



The Study

When the German 1-Andro study was published there were lots of questions as well as surprises from AMS fans. We hope the following helps explain in much simpler terms what exactly they discovered when they tested the effects of one capsule of our old 1-Andro encapsulated product.

In the study they were looking to determine two things. First, that the label matched what was actually in the bottle (1-Andro), and second, the urinary metabolites as a result of taking 1-Andro. In other words the second part of the study wanted to determine if once ingested it actually converted to more powerful anabolics like 1-Testosterone (Parr MK).



Label

The nice part of this study is that an independent third party tested and published results that indicate the compound we use is legit and not a bunk knockoff. Typically a supplement company has to pay a lot for this extensive testing for quality control purposes. This study helps confirm what we already knew and what any hesitant consumers might have wanted to hear from an independent third party. It also confirmed the amount of active 1-Andro listed on the bottle is the same amount actually found in one capsule. For your reference we refer to 1-Andro on our label as **1-Androstene-3b-ol**. The study refers to the same compound as **3a-hydroxy-5b-androst-1-en-17-one**. They are the same compound, just defined using different nomenclature.

The Fun Part

It would have been great if the researchers tested urinary metabolites (what does 1-Andro break down into once ingested) over a period of supplementation for several weeks. However they simply wanted to see what would happen in the body after taking 1 capsule of 1-Andro. Still it gives us a good idea of what might accumulate overtime when you run a typical cycle of 1-Andro for 3 or more weeks straight. The following table clarifies the compounds they tested for as well as their more commonly known names:

Number	Chemical Nomenclature	More Commonly Known As
1	17b-hydroxy-5a-androst-1-en-3-one	1-Testosterone
2	5a-androst-1-ene-3,17-dione	1-Androstenedione
3	3b-hydroxy-5a-androst-1-en-17-one	1-Androsterone or 1-DHEA
4	3a-hydroxy-5a-androst-1-en-17-one	Alpha-isomer of 1-Androsterone/1-DHEA
5	5a-androst-1-ene-3a,17b-diol	Alpha-isomer of 1-Androstenediol
6	5a-androst-1-ene-3b,17b-diol	1-Androstenediol
7	HO-Dione1	Unknown
8	HO-Dione2	Unknown

So what were the primary metabolites after taking one cap of 1-Andro? The metabolites in order of peak concentrations were as follows:

1. Alpha-isomer of 1-Androsterone/1-DHEA
2. 1-Testosterone
3. HO-Dione 1
4. 1-Androstenediol, Alpha-isomer of 1-Androstenediol, and HO-Dione 2
5. 1-Androstenedione
6. 1-Androsterone or 1-DHEA

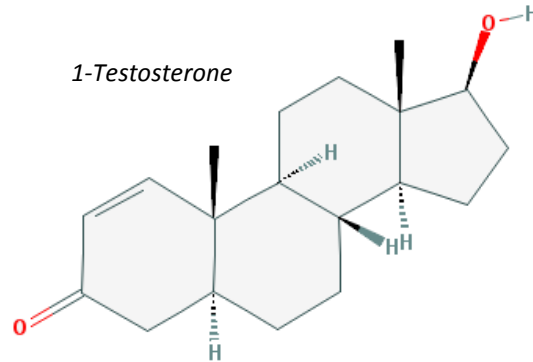
A summary of the findings are shown in the following table:

Compound	T _{max}	Peak Concentration (approx)
1-Testosterone	0-3 hours	7000
1-Androstenedione	0-3 hours	480
1-Androsterone or 1-DHEA	0-3 hours	475
Alpha-isomer of 1-Androsterone/1-DHEA	3-7.5 hours	19000
Alpha-isomer of 1-Androstenediol	3-7.5 hours	675
1-Androstenediol	3-7.5 hours	575
HO-Dione – 1	3-7.5 hours	3800
HO-Dione – 2	3-7.5 hours	575

-T_{max} – time of peak concentration occurrence

As you can see they found greater peak concentrations of 1-Testosterone than even the immediate precursor's 1-Androstenedione and diol. This is a great indicator that 1-Andro is in fact converting to the

powerful 1-Testosterone to a substantial degree! There are two different routes of conversion that 1-Andro could take to become 1-Testosterone once ingested. Based on this study alone it's hard to tell if one route is superior to another, or if it's a combination of the two. Either way we reached our end goal, 1-Testosterone very efficiently.



If you complete a full cycle of 1-Andro you will likely continue to experience the same above noted effects and increased concentrations of 1-Testosterone. It will also have a greater cumulative effect that we often see with continued administration of prohormones. If you would like to dig into the details you can read the full study at the [Advanced Muscle Science website](#). We hope this helps clarify some of the questions that some of you may have had regarding this new and exciting research.



References:

Parr MK, Opfermann G, Geyer H, Westphal F, Sönnichsen FD, Zapp J, Kwiatkowska D, Schänzer W. "Seized designer supplement named "1-Androsterone": Identification as 3 β -hydroxy-5 α -androst-1-en-17-one and its urinary elimination." *Steroids* (2011): May;76(6):540-7.