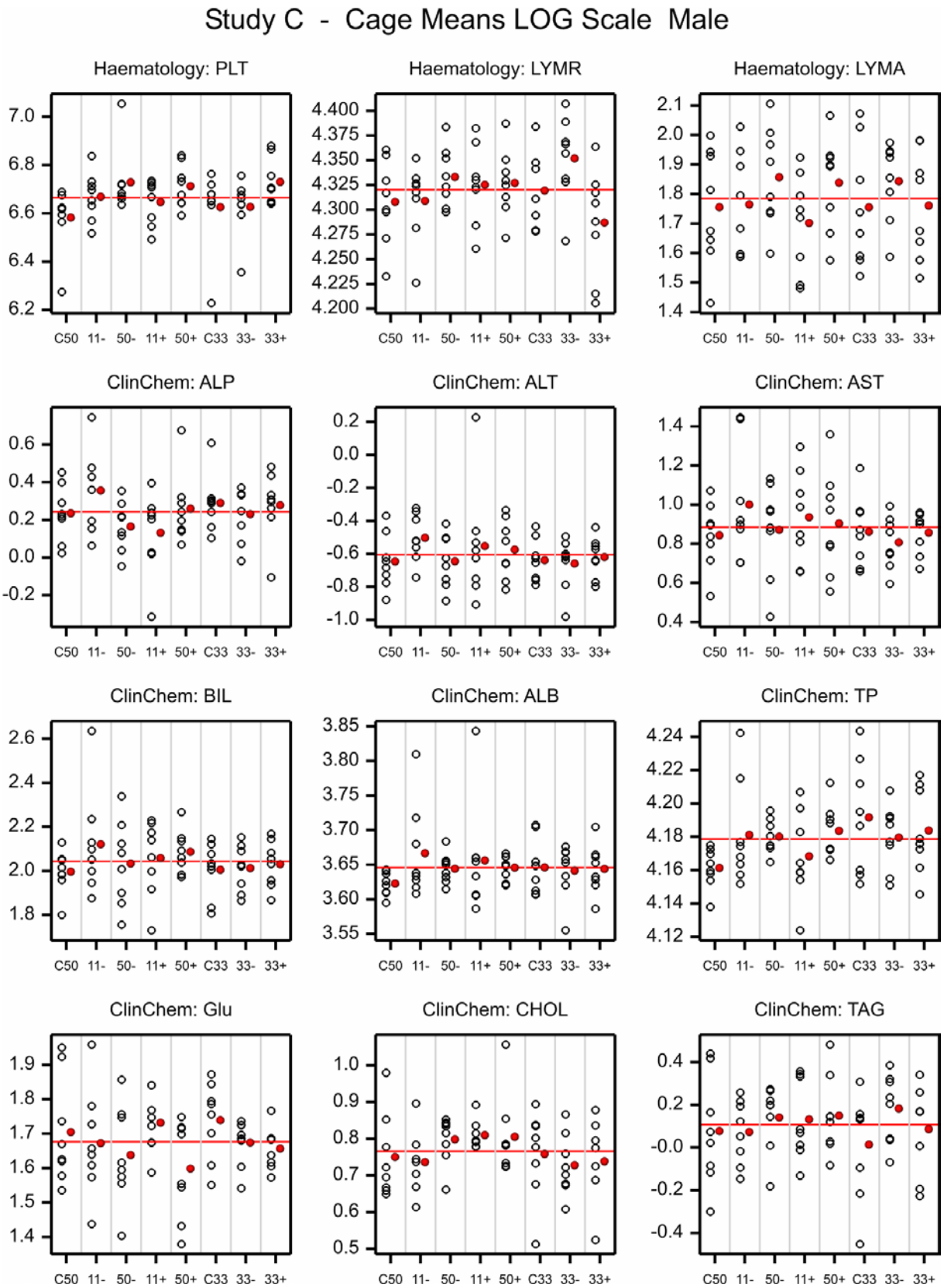
Appendix 4. Graphs of cage means on the log scale (continued)

Red symbols denote means for feeding groups while the red line denotes the overall mean.



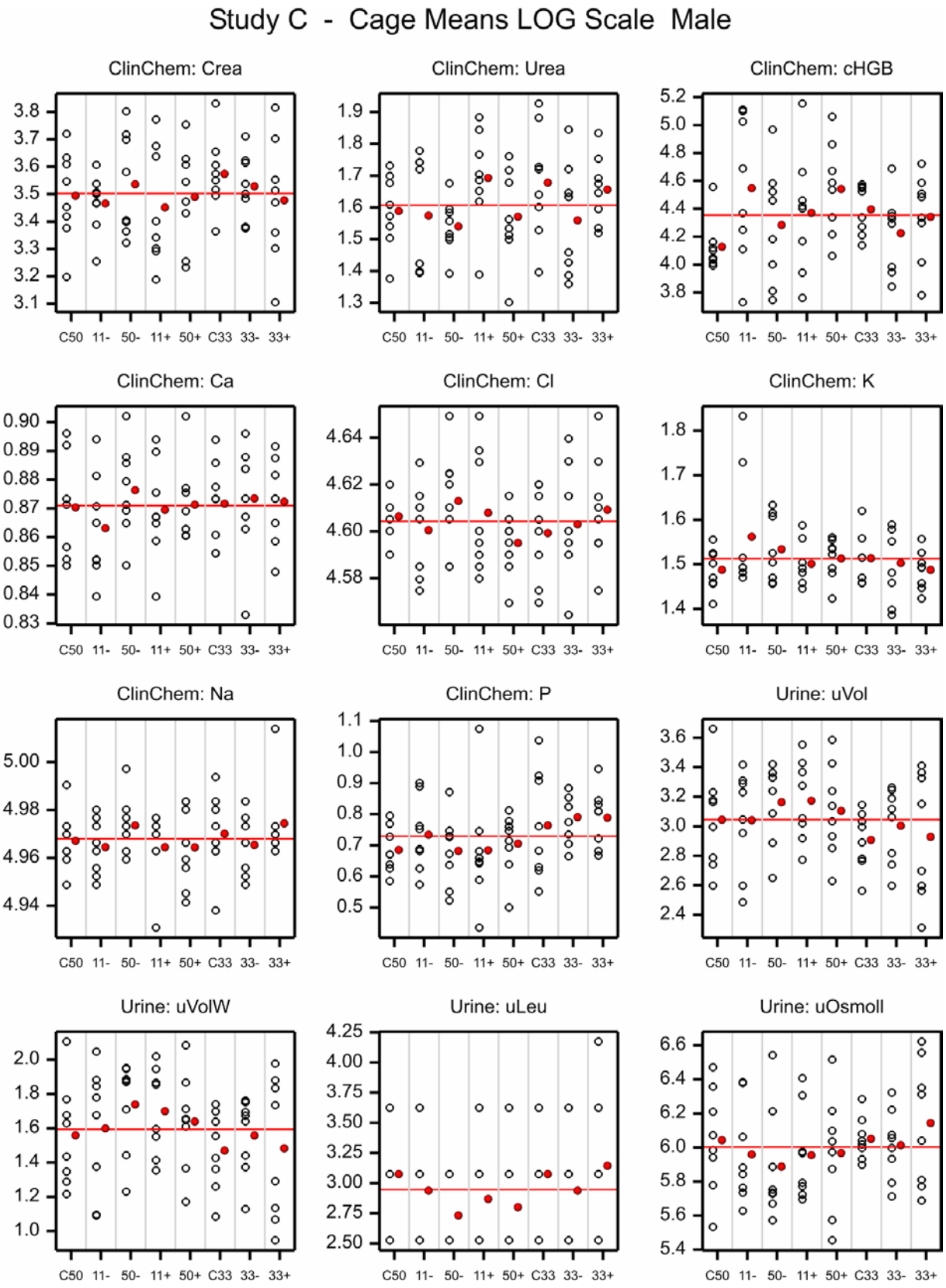
Appendix 4. Graphs of cage means on the log scale (continued)

Red symbols denote means for feeding groups while the red line denotes the overall mean.



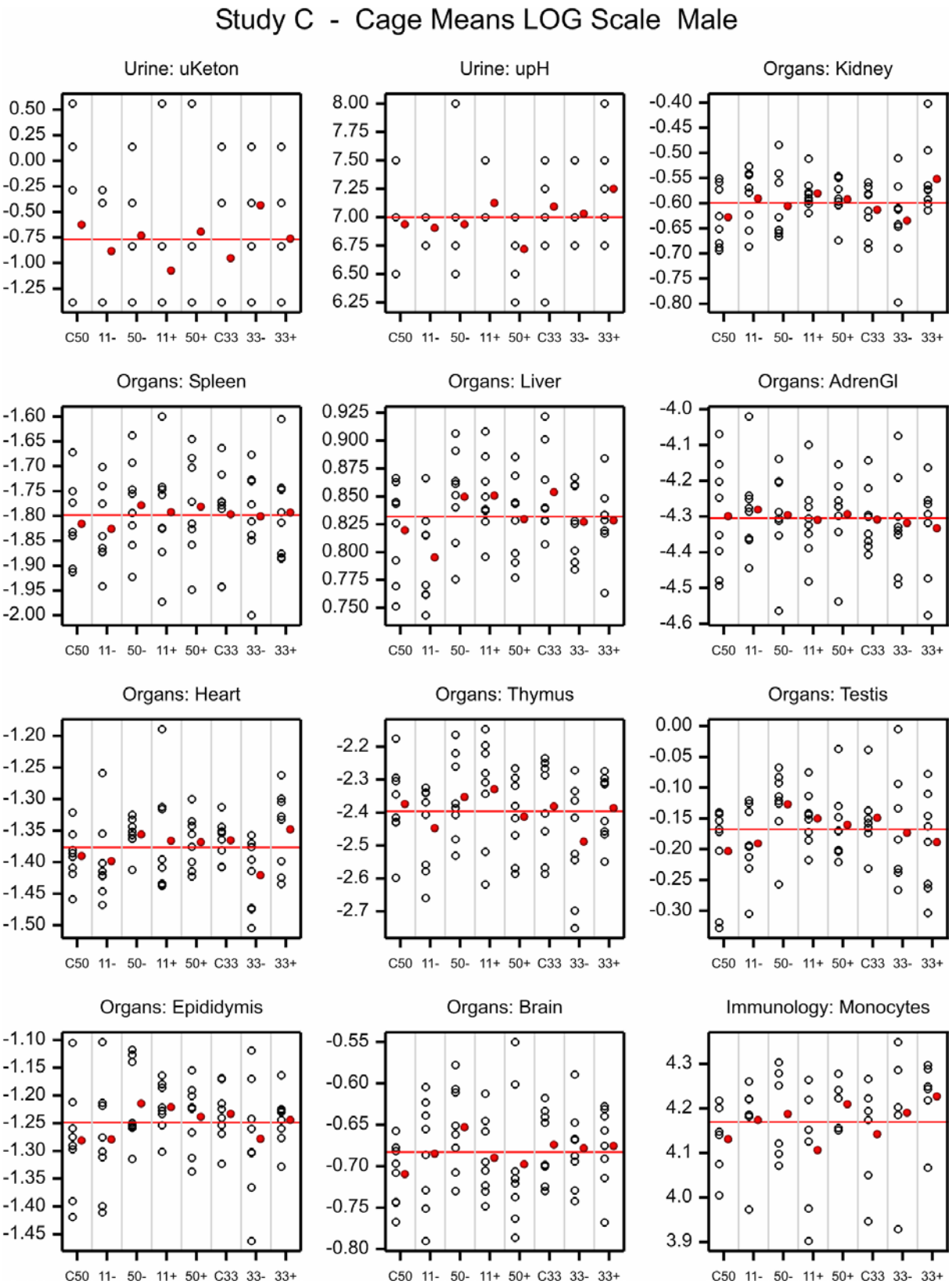
Appendix 4. Graphs of cage means on the log scale (continued)

Red symbols denote means for feeding groups while the red line denotes the overall mean.



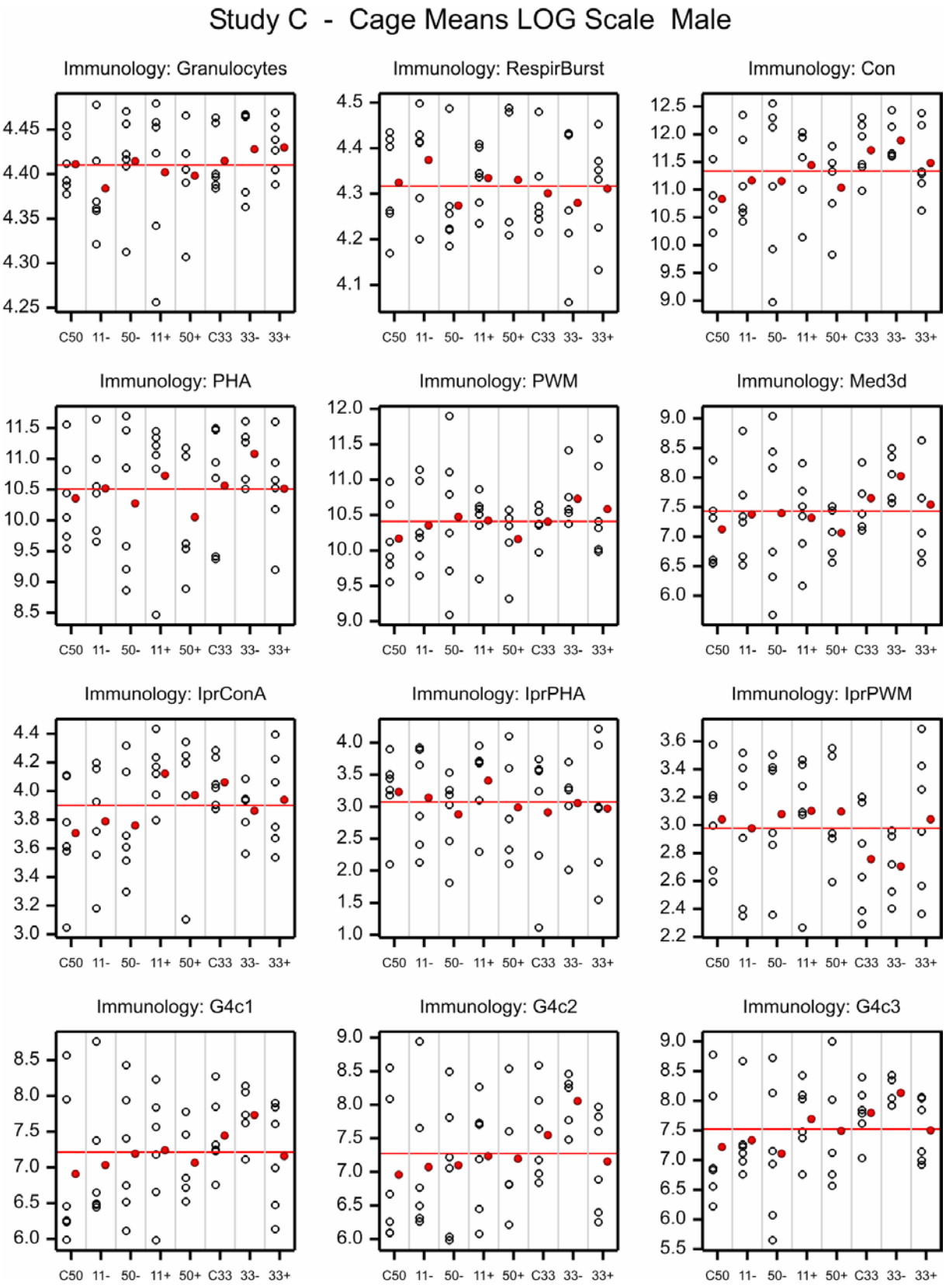
Appendix 4. Graphs of cage means on the log scale (continued)

Red symbols denote means for feeding groups while the red line denotes the overall mean.



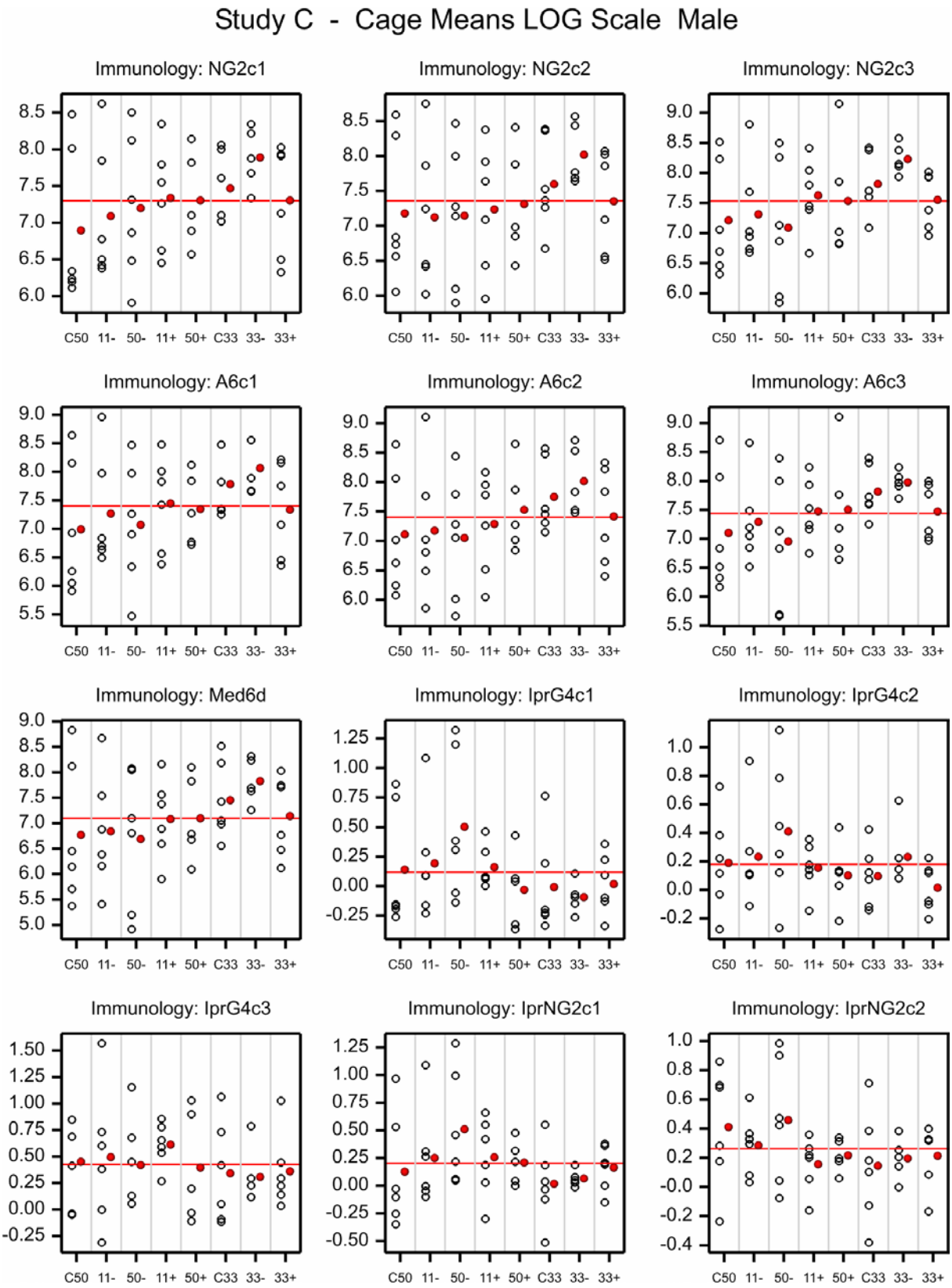
Appendix 4. Graphs of cage means on the log scale (continued)

Red symbols denote means for feeding groups while the red line denotes the overall mean.



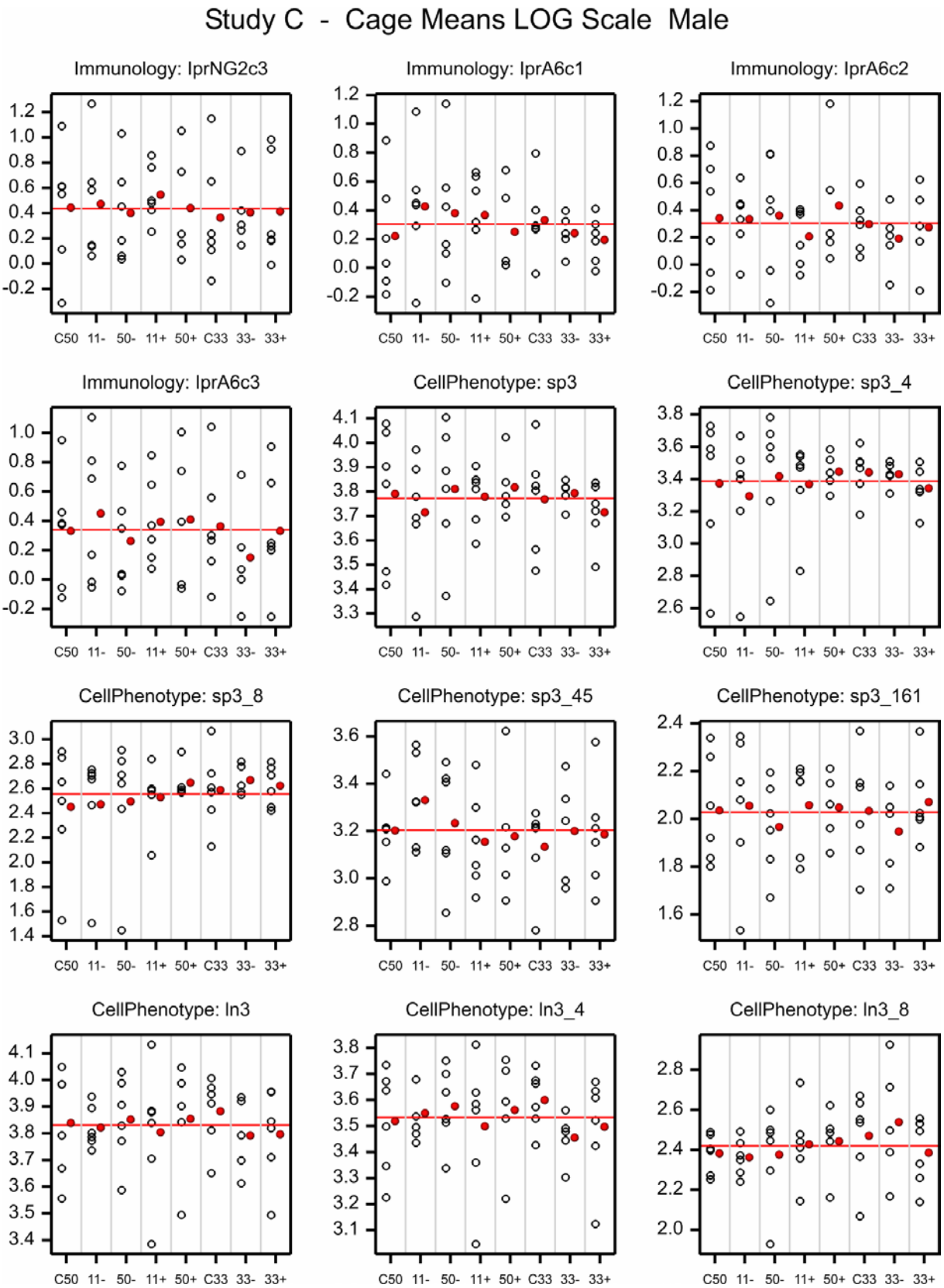
Appendix 4. Graphs of cage means on the log scale (continued)

Red symbols denote means for feeding groups while the red line denotes the overall mean.



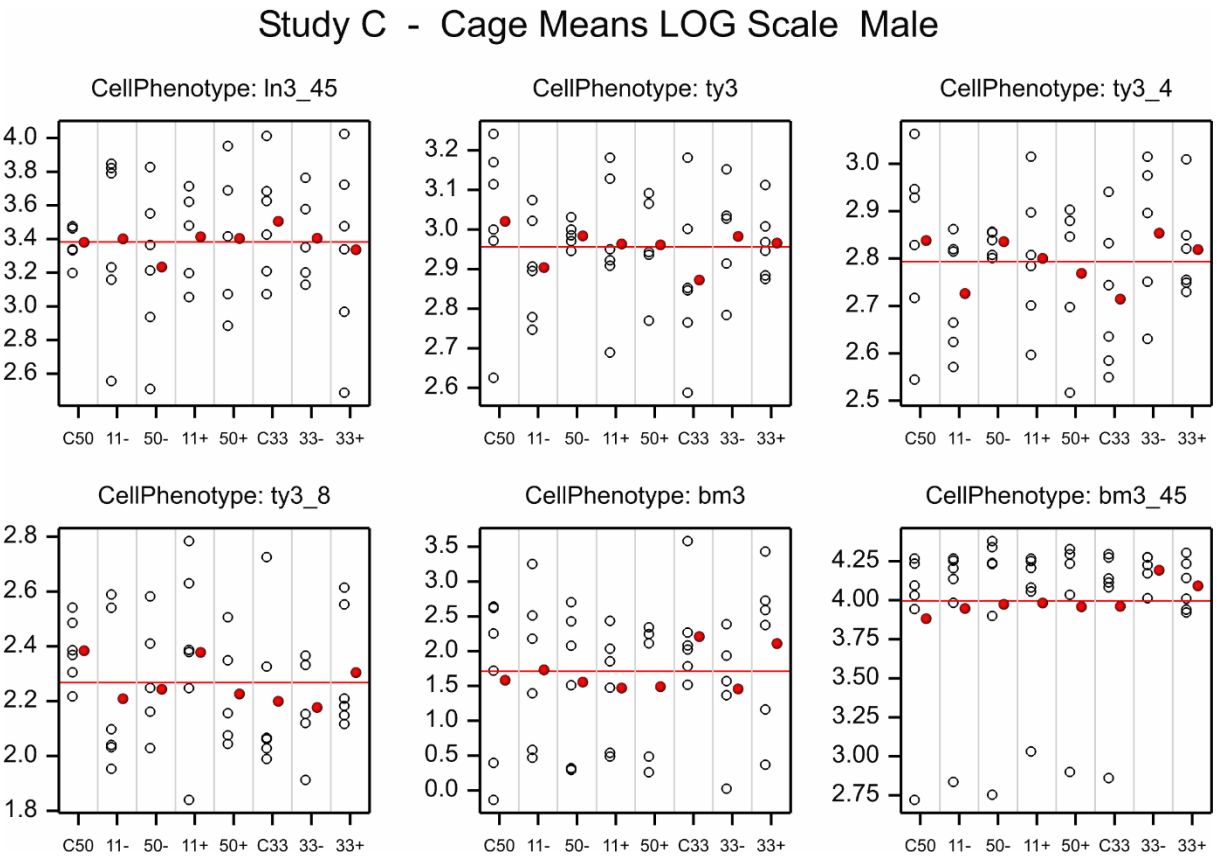
Appendix 4. Graphs of cage means on the log scale (continued)

Red symbols denote means for feeding groups while the red line denotes the overall mean.



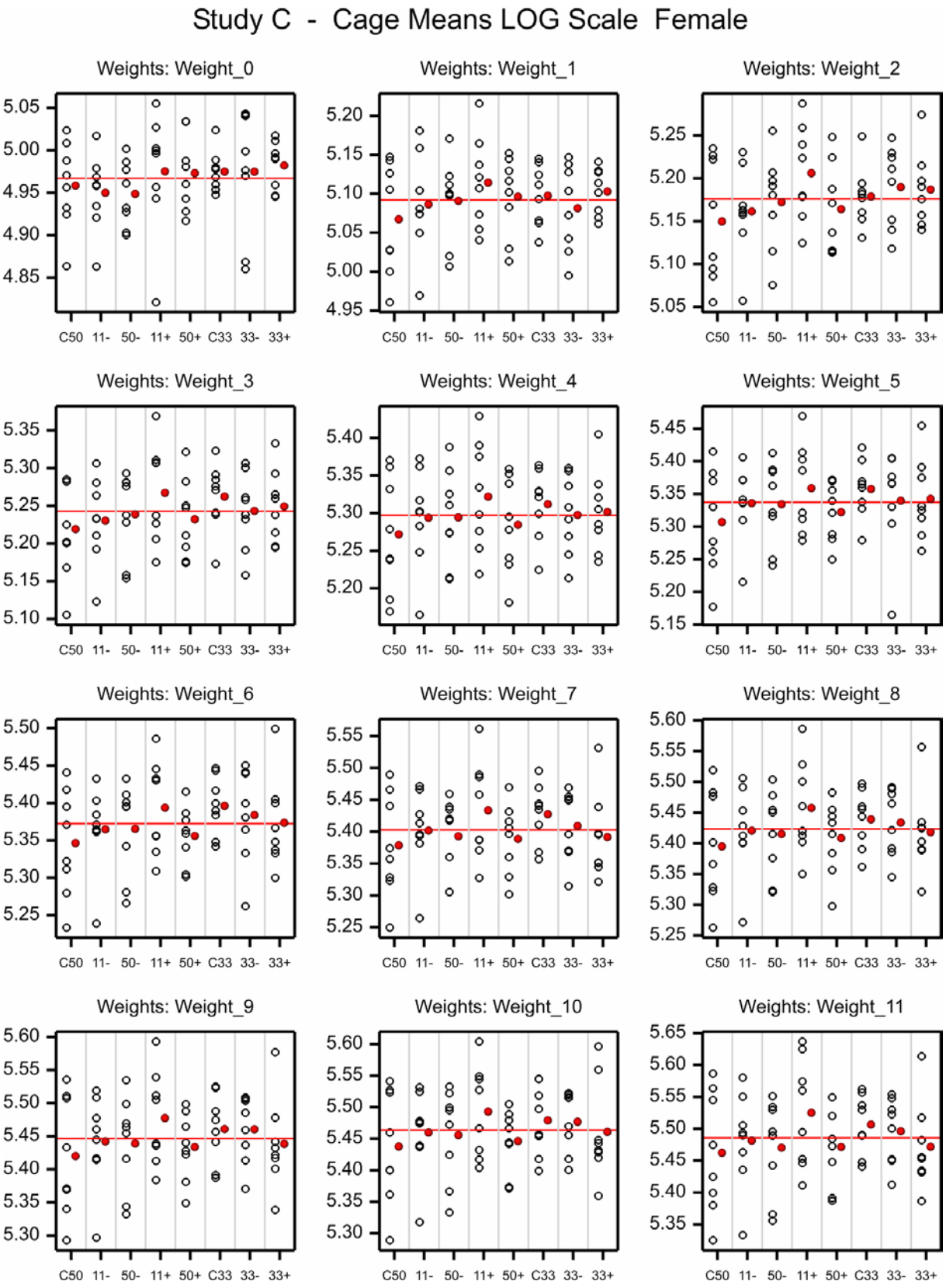
Appendix 4. Graphs of cage means on the log scale (continued)

Red symbols denote means for feeding groups while the red line denotes the overall mean.



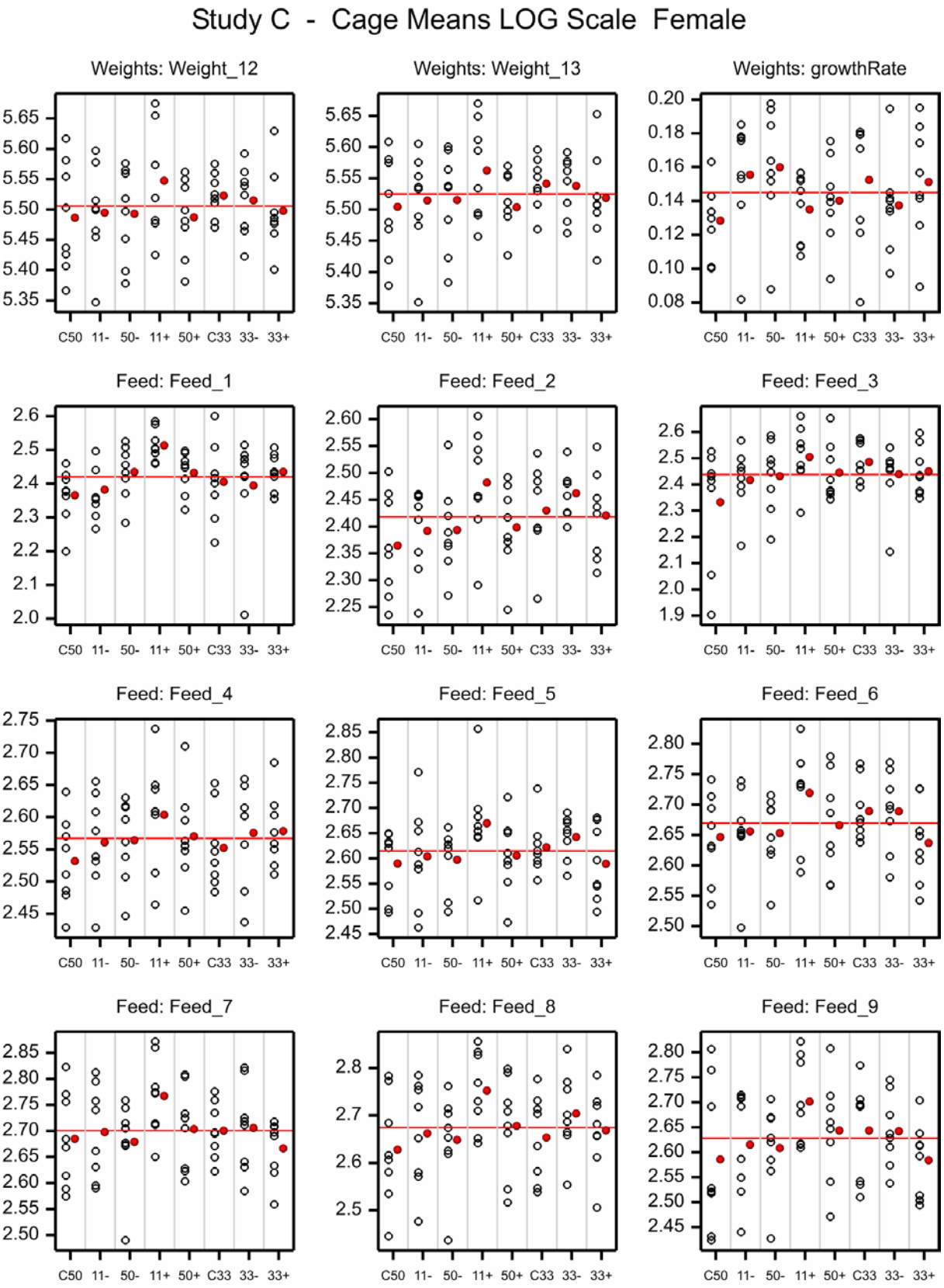
Appendix 4. Graphs of cage means on the log scale (continued)

Red symbols denote means for feeding groups while the red line denotes the overall mean.



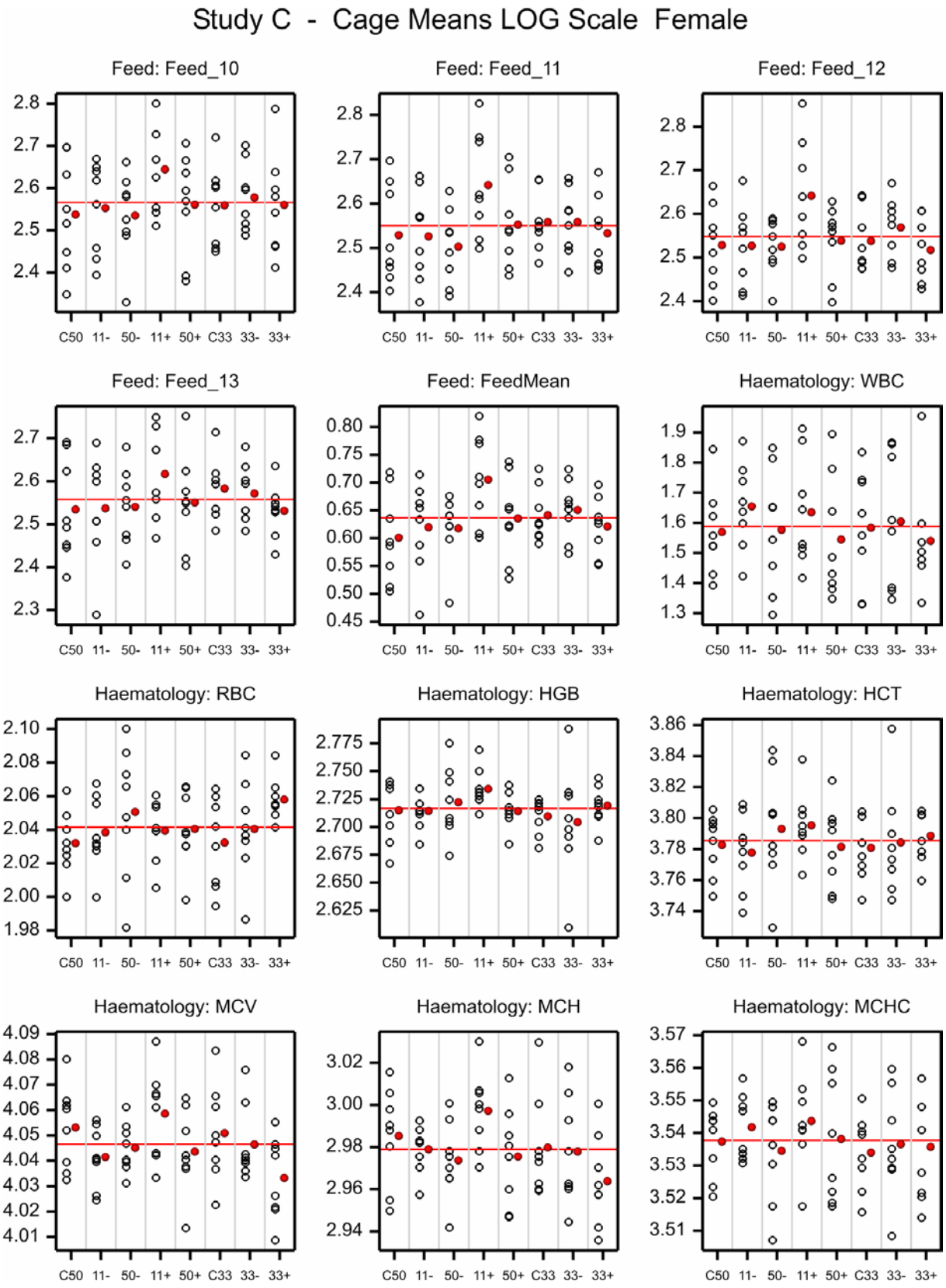
Appendix 4. Graphs of cage means on the log scale (continued)

Red symbols denote means for feeding groups while the red line denotes the overall mean.



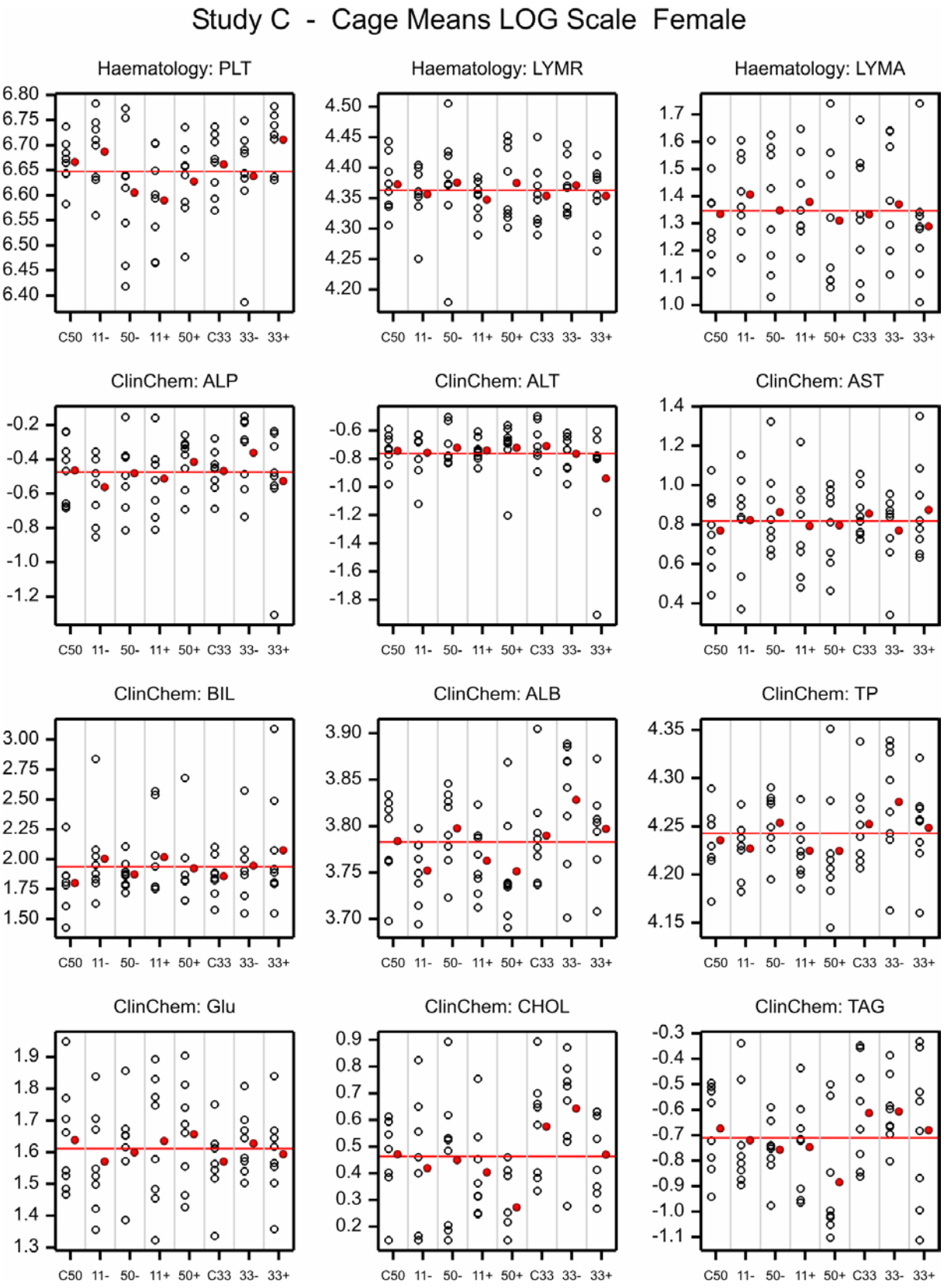
Appendix 4. Graphs of cage means on the log scale (continued)

Red symbols denote means for feeding groups while the red line denotes the overall mean.



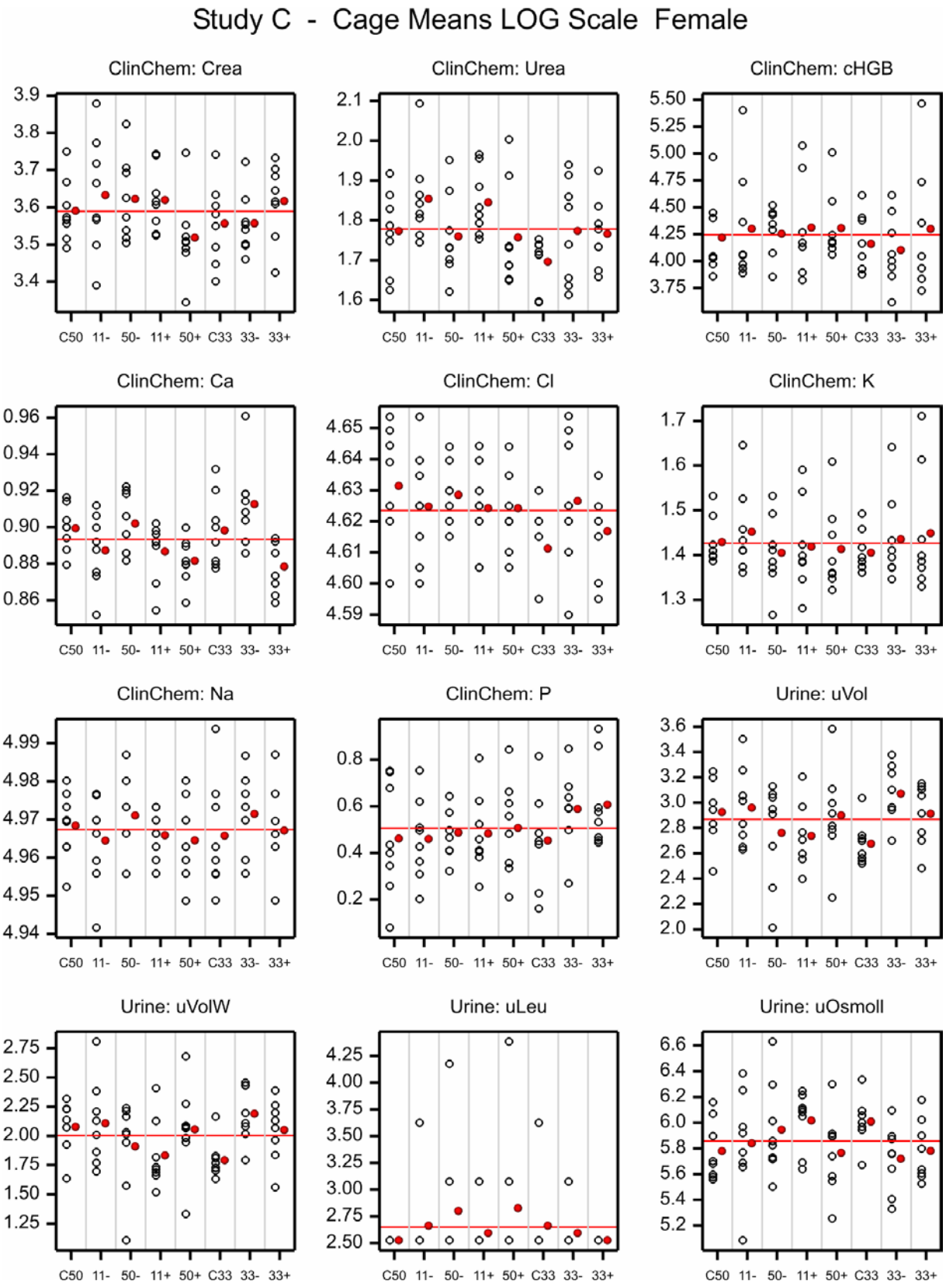
Appendix 4. Graphs of cage means on the log scale (continued)

Red symbols denote means for feeding groups while the red line denotes the overall mean.



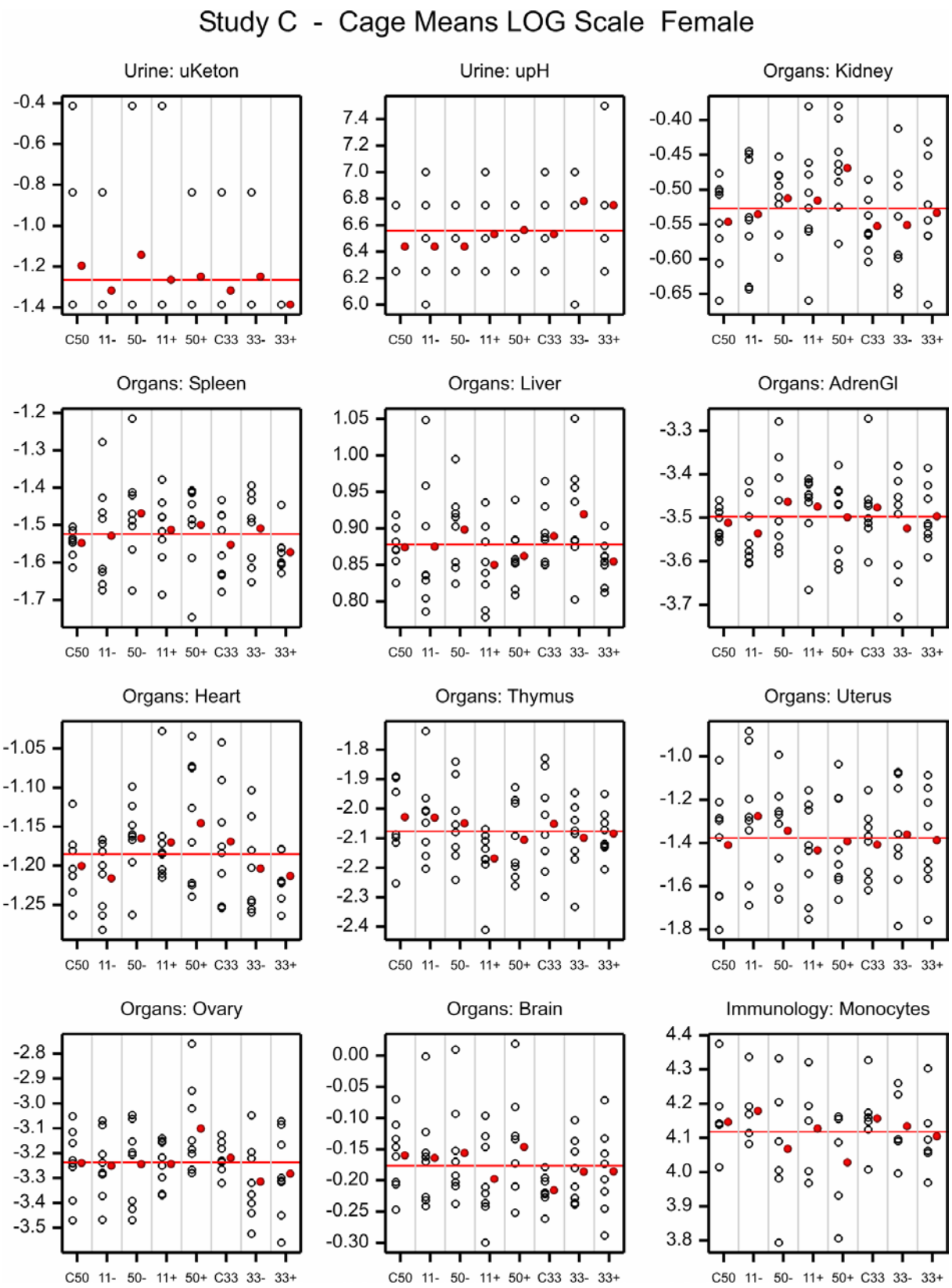
Appendix 4. Graphs of cage means on the log scale (continued)

Red symbols denote means for feeding groups while the red line denotes the overall mean.



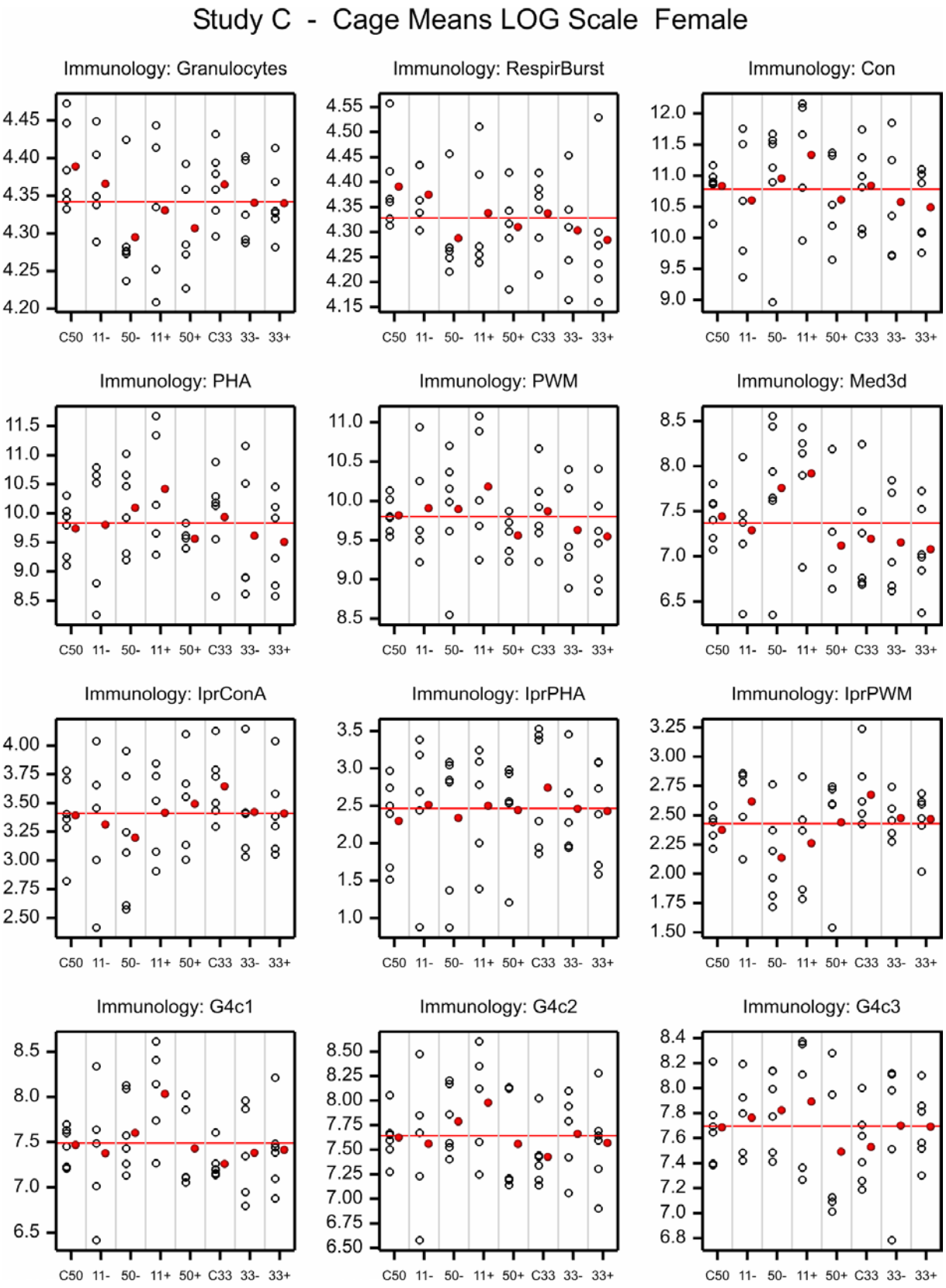
Appendix 4. Graphs of cage means on the log scale (continued)

Red symbols denote means for feeding groups while the red line denotes the overall mean.



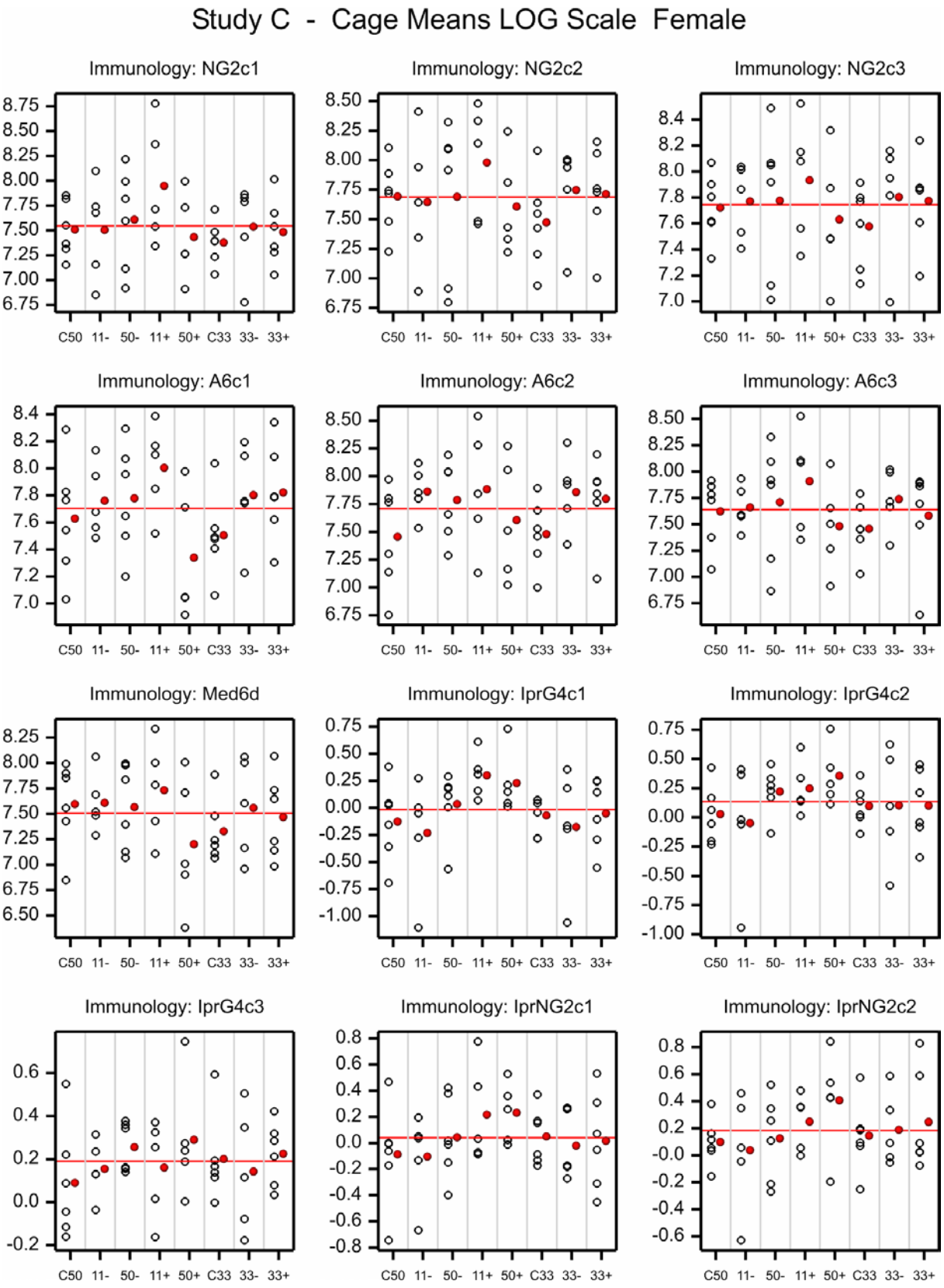
Appendix 4. Graphs of cage means on the log scale (continued)

Red symbols denote means for feeding groups while the red line denotes the overall mean.



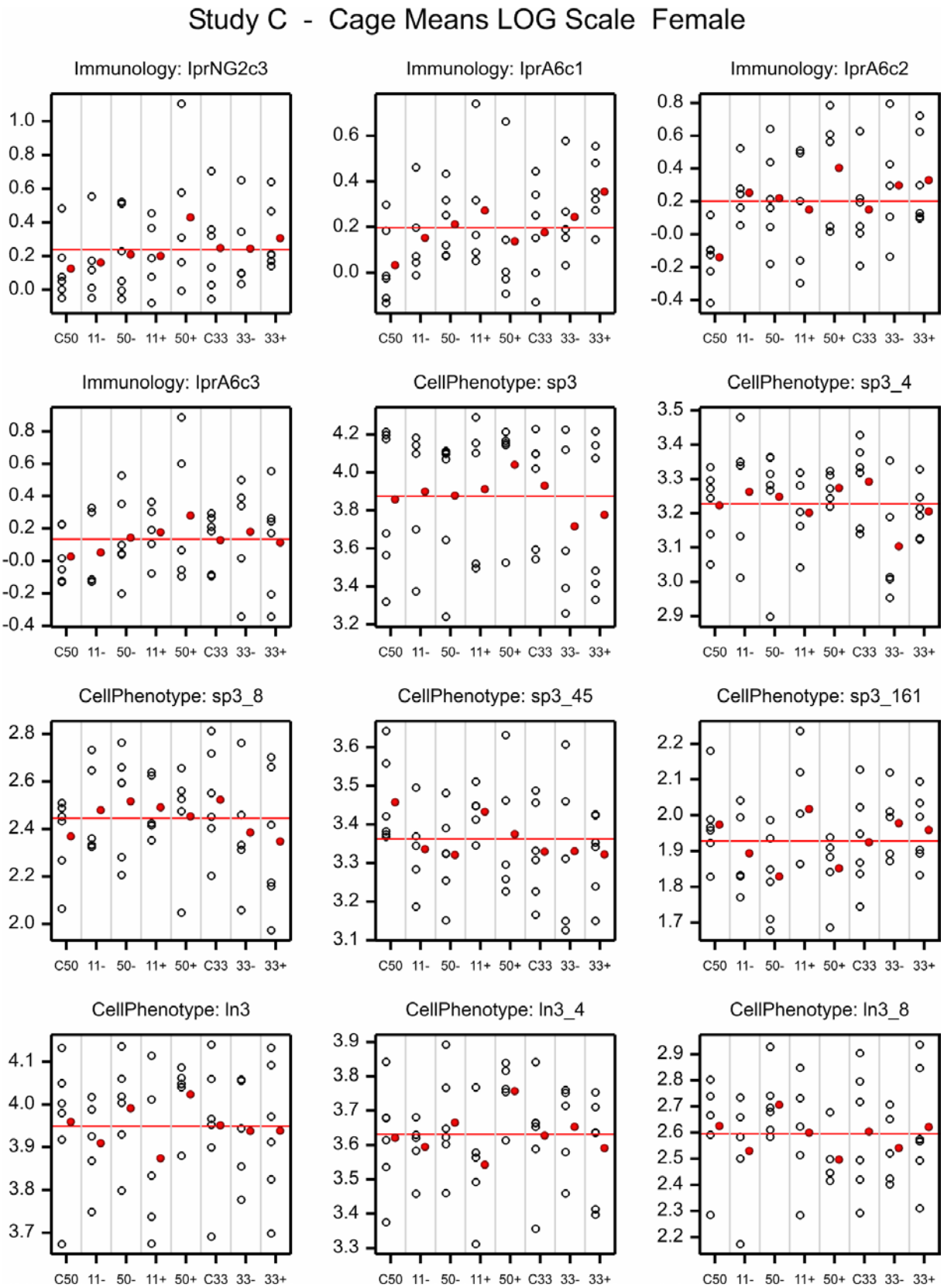
Appendix 4. Graphs of cage means on the log scale (continued)

Red symbols denote means for feeding groups while the red line denotes the overall mean.



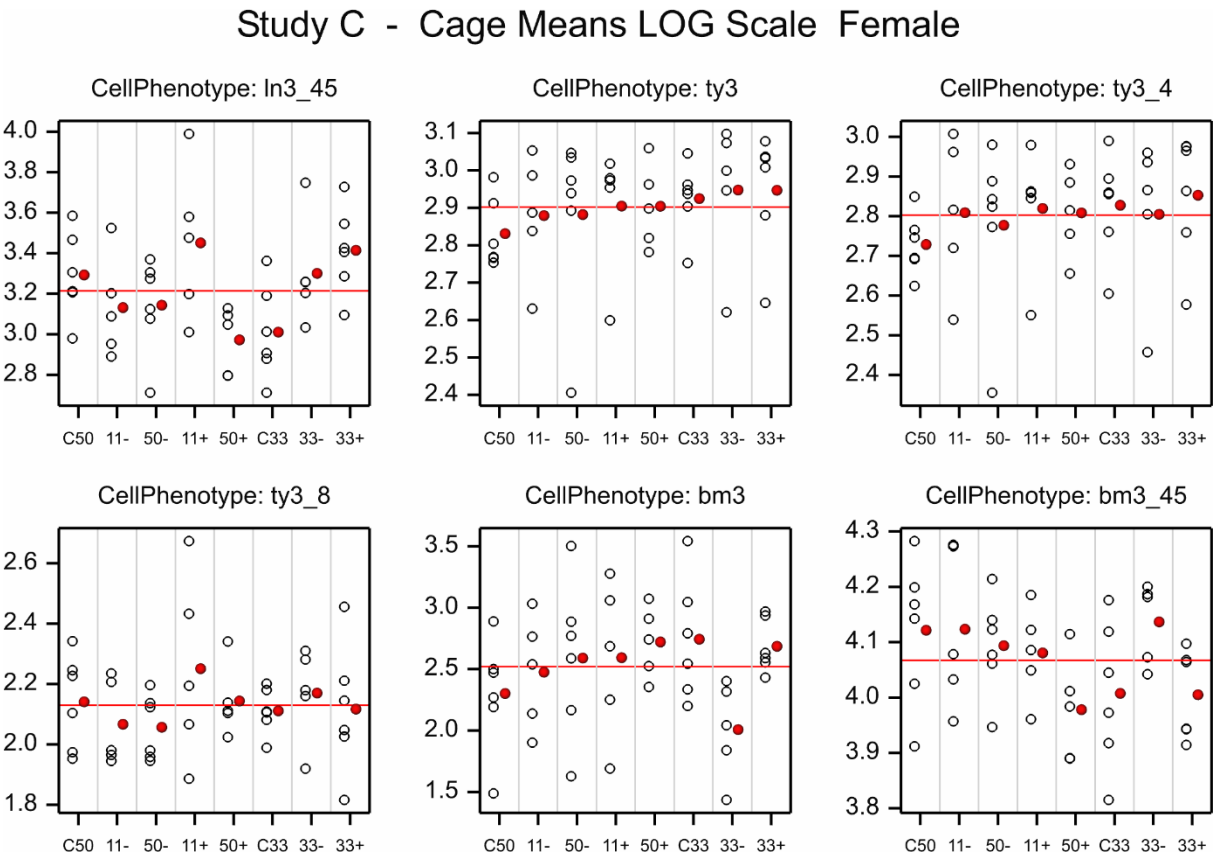
Appendix 4. Graphs of cage means on the log scale (continued)

Red symbols denote means for feeding groups while the red line denotes the overall mean.



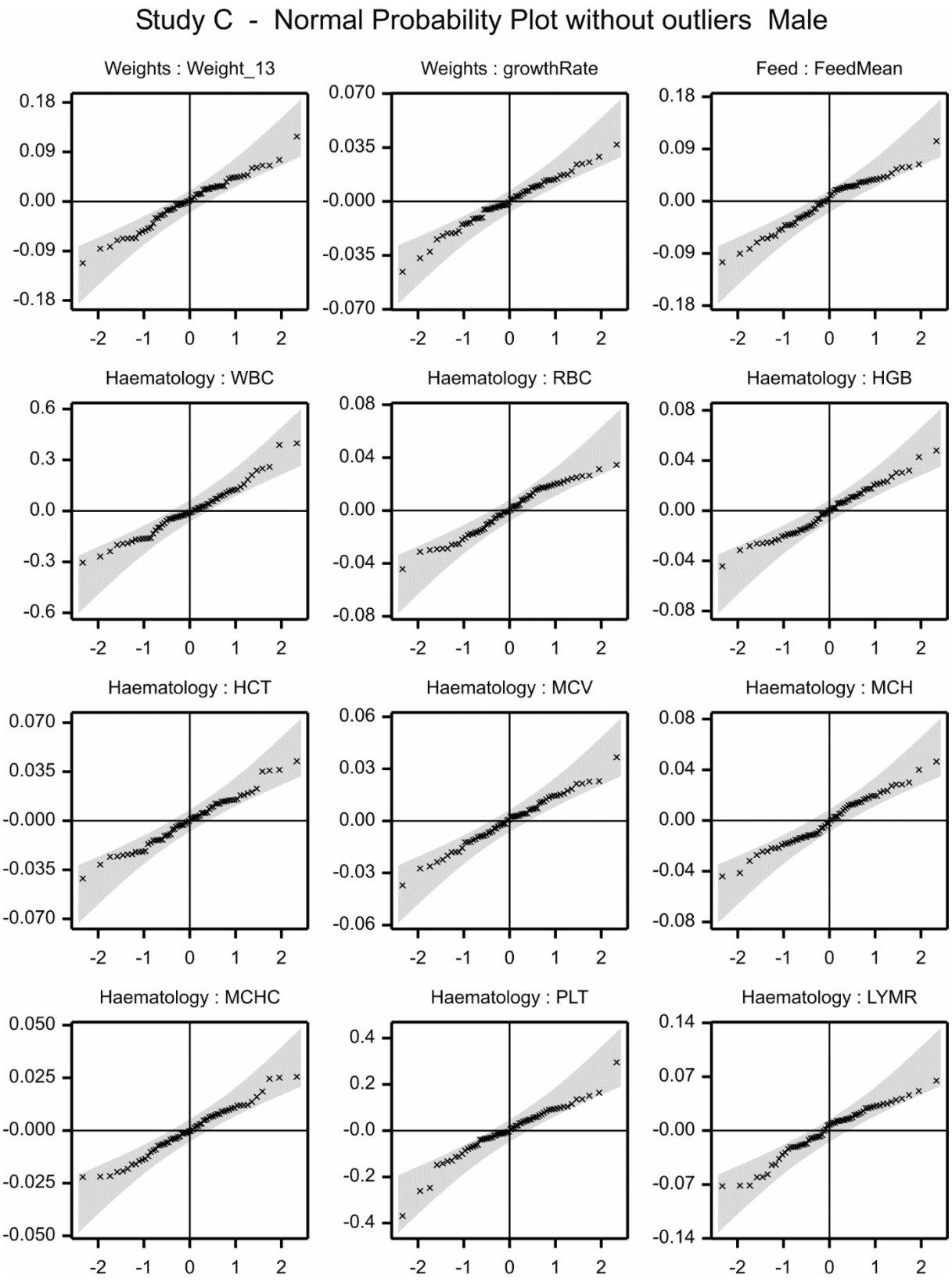
Appendix 4. Graphs of cage means on the log scale (continued)

Red symbols denote means for feeding groups while the red line denotes the overall mean.



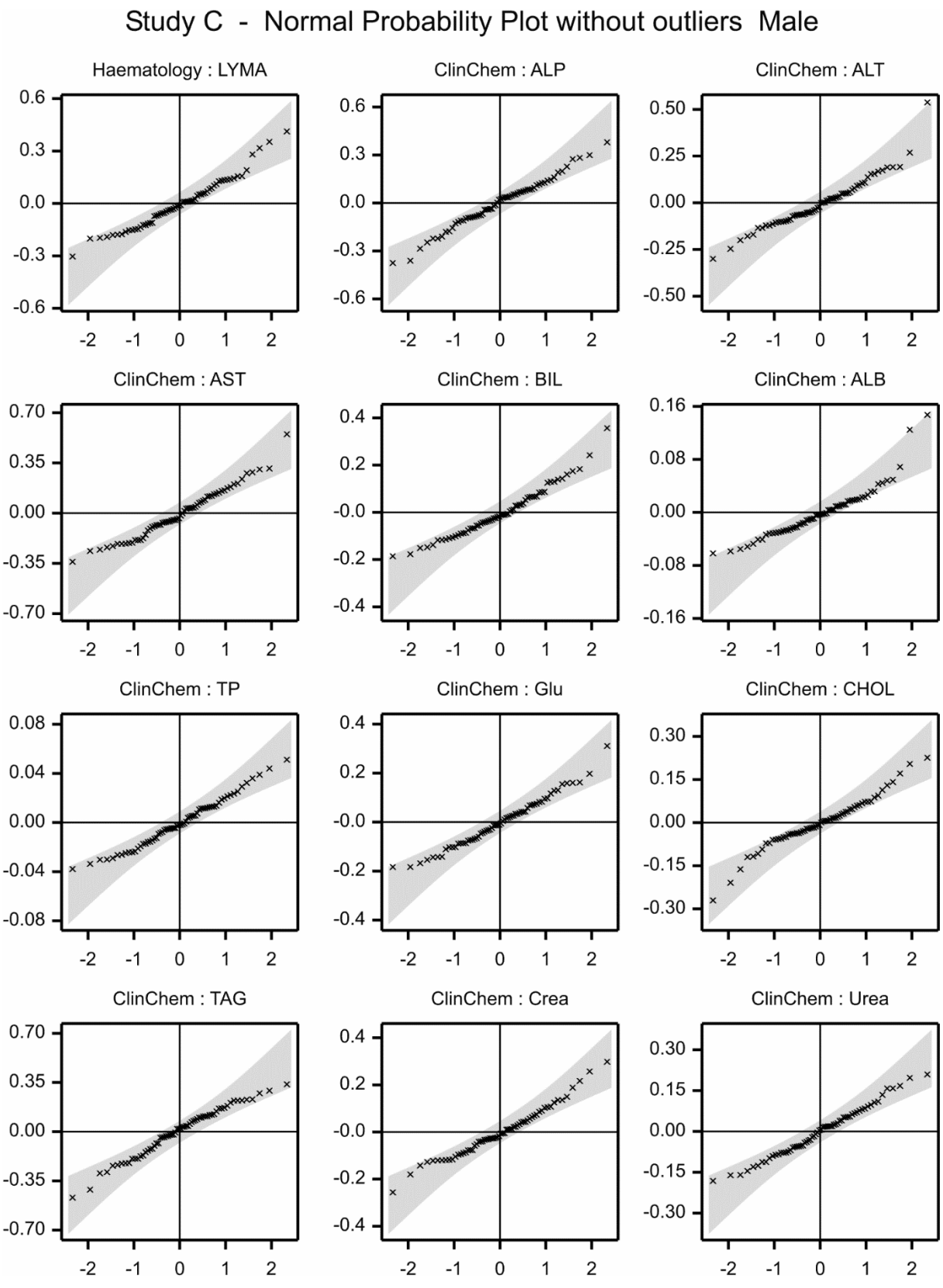
Appendix 5. Normal probability plots of residuals after ANOVA

Residuals are obtained from ANOVA of cage means (log scale). A 99% confidence envelop is added.



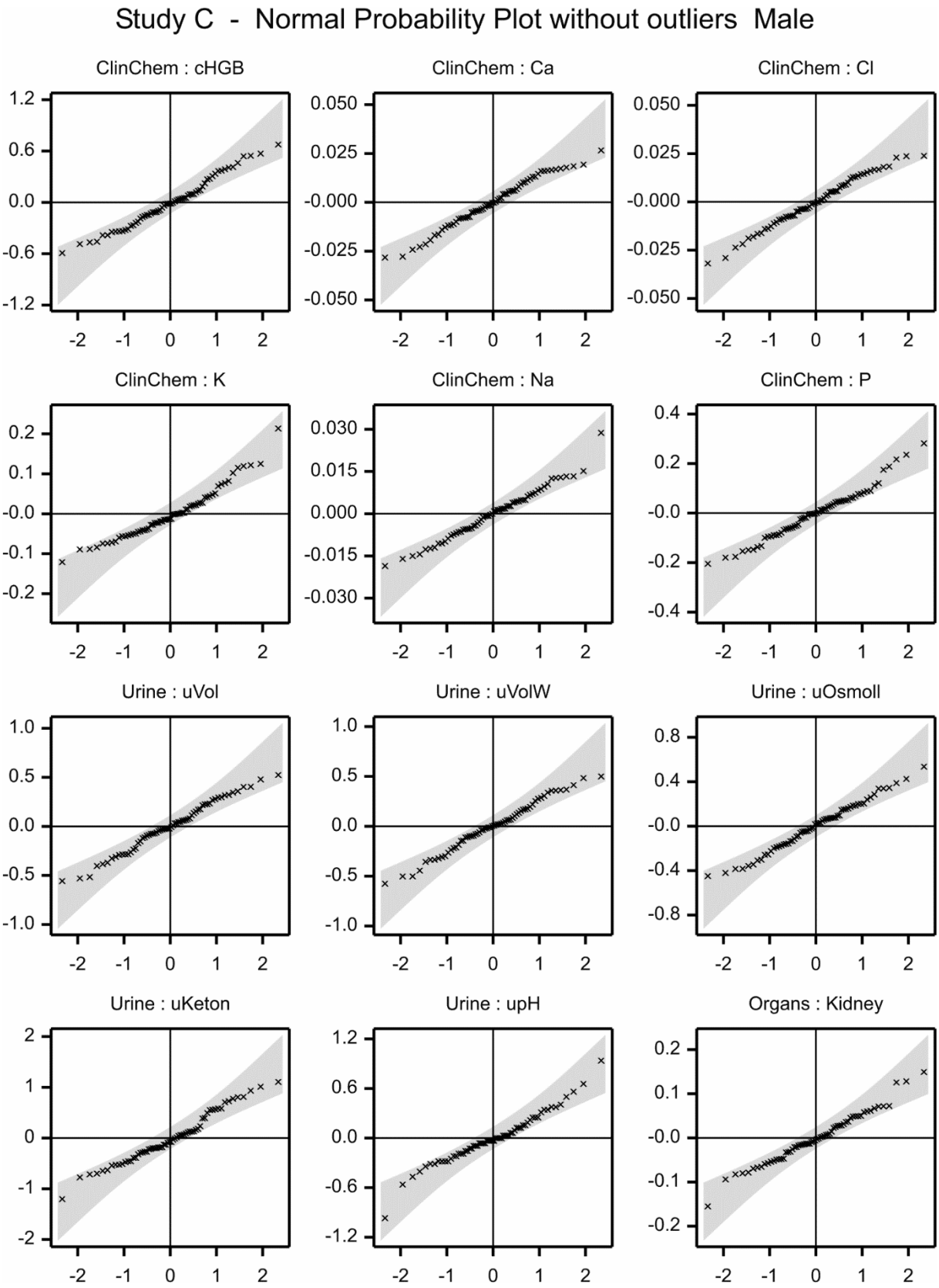
Appendix 5. Normal probability plots of residuals after ANOVA (continued)

Residuals are obtained from ANOVA of cage means (log scale). A 99% confidence envelop is added.



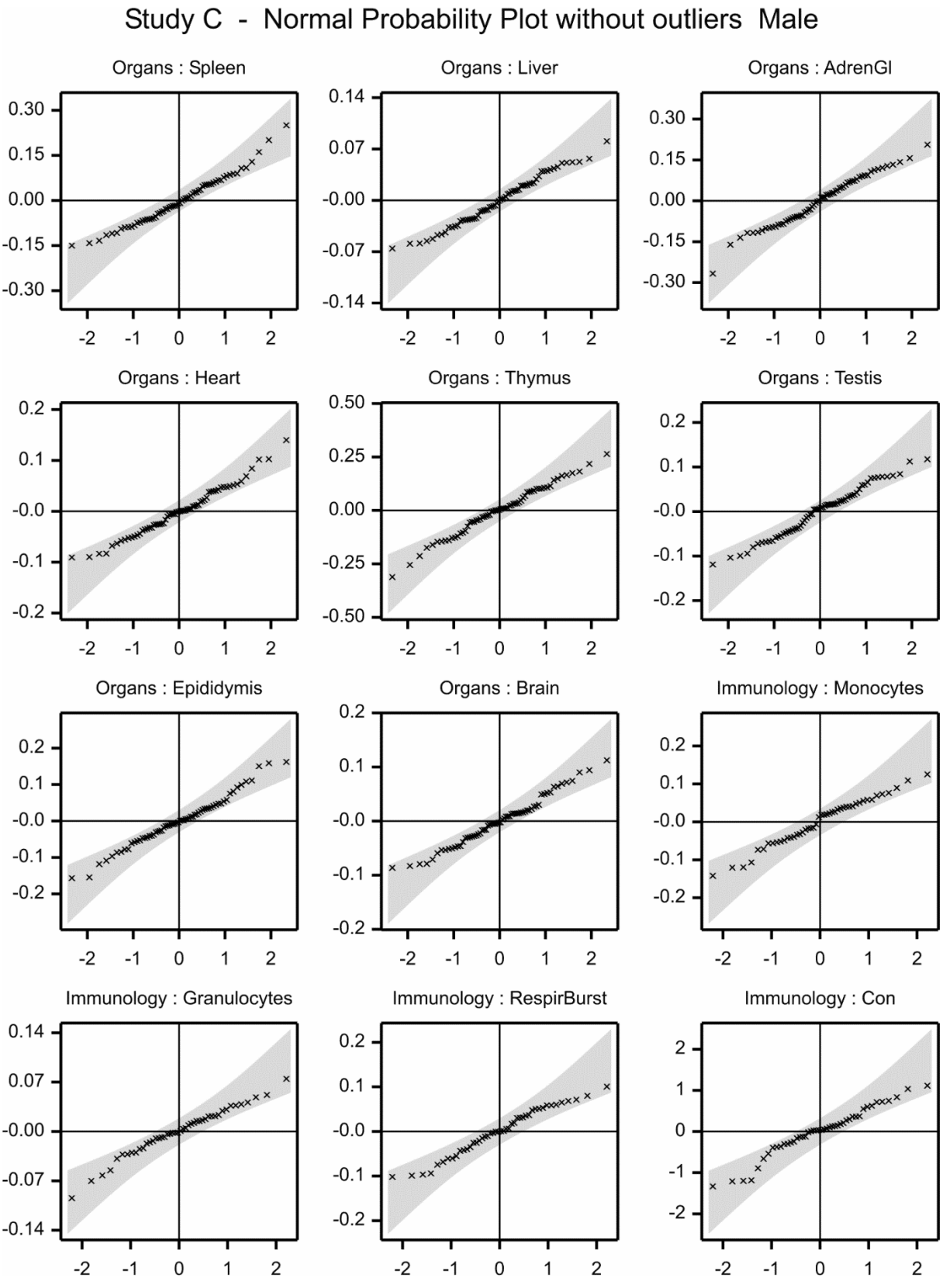
Appendix 5. Normal probability plots of residuals after ANOVA (continued)

Residuals are obtained from ANOVA of cage means (log scale). A 99% confidence envelop is added.



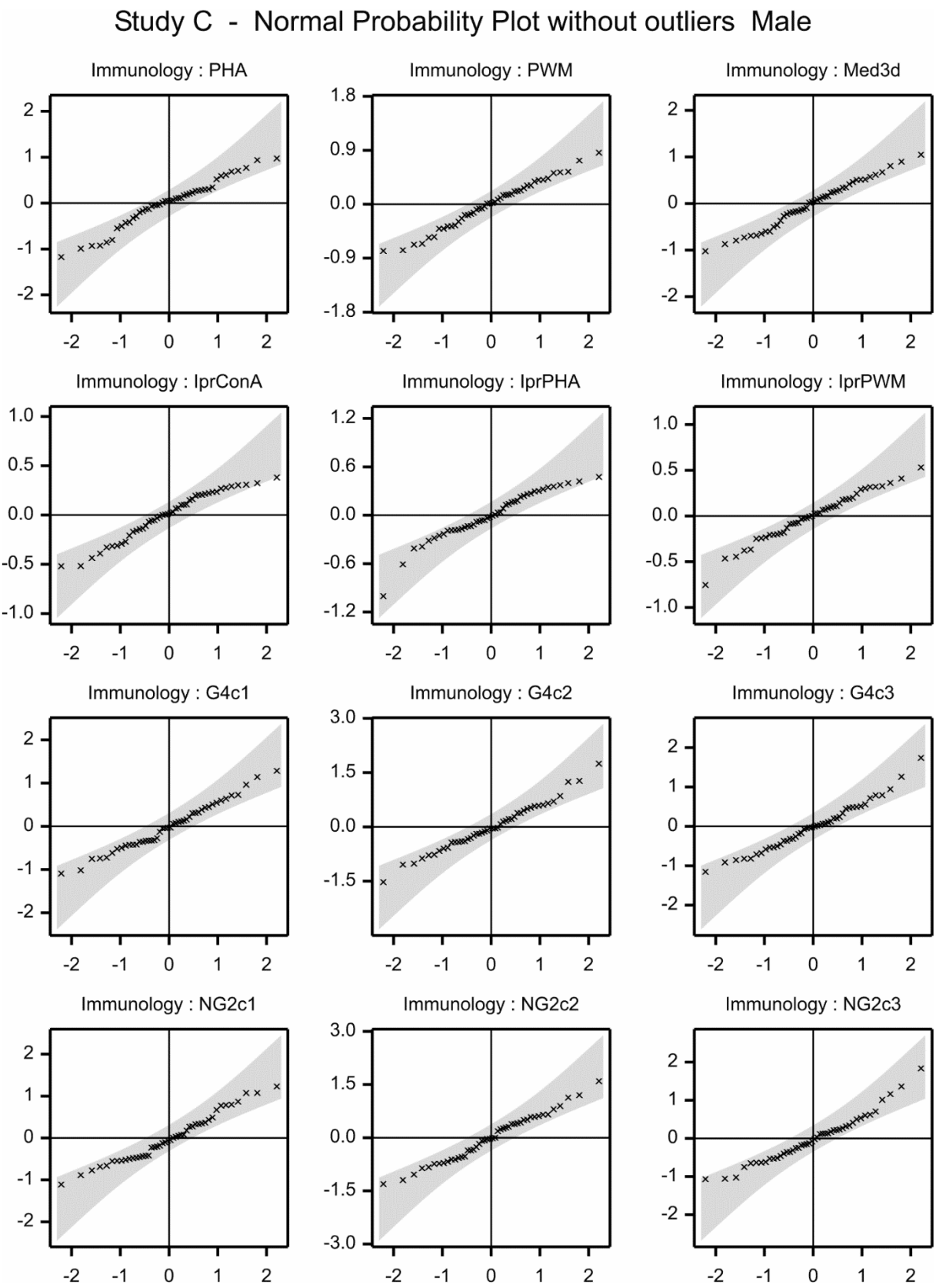
Appendix 5. Normal probability plots of residuals after ANOVA (continued)

Residuals are obtained from ANOVA of cage means (log scale). A 99% confidence envelop is added.



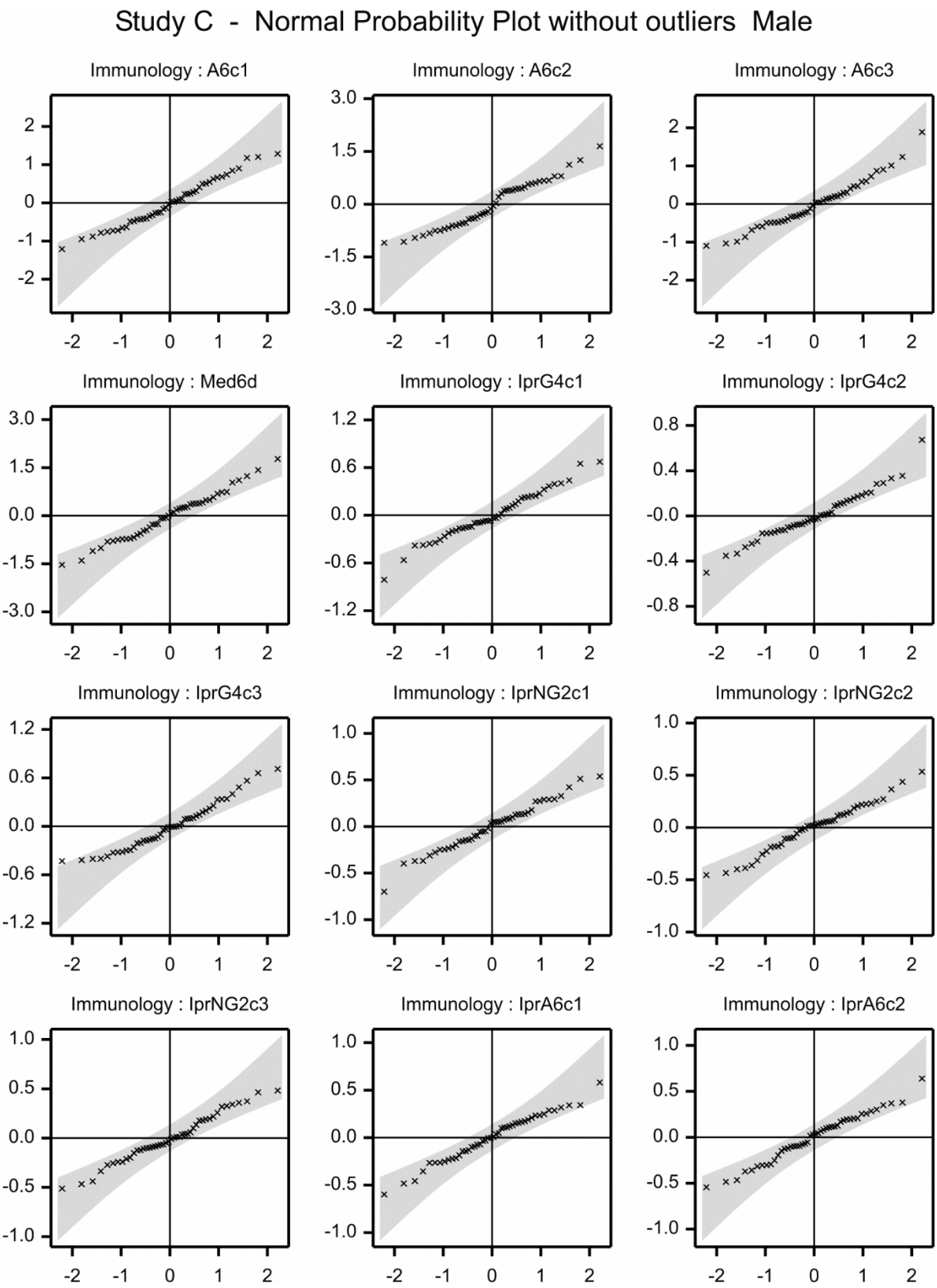
Appendix 5. Normal probability plots of residuals after ANOVA (continued)

Residuals are obtained from ANOVA of cage means (log scale). A 99% confidence envelop is added.



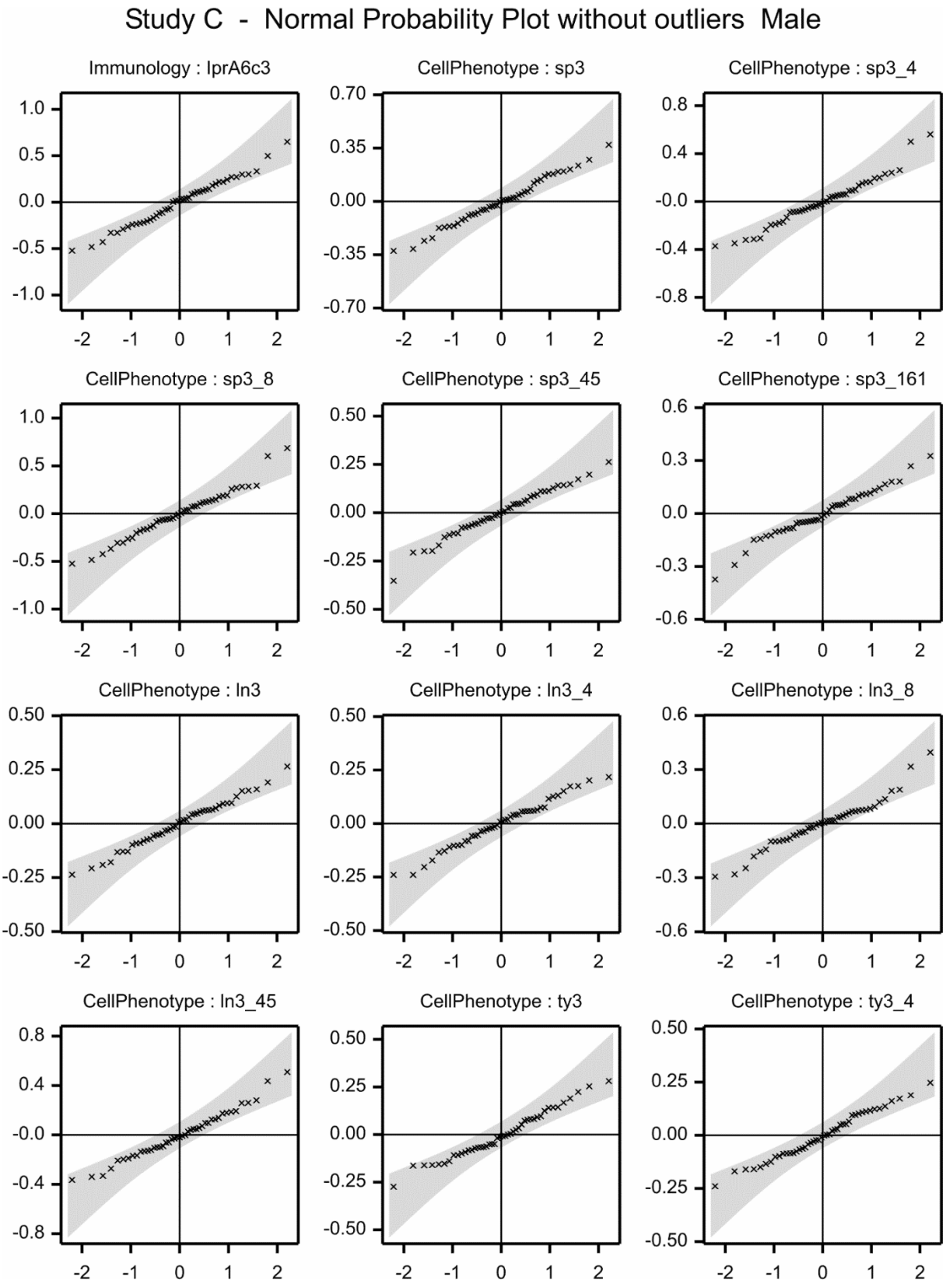
Appendix 5. Normal probability plots of residuals after ANOVA (continued)

Residuals are obtained from ANOVA of cage means (log scale). A 99% confidence envelop is added.



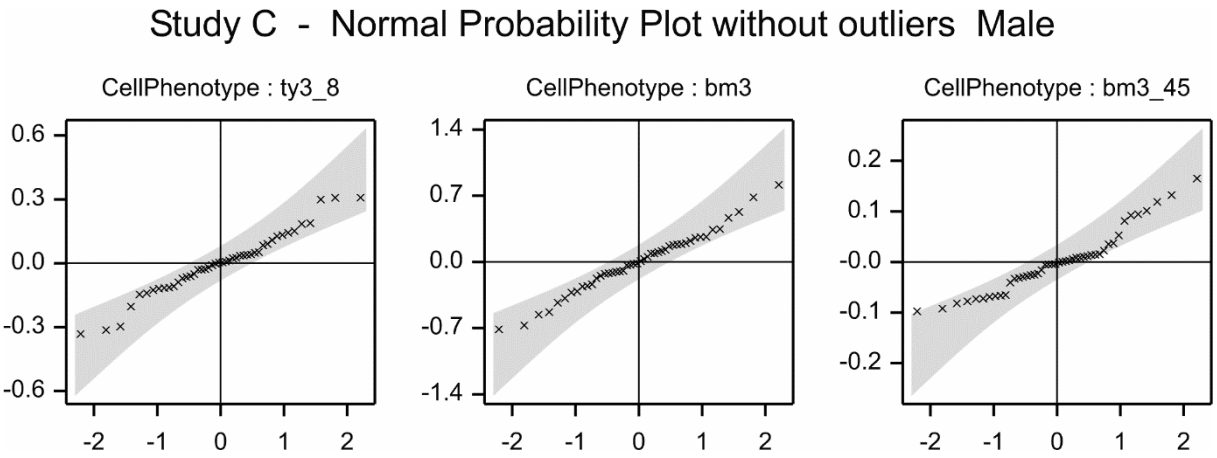
Appendix 5. Normal probability plots of residuals after ANOVA (continued)

Residuals are obtained from ANOVA of cage means (log scale). A 99% confidence envelop is added.



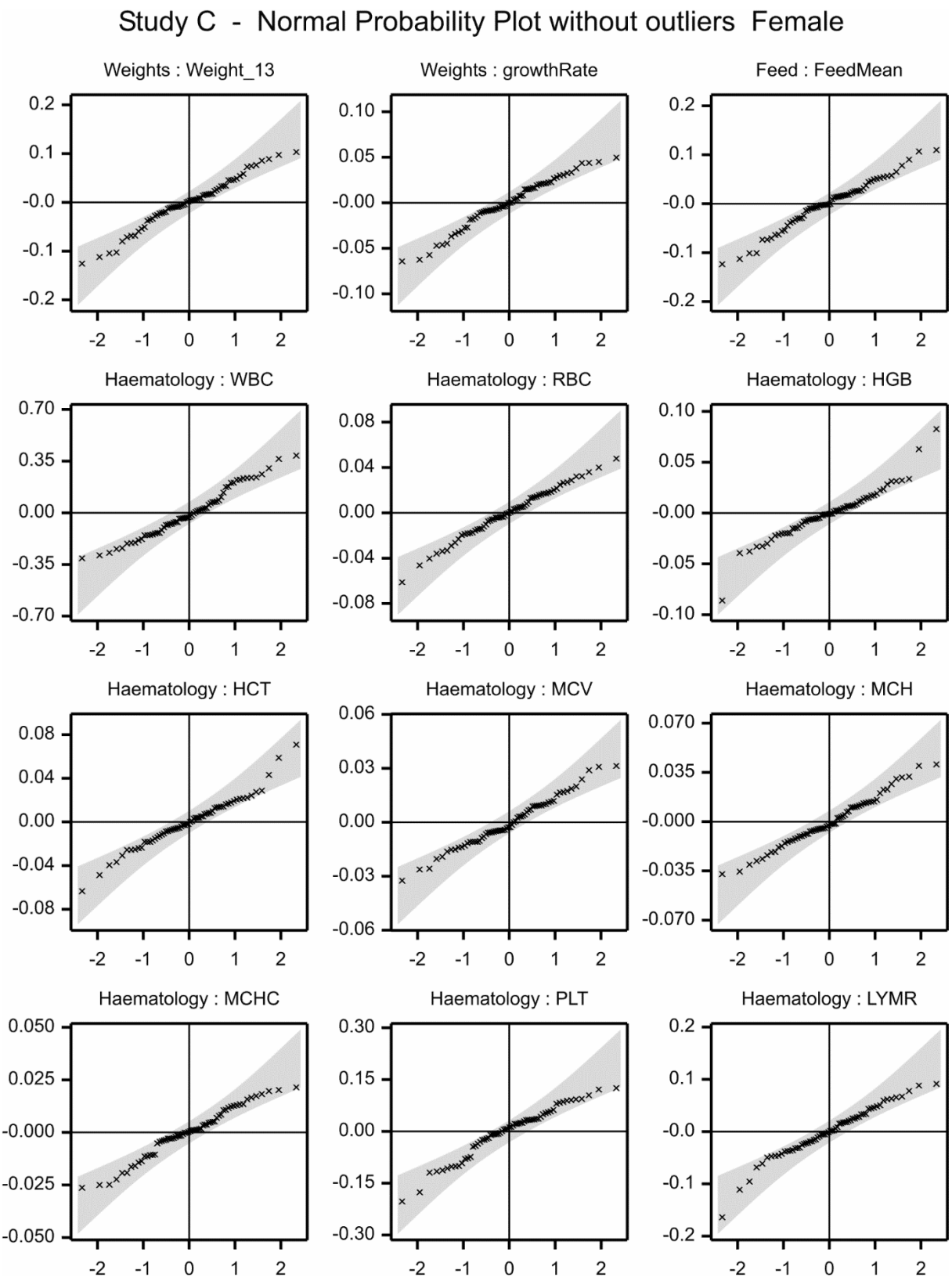
Appendix 5. Normal probability plots of residuals after ANOVA (continued)

Residuals are obtained from ANOVA of cage means (log scale). A 99% confidence envelop is added.



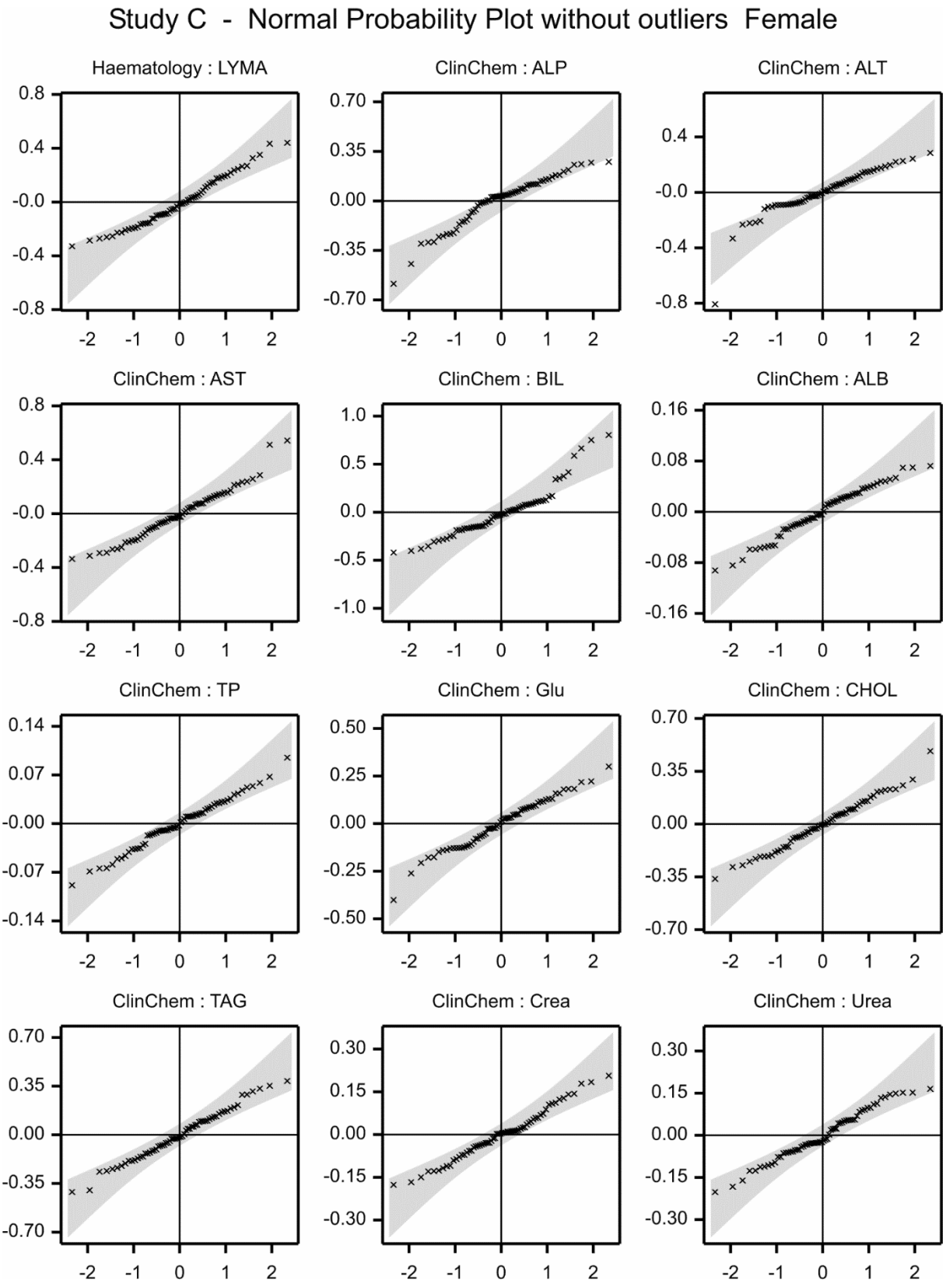
Appendix 5. Normal probability plots of residuals after ANOVA (continued)

Residuals are obtained from ANOVA of cage means (log scale). A 99% confidence envelop is added.



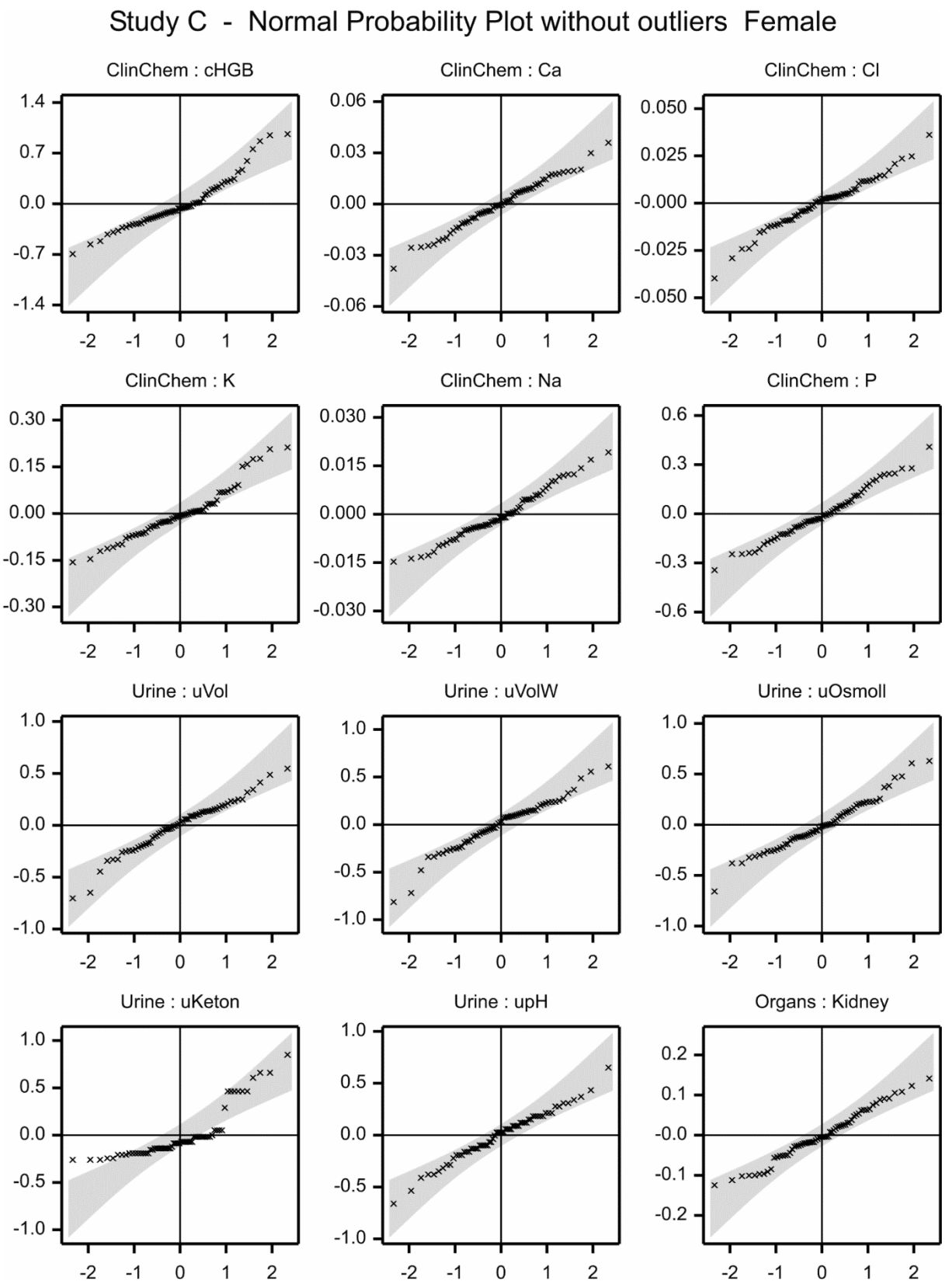
Appendix 5. Normal probability plots of residuals after ANOVA (continued)

Residuals are obtained from ANOVA of cage means (log scale). A 99% confidence envelop is added.



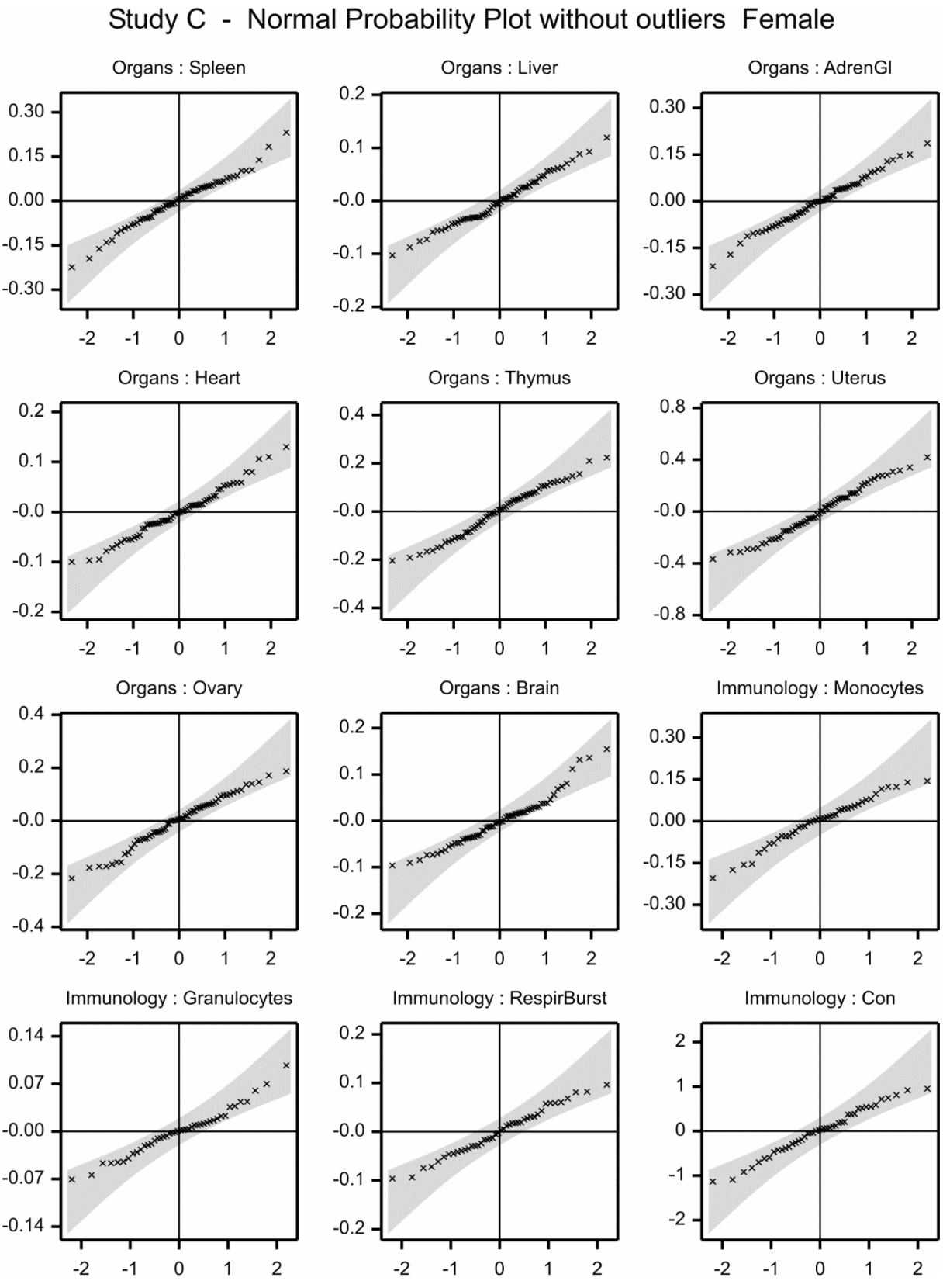
Appendix 5. Normal probability plots of residuals after ANOVA (continued)

Residuals are obtained from ANOVA of cage means (log scale). A 99% confidence envelop is added.



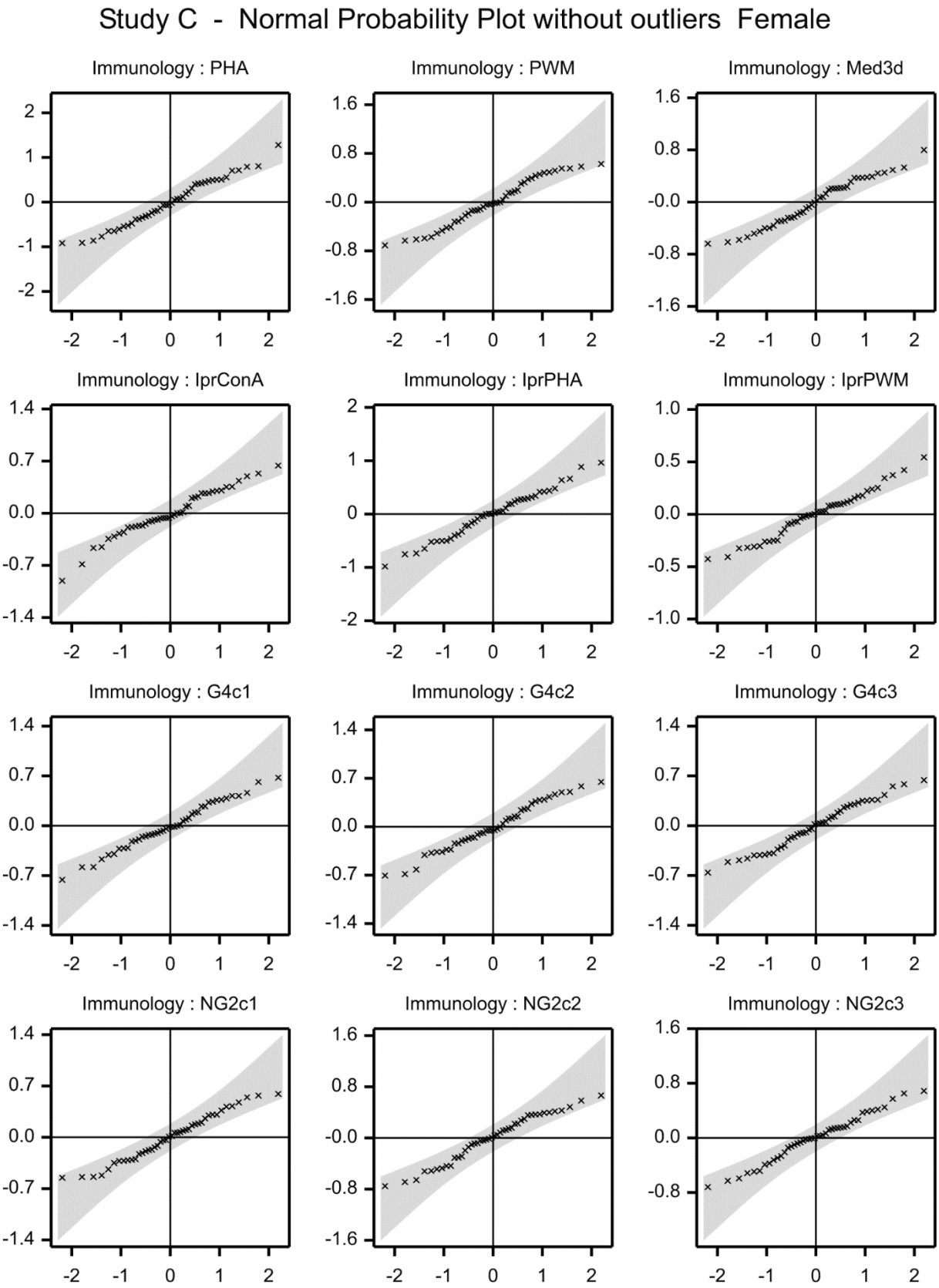
Appendix 5. Normal probability plots of residuals after ANOVA (continued)

Residuals are obtained from ANOVA of cage means (log scale). A 99% confidence envelop is added.



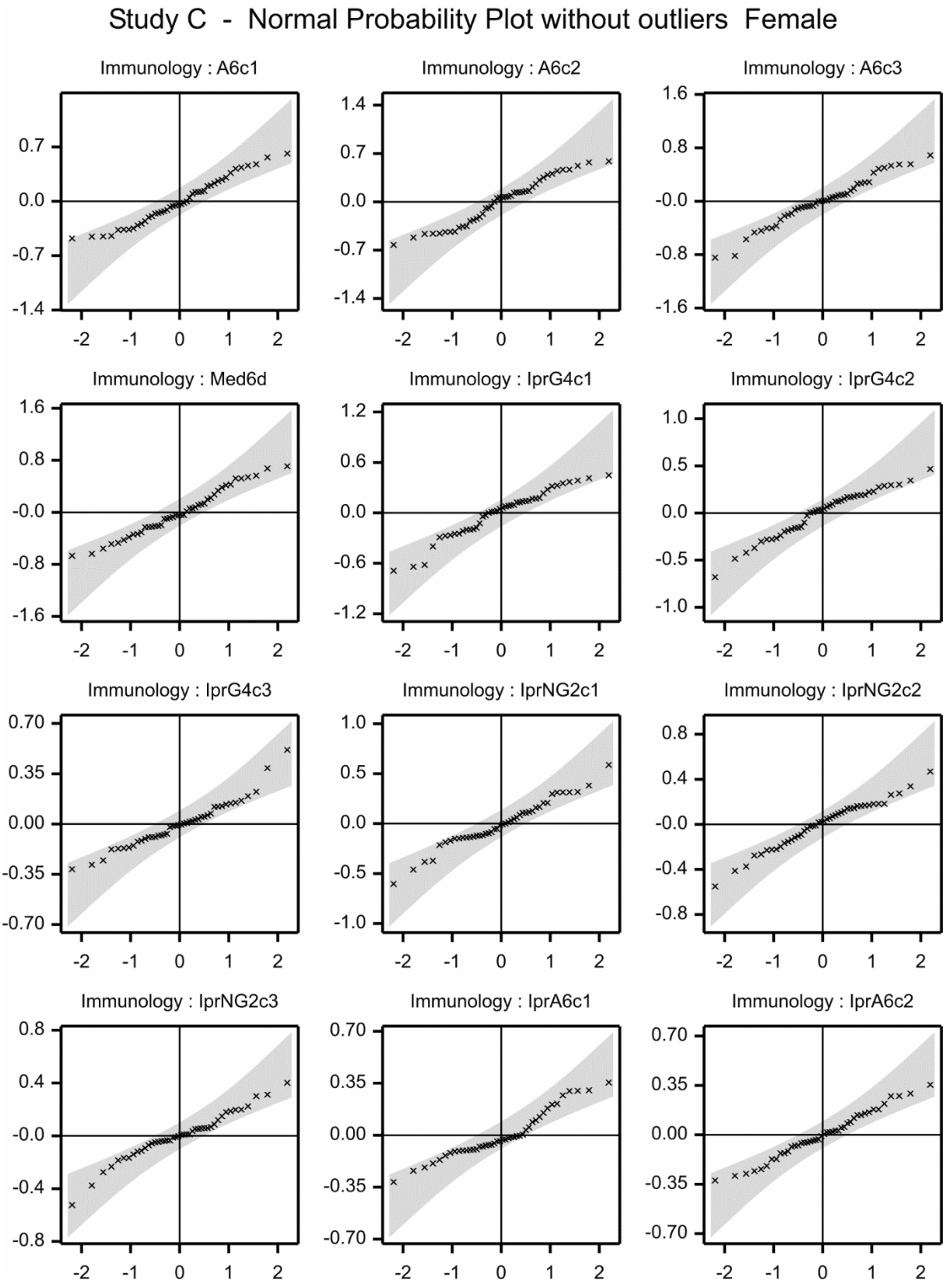
Appendix 5. Normal probability plots of residuals after ANOVA (continued)

Residuals are obtained from ANOVA of cage means (log scale). A 99% confidence envelop is added.



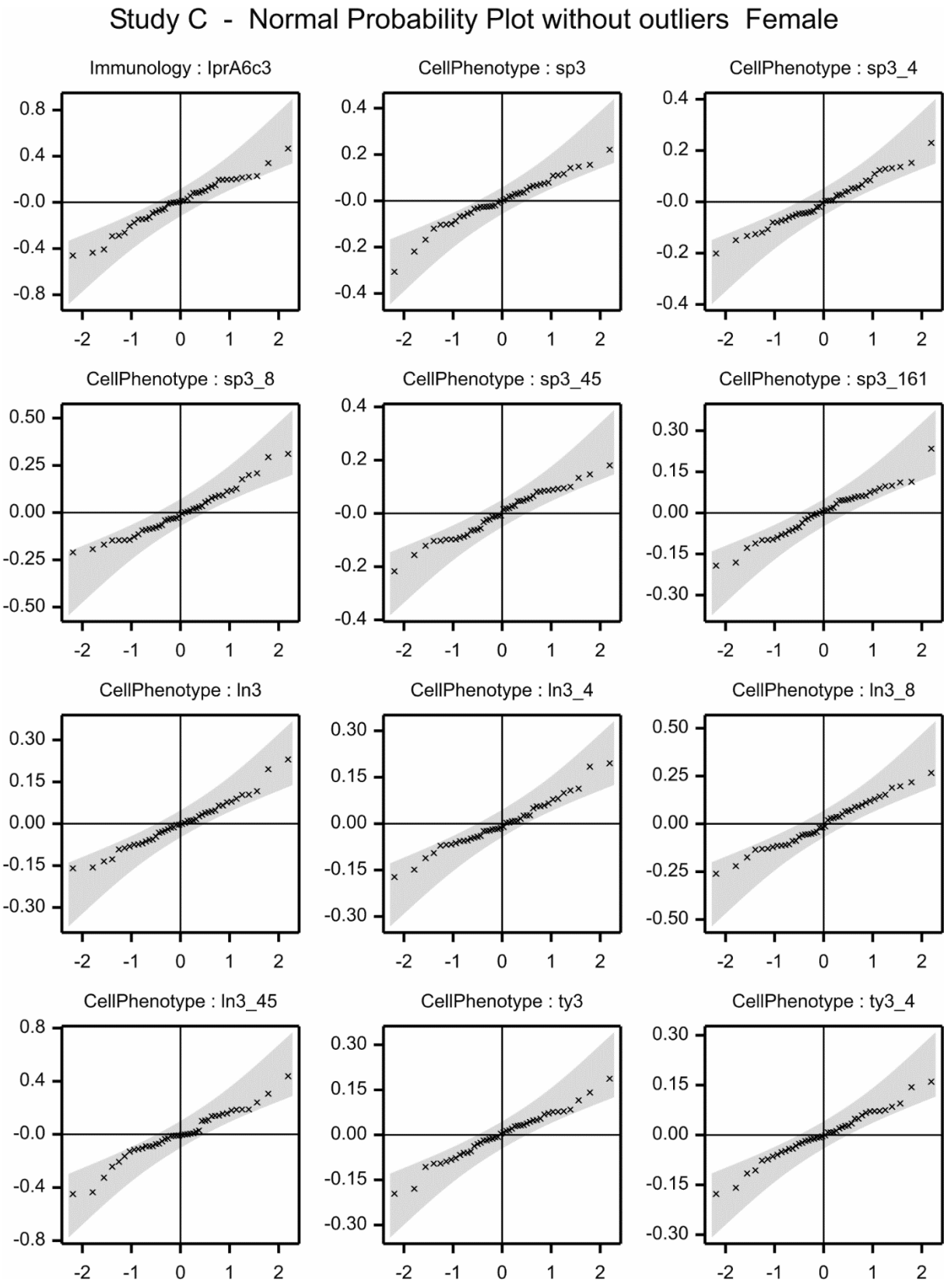
Appendix 5. Normal probability plots of residuals after ANOVA (continued)

Residuals are obtained from ANOVA of cage means (log scale). A 99% confidence envelop is added.



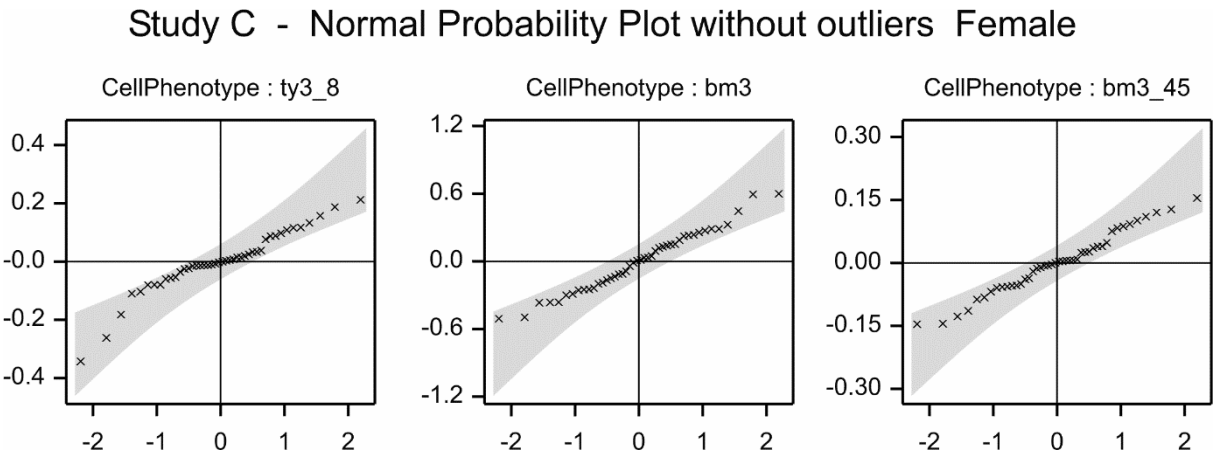
Appendix 5. Normal probability plots of residuals after ANOVA (continued)

Residuals are obtained from ANOVA of cage means (log scale). A 99% confidence envelop is added.



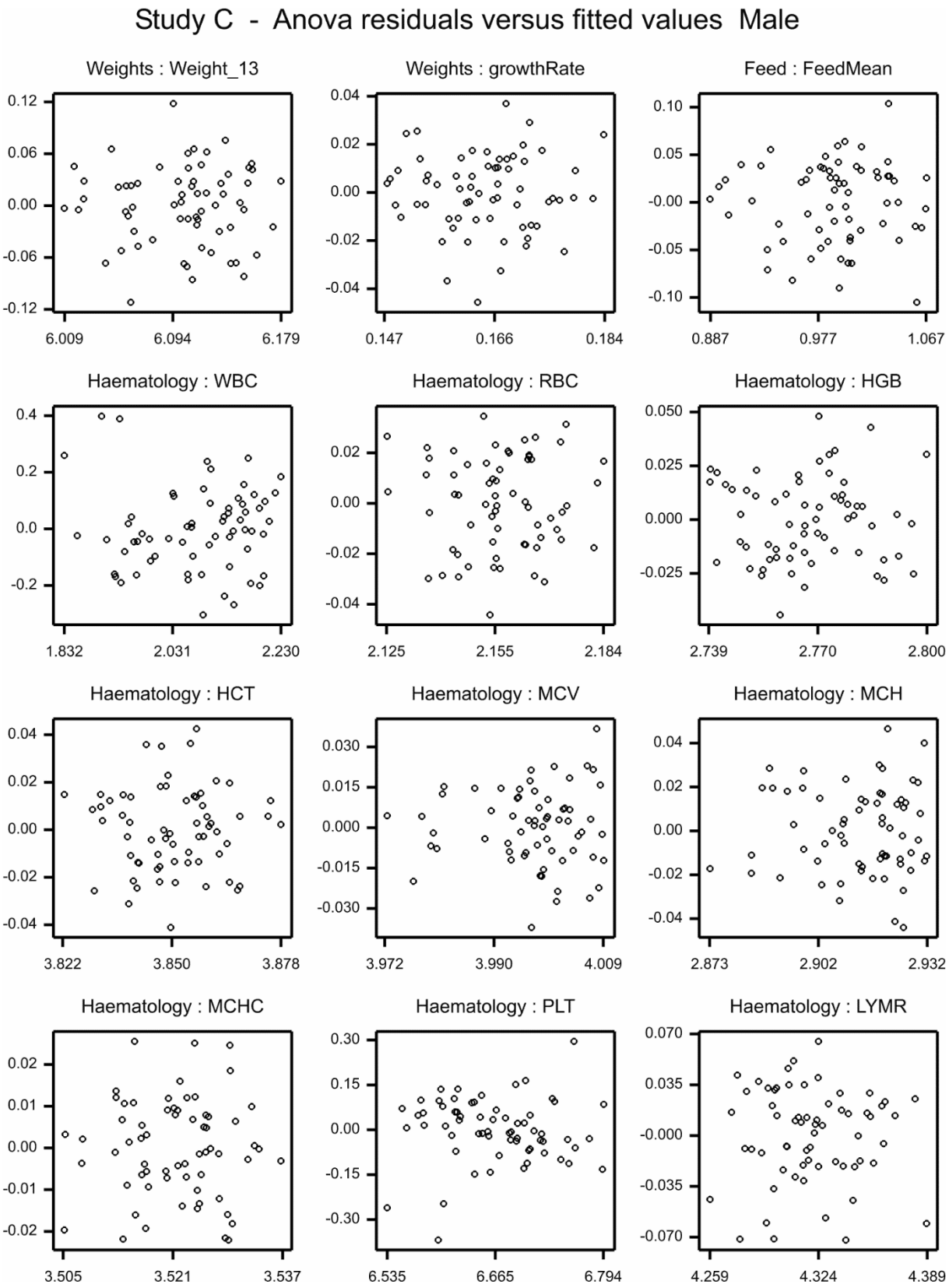
Appendix 5. Normal probability plots of residuals after ANOVA (continued)

Residuals are obtained from ANOVA of cage means (log scale). A 99% confidence envelop is added.



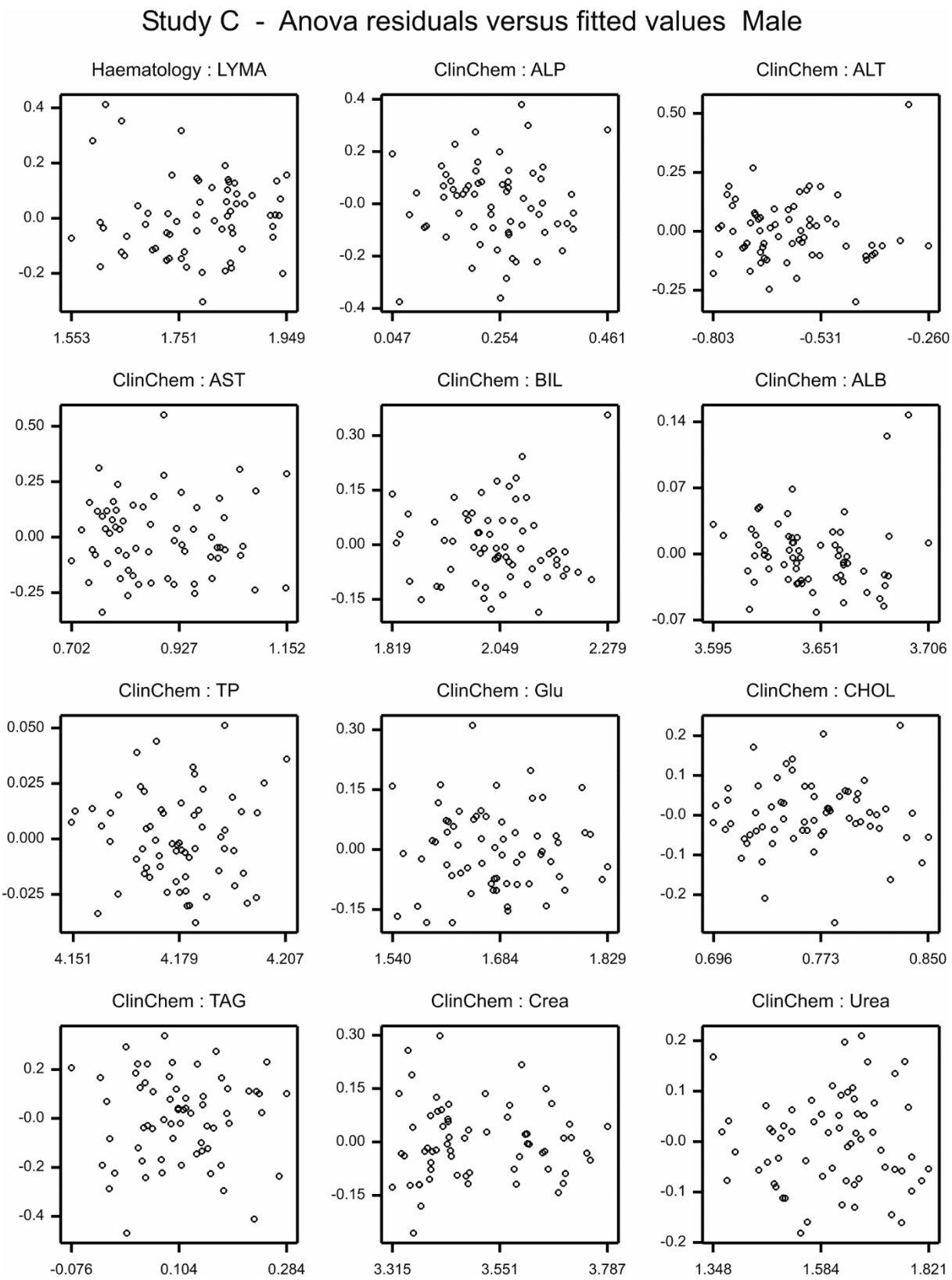
Appendix 6. Graphs of residuals versus fitted values after ANOVA

Residuals and fitted values are obtained from ANOVA of cage means (after a log transformation).



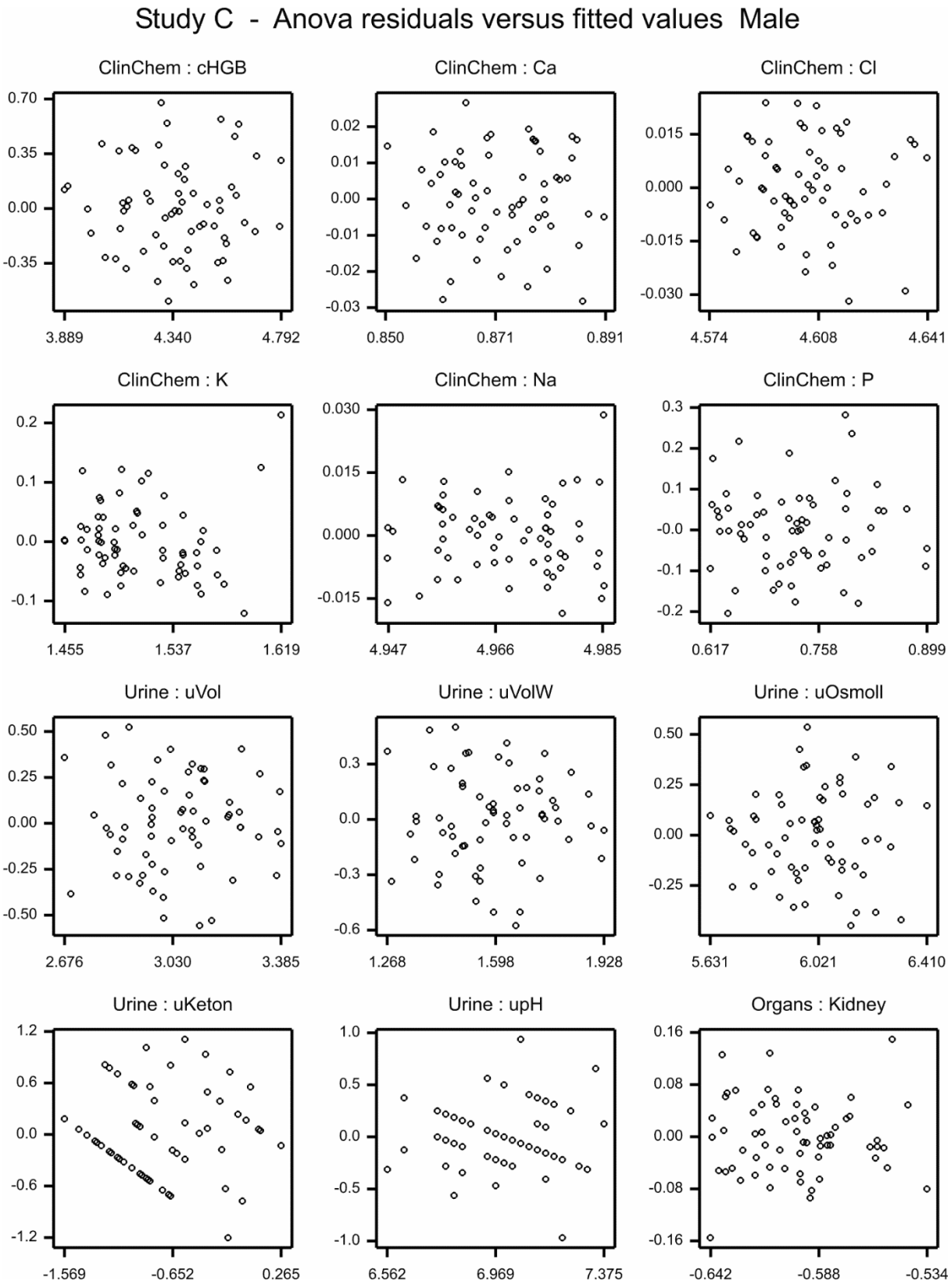
Appendix 6. Graphs of residuals versus fitted values after ANOVA (continued)

Residuals and fitted values are obtained from ANOVA of cage means (after a log transformation).



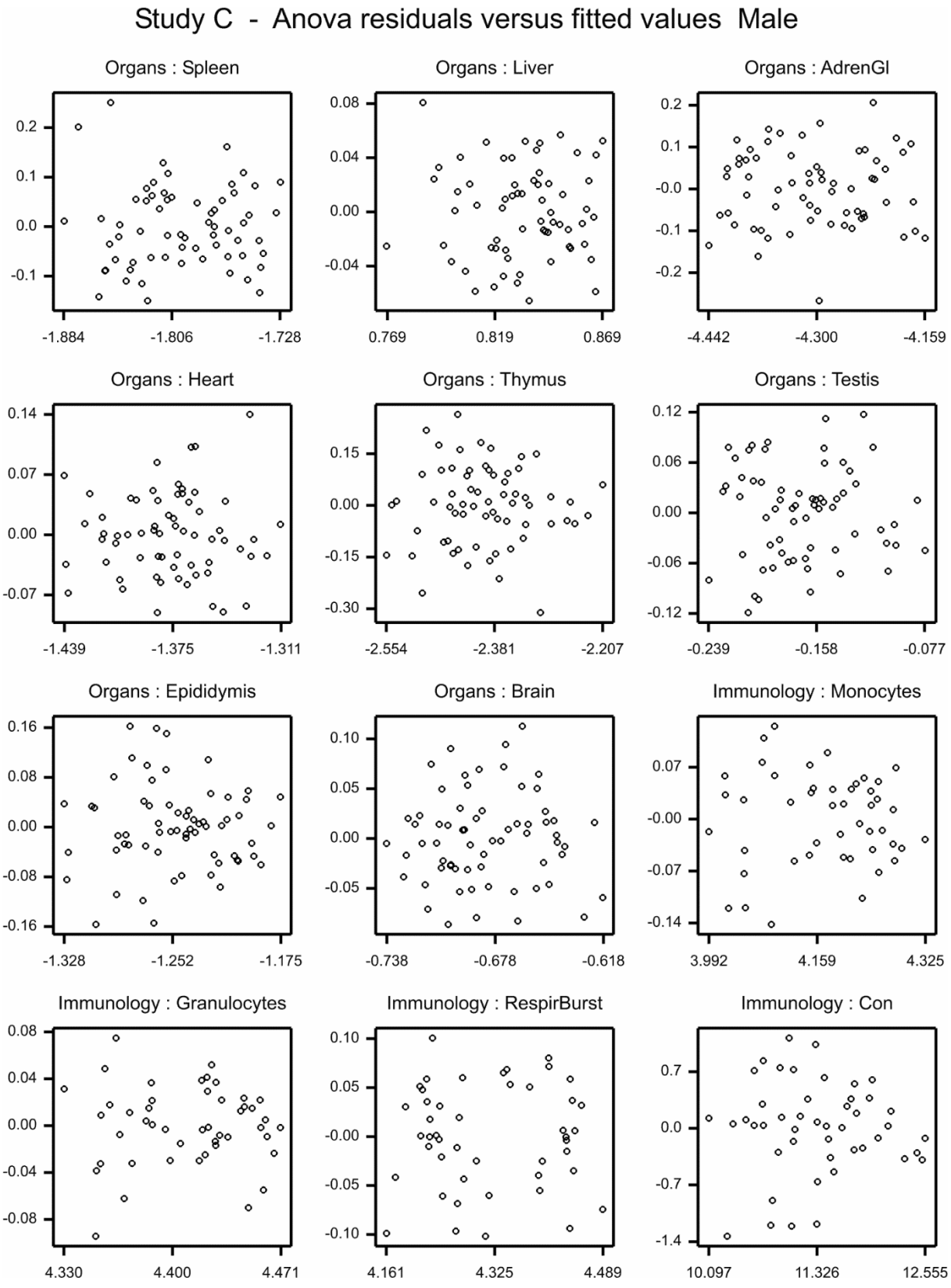
Appendix 6. Graphs of residuals versus fitted values after ANOVA (continued)

Residuals and fitted values are obtained from ANOVA of cage means (after a log transformation).



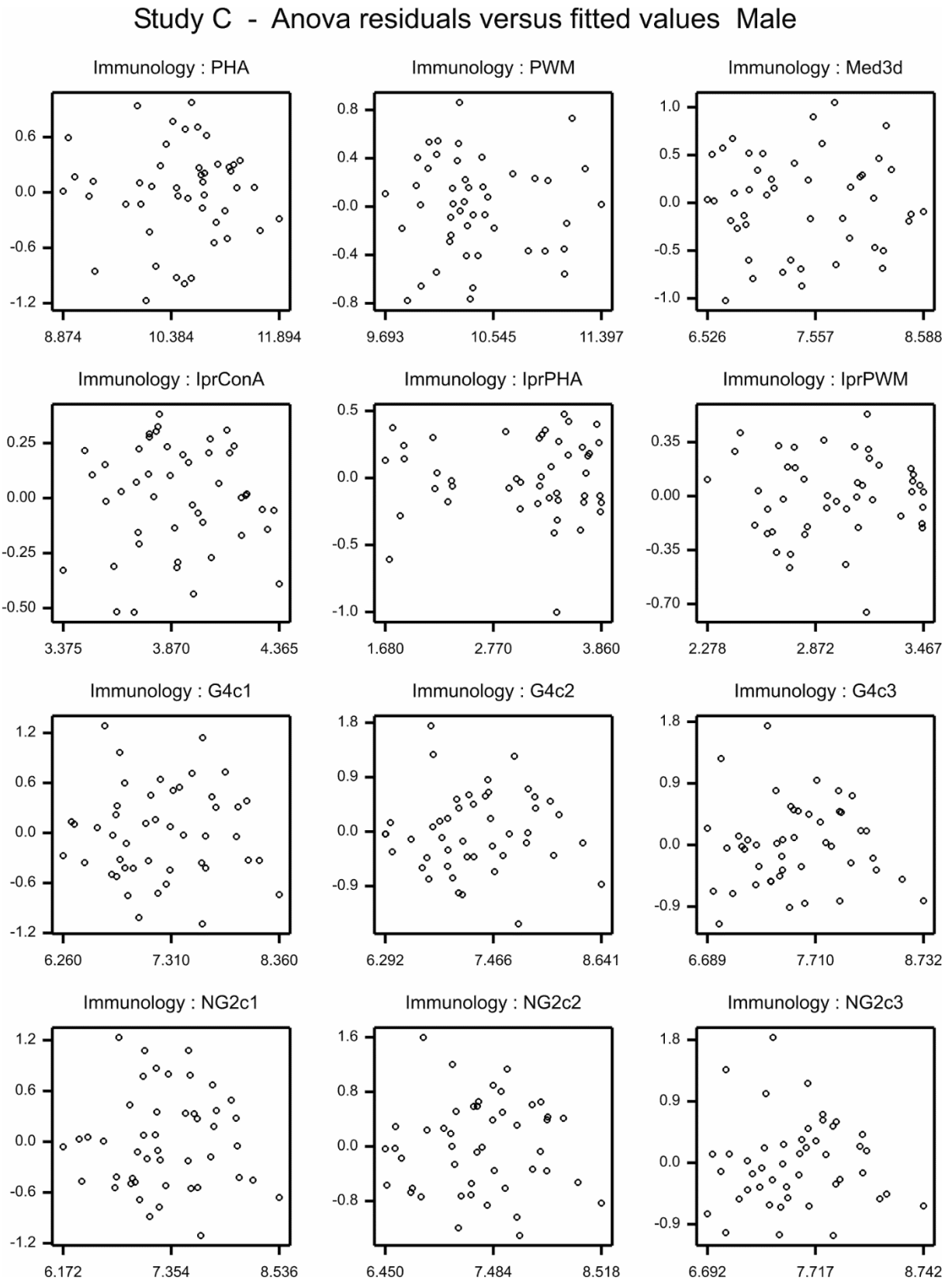
Appendix 6. Graphs of residuals versus fitted values after ANOVA (continued)

Residuals and fitted values are obtained from ANOVA of cage means (after a log transformation).



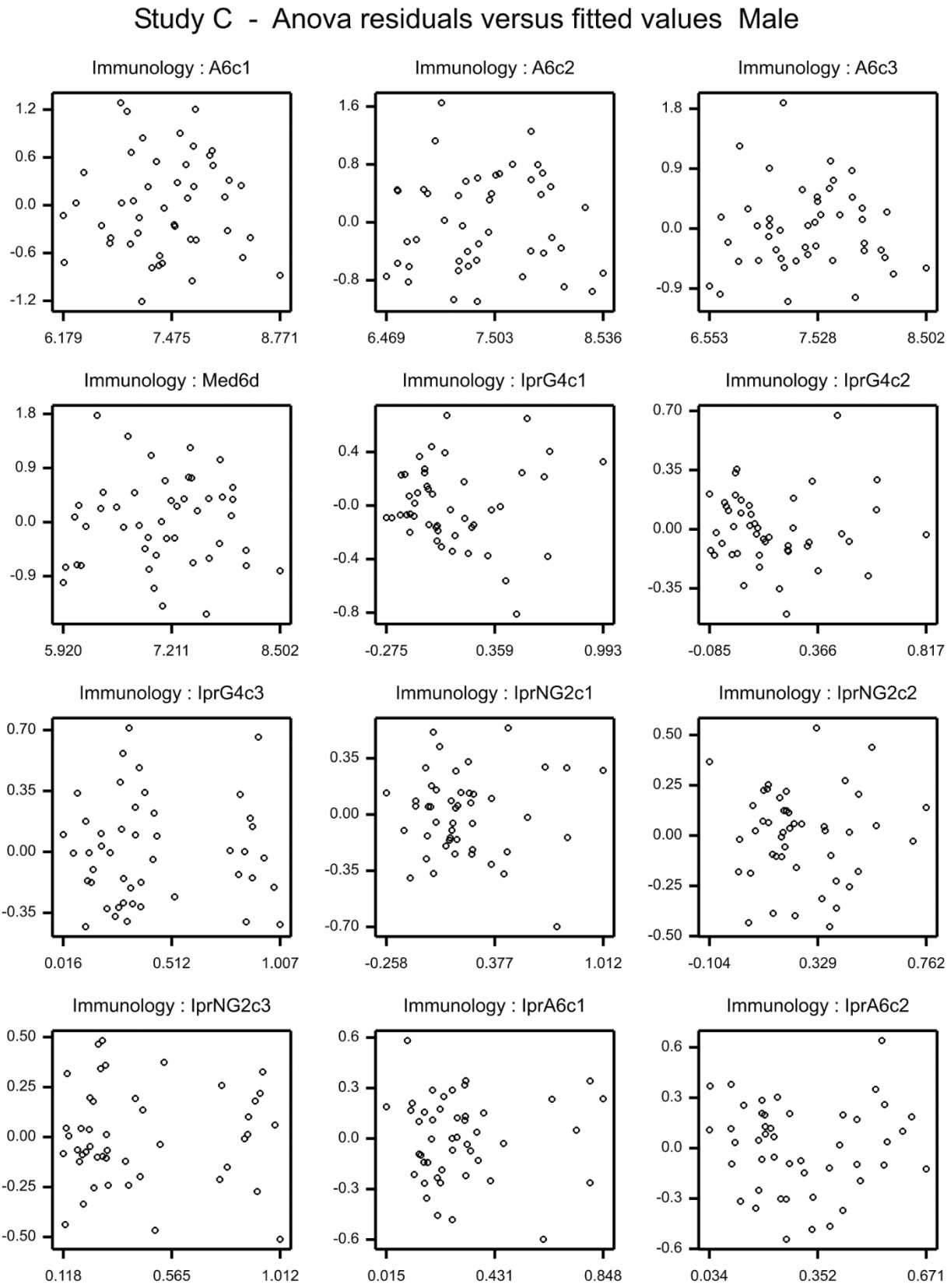
Appendix 6. Graphs of residuals versus fitted values after ANOVA (continued)

Residuals and fitted values are obtained from ANOVA of cage means (after a log transformation).



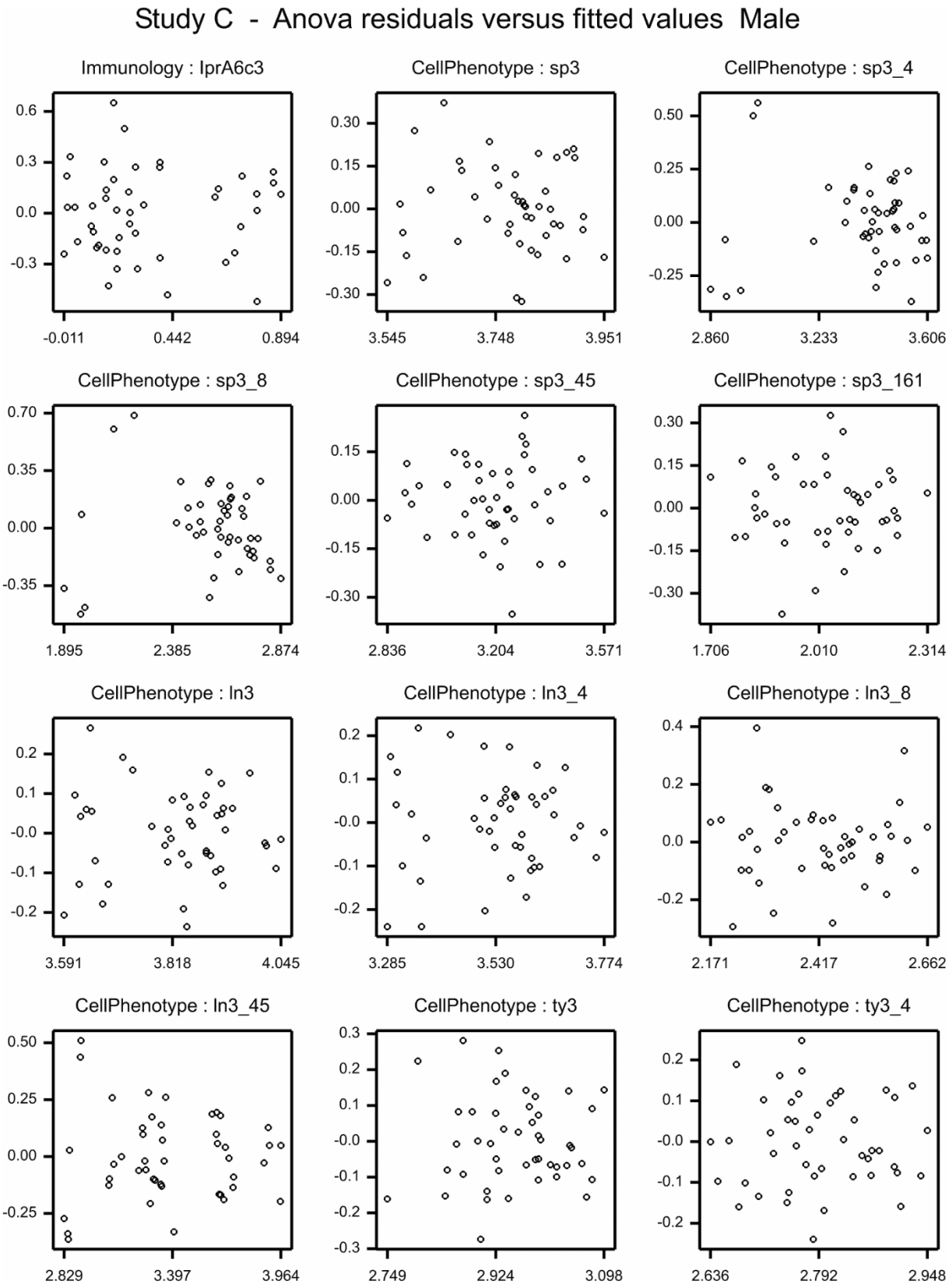
Appendix 6. Graphs of residuals versus fitted values after ANOVA (continued)

Residuals and fitted values are obtained from ANOVA of cage means (after a log transformation).



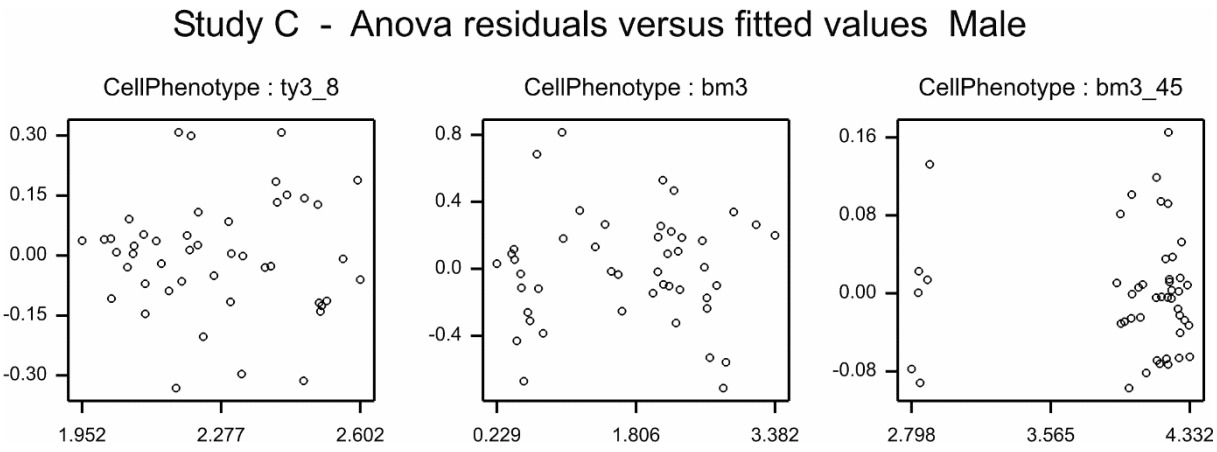
Appendix 6. Graphs of residuals versus fitted values after ANOVA (continued)

Residuals and fitted values are obtained from ANOVA of cage means (after a log transformation).



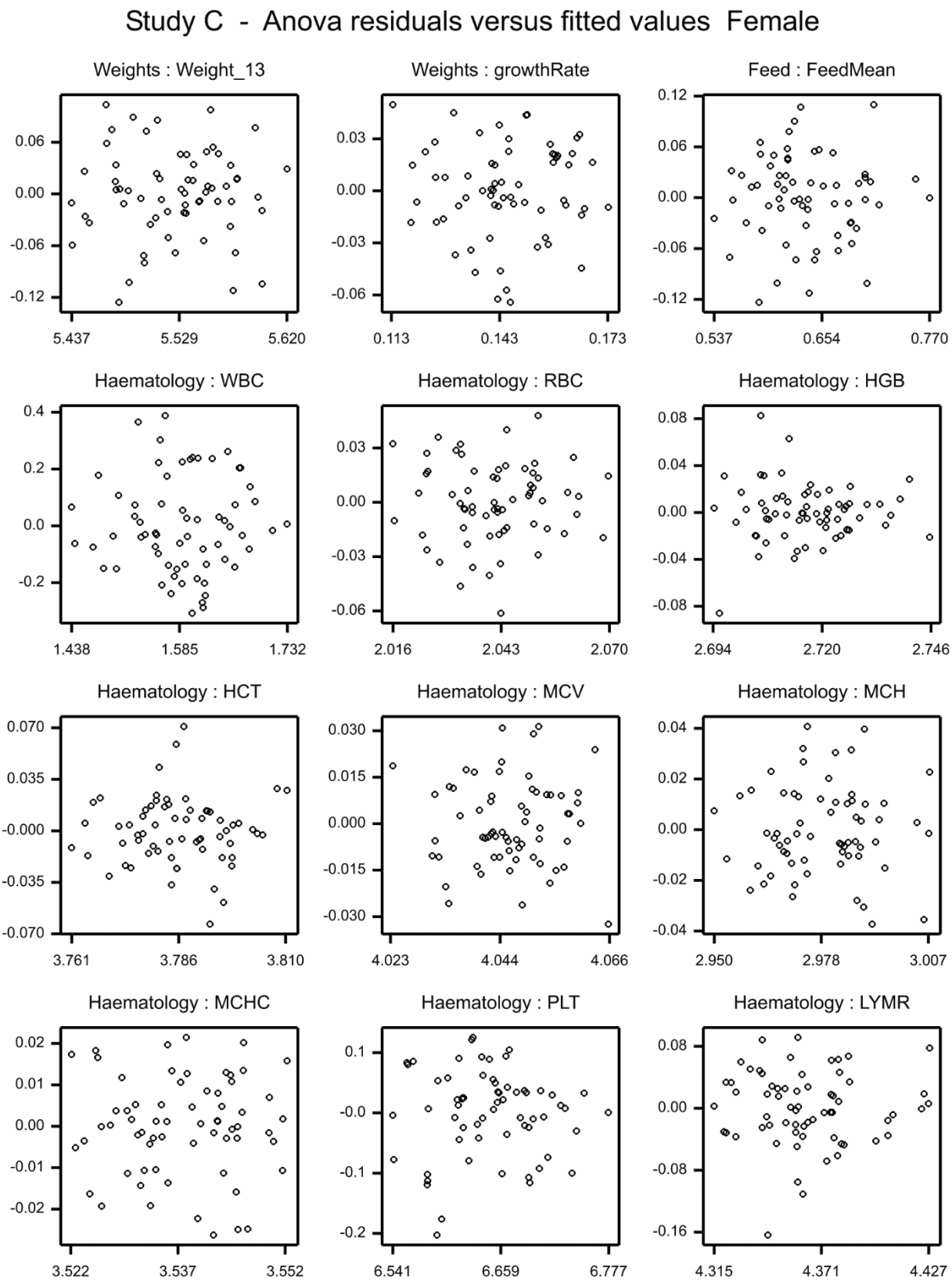
Appendix 6. Graphs of residuals versus fitted values after ANOVA (continued)

Residuals and fitted values are obtained from ANOVA of cage means (after a log transformation).



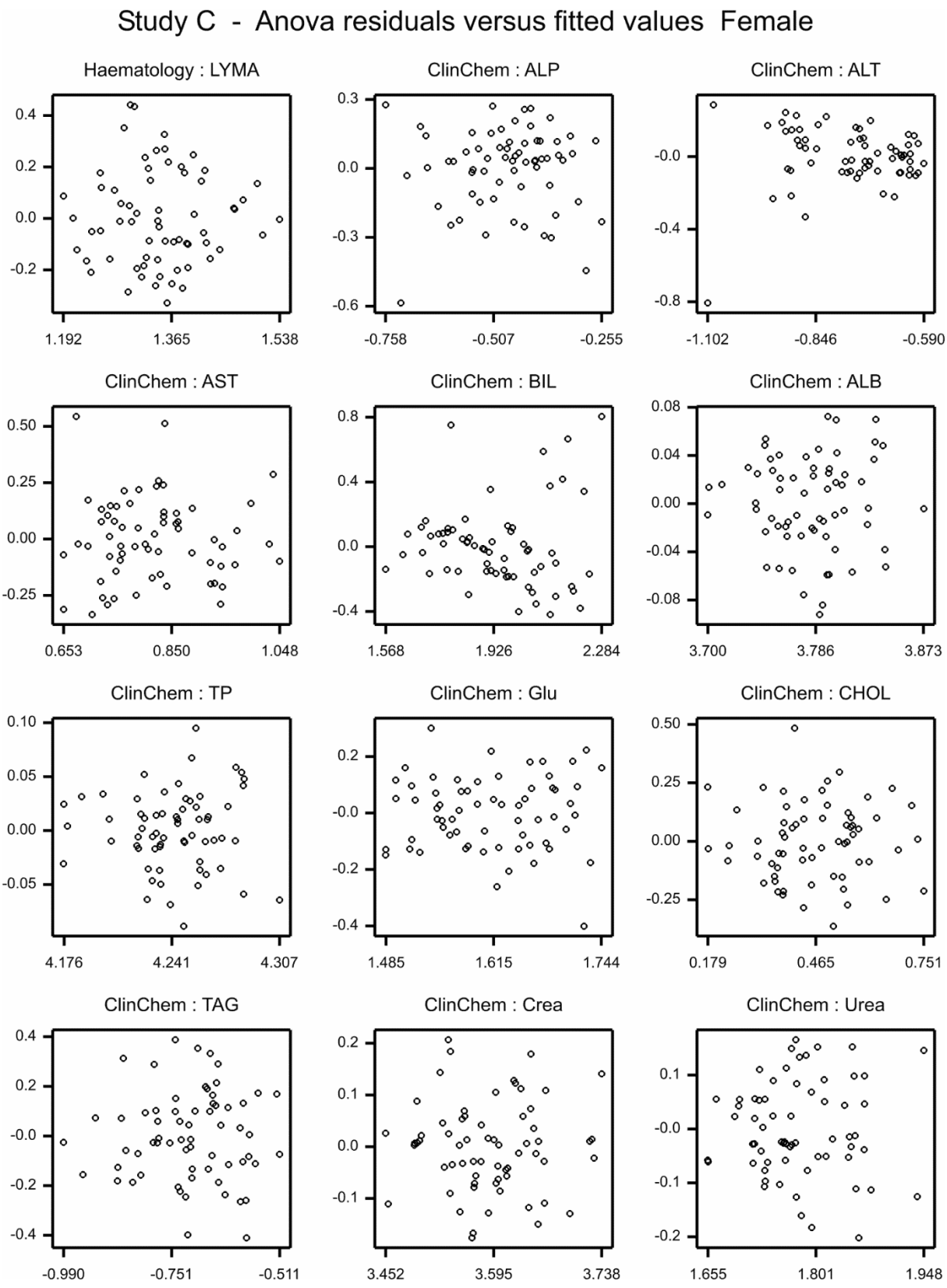
Appendix 6. Graphs of residuals versus fitted values after ANOVA (continued)

Residuals and fitted values are obtained from ANOVA of cage means (after a log transformation).



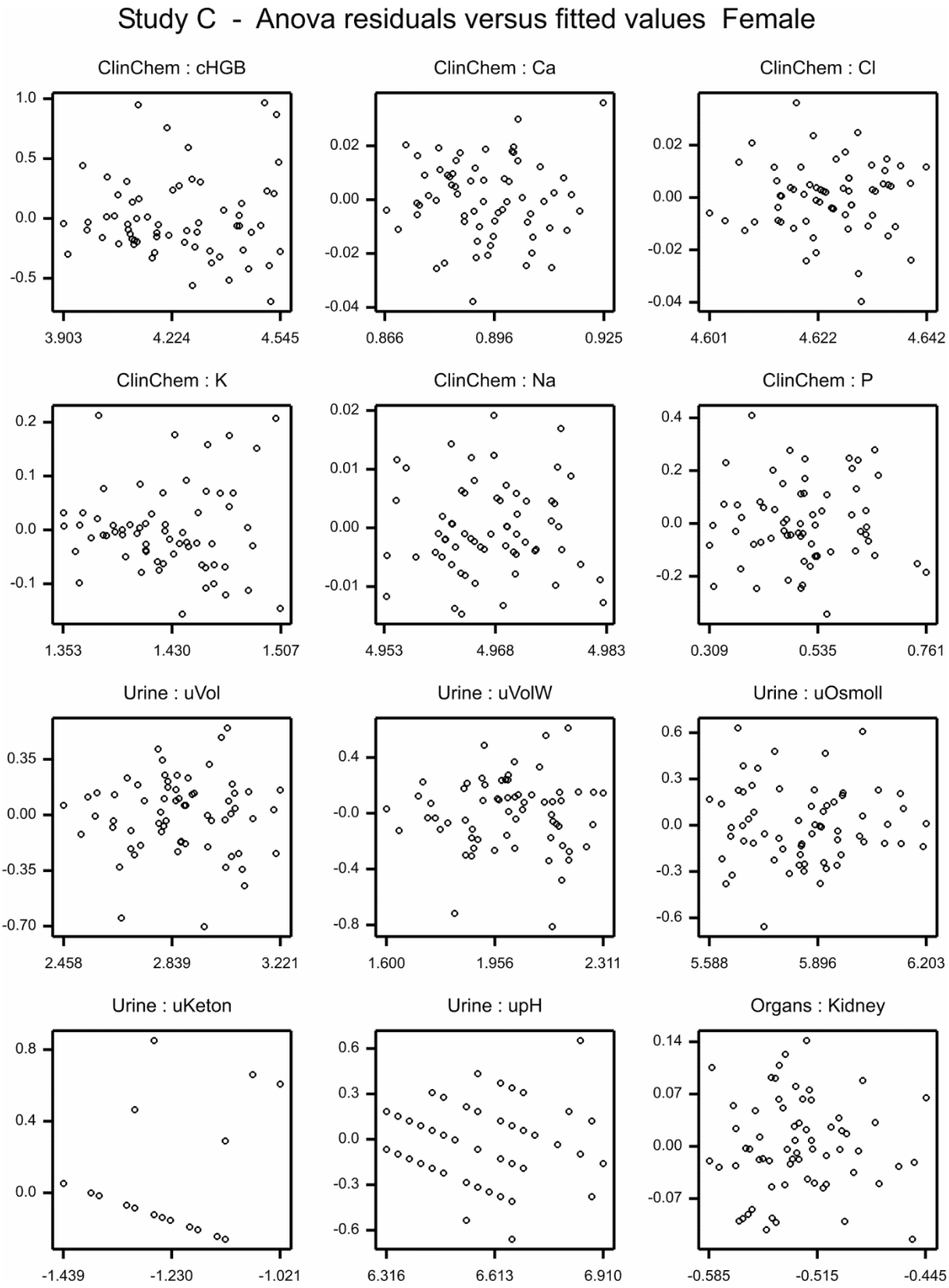
Appendix 6. Graphs of residuals versus fitted values after ANOVA (continued)

Residuals and fitted values are obtained from ANOVA of cage means (after a log transformation).



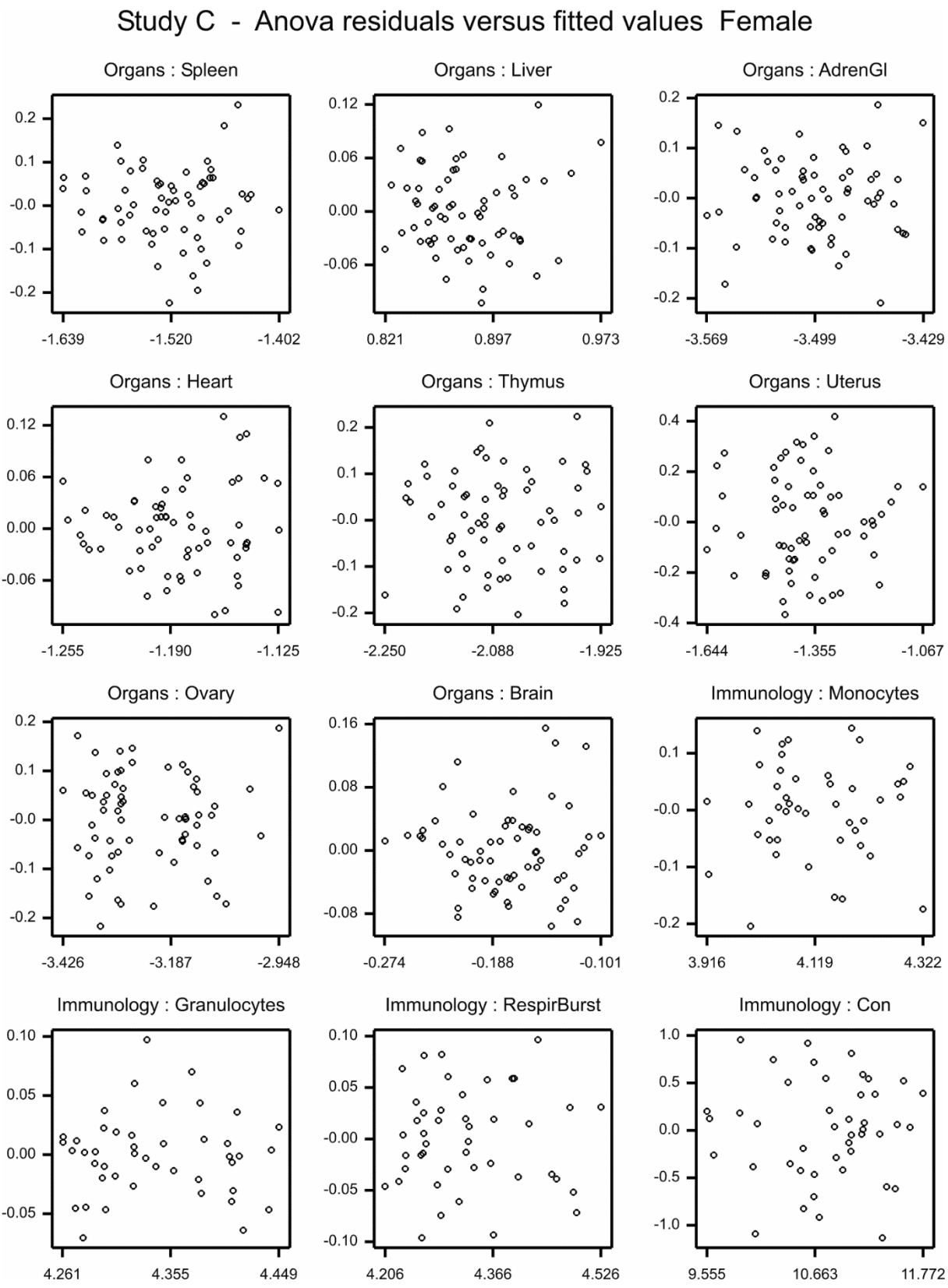
Appendix 6. Graphs of residuals versus fitted values after ANOVA (continued)

Residuals and fitted values are obtained from ANOVA of cage means (after a log transformation).



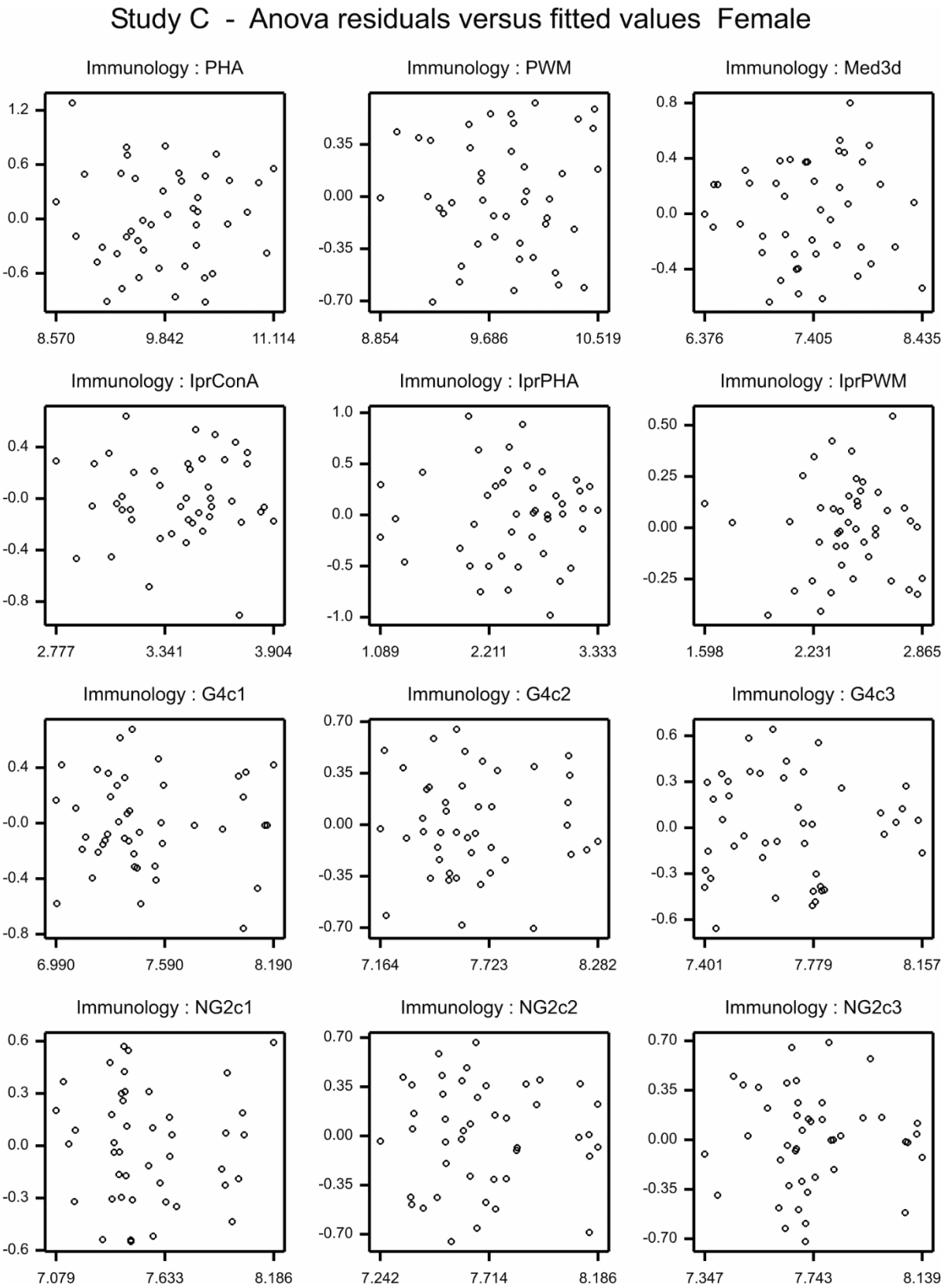
Appendix 6. Graphs of residuals versus fitted values after ANOVA (continued)

Residuals and fitted values are obtained from ANOVA of cage means (after a log transformation).



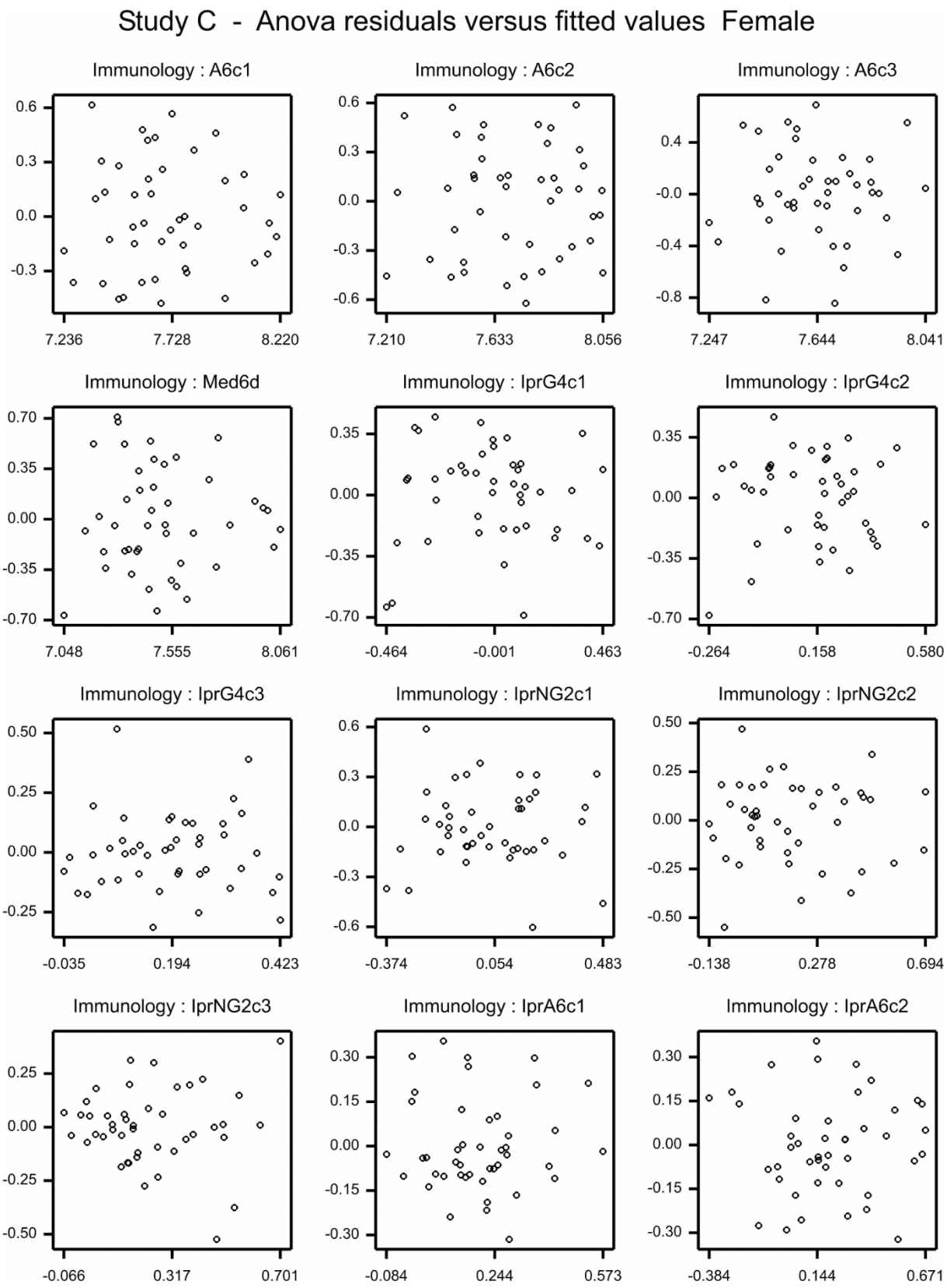
Appendix 6. Graphs of residuals versus fitted values after ANOVA (continued)

Residuals and fitted values are obtained from ANOVA of cage means (after a log transformation).



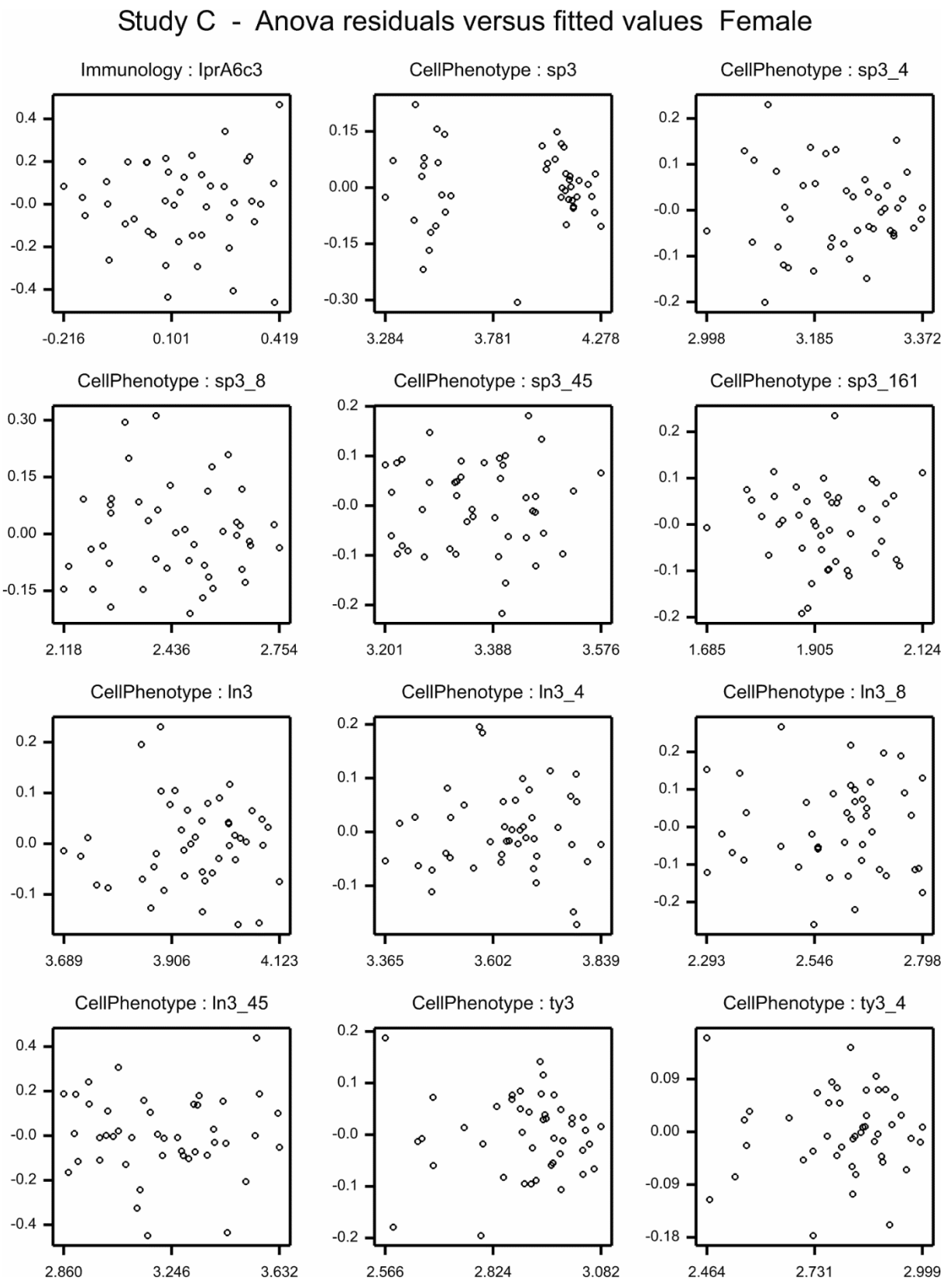
Appendix 6. Graphs of residuals versus fitted values after ANOVA (continued)

Residuals and fitted values are obtained from ANOVA of cage means (after a log transformation).



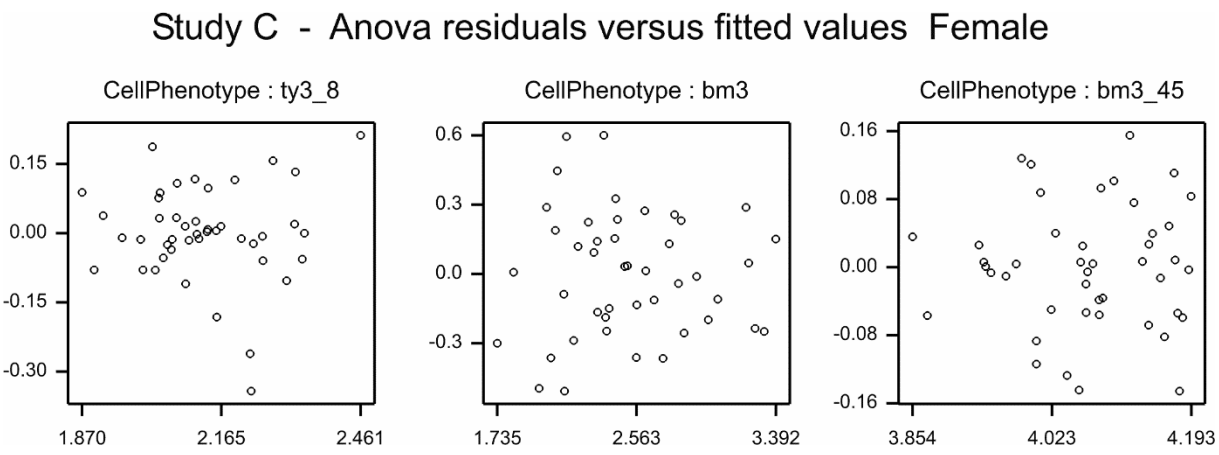
Appendix 6. Graphs of residuals versus fitted values after ANOVA (continued)

Residuals and fitted values are obtained from ANOVA of cage means (after a log transformation).



Appendix 6. Graphs of residuals versus fitted values after ANOVA (continued)

Residuals and fitted values are obtained from ANOVA of cage means (after a log transformation).



Appendix 7. Sums of squares, degrees of freedom and effective replication for the GRACE data

The values below are based on a simultaneous statistical analysis of the five GRACE studies A-E on cage means after a log-transform and after removal of outliers. The columns have the following interpretation:

- SS_R the between reference feeds sums of squares
- SS_E the residual sums of squares
- df_E the degrees of freedom for the residual sums of squares
- n_{eff} the effective replication
- %R/S the between reference feeds estimated standard error (σ_R) as a percentage of the estimated residual standard error (σ_E), where empty cells denote zero values.

Variable	Male rats					Female rats				
	SS_R	SS_E	df_E	n_{eff}	%R/S	SS_R	SS_E	df_E	n_{eff}	%R/S
BodyWeight	0.008387	0.19554	69	10.50		0.014574	0.26913	69	10.50	
growthRate	0.000206	0.02434	68	10.33		0.000751	0.06011	69	10.50	
FeedMean	0.022190	0.16515	69	10.50	35	0.032193	0.24197	69	10.50	35
WBC	0.489441	2.61275	59	9.25	44	0.356101	3.36561	59	9.25	25
RBC	0.004304	0.14638	59	9.25		0.007652	0.07286	59	9.25	24
HGB	0.008819	0.09808	58	9.08	18	0.003452	0.05478	59	9.25	
HCT	0.005987	0.13627	59	9.25		0.004400	0.04452	59	9.25	22
MCV	0.000242	0.01864	59	9.25		0.000925	0.02226	59	9.25	
MCH	0.001610	0.03980	58	9.08		0.002266	0.05291	58	9.11	
MCHC	0.001347	0.01505	58	9.08	18	0.000187	0.01436	57	8.94	
PLT	0.056905	3.74573	59	9.25		0.057845	1.66444	57	9.08	
LYMA	0.402469	2.53641	59	9.25	38	0.320270	3.15442	59	9.25	23
Lymphocytes	0.008561	0.11920	59	9.25	8	0.012897	0.12741	59	9.25	23
Neutrophils	0.101555	1.54710	59	9.25		0.214056	1.72788	59	9.25	30
Monocytes	0.932225	6.25457	59	9.25	36	0.948050	4.73942	59	9.25	46
Eosinophils	1.831756	12.92053	59	9.25	34	1.006901	14.28882	59	9.25	7
ALP	0.058075	1.80285	59	9.25		0.050742	1.41079	59	9.25	
ALT	0.040433	0.76309	57	8.90		0.143187	3.83379	59	9.25	
AST	0.082408	1.33797	58	9.08		0.108613	2.28004	58	9.08	
ALB	0.003719	0.16461	58	9.08		0.002401	0.49386	59	9.25	
TP	0.003316	0.09254	59	9.25		0.044110	0.30963	59	9.25	35
Glu	0.137923	1.20832	59	9.25	27	0.068248	1.26028	58	9.08	
CHOL	0.157821	0.72566	59	9.25	49	0.066835	0.91290	59	9.25	9
TAG	1.512480	4.78566	59	9.25	63	0.455467	6.38891	59	9.25	7
Crea	0.100802	1.01337	59	9.25	22	0.169402	0.84663	59	9.25	46
Urea	0.162169	0.56082	59	9.25	59	0.212305	0.68252	59	9.25	62
Ca	0.021413	0.21007	58	9.25	23	0.069969	0.13967	58	9.08	83
Cl	0.010708	0.13568	59	9.25	13	0.001771	0.04791	59	9.25	
K	0.025453	0.68615	59	9.25		0.063943	0.62498	58	9.08	23
Na	0.011611	0.16216	59	9.25	8	0.003438	0.04081	58	9.08	16
P	0.071064	0.54837	58	9.08	31	0.084107	0.93345	59	9.25	19

Variable	Male rats					Female rats				
	SS_R	SS_E	df_E	n_{eff}	%R/S	SS_R	SS_E	df_E	n_{eff}	%R/S
Kidney	0.008755	0.15764	50	8.00		0.002113	0.14971	50	8.00	
Spleen	0.028870	0.32638	50	8.00	11	0.007828	0.48420	50	8.00	
Liver	0.011485	0.10964	48	7.66	18	0.021902	0.24719	50	8.00	12
AdrenGl	0.054960	0.63981	50	8.00	10	0.021734	0.71168	50	8.00	
Heart	0.015268	0.12327	50	8.00	26	0.005002	0.16094	50	8.00	
Thymus	0.135724	1.59675	50	8.00	9	0.168167	0.75330	50	8.00	47
Testis	0.012233	0.26694	50	8.00		-	-	-	-	
Epididymis	0.012314	0.28836	50	8.00		-	-	-	-	
Uterus	-	-	-	-		0.063741	1.37482	49	7.83	
Ovary	-	-	-	-		0.187232	0.81620	50	8.00	48
Brain	0.017742	0.11613	50	8.00	34	0.012478	0.19660	50	8.00	

Appendix 8. Estimated differences between feeds for equivalence testing.

The differences are given along with the residual sums of squares SS_F based on an ANOVA on cage means after a log-transform. The degrees of freedom for the residual sums of squares equals 49, except for PLT in females which has 48 degrees of freedom for residual.

Weights **Males**	**NK11-/50 Con50**	**NK50- Con50**	**NK11+/50 Con50**	**NK50+ Con50**	**Con50 Con33**	**NK50- NK33-**	**NK50+ NK33+**	**NK33- Con33**	**NK33+ Con33**	SS_F
BodyWeight	-0.0436	-0.0548	-0.0062	-0.0224	0.0470	-0.0152	0.0169	0.0075	0.0078	0.1622
growthRate	0.0066	-0.0069	0.0019	-0.0101	-0.0016	0.0050	-0.0150	-0.0135	0.0032	0.0457
FeedMean	-0.0419	-0.0500	0.0229	-0.0094	0.0446	0.0074	0.0221	-0.0128	0.0132	0.1603
Haematology **Males**	**NK11-/50 Con50**	**NK50- Con50**	**NK11+/50 Con50**	**NK50+ Con50**	**Con50 Con33**	**NK50- NK33-**	**NK50+ NK33+**	**NK33- Con33**	**NK33+ Con33**	SS_F
WBC	0.0094	0.0744	-0.0684	0.0641	-0.0357	0.0321	0.0388	0.0067	-0.0103	1.7549
RBC	0.0044	-0.0104	0.0088	-0.0106	-0.0002	-0.0113	-0.0294	0.0006	0.0186	0.0300
HGB	0.0265	0.0001	0.0301	0.0112	-0.0148	-0.0162	0.0068	0.0015	-0.0105	0.0371
HCT	0.0100	-0.0077	0.0206	0.0016	-0.0021	-0.0151	-0.0024	0.0053	0.0019	0.0328
MCV	0.0056	0.0028	0.0116	0.0122	-0.0017	-0.0037	0.0271	0.0047	-0.0165	0.0120
MCH	0.0219	0.0110	0.0213	0.0214	-0.0150	-0.0046	0.0355	0.0006	-0.0292	0.0195
MCHC	0.0164	0.0074	0.0090	0.0093	-0.0121	-0.0012	0.0094	-0.0035	-0.0123	0.0088
PLT	0.0864	0.1464	0.0644	0.1307	-0.0433	0.1021	-0.0172	0.0010	0.1047	0.3151
LYMA	0.0095	0.1016	-0.0532	0.0832	0.0002	0.0138	0.0777	0.0880	0.0057	2.1273
ClinChem **Males**	**NK11-/50 Con50**	**NK50- Con50**	**NK11+/50 Con50**	**NK50+ Con50**	**Con50 Con33**	**NK50- NK33-**	**NK50+ NK33+**	**NK33- Con33**	**NK33+ Con33**	SS_F
ALP	0.1209	-0.0706	-0.1035	0.0247	-0.0548	-0.0662	-0.0183	-0.0592	-0.0118	1.9439
ALT	0.1426	0.0012	0.0927	0.0715	-0.0074	0.0146	0.0454	-0.0208	0.0187	1.6701
AST	0.1569	0.0281	0.0924	0.0606	-0.0182	0.0643	0.0470	-0.0545	-0.0046	2.0999
BIL	0.1245	0.0369	0.0617	0.0903	-0.0086	0.0208	0.0564	0.0075	0.0252	4.1901
ALB	0.0438	0.0214	0.0335	0.0231	-0.0235	0.0027	0.0020	-0.0048	-0.0024	0.0948
TP	0.0198	0.0188	0.0070	0.0222	-0.0302	0.0005	-0.0002	-0.0120	-0.0078	0.0811
Glu	-0.0322	-0.0667	0.0271	-0.1060	-0.0343	-0.0362	-0.0579	-0.0649	-0.0824	1.0674
CHOL	-0.0137	0.0482	0.0598	0.0552	-0.0081	0.0706	0.0668	-0.0305	-0.0198	1.6954
TAG	-0.0042	0.0638	0.0549	0.0723	0.0633	-0.0417	0.0631	0.1688	0.0725	1.9918
Crea	-0.0282	0.0417	-0.0429	-0.0038	-0.0796	0.0076	0.0127	-0.0455	-0.0962	0.4747
Urea	-0.0145	-0.0482	0.1044	-0.0178	-0.0893	-0.0191	-0.0854	-0.1185	-0.0218	0.4896

Ca	-0.0072	0.0060	-0.0009	0.0009	-0.0013	0.0029	-0.0011	0.0018	0.0007	0.0133
Cl	-0.0058	0.0066	0.0016	-0.0113	0.0071	0.0099	-0.0142	0.0037	0.0099	0.0108
K	0.0743	0.0463	0.0134	0.0254	-0.0260	0.0311	0.0257	-0.0108	-0.0263	0.4020
Na	-0.0026	0.0065	-0.0026	-0.0027	-0.0030	0.0082	-0.0100	-0.0047	0.0043	0.0038
P	0.0489	-0.0033	-0.0011	0.0200	-0.0789	-0.1085	-0.0836	0.0263	0.0247	1.4679
Organs Males	**NK11-/50 Con50**	**NK50- Con50**	**NK11+/50 Con50**	**NK50+ Con50**	**Con50 Con33**	**NK50- NK33-**	**NK50+ NK33+**	**NK33- Con33**	**NK33+ Con33**	SS_F
Kidney	0.0372	0.0221	0.0473	0.0355	-0.0148	0.0288	-0.0402	-0.0215	0.0609	0.2430
Spleen	-0.0102	0.0374	0.0233	0.0344	-0.0191	0.0226	0.0119	-0.0043	0.0034	0.4424
Liver	-0.0243	0.0301	0.0311	0.0100	-0.0342	0.0226	0.0012	-0.0267	-0.0254	0.1373
AdrenGl	0.0186	0.0032	-0.0103	0.0057	0.0093	0.0223	0.0392	-0.0098	-0.0243	0.3980
Heart	-0.0081	0.0343	0.0241	0.0220	-0.0249	0.0647	-0.0202	-0.0553	0.0173	0.1542
Thymus	-0.0731	0.0211	0.0448	-0.0386	0.0073	0.1354	-0.0261	-0.1069	-0.0051	0.6598
Testis	0.0126	0.0761	0.0530	0.0429	-0.0542	0.0461	0.0282	-0.0242	-0.0396	2.2749
Epididymis	0.0019	0.0667	0.0601	0.0426	-0.0479	0.0637	0.0058	-0.0450	-0.0110	0.5491
Brain	0.0247	0.0565	0.0197	0.0120	-0.0355	0.0252	-0.0221	-0.0041	-0.0015	0.1796

Weights Females	**NK11-/50 Con50**	**NK50- Con50**	**NK11+/50 Con50**	**NK50+ Con50**	**Con50 Con33**	**NK50- NK33-**	**NK50+ NK33+**	**NK33- Con33**	**NK33+ Con33**	SS_F
BodyWeight	0.0104	0.0111	0.0583	-0.0006	-0.0371	-0.0226	-0.0151	-0.0034	-0.0226	0.1622
growthRate	0.0272	0.0315	0.0066	0.0119	-0.0241	0.0225	-0.0110	-0.0151	-0.0012	0.0457
FeedMean	0.0188	0.0168	0.1045	0.0347	-0.0405	-0.0331	0.0144	0.0094	-0.0201	0.1603
Haematology Females	**NK11-/50 Con50**	**NK50- Con50**	**NK11+/50 Con50**	**NK50+ Con50**	**Con50 Con33**	**NK50- NK33-**	**NK50+ NK33+**	**NK33- Con33**	**NK33+ Con33**	SS_F
WBC	0.0851	0.0073	0.0654	-0.0248	-0.0143	-0.0274	0.0045	0.0204	-0.0437	1.7549
RBC	0.0065	0.0186	0.0074	0.0085	-0.0004	0.0101	-0.0175	0.0081	0.0256	0.0300
HGB	-0.0006	0.0073	0.0192	-0.0008	0.0054	0.0179	-0.0050	-0.0052	0.0096	0.0371
HCT	-0.0050	0.0104	0.0127	-0.0013	0.0019	0.0088	-0.0071	0.0035	0.0078	0.0328
MCV	-0.0116	-0.0080	0.0054	-0.0095	0.0022	-0.0013	0.0104	-0.0044	-0.0177	0.0120
MCH	-0.0063	-0.0116	0.0119	-0.0098	0.0054	-0.0042	0.0117	-0.0020	-0.0160	0.0195
MCHC	0.0044	-0.0028	0.0063	0.0008	0.0034	-0.0020	0.0024	0.0026	0.0018	0.0088

PLT	0.0208	-0.0609	-0.0763	-0.0385	0.0048	-0.0329	-0.0858	-0.0233	0.0520	0.3151
LYMA	0.0719	0.0135	0.0449	-0.0236	0.0013	-0.0228	0.0215	0.0376	-0.0439	2.1273
ClinChem Females	**NK11-/50 Con50**	**NK50- Con50**	**NK11+/50 Con50**	**NK50+ Con50**	**Con50 Con33**	**NK50- NK33-**	**NK50+ NK33+**	**NK33- Con33**	**NK33+ Con33**	SS_F
ALP	-0.0973	-0.0162	-0.0477	0.0495	0.0034	-0.1199	0.1113	0.1071	-0.0584	1.9439
ALT	-0.0121	0.0213	0.0025	0.0212	-0.0346	0.0418	0.2174	-0.0551	-0.2309	1.6701
AST	0.0523	0.0930	0.0232	0.0268	-0.0859	0.0928	-0.0779	-0.0856	0.0188	2.0999
BIL	0.2038	0.0733	0.2166	0.1224	-0.0573	-0.0721	-0.1526	0.0880	0.2177	4.1901
ALB	-0.0316	0.0139	-0.0211	-0.0325	-0.0060	-0.0306	-0.0458	0.0385	0.0073	0.0948
TP	-0.0086	0.0180	-0.0108	-0.0110	-0.0168	-0.0219	-0.0240	0.0231	-0.0038	0.0811
Glu	-0.0677	-0.0389	-0.0028	0.0185	0.0679	-0.0281	0.0629	0.0571	0.0235	1.0674
CHOL	-0.0522	-0.0223	-0.0676	-0.1992	-0.1038	-0.1936	-0.1979	0.0675	-0.1051	1.6954
TAG	-0.0462	-0.0830	-0.0730	-0.2112	-0.0607	-0.1498	-0.2048	0.0062	-0.0671	1.9918
Crea	0.0422	0.0320	0.0292	-0.0721	0.0341	0.0656	-0.0985	0.0005	0.0604	0.4747
Urea	0.0809	-0.0137	0.0721	-0.0160	0.0770	-0.0141	-0.0088	0.0775	0.0698	0.4896
Ca	-0.0121	0.0026	-0.0127	-0.0178	0.0011	-0.0107	0.0031	0.0144	-0.0198	0.0133
Cl	-0.0066	-0.0029	-0.0072	-0.0072	0.0201	0.0020	0.0074	0.0153	0.0056	0.0108
K	0.0230	-0.0239	-0.0103	-0.0156	0.0237	-0.0304	-0.0355	0.0301	0.0436	0.4020
Na	-0.0040	0.0026	-0.0026	-0.0039	0.0027	-0.0004	-0.0026	0.0057	0.0013	0.0038
P	-0.0018	0.0253	0.0213	0.0458	0.0087	-0.1018	-0.0998	0.1358	0.1543	1.4679
Organs Females	**NK11-/50 Con50**	**NK50- Con50**	**NK11+/50 Con50**	**NK50+ Con50**	**Con50 Con33**	**NK50- NK33-**	**NK50+ NK33+**	**NK33- Con33**	**NK33+ Con33**	SS_F
Kidney	0.0109	0.0337	0.0306	0.0775	0.0062	0.0384	0.0645	0.0015	0.0191	0.2430
Spleen	0.0192	0.0793	0.0351	0.0486	0.0046	0.0404	0.0732	0.0435	-0.0201	0.4424
Liver	0.0010	0.0243	-0.0238	-0.0120	-0.0153	-0.0210	0.0074	0.0299	-0.0347	0.1373
AdrenGl	-0.0243	0.0484	0.0372	0.0128	-0.0355	0.0610	-0.0021	-0.0481	-0.0206	0.3980
Heart	-0.0158	0.0355	0.0302	0.0548	-0.0312	0.0390	0.0676	-0.0347	-0.0440	0.1542
Thymus	-0.0020	-0.0211	-0.1404	-0.0772	0.0232	0.0492	-0.0214	-0.0471	-0.0327	0.6598
Uterus	0.1331	0.0661	-0.0245	0.0165	-0.0020	0.0181	-0.0055	0.0460	0.0200	2.2749
Ovary	-0.0115	-0.0047	-0.0042	0.1376	-0.0204	0.0708	0.1810	-0.0959	-0.0638	0.5491
Brain	-0.0042	0.0038	-0.0379	0.0135	0.0560	0.0299	0.0393	0.0299	0.0303	0.1796

Appendix 9. Intervals for equivalence tests.

95% Confidence interval plus estimate for the ratio Δ of a GMO feed versus the control feed, 95% Confidence interval plus median for (upper) equivalence limits, and the confidence interval plus median for Δ on the ELSD scale. Red background colouring indicates significant differences, green background colouring indicates significant equivalences (in all remaining cases equivalence is still more likely than not).

Males NK11-/50 versus Con50									
Weights	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Weight_13	0.909	0.957	1.008	1.128	1.163	1.217	-0.590	-0.285	0.051
growthRate	0.988	1.007	1.025	1.043	1.054	1.067	-0.226	0.126	0.431
FeedMean	0.914	0.959	1.007	1.126	1.164	1.274	-0.560	-0.266	0.042
Haematology	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
WBC	0.855	1.009	1.192	1.745	2.028	3.244	-0.226	0.013	0.241
RBC	0.983	1.004	1.026	1.137	1.166	1.210	-0.110	0.029	0.152
HGB	1.004	1.027	1.050	1.113	1.140	1.202	0.032	0.198	0.354
HCT	0.990	1.010	1.031	1.133	1.162	1.210	-0.068	0.066	0.181
MCV	0.989	1.006	1.022	1.041	1.052	1.066	-0.213	0.111	0.394
MCH	1.000	1.022	1.045	1.063	1.079	1.104	-0.005	0.282	0.546
MCHC	1.003	1.017	1.030	1.040	1.050	1.073	0.061	0.326	0.579
PLT	0.965	1.090	1.231	1.897	2.155	2.569	-0.046	0.111	0.248
LYMA	0.859	1.010	1.186	1.716	1.977	3.007	-0.226	0.013	0.241
ClinChem	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
ALP	0.948	1.129	1.344	1.467	1.634	1.888	-0.108	0.243	0.563
ALT	0.992	1.153	1.341	1.229	1.348	1.523	-0.032	0.470	0.977
AST	0.961	1.170	1.424	1.320	1.490	1.771	-0.101	0.388	0.863
ALB	1.001	1.045	1.090	1.133	1.168	1.216	0.009	0.280	0.528
TP	0.997	1.020	1.044	1.105	1.128	1.164	-0.027	0.162	0.331
Glu	0.863	0.968	1.086	1.433	1.570	1.959	-0.292	-0.069	0.186
CHOL	0.894	0.986	1.088	1.339	1.457	1.931	-0.273	-0.032	0.228
TAG	0.815	0.996	1.216	2.274	2.888	7.165	-0.192	-0.004	0.188
Crea	0.863	0.972	1.095	1.370	1.491	1.800	-0.334	-0.069	0.228
Urea	0.889	0.986	1.093	1.287	1.404	1.902	-0.325	-0.040	0.269
Ca	0.978	0.993	1.007	1.178	1.219	1.326	-0.099	-0.036	0.036
Cl	0.980	0.994	1.009	1.138	1.168	1.234	-0.119	-0.037	0.057
K	1.003	1.077	1.156	1.307	1.384	1.512	0.008	0.226	0.420
Na	0.987	0.997	1.008	1.152	1.185	1.253	-0.067	-0.015	0.044
P	0.936	1.050	1.178	1.234	1.330	1.581	-0.235	0.165	0.530
Organs	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Kidney	0.974	1.038	1.106	1.121	1.168	1.240	-0.176	0.235	0.611
Spleen	0.902	0.990	1.087	1.183	1.259	1.408	-0.432	-0.043	0.377
Liver	0.939	0.976	1.015	1.124	1.160	1.244	-0.393	-0.159	0.097
AdrenGl	0.918	1.019	1.130	1.304	1.405	1.627	-0.256	0.053	0.328
Heart	0.939	0.992	1.048	1.116	1.159	1.263	-0.403	-0.053	0.328
Thymus	0.815	0.930	1.060	1.556	1.742	2.181	-0.336	-0.128	0.106
Testis	0.950	1.013	1.079	1.184	1.240	1.328	-0.241	0.058	0.324
Epididymis	0.927	1.002	1.082	1.179	1.240	1.333	-0.363	0.007	0.372
Brain	0.973	1.025	1.080	1.117	1.161	1.276	-0.184	0.159	0.472

Appendix 9. Intervals for equivalence tests (continued)

Males NK50- versus Con50									
Weights	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Weight_13	0.899	0.947	0.997	1.128	1.163	1.217	-0.667	-0.355	-0.023
growthRate	0.975	0.993	1.011	1.043	1.054	1.067	-0.437	-0.131	0.222
FeedMean	0.906	0.951	0.999	1.126	1.164	1.271	-0.620	-0.319	-0.009
Haematology	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
WBC	0.912	1.077	1.272	1.745	2.029	3.258	-0.128	0.101	0.308
RBC	0.969	0.990	1.011	1.137	1.166	1.211	-0.185	-0.066	0.071
HGB	0.978	1.000	1.023	1.113	1.140	1.202	-0.170	0.000	0.172
HCT	0.973	0.992	1.013	1.133	1.162	1.210	-0.166	-0.051	0.084
MCV	0.987	1.003	1.019	1.041	1.052	1.066	-0.272	0.053	0.348
MCH	0.989	1.011	1.034	1.063	1.079	1.104	-0.147	0.142	0.397
MCHC	0.994	1.007	1.021	1.040	1.050	1.073	-0.119	0.147	0.384
PLT	1.025	1.158	1.307	1.895	2.156	2.572	0.032	0.189	0.330
LYMA	0.942	1.107	1.301	1.718	1.977	2.990	-0.085	0.143	0.354
ClinChem	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
ALP	0.782	0.932	1.110	1.469	1.634	1.890	-0.455	-0.141	0.217
ALT	0.861	1.001	1.164	1.229	1.348	1.527	-0.539	0.002	0.541
AST	0.845	1.028	1.252	1.320	1.489	1.772	-0.447	0.070	0.546
ALB	0.979	1.022	1.066	1.134	1.168	1.216	-0.137	0.136	0.376
TP	0.996	1.019	1.043	1.105	1.128	1.164	-0.034	0.154	0.322
Glu	0.834	0.935	1.050	1.433	1.570	1.963	-0.370	-0.143	0.106
CHOL	0.952	1.049	1.157	1.339	1.456	1.920	-0.132	0.121	0.354
TAG	0.873	1.066	1.302	2.271	2.887	7.171	-0.129	0.056	0.224
Crea	0.925	1.043	1.175	1.370	1.492	1.804	-0.197	0.102	0.364
Urea	0.859	0.953	1.057	1.287	1.404	1.894	-0.412	-0.134	0.163
Ca	0.991	1.006	1.021	1.178	1.219	1.323	-0.043	0.030	0.093
Cl	0.992	1.007	1.022	1.137	1.168	1.234	-0.051	0.042	0.124
K	0.976	1.047	1.124	1.306	1.385	1.510	-0.078	0.140	0.330
Na	0.996	1.007	1.017	1.152	1.185	1.253	-0.021	0.038	0.090
P	0.889	0.997	1.118	1.233	1.331	1.590	-0.419	-0.011	0.404
Organs	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Kidney	0.959	1.022	1.090	1.121	1.168	1.240	-0.276	0.139	0.509
Spleen	0.946	1.038	1.140	1.183	1.258	1.407	-0.248	0.158	0.527
Liver	0.991	1.031	1.071	1.124	1.160	1.244	-0.057	0.196	0.431
AdrenGl	0.904	1.003	1.113	1.303	1.406	1.629	-0.302	0.010	0.313
Heart	0.979	1.035	1.094	1.116	1.159	1.264	-0.139	0.224	0.572
Thymus	0.895	1.021	1.165	1.557	1.742	2.187	-0.201	0.037	0.251
Testis	1.013	1.079	1.150	1.184	1.240	1.328	0.060	0.349	0.624
Epididymis	0.989	1.069	1.155	1.179	1.240	1.333	-0.051	0.304	0.637
Brain	1.005	1.058	1.115	1.117	1.160	1.278	0.029	0.368	0.713

Appendix 9. Intervals for equivalence tests (continued)

Males NK11+/50 versus Con50									
Weights	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Weight_13	0.944	0.994	1.046	1.128	1.163	1.217	-0.356	-0.041	0.304
growthRate	0.984	1.002	1.020	1.043	1.054	1.067	-0.320	0.036	0.366
FeedMean	0.975	1.023	1.074	1.126	1.163	1.272	-0.169	0.145	0.429
Haematology	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
WBC	0.791	0.934	1.103	1.746	2.029	3.237	-0.299	-0.093	0.135
RBC	0.988	1.009	1.031	1.137	1.166	1.211	-0.082	0.057	0.175
HGB	1.008	1.031	1.054	1.113	1.140	1.202	0.058	0.225	0.384
HCT	1.000	1.021	1.042	1.133	1.162	1.209	0.003	0.135	0.255
MCV	0.995	1.012	1.028	1.041	1.052	1.066	-0.092	0.229	0.517
MCH	0.999	1.022	1.044	1.063	1.079	1.104	-0.012	0.275	0.536
MCHC	0.996	1.009	1.023	1.040	1.050	1.073	-0.084	0.179	0.419
PLT	0.944	1.066	1.204	1.897	2.156	2.569	-0.075	0.083	0.220
LYMA	0.807	0.948	1.114	1.718	1.978	2.989	-0.283	-0.075	0.158
ClinChem	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
ALP	0.757	0.902	1.074	1.468	1.634	1.890	-0.525	-0.207	0.150
ALT	0.943	1.097	1.276	1.229	1.348	1.527	-0.202	0.304	0.786
AST	0.901	1.097	1.335	1.320	1.490	1.769	-0.273	0.227	0.684
ALB	0.991	1.034	1.079	1.133	1.168	1.216	-0.057	0.214	0.457
TP	0.984	1.007	1.030	1.105	1.128	1.165	-0.134	0.057	0.222
Glu	0.916	1.027	1.153	1.434	1.570	1.969	-0.198	0.058	0.285
CHOL	0.963	1.062	1.171	1.338	1.457	1.923	-0.098	0.152	0.387
TAG	0.865	1.056	1.290	2.272	2.889	7.174	-0.137	0.048	0.216
Crea	0.850	0.958	1.079	1.370	1.491	1.808	-0.368	-0.104	0.191
Urea	1.001	1.110	1.231	1.287	1.403	1.898	0.001	0.292	0.594
Ca	0.985	0.999	1.014	1.178	1.219	1.323	-0.075	-0.004	0.069
Cl	0.987	1.002	1.016	1.137	1.168	1.234	-0.085	0.010	0.098
K	0.944	1.014	1.088	1.306	1.385	1.512	-0.179	0.041	0.236
Na	0.987	0.997	1.008	1.151	1.185	1.254	-0.067	-0.015	0.044
P	0.891	0.999	1.120	1.233	1.330	1.586	-0.420	-0.003	0.414
Organs	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Kidney	0.983	1.048	1.118	1.121	1.168	1.240	-0.110	0.299	0.681
Spleen	0.932	1.024	1.124	1.183	1.258	1.407	-0.314	0.098	0.469
Liver	0.992	1.032	1.072	1.124	1.160	1.244	-0.050	0.204	0.440
AdrenGl	0.892	0.990	1.098	1.303	1.406	1.627	-0.319	-0.030	0.283
Heart	0.969	1.024	1.083	1.116	1.160	1.265	-0.213	0.157	0.497
Thymus	0.917	1.046	1.193	1.557	1.742	2.189	-0.157	0.080	0.286
Testis	0.990	1.054	1.124	1.184	1.240	1.328	-0.047	0.242	0.510
Epididymis	0.983	1.062	1.147	1.179	1.240	1.332	-0.079	0.275	0.603
Brain	0.968	1.020	1.074	1.117	1.161	1.278	-0.220	0.126	0.440

Appendix 9. Intervals for equivalence tests (continued)

Males NK50+ versus Con50									
Weights	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Weight_13	0.929	0.978	1.029	1.128	1.163	1.217	-0.443	-0.146	0.196
growthRate	0.972	0.990	1.008	1.043	1.054	1.067	-0.499	-0.193	0.155
FeedMean	0.944	0.991	1.040	1.126	1.164	1.275	-0.349	-0.059	0.263
Haematology	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
WBC	0.903	1.066	1.259	1.745	2.028	3.260	-0.144	0.086	0.294
RBC	0.969	0.989	1.011	1.137	1.166	1.211	-0.187	-0.068	0.070
HGB	0.989	1.011	1.034	1.113	1.140	1.202	-0.085	0.083	0.231
HCT	0.982	1.002	1.022	1.133	1.162	1.209	-0.124	0.010	0.137
MCV	0.996	1.012	1.029	1.041	1.052	1.066	-0.082	0.240	0.527
MCH	0.999	1.022	1.045	1.063	1.079	1.104	-0.011	0.276	0.538
MCHC	0.996	1.009	1.023	1.040	1.050	1.073	-0.078	0.185	0.426
PLT	1.009	1.140	1.287	1.896	2.155	2.568	0.012	0.169	0.310
LYMA	0.925	1.087	1.277	1.716	1.977	2.990	-0.114	0.117	0.326
ClinChem	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
ALP	0.861	1.025	1.221	1.468	1.634	1.887	-0.314	0.050	0.380
ALT	0.924	1.074	1.249	1.228	1.348	1.523	-0.273	0.237	0.709
AST	0.873	1.062	1.293	1.320	1.490	1.768	-0.357	0.148	0.605
ALB	0.981	1.023	1.068	1.134	1.168	1.216	-0.125	0.146	0.388
TP	0.999	1.022	1.046	1.105	1.128	1.164	-0.007	0.182	0.352
Glu	0.802	0.899	1.009	1.433	1.570	1.972	-0.461	-0.229	0.020
CHOL	0.958	1.057	1.165	1.339	1.457	1.928	-0.112	0.138	0.372
TAG	0.880	1.075	1.313	2.270	2.890	7.193	-0.120	0.064	0.230
Crea	0.884	0.996	1.122	1.371	1.492	1.806	-0.305	-0.008	0.296
Urea	0.886	0.982	1.089	1.287	1.404	1.902	-0.332	-0.049	0.257
Ca	0.986	1.001	1.016	1.178	1.219	1.324	-0.069	0.005	0.075
Cl	0.974	0.989	1.003	1.138	1.168	1.234	-0.155	-0.072	0.021
K	0.955	1.026	1.101	1.306	1.385	1.511	-0.143	0.077	0.265
Na	0.987	0.997	1.007	1.152	1.185	1.253	-0.068	-0.016	0.043
P	0.910	1.020	1.144	1.233	1.330	1.591	-0.346	0.067	0.439
Organs	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Kidney	0.972	1.036	1.105	1.121	1.168	1.240	-0.187	0.226	0.601
Spleen	0.943	1.035	1.136	1.183	1.259	1.407	-0.262	0.145	0.512
Liver	0.972	1.010	1.050	1.124	1.160	1.245	-0.195	0.066	0.298
AdrenGl	0.907	1.006	1.116	1.303	1.406	1.628	-0.294	0.017	0.314
Heart	0.967	1.022	1.080	1.116	1.159	1.261	-0.228	0.143	0.480
Thymus	0.844	0.962	1.097	1.557	1.742	2.190	-0.275	-0.068	0.168
Testis	0.980	1.044	1.112	1.184	1.240	1.327	-0.097	0.197	0.460
Epididymis	0.966	1.044	1.127	1.179	1.240	1.333	-0.166	0.196	0.516
Brain	0.961	1.012	1.066	1.118	1.161	1.277	-0.273	0.077	0.393

Appendix 9. Intervals for equivalence tests (continued)

Males Con50 vs Con33									
Weights	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Weight_13	0.996	1.048	1.104	1.129	1.163	1.218	-0.032	0.307	0.616
growthRate	0.980	0.998	1.017	1.043	1.054	1.067	-0.364	-0.030	0.324
FeedMean	0.996	1.046	1.098	1.126	1.164	1.271	-0.025	0.285	0.582
Haematology	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
WBC	0.817	0.965	1.140	1.744	2.027	3.228	-0.258	-0.049	0.185
RBC	0.979	1.000	1.021	1.137	1.166	1.211	-0.139	-0.001	0.137
HGB	0.964	0.985	1.007	1.113	1.140	1.202	-0.259	-0.110	0.058
HCT	0.978	0.998	1.018	1.133	1.162	1.210	-0.138	-0.014	0.121
MCV	0.982	0.998	1.015	1.041	1.052	1.065	-0.337	-0.033	0.294
MCH	0.963	0.985	1.007	1.063	1.079	1.104	-0.449	-0.193	0.092
MCHC	0.975	0.988	1.001	1.040	1.050	1.073	-0.486	-0.240	0.027
PLT	0.848	0.958	1.081	1.895	2.154	2.572	-0.193	-0.055	0.104
LYMA	0.851	1.000	1.175	1.716	1.977	3.011	-0.240	0.001	0.241
ClinChem	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
ALP	0.795	0.947	1.128	1.468	1.634	1.889	-0.425	-0.110	0.248
ALT	0.854	0.993	1.155	1.228	1.348	1.525	-0.538	-0.022	0.510
AST	0.807	0.982	1.195	1.321	1.489	1.769	-0.533	-0.046	0.472
ALB	0.936	0.977	1.019	1.133	1.168	1.216	-0.390	-0.149	0.124
TP	0.948	0.970	0.993	1.105	1.128	1.164	-0.422	-0.248	-0.058
Glu	0.861	0.966	1.084	1.433	1.570	1.969	-0.297	-0.073	0.182
CHOL	0.899	0.992	1.094	1.338	1.457	1.925	-0.268	-0.020	0.243
TAG	0.872	1.065	1.301	2.269	2.888	7.235	-0.127	0.055	0.222
Crea	0.820	0.923	1.040	1.370	1.491	1.798	-0.460	-0.194	0.100
Urea	0.825	0.915	1.014	1.287	1.404	1.898	-0.548	-0.249	0.042
Ca	0.984	0.999	1.013	1.178	1.219	1.323	-0.075	-0.006	0.068
Cl	0.992	1.007	1.022	1.137	1.168	1.233	-0.049	0.045	0.126
K	0.908	0.974	1.046	1.306	1.385	1.511	-0.267	-0.079	0.141
Na	0.987	0.997	1.007	1.152	1.185	1.253	-0.069	-0.017	0.042
P	0.824	0.924	1.037	1.233	1.330	1.588	-0.645	-0.267	0.127
Organs	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Kidney	0.924	0.985	1.050	1.121	1.168	1.241	-0.467	-0.094	0.325
Spleen	0.894	0.981	1.077	1.183	1.258	1.408	-0.456	-0.080	0.336
Liver	0.930	0.966	1.005	1.124	1.160	1.245	-0.462	-0.225	0.029
AdrenGl	0.910	1.009	1.120	1.303	1.406	1.625	-0.287	0.026	0.316
Heart	0.923	0.975	1.031	1.116	1.160	1.263	-0.499	-0.161	0.206
Thymus	0.883	1.007	1.149	1.557	1.742	2.178	-0.227	0.013	0.242
Testis	0.889	0.947	1.009	1.185	1.239	1.329	-0.519	-0.250	0.044
Epididymis	0.882	0.953	1.030	1.179	1.240	1.333	-0.544	-0.220	0.141
Brain	0.916	0.965	1.017	1.118	1.161	1.279	-0.555	-0.230	0.107

Appendix 9. Intervals for equivalence tests (continued)

Males NK50- vs NK33-									
Weights	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Weight_13	0.936	0.985	1.037	1.128	1.163	1.217	-0.397	-0.099	0.241
growthRate	0.987	1.005	1.024	1.043	1.054	1.067	-0.258	0.095	0.405
FeedMean	0.960	1.007	1.058	1.126	1.164	1.273	-0.273	0.047	0.340
Haematology	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
WBC	0.874	1.033	1.219	1.745	2.028	3.250	-0.191	0.043	0.255
RBC	0.968	0.989	1.010	1.137	1.166	1.210	-0.192	-0.073	0.066
HGB	0.962	0.984	1.006	1.113	1.140	1.201	-0.271	-0.121	0.047
HCT	0.965	0.985	1.005	1.133	1.162	1.209	-0.217	-0.100	0.032
MCV	0.980	0.996	1.013	1.041	1.052	1.066	-0.361	-0.073	0.254
MCH	0.974	0.995	1.018	1.063	1.079	1.104	-0.321	-0.060	0.232
MCHC	0.986	0.999	1.012	1.040	1.050	1.073	-0.281	-0.023	0.253
PLT	0.981	1.108	1.251	1.897	2.155	2.572	-0.025	0.132	0.270
LYMA	0.863	1.014	1.192	1.717	1.979	3.004	-0.217	0.020	0.244
ClinChem	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
ALP	0.786	0.936	1.115	1.468	1.634	1.887	-0.444	-0.132	0.225
ALT	0.872	1.015	1.180	1.229	1.348	1.525	-0.484	0.048	0.546
AST	0.876	1.066	1.298	1.321	1.490	1.772	-0.342	0.157	0.613
ALB	0.961	1.003	1.046	1.133	1.168	1.216	-0.261	0.016	0.281
TP	0.978	1.001	1.024	1.105	1.128	1.164	-0.190	0.005	0.194
Glu	0.860	0.964	1.082	1.433	1.570	1.973	-0.301	-0.076	0.175
CHOL	0.973	1.073	1.183	1.339	1.457	1.917	-0.069	0.180	0.417
TAG	0.785	0.959	1.171	2.268	2.888	7.261	-0.207	-0.037	0.150
Crea	0.894	1.008	1.135	1.370	1.491	1.805	-0.282	0.019	0.305
Urea	0.885	0.981	1.088	1.286	1.403	1.892	-0.333	-0.053	0.251
Ca	0.988	1.003	1.018	1.178	1.219	1.324	-0.059	0.014	0.079
Cl	0.995	1.010	1.025	1.137	1.168	1.234	-0.031	0.063	0.146
K	0.961	1.032	1.108	1.307	1.385	1.510	-0.123	0.094	0.284
Na	0.998	1.008	1.019	1.152	1.185	1.253	-0.011	0.048	0.100
P	0.800	0.897	1.006	1.234	1.330	1.586	-0.758	-0.368	0.019
Organs	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Kidney	0.965	1.029	1.097	1.121	1.168	1.240	-0.233	0.180	0.554
Spleen	0.932	1.023	1.123	1.183	1.258	1.409	-0.320	0.095	0.468
Liver	0.984	1.023	1.063	1.124	1.160	1.246	-0.110	0.147	0.378
AdrenGl	0.922	1.023	1.134	1.303	1.405	1.630	-0.243	0.064	0.339
Heart	1.009	1.067	1.128	1.116	1.159	1.263	0.059	0.428	0.799
Thymus	1.004	1.145	1.306	1.557	1.741	2.177	0.009	0.239	0.457
Testis	0.983	1.047	1.116	1.184	1.240	1.329	-0.080	0.212	0.477
Epididymis	0.987	1.066	1.151	1.179	1.240	1.332	-0.064	0.292	0.621
Brain	0.974	1.026	1.080	1.117	1.160	1.276	-0.179	0.163	0.481

Appendix 9. Intervals for equivalence tests (continued)

Males NK50+ vs NK33+									
Weights	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Weight_13	0.966	1.017	1.071	1.128	1.163	1.217	-0.231	0.110	0.409
growthRate	0.967	0.985	1.003	1.043	1.054	1.067	-0.597	-0.284	0.063
FeedMean	0.974	1.022	1.073	1.126	1.163	1.272	-0.176	0.141	0.425
Haematology	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
WBC	0.880	1.040	1.228	1.745	2.028	3.283	-0.182	0.052	0.263
RBC	0.951	0.971	0.992	1.137	1.166	1.211	-0.315	-0.190	-0.049
HGB	0.985	1.007	1.030	1.113	1.140	1.202	-0.118	0.051	0.199
HCT	0.978	0.998	1.018	1.133	1.162	1.209	-0.139	-0.016	0.120
MCV	1.011	1.027	1.044	1.041	1.052	1.066	0.208	0.531	0.843
MCH	1.013	1.036	1.059	1.063	1.079	1.104	0.169	0.460	0.739
MCHC	0.996	1.009	1.023	1.040	1.050	1.073	-0.079	0.188	0.428
PLT	0.870	0.983	1.110	1.896	2.156	2.569	-0.167	-0.023	0.138
LYMA	0.920	1.081	1.270	1.717	1.978	2.983	-0.120	0.109	0.318
ClinChem	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
ALP	0.824	0.982	1.169	1.468	1.633	1.890	-0.375	-0.037	0.329
ALT	0.900	1.046	1.217	1.228	1.348	1.525	-0.369	0.150	0.617
AST	0.861	1.048	1.276	1.321	1.489	1.771	-0.393	0.117	0.574
ALB	0.960	1.002	1.045	1.133	1.168	1.216	-0.267	0.013	0.282
TP	0.977	1.000	1.023	1.105	1.128	1.164	-0.193	-0.002	0.191
Glu	0.841	0.944	1.059	1.433	1.569	1.966	-0.350	-0.124	0.126
CHOL	0.970	1.069	1.179	1.338	1.457	1.926	-0.081	0.169	0.406
TAG	0.872	1.065	1.301	2.269	2.890	7.203	-0.129	0.055	0.223
Crea	0.899	1.013	1.141	1.370	1.491	1.792	-0.269	0.031	0.311
Urea	0.828	0.918	1.018	1.286	1.404	1.893	-0.533	-0.238	0.053
Ca	0.985	0.999	1.014	1.178	1.219	1.324	-0.074	-0.005	0.068
Cl	0.971	0.986	1.001	1.138	1.168	1.234	-0.174	-0.090	0.004
K	0.956	1.026	1.102	1.307	1.385	1.511	-0.142	0.077	0.266
Na	0.980	0.990	1.000	1.152	1.185	1.253	-0.111	-0.058	0.001
P	0.820	0.920	1.032	1.233	1.330	1.588	-0.660	-0.282	0.110
Organs	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Kidney	0.901	0.961	1.024	1.121	1.168	1.240	-0.632	-0.253	0.155
Spleen	0.922	1.012	1.111	1.183	1.258	1.406	-0.366	0.050	0.438
Liver	0.963	1.001	1.041	1.124	1.160	1.246	-0.257	0.008	0.266
AdrenGl	0.938	1.040	1.154	1.303	1.405	1.627	-0.191	0.111	0.379
Heart	0.927	0.980	1.036	1.116	1.159	1.263	-0.468	-0.132	0.241
Thymus	0.854	0.974	1.111	1.557	1.742	2.181	-0.258	-0.046	0.193
Testis	0.965	1.029	1.096	1.184	1.239	1.327	-0.166	0.129	0.389
Epididymis	0.931	1.006	1.087	1.178	1.240	1.332	-0.338	0.026	0.376
Brain	0.929	0.978	1.030	1.117	1.161	1.281	-0.457	-0.142	0.204

Appendix 9. Intervals for equivalence tests (continued)

Males NK33- vs Con33									
Weights	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Weight_13	0.957	1.007	1.061	1.128	1.163	1.217	-0.298	0.048	0.361
growthRate	0.969	0.987	1.005	1.043	1.054	1.067	-0.567	-0.257	0.091
FeedMean	0.941	0.987	1.036	1.126	1.164	1.273	-0.365	-0.080	0.236
Haematology	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
WBC	0.852	1.007	1.189	1.746	2.028	3.262	-0.228	0.009	0.239
RBC	0.980	1.001	1.022	1.137	1.166	1.211	-0.135	0.004	0.140
HGB	0.979	1.001	1.024	1.113	1.140	1.202	-0.161	0.011	0.174
HCT	0.985	1.005	1.026	1.133	1.162	1.209	-0.099	0.035	0.152
MCV	0.989	1.005	1.021	1.041	1.052	1.066	-0.233	0.093	0.377
MCH	0.979	1.001	1.023	1.063	1.079	1.104	-0.288	0.009	0.299
MCHC	0.983	0.996	1.010	1.040	1.050	1.073	-0.309	-0.069	0.202
PLT	0.886	1.001	1.130	1.894	2.156	2.576	-0.161	0.001	0.162
LYMA	0.929	1.092	1.283	1.718	1.978	2.994	-0.109	0.123	0.332
ClinChem	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
ALP	0.791	0.943	1.123	1.468	1.634	1.889	-0.432	-0.119	0.239
ALT	0.842	0.979	1.139	1.229	1.348	1.523	-0.560	-0.069	0.462
AST	0.778	0.947	1.153	1.317	1.489	1.767	-0.593	-0.134	0.374
ALB	0.954	0.995	1.038	1.134	1.168	1.216	-0.287	-0.031	0.247
TP	0.966	0.988	1.011	1.105	1.128	1.165	-0.262	-0.098	0.091
Glu	0.835	0.937	1.052	1.433	1.570	1.965	-0.366	-0.140	0.111
CHOL	0.880	0.970	1.070	1.338	1.457	1.929	-0.306	-0.076	0.180
TAG	0.969	1.184	1.446	2.272	2.890	7.247	-0.027	0.151	0.329
Crea	0.848	0.956	1.077	1.371	1.491	1.792	-0.374	-0.110	0.186
Urea	0.801	0.888	0.985	1.286	1.404	1.896	-0.639	-0.333	-0.041
Ca	0.987	1.002	1.016	1.178	1.219	1.322	-0.064	0.009	0.076
Cl	0.989	1.004	1.019	1.138	1.168	1.233	-0.072	0.023	0.107
K	0.921	0.989	1.062	1.306	1.385	1.510	-0.231	-0.032	0.187
Na	0.985	0.995	1.005	1.152	1.185	1.254	-0.078	-0.027	0.032
P	0.915	1.027	1.152	1.234	1.330	1.585	-0.320	0.088	0.457
Organs	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Kidney	0.918	0.979	1.043	1.121	1.168	1.240	-0.505	-0.136	0.280
Spleen	0.907	0.996	1.093	1.183	1.258	1.405	-0.426	-0.019	0.405
Liver	0.937	0.974	1.012	1.123	1.160	1.246	-0.409	-0.175	0.080
AdrenGl	0.893	0.990	1.098	1.303	1.405	1.628	-0.318	-0.028	0.283
Heart	0.895	0.946	1.000	1.116	1.159	1.263	-0.727	-0.364	0.001
Thymus	0.788	0.899	1.025	1.557	1.743	2.180	-0.401	-0.189	0.043
Testis	0.916	0.976	1.040	1.184	1.240	1.328	-0.372	-0.111	0.187
Epididymis	0.885	0.956	1.033	1.178	1.240	1.333	-0.528	-0.204	0.154
Brain	0.945	0.996	1.049	1.117	1.160	1.277	-0.366	-0.026	0.334

Appendix 9. Intervals for equivalence tests (continued)

Males NK33+ vs Con33									
Weights	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Weight_13	0.957	1.008	1.061	1.129	1.163	1.217	-0.297	0.050	0.363
growthRate	0.985	1.003	1.022	1.043	1.054	1.067	-0.295	0.061	0.380
FeedMean	0.965	1.013	1.064	1.126	1.164	1.273	-0.236	0.084	0.368
Haematology	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
WBC	0.838	0.990	1.169	1.743	2.028	3.261	-0.241	-0.013	0.223
RBC	0.997	1.019	1.041	1.137	1.166	1.211	-0.018	0.119	0.241
HGB	0.968	0.990	1.012	1.113	1.140	1.201	-0.225	-0.078	0.090
HCT	0.982	1.002	1.022	1.133	1.162	1.209	-0.123	0.013	0.138
MCV	0.968	0.984	1.000	1.041	1.052	1.066	-0.620	-0.327	-0.007
MCH	0.950	0.971	0.993	1.063	1.079	1.104	-0.649	-0.377	-0.090
MCHC	0.975	0.988	1.001	1.040	1.050	1.073	-0.492	-0.244	0.021
PLT	0.983	1.110	1.254	1.897	2.155	2.573	-0.021	0.135	0.273
LYMA	0.856	1.006	1.182	1.718	1.977	2.990	-0.233	0.008	0.241
ClinChem	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
ALP	0.830	0.988	1.177	1.468	1.634	1.888	-0.371	-0.024	0.342
ALT	0.876	1.019	1.185	1.228	1.348	1.525	-0.476	0.061	0.558
AST	0.818	0.995	1.212	1.321	1.489	1.768	-0.524	-0.011	0.513
ALB	0.956	0.998	1.041	1.134	1.168	1.216	-0.282	-0.014	0.264
TP	0.970	0.992	1.015	1.105	1.128	1.164	-0.228	-0.063	0.127
Glu	0.821	0.921	1.033	1.434	1.570	1.958	-0.406	-0.177	0.072
CHOL	0.889	0.980	1.081	1.338	1.457	1.922	-0.285	-0.050	0.210
TAG	0.880	1.075	1.313	2.270	2.885	7.197	-0.119	0.064	0.230
Crea	0.806	0.908	1.023	1.371	1.491	1.802	-0.505	-0.234	0.056
Urea	0.882	0.978	1.085	1.287	1.403	1.902	-0.339	-0.060	0.245
Ca	0.986	1.001	1.015	1.178	1.219	1.323	-0.071	0.003	0.074
Cl	0.995	1.010	1.025	1.138	1.168	1.234	-0.031	0.063	0.145
K	0.907	0.974	1.046	1.306	1.385	1.511	-0.269	-0.079	0.138
Na	0.994	1.004	1.015	1.152	1.185	1.252	-0.034	0.025	0.076
P	0.914	1.025	1.150	1.234	1.330	1.587	-0.324	0.083	0.453
Organs	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Males	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Kidney	0.997	1.063	1.133	1.121	1.168	1.241	-0.021	0.385	0.783
Spleen	0.914	1.003	1.102	1.183	1.258	1.405	-0.410	0.014	0.426
Liver	0.938	0.975	1.013	1.124	1.160	1.245	-0.400	-0.167	0.089
AdrenGl	0.880	0.976	1.083	1.303	1.405	1.627	-0.345	-0.069	0.238
Heart	0.963	1.017	1.075	1.116	1.160	1.265	-0.263	0.113	0.449
Thymus	0.872	0.995	1.135	1.557	1.742	2.191	-0.242	-0.010	0.230
Testis	0.902	0.961	1.024	1.185	1.239	1.329	-0.444	-0.182	0.111
Epididymis	0.915	0.989	1.068	1.179	1.240	1.333	-0.386	-0.050	0.317
Brain	0.948	0.999	1.052	1.117	1.161	1.278	-0.361	-0.009	0.352

Appendix 9. Intervals for equivalence tests (continued)

Females NK11-/50 vs Con50									
Weights	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Weight_13	0.954	1.010	1.071	1.156	1.198	1.272	-0.269	0.056	0.346
growthRate	0.996	1.028	1.060	1.065	1.084	1.106	-0.043	0.335	0.681
FeedMean	0.962	1.019	1.079	1.155	1.202	1.337	-0.210	0.098	0.372
Haematology	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
WBC	0.900	1.089	1.317	1.812	2.101	3.002	-0.142	0.111	0.335
RBC	0.982	1.006	1.032	1.094	1.117	1.176	-0.166	0.056	0.254
HGB	0.972	0.999	1.027	1.073	1.093	1.129	-0.318	-0.006	0.309
HCT	0.969	0.995	1.021	1.067	1.086	1.129	-0.344	-0.059	0.258
MCV	0.973	0.988	1.004	1.047	1.059	1.076	-0.445	-0.201	0.074
MCH	0.974	0.994	1.014	1.078	1.096	1.125	-0.258	-0.067	0.151
MCHC	0.991	1.004	1.018	1.037	1.046	1.059	-0.203	0.096	0.353
PLT	0.941	1.021	1.108	1.546	1.690	1.930	-0.117	0.040	0.174
LYMA	0.872	1.075	1.325	1.739	2.017	2.816	-0.195	0.100	0.361
ClinChem	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
ALP	0.743	0.907	1.108	1.312	1.481	1.708	-0.718	-0.244	0.270
ALT	0.821	0.988	1.189	1.854	2.130	2.619	-0.251	-0.017	0.232
AST	0.856	1.054	1.297	1.533	1.740	2.101	-0.288	0.093	0.429
ALB	0.927	0.969	1.013	1.259	1.318	1.402	-0.252	-0.113	0.046
TP	0.952	0.991	1.033	1.214	1.271	1.450	-0.185	-0.034	0.135
Glu	0.806	0.935	1.084	1.386	1.521	1.756	-0.471	-0.158	0.194
CHOL	0.787	0.949	1.144	1.191	1.351	1.591	-0.799	-0.171	0.495
TAG	0.780	0.955	1.169	2.304	2.773	3.953	-0.219	-0.044	0.152
Crea	0.945	1.043	1.151	1.369	1.495	1.978	-0.141	0.100	0.316
Urea	0.981	1.084	1.199	1.337	1.470	2.069	-0.049	0.197	0.446
Ca	0.972	0.988	1.004	1.170	1.230	1.518	-0.130	-0.055	0.021
Cl	0.979	0.993	1.008	1.075	1.091	1.116	-0.223	-0.076	0.095
K	0.934	1.023	1.121	1.286	1.374	1.599	-0.217	0.071	0.323
Na	0.987	0.996	1.005	1.073	1.089	1.125	-0.134	-0.046	0.056
P	0.839	0.998	1.188	1.243	1.389	1.669	-0.572	-0.006	0.566
Organs	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Kidney	0.942	1.011	1.085	1.099	1.149	1.207	-0.457	0.077	0.569
Spleen	0.927	1.019	1.121	1.240	1.320	1.432	-0.283	0.068	0.381
Liver	0.949	1.001	1.056	1.189	1.244	1.363	-0.243	0.005	0.248
AdrenGl	0.892	0.976	1.069	1.328	1.425	1.576	-0.292	-0.067	0.191
Heart	0.930	0.984	1.041	1.131	1.174	1.235	-0.408	-0.096	0.258
Thymus	0.888	0.998	1.121	1.367	1.511	2.065	-0.289	-0.005	0.286
Uterus	0.920	1.142	1.418	1.345	1.545	1.842	-0.200	0.300	0.778
Ovary	0.889	0.989	1.100	1.402	1.553	2.163	-0.252	-0.024	0.220
Brain	0.937	0.996	1.058	1.152	1.201	1.285	-0.346	-0.022	0.319

Appendix 9. Intervals for equivalence tests (continued)

Females NK50- vs Con50									
Weights	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Weight_13	0.954	1.011	1.071	1.157	1.198	1.273	-0.264	0.060	0.349
growthRate	1.001	1.032	1.064	1.065	1.084	1.106	0.010	0.389	0.741
FeedMean	0.960	1.017	1.077	1.155	1.202	1.336	-0.224	0.087	0.364
Haematology	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
WBC	0.833	1.007	1.218	1.811	2.101	2.991	-0.249	0.009	0.259
RBC	0.994	1.019	1.044	1.094	1.117	1.176	-0.058	0.163	0.363
HGB	0.980	1.007	1.036	1.073	1.093	1.129	-0.229	0.080	0.353
HCT	0.984	1.010	1.037	1.067	1.086	1.129	-0.189	0.124	0.400
MCV	0.977	0.992	1.008	1.047	1.059	1.076	-0.378	-0.138	0.134
MCH	0.969	0.988	1.008	1.078	1.096	1.124	-0.315	-0.124	0.096
MCHC	0.984	0.997	1.011	1.037	1.046	1.059	-0.327	-0.061	0.239
PLT	0.867	0.941	1.021	1.547	1.691	1.934	-0.250	-0.115	0.039
LYMA	0.822	1.014	1.250	1.740	2.018	2.826	-0.285	0.019	0.307
ClinChem	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
ALP	0.805	0.984	1.202	1.313	1.481	1.708	-0.550	-0.040	0.498
ALT	0.849	1.022	1.230	1.852	2.130	2.618	-0.219	0.028	0.256
AST	0.891	1.097	1.351	1.532	1.742	2.103	-0.209	0.165	0.497
ALB	0.970	1.014	1.060	1.259	1.318	1.402	-0.109	0.050	0.189
TP	0.977	1.018	1.061	1.215	1.271	1.445	-0.094	0.073	0.220
Glu	0.829	0.962	1.116	1.385	1.521	1.764	-0.405	-0.090	0.268
CHOL	0.811	0.978	1.179	1.190	1.351	1.591	-0.725	-0.071	0.622
TAG	0.752	0.920	1.127	2.307	2.773	3.966	-0.253	-0.080	0.117
Crea	0.935	1.033	1.140	1.368	1.495	1.974	-0.163	0.076	0.293
Urea	0.892	0.986	1.091	1.337	1.470	2.075	-0.276	-0.032	0.229
Ca	0.986	1.003	1.019	1.170	1.231	1.517	-0.067	0.011	0.085
Cl	0.982	0.997	1.012	1.075	1.091	1.116	-0.185	-0.033	0.140
K	0.891	0.976	1.069	1.286	1.374	1.596	-0.326	-0.073	0.213
Na	0.994	1.003	1.011	1.073	1.089	1.125	-0.072	0.030	0.119
P	0.862	1.026	1.220	1.243	1.389	1.672	-0.483	0.074	0.593
Organs	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Kidney	0.964	1.034	1.110	1.099	1.149	1.207	-0.278	0.239	0.720
Spleen	0.984	1.083	1.191	1.240	1.320	1.431	-0.058	0.283	0.593
Liver	0.972	1.025	1.081	1.189	1.244	1.363	-0.133	0.108	0.322
AdrenGl	0.959	1.050	1.149	1.328	1.426	1.577	-0.120	0.135	0.359
Heart	0.979	1.036	1.096	1.131	1.174	1.235	-0.133	0.217	0.534
Thymus	0.871	0.979	1.100	1.367	1.512	2.070	-0.309	-0.048	0.233
Uterus	0.860	1.068	1.327	1.341	1.544	1.842	-0.365	0.151	0.614
Ovary	0.895	0.995	1.107	1.402	1.553	2.155	-0.249	-0.010	0.237
Brain	0.945	1.004	1.067	1.151	1.201	1.287	-0.320	0.021	0.345

Appendix 9. Intervals for equivalence tests (continued)

Females NK11+/50 vs Con50									
Weights	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Weight_13	1.001	1.060	1.123	1.157	1.199	1.272	0.004	0.317	0.606
growthRate	0.976	1.007	1.038	1.065	1.084	1.106	-0.307	0.082	0.425
FeedMean	1.048	1.110	1.176	1.155	1.202	1.339	0.227	0.556	0.879
Haematology	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
WBC	0.883	1.068	1.291	1.810	2.100	2.997	-0.170	0.085	0.309
RBC	0.983	1.007	1.033	1.093	1.117	1.175	-0.159	0.066	0.261
HGB	0.992	1.019	1.048	1.073	1.093	1.128	-0.093	0.212	0.489
HCT	0.987	1.013	1.039	1.067	1.086	1.130	-0.163	0.150	0.428
MCV	0.990	1.005	1.021	1.047	1.059	1.076	-0.183	0.095	0.338
MCH	0.992	1.012	1.032	1.078	1.096	1.125	-0.090	0.129	0.318
MCHC	0.993	1.006	1.020	1.037	1.046	1.059	-0.158	0.137	0.394
PLT	0.854	0.927	1.005	1.546	1.691	1.934	-0.281	-0.144	0.010
LYMA	0.848	1.046	1.289	1.740	2.017	2.831	-0.236	0.062	0.330
ClinChem	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
ALP	0.780	0.953	1.165	1.313	1.481	1.707	-0.593	-0.120	0.408
ALT	0.833	1.003	1.207	1.853	2.130	2.630	-0.247	0.003	0.250
AST	0.831	1.023	1.260	1.532	1.741	2.098	-0.342	0.041	0.397
ALB	0.937	0.979	1.023	1.259	1.318	1.402	-0.213	-0.076	0.084
TP	0.950	0.989	1.031	1.214	1.271	1.450	-0.191	-0.042	0.126
Glu	0.860	0.997	1.157	1.386	1.521	1.755	-0.363	-0.007	0.357
CHOL	0.775	0.935	1.127	1.190	1.351	1.600	-0.846	-0.220	0.430
TAG	0.759	0.930	1.138	2.307	2.775	3.984	-0.243	-0.070	0.129
Crea	0.933	1.030	1.137	1.369	1.494	1.983	-0.174	0.069	0.286
Urea	0.972	1.075	1.188	1.337	1.470	2.070	-0.071	0.176	0.420
Ca	0.971	0.987	1.004	1.171	1.230	1.515	-0.133	-0.057	0.018
Cl	0.978	0.993	1.008	1.075	1.091	1.116	-0.229	-0.082	0.087
K	0.904	0.990	1.084	1.286	1.374	1.603	-0.299	-0.032	0.258
Na	0.989	0.997	1.006	1.073	1.089	1.125	-0.119	-0.029	0.074
P	0.858	1.022	1.216	1.243	1.389	1.673	-0.492	0.063	0.586
Organs	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Kidney	0.961	1.031	1.107	1.099	1.149	1.207	-0.300	0.218	0.696
Spleen	0.941	1.036	1.139	1.239	1.320	1.431	-0.223	0.125	0.429
Liver	0.926	0.976	1.030	1.190	1.244	1.362	-0.319	-0.106	0.134
AdrenGl	0.948	1.038	1.136	1.329	1.425	1.578	-0.153	0.103	0.327
Heart	0.974	1.031	1.090	1.131	1.174	1.234	-0.164	0.186	0.499
Thymus	0.773	0.869	0.976	1.367	1.512	2.069	-0.607	-0.327	-0.054
Uterus	0.786	0.976	1.212	1.344	1.544	1.841	-0.544	-0.056	0.470
Ovary	0.895	0.996	1.108	1.402	1.553	2.143	-0.249	-0.008	0.239
Brain	0.906	0.963	1.023	1.152	1.201	1.286	-0.500	-0.203	0.126

Appendix 9. Intervals for equivalence tests (continued)

Females NK50+ vs Con50									
Weights	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Weight_13	0.943	0.999	1.059	1.157	1.198	1.272	-0.326	-0.003	0.321
growthRate	0.981	1.012	1.043	1.065	1.084	1.106	-0.237	0.147	0.481
FeedMean	0.978	1.035	1.097	1.155	1.202	1.337	-0.124	0.181	0.463
Haematology	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
WBC	0.807	0.975	1.180	1.810	2.102	2.982	-0.270	-0.032	0.224
RBC	0.984	1.009	1.034	1.094	1.117	1.175	-0.148	0.074	0.270
HGB	0.972	0.999	1.027	1.073	1.093	1.129	-0.317	-0.009	0.308
HCT	0.973	0.999	1.025	1.067	1.086	1.130	-0.325	-0.014	0.306
MCV	0.975	0.991	1.006	1.047	1.059	1.076	-0.407	-0.163	0.108
MCH	0.971	0.990	1.010	1.078	1.096	1.124	-0.295	-0.106	0.113
MCHC	0.987	1.001	1.014	1.037	1.046	1.059	-0.283	0.017	0.303
PLT	0.887	0.962	1.044	1.546	1.692	1.936	-0.205	-0.072	0.083
LYMA	0.792	0.977	1.204	1.739	2.018	2.809	-0.312	-0.032	0.265
ClinChem	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
ALP	0.860	1.051	1.284	1.312	1.480	1.706	-0.405	0.126	0.603
ALT	0.848	1.021	1.230	1.852	2.130	2.622	-0.221	0.027	0.255
AST	0.834	1.027	1.265	1.532	1.741	2.100	-0.336	0.047	0.399
ALB	0.926	0.968	1.012	1.259	1.318	1.402	-0.256	-0.117	0.042
TP	0.949	0.989	1.030	1.214	1.271	1.450	-0.193	-0.044	0.123
Glu	0.878	1.019	1.182	1.386	1.521	1.758	-0.318	0.043	0.373
CHOL	0.680	0.819	0.988	1.191	1.351	1.593	-1.382	-0.652	-0.038
TAG	0.661	0.810	0.991	2.305	2.772	3.957	-0.383	-0.204	-0.009
Crea	0.843	0.930	1.027	1.369	1.494	1.982	-0.398	-0.171	0.064
Urea	0.890	0.984	1.088	1.338	1.470	2.065	-0.280	-0.039	0.224
Ca	0.966	0.982	0.999	1.171	1.230	1.514	-0.161	-0.081	-0.005
Cl	0.978	0.993	1.008	1.075	1.091	1.116	-0.229	-0.082	0.089
K	0.899	0.985	1.078	1.286	1.374	1.595	-0.308	-0.048	0.241
Na	0.987	0.996	1.005	1.074	1.089	1.125	-0.133	-0.045	0.057
P	0.880	1.047	1.246	1.243	1.389	1.674	-0.411	0.134	0.640
Organs	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Kidney	1.007	1.081	1.160	1.099	1.149	1.207	0.046	0.553	1.079
Spleen	0.954	1.050	1.155	1.239	1.320	1.431	-0.173	0.173	0.476
Liver	0.937	0.988	1.042	1.190	1.244	1.364	-0.270	-0.053	0.189
AdrenGl	0.925	1.013	1.109	1.329	1.425	1.578	-0.224	0.035	0.271
Heart	0.998	1.056	1.118	1.131	1.174	1.234	-0.010	0.338	0.665
Thymus	0.824	0.926	1.040	1.367	1.511	2.078	-0.439	-0.179	0.093
Uterus	0.819	1.017	1.262	1.343	1.545	1.843	-0.493	0.037	0.540
Ovary	1.032	1.148	1.276	1.401	1.553	2.150	0.065	0.301	0.540
Brain	0.954	1.014	1.077	1.152	1.201	1.285	-0.264	0.071	0.373

Appendix 9. Intervals for equivalence tests (continued)

Females Con50 vs Con33									
Weights	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Weight_13	0.909	0.964	1.021	1.157	1.199	1.272	-0.484	-0.200	0.111
growthRate	0.947	0.976	1.007	1.065	1.084	1.106	-0.639	-0.297	0.084
FeedMean	0.907	0.960	1.017	1.155	1.202	1.336	-0.494	-0.212	0.091
Haematology	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
WBC	0.815	0.986	1.192	1.810	2.100	2.967	-0.263	-0.018	0.239
RBC	0.975	1.000	1.025	1.094	1.117	1.176	-0.226	-0.004	0.223
HGB	0.978	1.005	1.034	1.073	1.093	1.128	-0.254	0.059	0.339
HCT	0.976	1.002	1.028	1.067	1.086	1.129	-0.299	0.022	0.327
MCV	0.987	1.002	1.018	1.047	1.059	1.076	-0.240	0.038	0.293
MCH	0.986	1.005	1.026	1.078	1.096	1.124	-0.160	0.059	0.250
MCHC	0.990	1.003	1.017	1.037	1.047	1.059	-0.221	0.074	0.336
PLT	0.926	1.005	1.090	1.546	1.691	1.933	-0.148	0.008	0.158
LYMA	0.812	1.001	1.234	1.740	2.019	2.816	-0.302	0.002	0.304
ClinChem	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
ALP	0.821	1.003	1.226	1.313	1.481	1.707	-0.540	0.007	0.546
ALT	0.802	0.966	1.163	1.852	2.130	2.619	-0.264	-0.046	0.201
AST	0.745	0.918	1.130	1.531	1.740	2.099	-0.486	-0.153	0.227
ALB	0.951	0.994	1.039	1.259	1.318	1.402	-0.168	-0.021	0.140
TP	0.944	0.983	1.024	1.214	1.271	1.446	-0.215	-0.068	0.100
Glu	0.923	1.070	1.241	1.385	1.521	1.762	-0.192	0.159	0.472
CHOL	0.748	0.901	1.087	1.191	1.351	1.591	-0.986	-0.340	0.293
TAG	0.769	0.941	1.152	2.307	2.772	3.982	-0.231	-0.058	0.141
Crea	0.937	1.035	1.142	1.369	1.495	1.979	-0.161	0.081	0.298
Urea	0.977	1.080	1.194	1.337	1.470	2.072	-0.058	0.189	0.436
Ca	0.985	1.001	1.018	1.171	1.230	1.514	-0.075	0.005	0.082
Cl	1.005	1.020	1.036	1.075	1.091	1.116	0.058	0.230	0.385
K	0.935	1.024	1.122	1.286	1.374	1.598	-0.215	0.071	0.325
Na	0.994	1.003	1.012	1.073	1.089	1.124	-0.071	0.030	0.119
P	0.848	1.009	1.200	1.244	1.389	1.673	-0.540	0.024	0.573
Organs	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Kidney	0.937	1.006	1.080	1.099	1.149	1.207	-0.493	0.044	0.549
Spleen	0.913	1.005	1.105	1.240	1.320	1.432	-0.337	0.016	0.356
Liver	0.934	0.985	1.039	1.190	1.244	1.363	-0.281	-0.067	0.175
AdrenGl	0.882	0.965	1.057	1.328	1.425	1.577	-0.321	-0.099	0.156
Heart	0.916	0.969	1.025	1.132	1.174	1.234	-0.505	-0.192	0.160
Thymus	0.911	1.023	1.150	1.367	1.511	2.071	-0.229	0.054	0.309
Uterus	0.804	0.998	1.239	1.344	1.543	1.841	-0.534	-0.005	0.533
Ovary	0.881	0.980	1.090	1.402	1.553	2.163	-0.263	-0.044	0.197
Brain	0.995	1.058	1.124	1.152	1.201	1.285	-0.027	0.300	0.607

Appendix 9. Intervals for equivalence tests (continued)

Females NK50- vs NK33-									
Weights	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Weight_13	0.923	0.978	1.036	1.157	1.199	1.271	-0.402	-0.123	0.196
growthRate	0.992	1.023	1.055	1.065	1.084	1.106	-0.100	0.278	0.623
FeedMean	0.913	0.967	1.025	1.156	1.202	1.338	-0.452	-0.173	0.129
Haematology	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
WBC	0.804	0.973	1.177	1.813	2.102	2.986	-0.270	-0.035	0.221
RBC	0.985	1.010	1.036	1.093	1.117	1.176	-0.134	0.089	0.283
HGB	0.990	1.018	1.047	1.073	1.093	1.128	-0.109	0.197	0.473
HCT	0.983	1.009	1.035	1.067	1.086	1.129	-0.208	0.103	0.382
MCV	0.983	0.999	1.015	1.047	1.059	1.076	-0.286	-0.024	0.259
MCH	0.976	0.996	1.016	1.078	1.096	1.125	-0.240	-0.045	0.176
MCHC	0.985	0.998	1.012	1.037	1.047	1.059	-0.315	-0.043	0.256
PLT	0.892	0.968	1.050	1.545	1.691	1.934	-0.196	-0.062	0.093
LYMA	0.793	0.978	1.205	1.738	2.019	2.837	-0.312	-0.031	0.269
ClinChem	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
ALP	0.726	0.887	1.084	1.312	1.481	1.707	-0.781	-0.300	0.213
ALT	0.866	1.043	1.255	1.852	2.130	2.622	-0.193	0.055	0.271
AST	0.891	1.097	1.351	1.533	1.742	2.102	-0.209	0.166	0.497
ALB	0.928	0.970	1.014	1.259	1.318	1.402	-0.249	-0.110	0.049
TP	0.939	0.978	1.019	1.215	1.271	1.450	-0.237	-0.088	0.078
Glu	0.838	0.972	1.128	1.385	1.521	1.761	-0.388	-0.065	0.292
CHOL	0.683	0.824	0.993	1.190	1.351	1.594	-1.359	-0.636	-0.021
TAG	0.703	0.861	1.054	2.307	2.774	3.961	-0.319	-0.144	0.052
Crea	0.967	1.068	1.179	1.368	1.494	1.982	-0.080	0.155	0.379
Urea	0.892	0.986	1.090	1.337	1.470	2.073	-0.275	-0.034	0.225
Ca	0.973	0.989	1.006	1.171	1.230	1.518	-0.122	-0.048	0.029
Cl	0.987	1.002	1.017	1.075	1.091	1.116	-0.152	0.022	0.180
K	0.886	0.970	1.063	1.286	1.375	1.602	-0.343	-0.093	0.192
Na	0.991	1.000	1.008	1.073	1.089	1.125	-0.104	-0.005	0.099
P	0.759	0.903	1.075	1.243	1.389	1.671	-0.816	-0.301	0.229
Organs	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Kidney	0.968	1.039	1.115	1.099	1.149	1.208	-0.245	0.273	0.756
Spleen	0.946	1.041	1.146	1.239	1.319	1.431	-0.198	0.144	0.449
Liver	0.929	0.979	1.033	1.189	1.244	1.365	-0.306	-0.093	0.150
AdrenGl	0.971	1.063	1.164	1.328	1.425	1.577	-0.083	0.170	0.394
Heart	0.983	1.040	1.100	1.131	1.174	1.234	-0.108	0.239	0.557
Thymus	0.935	1.050	1.180	1.367	1.512	2.076	-0.162	0.112	0.368
Uterus	0.820	1.018	1.264	1.345	1.544	1.837	-0.481	0.041	0.540
Ovary	0.965	1.073	1.194	1.402	1.553	2.149	-0.080	0.152	0.374
Brain	0.970	1.030	1.095	1.152	1.201	1.286	-0.170	0.160	0.455

Appendix 9. Intervals for equivalence tests (continued)

Females NK50+ vs NK33+									
Weights	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Weight_13	0.930	0.985	1.044	1.157	1.198	1.272	-0.364	-0.081	0.240
growthRate	0.959	0.989	1.020	1.065	1.084	1.106	-0.474	-0.135	0.253
FeedMean	0.958	1.015	1.075	1.155	1.202	1.340	-0.238	0.074	0.353
Haematology	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
WBC	0.831	1.004	1.215	1.811	2.102	3.001	-0.253	0.006	0.261
RBC	0.959	0.983	1.007	1.094	1.117	1.175	-0.353	-0.153	0.065
HGB	0.968	0.995	1.023	1.073	1.093	1.129	-0.334	-0.056	0.260
HCT	0.967	0.993	1.019	1.067	1.086	1.129	-0.365	-0.084	0.232
MCV	0.995	1.010	1.026	1.047	1.059	1.076	-0.096	0.179	0.424
MCH	0.992	1.012	1.032	1.078	1.096	1.124	-0.094	0.126	0.316
MCHC	0.989	1.002	1.016	1.037	1.047	1.059	-0.246	0.052	0.319
PLT	0.843	0.918	0.999	1.546	1.691	1.938	-0.304	-0.162	-0.003
LYMA	0.829	1.022	1.260	1.740	2.019	2.816	-0.274	0.030	0.312
ClinChem	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
ALP	0.915	1.118	1.365	1.314	1.481	1.705	-0.233	0.281	0.758
ALT	1.032	1.243	1.496	1.853	2.130	2.629	0.043	0.284	0.508
AST	0.751	0.925	1.139	1.532	1.742	2.106	-0.470	-0.138	0.239
ALB	0.914	0.955	0.998	1.259	1.318	1.402	-0.307	-0.165	-0.006
TP	0.937	0.976	1.017	1.214	1.271	1.448	-0.245	-0.097	0.069
Glu	0.918	1.065	1.235	1.385	1.521	1.762	-0.206	0.148	0.458
CHOL	0.681	0.820	0.989	1.190	1.351	1.595	-1.378	-0.648	-0.032
TAG	0.665	0.815	0.998	2.307	2.772	3.956	-0.376	-0.197	-0.003
Crea	0.821	0.906	1.000	1.369	1.494	1.977	-0.466	-0.235	0.002
Urea	0.897	0.991	1.096	1.338	1.470	2.068	-0.271	-0.022	0.244
Ca	0.987	1.003	1.020	1.171	1.230	1.514	-0.065	0.014	0.087
Cl	0.992	1.007	1.023	1.075	1.091	1.116	-0.086	0.084	0.231
K	0.881	0.965	1.057	1.285	1.374	1.598	-0.362	-0.108	0.178
Na	0.989	0.997	1.006	1.073	1.089	1.125	-0.118	-0.030	0.072
P	0.761	0.905	1.077	1.242	1.389	1.677	-0.811	-0.295	0.232
Organs	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Kidney	0.994	1.067	1.145	1.099	1.149	1.207	-0.046	0.462	0.968
Spleen	0.978	1.076	1.184	1.239	1.320	1.432	-0.081	0.261	0.573
Liver	0.955	1.007	1.062	1.190	1.244	1.361	-0.213	0.033	0.257
AdrenGl	0.912	0.998	1.092	1.329	1.426	1.577	-0.262	-0.006	0.255
Heart	1.011	1.070	1.132	1.131	1.174	1.235	0.067	0.417	0.752
Thymus	0.871	0.979	1.100	1.368	1.512	2.069	-0.307	-0.049	0.234
Uterus	0.801	0.995	1.235	1.342	1.544	1.841	-0.532	-0.013	0.519
Ovary	1.078	1.198	1.333	1.402	1.553	2.165	0.144	0.397	0.653
Brain	0.979	1.040	1.105	1.151	1.201	1.286	-0.120	0.209	0.507

Appendix 9. Intervals for equivalence tests (continued)

Females NK33- vs Con33									
Weights	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Weight_13	0.941	0.997	1.056	1.156	1.198	1.273	-0.330	-0.019	0.305
growthRate	0.955	0.985	1.016	1.065	1.084	1.106	-0.523	-0.186	0.196
FeedMean	0.953	1.009	1.069	1.155	1.202	1.337	-0.268	0.048	0.334
Haematology	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
WBC	0.844	1.021	1.234	1.812	2.102	2.982	-0.230	0.026	0.265
RBC	0.983	1.008	1.034	1.094	1.117	1.176	-0.152	0.070	0.268
HGB	0.968	0.995	1.023	1.073	1.093	1.129	-0.337	-0.057	0.255
HCT	0.978	1.003	1.030	1.067	1.086	1.129	-0.277	0.042	0.332
MCV	0.980	0.996	1.011	1.047	1.059	1.076	-0.320	-0.077	0.202
MCH	0.978	0.998	1.018	1.078	1.096	1.124	-0.226	-0.022	0.199
MCHC	0.989	1.003	1.016	1.037	1.046	1.059	-0.243	0.057	0.323
PLT	0.900	0.977	1.060	1.547	1.692	1.933	-0.177	-0.044	0.111
LYMA	0.842	1.038	1.280	1.739	2.019	2.822	-0.246	0.050	0.320
ClinChem	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
ALP	0.911	1.113	1.360	1.314	1.481	1.709	-0.248	0.270	0.741
ALT	0.786	0.946	1.139	1.852	2.129	2.619	-0.286	-0.071	0.174
AST	0.746	0.918	1.130	1.532	1.740	2.096	-0.487	-0.152	0.226
ALB	0.994	1.039	1.086	1.259	1.318	1.403	-0.019	0.139	0.279
TP	0.982	1.023	1.066	1.214	1.271	1.446	-0.073	0.093	0.243
Glu	0.913	1.059	1.228	1.385	1.521	1.762	-0.220	0.134	0.446
CHOL	0.887	1.070	1.290	1.190	1.351	1.594	-0.433	0.218	0.848
TAG	0.822	1.006	1.232	2.305	2.772	3.956	-0.194	0.006	0.200
Crea	0.906	1.000	1.104	1.369	1.494	1.982	-0.250	0.002	0.252
Urea	0.977	1.081	1.195	1.338	1.470	2.073	-0.057	0.189	0.435
Ca	0.998	1.014	1.031	1.171	1.230	1.515	-0.010	0.065	0.142
Cl	1.000	1.015	1.031	1.075	1.091	1.116	0.004	0.174	0.325
K	0.941	1.031	1.129	1.286	1.374	1.602	-0.192	0.092	0.345
Na	0.997	1.006	1.015	1.073	1.089	1.125	-0.036	0.065	0.155
P	0.963	1.145	1.363	1.243	1.389	1.671	-0.116	0.403	0.935
Organs	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Kidney	0.933	1.002	1.075	1.099	1.149	1.207	-0.533	0.012	0.545
Spleen	0.949	1.044	1.149	1.239	1.320	1.431	-0.190	0.155	0.459
Liver	0.977	1.030	1.087	1.189	1.244	1.364	-0.106	0.134	0.347
AdrenGl	0.871	0.953	1.043	1.328	1.425	1.576	-0.356	-0.134	0.119
Heart	0.913	0.966	1.022	1.131	1.174	1.235	-0.529	-0.213	0.140
Thymus	0.849	0.954	1.072	1.366	1.512	2.076	-0.362	-0.106	0.168
Uterus	0.843	1.047	1.300	1.344	1.544	1.844	-0.417	0.104	0.573
Ovary	0.817	0.909	1.010	1.402	1.553	2.168	-0.437	-0.209	0.021
Brain	0.970	1.030	1.095	1.152	1.201	1.286	-0.171	0.160	0.456

Appendix 9. Intervals for equivalence tests (continued)

Females NK33+ vs Con33									
Weights	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Weight_13	0.923	0.978	1.036	1.156	1.198	1.273	-0.402	-0.123	0.197
growthRate	0.969	0.999	1.030	1.065	1.084	1.106	-0.397	-0.016	0.380
FeedMean	0.925	0.980	1.038	1.155	1.202	1.337	-0.381	-0.105	0.203
Haematology	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
WBC	0.792	0.957	1.158	1.810	2.102	2.987	-0.283	-0.056	0.198
RBC	1.001	1.026	1.052	1.093	1.117	1.177	0.007	0.225	0.431
HGB	0.982	1.010	1.038	1.073	1.093	1.129	-0.204	0.106	0.377
HCT	0.982	1.008	1.034	1.067	1.086	1.129	-0.223	0.091	0.370
MCV	0.967	0.982	0.998	1.047	1.059	1.077	-0.559	-0.305	-0.033
MCH	0.965	0.984	1.004	1.078	1.096	1.124	-0.366	-0.173	0.043
MCHC	0.988	1.002	1.015	1.037	1.046	1.059	-0.262	0.038	0.311
PLT	0.968	1.053	1.147	1.545	1.692	1.938	-0.059	0.099	0.239
LYMA	0.776	0.957	1.180	1.740	2.019	2.821	-0.329	-0.060	0.239
ClinChem	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
ALP	0.772	0.943	1.152	1.313	1.481	1.706	-0.621	-0.147	0.380
ALT	0.659	0.794	0.956	1.854	2.130	2.618	-0.527	-0.302	-0.059
AST	0.828	1.019	1.255	1.533	1.741	2.097	-0.353	0.033	0.395
ALB	0.964	1.007	1.053	1.259	1.318	1.402	-0.135	0.026	0.170
TP	0.956	0.996	1.038	1.214	1.271	1.448	-0.175	-0.015	0.154
Glu	0.883	1.024	1.187	1.386	1.521	1.763	-0.304	0.056	0.380
CHOL	0.747	0.900	1.085	1.190	1.351	1.595	-0.991	-0.342	0.284
TAG	0.764	0.935	1.145	2.305	2.773	3.972	-0.237	-0.064	0.134
Crea	0.962	1.062	1.173	1.369	1.494	1.984	-0.094	0.143	0.365
Urea	0.970	1.072	1.186	1.338	1.470	2.065	-0.078	0.171	0.416
Ca	0.964	0.980	0.997	1.170	1.230	1.517	-0.172	-0.090	-0.014
Cl	0.991	1.006	1.021	1.075	1.091	1.116	-0.107	0.063	0.211
K	0.954	1.045	1.144	1.286	1.374	1.594	-0.150	0.133	0.385
Na	0.993	1.001	1.010	1.073	1.089	1.125	-0.086	0.016	0.108
P	0.981	1.167	1.388	1.243	1.389	1.667	-0.060	0.459	1.001
Organs	**Interval for ratio Δ**			**Interval for EQ limit**			**Interval for Δ ELSD scale**		
Females	**lower**	**esti**	**upper**	**lower**	**median**	**upper**	**lower**	**median**	**upper**
Kidney	0.950	1.019	1.094	1.099	1.149	1.207	-0.392	0.137	0.614
Spleen	0.891	0.980	1.078	1.240	1.320	1.431	-0.383	-0.070	0.281
Liver	0.916	0.966	1.019	1.190	1.244	1.363	-0.372	-0.155	0.086
AdrenGl	0.895	0.980	1.072	1.328	1.425	1.576	-0.285	-0.058	0.199
Heart	0.904	0.957	1.012	1.131	1.174	1.235	-0.591	-0.270	0.079
Thymus	0.861	0.968	1.088	1.367	1.511	2.060	-0.326	-0.074	0.206
Uterus	0.822	1.020	1.267	1.343	1.545	1.844	-0.481	0.046	0.540
Ovary	0.844	0.938	1.043	1.402	1.553	2.168	-0.356	-0.137	0.096
Brain	0.970	1.031	1.095	1.152	1.201	1.285	-0.169	0.163	0.459

Appendix 10. R-script for the classical statistical analysis

```
# Classical Statistical analysis of a single endpoint for G-TwYST Study C
# Define some settings
alpha <- 0.95            # Confidence level for intervals
friedman.mc <- 20000     # Number of MC samples for p.value of Friedman test
friedman.limit <- 0.25   # Do MC when Asymptotic p.value is smaller than limit

# Define a dataframe to save results of test-statistics
testStats <- as.data.frame(matrix(nrow=9,ncol=2))
colnames(testStats) <- c("statistic", "value")
rownames(testStats) <- c("fAnova", "pAnova", "pKS", "pSW",
    "pFriedmanAs", "pFriedmanMc","pBartlett", "pLeveneMean", "pLeveneMedian")
testStats[,1] <- c("fAnova", "pAnova", "pKS", "pSW",
    "pFriedmanAs", "pFriedmanMc","pBartlett", "pLeveneMean", "pLeveneMedian")

# Define a dataframe to save results of pairwise comparisons
tAnova <- as.data.frame(matrix(nrow=9,ncol=15))
colnames(tAnova) <- c("term","estimate","se","tvalue","pvalue",
        "dfRes","seRes","CIlower","CIupper","Dunnett","SES",
        "SESlower","SESupper", "SESmult", "pwilcoxon")
tAnova[,1] <- c("NK11-/50 vs Con50", "NK50- vs Con50", "NK11+/50 vs Con50",
    "NK50+ vs Con50", "Con50 vs Con33", "NK33- vs Con33", "NK33+ vs Con33",
    "NK50- vs NK33-", "NK50+ vs NK33+")
ncompare <- length(tAnova[,1])

# Define elements for comparisons to be made
orderT <- c(2,3,4,5,1,7,8,3,5)
orderC <- c(1,1,1,1,6,6,6,7,8)

# Get data, define factors and sort (necessary for wilcox.test())
data <- read.csv("RscriptInput.csv")
data$block <- as.factor(data$block)
data$group <- as.factor(data$group)
newlevels <- levels(data$group)[c(2,3,7,4,8,1,5,6)]
newlevels
data$group <- factor(data$group, newlevels)
levgroup <- levels(data$group)
ngroup <- length(levgroup)
data <- data[order(data$block, data$group),]

# Check that orderT and orderC are correct
chklevels <- gsub("'", '', noquote(levels(data$group)))
chkCompare <- paste0(chklevels[orderT], " vs ", chklevels[orderC])
if (!all(tAnova[,1] == chkCompare)) stop("orderT/orderC not correct.")

# Initialize random generator by means of response
maxResponse <- max(abs(data$response), na.rm=TRUE)
power <- 7 - ceiling(log10(maxResponse))
seed  <- round(sum(10^power*abs(data$response), na.rm=TRUE))
set.seed(seed)

# Load libraries
suppressMessages(library(lsmeans))   # For Pairwise comparisons after ANOVA
suppressMessages(library(multcomp))  # For Dunnett multiple comparison after ANOVA
suppressMessages(library(MBESS))     # For SES intervals
suppressMessages(library(NSM3))      # For p.value of non-parametric Friedman test
suppressMessages(library(car))       # For Levene test for homogeneity of variance
library(broom)                       # For the tidy() function
```

```
# ============================================================================
# Randomized block ANOVA; note that lm() takes proper account of any unbalance
# Estimates for group are differences with the control feed Con50
# ============================================================================
lm0 <- lm(response ~ block, data)
lm  <- lm(response ~ block + group, data)
aov <- anova(lm, lm0)
testStats["fAnova","value"] <- aov$F[2]
testStats["pAnova","value"] <- aov$'Pr(>F)'[2]

# Extract results for treatment differences, add Residual Df and Se
# Note that these are all comparisons with Con50
estimates <- tidy(lm)
estimates <- estimates[startsWith(estimates[,1],"group"), ]
estimates
tAnova[c(1,2,3,4),c(2,3,4,5)] <- estimates[c(1,2,3,4),c(2,3,4,5)]
tAnova$dfRes <- df.residual(lm)
tAnova$seRes <- summary(lm)$sigma
tAnova[,c(1,2,3,4,5)]

# Get other comparisons using the pairs() function
# pairs() uses Tukey for pvalues do correct using pt()
means.group <- lsmeans(lm, "group")
pairsOther <- summary(pairs(means.group)[c(5,26,27,17,25),])
pairsOther[,"p.value"] <- 2*pt(-abs(pairsOther[,"t.ratio"]), pairsOther[,"df"])
tAnova[c(5,6,7,8,9),c(2,4)] <-  c(1,-1,-1,1,1) * pairsOther[,c(2,5)]
tAnova[c(5,6,7,8,9),c(3,5)] <-  pairsOther[,c(3,6)]
tAnova[,c(1,2,3,4,5)]

# Add confidence interval for differences
edt <- qt((1+alpha)/2, tAnova$dfRes)
tAnova$CIlower <- tAnova$estimate - edt*tAnova$se
tAnova$CIupper <- tAnova$estimate + edt*tAnova$se

# Add Dunnett p.values. Two comparisons are made
#  4 x NK50 are simultaneously compared to Con50
#  2 x NK33 are simultaneously compared to Con33
contr50 <- rbind(
    "NK11- / Con50" = c(-1,1,0,0,0,0,0,0),
    "NK50- / Con50" = c(-1,0,1,0,0,0,0,0),
    "NK11+ / Con50" = c(-1,0,0,1,0,0,0,0),
    "NK50+ / Con50" = c(-1,0,0,0,1,0,0,0))
dunnett50 <- glht(lm, linfct=mcp(group=contr50))
pval50 <- as.numeric(summary(dunnett50)$test$pvalues)
tAnova$Dunnett[c(1,2,3,4)] <- pval50

contr33 <- rbind(
    "NK33- / Con33" = c(0,0,0,0,0,-1,1,0),
    "NK33+ / Con33" = c(0,0,0,0,0,-1,0,1))
dunnett33 <- glht(lm, linfct=mcp(group=contr33))
pval33 <- as.numeric(summary(dunnett33)$test$pvalues)
tAnova$Dunnett[c(6,7)] <- pval33

# Add SES and its confidence interval
tAnova$SES <- tAnova$estimate/tAnova$seRes
tAnova$SESlower <- NA * tAnova$SES
tAnova$SESupper <- NA * tAnova$SES
tnobs <- aggregate(response ~ group, data=data, FUN=function(x) sum( !is.na(x) ))
```

```
nobs  <- as.vector(tnobs[,2])
nobsT <- nobs[orderT]
nobsC <- nobs[orderC]
mult  <- sqrt( (nobsT + nobsC) / (nobsT*nobsC) )
tAnova$SESmult <- mult
for (ii in 1:ncompare) {
  CInct <- conf.limits.nct(tAnova$tvalue[ii], tAnova$dfRes[ii], conf.level=alpha)
  tAnova$SESlower[ii] <- mult[ii] * CInct$Lower.Limit
  tAnova$SESupper[ii] <- mult[ii] * CInct$Upper.Limit
}

# Do normality checks for lm() residuals
# This is only very approximate because residuals are not independent
res <- residuals(lm)
ks <- ks.test(res, "pnorm", mean(res), sd(res))
testStats["pKS","value"] <- ks$p.value
sw <- shapiro.test(res)
testStats["pSW","value"] <- sw$p.value

# ============================================================================
# Non-parametric Friedman test and pairwise Wilcoxon signed rank tests
# ============================================================================
fried <- friedman.test(data$response, groups=data$group, blocks=data$block)
testStats["pFriedmanAs","value"] <- fried$p.value

if (is.na(fried$p.value)) {
  testStats["pFriedmanAs","value"] <- NA
  testStats["pFriedmanMc","value"] <- NA
} else if (fried$p.value < friedman.limit) {
  blk <- as.numeric(data$block)
  trt <- as.numeric(data$group)
  pFrd <- pFrd(x=data$response, b=blk, trt=trt, method="Monte Carlo",
n.mc=friedman.mc)
  testStats["pFriedmanMc","value"] <- pFrd$p.val
} else {
  testStats["pFriedmanMc","value"] <- NA
}

# Pairwise Wilcoxon signed rank test. Note that ordering of data is (block,group)
# Also note that wilcox.test() can handle NA
for (ii in 1:ncompare) {
  controlData <- data$response[data$group %in% levgroup[orderC[ii]]]
  groupData   <- data$response[data$group %in% levgroup[orderT[ii]]]
  if (FALSE) {
    print(paste(levgroup[orderT[ii]], levgroup[orderC[ii]]))
    print(cbind(groupData, controlData))
    cat("\n")
  }
  wt <- wilcox.test(controlData, groupData, paired=TRUE, exact=TRUE)
  tAnova$pwilcoxon[ii] <- wt$p.value
}

# ============================================================================
# Bartlett test for homogeneity of variance
# ============================================================================
bt <- bartlett.test(response ~ group, data=data)
testStats["pBartlett","value"] <- bt$p.value
lv <- levene.test(response ~ group, data=data, center=mean)
testStats["pLeveneMean","value"] <- lv$'Pr(>F)'[1]
```

```
lv <- leveneTest(response ~ group, data=data, center=median)
testStats["pLeveneMedian","value"] <- lv$'Pr(>F)'[1]

# ============================================================================
# Kolomogorov-Smirnov & Shapiro-Wilks tests for normality
# ============================================================================
normality <- as.data.frame(matrix(nrow=ngroup,ncol=3))
colnames(normality) <- c("term", "pKS", "pSW")
normality$term <- levels(data$group)
normality[, seq(2,ncol(normality))] <- NA
for (ii in 1:ngroup) {
  sublevels <- levels(data$group)[ii]
  groupData <- data$response[data$group %in% sublevels]
  groupData <- groupData[!is.na(groupData)]
  if (var(groupData) > 0) {
    ks <- ks.test(groupData, "pnorm", mean(groupData), sd(groupData))
    normality$pKS[ii] <- ks$p.value
    sw <- shapiro.test(groupData)
    normality$pSW[ii] <- sw$p.value
  }
}

# ============================================================================
# Output results for further processing in GenStat
# ============================================================================
for (ii in 1:1) {
  cat("\n")
  print(testStats);  cat("\n\n")
  print(tAnova);     cat("\n\n")
  print(normality);  cat("\n\n")
}
write.csv(testStats, file="RscriptTest.csv",      row.names=FALSE, quote=FALSE)
write.csv(tAnova,    file="RscriptAnova.csv",     row.names=FALSE, quote=FALSE)
write.csv(normality, file="RscriptNormality.csv", row.names=FALSE, quote=FALSE)
cat("\n-- Program Completed --\n\n")
```

Appendix 11. Example input file for the R-script in Appendix 10.

The data given below are for BodyWeight, i.e. the last observed weight, for males

```
1,'NK50-',6.06955880829403
2,'NK50-',6.03456630446553
3,'NK50-',6.11377942740327
4,'NK50-',6.07254374452071
5,'NK50-',6.09588566625866
6,'NK50-',6.11120259644028
7,'NK50-',6.12616800549161
8,'NK50-',6.00564128298478
1,'NK50+',6.19810908154017
2,'NK50+',6.17373338736432
3,'NK50+',6.14691955418536
4,'NK50+',6.12817588888955
5,'NK50+',6.12780702539034
6,'NK50+',6.03852921354745
7,'NK50+',6.10057083787821
8,'NK50+',5.97453823371051
1,'Con50',6.20711154370251
2,'Con50',6.10266393687826
3,'Con50',6.20452038988336
4,'Con50',6.09056227690389
5,'Con50',6.14509649416908
6,'Con50',6.10469852677866
7,'Con50',6.17904635030813
8,'Con50',6.03377780891354
1,'NK11+/50',6.1480483635697
2,'NK11+/50',6.19768254953415
3,'NK11+/50',6.06781062581531
4,'NK11+/50',6.08460340338123
5,'NK11+/50',6.07743168775361
6,'NK11+/50',6.21242574266723
7,'NK11+/50',6.15004539550876
8,'NK11+/50',6.08022217681002
1,'NK11-/50',6.21085360542113
2,'NK11-/50',6.10980595235316
3,'NK11-/50',6.09915884648231
4,'NK11-/50',6.06057954329039
5,'NK11-/50',6.14964915712504
6,'NK11-/50',6.04989945372805
7,'NK11-/50',6.02363115065465
8,'NK11-/50',6.01513104802468
1,'NK33-',6.11404320783148
2,'NK33-',6.13489219663302
3,'NK33-',6.16353613055445
4,'NK33-',6.09207494928387
5,'NK33-',6.1381680986804
6,'NK33-',5.94906510551882
7,'NK33-',6.12731676146961
8,'NK33-',6.03165136096856
```

```
1,'Con33',6.15747994199197
2,'Con33',6.09042041692405
3,'Con33',6.1312088284907
4,'Con33',6.0469683455584
5,'Con33',6.03548035024525
6,'Con33',6.001277310636
7,'Con33',6.16639776073402
8,'Con33',6.06189198152121
1,'NK33+',6.07261468746842
2,'NK33+',6.18265878666433
3,'NK33+',6.06784807023896
4,'NK33+',6.01963671019378
5,'NK33+',6.17604804576911
6,'NK33+',6.08434613591647
7,'NK33+',6.09742558480717
8,'NK33+',6.05263226486785
```

Appendix 12. P-values for difference tests for comparisons between feeds

Difference tests are based on log transformed cage means. P-values are given for Dunnett tests (Dunnet), for t-tests and for Wilcoxon signed rank tests (Wilcox). P-values smaller than 0.01/0.05 have a gold/yellow background. Note that there were two sets of Dunnett test performed: (1) the four GM 50% feeds versus the Con50 feed, and (2) the two GM 33% feeds versus the Con33 feed. The Wilcoxon non-parametric test is not performed for variables in the Immunology and CellPhenotype group because there are not enough (paired) observations for such a test.

Weights	**NK11-/50 vs Con50**			**NK50- vs Con50**			**NK11+/50 vs Con50**			**NK50+ vs Con50**		
Males	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox
BodyWeight	0.272	0.095	0.109	0.118	0.037	0.016	0.998	0.811	0.844	0.795	0.386	0.313
growthRate	0.877	0.469	0.742	0.861	0.450	0.250	0.999	0.838	0.641	0.633	0.270	0.250
FeedMean	0.257	0.089	0.109	0.136	0.044	0.039	0.746	0.347	0.547	0.986	0.700	0.547
Haematology	**NK11-/50 vs Con50**			**NK50- vs Con50**			**NK11+/50 vs Con50**			**NK50+ vs Con50**		
Males	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox
WBC	1.000	0.910	0.844	0.780	0.373	0.383	0.824	0.412	0.383	0.854	0.442	0.461
RBC	0.982	0.680	0.844	0.725	0.331	0.250	0.823	0.411	0.383	0.711	0.321	0.461
HGB	0.069	0.021	0.078	1.000	0.991	1.000	0.032	0.009	0.008	0.709	0.320	0.383
HCT	0.713	0.323	0.547	0.857	0.446	0.641	0.142	0.046	0.016	1.000	0.873	1.000
MCV	0.893	0.489	0.742	0.991	0.732	0.383	0.414	0.156	0.461	0.371	0.137	0.461
MCH	0.162	0.053	0.109	0.716	0.325	0.313	0.181	0.060	0.108	0.178	0.059	0.108
MCHC	0.056	0.017	0.055	0.630	0.269	0.383	0.464	0.180	0.078	0.436	0.166	0.148
PLT	0.422	0.160	0.148	0.064	0.019	0.023	0.668	0.293	0.461	0.113	0.036	0.039
LYMR	1.000	0.957	0.844	0.453	0.174	0.078	0.749	0.349	0.461	0.678	0.299	0.313
LYMA	1.000	0.906	1.000	0.529	0.212	0.250	0.909	0.511	0.547	0.688	0.305	0.383
ClinChem	**NK11-/50 vs Con50**			**NK50- vs Con50**			**NK11+/50 vs Con50**			**NK50+ vs Con50**		
Males	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox
ALP	0.445	0.171	0.383	0.833	0.421	0.547	0.580	0.240	0.109	0.996	0.778	0.461
ALT	0.191	0.064	0.109	1.000	0.988	0.945	0.550	0.223	0.641	0.745	0.346	0.148
AST	0.321	0.115	0.313	0.995	0.775	0.945	0.750	0.349	0.195	0.927	0.539	1.000
BIL	0.129	0.041	0.078	0.925	0.537	0.641	0.686	0.304	0.383	0.367	0.135	0.055
ALB	0.136	0.044	0.641	0.704	0.317	0.078	0.332	0.120	0.313	0.648	0.280	0.109
TP	0.260	0.090	0.461	0.303	0.108	0.008	0.931	0.546	0.250	0.177	0.058	0.023
Glu	0.947	0.577	0.844	0.598	0.250	0.195	0.970	0.638	0.742	0.209	0.070	0.250

CHOL	0.996	0.780	1.000	0.719	0.327	0.250	0.553	0.225	0.250	0.619	0.263	0.195
TAG	1.000	0.967	0.945	0.918	0.524	0.742	0.950	0.583	0.547	0.879	0.471	0.547
Crea	0.970	0.636	0.383	0.890	0.485	1.000	0.880	0.473	0.844	1.000	0.949	0.641
Urea	0.996	0.780	0.844	0.756	0.354	0.148	0.149	0.048	0.023	0.991	0.731	0.383
cHGB	0.047	0.014	0.109	0.748	0.348	0.461	0.392	0.146	0.250	0.052	0.015	0.008
Ca	0.712	0.322	0.313	0.825	0.413	0.461	1.000	0.906	1.000	1.000	0.898	0.844
Cl	0.842	0.430	0.547	0.776	0.370	0.461	0.999	0.832	0.933	0.352	0.128	0.076
K	0.128	0.041	0.250	0.499	0.197	0.272	0.987	0.706	0.447	0.882	0.475	0.148
Na	0.959	0.606	0.844	0.508	0.201	0.035	0.958	0.603	0.742	0.955	0.595	0.547
P	0.807	0.397	0.195	1.000	0.955	1.000	1.000	0.985	0.844	0.990	0.728	0.641
Urine	**NK11-/50 vs Con50**			**NK50- vs Con50**			**NK11+/50 vs Con50**			**NK50+ vs Con50**		
Males	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox
uVol	1.000	0.983	1.000	0.826	0.414	0.461	0.781	0.374	0.383	0.981	0.679	0.641
uVolW	0.995	0.776	0.844	0.520	0.207	0.313	0.713	0.322	0.195	0.944	0.570	0.945
uLeu	0.905	0.506	0.410	0.285	0.100	0.134	0.709	0.320	0.281	0.477	0.186	0.387
uOsmoll	0.908	0.510	0.547	0.549	0.223	0.461	0.892	0.487	0.383	0.933	0.551	0.383
uKeton	0.758	0.356	0.293	0.986	0.705	0.528	0.314	0.112	0.201	0.997	0.806	1.000
upH	0.999	0.855	1.000	1.000	1.000	1.000	0.643	0.277	0.233	0.516	0.206	0.202
Organs	**NK11-/50 vs Con50**			**NK50- vs Con50**			**NK11+/50 vs Con50**			**NK50+ vs Con50**		
Males	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox
Kidney	0.595	0.249	0.313	0.895	0.491	0.742	0.387	0.144	0.250	0.633	0.270	0.055
Spleen	0.998	0.827	1.000	0.837	0.425	0.383	0.964	0.619	0.250	0.872	0.462	0.547
Liver	0.530	0.213	0.383	0.345	0.126	0.461	0.316	0.113	0.313	0.959	0.606	0.383
AdrenGl	0.989	0.721	0.641	1.000	0.951	0.742	0.999	0.843	0.844	1.000	0.913	0.945
Heart	0.995	0.770	0.461	0.542	0.219	0.109	0.794	0.385	0.547	0.840	0.428	0.641
Thymus	0.631	0.270	0.641	0.993	0.748	0.945	0.899	0.497	0.461	0.938	0.559	0.641
Testis	0.984	0.691	0.844	0.065	0.020	0.008	0.283	0.100	0.039	0.466	0.181	0.148
Epididymis	1.000	0.961	0.742	0.258	0.089	0.195	0.343	0.124	0.250	0.637	0.273	0.383
Brain	0.743	0.344	0.250	0.108	0.034	0.055	0.860	0.450	0.461	0.973	0.646	0.945
Immunology	**NK11-/50 vs Con50**			**NK50- vs Con50**			**NK11+/50 vs Con50**			**NK50+ vs Con50**		
Males	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox
Monocytes	0.911	0.512		0.912	0.514		0.945	0.572		0.944	0.570	
Granulocytes	0.559	0.227		0.989	0.717		0.985	0.697		0.685	0.302	
RespirBurst	1.000	0.894		0.940	0.563		0.996	0.783		0.907	0.506	

Con	0.910	0.511		0.961	0.610		0.374	0.137		1.000	0.997	
PHA	0.988	0.710		0.997	0.805		0.690	0.305		0.999	0.854	
PWM	0.973	0.646		0.925	0.535		0.767	0.361		0.946	0.575	
Med3d	0.998	0.822		0.994	0.761		0.951	0.585		0.927	0.538	
IprConA	0.644	0.275		0.941	0.563		0.062	0.019		0.504	0.198	
IprPHA	0.997	0.793		1.000	0.926		0.803	0.391		0.871	0.460	
IprPWM	0.997	0.793		0.990	0.723		0.992	0.738		0.990	0.729	
G4c1	0.999	0.839		0.954	0.593		0.802	0.391		0.999	0.854	
G4c2	1.000	0.914		1.000	0.877		0.931	0.545		0.999	0.850	
G4c3	0.997	0.799		0.994	0.763		0.630	0.267		0.887	0.480	
NG2c1	0.979	0.669		0.962	0.612		0.633	0.269		0.887	0.479	
NG2c2	0.999	0.839		0.999	0.861		1.000	0.904		1.000	0.967	
NG2c3	0.999	0.860		0.995	0.773		0.748	0.346		0.905	0.503	
A6c1	0.951	0.584		1.000	0.981		0.673	0.294		0.978	0.664	
A6c2	1.000	0.990		0.998	0.818		0.987	0.707		0.934	0.550	
A6c3	0.984	0.690		0.987	0.705		0.803	0.391		0.814	0.401	
Med6d	1.000	0.927		0.997	0.795		0.932	0.548		0.980	0.672	
IprG4c1	1.000	0.883		0.317	0.113		1.000	0.921		0.891	0.484	
IprG4c2	1.000	0.988		0.449	0.171		0.998	0.814		0.780	0.372	
IprG4c3	0.995	0.769		1.000	0.974		0.848	0.435		0.985	0.695	
IprNG2c1	0.897	0.493		0.202	0.068		0.875	0.464		0.990	0.725	
IprNG2c2	0.783	0.374		0.992	0.744		0.326	0.117		0.538	0.215	
IprNG2c3	0.999	0.859		1.000	0.961		0.930	0.543		0.977	0.658	
IprA6c1	0.645	0.276		0.820	0.406		0.813	0.400		0.999	0.861	
IprA6c2	0.995	0.770		1.000	0.886		0.872	0.461		0.990	0.729	
IprA6c3	0.886	0.479		0.999	0.864		0.990	0.725		0.822	0.408	
CellPhenotype	**NK11-/50 vs Con50**			**NK50- vs Con50**			**NK11+/50 vs Con50**			**NK50+ vs Con50**		
Males	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox
sp3	0.993	0.751		0.995	0.776		1.000	0.913		0.938	0.559	
sp3-4	0.987	0.704		0.990	0.727		1.000	0.975		0.889	0.482	
sp3-8	0.959	0.604		0.980	0.673		0.975	0.652		0.301	0.106	
sp3-45	0.984	0.688		0.993	0.754		0.946	0.575		0.976	0.656	
sp3-161	0.695	0.309		0.918	0.523		0.998	0.815		0.757	0.354	
ln3	0.653	0.281		0.985	0.695		0.974	0.651		1.000	0.971	

ln3-4	0.946	0.574		0.803	0.391		0.997	0.797		0.999	0.868	
ln3-8	0.916	0.521		0.996	0.778		0.965	0.621		0.925	0.535	
ln3-45	0.997	0.790		1.000	0.897		1.000	0.955		1.000	0.953	
ty3	0.623	0.263		0.982	0.683		0.910	0.511		0.774	0.367	
ty3-4	0.452	0.173		0.992	0.740		0.967	0.626		0.619	0.260	
ty3-8	0.719	0.325		0.862	0.449		1.000	0.952		0.582	0.240	
bm3	0.831	0.418		0.994	0.759		0.967	0.625		0.994	0.757	
bm3-45	0.820	0.406		0.650	0.279		0.080	0.024		0.208	0.070	

Weights	**Con50 vs Con33**			**NK50- vs NK33-**			**NK50+ vs NK33+**			**NK33- vs Con33**			**NK33+ vs Con33**		
Males	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx
BodyWeight		0.072	0.039		0.556	0.195		0.512	0.641	0.940	0.772	0.742	0.935	0.763	0.844
growthRate		0.861	0.945		0.582	0.250		0.106	0.055	0.243	0.142	0.109	0.912	0.723	0.844
FeedMean		0.071	0.055		0.759	0.742		0.365	0.383	0.816	0.597	0.641	0.808	0.588	0.844
Haematology	**Con50 vs Con33**			**NK50- vs NK33-**			**NK50+ vs NK33+**			**NK33- vs Con33**			**NK33+ vs Con33**		
Males	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx
WBC		0.668	0.742		0.700	0.641		0.642	0.383	0.995	0.936	0.945	0.989	0.901	0.945
RBC		0.982	0.844		0.292	0.461		0.008	0.016	0.997	0.952	0.945	0.151	0.086	0.039
HGB		0.188	0.250		0.151	0.250		0.542	0.641	0.987	0.894	0.945	0.542	0.349	0.547
HCT		0.835	0.742		0.138	0.195		0.815	0.945	0.818	0.599	0.461	0.975	0.852	1.000
MCV		0.832	0.844		0.652	0.195		0.002	0.016	0.784	0.561	0.742	0.083	0.046	0.078
MCH		0.180	0.250		0.677	0.933		0.002	0.016	0.998	0.957	0.945	0.021	0.011	0.055
MCHC		0.073	0.195		0.856	1.000		0.161	0.383	0.818	0.599	0.742	0.125	0.070	0.250
PLT		0.478	0.313		0.098	0.078		0.777	0.742	1.000	0.986	0.641	0.158	0.090	0.313
LYMR		0.602	0.578		0.307	0.461		0.033	0.109	0.138	0.079	0.297	0.189	0.111	0.078
LYMA		0.998	0.945		0.864	0.844		0.338	0.195	0.447	0.279	0.195	0.996	0.943	0.742
ClinChem	**Con50 vs Con33**			**NK50- vs NK33-**			**NK50+ vs NK33+**			**NK33- vs Con33**			**NK33+ vs Con33**		
Males	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx
ALP		0.532	0.195		0.450	0.148		0.834	0.742	0.721	0.499	0.547	0.987	0.893	0.742
ALT		0.922	0.641		0.847	0.844		0.548	0.461	0.946	0.783	1.000	0.956	0.804	0.641

AST		0.853	1.000		0.514	0.461		0.633	0.641	0.801	0.580	0.461	0.998	0.963	1.000
BIL		0.885	0.547		0.728	0.641		0.347	0.148	0.988	0.900	0.844	0.878	0.673	0.195
ALB		0.272	0.250		0.899	0.742		0.925	0.945	0.963	0.822	0.844	0.991	0.911	0.641
TP		0.011	0.109		0.963	0.945		0.983	0.945	0.479	0.302	0.313	0.723	0.502	0.742
Glu		0.552	0.641		0.531	0.742		0.317	0.313	0.425	0.263	0.313	0.265	0.157	0.195
CHOL		0.868	0.383		0.153	0.148		0.176	0.641	0.757	0.534	0.461	0.887	0.686	0.844
TAG		0.528	0.844		0.677	0.547		0.529	0.742	0.168	0.096	0.250	0.689	0.470	0.641
Crea		0.186	0.109		0.899	0.945		0.831	0.742	0.663	0.447	0.547	0.193	0.111	0.148
Urea		0.089	0.148		0.713	0.844		0.104	0.195	0.048	0.026	0.078	0.879	0.674	0.844
cHGB		0.111	0.055		0.721	0.742		0.230	0.250	0.483	0.305	0.383	0.925	0.744	0.547
Ca		0.858	0.844		0.692	0.547		0.884	0.641	0.956	0.806	0.641	0.993	0.924	1.000
Cl		0.341	0.250		0.181	0.383		0.058	0.035	0.830	0.613	0.547	0.305	0.182	0.023
K		0.465	0.250		0.384	0.742		0.471	0.313	0.934	0.761	1.000	0.679	0.461	0.383
Na		0.556	0.742		0.107	0.109		0.052	0.250	0.548	0.353	0.195	0.598	0.393	0.675
P		0.173	0.383		0.063	0.109		0.150	0.039	0.858	0.647	0.641	0.874	0.668	0.844
Urine	**Con50 vs Con33**			**NK50- vs NK33-**			**NK50+ vs NK33+**			**NK33- vs Con33**			**NK33+ vs Con33**		
Males	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx
uVol		0.346	0.547		0.275	0.383		0.227	0.383	0.728	0.506	0.461	0.985	0.886	1.000
uVolW		0.536	0.844		0.206	0.313		0.275	0.383	0.762	0.539	0.641	0.994	0.929	1.000
uLeu		1.000	0.668		0.320	0.203		0.100	0.306	0.728	0.506	0.710	0.922	0.739	0.590
uOsmoll		0.953	0.742		0.323	0.461		0.169	0.547	0.939	0.769	0.844	0.684	0.465	0.461
uKeton		0.244	0.361		0.292	0.167		0.806	0.865	0.122	0.068	0.171	0.718	0.497	0.784
upH		0.364	0.395		0.585	0.588		0.003	0.034	0.907	0.716	0.776	0.562	0.364	0.621
Organs	**Con50 vs Con33**			**NK50- vs NK33-**			**NK50+ vs NK33+**			**NK33- vs Con33**			**NK33+ vs Con33**		
Males	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx
Kidney		0.645	0.547		0.370	0.742		0.213	0.461	0.725	0.503	0.844	0.110	0.062	0.195
Spleen		0.682	0.383		0.629	0.641		0.798	1.000	0.994	0.926	0.844	0.996	0.943	0.844
Liver		0.082	0.313		0.248	0.250		0.949	0.945	0.289	0.172	0.383	0.322	0.193	0.383
AdrenGl		0.858	1.000		0.668	0.547		0.451	0.547	0.974	0.850	0.844	0.853	0.640	0.641
Heart		0.371	0.078		0.023	0.039		0.467	0.461	0.090	0.050	0.039	0.755	0.532	0.742
Thymus		0.911	0.547		0.044	0.109		0.692	0.945	0.189	0.109	0.148	0.996	0.938	0.945
Testis		0.092	0.195		0.151	0.313		0.376	0.547	0.663	0.447	0.547	0.357	0.216	0.313
Epididymis		0.219	0.313		0.104	0.250		0.881	0.547	0.404	0.248	0.383	0.942	0.775	0.641
Brain		0.177	0.016		0.335	0.461		0.398	0.547	0.981	0.873	0.641	0.998	0.955	0.945

Immunology	Con50 vs Con33			NK50- vs NK33-			NK50+ vs NK33+			NK33- vs Con33			NK33+ vs Con33		
Males	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx
Monocytes		0.511			0.953			0.296		0.338	0.204		0.043	0.023	
Granulocytes		0.660			0.907			0.227		0.972	0.845		0.765	0.542	
RespirBurst		0.289			0.472			0.802		0.960	0.813		0.993	0.920	
Con		0.092			0.172			0.337		0.968	0.835		0.697	0.477	
PHA		0.352			0.163			0.352		0.682	0.463		0.982	0.876	
PWM		0.689			0.441			0.139		0.533	0.342		0.791	0.570	
Med3d		0.376			0.354			0.300		0.910	0.719		0.859	0.648	
IprConA		0.031			0.184			0.911		0.952	0.797		0.677	0.459	
IprPHA		0.918			0.390			0.870		0.729	0.507		0.825	0.607	
IprPWM		0.265			0.522			0.799		0.666	0.449		0.150	0.085	
G4c1		0.290			0.447			0.941		0.959	0.812		0.640	0.427	
G4c2		0.352			0.147			0.840		0.700	0.480		0.538	0.346	
G4c3		0.190			0.084			0.772		0.970	0.840		0.583	0.380	
NG2c1		0.275			0.223			0.928		0.747	0.524		0.865	0.657	
NG2c2		0.558			0.194			0.959		0.787	0.565		0.773	0.551	
NG2c3		0.208			0.048			0.882		0.816	0.596		0.693	0.474	
A6c1		0.153			0.092			0.906		0.916	0.730		0.434	0.269	
A6c2		0.298			0.181			0.663		0.987	0.896		0.591	0.387	
A6c3		0.133			0.081			0.766		0.999	0.970		0.540	0.347	
Med6d		0.302			0.133			0.848		0.944	0.780		0.643	0.430	
IprG4c1		0.550			0.024			0.545		0.954	0.800		0.841	0.626	
IprG4c2		0.457			0.432			0.964		0.376	0.229		0.982	0.874	
IprG4c3		0.905			0.836			0.909		0.941	0.775		0.977	0.858	
IprNG2c1		0.577			0.099			0.724		0.766	0.543		0.329	0.198	
IprNG2c2		0.106			0.280			0.637		0.646	0.432		0.629	0.418	
IprNG2c3		0.908			0.555			0.838		0.824	0.605		0.792	0.570	
IprA6c1		0.601			0.800			0.781		0.999	0.977		0.878	0.674	
IprA6c2		0.809			0.409			0.561		0.860	0.649		1.000	0.998	
IprA6c3		0.478			0.941			0.864		0.568	0.369		1.000	0.993	
CellPhenotype	**Con50 vs Con33**			**NK50- vs NK33-**			**NK50+ vs NK33+**			**NK33- vs Con33**			**NK33+ vs Con33**		
Males	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx
sp3		0.893			0.910			0.185		1.000	0.980		0.561	0.363	

sp3-4		0.525			0.784			0.160		0.804	0.584		0.293	0.174	
sp3-8		0.220			0.570			0.317		0.965	0.825		0.810	0.590	
sp3-45		0.224			0.152			0.859		1.000	0.985		0.542	0.348	
sp3-161		0.372			0.502			0.362		0.886	0.684		0.594	0.389	
ln3		0.798			0.356			0.913		0.644	0.431		0.885	0.683	
ln3-4		0.534			0.113			0.890		0.292	0.174		0.777	0.554	
ln3-8		0.402			0.156			0.877		0.582	0.380		0.916	0.730	
ln3-45		0.714			0.650			0.965		1.000	0.985		0.848	0.635	
ty3		0.101			0.936			0.999		0.338	0.204		0.696	0.476	
ty3-4		0.094			0.910			0.694		0.273	0.161		0.556	0.359	
ty3-8		0.087			0.731			0.402		0.761	0.538		0.295	0.175	
bm3		0.008			0.751			0.039		0.085	0.047		0.565	0.366	
bm3-45		0.372			0.716			0.025		0.822	0.603		0.306	0.183	

Weights	**NK11-/50 vs Con50**			**NK50- vs Con50**			**NK11+/50 vs Con50**			**NK50+ vs Con50**		
Females	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox
BodyWeight	0.989	0.720	0.844	0.986	0.703	0.945	0.148	0.048	0.148	1.000	0.983	1.000
growthRate	0.238	0.082	0.148	0.137	0.044	0.195	0.978	0.665	0.742	0.852	0.441	0.641
FeedMean	0.911	0.514	0.641	0.938	0.559	0.641	0.002	0.001	0.023	0.563	0.231	0.148
Haematology	**NK11-/50 vs Con50**			**NK50- vs Con50**			**NK11+/50 vs Con50**			**NK50+ vs Con50**		
Females	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox
WBC	0.779	0.373	0.250	1.000	0.939	0.742	0.896	0.493	0.547	0.997	0.794	0.742
RBC	0.959	0.605	0.844	0.377	0.140	0.250	0.934	0.552	0.547	0.898	0.495	0.547
HGB	1.000	0.968	1.000	0.957	0.600	0.844	0.444	0.170	0.109	1.000	0.954	1.000
HCT	0.986	0.702	0.641	0.838	0.426	0.742	0.727	0.333	0.461	1.000	0.923	0.945
MCV	0.388	0.144	0.109	0.698	0.312	0.461	0.895	0.491	0.547	0.565	0.232	0.383
MCH	0.921	0.530	0.547	0.600	0.251	0.461	0.575	0.237	0.250	0.726	0.332	0.195
MCHC	0.911	0.515	0.844	0.980	0.674	0.742	0.753	0.352	0.547	1.000	0.907	0.844
PLT	0.961	0.610	0.250	0.376	0.139	0.250	0.196	0.066	0.109	0.746	0.346	0.461
LYMR	0.932	0.548	0.742	1.000	0.915	0.641	0.756	0.354	0.461	1.000	0.932	0.844
LYMA	0.897	0.494	0.547	1.000	0.897	0.945	0.979	0.668	0.742	0.998	0.821	0.844

ClinChem	NK11-/50 vs Con50			NK50- vs Con50			NK11+/50 vs Con50			NK50+ vs Con50		
Females	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox
ALP	0.728	0.333	0.461	0.999	0.871	0.461	0.969	0.634	0.195	0.965	0.621	0.547
ALT	1.000	0.896	0.945	0.998	0.818	0.844	1.000	0.978	0.844	0.998	0.820	0.461
AST	0.963	0.615	0.547	0.780	0.373	0.313	0.998	0.824	0.742	0.997	0.797	0.844
BIL	0.443	0.170	0.109	0.964	0.618	0.313	0.389	0.145	0.844	0.818	0.406	0.547
ALB	0.416	0.157	0.250	0.922	0.531	0.945	0.739	0.341	0.313	0.392	0.146	0.109
TP	0.980	0.675	0.461	0.788	0.380	0.547	0.956	0.597	0.844	0.953	0.591	0.641
Glu	0.768	0.363	0.195	0.957	0.601	0.547	1.000	0.970	0.641	0.997	0.803	1.000
CHOL	0.947	0.577	0.641	0.998	0.811	0.641	0.879	0.471	0.461	0.117	0.037	0.078
TAG	0.974	0.649	0.547	0.826	0.414	0.055	0.880	0.472	0.554	0.129	0.041	0.109
Crea	0.806	0.396	0.313	0.914	0.518	0.383	0.936	0.555	0.461	0.399	0.149	0.195
Urea	0.313	0.112	0.383	0.996	0.786	0.844	0.413	0.156	0.313	0.993	0.749	0.945
cHGB	0.980	0.674	0.844	0.999	0.855	0.844	0.969	0.633	0.742	0.974	0.650	0.641
Ca	0.396	0.148	0.195	0.993	0.755	0.641	0.355	0.130	0.039	0.112	0.035	0.008
Cl	0.782	0.375	0.674	0.986	0.700	0.742	0.735	0.339	0.547	0.734	0.338	0.250
K	0.962	0.614	0.742	0.957	0.599	0.554	0.998	0.822	0.945	0.991	0.733	0.547
Na	0.776	0.370	0.313	0.933	0.550	0.673	0.939	0.562	0.742	0.785	0.377	0.547
P	1.000	0.984	0.945	0.995	0.771	0.945	0.997	0.806	0.844	0.956	0.599	0.313
Urine	**NK11-/50 vs Con50**			**NK50- vs Con50**			**NK11+/50 vs Con50**			**NK50+ vs Con50**		
Females	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox
uVol	0.997	0.797	0.844	0.562	0.230	0.461	0.444	0.170	0.078	0.999	0.851	0.844
uVolW	0.999	0.839	1.000	0.621	0.263	0.547	0.293	0.103	0.055	1.000	0.883	0.945
uLeu	0.890	0.485	1.000	0.434	0.165	0.371	0.990	0.726	1.000	0.354	0.129	0.371
uOsmoll	0.978	0.665	0.844	0.574	0.236	0.383	0.268	0.093	0.039	1.000	0.922	0.547
uKeton	0.832	0.420	0.586	0.990	0.725	1.000	0.974	0.649	1.000	0.990	0.725	0.850
upH	1.000	1.000	1.000	1.000	1.000	1.000	0.895	0.492	0.374	0.764	0.361	0.279
Organs	**NK11-/50 vs Con50**			**NK50- vs Con50**			**NK11+/50 vs Con50**			**NK50+ vs Con50**		
Females	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox
Kidney	0.994	0.758	0.945	0.741	0.343	0.313	0.798	0.389	0.547	0.104	0.032	0.055
Spleen	0.983	0.688	0.844	0.288	0.102	0.195	0.873	0.464	0.383	0.697	0.312	0.313
Liver	1.000	0.969	0.742	0.767	0.363	0.461	0.779	0.372	0.313	0.975	0.653	0.547
AdrenGl	0.954	0.593	0.742	0.661	0.288	0.195	0.825	0.413	0.313	0.996	0.777	0.742
Heart	0.947	0.577	0.547	0.527	0.211	0.250	0.658	0.286	0.250	0.172	0.057	0.109

Thymus	1.000	0.973	0.945	0.989	0.718	1.000	0.064	0.019	0.055	0.484	0.189	0.039
Uterus	0.548	0.223	0.742	0.929	0.543	0.383	0.998	0.821	0.844	1.000	0.879	0.641
Ovary	0.998	0.830	1.000	1.000	0.929	0.945	1.000	0.938	0.844	0.042	0.012	0.016
Brain	1.000	0.891	0.461	1.000	0.900	0.844	0.536	0.216	0.313	0.976	0.657	0.547
Immunology	**NK11-/50 vs Con50**			**NK50- vs Con50**			**NK11+/50 vs Con50**			**NK50+ vs Con50**		
Females	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox
Monocytes	0.999	0.851		0.945	0.569		0.990	0.722		0.264	0.090	
Granulocytes	0.454	0.171		0.062	0.019		0.280	0.096		0.045	0.013	
RespirBurst	0.636	0.268		0.240	0.081		0.542	0.215		0.179	0.058	
Con	0.902	0.496		0.985	0.693		0.694	0.305		0.964	0.615	
PHA	0.800	0.385		0.308	0.108		0.249	0.084		0.998	0.829	
PWM	0.998	0.813		0.987	0.707		0.601	0.247		0.868	0.453	
Med3d	0.646	0.274		0.803	0.388		0.642	0.272		0.289	0.100	
IprConA	1.000	0.905		0.992	0.743		0.975	0.648		0.670	0.289	
IprPHA	0.181	0.059		0.540	0.214		0.572	0.231		0.314	0.110	
IprPWM	0.116	0.036		0.872	0.457		0.998	0.822		0.444	0.167	
G4c1	0.982	0.677		0.999	0.865		0.047	0.014		0.999	0.833	
G4c2	0.992	0.736		0.998	0.818		0.263	0.090		1.000	0.949	
G4c3	0.998	0.827		0.996	0.775		0.608	0.251		0.993	0.752	
NG2c1	1.000	0.908		1.000	0.931		0.103	0.032		1.000	0.895	
NG2c2	1.000	0.998		0.994	0.759		0.414	0.153		1.000	0.992	
NG2c3	0.999	0.842		1.000	0.976		0.700	0.309		0.998	0.828	
A6c1	0.966	0.619		0.968	0.625		0.135	0.043		0.794	0.380	
A6c2	0.419	0.155		0.692	0.303		0.225	0.075		0.987	0.707	
A6c3	1.000	0.986		1.000	0.924		0.575	0.233		0.955	0.591	
Med6d	0.998	0.828		1.000	0.908		0.792	0.378		0.709	0.315	
IprG4c1	0.999	0.832		0.990	0.727		0.189	0.062		0.356	0.127	
IprG4c2	1.000	0.883		0.969	0.631		0.651	0.277		0.357	0.128	
IprG4c3	0.766	0.357		0.821	0.404		0.984	0.690		0.330	0.117	
IprNG2c1	0.967	0.623		0.995	0.767		0.280	0.097		0.264	0.090	
IprNG2c2	0.988	0.712		0.991	0.733		0.693	0.304		0.253	0.086	
IprNG2c3	0.823	0.406		0.999	0.860		0.999	0.847		0.306	0.107	
IprA6c1	0.415	0.154		0.577	0.234		0.164	0.053		0.925	0.532	
IprA6c2	0.006	0.002		0.077	0.023		0.228	0.076		0.020	0.006	

IprA6c3	0.990	0.723		0.988	0.712		0.960	0.603		0.809	0.393	
CellPhenotype	**NK11-/50 vs Con50**			**NK50- vs Con50**			**NK11+/50 vs Con50**			**NK50+ vs Con50**		
Females	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox	Dunnet	t-test	Wilcox
sp3	0.987	0.707		0.805	0.390		0.992	0.739		0.955	0.592	
sp3-4	0.986	0.700		1.000	0.935		0.766	0.357		0.995	0.767	
sp3-8	0.818	0.401		0.973	0.642		0.800	0.385		0.976	0.655	
sp3-45	0.218	0.073		0.252	0.085		0.729	0.329		0.624	0.261	
sp3-161	0.886	0.474		0.108	0.034		0.410	0.151		0.815	0.398	
ln3	0.996	0.780		0.999	0.843		0.698	0.307		0.470	0.179	
ln3-4	1.000	0.902		1.000	0.983		0.552	0.220		0.078	0.024	
ln3-8	0.923	0.527		0.999	0.843		0.999	0.850		0.924	0.530	
ln3-45	0.922	0.527		0.805	0.390		0.791	0.378		0.104	0.032	
ty3	0.504	0.196		0.992	0.738		0.906	0.502		0.876	0.462	
ty3-4	0.224	0.075		1.000	0.891		0.643	0.272		0.919	0.522	
ty3-8	0.423	0.157		0.941	0.560		0.395	0.144		0.997	0.799	
bm3	0.958	0.598		0.996	0.782		0.991	0.732		0.858	0.442	
bm3-45	0.909	0.506		0.999	0.846		1.000	0.938		0.484	0.186	

Weights	**Con50 vs Con33**			**NK50- vs NK33-**			**NK50+ vs NK33+**			**NK33- vs Con33**			**NK33+ vs Con33**		
Females	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx
BodyWeight		0.203	0.313		0.436	0.461		0.603	0.742	0.990	0.906	0.945	0.649	0.435	0.461
growthRate		0.121	0.148		0.147	0.195		0.476	0.641	0.516	0.329	0.383	0.995	0.936	0.945
FeedMean		0.163	0.148		0.253	0.250		0.617	0.461	0.924	0.743	0.641	0.705	0.485	0.641
Haematology	**Con50 vs Con33**			**NK50- vs NK33-**			**NK50+ vs NK33+**			**NK33- vs Con33**			**NK33+ vs Con33**		
Females	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx
WBC		0.880	0.547		0.773	0.945		0.962	0.844	0.967	0.830	0.945	0.858	0.646	0.547
RBC		0.977	0.945		0.418	0.547		0.164	0.078	0.737	0.515	0.641	0.079	0.044	0.039
HGB		0.696	0.742		0.199	0.313		0.716	0.148	0.901	0.706	0.945	0.708	0.487	0.383
HCT		0.885	0.641		0.500	0.547		0.585	0.461	0.949	0.789	0.844	0.774	0.552	0.641
MCV		0.779	0.844		0.865	0.945		0.191	0.313	0.794	0.573	0.945	0.053	0.029	0.148

MCH		0.588	0.547		0.679	0.547		0.246	0.547	0.971	0.843	0.800	0.198	0.114	0.250
MCHC		0.615	0.641		0.766	0.641		0.721	0.844	0.900	0.704	0.844	0.950	0.792	1.000
PLT		0.907	0.742		0.421	0.641		0.047	0.031	0.791	0.567	0.945	0.369	0.223	0.156
LYMR		0.486	0.641		0.876	0.313		0.434	0.844	0.740	0.517	0.547	1.000	0.998	0.547
LYMA		0.990	0.945		0.828	0.945		0.837	0.844	0.910	0.720	0.844	0.879	0.675	0.641
ClinChem	**Con50 vs Con33**			**NK50- vs NK33-**			**NK50+ vs NK33+**			**NK33- vs Con33**			**NK33+ vs Con33**		
Females	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx
ALP		0.973	1.000		0.234	0.313		0.269	0.383	0.459	0.287	0.195	0.783	0.561	0.945
ALT		0.709	0.641		0.653	0.383		0.023	0.195	0.776	0.553	0.313	0.029	0.016	0.547
AST		0.411	0.313		0.374	0.641		0.455	0.641	0.622	0.412	0.641	0.976	0.856	1.000
BIL		0.697	0.313		0.624	0.641		0.302	0.844	0.772	0.550	0.844	0.244	0.143	0.742
ALB		0.787	0.742		0.170	0.109		0.043	0.195	0.152	0.086	0.313	0.923	0.741	0.641
TP		0.412	0.250		0.287	0.148		0.244	0.461	0.424	0.262	0.547	0.974	0.851	0.844
Glu		0.362	0.383		0.705	0.641		0.398	0.461	0.658	0.443	0.547	0.929	0.752	0.945
CHOL		0.270	0.461		0.043	0.148		0.038	0.023	0.691	0.471	0.641	0.426	0.264	0.148
TAG		0.550	0.641		0.144	0.016		0.048	0.250	0.997	0.952	1.000	0.731	0.509	0.844
Crea		0.492	0.547		0.188	0.250		0.051	0.039	1.000	0.992	0.844	0.371	0.226	0.250
Urea		0.130	0.055		0.778	0.844		0.861	0.313	0.219	0.127	0.109	0.285	0.169	0.313
cHGB		0.767	0.547		0.443	0.195		0.946	0.297	0.940	0.771	0.844	0.738	0.514	1.000
Ca		0.890	0.945		0.202	0.250		0.705	0.945	0.153	0.087	0.250	0.037	0.020	0.148
Cl		0.009	0.080		0.793	1.000		0.326	0.483	0.081	0.045	0.109	0.675	0.458	0.498
K		0.604	0.383		0.506	0.800		0.437	0.945	0.732	0.510	0.547	0.531	0.340	1.000
Na		0.546	0.547		0.926	0.844		0.557	0.673	0.330	0.198	0.313	0.933	0.759	0.641
P		0.920	0.945		0.245	0.250		0.255	0.844	0.212	0.123	0.250	0.143	0.081	0.109
Urine	**Con50 vs Con33**			**NK50- vs NK33-**			**NK50+ vs NK33+**			**NK33- vs Con33**			**NK33+ vs Con33**		
Females	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx
uVol		0.070	0.039		0.026	0.078		0.926	1.000	0.010	0.005	0.008	0.151	0.085	0.016
uVolW		0.058	0.023		0.065	0.195		0.974	1.000	0.018	0.010	0.008	0.150	0.085	0.016
uLeu		0.485	1.000		0.296	0.586		0.129	0.371	0.914	0.726	1.000	0.705	0.485	1.000
uOsmoll		0.106	0.078		0.109	0.195		0.914	0.844	0.077	0.043	0.016	0.187	0.108	0.078
uKeton		0.420	0.586		0.483	0.577		0.363	0.346	0.859	0.649	0.773	0.859	0.649	1.000
upH		0.492	0.374		0.014	0.077		0.172	0.242	0.126	0.071	0.073	0.195	0.113	0.265

Organs	Con50 vs Con33			NK50- vs NK33-			NK50+ vs NK33+			NK33- vs Con33			NK33+ vs Con33		
Females	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx
Kidney		0.862	0.844		0.281	0.195		0.073	0.195	0.999	0.966	0.945	0.809	0.589	0.742
Spleen		0.923	0.641		0.399	1.000		0.130	0.109	0.562	0.364	0.109	0.879	0.675	0.641
Liver		0.565	0.641		0.432	0.250		0.782	0.844	0.426	0.264	0.313	0.327	0.196	0.109
AdrenGl		0.435	0.461		0.182	0.313		0.963	0.547	0.464	0.291	0.461	0.860	0.650	0.742
Heart		0.271	0.547		0.171	0.313		0.020	0.078	0.366	0.223	0.148	0.212	0.123	0.195
Thymus		0.691	0.742		0.401	0.742		0.714	0.844	0.632	0.421	0.461	0.797	0.576	0.641
Uterus		0.985	1.000		0.867	0.547		0.959	1.000	0.877	0.672	0.641	0.975	0.853	0.547
Ovary		0.701	0.844		0.187	0.461		0.001	0.008	0.135	0.076	0.383	0.383	0.234	0.313
Brain		0.070	0.039		0.327	0.250		0.201	0.313	0.515	0.328	0.313	0.506	0.322	0.250
Immunology	**Con50 vs Con33**			**NK50- vs NK33-**			**NK50+ vs NK33+**			**NK33- vs Con33**			**NK33+ vs Con33**		
Females	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx
Monocytes		0.693			0.403			0.151		0.994	0.931		0.712	0.491	
Granulocytes		0.727			0.290			0.192		0.541	0.349		0.492	0.312	
RespirBurst		0.308			0.937			0.582		0.645	0.432		0.191	0.111	
Con		0.655			0.247			0.739		0.388	0.238		0.313	0.188	
PHA		0.141			0.149			0.499		0.328	0.197		0.097	0.054	
PWM		0.505			0.355			0.822		0.392	0.241		0.166	0.095	
Med3d		0.329			0.063			0.753		0.987	0.895		0.852	0.640	
IprConA		0.072			0.817			0.367		0.133	0.075		0.175	0.100	
IprPHA		0.014			0.846			0.290		0.258	0.152		0.095	0.053	
IprPWM		0.010			0.147			0.377		0.134	0.076		0.066	0.036	
G4c1		0.653			0.355			0.606		0.924	0.744		0.988	0.900	
G4c2		0.640			0.595			0.669		0.986	0.891		0.995	0.934	
G4c3		0.765			0.600			0.818		0.999	0.971		0.969	0.836	
NG2c1		0.907			0.665			0.696		0.961	0.816		0.982	0.874	
NG2c2		0.613			0.868			0.886		0.913	0.725		0.907	0.715	
NG2c3		0.677			0.877			0.728		0.825	0.607		0.800	0.579	
A6c1		0.773			0.863			0.120		0.571	0.372		0.483	0.305	
A6c2		0.913			0.748			0.445		0.288	0.171		0.319	0.192	
A6c3		0.485			0.916			0.739		0.601	0.396		0.844	0.630	
Med6d		0.486			0.855			0.558		0.903	0.710		0.955	0.804	
IprG4c1		0.712			0.390			0.178		0.594	0.390		0.978	0.864	

IprG4c2		0.712			0.644			0.158		0.914	0.726		0.956	0.806	
IprG4c3		0.349			0.508			0.406		0.671	0.455		0.988	0.898	
IprNG2c1		0.364			0.755			0.157		0.577	0.377		0.773	0.551	
IprNG2c2		0.755			0.544			0.212		1.000	0.984		0.966	0.829	
IprNG2c3		0.539			0.500			0.602		0.956	0.805		0.785	0.563	
IprA6c1		0.298			0.454			0.097		0.588	0.385		0.275	0.163	
IprA6c2		0.203			0.297			0.766		0.088	0.049		0.066	0.037	
IprA6c3		0.982			0.612			0.643		0.624	0.414		0.891	0.691	
CellPhenotype	**Con50 vs Con33**			**NK50- vs NK33-**			**NK50+ vs NK33+**			**NK33- vs Con33**			**NK33+ vs Con33**		
Females	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx	Dunn	t-test	Wlcx
sp3		0.427			0.077			0.723		0.132	0.075		0.984	0.883	
sp3-4		0.665			0.154			0.779		0.115	0.064		0.475	0.299	
sp3-8		0.527			0.318			0.879		0.416	0.258		0.346	0.210	
sp3-45		0.066			0.875			0.610		0.943	0.778		0.985	0.886	
sp3-161		0.847			0.050			0.671		0.995	0.934		0.952	0.796	
ln3		0.712			0.501			0.071		0.388	0.238		0.577	0.376	
ln3-4		0.599			0.872			0.004		0.723	0.502		0.353	0.214	
ln3-8		0.760			0.095			0.710		0.147	0.084		0.784	0.562	
ln3-45		0.045			0.239			0.004		0.050	0.027		0.011	0.006	
ty3		0.053			0.113			0.482		1.000	0.991		0.853	0.641	
ty3-4		0.048			0.245			0.296		0.736	0.514		0.955	0.804	
ty3-8		0.625			0.113			0.983		0.242	0.142		0.957	0.808	
bm3		0.248			0.148			0.553		0.053	0.029		0.942	0.777	
bm3-45		0.281			0.893			0.515		0.312	0.187		0.486	0.307	

Appendix 13. Tests for normality and homogeneity of variance

P-values for the Shapiro-Wilks (SW) normality test are given separately for each feeding group, and also for the ANOVA residuals. In addition P-values for Bartlett and Levene test for homogeneity of variance are given. P-values smaller than 0.01/0.05 have a gold/yellow background.

Weights	Shapiro-Wilks test for normality									Variance Homogeneity	
Males	**Con50**	**NK11-/50**	**NK50-**	**NK11+/50**	**NK50+**	**Con33**	**NK33-**	**NK33+**	**Residual**	**Bartlett**	**Levene**
BodyWeight	0.556	0.601	0.499	0.122	0.493	0.626	0.086	0.247	0.660	0.928	0.924
growthRate	0.726	0.684	0.588	0.028	0.558	0.990	0.900	0.852	0.814	0.302	0.504
FeedMean	0.016	0.701	0.728	0.989	0.167	0.974	0.453	0.904	0.166	0.995	0.989
Haematology											
Males	**Con50**	**NK11-/50**	**NK50-**	**NK11+/50**	**NK50+**	**Con33**	**NK33-**	**NK33+**	**Residual**	**Bartlett**	**Levene**
WBC	0.371	0.689	0.624	0.394	0.810	0.537	0.636	0.457	0.362	0.858	0.312
RBC	0.345	0.372	0.737	0.682	0.613	0.808	0.361	0.259	0.140	0.971	0.928
HGB	0.067	0.620	0.583	0.151	0.361	0.060	0.103	0.182	0.626	0.600	0.762
HCT	0.915	0.664	0.091	0.277	0.106	0.279	0.984	0.195	0.634	0.834	0.723
MCV	0.412	0.982	0.940	0.151	0.002	0.088	0.410	0.660	0.987	0.752	0.420
MCH	0.663	0.888	0.774	0.934	0.682	0.807	0.986	0.236	0.586	0.427	0.167
MCHC	0.845	0.001	0.183	0.580	0.060	0.640	0.266	0.999	0.414	0.584	0.436
PLT	0.003	0.984	0.000	0.125	0.540	0.001	0.028	0.082	0.027	0.708	0.999
LYMR	0.799	0.100	0.758	0.761	0.986	0.474	0.637	0.596	0.063	0.894	0.863
LYMA	0.606	0.205	0.902	0.511	0.562	0.311	0.185	0.345	0.108	0.979	0.783
ClinChem	**Shapiro-Wilks test for normality**									**Variance Homogeneity**	
Males	**Con50**	**NK11-/50**	**NK50-**	**NK11+/50**	**NK50+**	**Con33**	**NK33-**	**NK33+**	**Residual**	**Bartlett**	**Levene**
ALP	0.712	0.729	0.978	0.221	0.062	0.107	0.160	0.135	0.890	0.827	0.833
ALT	0.853	0.697	0.857	0.045	0.624	0.506	0.103	0.703	0.006	0.069	0.454
AST	0.888	0.071	0.319	0.669	0.879	0.588	0.902	0.126	0.231	0.177	0.182
BIL	0.378	0.107	0.985	0.337	0.708	0.199	0.663	0.865	0.052	0.097	0.239
ALB	0.584	0.045	0.870	0.006	0.277	0.104	0.045	0.959	0.000	0.000	0.081
TP	0.531	0.068	0.840	0.744	0.301	0.529	0.655	0.480	0.499	0.025	0.021
Glu	0.154	0.902	0.813	0.700	0.180	0.549	0.081	0.716	0.466	0.130	0.098
CHOL	0.105	0.710	0.046	0.044	0.007	0.303	0.900	0.642	0.095	0.159	0.377
TAG	0.688	0.628	0.043	0.182	0.505	0.206	0.520	0.244	0.344	0.768	0.576
Crea	0.915	0.454	0.214	0.305	0.719	0.806	0.710	0.994	0.348	0.482	0.143

Urea	0.781	0.006	0.908	0.543	0.618	0.927	0.427	0.875	0.722	0.482	0.072
cHGB	0.003	0.404	0.737	0.854	0.982	0.123	0.451	0.573	0.504	0.084	0.029
Ca	0.336	0.695	0.993	0.727	0.022	0.551	0.307	0.891	0.421	0.986	0.984
Cl	0.553	0.601	0.594	0.219	0.913	0.313	0.811	0.943	0.653	0.381	0.193
K	0.878	0.002	0.110	0.304	0.314	0.220	0.149	0.952	0.016	0.011	0.001
Na	0.688	0.668	0.487	0.012	0.304	0.767	0.756	0.000	0.556	0.917	0.904
P	0.755	0.592	0.811	0.103	0.239	0.505	0.461	0.579	0.302	0.165	0.332
Urine	**Shapiro-Wilks test for normality**									**Variance Homogeneity**	
Males	**Con50**	**NK11-/50**	**NK50-**	**NK11+/50**	**NK50+**	**Con33**	**NK33-**	**NK33+**	**Residual**	**Bartlett**	**Levene**
uVol	0.728	0.251	0.122	0.811	0.996	0.714	0.250	0.181	0.636	0.639	0.143
uVolW	0.608	0.234	0.027	0.391	0.873	0.732	0.124	0.172	0.702	0.691	0.080
uLeu	0.030	0.056	0.000	0.027	0.004	0.005	0.056	0.197	0.615	0.509	0.096
uOsmoll	0.981	0.173	0.058	0.112	0.915	0.706	0.949	0.342	0.879	0.280	0.190
uKeton	0.023	0.003	0.062	0.000	0.013	0.004	0.020	0.130	0.252	0.761	0.197
upH	0.037	0.000	0.004	0.000	0.018	0.178	0.001	0.413	0.133	0.051	0.177
Organs											
Males	**Con50**	**NK11-/50**	**NK50-**	**NK11+/50**	**NK50+**	**Con33**	**NK33-**	**NK33+**	**Residual**	**Bartlett**	**Levene**
Kidney	0.160	0.392	0.075	0.209	0.230	0.254	0.788	0.031	0.629	0.302	0.247
Spleen	0.587	0.636	0.999	0.852	0.877	0.139	0.515	0.210	0.252	0.993	0.997
Liver	0.319	0.459	0.851	0.960	0.769	0.291	0.278	0.432	0.491	0.993	0.852
AdrenGl	0.691	0.290	0.284	0.835	0.153	0.426	0.569	0.305	0.586	0.935	0.831
Heart	0.984	0.098	0.209	0.050	0.804	0.658	0.281	0.400	0.473	0.058	0.021
Thymus	0.820	0.080	0.787	0.344	0.485	0.141	0.595	0.247	0.929	0.911	0.782
Testis	0.013	0.456	0.077	0.983	0.168	0.198	0.244	0.774	0.462	0.659	0.336
Epididymis	0.747	0.754	0.077	0.749	0.683	0.756	0.971	0.771	0.608	0.119	0.210
Brain	0.676	0.666	0.892	0.720	0.167	0.240	0.789	0.346	0.479	0.563	0.466
Immunology	**Shapiro-Wilks test for normality**									**Variance Homogeneity**	
Males	**Con50**	**NK11-/50**	**NK50-**	**NK11+/50**	**NK50+**	**Con33**	**NK33-**	**NK33+**	**Residual**	**Bartlett**	**Levene**
Monocytes	0.650	0.022	0.201	0.585	0.446	0.400	0.387	0.064	0.554	0.550	0.496
Granulocytes	0.403	0.443	0.212	0.198	0.698	0.045	0.028	0.951	0.666	0.307	0.189
RespirBurst	0.245	0.419	0.025	0.631	0.032	0.129	0.475	0.753	0.286	0.848	0.421
Con	0.986	0.241	0.343	0.111	0.498	0.641	0.096	0.528	0.133	0.221	0.055
PHA	0.758	0.824	0.333	0.003	0.297	0.135	0.456	0.899	0.252	0.718	0.347
PWM	0.628	0.490	0.995	0.141	0.158	0.225	0.175	0.219	0.856	0.173	0.054

Med3d	0.153	0.514	0.595	0.940	0.478	0.204	0.483	0.215	0.745	0.212	0.011
IprConA	0.435	0.682	0.586	0.987	0.056	0.439	0.700	0.666	0.074	0.330	0.325
IprPHA	0.204	0.242	0.390	0.083	0.613	0.089	0.319	0.710	0.036	0.849	0.524
IprPWM	0.727	0.242	0.318	0.077	0.378	0.440	0.548	0.824	0.750	0.914	0.652
G4c1	0.069	0.014	0.811	0.913	0.494	0.640	0.604	0.353	0.802	0.576	0.165
G4c2	0.067	0.090	0.611	0.669	0.633	0.587	0.403	0.302	0.937	0.733	0.488
G4c3	0.276	0.022	0.831	0.784	0.436	0.878	0.175	0.092	0.608	0.097	0.050
NG2c1	0.017	0.067	0.878	0.827	0.646	0.094	0.823	0.126	0.317	0.555	0.102
NG2c2	0.226	0.546	0.647	0.863	0.608	0.426	0.085	0.118	0.758	0.787	0.541
NG2c3	0.182	0.075	0.396	0.933	0.098	0.378	0.841	0.165	0.204	0.133	0.070
A6c1	0.219	0.058	0.978	0.589	0.398	0.071	0.068	0.250	0.563	0.582	0.284
A6c2	0.412	0.691	0.787	0.461	0.484	0.104	0.231	0.364	0.113	0.833	0.767
A6c3	0.178	0.312	0.451	0.924	0.319	0.369	0.986	0.097	0.273	0.043	0.030
Med6d	0.310	0.919	0.255	0.993	0.544	0.601	0.517	0.358	0.921	0.397	0.142
IprG4c1	0.011	0.119	0.235	0.099	0.485	0.042	0.855	0.927	0.813	0.054	0.016
IprG4c2	0.995	0.055	0.988	0.610	0.797	0.714	0.032	0.556	0.350	0.216	0.270
IprG4c3	0.125	0.861	0.206	0.787	0.198	0.377	0.047	0.148	0.093	0.401	0.194
IprNG2c1	0.241	0.063	0.225	0.798	0.730	0.943	0.583	0.509	0.874	0.032	0.049
IprNG2c2	0.554	0.654	0.517	0.495	0.655	0.996	0.991	0.069	0.671	0.061	0.048
IprNG2c3	0.665	0.194	0.419	0.651	0.371	0.424	0.204	0.071	0.706	0.815	0.585
IprA6c1	0.537	0.632	0.597	0.258	0.063	0.403	0.901	0.925	0.839	0.242	0.432
IprA6c2	0.632	0.769	0.421	0.170	0.218	0.871	0.851	0.761	0.760	0.347	0.106
IprA6c3	0.493	0.359	0.480	0.598	0.463	0.719	0.668	0.688	0.911	0.977	0.809
CellPhenotype	**Shapiro-Wilks test for normality**									**Variance Homogeneity**	
Males	**Con50**	**NK11-/50**	**NK50-**	**NK11+/50**	**NK50+**	**Con33**	**NK33-**	**NK33+**	**Residual**	**Bartlett**	**Levene**
sp3	0.233	0.434	0.757	0.386	0.405	0.718	0.382	0.359	0.963	0.061	0.099
sp3-4	0.083	0.127	0.132	0.012	0.977	0.547	0.563	0.563	0.231	0.003	0.030
sp3-8	0.228	0.002	0.031	0.097	0.003	0.951	0.278	0.446	0.491	0.015	0.249
sp3-45	0.384	0.330	0.368	0.795	0.477	0.025	0.523	0.763	0.840	0.946	0.776
sp3-161	0.415	0.420	0.901	0.022	0.887	0.973	0.554	0.359	0.695	0.847	0.707
ln3	0.402	0.408	0.760	0.594	0.253	0.270	0.539	0.319	0.985	0.453	0.601
ln3-4	0.568	0.178	0.789	0.560	0.372	0.805	0.519	0.146	0.752	0.328	0.340
ln3-8	0.289	0.965	0.127	0.734	0.320	0.191	0.982	0.436	0.125	0.277	0.313
ln3-45	0.152	0.172	0.974	0.611	0.860	0.925	0.681	0.954	0.696	0.112	0.150

ty3	0.335	0.651	0.862	0.627	0.515	0.941	0.848	0.578	0.537	0.025	0.239
ty3-4	0.852	0.311	0.060	0.995	0.235	0.662	0.606	0.141	0.853	0.060	0.092
ty3-8	0.946	0.048	0.485	0.787	0.423	0.032	0.605	0.045	0.333	0.590	0.493
bm3	0.184	0.635	0.255	0.381	0.053	0.108	0.534	0.555	0.886	0.967	0.582
bm3-45	0.005	0.002	0.008	0.002	0.011	0.001	0.165	0.467	0.022	0.031	0.520

Weights	**Shapiro-Wilks test for normality**									**Variance Homogeneity**	
Females	**Con50**	**NK11-**	**NK50-**	**NK11+/50**	**NK50+**	**Con33**	**NK33-**	**NK33+**	**Residual**	**Bartlett**	**Levene**
BodyWeight	0.710	0.294	0.369	0.530	0.275	0.944	0.339	0.595	0.374	0.553	0.330
growthRate	0.567	0.038	0.269	0.082	0.864	0.018	0.260	0.851	0.195	0.662	0.626
FeedMean	0.438	0.504	0.028	0.644	0.516	0.231	0.679	0.631	0.465	0.721	0.575
Haematology											
Females	**Con50**	**NK11-**	**NK50-**	**NK11+/50**	**NK50+**	**Con33**	**NK33-**	**NK33+**	**Residual**	**Bartlett**	**Levene**
WBC	0.655	1.000	0.697	0.351	0.153	0.495	0.110	0.028	0.199	0.940	0.654
RBC	0.995	0.561	0.820	0.393	0.309	0.420	0.904	0.333	0.955	0.164	0.133
HGB	0.164	0.577	0.945	0.310	0.622	0.114	0.709	0.875	0.005	0.005	0.056
HCT	0.418	0.709	0.790	0.685	0.699	0.469	0.236	0.136	0.245	0.385	0.498
MCV	0.573	0.384	0.933	0.655	0.529	0.988	0.018	0.595	0.721	0.786	0.672
MCH	0.557	0.489	0.817	0.872	0.724	0.059	0.593	0.794	0.717	0.628	0.599
MCHC	0.171	0.216	0.207	0.750	0.162	0.909	0.716	0.285	0.143	0.623	0.234
PLT	0.934	0.772	0.645	0.350	0.754	0.673	0.030	0.308	0.038	0.160	0.279
LYMR	0.854	0.096	0.256	0.606	0.112	0.755	0.460	0.451	0.122	0.206	0.510
LYMA	0.842	0.796	0.416	0.503	0.166	0.823	0.154	0.217	0.178	0.825	0.476
ClinChem	**Shapiro-Wilks test for normality**									**Variance Homogeneity**	
Females	**Con50**	**NK11-**	**NK50-**	**NK11+/50**	**NK50+**	**Con33**	**NK33-**	**NK33+**	**Residual**	**Bartlett**	**Levene**
ALP	0.163	0.274	0.864	0.814	0.201	0.973	0.231	0.012	0.002	0.290	0.725
ALT	0.703	0.024	0.022	0.788	0.002	0.426	0.525	0.004	0.000	0.000	0.025
AST	0.995	0.518	0.203	0.831	0.336	0.335	0.058	0.272	0.155	0.753	0.770
BIL	0.333	0.022	0.689	0.009	0.006	0.858	0.334	0.106	0.000	0.029	0.238
ALB	0.250	0.786	0.587	0.924	0.081	0.107	0.123	0.518	0.325	0.706	0.726
TP	0.875	0.622	0.480	0.923	0.323	0.400	0.381	0.642	0.948	0.252	0.332

Glu	0.364	0.896	0.338	0.599	0.880	0.450	0.803	0.902	0.610	0.735	0.334
CHOL	0.104	0.354	0.369	0.133	0.090	0.567	0.533	0.175	0.887	0.598	0.452
TAG	0.270	0.041	0.652	0.484	0.027	0.336	0.804	0.602	0.874	0.363	0.087
Crea	0.522	0.994	0.436	0.247	0.122	0.980	0.379	0.481	0.600	0.697	0.486
Urea	0.826	0.094	0.500	0.298	0.028	0.008	0.310	0.768	0.291	0.662	0.466
cHGB	0.074	0.024	0.441	0.193	0.007	0.299	0.917	0.201	0.002	0.206	0.255
Ca	0.856	0.818	0.157	0.044	0.861	0.380	0.194	0.199	0.956	0.718	0.744
Cl	0.608	0.935	0.777	0.515	0.842	0.046	0.640	0.406	0.419	0.579	0.382
K	0.015	0.132	0.887	0.437	0.114	0.187	0.055	0.031	0.007	0.185	0.295
Na	0.822	0.344	0.770	0.636	0.887	0.425	0.876	0.632	0.354	0.653	0.588
P	0.473	0.994	0.888	0.612	0.977	0.637	0.449	0.044	0.690	0.688	0.596
Urine	**Shapiro-Wilks test for normality**									**Variance Homogeneity**	
Females	**Con50**	**NK11-**	**NK50-**	**NK11+/50**	**NK50+**	**Con33**	**NK33-**	**NK33+**	**Residual**	**Bartlett**	**Levene**
uVol	0.646	0.516	0.102	0.707	0.644	0.081	0.756	0.260	0.232	0.397	0.402
uVolW	0.268	0.592	0.045	0.097	0.281	0.019	0.364	0.825	0.113	0.352	0.608
uLeu		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.005
uOsmoll	0.122	0.717	0.435	0.048	0.862	0.382	0.747	0.388	0.423	0.479	0.499
uKeton	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.005
upH	0.000	0.592	0.056	0.156	0.056	0.156	0.001	0.027	0.821	0.508	0.879
Organs											
Females	**Con50**	**NK11-**	**NK50-**	**NK11+/50**	**NK50+**	**Con33**	**NK33-**	**NK33+**	**Residual**	**Bartlett**	**Levene**
Kidney	0.393	0.185	0.583	0.960	0.939	0.765	0.636	0.640	0.515	0.514	0.470
Spleen	0.493	0.317	0.710	0.914	0.036	0.462	0.405	0.034	0.698	0.038	0.068
Liver	0.834	0.151	0.689	0.895	0.601	0.218	0.876	0.719	0.790	0.030	0.018
AdrenGl	0.416	0.107	0.574	0.008	0.294	0.100	0.461	0.758	0.996	0.184	0.128
Heart	0.878	0.338	0.517	0.003	0.298	0.611	0.172	0.201	0.611	0.314	0.138
Thymus	0.262	0.406	0.830	0.023	0.257	0.872	0.694	0.948	0.503	0.766	0.507
Uterus	0.679	0.601	0.785	0.565	0.372	0.778	0.555	0.751	0.459	0.922	0.898
Ovary	0.793	0.822	0.291	0.229	0.267	0.874	0.933	0.599	0.448	0.239	0.203
Brain	0.981	0.141	0.134	0.740	0.613	0.703	0.369	1.000	0.026	0.163	0.402
Immunology	**Shapiro-Wilks test for normality**									**Variance Homogeneity**	
Females	**Con50**	**NK11-**	**NK50-**	**NK11+/50**	**NK50+**	**Con33**	**NK33-**	**NK33+**	**Residual**	**Bartlett**	**Levene**
Monocytes	0.331	0.485	0.981	0.707	0.301	0.516	0.570	0.530	0.367	0.865	0.614
Granulocytes	0.279	0.904	0.007	0.629	0.725	0.998	0.141	0.705	0.557	0.792	0.419

RespirBurst	0.133	0.376	0.006	0.179	0.926	0.617	0.992	0.148	0.832	0.814	0.804
Con	0.074	0.563	0.017	0.357	0.509	0.695	0.359	0.186	0.707	0.382	0.236
PHA	0.534	0.096	0.551	0.467	0.408	0.511	0.140	0.549	0.579	0.081	0.001
PWM	0.728	0.546	0.456	0.572	0.801	0.945	0.600	0.885	0.114	0.201	0.128
Med3d	0.851	0.846	0.323	0.133	0.131	0.173	0.172	0.801	0.302	0.662	0.794
IprConA	0.586	0.912	0.510	0.477	0.762	0.797	0.219	0.452	0.408	0.805	0.561
IprPHA	0.438	0.263	0.035	0.456	0.058	0.067	0.291	0.246	0.931	0.949	0.693
IprPWM	0.506	0.144	0.731	0.576	0.005	0.137	0.864	0.159	0.627	0.248	0.218
G4c1	0.244	0.982	0.319	0.807	0.049	0.010	0.402	0.466	0.918	0.142	0.093
G4c2	0.651	0.984	0.288	0.743	0.017	0.116	0.685	0.803	0.588	0.512	0.172
G4c3	0.375	0.689	0.252	0.111	0.105	0.775	0.117	0.929	0.443	0.540	0.035
NG2c1	0.515	0.764	0.702	0.503	0.712	0.942	0.069	0.944	0.349	0.543	0.146
NG2c2	0.954	1.000	0.073	0.191	0.412	0.979	0.024	0.517	0.225	0.816	0.340
NG2c3	0.939	0.278	0.294	0.737	0.866	0.325	0.079	0.531	0.756	0.662	0.417
A6c1	0.983	0.585	0.937	0.852	0.157	0.450	0.535	0.948	0.247	0.972	0.726
A6c2	0.566	0.876	0.510	0.934	0.518	0.988	0.936	0.131	0.085	0.696	0.275
A6c3	0.182	0.780	0.390	0.500	0.998	0.783	0.456	0.017	0.494	0.500	0.266
Med6d	0.283	0.664	0.163	0.974	0.760	0.148	0.429	0.678	0.515	0.820	0.334
IprG4c1	0.951	0.281	0.036	0.805	0.068	0.042	0.370	0.361	0.061	0.280	0.580
IprG4c2	0.662	0.191	0.525	0.520	0.504	0.978	0.784	0.620	0.203	0.177	0.271
IprG4c3	0.380	0.809	0.038	0.387	0.272	0.057	0.749	0.795	0.108	0.471	0.505
IprNG2c1	0.434	0.178	0.622	0.192	0.615	0.401	0.070	0.924	0.550	0.889	0.916
IprNG2c2	0.848	0.543	0.605	0.287	0.414	0.598	0.405	0.080	0.616	0.673	0.608
IprNG2c3	0.156	0.254	0.179	0.880	0.621	0.674	0.170	0.075	0.383	0.741	0.479
IprA6c1	0.303	0.249	0.357	0.153	0.067	0.923	0.446	0.943	0.025	0.728	0.803
IprA6c2	0.736	0.738	0.980	0.319	0.207	0.649	0.985	0.087	0.821	0.754	0.342
IprA6c3	0.127	0.015	0.722	0.831	0.210	0.077	0.387	0.613	0.505	0.362	0.030
CellPhenotype	**Shapiro-Wilks test for normality**									**Variance Homogeneity**	
Females	**Con50**	**NK11-**	**NK50-**	**NK11+/50**	**NK50+**	**Con33**	**NK33-**	**NK33+**	**Residual**	**Bartlett**	**Levene**
sp3	0.143	0.163	0.014	0.119	0.002	0.118	0.352	0.088	0.458	0.991	0.433
sp3-4	0.467	0.674	0.006	0.804	0.720	0.291	0.291	0.617	0.970	0.190	0.154
sp3-8	0.103	0.072	0.272	0.163	0.099	0.941	0.841	0.482	0.265	0.867	0.665
sp3-45	0.071	0.972	0.969	0.848	0.302	0.719	0.575	0.374	0.633	0.513	0.180
sp3-161	0.376	0.304	0.744	0.440	0.233	0.975	0.621	0.802	0.595	0.970	0.804

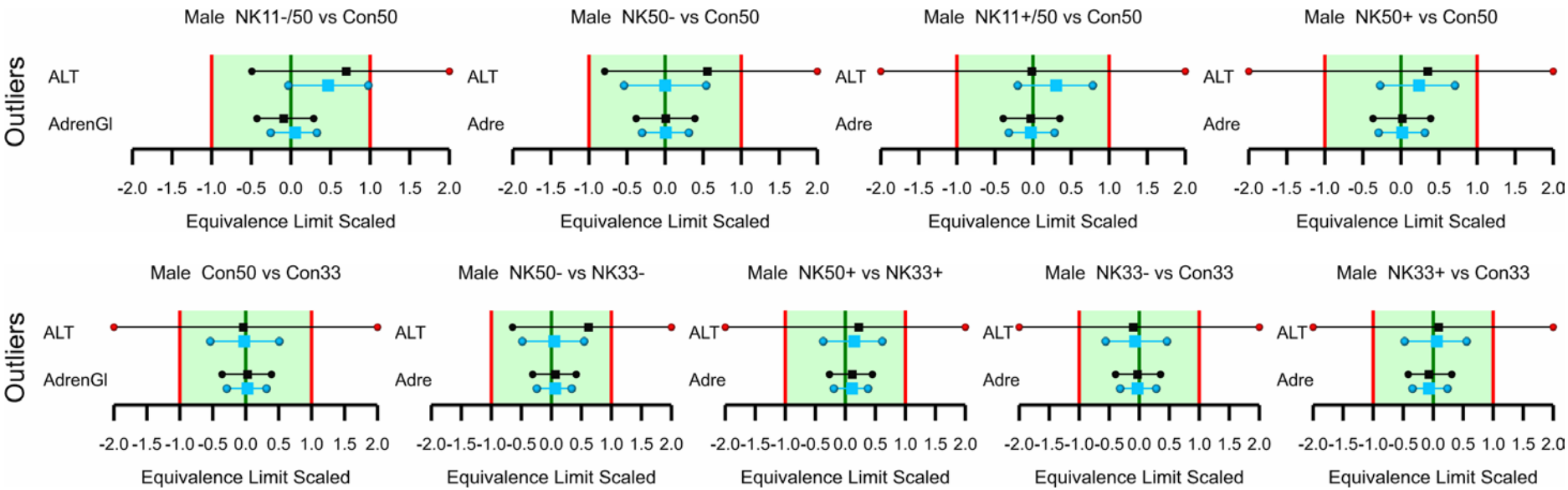
ln3	0.382	0.690	0.835	0.662	0.032	0.741	0.449	0.872	0.635	0.833	0.685
ln3-4	0.905	0.421	0.876	0.866	0.315	0.371	0.225	0.183	0.540	0.863	0.845
ln3-8	0.157	0.372	0.330	0.928	0.063	0.750	0.451	0.667	0.872	0.652	0.369
ln3-45	0.904	0.551	0.253	0.914	0.086	0.896	0.159	0.989	0.249	0.872	0.879
ty3	0.098	0.753	0.009	0.006	0.847	0.402	0.112	0.056	0.835	0.457	0.780
ty3-4	0.920	0.750	0.056	0.116	0.909	0.655	0.092	0.116	0.826	0.514	0.797
ty3-8	0.521	0.059	0.195	0.933	0.223	0.670	0.304	0.932	0.016	0.140	0.054
bm3	0.570	0.870	0.972	0.812	0.923	0.765	0.694	0.266	0.644	0.430	0.468
bm3-45	0.771	0.272	0.896	0.986	0.440	0.964	0.105	0.126	0.686	0.774	0.382

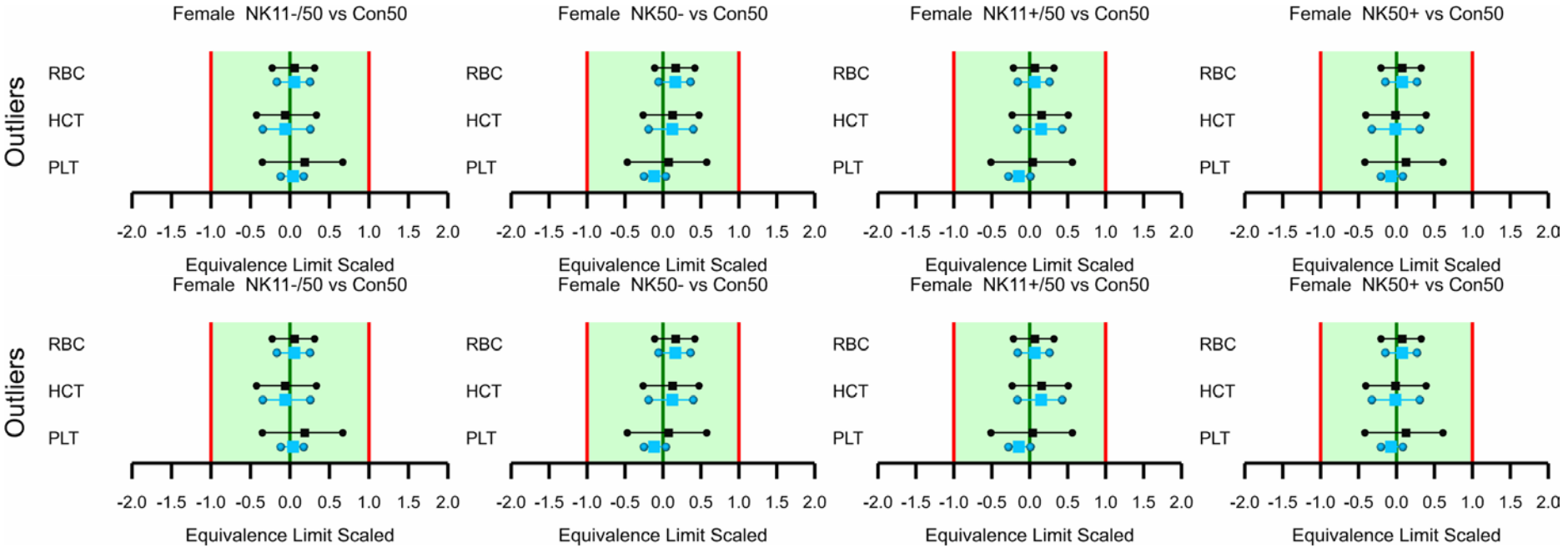
Appendix 14. Statistical analysis including outliers

For male animals there are outlying values for LYMR (2×), ALT (1×) and AdrenGl (1×), while for females there are outlying values for RBC (1×), HCT (1×), PLT (4×) and cHGB (1×); see Table 8 in the main report for a list of outliers. The results of the equivalence tests, using the historical GRACE data, are given below; the black lines are for the analysis including outliers while the blue lines are for the analysis without outliers as in Figure 6 to Figure 9 in the main report.

Results of the classical analysis without and with outliers are given in the tables below. Note that the top tables, i.e. without outliers, are identical to the values in Table 17 and Table 18 in the main report.

The main difference between the analysis without and with outliers is that, when outliers are included, equivalence cannot be established for ALT in males. Additionally there are some differences in the classical statistical analysis





Without Outliers	Means								NK11- Con50	NK50- Con50	NK11+ Con50	NK50+ Con50	Con50 Con33	NK50- NK33-	NK50+ NK33+	NK33- Con33	NK33+ Con33
Males	**Con50**	**NK11-**	**NK50-**	**NK11+**	**NK50+**	**Con33**	**NK33-**	**NK33+**									
LYMR	74.46	74.49	76.30	75.71	75.79	75.25	77.89	72.99							t		
ALT	0.536	0.658	0.533	0.639	0.574	0.533	0.524	0.546									
AdrenGl	0.0138	0.0140	0.0138	0.0135	0.0138	0.0136	0.0135	0.0133									
With Outliers	**Means**								**NK11- Con50**	**NK50- Con50**	**NK11+ Con50**	**NK50+ Con50**	**Con50 Con33**	**NK50- NK33-**	**NK50+ NK33+**	**NK33- Con33**	**NK33+ Con33**
Males	**Con50**	**NK11-**	**NK50-**	**NK11+**	**NK50+**	**Con33**	**NK33-**	**NK33+**									
LYMR	74.46	74.49	76.30	75.71	75.79	72.18	77.89	72.99								dT	
ALT	0.536	0.658	0.692	0.612	0.574	0.533	0.524	0.546									
AdrenGl	0.0138	0.0135	0.0138	0.0135	0.0138	0.0136	0.0135	0.0133									

Without Outliers	Means								NK11-Con50	NK50-Con50	NK11+Con50	NK50+Con50	Con50Con33	NK50-NK33-	NK50+NK33+	NK33-Con33	NK33+Con33
Females	**Con50**	**NK11-**	**NK50-**	**NK11+**	**NK50+**	**Con33**	**NK33-**	**NK33+**									
RBC	7.636	7.684	7.781	7.689	7.702	7.636	7.699	7.836									tw
HCT	43.96	43.73	44.44	44.51	43.92	43.87	44.04	44.22									
PLT	787.4	807.2	745.3	733.9	760.4	784.6	773.0	823.7							tw		
cHGB	73.2	97.9	77.5	109.6	100.7	67.2	65.4	100.5									
With Outliers	**Means**								**NK11-Con50**	**NK50-Con50**	**NK11+Con50**	**NK50+Con50**	**Con50Con33**	**NK50-NK33-**	**NK50+NK33+**	**NK33-Con33**	**NK33+Con33**
Females	**Con50**	**NK11-**	**NK50-**	**NK11+**	**NK50+**	**Con33**	**NK33-**	**NK33+**									
RBC	7.636	7.684	7.781	7.689	7.702	7.636	7.622	7.836									w
HCT	43.96	43.73	44.44	44.51	43.92	43.87	43.59	44.22									
PLT	746.5	789.4	745.3	733.9	760.4	784.6	773.0	746.8									
cHGB	73.2	97.9	77.5	109.6	100.7	67.2	65.4	153.2									