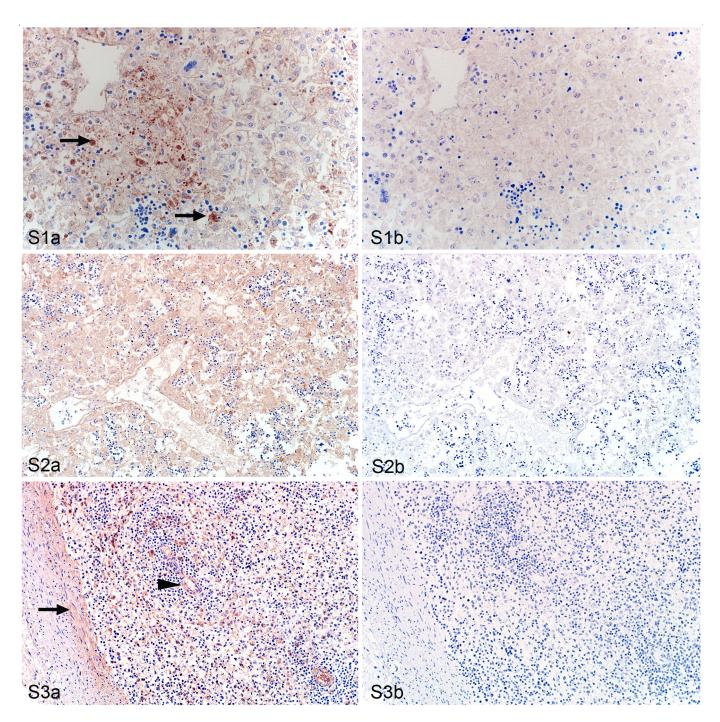
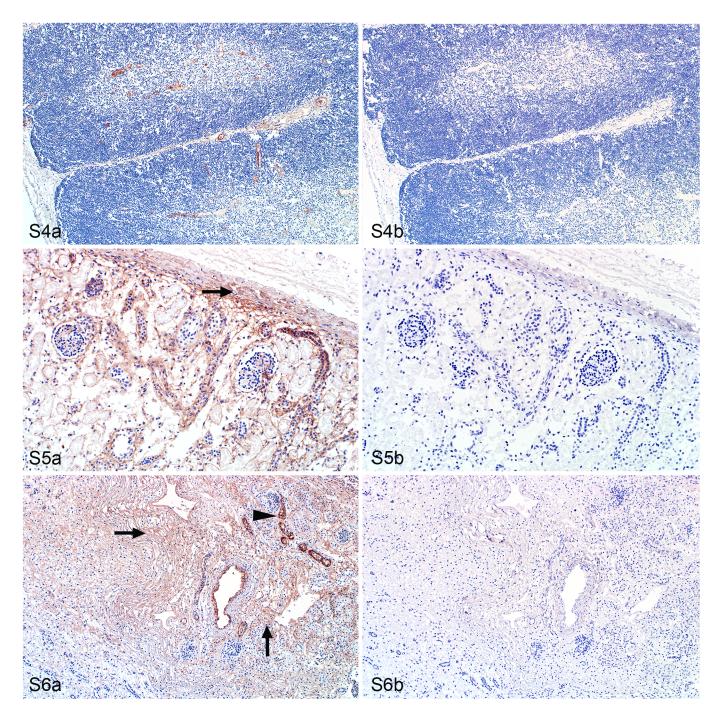
Veterinary Pathology: Supplemental Materials.



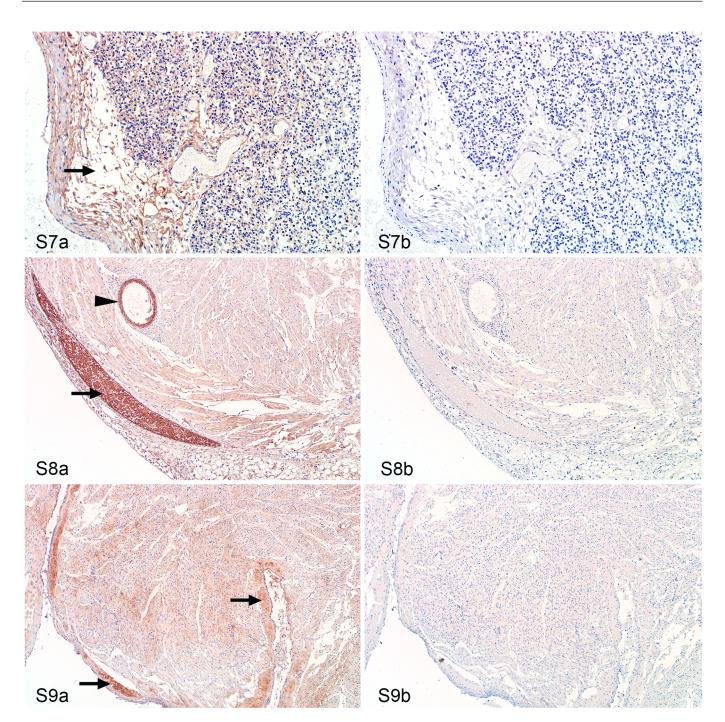
Supplemental figures S1-S3. Rift Valley fever virus (RVFV), liver and spleen, sheep fetuses. Sequential testing of tissue sections with antibodies to Rift Valley fever virus and Wesselsbron virus (WBV).

Figure 1a. Case 41. Liver. Viral antigen in the cytoplasm of necrotic hepatocytes (arrows). Immunohistochemistry (IHC) for RVFV. **Figure 1b.** Case 41 sequential slide. Liver. Negative for viral antigen. IHC for WBV. **Figure 2a.** Case 17. Delineation of the reticulin framework by viral antigen, and labeling of the tunica intima of a vein. IHC for RVFV. **Figure 2b.** Case 17 sequential slide. Liver. Negative for viral antigen. IHC for WBV. **Figure 3a.** Case 14. Spleen. Viral antigen in smooth muscle cells in the capsule (arrow) and in a central artery (arrowhead). Also, widespread antigen in the red and white pulp. IHC for RVFV. **Figure 3b.** Case 14 sequential slide. Negative for viral antigen. IHC for WBV.



Supplemental figures S4-S6. Rift Valley fever virus (RVFV), thymus and kidney, sheep fetuses. Sequential testing of tissue sections with antibodies to Rift Valley fever virus and Wesselsbron virus (WBV).

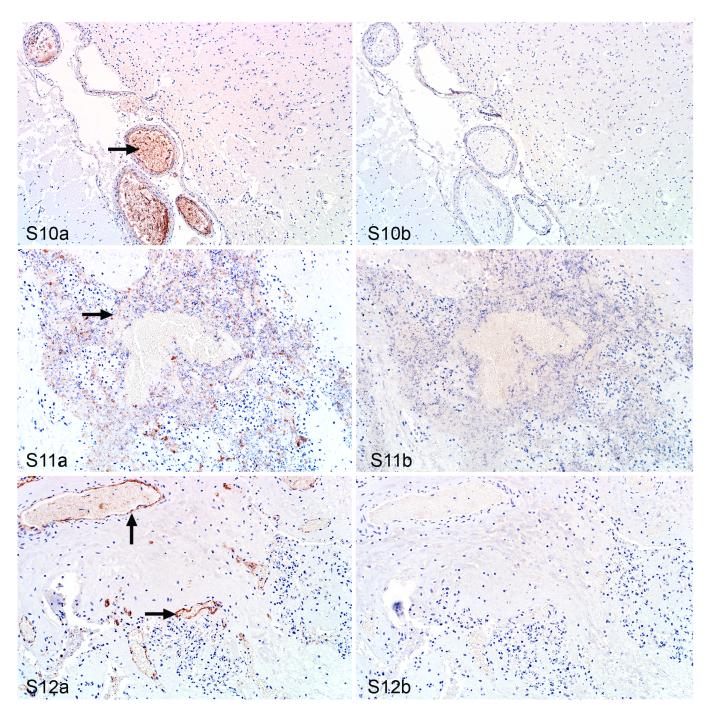
Figure 4a. Case 14. Thymus. RVFV antigen in blood vessels in the trabeculae and medulla. Immunohistochemistry (IHC) for RVFV. **Figure 4b.** Case 14 sequential slide. Thymus. Negative for viral antigen. IHC for WBV. **Figure 5a.** Case 54. Kidney. Prominent viral antigen in the capsule (arrow) and superficial cortex. IHC for RVFV. **Figure 5b.** Case 54 sequential slide. Kidney. Negative for viral antigen. IHC for WBV. **Figure 6a.** Case 54. Kidney. Delineation of the basement membranes in the inner cortex by non-cell associated viral antigen (arrows). Also, intense labeling of smooth muscle cells in small arteries (arrowhead) at the corticomedullary junction. IHC for RVFV. **Figure 6b.** Case 54 sequential slide. Kidney. Negative for viral antigen. IHC for WBV.



Supplemental figures S7-S9. Rift Valley fever virus (RVFV), lung and heart, sheep fetuses. Sequential testing of tissue sections with antibodies to Rift Valley fever virus and Wesselsbron virus (WBV).

Figure 7a. Case 14. Lung. Non-cell associated viral antigen in the pulmonary interstitium (arrow). Immunohistochemistry (IHC) for RVFV. **Figure 7b.** Case 14 sequential slide. Lung. Negative for viral antigen. IHC for WBV. **Figure 8a.** Case 56. Heart. Intense labeling of cellular debris in a subepicardial capsular blood vessel (arrow) and smooth muscle in an artery (arrowhead). Also, widespread antigen in the subpericardium and the myocardium. IHC for RVFV. **Figure 8b.** Case 56 sequential slide. Heart. Negative for viral antigen. IHC for WBV. **Figure 9a.** Case 56. Heart. Viral antigen in Purkinje fibres (arrows) and widespread in the myocardium. IHC for RVFV. **Figure 9b.** Case 56 sequential slide. Heart. Negative for viral antigen. IHC for WBV.

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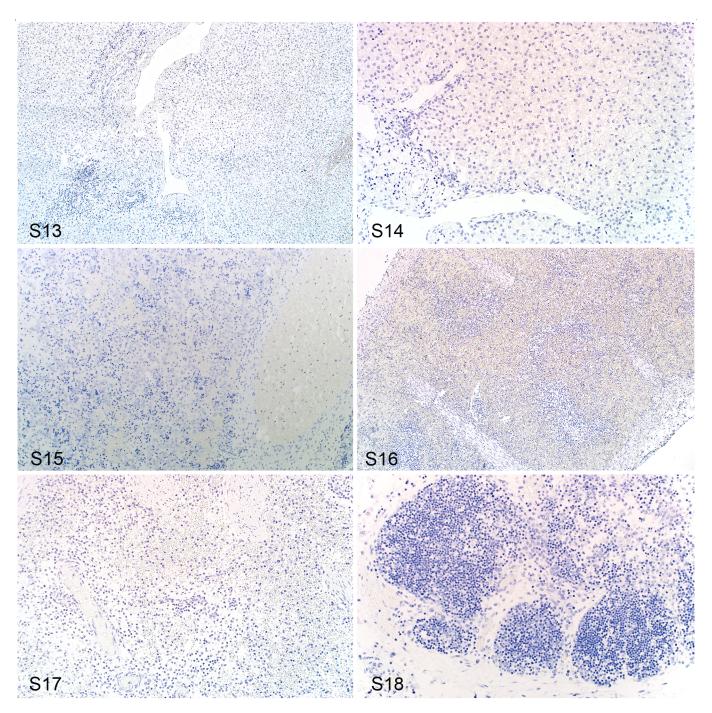


Supplemental figures S10-S12. Rift Valley fever virus (RVFV), brain and placenta, sheep fetuses. Sequential testing of tissue sections with antibodies to Rift Valley fever virus and Wesselsbron virus (WBV).

Figure 10a. Case 4. Cerebrum. Intense labeling of cellular debris in blood vessels (arrow) in the meninges. Immunohistochemistry (IHC) for RVFV. Figure 10b. Case 4 sequential slide. Cerebrum. Negative for viral antigen. IHC for WBV. Figure 11a. Case 41. Placenta, fetal cotyledon. RVFV antigen in trophoblasts and cellular debris (arrow). IHC for RVFV. Figure 11b. Case 41 sequential slide. Placenta, fetal cotyledon. Negative for viral antigen. The fine diffuse red coloring is due to the presence of residual substate. IHC for WBV. Figure 12a. Case 54. Placenta, chorioallantoic membrane. Viral antigen in endothelial cells (arrows). IHC for RVFV. Figure 12b. Case 54 sequential slide. Placenta, chorioallantoic membrane. Negative for viral antigen. IHC for WBV.

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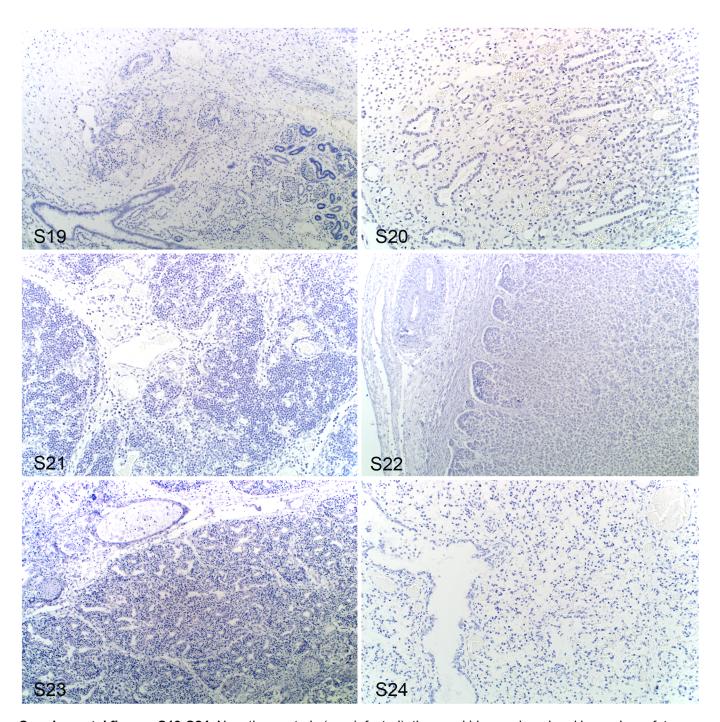
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Supplemental figures S13-S18. Negative controls (non-infected), liver, spleen and lymph node, sheep fetuses. Immunohistochemistry for Rift Valley fever virus.

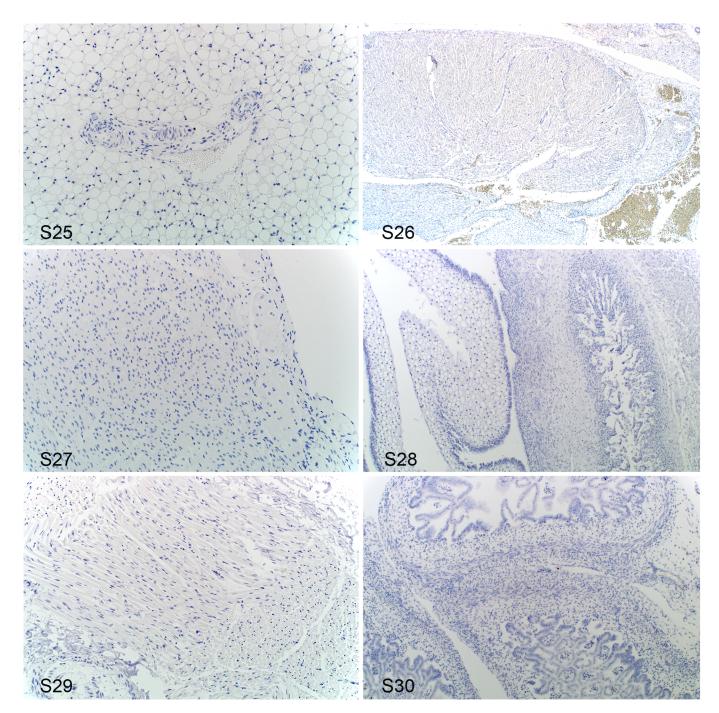
Figure 13. Control 10. Liver. Parenchyma and blood vessels negative for viral antigen. **Figure 14.** Control 12. Liver. Hepatocytes and reticulin framework negative for viral antigen. **Figure 15.** Control 5. Liver. Negative for viral antigen. **Figure 16.** Control 10. Spleen. Capsule and pulp negative for viral antigen. **Figure 17.** Control 4. Spleen. Negative for viral antigen. **Figure 18.** Control 5. Lymph node. Cortex and medulla negative for viral antigen.

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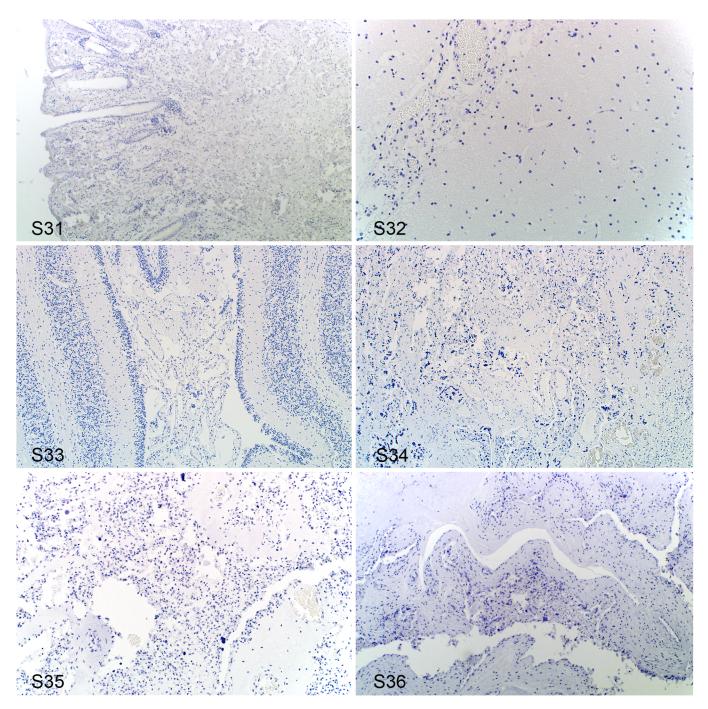
Supplemental figures S19-S24. Negative controls (non-infected), thymus, kidney, adrenal and lung, sheep fetuses. Immunohistochemistry for Rift Valley fever virus.

Figure 19. Control 5. Kidney. Renal parenchyma and blood vessels at the corticomedullary junction negative for viral antigen. **Figure 20.** Control 11. Kidney. Medulla negative for viral antigen. **Figure 21.** Control 11. Thymus. Negative for viral antigen. **Figure 22.** Control 1. Adrenal. Capsule and cortex negative for viral antigen. **Figure 23.** Control 1. Lung. Negative for viral antigen. **Figure 24.** Control 4. Lung. Blood vessels and interstitium negative for viral antigen.



Supplemental figures S25-S30. Negative controls (non-infected), fat, heart, rumen, small intestine and tongue, sheep fetuses. Immunohistochemistry for Rift Valley fever virus.

Figure 25. Control 8. Pericardial fat. Negative for viral antigen. **Figure 26.** Control 5. Heart. Subepicardium, myocardium and endocardium negative for viral antigen. **Figure 27.** Control 4. Heart. Myocardium and Purkinje fibres negative for viral antigen. **Figure 28.** Control 1. Rumen. Negative for viral antigen. **Figure 29.** Control 8. Tongue. Skeletal myofibres, blood vessel and connective tissue negative for viral antigen. **Figure 30.** Control 5. Small intestine. Negative for viral antigen.



Supplemental figures S31-S36. Negative controls (non-infected), cerebrum, cerebellum and placenta, sheep fetuses. Immunohistochemistry for Rift Valley fever virus.

Figure 31. Control 8. Skin. All structures in the epidermis and dermis negative for viral antigen. **Figure 32.** Control 3. Cerebrum. Cortex and meningeal blood vessels negative for viral antigen. **Figure 33.** Control 6. Cerebellum. Negative for viral antigen. **Figure 34.** Control 6. Placenta, fetal cotyledon. Trophoblasts and cellular debris in the cotyledonary chorioallantois negative for viral antigen. **Figure 35.** Control 8. Placenta, fetal cotyledon. Negative for viral antigen. **Figure 36.** Control 2. Intercotyledonary placenta. Negative for viral antigen.