Evaluation of Prothrombin Time and Activated Partial Thromboplastin Time in Native and Citrated Whole Blood in Hispaniolan Amazon Parrots (*Amazona ventralis*) With a Handheld Point-of-Care Analyzer

Rachel Baden, DVM, Dipl ABVP (Avian), Thomas N. Tully Jr, DVM, MS, Dipl ABVP (Avian), Dipl ECZM (Avian), João Brandão, LMV, MS, Dipl ECZM (Avian), Chin-Chi Liu, MS, MApStat, PhD, and Britton Grasperge, DVM, PhD, DACVP

Abstract: Objective assessment of coagulation in birds is difficult, and traditional methods of measuring prothrombin time (PT) and activated partial thromboplastin time (aPTT) with the use of mammalian reagents have not been validated in birds. Avian-specific reagents must be prepared from brain extract and are not practical for clinical use. The objective of this investigation was to determine whether the InSight qLabs point-of-care analyzer (Micropoint Biotechnologies Inc, Guangdong, China) could measure PT and aPTT in Hispaniolan Amazon parrots (*Amazona ventralis*) in native and citrated whole blood, and whether the values obtained correlated with clinical appearance and basic hematologic and biochemical parameters from the bird. The qLabs analyzer was able to measure aPTT reliably, but not PT. Activated partial thromboplastin time of citrated blood was significantly different from the aPTT measured from native whole blood (P < 0.001). On the basis of this study, the qLabs machine may be used to measure aPTT, but clinical application between avian species requires further research.