

# ESPE 2015 P3-792: Physical assessment and growth curve of 46, XY Disorders of Sex Development children who aged 0-16 years old



北京儿童医院  
BEIJING CHILDREN'S HOSPITAL

Di Wu<sup>1</sup>, Hui Chen<sup>2</sup>, Chunxiu Gong<sup>1\*</sup>

<sup>1</sup> Department of Endocrinology, Genetics, and Metabolism, Beijing Children's Hospital, Capital Medical University, Beijing 100045, China.

<sup>2</sup> School of Biomedical Engineering, Capital Medical University, Beijing 100069, China

## OBJECTIVES

To understand growth and development of the 46, XY disorders of sex development (DSD) children, drawing height, weight and BMI curve of children with 46, XY DSD at the age of 0-16.

## METHODS

The registration database was used in this study. Non-CAH 0-16 years old 46, XY DSDs were collected. Growth curves were fitted by LMS application within 0-3 years old and 3-16 years old group and were compared with the curves of normal boy. According to the results of HCG standard test, the children were divided into good response group and poor response group, the differences of height between the two groups of children with normal boys were analyzed. The HtSDS and WtSDS were calculated and compared with normal boys at same age.

## RESULTS

431 cases of non-CAH 46, XY DSDs were included in the study. 56.6% (244 cases) of children aged 0-3 years old. The HtSDS was  $-0.25 \pm 1.206$ , WtSDS was  $0.44 \pm 1.282$ , BMI was  $18.10 \pm 2.926 \text{ kg/m}^2$  for 46, XY DSD children.

HCG standard test was conducted among 360 cases. Good response 250 cases, HtSDS and WtSDS were  $-0.16 \pm 1.211$  and  $0.57 \pm 1.346$ ; 110 cases were classified into poor reaction group, HtSDS and WtSDS were  $-0.38 \pm 1.200$  and  $0.26 \pm 1.245$ .

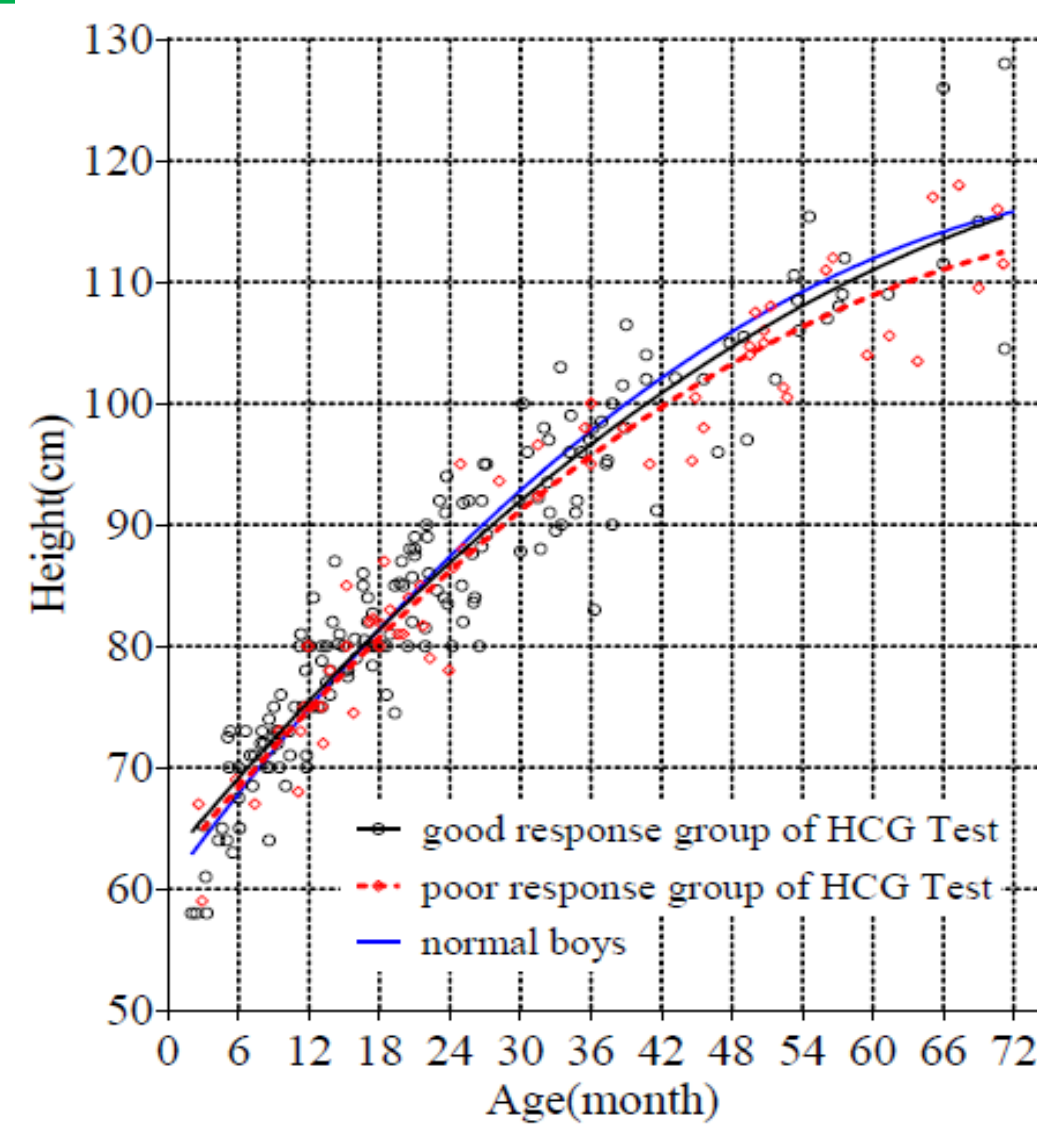
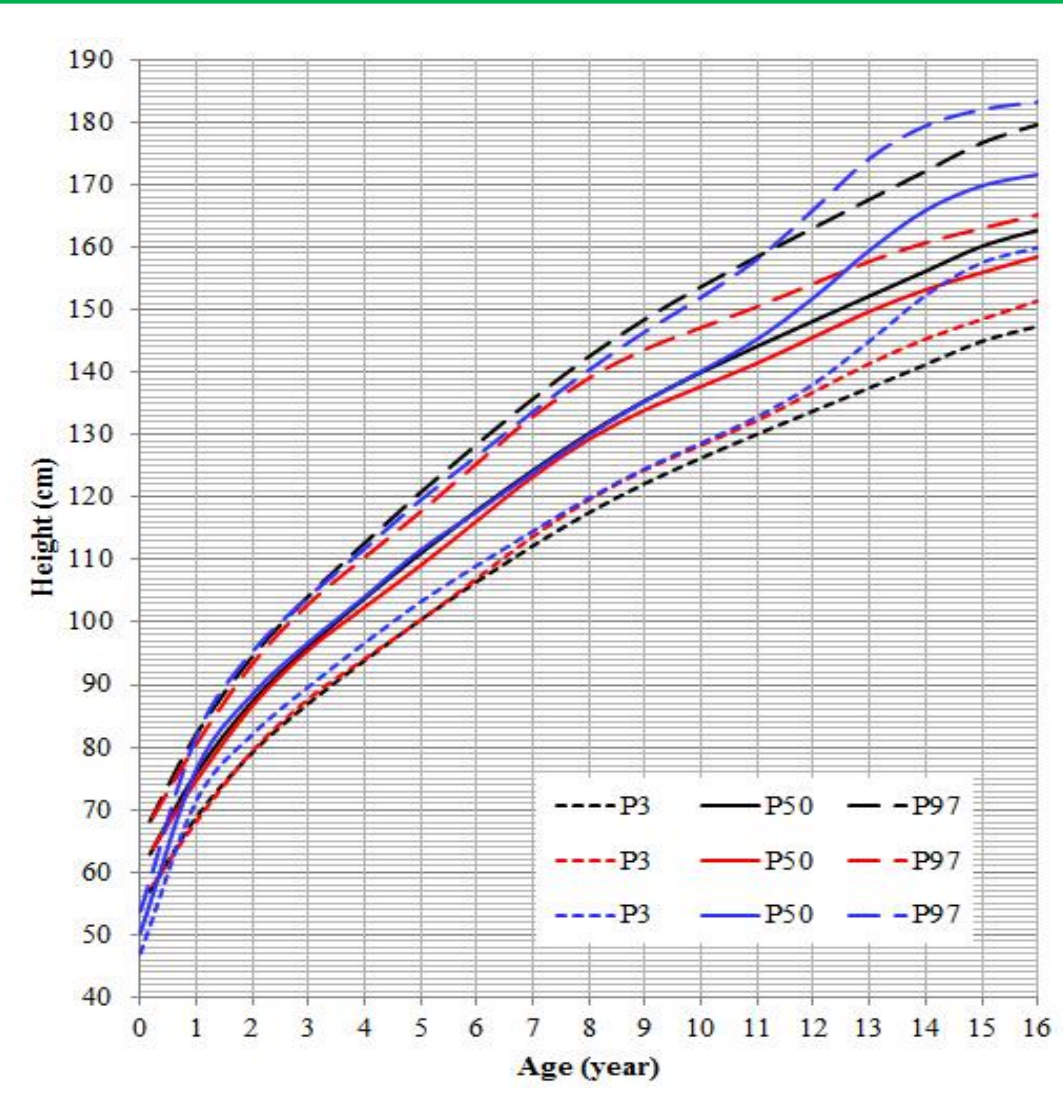
Height of 46, XY DSD children generally lower than normal boys in infant period, 46, XY DSD children without soared growth at 12-16 years old, this phenomenon was more obvious in poor response group.

## References

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## CONCLUSIONS

The growth retardation of non-CAH 46, XYDSD was observed at infant period, and it is more obvious in pubertal period. The level of retardation related with testicular interstitial cell function.



### Figure legends

**Figure 1A:** Height percentile curves of 46, XY DSD children and normal boys

**Figure 1B:** Distribution and height trend in 0-6 y old 46, XYDSD children

Legend (1A and 1 B): Blue, black and red represent the curves for normal boys, 46, XY DSD children in the good response group and 46, XY DSD children in the poor response group

**Figure 2A-7B:** Standard curves for height, weight and BMI of 46, XY DSD children in the 0-3, 3-16 year age-group. Percentile curve; The standard deviation curve

