bath, which is the recommended method for the preparation of ^{99m}Tc-sestamibi (*8*). It is not clear why, with this high temperature (i.e., 119 ± 0.7°C), the Recon-o-Stat RCP values were consistently at the low end, with occasional failing RCP values (i.e., <90%) (*1*). Gagnon, et al. have demonstrated that a 1-min boiling water bath time is sufficient to provide an RCP value of 99.7 ± 0.3% (*2*). We have shown that, even with a 2-min incubation of a ^{99m}Tc-sestamibi kit in an 82.2°C water bath, an acceptable RCP value of 94.1 ± 0.7% can be obtained over 24 hr after preparation (*7*).

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Reply: We agree with Drs. Hung and Gibbons that more rapid preparation methods of ^{99m}Tc-sestamibi should not be discarded entirely. On rare occasions we still employ the microwave method when speed is our primary concern. Whereas speed is critical when performing ictal SPECT studies with cerebral perfusion agents, a relatively large window generally exists for the preparation/administration of myocardial perfusion agents even in the acute setting.

A comparison of finger TLD readings of those involved with ^{99m}Tc-sestamibi preparation in our lab for the 6-mo periods 8/94–1/95 (microwave) and 8/95–1/96 (Recon-o-Stat™) reveals a reduction of approximately 22%. Adjusted for the fraction represented by ^{99m}Tc-sestamibi of the approximate total activity handled, this is consistent with the reduction attributed to the use of the Recon-o-Stat projected from our published data. Additionally, the magnitude of finger radiation dose reduction which we reported in comparison with the microwave would be expected to be fairly consistent regardless of which other unshielded method is employed.

Vastly improved packaging has obviously reduced the likelihood of vial damage during shipping. However, glass imperfections and other variations in vial thickness do occur and must still be considered as a potential risk for vial rupture. We have observed variations in the depth of the aluminum closure crimp and can confirm an isolated instance of the stopper blowing-off when microwaved.

Although the Recon-o-Stat specifications indicate an accuracy of "±0.7°C of programmed target at 119°C" (*1*), the manufacturer confirms that when the kit is prepared at the recommended volume, the maximum internal vial temperature is only 85°C (DuPont Pharma technical services, Billerica, MA, *personal communication*), thereby subjecting the vial to significantly less internal pressure than other methods.

Clearly, the radiochemical purity was consistently lower with the Recon-o-Stat, however, the only instance we observed purity to be <90% was the one we reported. We have used initial elutions at the manufacturer's recommended activities without similar problems, which is apparently why this is not contraindicated in the package insert.

In summary we feel that: (a) ultrafast preparation methods do not enhance diagnostic accuracy and are simply not necessary in the overwhelming majority of conventional and acute Cardiolite® administrations and (b) the routine use of methods which require unshielded transfers should be discouraged from a radiation safety perspective.

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