

# Postnatal Growth and Biochemical Markers of Late Preterm Infants: Prospective Birth Cohort

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DISCLOSURE STATEMENT  
nothing to disclose

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## INTRODUCTION

Late preterm birth (defined as infants born between 34 and 36 weeks of gestational age) is increasing worldwide. Their postnatal growth has not been fully investigated.

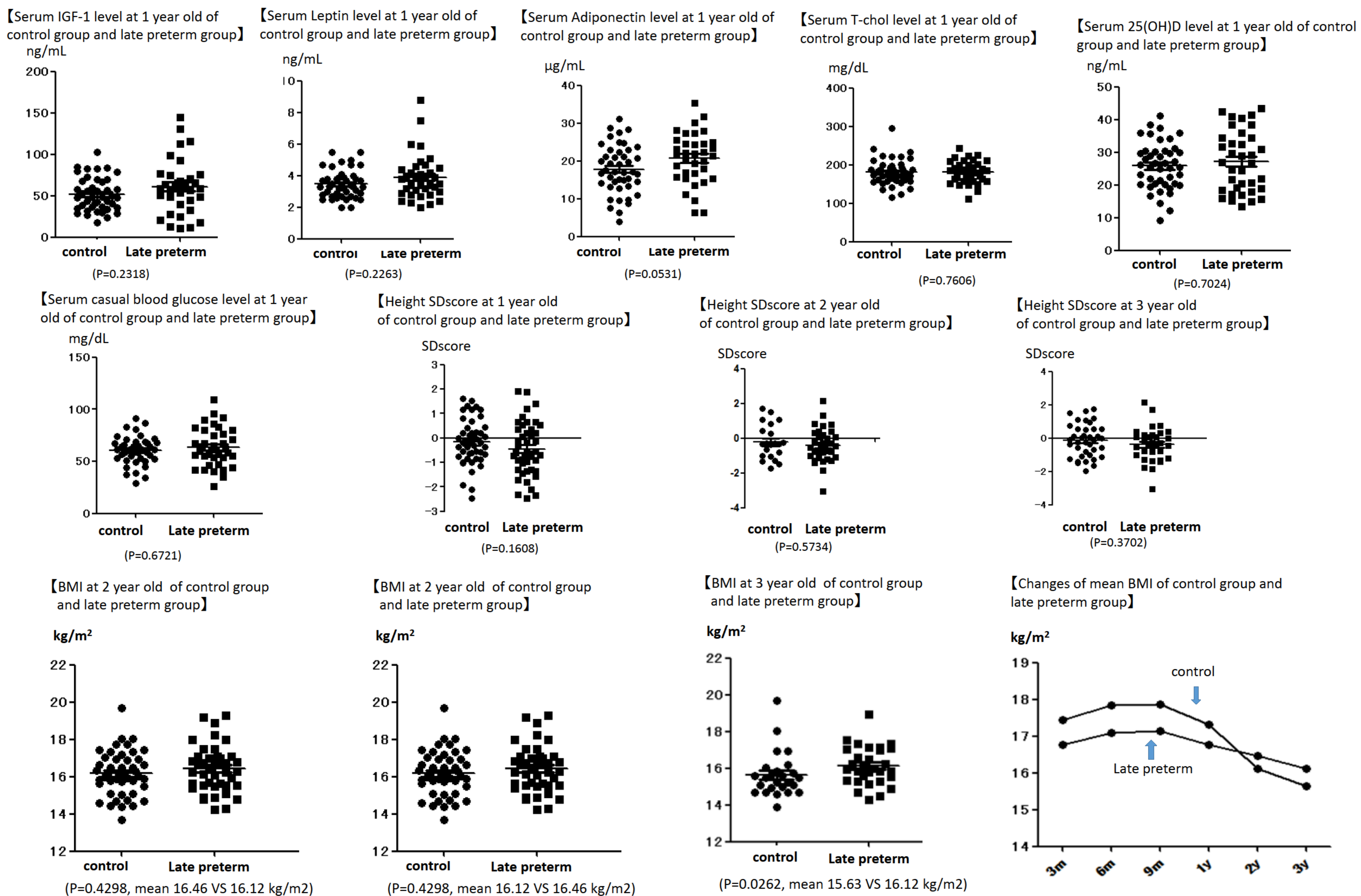
## OBJECTIVES

- To identify the characteristics of postnatal growth and biochemical markers in late preterm infants.

## SUBJECTS AND METHOD

- Among 2014 children in the birth cohort study conducted from 2010, 51 children were born late preterm with birth weight and height as AGA.
- Matched control group were set for maternal age and other background, but born in term.
- Measurement of their height and weight: 1,3,6,9,12 months and 2,3 years.
- Measurement of blood sample (at age of 1 and 3): Serum IGF-1, Leptin, Adiponectin, total cholesterol, 25(OH)D, casual blood glucose
- Maternal history during pregnancy, including weight gain and complications: obtained from cohort database.
- Children's nutrition: surveyed by questionnaires.
- Statistical analysis: Mann-Whitney and Kruskal-Wallis test.

## RESULTS



- There was no significant difference in mother's condition during pregnancy and nutrition of the children within late preterm and term controls.
- Height SD score, serum biochemical data didn't show significant difference between these two groups.
- At the age of 2, there was no statistically significant difference in BMI, although late preterm children showed a tendency of higher BMI.
- At the age of 3, late preterm group had significantly higher BMI compared to controls.

## CONCLUSIONS

Late preterm group might have higher risk in developing obesity later in life. We need additional follow up to judge. We are going to continue this cohort study.