



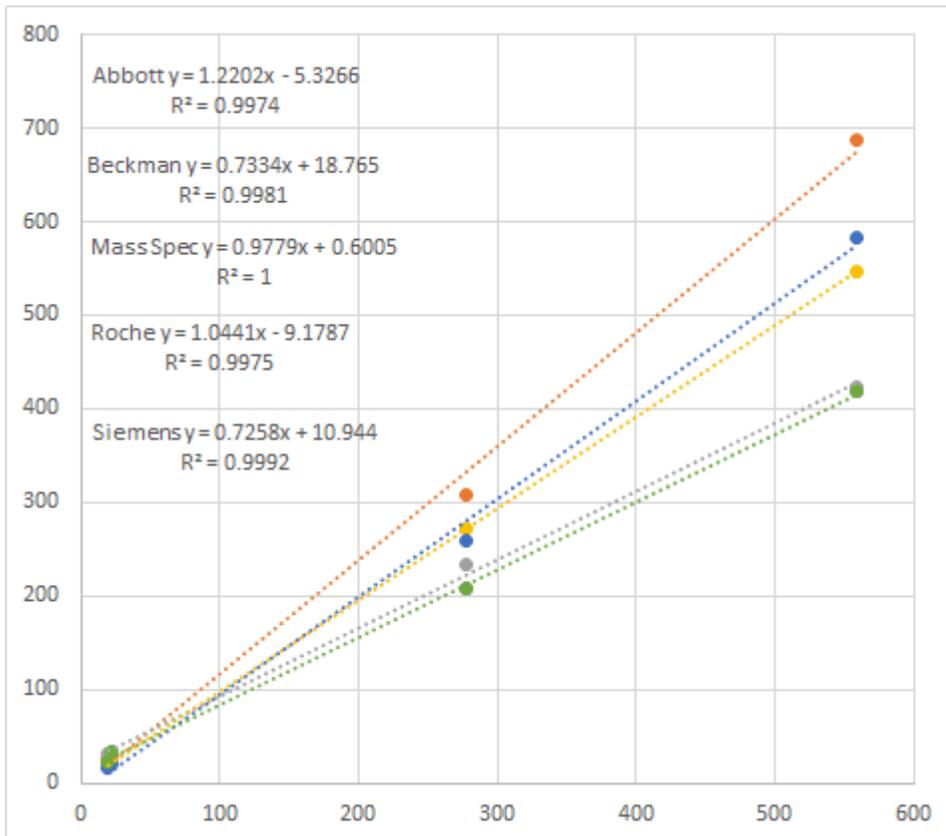
**Educational Discussion: Accuracy Based Testosterone and Estradiol**

**2016-A**

Years of effort by the CAP, Endocrinology groups, and the diagnostics industry to harmonize testosterone assays begin to bear fruit. Focusing upon 2016 ABS-A Survey method medians, we find that some methods (Mass Spectrometry, Roche) appear to correspond very well with the reference method\* (see graph). The remaining methods differ primarily in systematic bias that may be correctable with recalibration. Perhaps we infer too much on four data points per method, but there does seem to be real progress. Estradiol methods, too, seem to be progressing to better harmonization, although all methods seem high-biased relative to the reference method. The harmonization of cortisol methods is better still.

In contrast, sex hormone binding globulin methods that were well harmonized (Abbott, Roche) now differ due to recalibration of Abbott's assay. Bromcreosol green albumin methods run consistently higher than bromcreosol purple methods.

\*LC/MS reference method results for testosterone and estradiol were provided by the Clinical Chemistry Branch of the Centers for Disease Control (CDC).





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