

dium-111-labeled mouse antimelanoma monoclonal antibody ZME-018. *J Nucl Med* 1987; 28:25-33.

Richard P. Spencer  
*University of Connecticut Health Center  
 Farmington, Connecticut*

**REPLY:** Dr. Spencer proposes a unique and presumably useful method of evaluating the percentage of tumors imaged as a function of the quantity of antibody administered. This is done using a Michaelis Menten type analysis. There are concerns about the formula  $A + T \rightleftharpoons AT \rightarrow (AT)$ , in addition to those mentioned by Dr. Spencer.

1. The formula indicates that the antibody can dissociate back and forth to form a stable or internalized complex. However, it is possible that the degree to which each individual antibody is in equilibrium is dependent on its affinity, whether the antigen is shed from the surface and to what degree, and the extent to which internalization and/or modulation occurs. It is uncertain whether this formula would hold in all cases—for example, there are studies, such as the use of T 101 in leukemia, in which other variables may influence this hypothesis.

2.  $^{111}\text{In}$  may dissociate to a small or great extent after antibody binding and is in equilibrium with transferrin in the serum (~5% of the indium per day is in equilibrium with this protein). With  $^{131}\text{I}$ , there is considerable dehalogenation over time. This will affect calculation of actual uptake of the antibody isotope/complex.

Thus, this equation is an oversimplification of what is actually happening at the cell surface, although, as Dr. Spencer suggests, it may lead to useful approaches.

J. L. Murray  
*The University of Texas M. D. Anderson Hospital  
 and Tumor Institute  
 Houston, Texas*

### Monitoring of Radioactive “Dirty Linen” After Iodine-131 Therapy

**TO THE EDITOR:** In Los Angeles County, trash that is to be dumped into sanitary landfills is routinely monitored at the site for radioactive contamination (1). Generally speaking, waste from patients who have had nuclear medicine diagnostic procedures is not intense enough to cause a detector external to the dumpster to register a count rate warranting investigation (ten times background). The Los Angeles County Division of Radiation Management will permit the trash to be dumped if after investigation detected radioactivity is related to nuclear medicine patient excreta.

Many hospitals have purchased radiation detector systems to monitor trash bins before they leave the hospital grounds, in order to prevent unnecessary incidents at landfills. Recently, however, a problem occurred when linens, contaminated with I-131 from a therapy patient dose (20 mCi), were sent to a laundry service. En route the laundry truck was stopped by the California Highway Patrol at a weighing station and radiation detectors detected a count rate greater than 20 times background. The hospital health physicist was notified and the radioactive linen was brought back to the hospital to be stored for decay.

It is suggested that hospitals monitor laundry that leaves the hospital grounds just as they do with trash. Radioactive linen from therapy patients should be monitored and held for radioactive decay, although in the vast majority of cases the types and quantities of radioactive material involved will not constitute a risk to the public health.

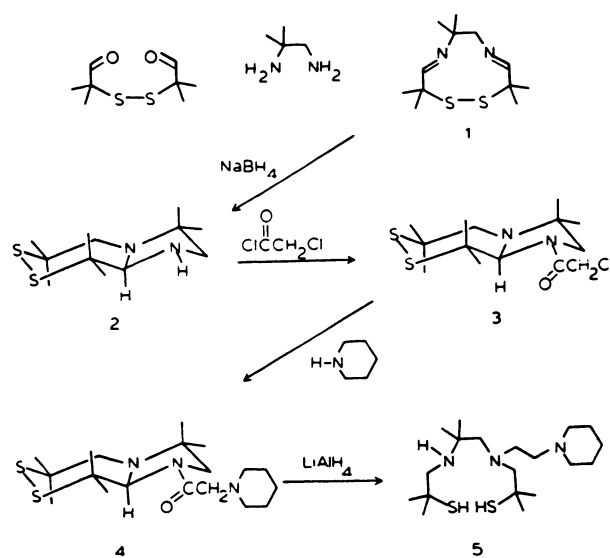
### References

1. Ketchum L. LA nuclear medicine community improves radiation monitoring at landfills. *J Nucl Med* 1985; 26:336-337.

Carol S. Marcus  
*Nuclear Medicine Outpatient Clinic  
 Harbor-UCLA Medical Center  
 Torrance, California*  
 Joseph E. Karbus  
*Los Angeles County Occupational Health and  
 Radiation Management  
 Los Angeles, California*

### Correction: Design, Preparation, and Biodistribution of a Technetium-99m Triaminedithiol Complex to Assess Regional Cerebral Blood Flow.

**TO THE EDITOR:** In the article by Lever, Burns, and Kervitsky et al. appearing in *J Nucl Med* 1985; 26:1287-1294, Figure 4 should be replaced with the one shown below. Intermediate 2, the fraction isolated from the crude reaction mixture, was incorrectly characterized as the monocyclic diamine. The correct structure is the bicyclic diamine, which resulted from an intramolecular ring closure during sodium borohydride reduction. Spectroscopic experiments on 2 permit the unambiguous assignment of the methine carbon. An Insensitive Nuclei Enhanced by Polarization Transfer (INEPT) sequence assigns the peak at 91.5 ppm to C6 in the carbon NMR spectrum and the heteronuclear 2D chemical shift correlation spectrum assigns the singlet at 3.53 ppm to C6-H



**FIGURE 4**  
 Triaminedithiol ligand synthesis.