**2% (20 mg/ml) Lidocaine (Xylocaine ®, Lignocaine ®)**

N.B. – most commercial solutions contain 0.01 mg/ml epinephrine, which constricts local

blood vessels prolonging the anesthetic effect; products containing epinephrine should

not be used intravenously

**Mechanism of Action** – affects sodium channel depolarization/repolarization; metabolized in

the liver and excreted in the urine

**Dosage**

***Bovine*** – varies with size of area to be blocked; adult animals tolerate 100-125 ml total

volume without difficulty

***Sheep*** – 50 ml is the adult maximum dose that may be administered at one time; sheep

are highly sensitive to lidocaine induced seizures; toxicity can occur at lower doses if

administered directly into the blood stream or highly vascularized tissues

**Duration of Anesthesia** – varies with species, but effects generally last 30-45 minutes

**Reversal Agents** – none; warming the area to increase circulation may hasten in recovery; a

short-acting may be administered therapeutically to control seizures if they occur

**Withdrawal Time** – meat – none; milk - unspecified