Serum versus salivary T levels and inter-individual variation. Original data 2006 (Glaser/Zava)

The mean serum testosterone (T) level in 12 post-menopausal patients, 4 weeks after implantation of a 100 mg T implant was 190.8 **+** 80 ng/dl (range 83-368, CV 41.9%) by EIA (LabCorp). There was a 4.4-fold difference between the lowest and highest T level despite identical dosing. None of the patients had symptoms of androgen excess. The mean serum T level and standard deviation is remarkably consistent with what Burger published in 1984 - 4 weeks following T 100 mg implant (192 + 91 ng/dL).

Serum T levels in 12 female patients, 4 weeks after therapy with a 100 mg T implant.

There was also a significant inter-individual variation in am **salivary** T levels 4 weeks after T pellet implantation. The mean salivary T level was 39.3 + 17.2 pg/ml (range 17-86, CV 43.8%).

Despite significantly elevated serum T levels, salivary (bioavailable) T levels were not elevated above normal in 11 of 12 patients (ZRT range, females 20-50 pg/ml). One patient (no.7), with a serum level of 218 ng/dl, had a salivary T level below normal.

Salivary T levels in 12 female patients, 4 weeks after therapy with a 100 mg T implant.

Ref: Burger, H. G., Hailes, J., Menelaus, M., Nelson, J., Hudson, B., & Balazs, N. (1984). The management of persistent menopausal symptoms with oestradiol-testosterone implants: clinical, lipid and hormonal results. *Maturitas*, *6*(4), 351-358.