







































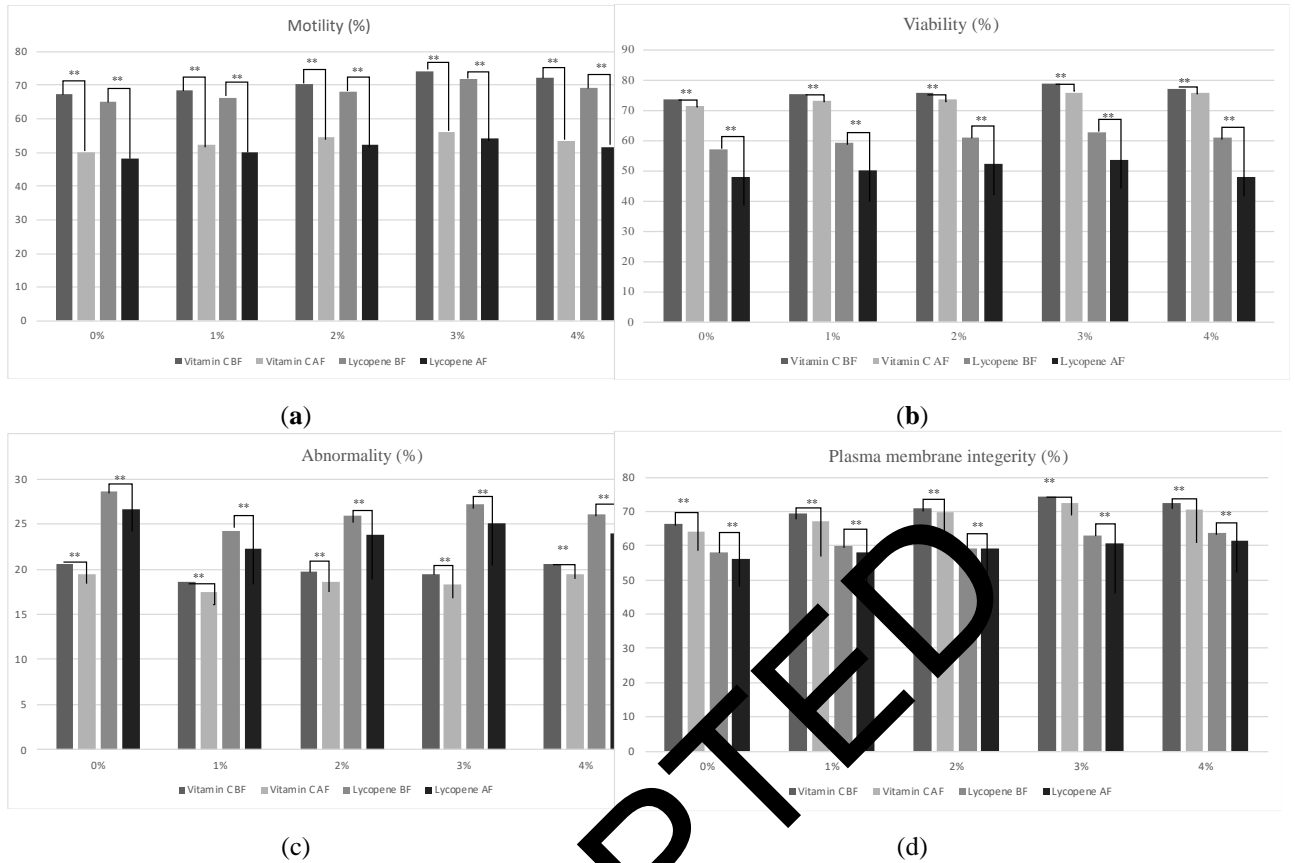








Figures



501 **Figure 1.** Figure 1. Comparison on semen quality ((a) motility, (b) viability, (c) abnormality and (d) Plasma  
 502 membrane integrity/PMI) after diluted with ascorbic acid and lycopene with the same dosage, the figure described  
 503 addition of ascorbic acid was better to maintain the semen quality rather than addition of lycopene both in  
 504 before freezing and in after thawing. The figure also showed declined semen quality ( $p < 0.05$ ) in after thawing  
 505 semen due to the cryopreservation protocols in both group.