

Mammalian Balbiani Body As a Sign of Ancestral Oocyte Asymmetry: Review

*V. Hadzhinesheva, V. Nikolova, I. Chakarova, S. Delimitreva,
M. Markova, R. Zhivkova*

Department of Biology, Medical Faculty, Medical University – Sofia, Bulgaria

Eutherian eggs underwent a secondary loss of the ooplasmic gradient of yolk and maternal morphogens. However, the oocytes of mammalian primordial follicles display an asymmetric organelle cluster recognized as Balbiani body. Distribution of components of this aggregate might be a clue for the function of Balbiani body in eutherians and some alterations of its dynamics could be associated with ovarian pathology, particularly in human.

Key words: oocyte polarity, mitochondria, Golgi complex, Xenopus, mouse.