

## ПОПРАВКА

DOI: 10.7868/S0475145014020086

Уважаемые читатели, сообщаем Вам, что в аннотации статьи Гордеевой О.Ф., опубликованной в № 6, 2013 были допущены опечатки, ниже приводится верный вариант текста:

### **Cytotoxic Effects of Etoposide at Different Stages of Differentiation of Embryoid Bodies Formed by Mouse Embryonic Stem Cells**

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Received July 7, 2013; in final form, July 10, 2013

**Abstract**—The initial stages of in vitro differentiation of embryonic stem cells are considered as unique three dimensional models of early development of mammals for basic, pharmacological, and toxicological studies. It has been previously shown (Gordeeva, 2012) that the assessment of embryotoxicity in the model of undifferentiated embryonic stem cells can be insufficiently accurate in predicting toxic effects on mammalian embryos. In view of this, we performed a comparative study of the damaging effects of the cytostatic etoposide in undifferentiated embryonic stem cells and embryoid bodies of different stages of differentiation that have similar three-dimensional structures with early embryos. The analysis of growth, cell death, and dynamics of differentiation of embryonic stem cells and embryoid bodies exposed to etoposide showed that the cytostatic and cytotoxic effects of etoposide are stage-specific. The damaging effects of etoposide were maximum in the undifferentiated embryonic stem cells and decreased with growth and differentiation of embryoid bodies. We suggest that the increase of embryoid body volume and overgrowth of extraembryonic endoderm layer lead to a decrease in the diffusion, transport and metabolism of chemical and bioactive substances and prevent the damaging effects.

**Keywords:** embryoid bodies, embryonic stem cells, etoposide, cytostatics, cytotoxicity, embryotoxicity, differentiation

DOI: 10.7868/S0475145013060037