**Supplemental Table 1**. **Measurement of free cobalt in C4 solution incubated at 37 oC**

Duration of incubation (Hours) Percentage of free cobalt (%)

0 5.5 ± 0.2

48 6.5 ± 0.5

96 8.8 ± 0.4

120 7.0 ± 0.0

**Supplemental Table 2**. **Measurement of free cobalt from C4 solution in human salvage plasma**

Duration of incubation (Hours) Percentage of free cobalt (%)

0 0.8 ± 0.8

48 5.3 ± 0.8

**Supplemental Table 3**. **Tissues collected from rats at necropsy at 48 hours, 28 days, or 63 days after a single intramuscular dose of C4**

Digestive System Endocrine System

Liver\* Pituitary gland

Esophagus Thyroid gland

Stomach Parathyroid glands

Duodenum Adrenal glands

Jejunum

Ileum Nervous System

Cecum Brain (including cerebrum, cerebellum, medulla/pons)

Colon Spinal cord (cervical, thoracic, lumbar)

Salivary glands

Pancreas Musculoskeletal System

  Skeletal muscle

Urinary System Femur/knee joint

Kidneys\* Sternum

Urinary Bladder

  Miscellaneous

Respiratory System Skin

Lungs Eyes

Trachea Gross observations‡

Larynx Injection site

Pharynx

Nasal Cavity Reproductive System

  Testes

Cardiovascular System Epididymides

Heart Prostate

Aorta Seminal Vesicles

Hematopoietic System

Spleen\*

Thymus

Mandibular lymph node

Mesenteric lymph node

Bone marrow†

\*These organs were weighed at necropsy

†Bone marrow assessed with the sternum.

‡This describes observations for which histopathologic analysis was not appropriate (e.g., fluid, ruffled fur, and missing anatomic parts)