Supplementary data:

**Investigation of Stability of Selective Androgen Receptor Modulators in Urine**

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**Figure S1.** Stability of emerging SARMs in stock solutions. Mean response (and standard deviations, shown by error bars, *n*=5). Control samples expressed as 100%. ----- response limits (±10%).



**Figure S2.** Stability of Ly2452473 and PF-06260414 in stock solutions. Mean response (and standard deviations, shown by error bars, *n*=3). Control samples expressed as 100%. ----- response limits (±10%).



**Figure S3.** Stability of emerging SARMs in working stock solutions. Mean response (and standard deviations, shown by error bars, *n*=3). Control samples expressed as 100%. ----- response limits (±10%).

**(a)**



**(b)**



**(c)**



**Figure S4.** Stability of selected SARMs in urine under frozen storage (-20 °C). Mean recovery (and standard deviations, shown by error bars, *n*=5) obtained from fortified blank (a) equine, (b) canine and (c) human urine. Where *p* <0.05 (\*), <0.01 (\*\*) and <0.001 (\*\*\*), and ----- response limits (±20%).

 **(a)**



**(b)**



**(c)**



**Figure S5.** Stability of selected SARMs in urine under frozen storage (-80 °C). Mean recovery (and standard deviations, shown by error bars, *n*=5) obtained from fortified blank (a) equine, (b) canine and (c) human urine. Where *p* <0.05 (\*), <0.01 (\*\*) and <0.001 (\*\*\*), and ----- response limits (±20%).



**Figure S6.** Stability of selected SARMs in human urine under storage at 4 °C and room temperature (18 °C). Mean recovery (and standard deviations, shown by error bars, *n*=5) obtained from fortified blank human urine samples. Where *p* <0.05 (\*), <0.01 (\*\*) and <0.001 (\*\*\*), and ----- response limits (±20%).

 **(a)**



**(b)**



**(c)**



**Figure S7.** Stability of emerging SARMs in urine under freeze-thaw cycles. Mean recovery (and standard deviations, shown by error bars, *n*=5) obtained from fortified blank (a) equine, (b) canine and (c) human urine. Where p <0.05 (\*), <0.01 (\*\*) and <0.001 (\*\*\*), and ----- response limits (±20%).

 **(a)**



**(b)**



**(c)**



**Figure S8.** Stability of emerging SARMs in sample extracts - final injection solvent. Mean response (and standard deviations, shown by error bars, *n*=5) obtained from blank (a) equine, (b) canine and (c) human urine samples spiked post extraction. Control samples expressed as 100%. Where p <0.05 (\*), <0.01 (\*\*) and <0.001 (\*\*\*), and ----- relative response limits (±20%).