We thank Dr. Fukami for his Commentary [1] which nicely summarises the essentials of our study [2] and is well placed in the context of the challenges facing clinicians in the management of PAIS patients raised male. We would wish to take issue, however, with the emphasis placed on testicular dysfunction and somatic mosaicism of the AR as possible contributors to the phenotypic variation observed in PAIS.

The study of [3] is quoted with respect to evidence of testicular dysfunction in some cases of PAIS. We did not design our study specifically to assess the characteristics of pituitary-gonadal function which are well known in AIS, particularly the CAIS form. An undescended testis which is often longstanding in AIS does not impair Leydig cell testosterone production in general, in contrast to Sertoli and germ cell function. Indeed, adult women with CAIS who have not been gonadectomised have testosterone concentrations well within or above the normal adult male range. An elevated random T:LH ratio may be a biochemical indicator of androgen resistance and indeed was tried, unsuccessfully, in the past as a screen for mild androgen sensitivity syndrome (MAIS) associated with idiopathic male factor infertility (unpublished). However, in view of the lack of precision and specificity in such measurements, we do not see how blood hormone levels could be used as biomarkers for pubertal outcome in PAIS. The other point made by Dr. Fukami in relation to somatic mosaicism has already been covered in the Discussion of our study by emphasising the importance of assessing the psychological aspects of the continuum of DSD, of which PAIS is only one of numerous examples. He raises the problem of identifying predictors of gender as opposed to somatic development in PAIS, a challenge which at present appears insurmountable. We strongly echo his call for prospective, multicentre-based international studies to capitalise on resources such as the I-DSD registry and the DSD Translational Research Network in the United States to garner robust outcome data that leads to improved care for patients with PAIS across the lifespan.

References


