**Figure S1: Sensory Scores (Peroneal)** Sensory function scores (median) at the peroneal dermatome over a 96 hour period in a population of eight (seven in the BLS treatment) research beagle dogs. One sciatic nerve of each dog was assigned to be treated with either bupivacaine 0.5% plus dexmedetomidine (1 µg / mL) at a volume of 0.1 mL / kg (BUP-DEX) or a bupivacaine liposome suspension (13.3 mg / mL) at a volume of 0.1 mL / kg (BLS). The contralateral nerve was assigned to be treated with the alternate treatment. The scores (Y axis) vary from 0 (no evidence of block detected) to 2 (complete absence of sensory function as tested). The time on the X axis is hours post block. Note that only seven limbs were analyzed in the BLS treatment whereas eight were analyzed in the BUP-DEX treatment. Also note that the majority of limbs in the BUP-DEX treatment had a score of 0 by 24 hours post block, whereas this was not the case until 96 hours in the limbs treated with the bupivacaine liposome suspension treatment (BLS).