

Correction: Table Structures

Due to a printer's error, structures were left out of the final printing of Tables 2 and 3 in the article by Jones et al., "Synthesis and Biologic Evaluation of 1-[¹⁴C]-3,3-Dimethylheptadecanoic Acid" (*J Nucl Med* 1988; 29:68-72). The tables are shown correctly below.

TABLE 2
Radioactivity in the Heart (%Injected dose/gram of Tissue) of Rats at Various Times After Intravenous Administration of Radiolabeled Fatty Acid Derivatives





Compound	Time (min)	%Injected dose/gram (mean)	Reference
H			
CH ₃ (CH ₂) ₁₂ CCH ₂ ¹⁴ COOH	5	2.65	(27)
H	15	2.04	
H	60	0.89	
H			
CH ₃ (CH ₂) ₁₃ CCH ₂ ¹¹ COOH	5	2.32	(13)
CH ₃	30	2.94	
H			
CH ₃ (CH ₂) ₁₃ CCH ₂ ¹¹ COOH	5	0.63	
CH ₃	30	0.42	
H			
¹²⁵ I-CH ₂ (CH ₂) ₁₃ CCH ₂ COOH	5	2.06	(16)
CH ₃	30	0.84	
H			
¹²⁵ I-  (CH ₂) ₁₂ CCH ₂ COOH	5	2.98	(9)
H	30	2.67	
H			
¹²⁵ I-  (CH ₂) ₁₂ CCH ₂ COOH	5	4.62	(9)
CH ₃	30	3.63	
H			
¹²⁵ I-  (CH ₂) ₁₂ CCH ₂ COOH	5	4.67	(14)
CH ₃	30	5.06	

TABLE 3
Relative Lipophilicities of β, β-Dimethylated Fatty Acids

R	Δ Lipophilicity*
H	—(CH ₂) ₁₄ C(CH ₃) ₂ CH ₂ COOH
I	—(CH ₂) ₁₄ C(CH ₃) ₂ CH ₂ COOH + 1.00
I-CH=CH	—(CH ₂) ₁₄ C(CH ₃) ₂ CH ₂ COOH + 1.72
I- 	—(CH ₂) ₁₂ C(CH ₃) ₂ CH ₂ COOH + 2.25†

* Δ Lipophilicity is the difference in lipophilicity relative to (C-11) DMHDA, which reflects the contribution to total lipophilicity made by R based on Hansch hydrophobic (π) constants.

$$† \pi_{(p-IC_6H_4)} - 2\pi_{(CH_3)}$$

Correction: Reference Citation

In the article by Lacy et al., "First-Pass Radionuclide Angiography Using a Multiwire Gamma Camera and Tantalum-178" (*J Nucl Med* 1988; 29:293-301), the citation of Reference (12) on p. 294 should have referred to Lacy JL, Ball ME, Verani MS, et al., submitted for publication.

Correction: Reply to Letter to the Editor

Due to a printing error, a portion of a reply by Mock and English to a letter by Hanna, "Leukocyte Labeling with Technetium-99m Tin Colloids," (*J Nucl Med* 1988; 29:729-730) was inadvertently omitted. The reply is shown correct and complete below. We apologize for any inconvenience this may have caused our readers.

REPLY: We appreciate the opportunity to respond to the above letter from Hanna, Lomas and Sullivan. Although Hanna and colleagues state that they "have never published a method involving a stock solution combining both starting materials," we quote from their own cited method (1), "After the method of Schroth et al., 16 mg stannous fluoride and 125 mg sodium fluoride were dissolved in 12.5 ml sterile water for injection (SWFI). One millilitre of this solution was then diluted to 10 ml with SWFI producing a solution with 0.82 mM stannous concentration." This same method was also described in a second publication (2) as well as in written communication to us by Mr. Hanna on August 19, 1985. Therefore, the stannous fluoride formulation we evaluated (3) was identical to that published by Hanna et al. In addition, we reported no difference in leukocyte labeling results when either fresh or frozen stock solutions were used to prepare the technetium-99m (^{99m}Tc) tin colloid.

Of concern to us is the claim of >80% leukocyte labeling efficiency when the analytical method used is incapable of supporting such a claim. Hanna et al. stated that free ^{99m}Tc-colloid was removed and quantified by centrifuging the whole blood incubation mixture at 330× g for 5 min (1) or at 400 g (time not reported) (2). One of our several control studies (3) demonstrated that in the absence of citrate, approximately 70% of the ^{99m}Tc stannous fluoride colloid spun down in plasma at 100 g for 10 min, thereby precluding the use of soft-centrifugation alone as a purification or analytical procedure. Furthermore, in an attempt to quantify the ^{99m}Tc activity bound to various cell types, Hanna et al. used a single discontinuous density gradient of Ficoll-Paque (SG 1.007) (1) and/or a dual gradient of sodium metrizoate-Ficoll (SG 1.077 and 1.119) (2). Neither of these gradient systems can separate free ^{99m}Tc tin fluoride colloid from colloid loosely bound to erythrocytes. Therefore, we developed and used a triple density gradient system of nonionic metrizamide in plasma which does resolve free colloid from RBC-bound colloid. The results of our control studies were presented in the manuscript to verify the effectiveness of the triple MP-gradient system.

We agree with Hanna, Lomas and Sullivan that there are many factors to be controlled when attempting to label leukocytes with radiocolloids. However, it is equally important, if not more so, to use the appropriate analytical techniques to characterize and express the labeling process. As we reported, (3), an apparent labeling efficiency of 85-95% was achieved when ^{99m}Tc-stannous fluoride colloid was incubated with heparinized whole blood and then analyzed with simple centrifugation. "However, when the labeled whole blood mixture was analyzed by our MP-gradient method, we found that much of the apparent cell-bound activity was instead nonspecifically associated with erythrocytes. Less than half of the cell-bound activity was leukocyte associated." In further support of this conclusion, we reported that 44 ± 11% specific labeling was obtained when leukocyte-rich-plasma was incu-

bated with the ^{99m}Tc -colloid in the absence of red blood cells. To conclude that our 44% labeling efficiency was low because we used an inappropriate stock solution of stannous and sodium fluoride is incorrect. Instead, the primary purpose of our paper was to characterize the labeling method more accurately, and to provide the reader with more appropriate analytical techniques.

References

1. Hanna R, Braun T, Levendel A, Lomas F. Radiochemistry and biostability of autologous leucocytes labelled

with ^{99m}Tc -stannous colloid in whole blood. *Eur J Nucl Med* 1984; 9:216-219.

2. Hanna RW, Lomas FE. Identification of factors affecting technetium 99m leucocyte labelling by phagocytic engulfment and development of an optimal technique. *Eur J Nucl Med* 1986; 12:159-162.
3. Mock B, English D. Leukocyte labeling with technetium-99m tin colloids. *J Nucl Med* 1987; 28:1471-1477.

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