1154-VT-1066 **Md Sazib Hasan*** (sazib25@gmail.com), 368 S Mall Drive, Unit I 206, St George, UT 84790, and **Kalimuthu Krishnamoorthy**. *Confidence intervals for the mean and a percentile based on zero-inflated lognormal data.*

The problems of estimating the mean and an upper percentile of a lognormal population with nonnegative values are considered. For estimating the mean of a such population based on data that include zeros, a simple confidence interval (CI) that is obtained by modifying Tian's [Inferences on the mean of zero-inflated lognormal data: the generalized variable approach. Stat Med. 2005;24:3223—3232] generalized CI, is proposed. A fiducial upper confidence limit (UCL) and a closed-form approximate UCL for an upper percentile are developed. Our simulation studies indicate that the proposed methods are very satisfactory in terms of coverage probability and precision, and better than existing methods for maintaining balanced tail error rates. The proposed CI and the UCL are simple and easy to calculate. All the methods considered are illustrated using samples of data involving airborne chlorine concentrations and data on diagnostic test costs. (Received September 13, 2019)