pathway based analysis to maximise its value. Besides, meta-analysis of epistasis in GWA populations is essential to boost power of detection.

**P-221 – ABSTRACT WITHDRAWN**

**P-222 – ABSTRACT WITHDRAWN**

**P-223**
**EVOLUTION OF GROWTH PATTERN OF NELLORE CATTLE**

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The use of growth functions allows the study of animal growth in adulthood, enabling the correlation between weights at different ages and attainment of adults with smaller size (A), a higher rate of weight gain (K) and younger age at the inflection point (K-1). The selection criteria for growth in Nellore cattle has changed in the last years, according to the demands of the consumer market, providing different patterns within the breed. The objective of this study was to determine the evolution of the growth pattern of Nellore cattle registered at the Brazilian Association of Zebu Breeders, born in 1995, 2000 and 2005.. For this purpose it was determined the mean values of A, scale parameter (B), K and the inflection point (M) which indicatives the onset of puberty, using the nonlinear model Richards. The average asymptotic weight for animals born in 1995, 2000 and 2005 were 844.8, 769.9 and 537.9 kg, respectively. The b values were 0.9927, 0.9928 and 0.9498, respectively. Values of K were 0.000533, 0.000645 and 0.00149 with age and the inflection point of about 59.6, 49.2 and 21.3 months. M values were 0.7231, 0.7205 and 0.8983 for the three birth years considered. The correlations between A and K, A and M and K and M were equal to -0.99, -0.95 and 0.97 in the three periods, showing the strong dependence between the parameters. It can be seen that a clear differentiation occurred in the growth pattern of the animals over time. The search for sexual precocity verified by k-1 was effective in reducing by half the age of onset of puberty, besides the production of adult animals best suited to lighter production systems of Nellore cattle.



**P-224**
**INTERACTIONS BETWEEN VDR AND RXRA GENE POLYMORPHISMS AFFECT METABOLIC TRAITS IN THE 1958 BRITISH BIRTH COHORT**

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