

## AMS STUDY

The purpose of this study is to determine if 4 -Androstenone-3b-01, 17-one ( 4-andro), 1-Androsterone-3b-ol, 17-one (1-Andro), and NorAndrosterone-3b-ol, 17-one (norAndro), have a negative impact on the health of the user.

The Method to determine the safety of the compounds was to take blood samples and run blood tests before and after 4 weeks of 2 ml daily dosing of the 3 compounds. 1 ml 2 times daily.

The following were tested:

Total Cholesterol  
HDL  
LDL  
Triglycerides  
glucose  
BUN  
Creatinine  
eGFR  
BUN\Creatinine ratio  
Sodium  
Potassium  
Chloride  
Carbon dioxide  
Calcium  
Protein, Total  
Albumin  
Globulin  
Albumin/globulin ratio  
bilirubin, total  
Alkaline phosphatase  
AST  
ALT  
GGT  
complete urinalysis  
CBC

Subjects: 6 men between the ages of 18 and 46 were included in the study. 2 were assigned to each group. Group A received 4-Androsterone-3b-0l, 17-one, B: 1-Androsterone-3b-ol, 17-one and group C received NorAndrosterone-3b-ol, 17-one. One member from both B and C dropped out of the study for personal reasons, not side effects. One member from group A was excluded because long acting steroids were used shortly before the study and were likely still active during the testing period.

## DATA:

The remaining subject from group A (4-AD) Had no significant changes in blood work. The subject was very healthy at the beginning of the study and his health was the same after. The only abnormal values were a slightly low carbon dioxide before the study, and a marginally low glucose (63 the cutoff was 65) and White blood count (3.7 the cutoff was 3.8) after. Considering none of those three values should be effected by 4 -andro and the subject was fasting which would explain the low glucose.

The remaining subject in group B had abnormal lab values suspicious of extreme androgen abuse, but the final values were much better.

His initial cholesterol profile was very concerning;

Total cholesterol 227  
HDL 72 (fantastic yet still high)  
LDL 135

but his final panel was much better

Total 176  
HDL 43  
LDL 110

these values for total and LDL were only 6 and 1 point out of the normal reference range.

His Liver panel and associated values were improved as well

BUN 33 → 23 (both high, but the second value is marginally out of the reference range)  
total bilirubin 1.3 → 2.1 (this is worse, but not associated with androgens specifically)  
AST 48 → 36 (normal range is up to 32, thus not concerning since any exercise will raise AST)  
ALT 45 → 30 (more specific for liver, but normal after the treatment with 1-ANDRO)  
GGT 45 → 16 (very specific for liver disease but normal after treatment)

Thus in this subject the cholesterol and liver tests improved from customary androgen abuse profiles to almost normal levels AFTER the administration of 1-ANDRO for 4 weeks. This participant denied androgen use prior to this study, but regardless of if that is true or not, his values improved thus 1-andro according to this data does not cause damage to the liver or hurt the cholesterol profile with the possible exception of lowering a very high HDL to a normal healthy range, and slight increase in total bilirubin.

The remaining subject from group C was very healthy both before and after the study. The only abnormal value in the intitial test was a high white count (13.6) with an appropriately high neutrophil count, indicating an acute infection. At the end of the study the subjects white count was normal, but his red count was up 0.17 and Hematocrit was up 0.5% neither are clinically significant changes, but elevated values have been linked to androgens.

**CONCLUSION:** There are no clinically significant negative health effects from any of the three products. The blood chemistries were not altered in a significant negative way after the 4 weeks of

treatment. In fact, test subject B cholesterol and liver function improved after the 4 weeks of treatment. The best way to improve this study would be to control for other supplements, diet, exercise, prior health problems, and have much higher subject pool.

Todd Lee M.D.

[ToddleeMD@hotmail.com](mailto:ToddleeMD@hotmail.com)

248 225 4556