**RESULTS OF THE LEAD EXTRACTION DEVICE EVALUATION AND RESULTS (LEADER) DATABASE**

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The LEADER database was created to gather unbiased data to determine the success and adverse event (AE) rates of lead extraction (LE).

Methods: All patients in North America and Europe who had LE performed with Cook Medical (CM) rep in attendance from Oct 2009 to Oct 3011 were included consecutively with 100% capture of procedural outcomes.

Results: 1556 cases (73%M 27%F) with extraction of 3171 leads implanted an average of 79.6 months. LE volume/physician/month was <2(64%)=low, 3-5 (24%)=medium and >6 (12%)=high. Electrophysiologists (65%), cardiovascular surgeons (30%) performed the LE. Venue was an OR (n=817 (53%)) vs cath/EP lab (n=578 (37%)) or other (n=161 (10%). Leads were active (n=1886 (60.6%)) and passive (n=1224 (39.4%)) fixation (unreported n=61 (1.9%)), with pacing (n=2013 (64.4%)), ICD (n=961 (30.7%)) and LV (n=151 (4.8%)). LE indication was infection (55%). Complete success=92.2%, partial=3.9%, abandoned=2.4%), referred elsewhere after attempt=1.5%. High volume complete success=95.2% vs medium (93.3%) and low volume physicians (91.2%). Manual sheaths were used in 29% of patients, rotational sheaths in 64%, laser in 9.4% of cases, femoral approach in 10.6% (Needle’s Eye Snare(TM) being most common (n=150)). Overlapping device use was common. There were 18 (1.16%) major AE including 2 deaths (0.1%). Major AE were more likely at low (1.22%) and medium (1.35%) centers vs high centers (0.53%).

Conclusions: LE in a an unbiased sample suggests high success and low complication rates can be achieved. Progressively better results with increasing procedural volume. Major AE should be low and procedural mortality should be near 0.1%.