

## INDIANA UNIVERSITY

Medical Center

1100 WEST MICHIGAN STREET  
INDIANAPOLIS, INDIANA 46202AREA CODE 317  
TEL. NO. 639-7431

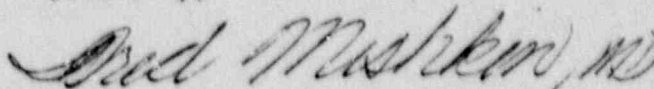
July 23, 1970

John E. Bowyer  
U.S. Atomic Energy Commission  
Division of Materials Licensing  
Washington, D.C.

Dear Mr. Bowyer:

Our human use subcommittee at Indiana University has been asked to extend the use of Sr-85 as strontium nitrate to aid in the management of non-malignant conditions. This would be particularly helpful in determining viability or non-viability of bone. Some of these uses would be in children in selected cases. We would like to know the feeling of the AEC about such uses of Sr-85, and any pertinent data concerning biologic effects, before passing on this request.

Cordially,



Fred S. Mishkin, M.D.  
Associate Professor of Radiology  
Director, Nuclear Medicine Section

FSM:mah

COPIES

SENT TO COMPLIANCE

8911220376 891102  
PDR FDIA  
WOLFEB9-401 PDR

A/278

U.S. ATOMIC ENERGY COMMISSION  
MEDICAL ADVISORY COMMITTEE

APPRAISAL

1. Applicant: Indiana University Medical Center Address: 1100 West Michigan Street City: Indianapolis State: Indiana	2. Control No. 1636 (JEB)
4. Name and title of trained individual Fred S. Mishkin, M.D.	3. Department 5. Type program: <input type="checkbox"/> Private practice. <input type="checkbox"/> Private practice in hospital. <input checked="" type="checkbox"/> Institutional / broad license for medical research, diagnosis, and therapy.
6. Review: <input checked="" type="checkbox"/> First. <input type="checkbox"/> Second.	7. Previous application control No.(s)
8. Remark on checked items: <input type="checkbox"/> A. All radioisotopes and uses stated in application. <input type="checkbox"/> B. Use of _____ for _____ <input type="checkbox"/> C. Training and experience of user. <input type="checkbox"/> D. Dosage(s) indicated. <input type="checkbox"/> E. Clinical techniques and procedures outlined. <input type="checkbox"/> F. Type patient used (i.e., terminal, infants, normal). <input checked="" type="checkbox"/> G. Other ...Please comment on letter dated July 23, 1970.	
9. Action of Subcommittee on Human Applications: <input type="checkbox"/> Approve. <input type="checkbox"/> Disapprove. Remarks: <i>Without knowing the disease state to be studied it is impossible to comment other than to suggest F-18 as an alternative to Sr-85.</i> <i>9/30/70</i> (Date of appraisal)	
Signature <i>[Signature]</i> (Member of subcommittee)	

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<input type="checkbox"/> E. Clinical techniques and procedures outlined.			
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<input checked="" type="checkbox"/> G. Other ...Please comment on letter dated July 23, 1970.			
9. Action of Subcommittee on Human Applications:			
<input type="checkbox"/> Approve. <input checked="" type="checkbox"/> Disapprove.			
Remarks:			
Recommend submission of a complete application suitable for evaluation.			

10/1/70  
(Date of appraisal)

Signature

Original Signed by  
C. D. WEST, M.D.

(Member of subcommittee)

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9. Action of Subcommittee on Human Applications: <input type="checkbox"/> Approve. <input type="checkbox"/> Disapprove. Remarks: Use must be evaluated on an individual risk <u>vs</u> benefit basis.	

9/4/70  
(Date of appraisal)

Signature

John E. Christian, (Member of subcommittee) Ph.D.



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Remarks: I would prefer to see greater availability and therefore use of $^{18}\text{F}$ . I wonder if marrow uptake of Tc-S Colloid wouldn't provide the bone blood flow information, albeit indirect, which Dr. Mishkin seeks. The calculated doses of the $^{85}\text{Sr}$ , however, do seem acceptable to me, considering the roentgen exposure which these children receive trying to determine aseptic necrosis.	

August 4, 1970  
(Date of appraisal)

Signature

James L. Quinn III, M.D.  
(Member of subcommittee)

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9. Action of Subcommittee on Human Applications: <input type="checkbox"/> Approve. <input type="checkbox"/> Disapprove.	

Remarks:

*No information*

*Aug 9, 1970*  
(Date of appraisal)

Signature

*Robert J. Hall*  
(Member of subcommittee)

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Remarks:

We need to know details of the selected cases  
If they are diseases, such as aseptic  
necrosis, osteomyelitis, it could be approved.

Signature

Henry H. Wagner J.  
(Member of subcommittee)

(Date of appraisal)

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Remarks:

I agree with Dr. Kuhl's statement regarding this request. It would appear each use must be evaluated on an individual risk/benefit basis.

7 August, 1970  
(Date of appraisal)

Signature

  
Joseph B. Workman, M.D.  
(Member of subcommittee)



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Remarks:

*They must judge on the basis of more data than they have given us - what "non-malignant conditions," how much, to whom, how often, etc.*

8/4/70  
(Date of appraisal)

Signature

*David E. Hill, M.D.*  
(Member of subcommittee)

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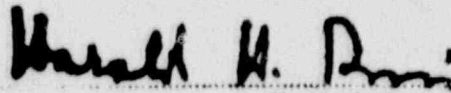
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9. Action of Subcommittee on Human Applications: <input type="checkbox"/> Approve. <input type="checkbox"/> Disapprove. Remarks: It is impossible to comment without information on what conditions are involved and what doses will be required.	

8/4/70

(Date of appraisal)

Signature

  
H.H. Rossi

(Member of subcommittee)

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REVIEW: All members

Signature

(Date of appraisal)

(Member of subcommittee)



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8. Remark on checked items:		
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<input type="checkbox"/> C. Training and experience of user. <i>all members</i>		
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Remarks:		

Signature.....

(Date of appraisal)

(Member of subcommittee)