

Updates in Internal Medicine – 2026

By Joseph M. Bruner DVM ACVIM

This presentation provides a rapid-fire, clinically focused review of recently published veterinary research, highlighting findings that directly influence everyday decision-making in Small Animal Internal Medicine (SAIM). Each slide is a brief summary of the content of the published journal articles and represents a meaningful update from the past several years, offering new insights into diagnostics, therapeutics, and patient management.

We begin with some various respiratory research articles. For example, a study evaluating the fluoroscopic appearance of a canine laryngopharyngeal anatomy demonstrates how head and neck positioning significantly alters airway dimensions and oxygenation, reminding clinicians that even subtle positioning choices can meaningfully affect ventilation. Complementing this, a feline study on topical lidocaine for intubation identified 45 seconds as the optimal time to achieve laryngeal desensitization—an immediately applicable refinement for anesthetic protocols. Respiratory infection management also saw important updates. A prospective trial in kittens with upper respiratory disease showed that adding famciclovir to doxycycline accelerated clinical recovery, supporting the use of combination therapy in shelter and rescue populations. In dogs with aspiration pneumonia, antimicrobial duration guided by clinical improvement and C-reactive protein demonstrated that most patients can safely discontinue antibiotics at 1-2 weeks, reducing unnecessary drug exposure. Diagnostic techniques continue to evolve as well. Fluoroscopy-guided fine-needle aspiration of deep pulmonary masses proved both safe and diagnostically productive, with complications in only one of ten cases. Meanwhile, a study evaluating fasting effects on GI biomarkers (cobalamin, folate, TLI, and cPLI) found no clinically significant differences, suggesting that strict fasting may not be necessary for these assays. Pain management and procedural comfort also received attention. Two separate investigations into vapocoolant sprays—one comparing them to EMLA cream and another evaluating a novel CO₂ spray—showed meaningful reductions in needle-related pain, particularly for venipuncture and centesis procedures. These findings support broader adoption of rapid-acting, non-pharmaceutical topical analgesia. In hospitalized patients, the use of force-activated separation devices (FASDs) for IV catheters significantly reduced complications, including line breakage and phlebitis. Although cost remains a barrier, the reduction in catheter-related morbidity is compelling. Endocrinology updates include a large retrospective study of dogs with pituitary-dependent hyperadrenocorticism treated with low-dose, twice-daily trilostane, which achieved a median survival of 998 days, surpassing historical expectations. Negative prognostic indicators included calcinosis cutis, thrombocytosis, and low body condition score. In diabetic dogs, periodontal treatment produced measurable improvements in glycemic control, reinforcing the systemic importance of oral health. Renal medicine updates include a review of familial nephropathies and a study of juvenile nephropathy in Boxers, emphasizing early recognition of breed-associated renal disease. Additionally, new radiographic reference values for tracheal hypoplasia in French Bulldogs identified TD:ML as the most reliable measurement, refining diagnostic criteria for brachycephalic airway disease. Other journal articles involving miscellaneous topics will also be presented.

Collectively, these studies highlight the rapid pace of advancement in veterinary internal medicine and offer practical, evidence-based updates that clinicians can implement immediately to improve patient outcomes.