To the
Journal of the American Society of Nephrology

SUPPLEMENTARY FIGURES

Title:

Sex differences in renal proximal tubular cell homeostasis

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Running title: Menstrual cycle and kidney

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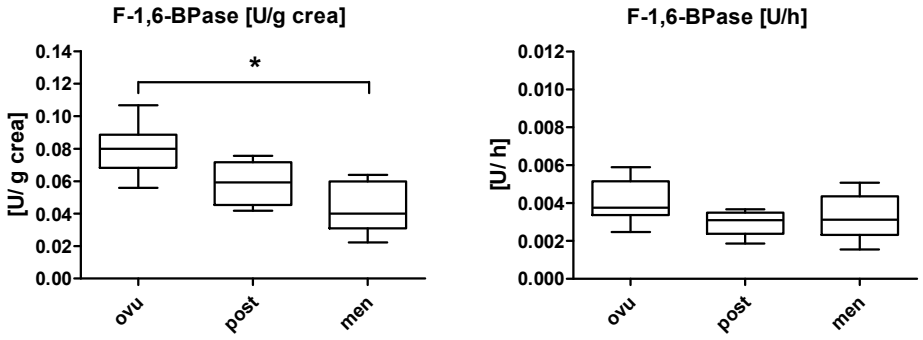
Fig. s1: Influence of the reference system for correcting differences in diuresis

*Daily second morning urinary samples were analyzed for F-1,6-BPase enzyme activity normalized to urinary creatinine [U/ g crea] (left panel). Alternatively, correction with urinary creatinine was followed by correction for total body creatinine through multiplying the F-1,6-BPase excretion in [U/ g crea] with the daily urinary creatinine excretion calculated according to Gerber et al [1] and expressed as [U/ h] (right panel). Medians of each proband's data set were used for this analysis excluding maxima +/- 3 days. Maxima were defined as the two maxima within a menstrual cycle length in ovulating women or within 29 days in postmenopausal women or men. Data are shown as box plots with median, 25th and 75th percentiles, outliers show maximal and minimal values. Groups were compared by the nonparametric Kruskal-Wallis test followed by Dunn's post test. Statistically significant differences were identified at $p<0.05$ between ovulating women and men only when F-1,6-BPase was referenced to 1 g of urinary creatinine [U/g crea], marked by an asterisk *.*



Reference

1. Gerber, LM, Mann, SJ: Development of a Model to Estimate 24-Hour Urinary Creatinine Excretion. *J Clin Hypertens,* 16**:** 367-371, 2014.

Fig s2: Comparison of pre-analytical factors between F-1,6-BPase "peak" and "non peak" samples in ovulating women

Urinary F-1,6-BPase excretion of ovulating women was measured daily. Peak maxima in the F-1,6-BPase time course were identified as the two maximal values within one cycle length not within 4 days. The analysis window was then shifted over the entire data set, allowing the identification of F-1,6-BPase peaks within uncompleted menstrual cycles at the beginning or the end of the data series as well. The thus identified "peak" and "non peak"(not within +/- 3 days of the peak) samples were analyzed for potential differences in pre-analytical factors. Diuretic status was determined through the urinary creatinine concentration [g/l]. Urinary pH was measured before starting sample processing. Micturition days were retrieved from the probands' daily data protocols. The data are represented as box plots with median, 25th and 75th percentiles with the outliers showing maximal and minimal values. "Peak" and "non peak" samples were compared using a Mann Whitney test. No statistically significant differences were revealed at $p<0.05$.