File S1 - Supplementary Figures

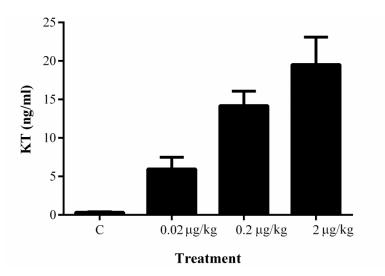


Figure S1 - Dose-response experiment to test which 11-ketotestosterone (KT) concentration dose $(0.02~\mu g/g,~0.2~\mu g/g,~2~\mu g/g)$ is responsible for a significant increase in plasma circulation in male castrated fish. Males were castrated and isolated in individual tanks. One week after operation, fish were injected with KT and returned to experimental tanks. Sixty min after injection, blood was collected (n=7-8 per treatment). The control treatment (C; n=5), similarly isolated for one week but not injected, was sampled for blood to measure baseline androgen levels. The lowest concentration $(0.02~\mu g/g)$ was confirmed to produce a significant increase of KT levels in plasma relative to control fish.

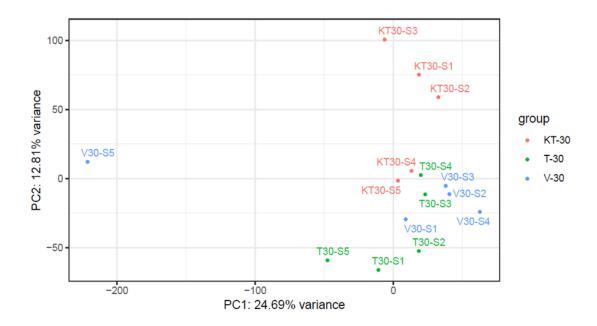
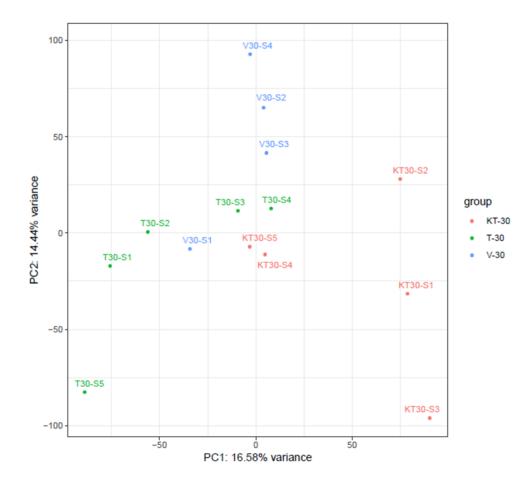


Figure S2 - Principal Component Analysis used to check relative similarities among replicates from the three treatment groups at the 30 min time point. One of the samples from the V-treated group was identified as an outlier and excluded from further analyses.



 $\textbf{Figure S3} \ - \ \text{Principal Component Analysis used to cluster samples by groups using differentially expressed genes for the 30 min time point. }$

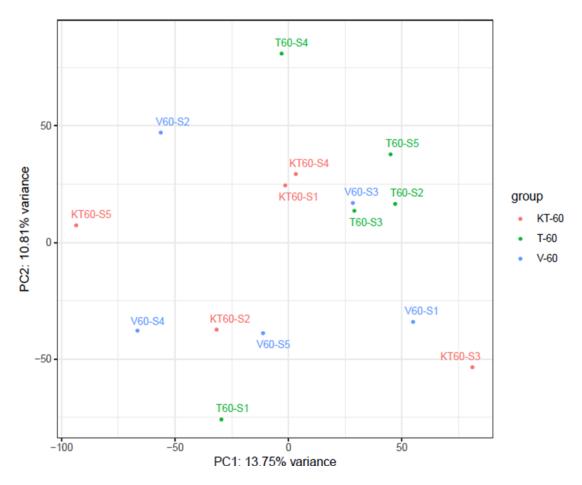


Figure S4 - Principal Component Analysis used to cluster samples by groups using differentially expressed genes for the 60 min time point.