in the jejunum, rectum and colon. The result was that the enhancement effect was approximately the same regardless of the point of administration.

To further investigate whether the absorption enhancement effect is caused by NOC7 itself or the NO derived from the NOC7, the effect of coadministration of an NO scavenger was investigated. 2-(4-carboxyphenyl)-4,4,5,5-tetramethylimidazole-1-oxyl-3-oxide (carboxy-PTIO) is a stable free radical that reacts stoichiometrically with NO. When carboxy-PTIO was coadministered with FD-4 and NOC7, the absorption enhancement effect of NOC7 was reduced dramatically. The AUC values of FD-4 for control and FD-4 coadministered with NOC7 and carboxy-PTIO were 0.76 and 0.75 ($h \times \mu g\ ml^{-1}$), respectively. Finally, the effect of NOC7 on plasma concentrations of FDs of various MW was investigated. Using three different FDs, FD-4, FD-10 and FD-20, it was found that the enhancement effect of NOC7 decreased with the increase of FD MW.

In some cases, absorption enhancers exhibit mucosal toxicity and irreversible membrane damage. The reversibility of the absorption enhancement effect of NOC7 was investigated by measuring the plasma concentration of FD-4 in the jejunum and colon after pretreatment with NOC7. No significant differences were observed between the values of AUC in the control and those in an experiment in which the jejunum was pretreated with NOC7 30 min before administration of FD-4. As further evidence that NOC7 does not cause mucosal toxicity, the amounts of lactose dehydrogenase and protein released in the presence of NOC7 were not significantly different from those in the control. If the absorption enhancement effect of NOC7 proves to be applicable to other macromolecules, this reversibility and lack of cytotoxicity will be beneficial.

References

1 Salzman, A.L. *et al.* (1995) Nitric oxide dilates tight junctions and depletes ATP in cultured Caco-2Bbe intestinal epithelial monolayers. *Am. J. Physiol.* 268, G361–G373

2 Numata, N. *et al.* (2000) Improvement of intestinal absorption of macromolecules by nitric oxide donor. *J. Pharm. Sci.* 89, 1296–1304

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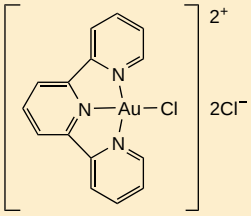
Erratum

Please note a correction to molecule **(i)** in the Novel antitumour molecules section of Monitor by Andrew Westwell, published in *Drug Discovery Today,* 15th February 2001, Volume 6, No. 4, 215. The structure should have been as follows:



(i)

We would like to apologize for this inaccuracy and any confusion that this might have caused.

Contributions to *Monitor*

We welcome recommendations of papers for review within *Monitor*, in the fields of combinatorial chemistry, pharmacogenomics, pharmacoproteomics, bioinformatics, new therapeutic targets, high-throughput screening, new drug delivery technologies and other promising lines of research. Details of recent papers or those *in press* should be directed to:

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