**Supplemental Figure 1.** An aspirate smear showing hemophagocytic histiocyte-engulfing platelets or neutrophils as well as a histiocyte containing mulberry-like intravacuolar inclusions suggestive of morulae of *Anaplasma phagocytophilum* (Wright–Giemsa stain, ×1000).

**Supplemental Figure 2.** Spleen of a C3H/HeJ mouse infected with the patient’s buffy coat; day 14; splenomegaly. The spleen is twice as large as normal.

**Supplemental Figure 3.** Light micrograph of *Anaplasma phagocytophilum* cultured in a human promyelocytic cell line (A–D; Diff-Quik staining). Original magnification (A and C; ×400, B and D; ×1,000).