CANINE TEAR OSMOLARITY MEASURED WITH THE SCOUTPRO® OSMOLARITY SYSTEM (<u>I Allgoewer</u>, 1 J Spornberger, 1 P Soukup, 1 S Lettmann, 1 M Erhard 1) Animal Eye Practice, Berlin, Germany

**Purpose.** To evaluate the applicability of the ScoutPro® (Trukera Medical, Southlake, Texas) osmolarity system in healthy dogs. <u>Methods.</u> Tear osmolarity of 17 healthy dogs of dolicho- and mesocephalic breeds was tested with the ScoutPro® osmolarity system. Two examiners took three subsequent measurements of each eye. Intrarater variability and inter-rater reliability were calculated. <u>Results.</u> The measuring technique was straightforward, instrument handling was simple. Mean tear osmolarity measured by examiner one was  $326.74 \pm 10.55$  mOsm/L and by examiner two  $323.51 \pm 12.01$  mOsm/L. Mean difference between examiners was  $3.2 \pm 11.2$  mOsm/L. Paired two-tailed t-test was 0.1, Cohens D was -0.29. <u>Conclusions.</u> Measurements with the ScoutPro® osmolarity system are easy to perform in dogs. Variability and inter-rater reliability seem to be acceptable in the small group of dogs tested. Further studies regarding the reliability of the test results and the evaluation of the tear osmolarity in ocular surface disease are warranted. **None.**