Corrections

Evidence in *Escherichia coli* that N3-Methyladenine Lesions Induced by a Minor Groove Binding Methyl Sulfonate Ester Can Be Processed by both Base and Nucleotide Excision Repair, by Dharini Shah, Jack Kelly, Yi Zhang, Prasad Dande, Juan Martinez, Gretchen Ortiz, Gilberto Fronza, Huy Tran, Ana Maria Soto, Luis Marky, and Barry Gold*, Volume 40, Number 6, February 13, 2001, pages 1796−1803.

Pages 1798 (Table 1) and 1800 (Figure 3). The *Escherichia coli alkA*/*tag* mutant identified as MV1932 is actually an *ada*/*tag* mutant. The difference between the *alkA*/*tag* and *ada*/*tag* mutants is that the *alkA* mutant by definition cannot make the AlkA protein while in the *ada* mutant there is a low level of constitutive AlkA expression, although the protein's expression cannot be induced via the adaptive repair response. The glycosylase activity of alkA in an uninduced cell is ∼10% of the total activity, i.e., AlkA and Tag [Karran, P., Hjelmgren, T., and Lindahl, T. (1982) *Nature 296*, 770−773; Evensen, G., and Seeberg, E. (1982) *Nature 296*, 773−775]. We have repeated all of the studies reported in our published paper with the authentic *alkA*/*tag* mutant and have found out that the low level of constitutive AlkA protein has a major impact on the results; therefore, there are some major changes in the results and with some of our conclusions. Specifically, there is NO difference between the *alkA*/*tag* mutant and the *uvrA*/*alkA*/*tag* mutant in terms of their sensitivity to Me-lex which selectively produces N3-methyladenine. In the paper, we incorrectly reported that the triple mutant was significantly more sensitive to Me-lex than the *alkA*/*tag* mutant (which actually was an *ada*/*tag* mutant). Since there is no difference, a major conclusion of the paper that nucleotide excision repair can play a role in the repair of N3-methyladenine is wrong. Another major finding of the paper was that AlkA glycosylase plays a role in the repair of *cis*-diamminedichloroplatinum(II) (*cis*-Pt) lesions. We have confirmed that this is still the case in that the toxicity of *cis*-Pt is only slightly enhanced over that of the wild type in the *alkA* and *alkA*/*tag* mutants, but the *uvrA*/*alkA*/*tag* mutant is several logs more sensitive than the *uvrA* mutant. The corrected toxicity data for Figure 3 are shown below.

BI015139G

10.1021/bi015139g
Published on Web 06/13/2001