

Supplemental Table S3. Lung Lesion Scores at 2 and 7 dpi.

Timepoint	Characteristic	Control	X31 _{mod}	X31 _{hi}	p-value	Test	Statistic
2 dpi	Bronchitis	0.08 ± 0.08	1.64 ± 0.32	2.00 ± 0.28	0.0001	K-W	H(2) = 20.85
	Interstitial Inflammation	0.08 ± 0.08	0.93 ± 0.27	1.25 ± 0.30	0.006	K-W	H(2) = 10.11
	Edema	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	-	-	-
	Endothelialitis	0.00 ± 0.00	0.86 ± 0.25	1.08 ± 0.23	0.001	K-W	H(2) = 13.16
	Pleuritis	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	-	-	-
	Thrombus Formation	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	-	-	-
	Total score	0.15 ± 0.10	3.43 ± 0.82	4.33 ± 0.76	0.0001	K-W	H(2) = 19.60
7 dpi	Bronchitis	0.00 ± 0.00	0.89 ± 0.11	0.90 ± 0.10	0.0001	K-W	H(2) = 20.88
	Interstitial Inflammation	0.00 ± 0.00	2.33 ± 0.37	2.50 ± 0.31	0.0001	K-W	H(2) = 18.16
	Edema	0.20 ± 0.13	0.44 ± 0.18	0.20 ± 0.13	0.41	K-W	H(2) = 1.79
	Endothelialitis	0.00 ± 0.00	1.00 ± 0.17	0.90 ± 0.10	0.0001	K-W	H(2) = 20.01
	Pleuritis	0.00 ± 0.00	0.56 ± 0.18	0.20 ± 0.13	0.02	K-W	H(2) = 7.85
	Thrombus Formation	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	-	-	-
	Total score	0.20 ± 0.13	5.22 ± 0.68	4.70 ± 0.60	0.0003	K-W	H(2) = 16.16

Lung lesion score quantification showed bronchitis, interstitial inflammation, and endothelialitis in IAV-infected dams at 2 dpi. No changes were noted in 11 of 13 control dams. Mild bronchitis, characterized by an occasional influx of neutrophils in bronchi, was noted in 1 of 13 control dams. Mild interstitial pneumonia was noted in 1 of 13 control dams. Mild bronchitis was noted in 4 of 14 X31_{mod} dams. Moderate (2 of 14) to marked (5 of 14) suppurative bronchopneumonia in X31_{mod} dams is characterized by sections of bronchi filled with clusters of degenerative neutrophils with cellular debris and arterial and venous endothelial attached with rolls of neutrophils. Mild bronchitis was noted in 4 of 12 X31_{hi} dams. Mild (1 of 12), moderate (2 of 12), to marked (5 of 12) suppurative bronchopneumonia was noted in X31_{hi} dams. Lung lesion score quantification showed bronchitis, interstitial inflammation, edema, endothelialitis, and pleuritis in IAV-infected dams at 7 dpi. No changes were noted in 8 of 10 control dams. Mild periarteriolitis, as characterized by infiltration of macrophages and lymphocytes in the periarteriolar interstitium, was found in 2 control dams. Marked subacute bronchointerstitial pneumonia, as characterized by clusters of degenerative neutrophils and foamy macrophages in alveoli and bronchi; infiltration of lymphocytes, neutrophils, and macrophages in periarteriolar and alveolar interstitium; attachment of rolling neutrophils to arterial and venous endothelia, was found in 8 of 9 X31_{mod} dams. One X31_{mod} dam did not have pathology. Mild (2 of 10) to marked (7 of 10) subacute bronchointerstitial pneumonia was noted in X31_{hi} dams. One X31_{hi} dam did not have pathology. IAV = influenza A virus, dpi = days post-inoculation, X31_{mod} = IAV-X31 10³ TCID₅₀, X31_{hi} = IAV-X31 10⁴ TCID₅₀. Kruskal-Wallis (K-W) ANOVA with Dunn's correction for multiple comparisons was used. Data are means ± SEM; bold font = p < 0.05; 2 dpi n = 12-14, 7 dpi n = 9-10 dams per treatment group.