## Journal of Medicinal Chemistry Corrections

Corrections to Design, Synthesis, and Biological Evaluation of  $6\alpha$ - and  $6\beta$ -N-Heterocyclic Substituted Naltrexamine Derivatives as  $\mu$  Opioid Receptor Selective Antagonists [J. Med. Chem. 2009, 52, 1416. DOI: 10.1021/jm801272c]. Guo Li, Lindsey C. Aschenbach, Jianyang Chen, Michael P. Cassidy, David L. Stevens, Bichoy H. Gabra, Dana E. Selley, William L. Dewey, Richard B. Westkaemper, and Yan Zhang\*

Page 1418. Lines 3-6 in the right column should be as follows:

**Molecular Design.** On the basis of the molecular modeling study, two series of ligands were designed as MOR selective antagonists (Table 1). While some of these ligands have been reported previously for various purposes (e.g. control compound  $\mathbf{8}$ ,<sup>1</sup> compounds  $\mathbf{2}$  and  $\mathbf{8}$ ,<sup>2,3</sup> and control compounds  $\mathbf{15}$  and  $\mathbf{16}$ ,<sup>4</sup>), to our knowledge none of them have been discussed specifically in the literature as selective  $\mu$  opioid receptor antagonists.

References for the above paragraph are as follows:

## References

- Sayre, L. M.; Larson, D. L.; Takemori, A. E.; Portoghese, P. S. Design and synthesis of naltrexone-derived affinity labels with nonequilibrium opioid agonist and antagonist activities. Evidence for the existence of different mu receptor subtypes in different tissues. J. Med. Chem. 1984, 27, 1325–1335.
- (2) Cashman, J. R.; Macdougall, J. M. Synthesis of Metabolically Stable Analgesics, Pain Medications and Other Agents. PCT Int. Appl. CODEN: PIXXD2. WO 2005117589. A1 20051215. CAN 144:51830. AN 2005:1314244, 2005; 107 pp.
- (3) Ghirmai, S.; Azar, M. R.; Polgar, W. E.; Berzetei-Gurske, I.; Cashman, J. R. Synthesis and biological evaluation of alpha- and beta-6-amido derivatives of 17-cyclopropylmethyl-3,14beta-dihydroxy-4,5alpha-epoxymorphinan: potential alcohol-cessation agents. J. Med. Chem. 2008, 51, 1913–1924.
- (4) (a) Yekkirala, A. S.; McCurdy, C. R.; Lunzer, M. M.; Powers, M. D.; Portoghese, P. S. Naphthoyl-beta-naltrexamine (NNTA) Selectively Activates Mu-Kappa Opioid Heterodimers, an Insightful Tool To Study Novel Mechanisms of Analgesia. Presented at the 37th Annual Meeting of the Society for Neuroscience, San Diego, CA, Nov 3–7, 2007; Session 119. (b) Yekkirala, A. S.; Lunzer, M. M.; McCurdy, C. R.; Powers, M. D.; Roerig, S. C.; Portoghese, P. S. NNTA, a Selective Activator of Heterodimeric Mu-Kappa Opioid Receptors Produces No Tolerance or Physical Dependence in Mice. Presented at the 2008 International Narcotics Research Conference, Charleston, SC, July 13–18, 2008.

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