Drug Development and Industrial Pharmacy, 34:234, 2008

ISSN: 0363-9045 print / 1520-5762 online
DOI: 10.1080/03639040801957662

informa
healthcare

Erratum

David D. Allen; Raúl Caviedes; Ana María Cárdenas; Takeshi Shimahara; Juan Segura-Aguilar; Pablo A. Caviedes (2005). Cell lines as in vitro models for drug screening and toxicity studies. *Drug Development and Industrial Pharmacy, 31*, 757–768.

Text was incorrectly reproduced and the corresponding reference was omitted, see page 759, bottom of the second column. It should read:

About five years ago, several reports established a link between bone marrow stromal (BMS) cells and mesenchymal stem cells, thus presenting BMS cells as a potential source for developing cardiomyocytes in vitro (Makino et al, 1999), among other cell types. Using prolonged culture conditions and a soluble differentiating agent such as 5-azacytidine, these authors claim that about 30% of the cells undergo differentiation toward a cardiac phenotype, expressed in formation of myotube-like structures, with electron microscopy compatible with sarcomere structures. Immuhistochemical studies showed the presence of fetal cardiac muscle markers, such as myosin heavy chain, myosin light chain, and α-actin. Also, the expression of mRNA of cardiomyocyte-specific transcription factors was evident at the differentiated state. Further, electrophysiological studies showed the presence of action potentials. However, the electrophysiological data also reports the presence of sinus node-like action potentials, and the authors report the presence of atrial natriuretic peptide in their cultured cells. Hence, as outlined by Leiden (1999), the differentiation process in BMS cells can generate multiple lineages of cardiac phenotype, thus prompting the need to develop more target-efficient treatments and cell sorting strategies to enrich or even purify such cultures to obtain mature and functional cardiac myocytes.

Leiden, J. M. (1999). Beating the odds: a cardiomyocyte cell line at last. *Journal of Clinical Investigation, 103*, 591–592.

Dr. Pablo A. Caviedes, MD, PhD
Program of Molecular & Clinical Pharmacology,
ICBM, Faculty of Medicine,
Santiago Chile
E-mail: pcaviede@med.uchile.cl