**Supplemental Digital Content 5.** Results of Randomized Trials of Effect of Anabolic-Androgenic Steroids (AAS) Compared to Placebo on Change in Fat Mass

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| **Author** | ***N*** | **Method of Body Fat Measurement** | **Difference in Fat Mass in AAS Group (Post - Pre)\*** | **Difference in Fat Mass in Placebo Group (Post - Pre)\*** | **Difference in Differences (AAS - placebo)\*\*** | ***P*** |
| Fahey and Brown, 1973 | 28 | Hydrodensitometry (Brozek) | -0.69 | -1 | 0.31 | - |
| Ward, 1973 | 16 | Hydrodensitometry (Brozek) | -1.71 | -0.1 | -1.61 | 0.05 |
| Kuipers et al., 1991 | 14 | Skinfold calipers | 1 | 0.7 | 0.3 | - |
| Brown et al., 1999 | 20 | Hydrodensitometry (Siri) | -1.5 | -0.8 | -0.7 | - |
| King et al., 1999 | 20 | Hydrodensitometry | -2.2 | -0.8 | -1.4 | - |
| Broeder et al., 2000 | 65 | Dual x-ray absorptiometry | 0.80 | -0.40 | 1.20 | - |
| Van Gammeren et al., 2001 | 16 | Dual x-ray absorptiometry | -0.98 | 1 | -1.98 | 0.23 |
| Van Gammeren et al., 2002 | 10 | Dual x-ray absorptiometry | 1.1 | 1.1 | 0 | - |
| Van Marken Lichtenbelt et al., 2004 | 16 | Four compartment model | -0.4 | -0.2 | -0.2 | - |
| Baume et al., 2006 | 30 | Skinfold calipers | 0.05 | -0.2 | 0.25 | - |
| Igwebuike et al., 2008 | 31 | Dual x-ray absorptiometry | -1.1 | -1.1 | 0 | 0.943 |
| Hildreth et al., 2013 | 84 | Dual x-ray absorptiometry | -1.8 | -0.6 | -1.2 | - |
| Granados et al., 2014 | 18 | Hydrodensitometry (Siri) | -3 | -1 | -2 | - |
|  |  |  |  |  |  |  |
| All differences were measured in kilograms. | | | |  |  |  |
| "-" Denotes data not reported | | |  |  |  |  |
| The type of hydrodensitometry equation (e.g., Siri, Brozek) is specified where reported. | | | | | |  |
| \*Negative numbers indicate fat mass was lower after treatment than before | | | | | |  |
| \*\*Negative numbers indicate a larger decline in fat mass in the AAS group | | | | | |  |