CONTINUING EDUCATION TEST

Radionuclide Therapy for Osseous Metastatic Disease

For each of the following questions, select the best answer. Then circle the number on the CE Tests Answer Sheet that corresponds to the answer you have selected. Keep a record of your responses so that you can compare them with the correct answers, which will be published in the next issue of the *Journal*. Answers to these test questions should be returned on the Answer Sheet no later than June 1, 1993. Supply your name, address, and VOICE number in the spaces provided on the Answer Sheet. Your VOICE number appears on the upper left hand corner of your *Journal* mailing label. No credit can be recorded without it. A 70% correct response rate is required to receive 0.1 CEU credit for this article. Members participating in the continuing education activity will receive documentation on their VOICE transcript, which is issued in March of each year. Nonmembers may request verification of their participation but do not receive transcripts.

A. *Name the first radioisotope used for therapy of metastatic bone disease.*

101. strontium-89
102. phosphorus-32
103. samarium-153
104. rhenium-186
105. techentium-99m

B. *For which of the following isotopes used in metastatic bone therapy is lead syringe shielding necessary?*

106. phosphorus-32
107. strontium-89
108. samarium-153 EDTMP

C. *Rhenium-186, when complexed to HEDP, is used for treatment in osseous metastatic disease.*

109. True
110. False

D. *The most common sites of bone metastases are _____.*

111. ribs
112. vertebral bodies
113. pelvis and femur
114. base of the skull
115. 112, 113, and 114
116. all of the above

E. *When developing an effective agent for radionuclide therapy of osseous metastatic disease, the following features are important*

117. high target-to-nontarget ratio
118. deposition of energy in a concentrated manner
119. physical and biological half-lives
120. 117, 118, and 119
121. none of the above

F. *The organic matrix of the bone is formed by _____.*

122. hydroxyapatite crystals
123. collagen fibers
124. marrow deposits
125. 122 and 123 only
126. 123 and 124 only

G. *Samarian-153 and rhenium-186 emit both beta and gamma radiation. To estimate the amount of beta exposure, one can multiply the abundance of the gamma by the dose to be administered.*

127. True
128. False

H. *Metastatic bone disease occurs when the malignant cells replace the normal bone cells, resulting in pain, loss of strength, and possibility of eventual fractures.*

129. True
130. False

I. *Which of the following statements about hemibody irradiation is false?*

131. multiple sites may be treated at one time
132. nausea and vomiting occur due to destruction of gastrointestinal cells
133. varying amounts of radiation may be delivered to the affected sites
134. bone marrow suppression occurs

Answers to CE Article Tests, December 1992

The Continuing Education article "Fast Protocols for Obstruction (Diuretic Renography) and for Renovascular Hypertension (Ace-Inhibition)" by George N. Sfakianakis et al. was accompanied by a CE article test. The correct answers are as follows.

A. 106	D. 121	G. 131	J. 141	M. 151	O. 165
B. 111	E. 123	H. 132	K. 145	N. 157	P. 170
C. 116	F. 128	I. 136	L. 149		

The Continuing Education article "Landmarks and Landmines in the Early History of Radiopharmaceuticals" by Muni M. Staum was accompanied by a CE article test. The correct answers are as follows.

A. 173	C. 182	E. 187	G. 193	I. 201	K. 209
B. 175	D. 185	F. 190	H. 198	J. 203	L. 215