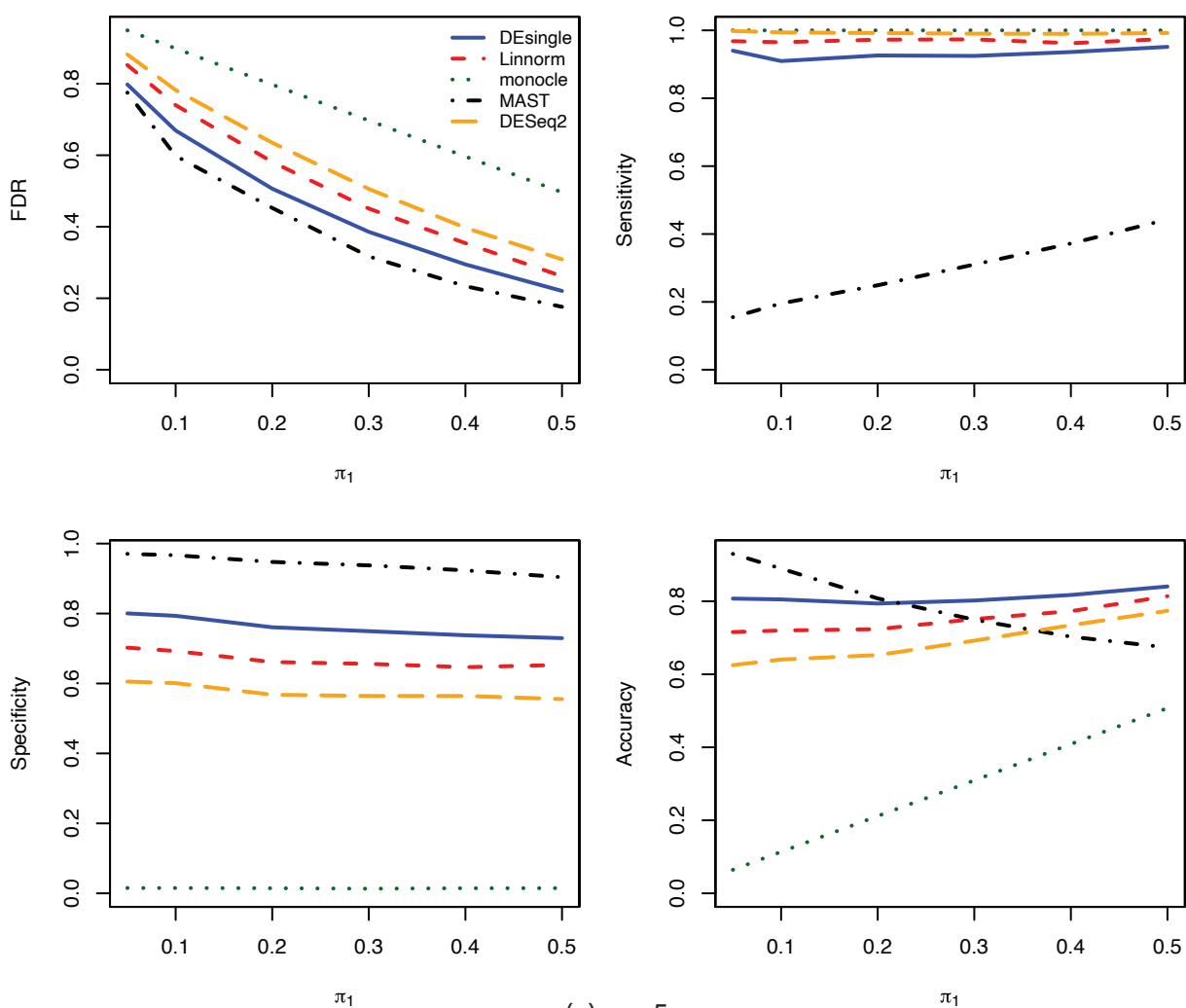
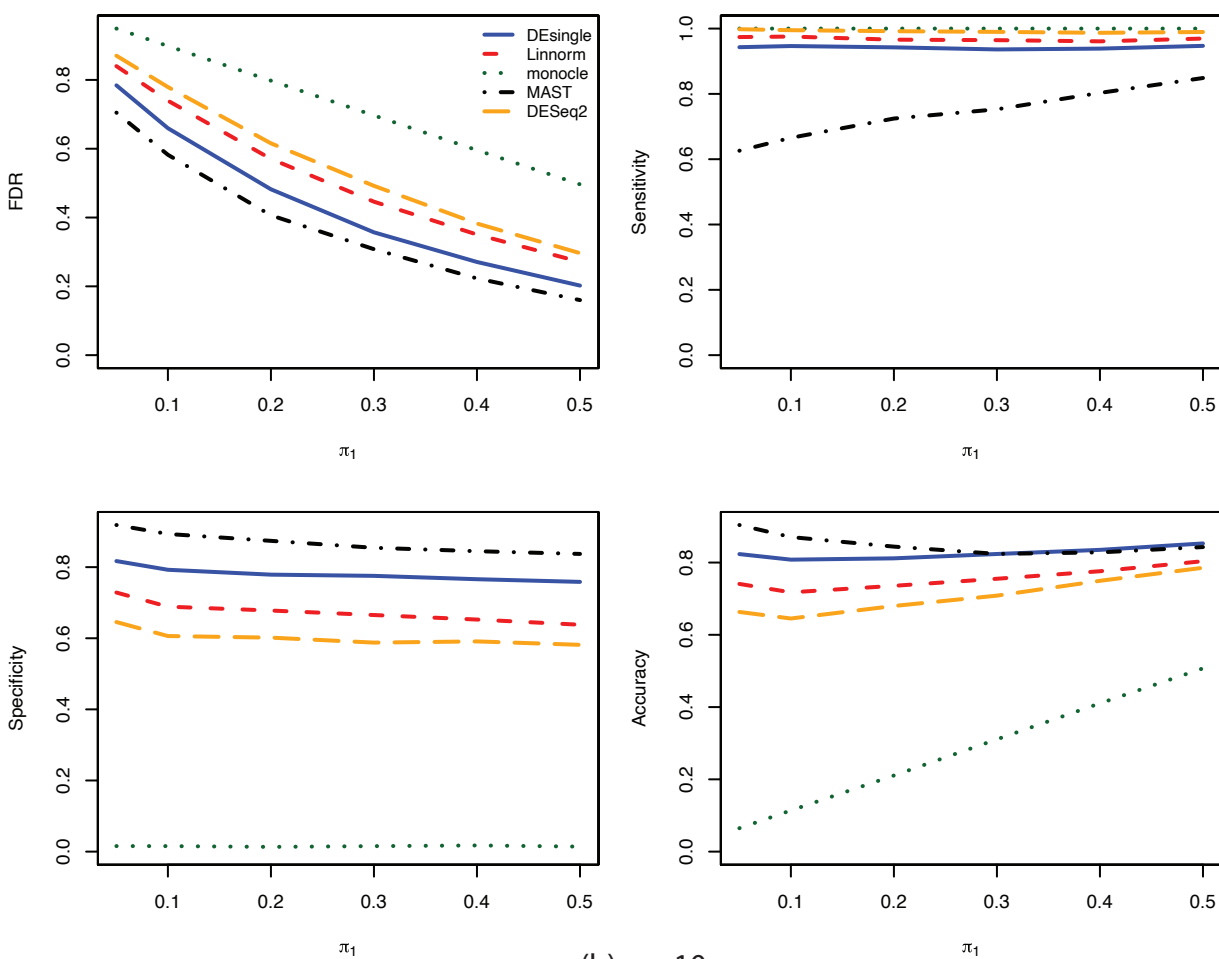
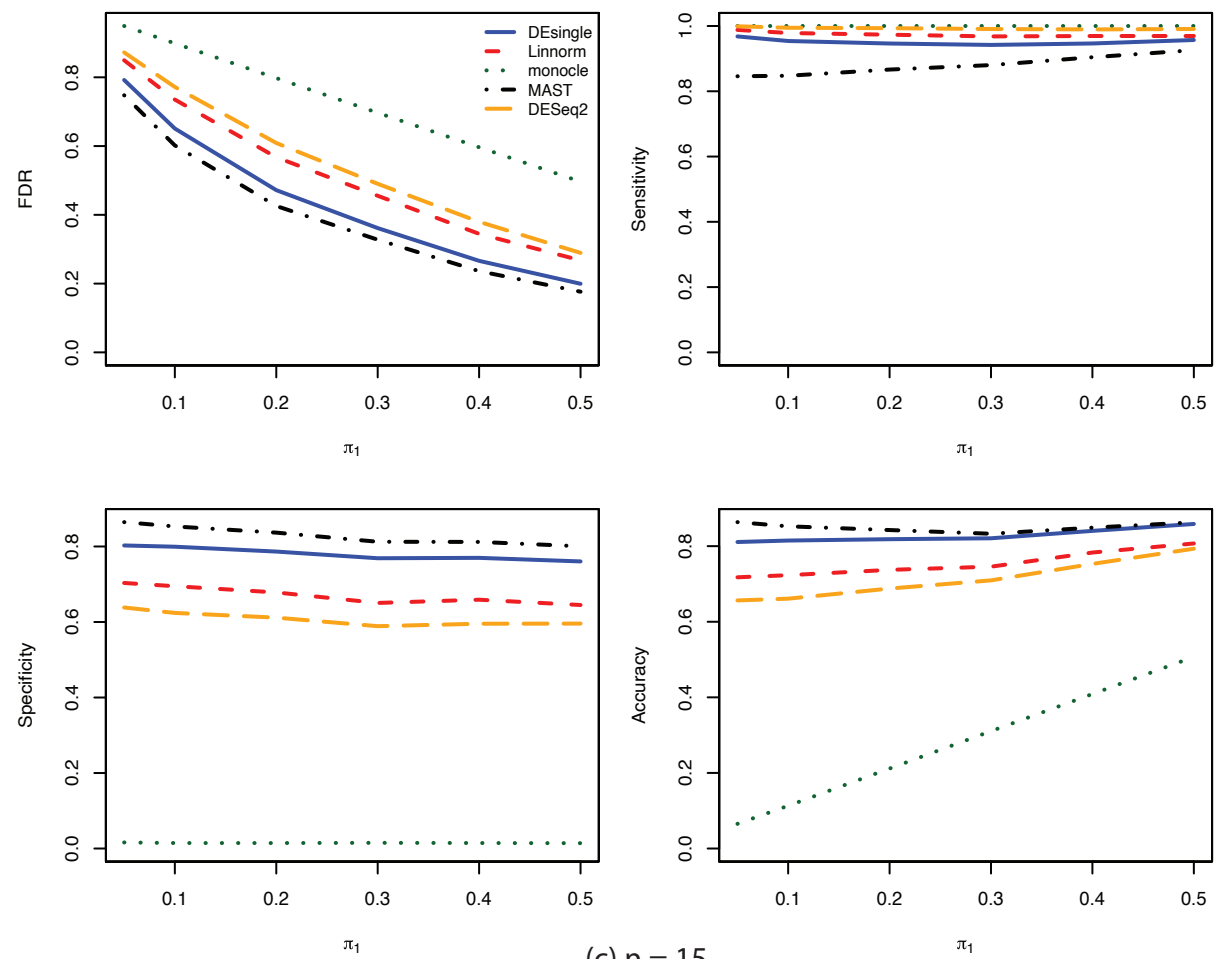




(a) $n = 5$



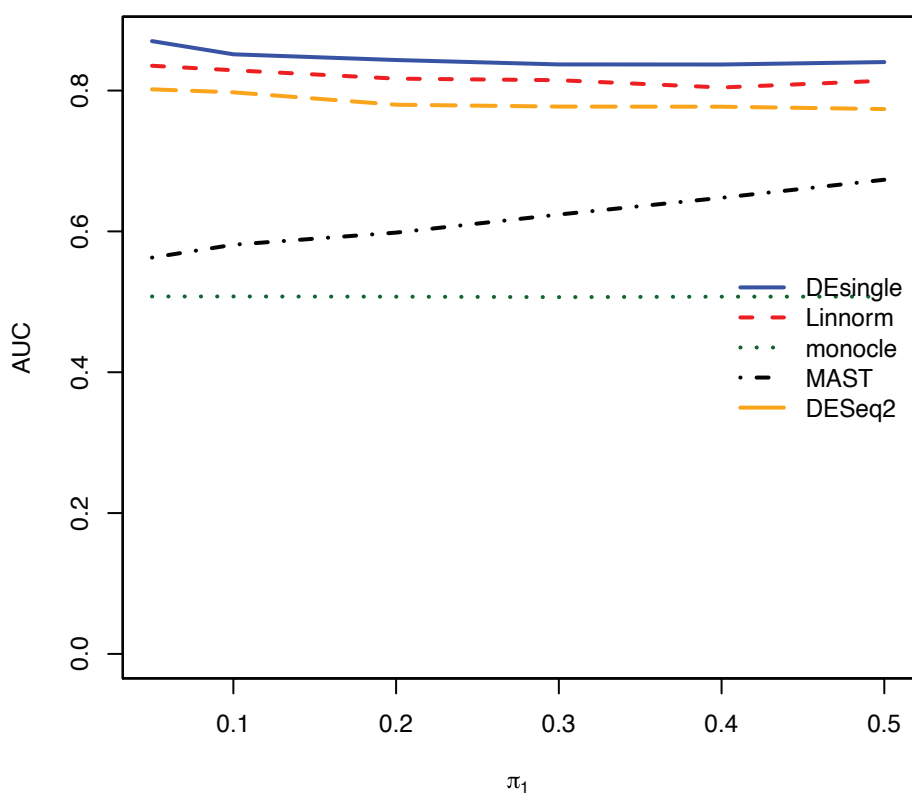
(b) $n = 10$



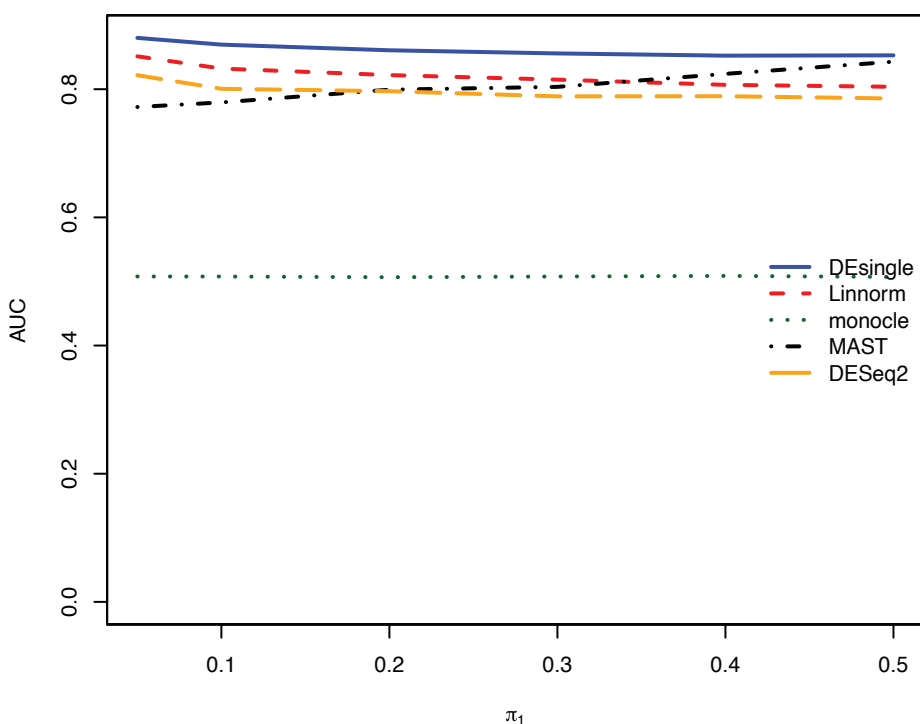
(c) $n = 15$

Figure S1: The estimated FDR, sensitivity, specificity, and accuracy comparisons for sample size $n = 5, 10$, and 15 in each group with simulated data follow negative binomial distribution. (a) $n = 5$, (b) $n = 10$, (c) $n = 15$.

(a) $n = 5$



(b) $n = 10$



(c) $n = 15$

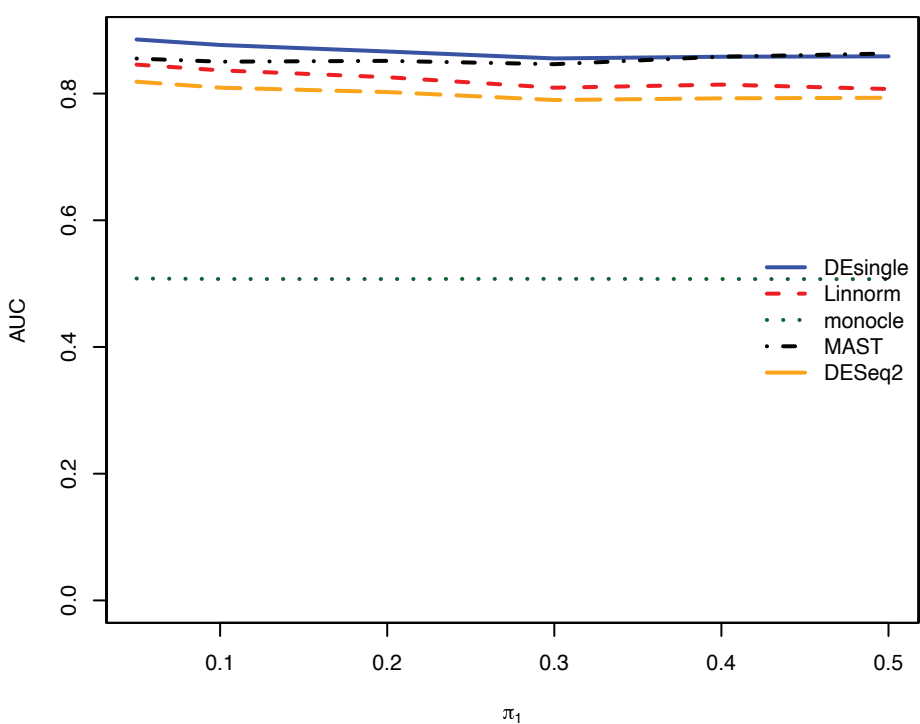
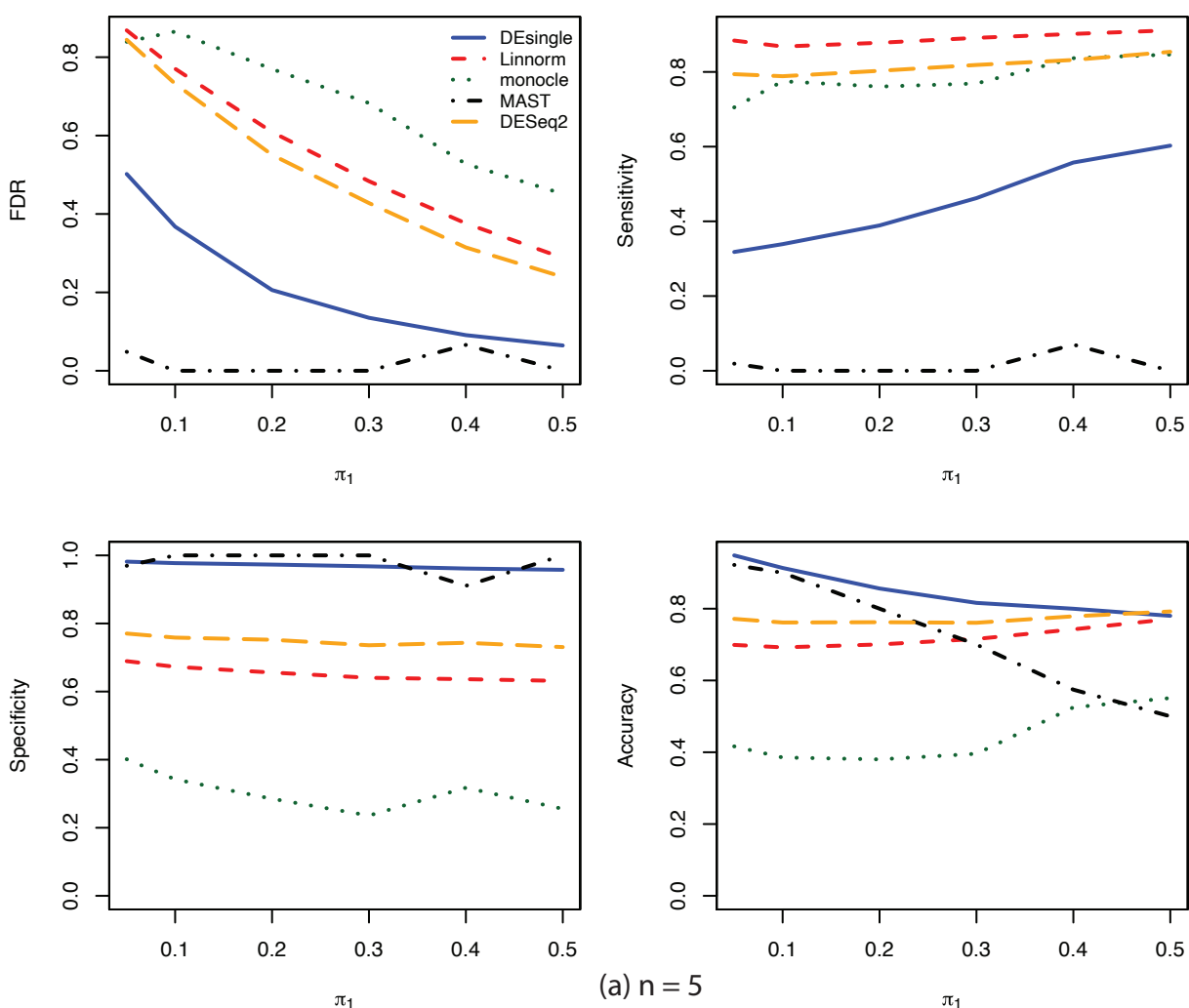
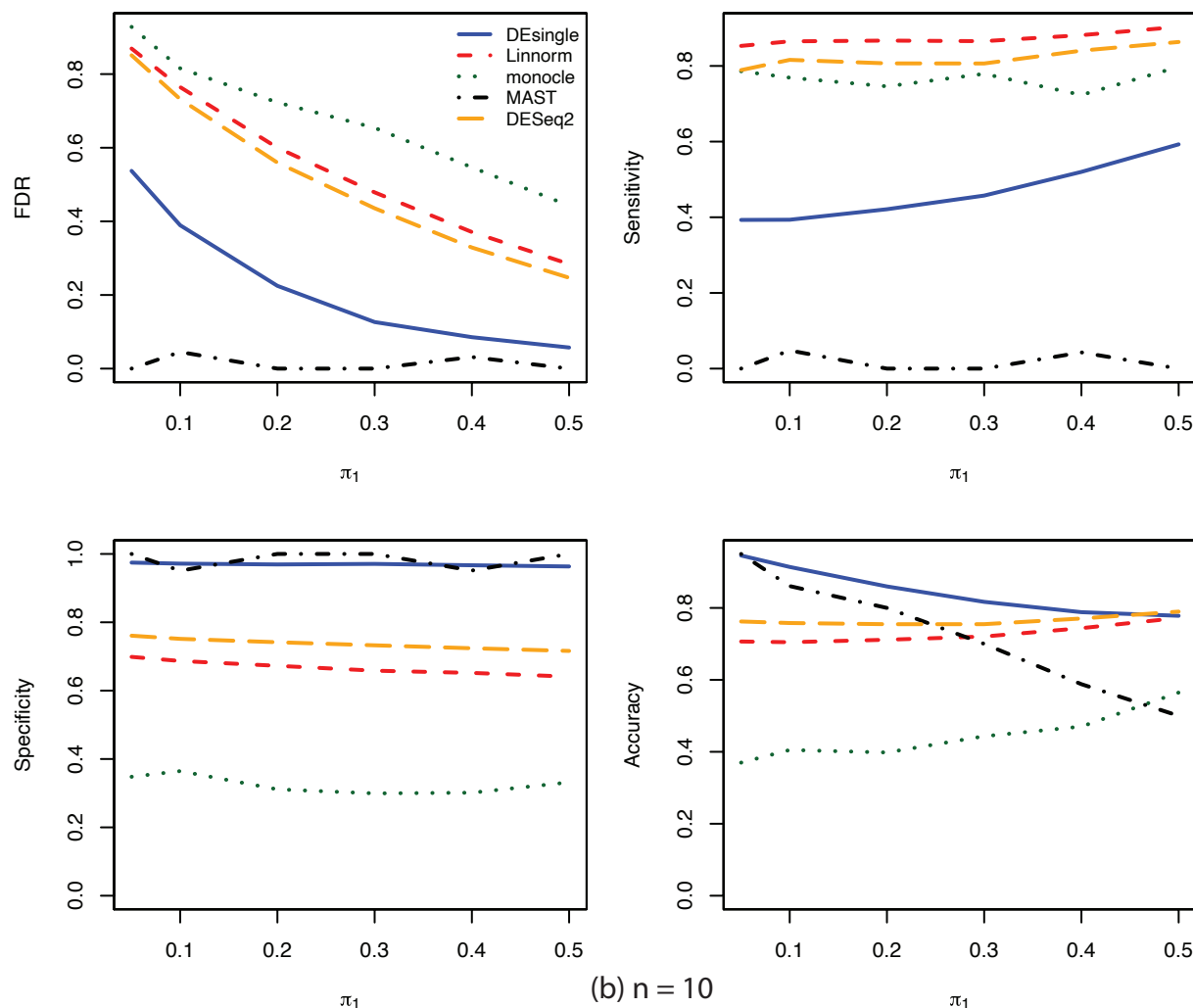


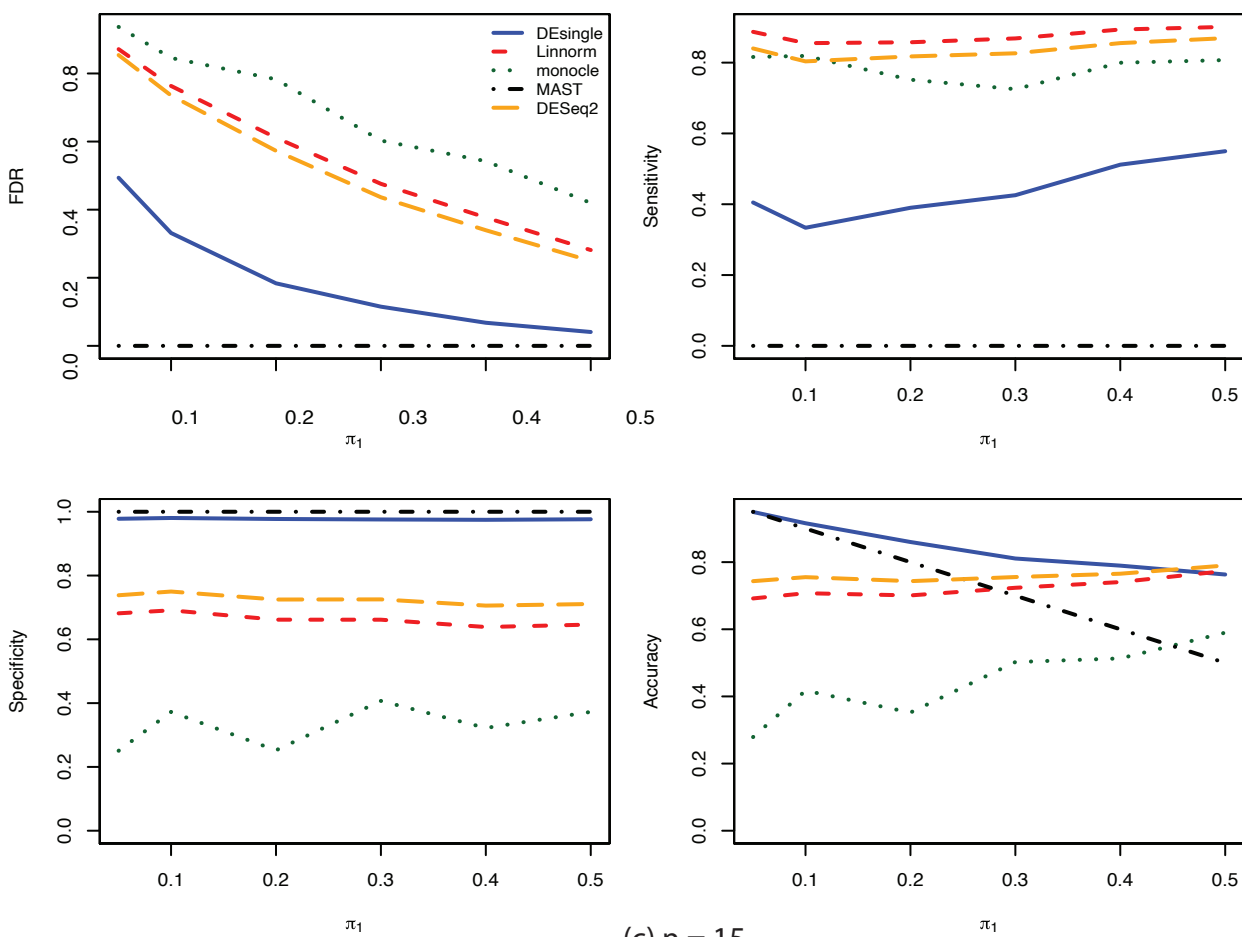
Figure S2. The AUROC comparisons for sample size $n = 5, 10$, and 15 in each group with simulated data follow negative binomial distribution. (a) $n = 5$, (b) $n = 10$, (c) $n = 15$.



(a) $n = 5$



(b) $n = 10$



(c) $n = 15$

Figure S3. The estimated FDR, sensitivity, specificity, and accuracy comparisons for sample size $n = 5, 10$, and 15 in each group with simulated data follow Poisson distribution. (a) $n = 5$, (b) $n = 10$, (c) $n = 15$.

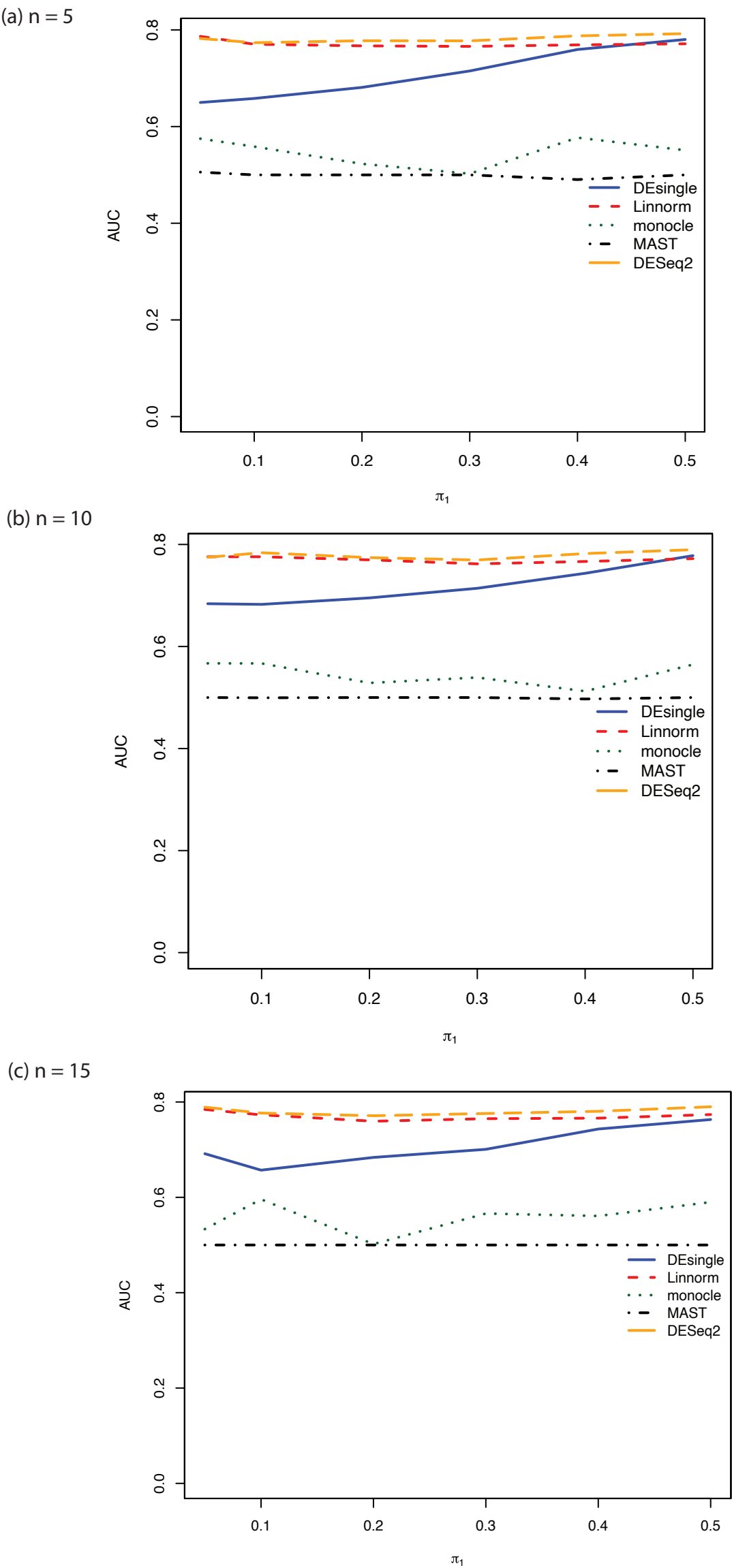
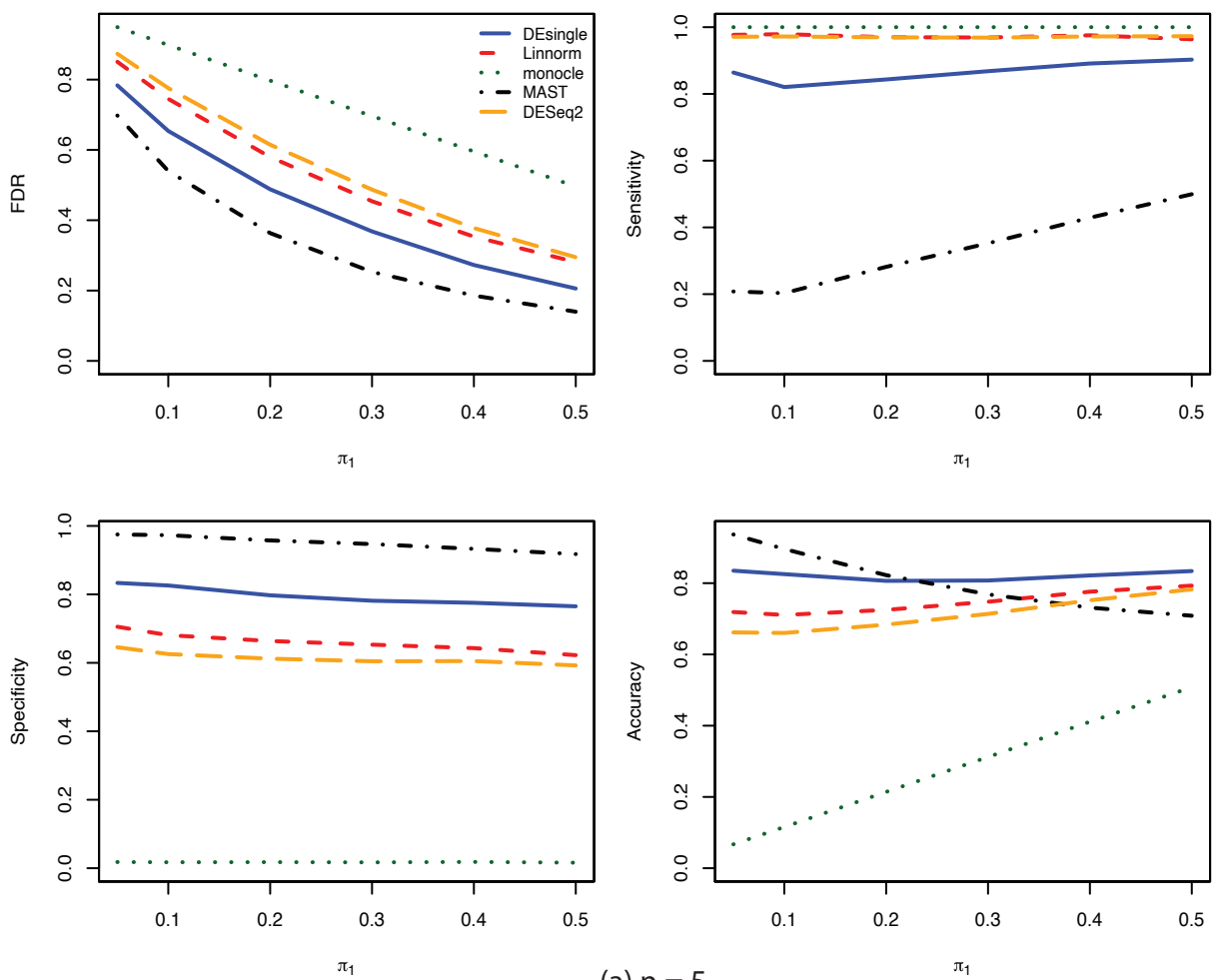
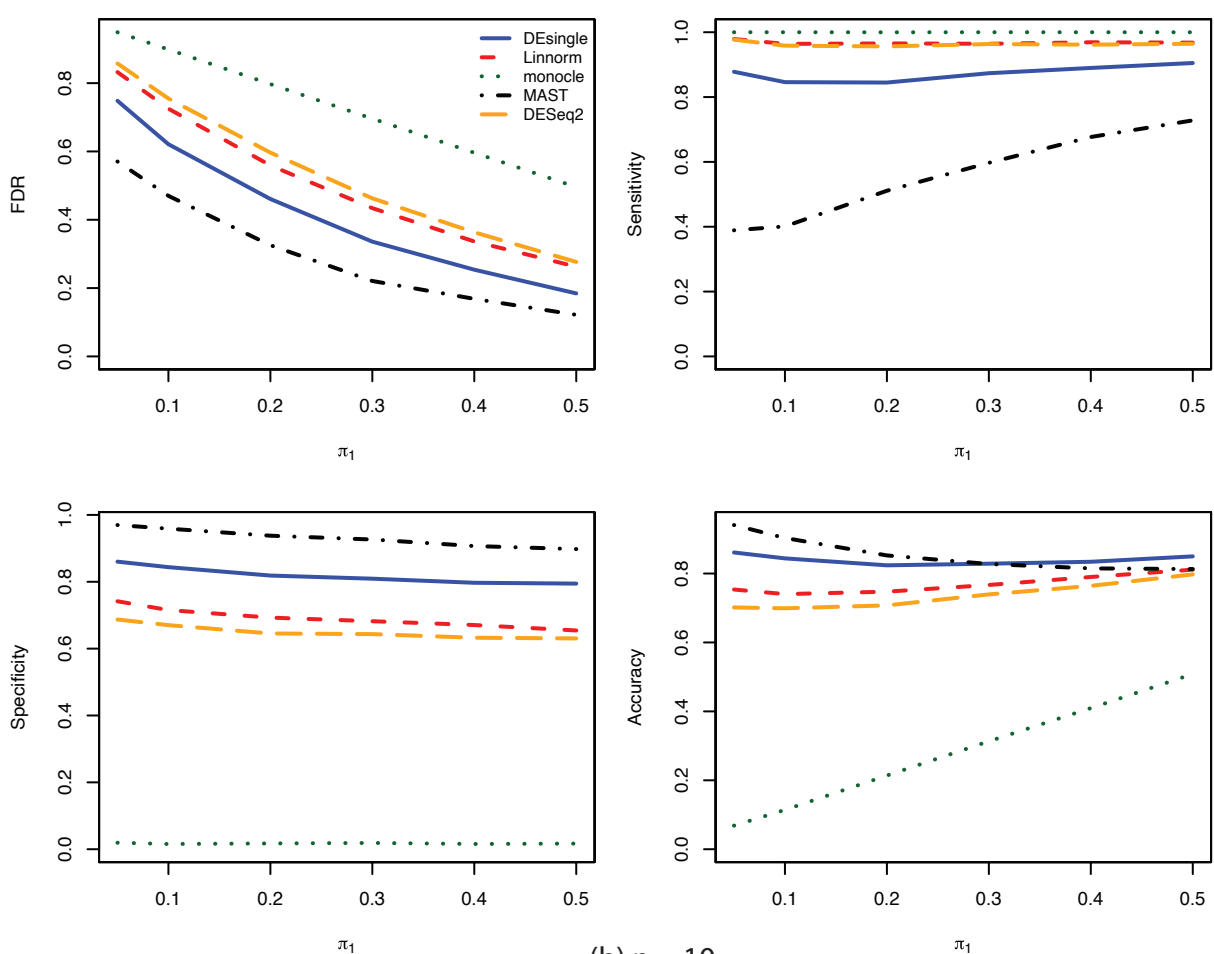


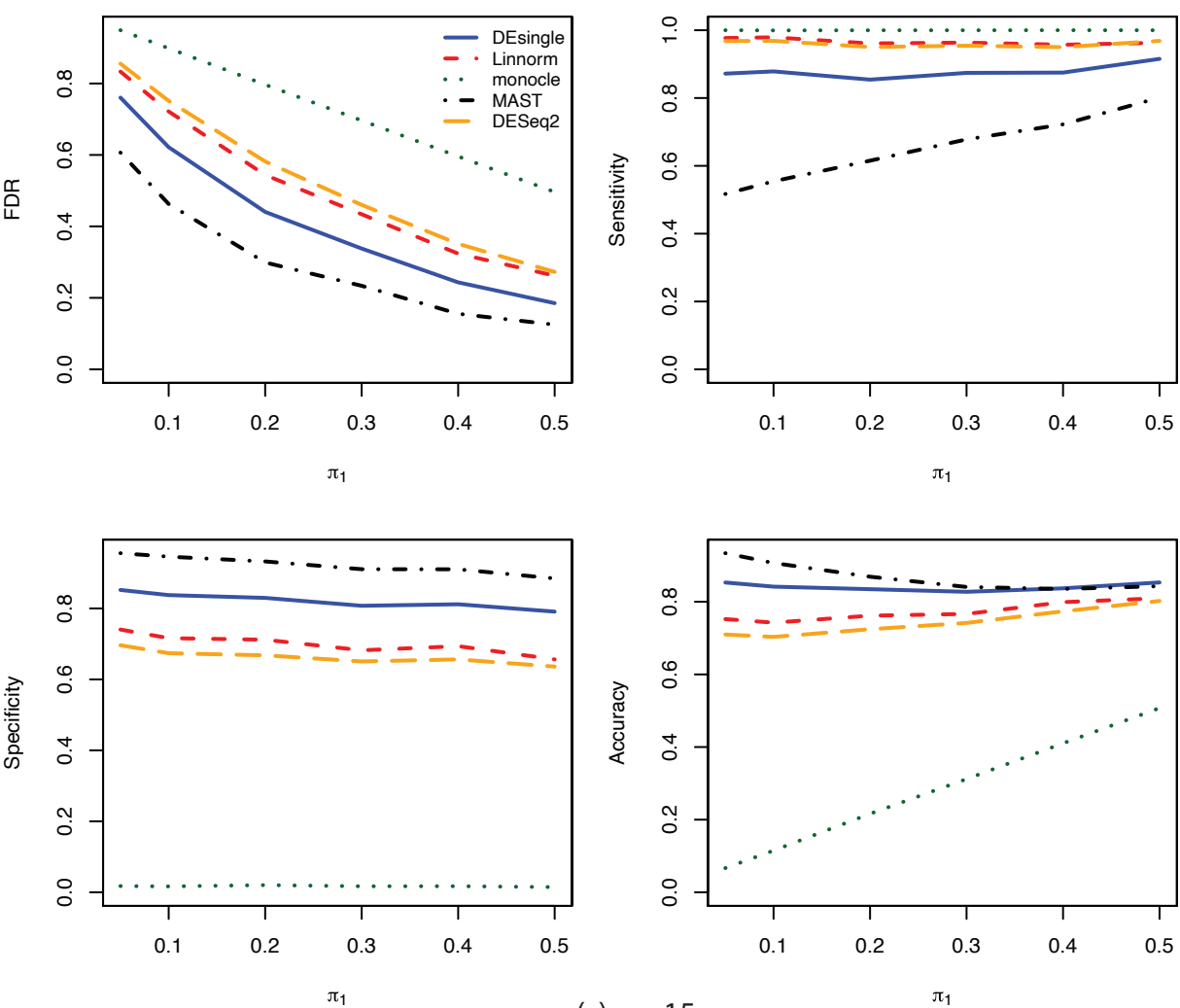
Figure S4. The AUROC comparisons for sample size $n = 5, 10$, and 15 in each group with simulated data follow Poisson distribution. (a) $n = 5$, (b) $n = 10$, (c) $n = 15$.



(a) $n = 5$



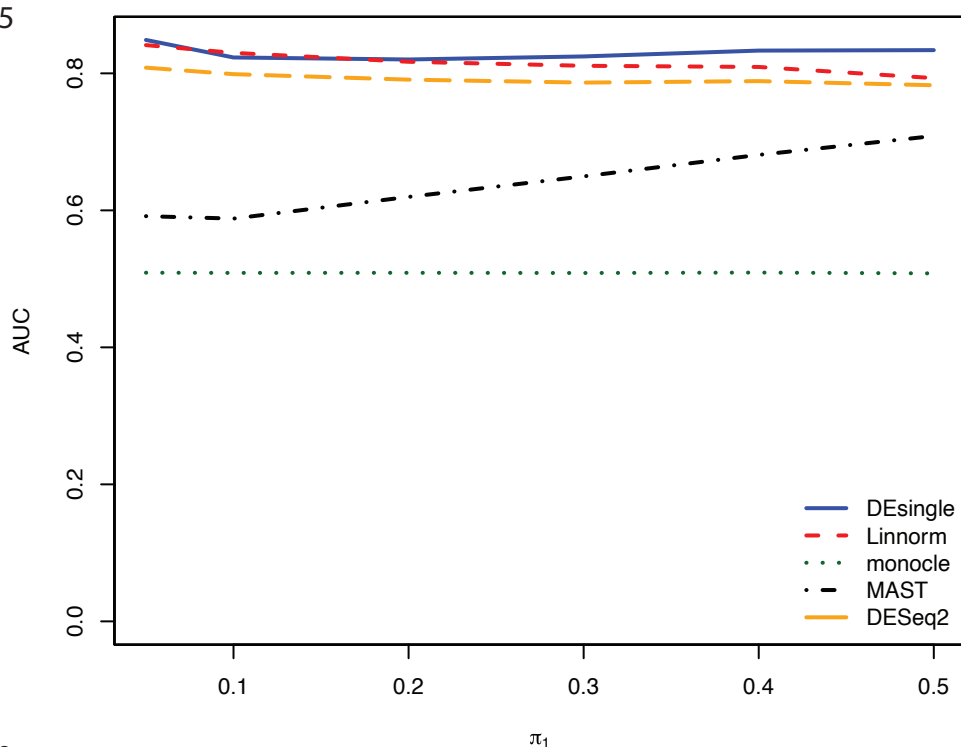
(b) $n = 10$



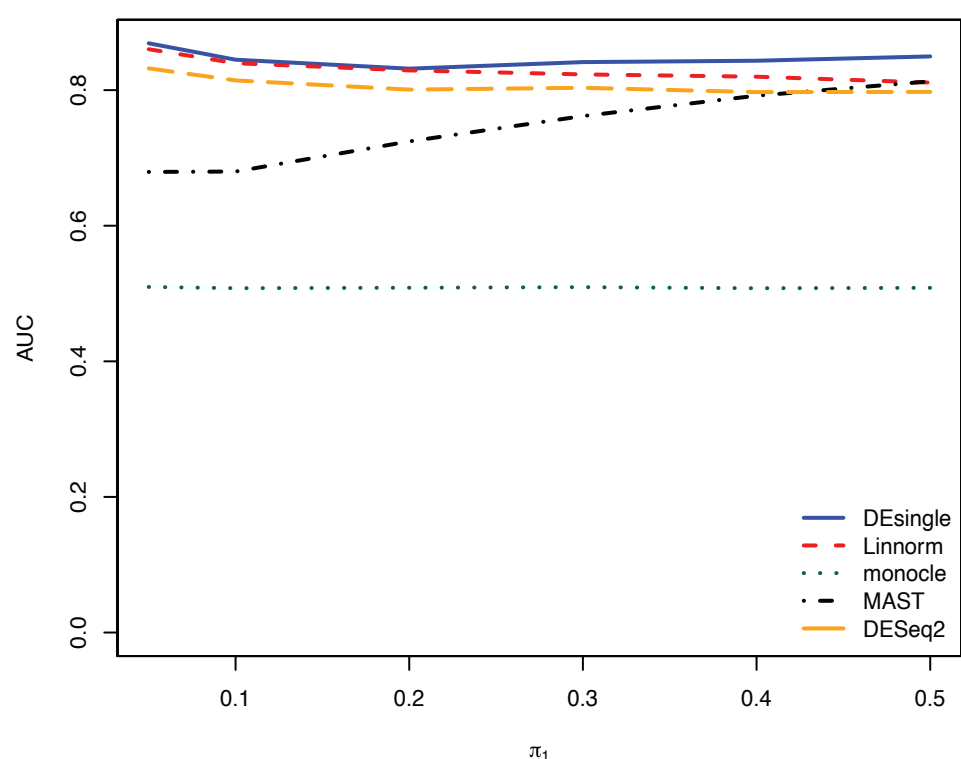
(c) $n = 15$

Figure S5. The estimated FDR, sensitivity, specificity, and accuracy comparisons for sample size $n = 5, 10$, and 15 in each group with simulated data follow log normal distribution. (a) $n = 5$, (b) $n = 10$, (c) $n = 15$.

(a) $n = 5$



(b) $n = 10$



(c) $n = 15$

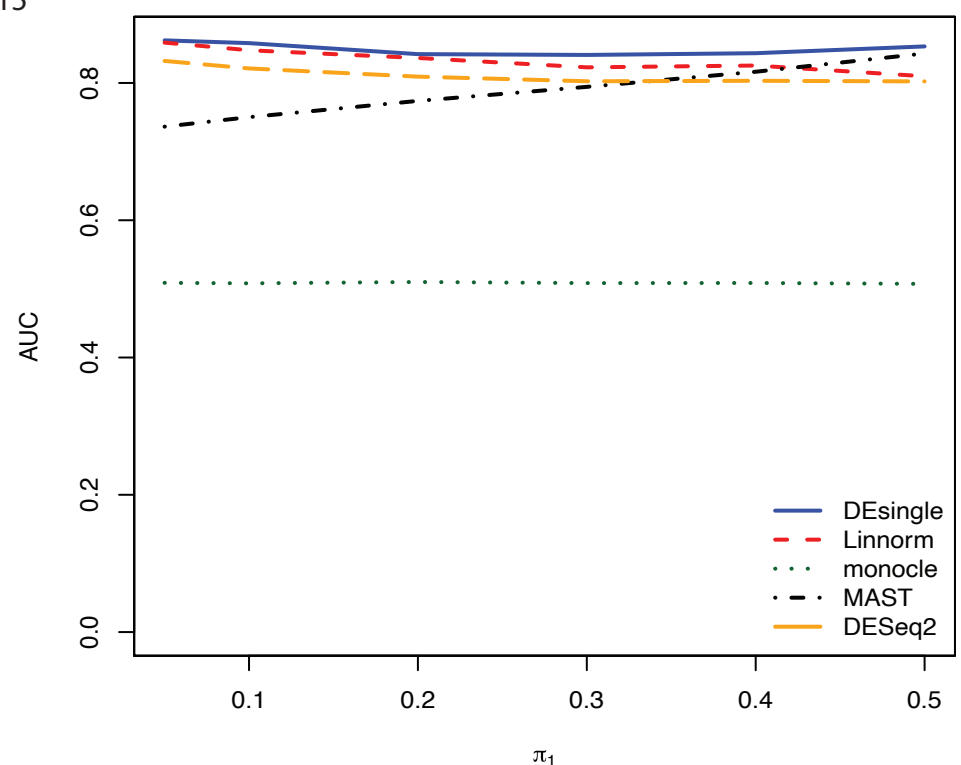
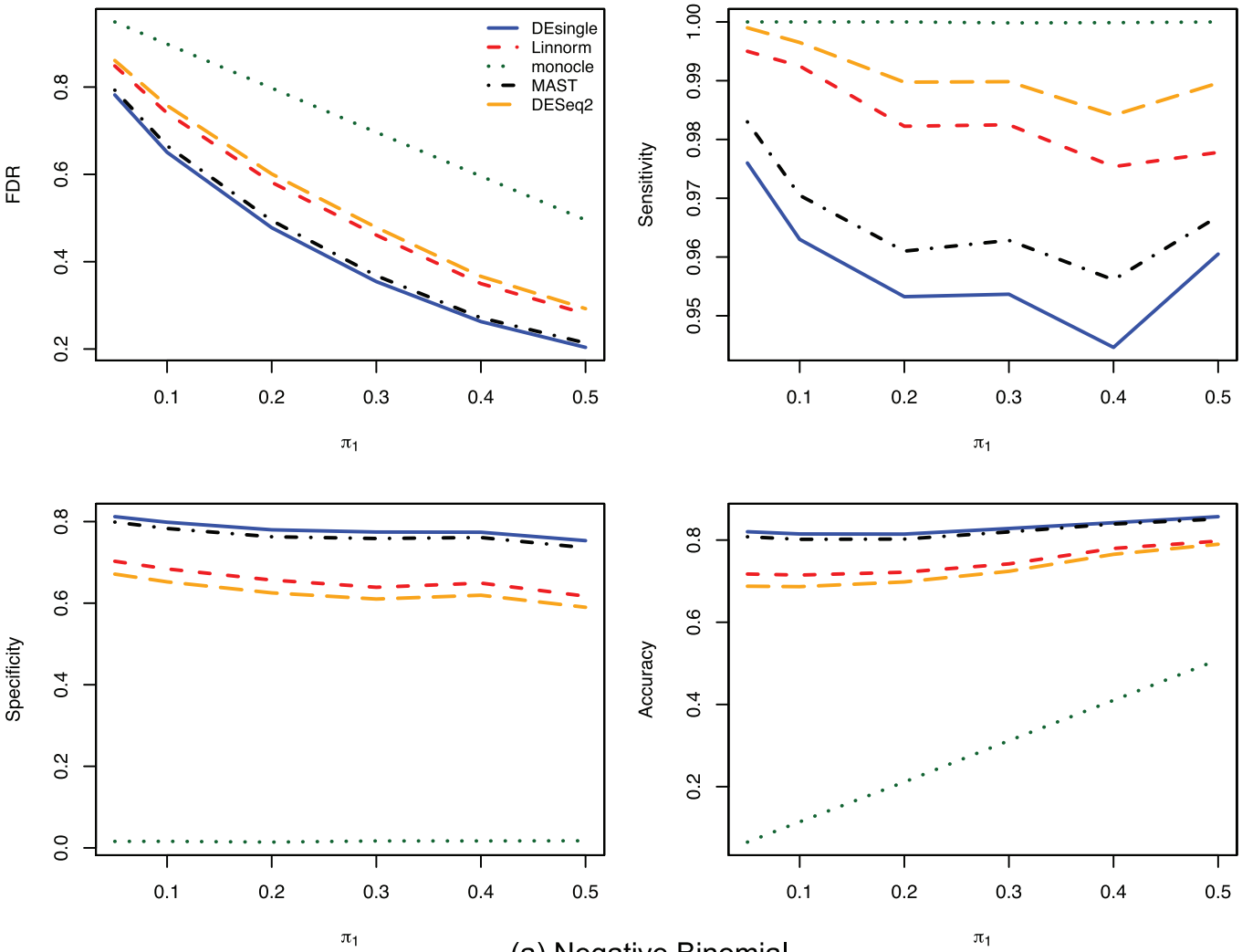
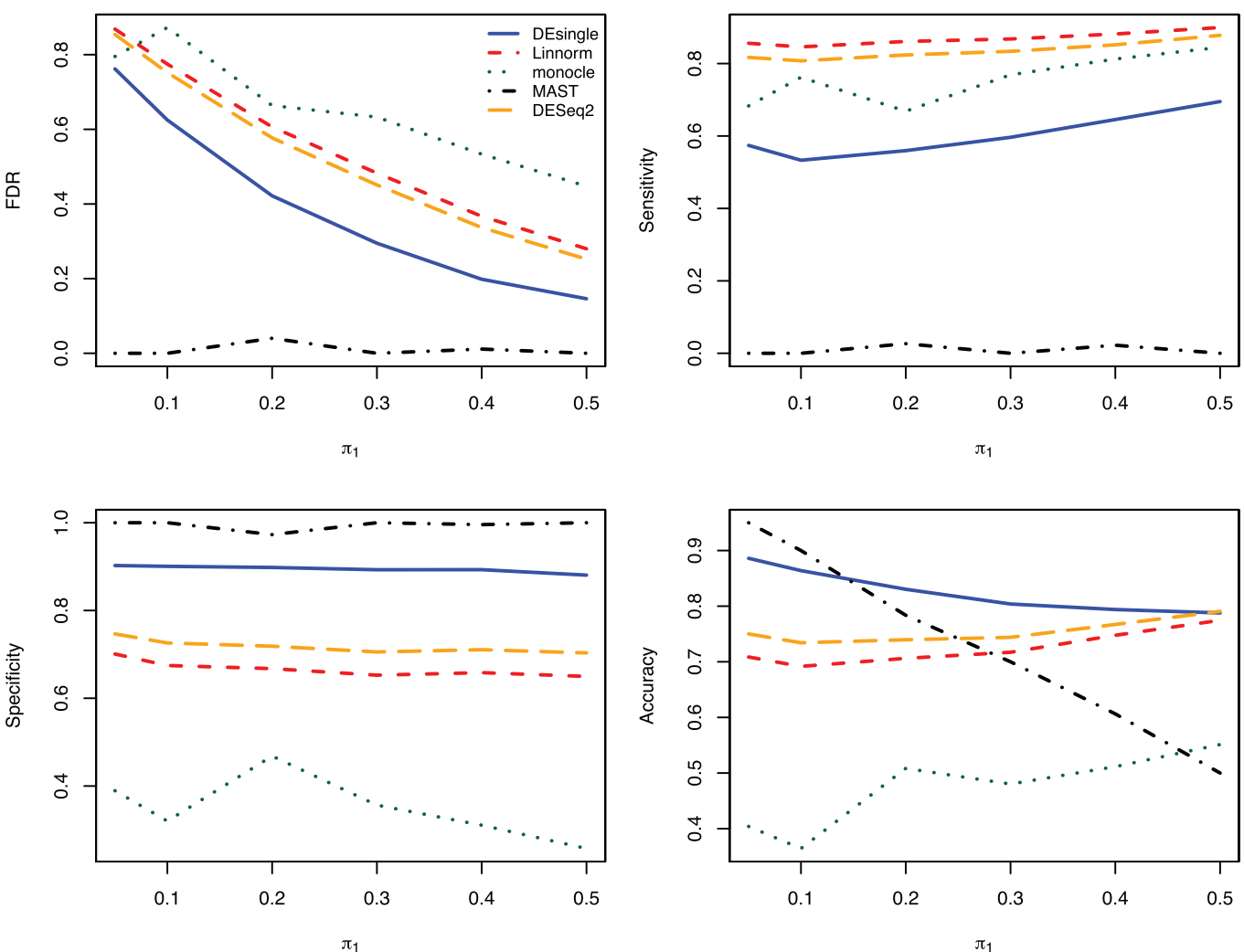


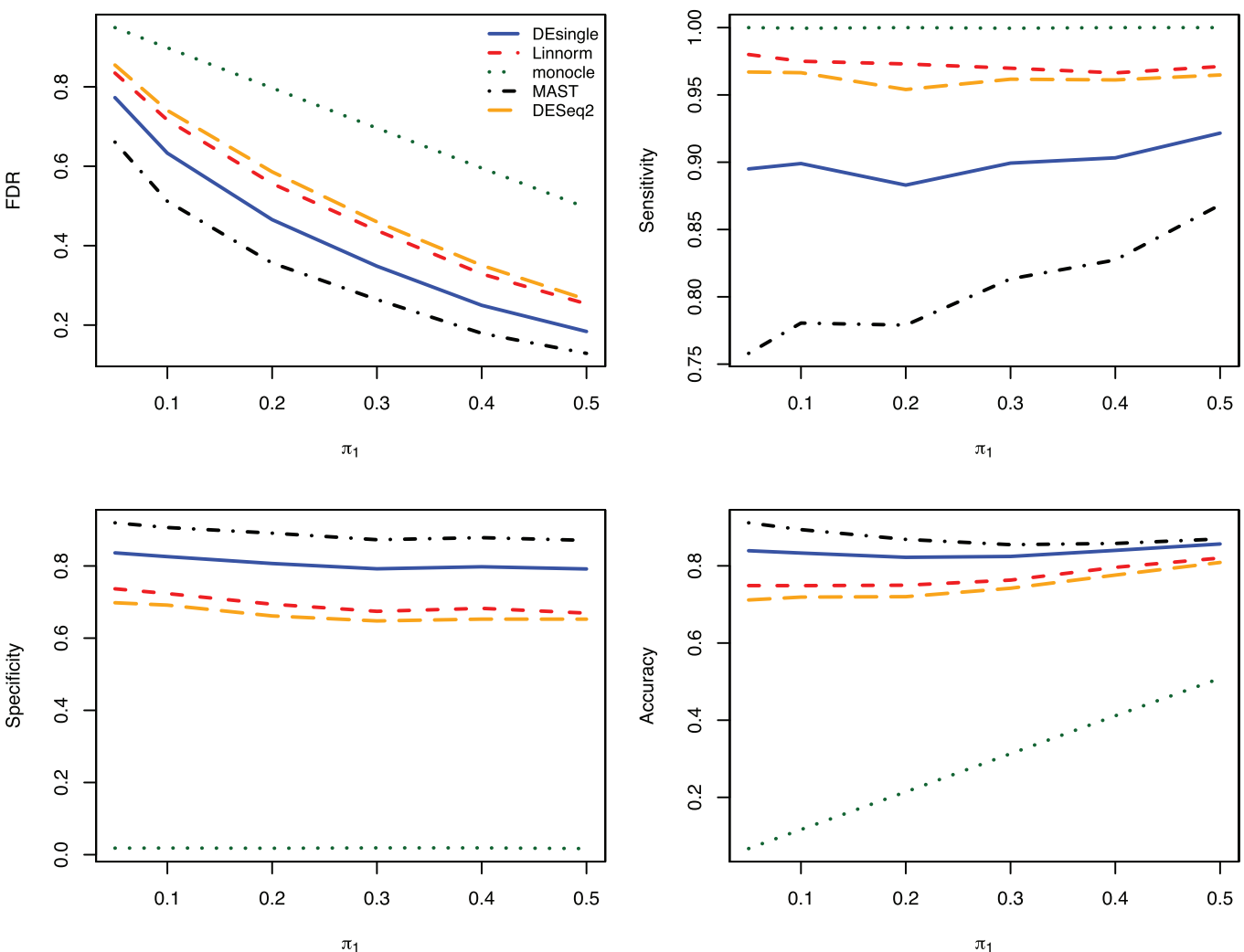
Figure S6. The AUROC comparisons for sample size $n = 5, 10$, and 15 in each group with simulated data follow log normal distribution. (a) $n = 5$, (b) $n = 10$, (c) $n = 15$.



(a) Negative Binomial

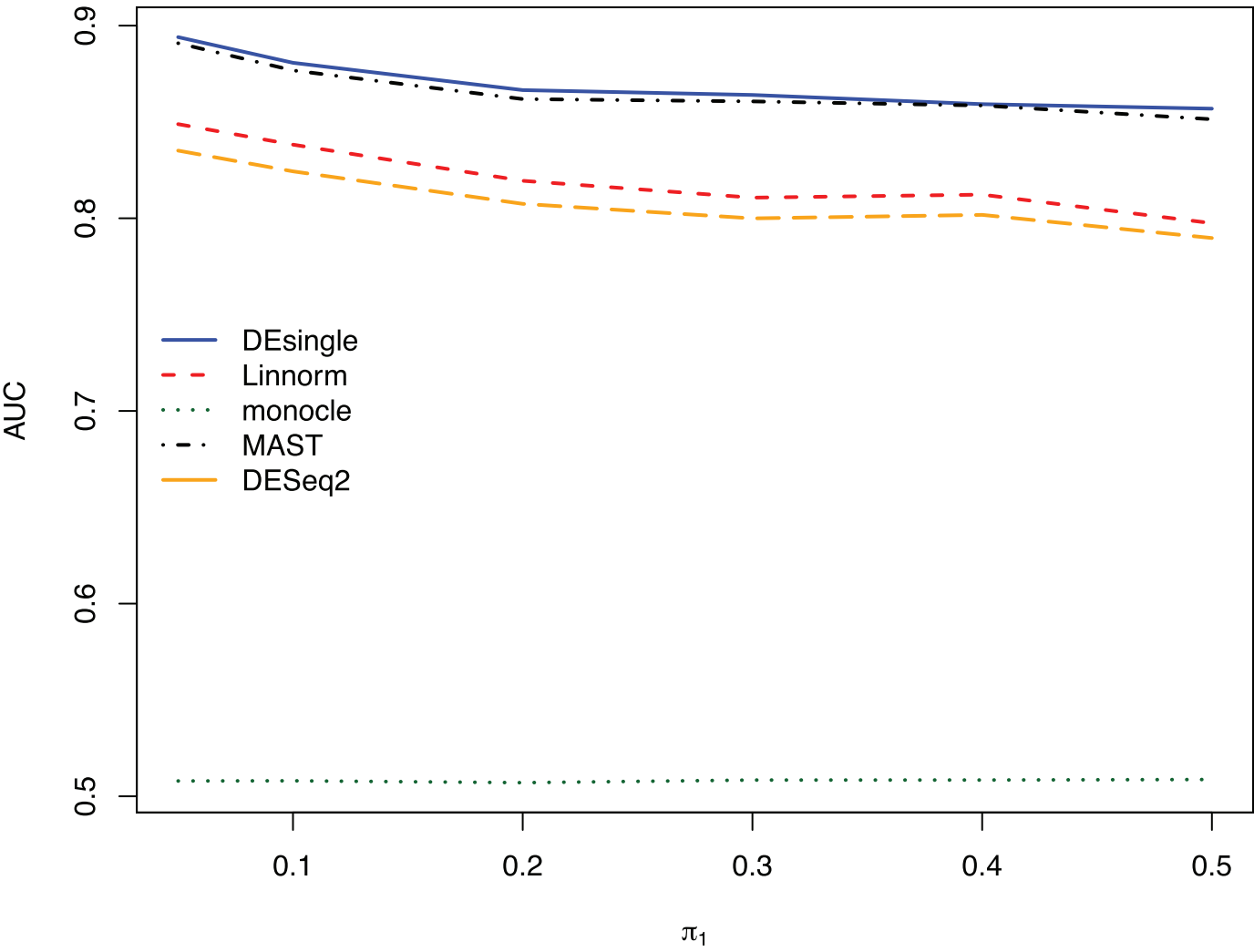


(b) Poisson

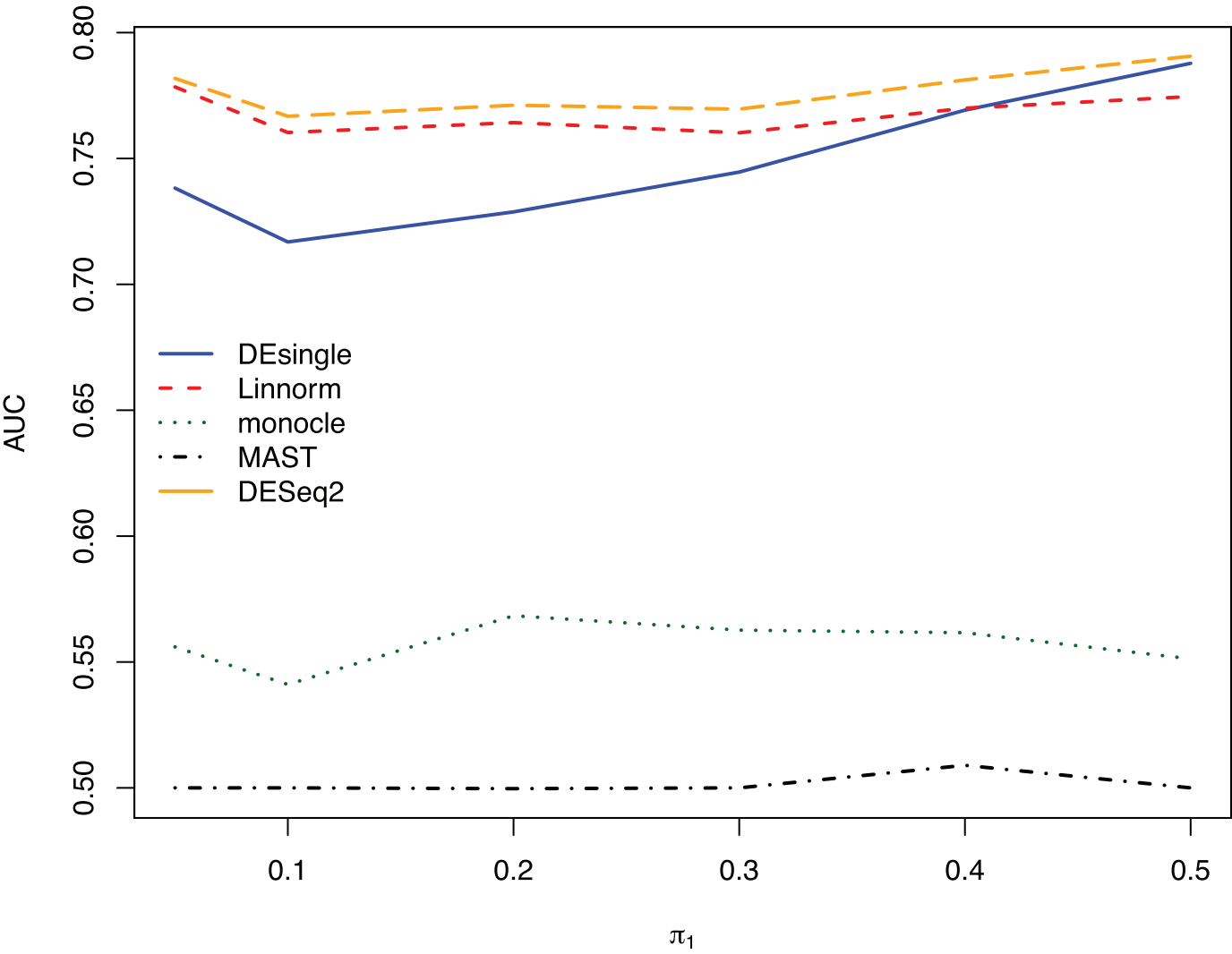


(c) Log Normal

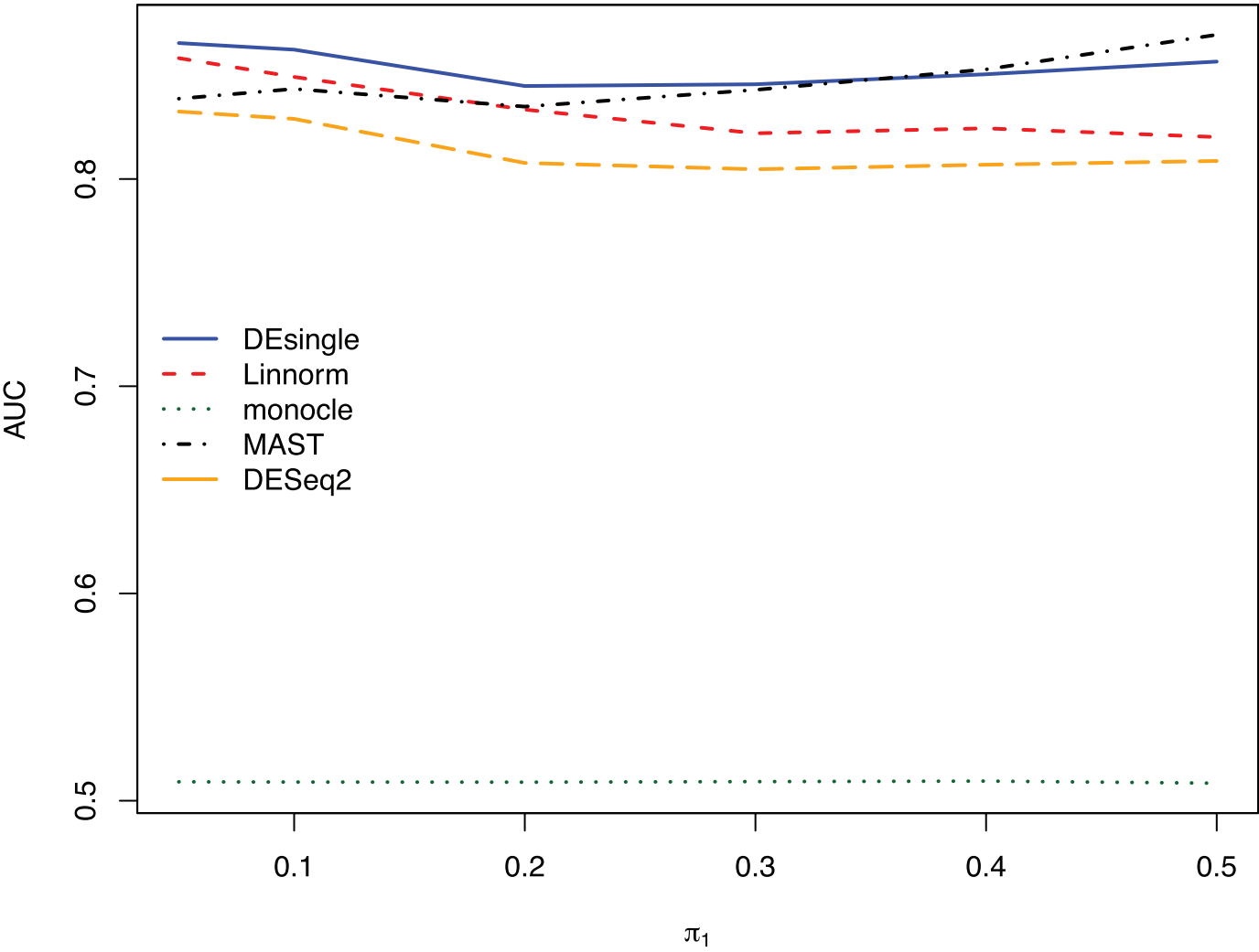
Figure S7. The estimated FDR, sensitivity, specificity, and accuracy comparisons for sample size $n = 100$ in each group with simulated data follow negative Binomial, Poisson, and log normal distribution. (a) negative Binomial distribution, (b) Poisson distribution, (c) log normal distribution.



(a) Negative Binomial



(b) Poisson



(c) Log Normal

Figure S8. The AUROC comparisons for sample size $n = 100$ in each group with simulated data follow negative Binomial, Poisson, and log normal distribution. (a) negative Binomial distribution, (b) Poisson distribution, (c) log normal distribution.