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SFACTOR: A Computer Code for Calculating Dose Equivalent to a Target Organ per Microcurie-Day Residence of a Radionuclide in a Source Organ—Supplementary Report

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Prepared for the
U.S. Nuclear Regulatory Commission
Division of Safeguards, Fuel Cycle,
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SFACTOR: A COMPUTER CODE FOR CALCULATING DOSE EQUIVALENT
TO A TARGET ORGAN PER MICROCURIE-DAY RESIDENCE OF
A RADIONUCLIDE IN A SOURCE ORGAN -
SUPPLEMENTARY REPORT

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HIGHLIGHTS

This report describes a revision of the SFACTOR computer code. SFACTOR has been developed to estimate the average dose equivalent to each of a specified list of target organs per microcurie-day residence of a radionuclide in source organs in man. Source and target organs of interest are specified in the input data stream, along with nuclear decay information. The SFACTOR code computes components of dose equivalent rate from each type of decay present for a particular radionuclide, including alpha, electron, gamma radiation, and spontaneous fission.

The principal refinement to the program is the addition of a method for calculating components of the dose equivalent rate from alpha particles to endosteal cells and red bone marrow from a source in mineral bone. Other details of the calculations remain unchanged from those described in a previous document.

Tabulations of all components of S are provided for an array of 22 source organs and 24 target organs for 19 radionuclides in an adult. Corrections to previously published tabulations are presented in Appendix III, based upon methods discussed here.

PREFACE

This report describes a revision of the SFACTOR¹ computer code. The principal refinement in the program is the addition of a scheme for calculating components of dose equivalent rate for alpha radiation to endosteal cells and red bone marrow from a source in cortical or cancellous bone. This procedure, described in Sect. 2.3, is based upon methods of Thorne.²

Other details of the calculations have remained unchanged from those documented in Dunning et al.¹ Some of the expository text from that document has been repeated here, with minor editing, for the reader's convenience.

Because of the relationship of this document to previous reports in this series, we have retained the units rem, rad, and curie (and their prefixed derivatives), believing that substitution of their SI counterparts (sievert, gray, and becquerel, respectively) at this moment would prove unduly inconvenient to the reader in making cross references among the reports. Future reports will be written in terms of the SI units. The conversions are $1 \text{ rem} = 0.01 \text{ sievert}$, $1 \text{ rad} = 0.01 \text{ gray}$, and $1 \text{ curie} = 37 \times 10^9 \text{ becquerel}$. Thus $1 \text{ rem per microcurie-day} = 2.7 \times 10^{-7} \text{ sievert per becquerel-day}$, which expresses the combination of units of the S-factors.

1. INTRODUCTION

A computer program, SFACTOR,¹ has been developed to estimate the average radiation dose equivalent rate $S(X \leftarrow Y)$ in rem per microcurie-day to target organ X due to 1 μ Ci of a given radionuclide uniformly distributed in source organ Y. Alternatively, the "S-factor" may be interpreted as the dose equivalent to target organ X per microcurie-day in source organ Y of the radionuclide. In the context of this report, the term "organ" is not used in the strict anatomical sense in all cases; rather, it is used to identify general anatomical areas functioning as radiation sources and targets.

An extensive tabulation of S-factors for 22 source and 24 target organs was undertaken by W. S. Snyder and his colleagues.^{3,4} Calculation of these values is based on an adult phantom with properties similar to those of the International Commission on Radiological Protection's (ICRP) Reference Man.⁵

The SFACTOR code was written to compute and tabulate S-factors and punch them onto cards. The cards are read by a second computer code, INREM II⁶ which has been prepared to input S-factors, together with metabolic data, and estimate radiation dose which results from the uptake and retention of a radionuclide and its radioactive daughters in one or more source organs to each of a number of target organs in man. The radionuclide is assumed to be taken into the body either by inhalation or by ingestion in accordance with a rate function specified by the user.

We assume that the nuclide (the parent) taken into the body is the first in a chain of N radioactive nuclide species ($N \geq 1$), and that the activity $A_{vY}(t)$ (microcuries) of species v ($1 < v \leq N$) in source organ Y has been calculated as a function of time t (days). If we write

$$\tilde{A}_{vY}(t) = \int_0^t A_{vY}(t') dt' , \quad (1)$$

then the dose equivalent $D_v(X)$ (rem) to target organ X due to nuclide species v in all source organs may be computed from the equation

$$D_v(X) = \sum S_v(X \leftarrow Y) \tilde{A}_{vY} \quad , \quad (2)$$

where the summation is taken over all source tissues Y. The total dose equivalent to target X (rem) resulting from the intake of the parent radionuclide is

$$D(X) = \sum_{v=1}^N D_v(X) \quad , \quad (3)$$

In case the time t at which the integration ends coincides with the age of the individual's life expectancy, D(X) would be the individual's dose commitment to organ X following the intake of the parent radionuclide.

The tabulation of S-factors by Snyder et al.^{3,4} decomposes the total S-factor into components for electron and photon emissions. We have followed this scheme in preparing SFACTOR and have also included components for decay by alpha and spontaneous fission.

The SFACTOR code, described in Dunning et al.¹ and in this report, computes the S-factors; the INREM II code accepts these, together with other data which determine intake, translocation, uptake, and retention of species of a radionuclide chain, and computes estimates of dose equivalent to a specified list of target organs.

2. DOSIMETRIC S-FACTORS

In the SFACTOR program, we have adopted intact the methodology set forth by Snyder et al.^{3,4} for photon and electron radiations, and these decay types will not be described in detail here. Some additions, however, were incorporated into calculating components of $S(X \leftarrow Y)$ from alpha particles and from radiations stemming from spontaneous fission of the transuranic elements. These additions and the underlying assumptions are noted below.

2.1 General Formulation

The dose equivalent rate (rem per microcurie-day) to a target organ X from a source organ Y due to an emission of type i may be calculated from the general equation

$$S_i(X \leftarrow Y) = 51.15 \sum_i f_i E_i \Phi_i(X \leftarrow Y) Q_i(X) N_i(X) \quad , \quad (4)$$

where

51.15 = (g-rad/MeV) (disintegrations/ μ Ci-day),

f_i = intensity of decay event (number per disintegration),

E_i = average energy of decay event (MeV),

$\Phi_i(X \leftarrow Y)$ = specific absorbed fraction = fraction of emitted energy from source organ Y absorbed by target organ X per gram of X (g^{-1}),

$Q_i(X)$ = quality factor for decay type i in the target organ X,

$N_i(X)$ = modifying factor for decay type i in target organ X,

and where the summation is taken over all radiations of type i . For photon emissions, specific absorbed fractions $\phi_i(X \leftarrow Y)$ are interpolated from a basic set that were computed by Monte Carlo methods for all combinations of 22 source and 24 target organs and 12 energies.³ Methods of calculating $\phi_i(X \leftarrow Y)$ values for other forms of decay are noted below. Table 1 defines $Q_i(X)$ and $N_i(X)$ for all radiation decay types considered.

Table 1. Quality factors and modifying factors used in SFACOR calculations

Radiation decay type i	$Q_i(X)$	$N_i(X)$ Target organ X		
		GI tract	Bone	Other
α	10^a	0.01	5^b	1
α recoil	20	0	5^b	1
e^- , β^- , β^+	1	1	1	1
Photon	1	1	1	1
Fission fragment	20	0.01	5^b	1
Neutron	10^c	1	5	1

^aWhile $Q_\alpha(X) = 10$ has long received wide use, the value $Q_\alpha(X) = 20$ has been recently recommended by the ICRP.⁷ Should the reader prefer the factor $Q_\alpha(X) = 20$, it is necessary only to multiply the alpha components tabulated in Appendix II and III by 2, and to divide by the factor $N_\alpha(\text{BONE}) = 5$ when the source and target organ is bone.

^bThe factor $N_\alpha(\text{BONE}) = 5$ when the source and target organ is bone. $N_\alpha(\text{BONE}) = 1$, when the radionuclide taken into the body is an isotope of radium.

When the target is total body, special calculations have been performed in certain cases. Increased dose rates from a source in bone [$N_i(\text{BONE}) = 5$] have been taken into consideration for alpha, alpha recoil, fission fragment, and neutron radiations; this consideration is applicable when the source organ is cancellous bone, cortical bone, or total body. Similarly, decreased dose rates from a source in the gastrointestinal (GI) tract to the total body target can be considered for alphas, alpha recoil nuclei, and fission fragments. These special calculations are discussed later in this chapter.

2.2 S-Factors for Betas, Positrons, and Discrete Electrons

In most cases, beta rays, positrons, and discrete electrons are assumed to be insufficiently energetic to contribute significantly to cross-irradiation doses of targets separated from a given source organ. Thus, when source and target coincide, the specific absorbed fraction $\Phi_i(X \leftarrow Y)$ is the reciprocal mass of the organ; when source and target are separated, $\Phi_i(X \leftarrow Y) = 0$. Exceptions to this rule arise for those cases where the source and target are distinct but may be considered to share a common boundary or to be in close proximity. Included in this category are various skeletal tissues, respiratory tissues, and walled organs (bladder, segments of the GI tract) in which the organ contents comprise the source. The reader is referred to Snyder et al.³ for a discussion of these cases.

2.3 S-Factors for Alpha Particle Decay

Similarly, the energy of alpha particles and their associated recoil nuclei is assumed to be absorbed within the source organ in the general case. Therefore, $\Phi_\alpha(X \leftarrow Y)$ is again taken to be the reciprocal organ mass when the source and target organs coincide, and zero when they are separated. Both the kinetic energy of the alpha particle, and the recoil energy of the daughter nucleus are considered. The equation for S_α (rem per microcurie-day) therefore becomes

$$S_{\alpha}(X \leftarrow Y) = 51.15 \left[(KE)Q_{\alpha}N_{\alpha} + (RE)Q_{RE}N_{RE} \right] \Phi_{\alpha}(X \leftarrow Y) \quad (5)$$

where (KE) and (RE) denote the kinetic and recoil energy, respectively, and are given by

$$(KE) = \sum f_{\alpha} E_{\alpha}, \quad \text{and} \quad (6)$$

$$(RE) = \frac{4}{A-4} \sum f_{\alpha} E_{\alpha}, \quad (7)$$

where A is the mass number of the radionuclide, and the summations are taken over all alpha particles for the given radionuclide. Values for the factors Q_{α} , N_{α} , Q_{RE} , and N_{RE} were previously given in Table 1.

In the GI tract, recoil nuclei are assumed not to penetrate the mucous lining; thus, $RE = 0$ for this case. For all walled organs, the dose to the organ walls is taken to be half that to the contents. In the case of irradiation of the bone compartment by a source in cortical or cancellous bone tissue, $\Phi_{\alpha}(X \leftarrow Y)$ is taken to be the reciprocal mass of the target, and $N_{\alpha}(\text{BONE}) = 5$ as noted in Table 1. For the case of irradiation of bone by a source in the total body, $\Phi_{\alpha}(X \leftarrow Y)$ is equal to the reciprocal mass of the total body, and the modifying factor of 5 is again employed. No cross irradiation is assumed for the respiratory organs (lungs and respiratory lymph nodes).

The calculation of $S_{\alpha}(\text{T BODY} \leftarrow Y)$ is handled in a manner similar to the beta methodology in most cases -- that is, $\Phi_{\alpha}(X \leftarrow Y)$ is the reciprocal mass of the total body. In the case where the source tissue is cortical or cancellous bone, a modifying factor of 5 is employed. When the source is the content of a walled organ, $\Phi_{\alpha}(X \leftarrow Y)$ is calculated somewhat differently, as follows:

$$\Phi_{\alpha}(T \text{ BODY} \leftarrow Y) = 1/2 M_W / (M_{TB} M_C) \quad (8)$$

where M_W denotes organ wall mass, M_C denotes the mass of the contents, M_{TB} denotes total body mass, and the dose rate to the organ wall is half of that to the contents. This value is equivalent to the specific absorbed fraction used to calculate the organ wall dose, multiplied by the organ wall to total body mass ratio; essentially, the dose rate to the organ wall is assumed to be distributed uniformly throughout the total body mass. One additional adjustment is incorporated in the case where the content of a segment of the GI tract is the source; modifying factors of $N'_{\alpha} = 0.01$ and $N'_{RE} = 0$ are also included to account for the limited penetration of the mucous lining. Finally, in calculating the dose equivalent rate to total body from a source in total body, the equation is modified to take into account the increased dose equivalent rate (rem per microcurie-day) from bone, in the following manner:

$$S'_{\alpha}(T \text{ BODY} \leftarrow T \text{ BODY}) = S_{\alpha}(T \text{ BODY} \leftarrow T \text{ BODY}) + 4/5(M_{BONE}/M_{TB})S_{\alpha}(BONE \leftarrow T \text{ BODY}) \quad (9)$$

where $S_{\alpha}(T \text{ BODY} \leftarrow T \text{ BODY})$ is given by Eq. (5). This original calculation includes the dose rate to the total body from a source in bone without regard to the modifying factor of 5 which should actually accompany the calculation. We compensate for this difference by adding back into the equation the remaining fraction of this dose rate from a source in bone on a mass-weighted basis.

In the case of alpha-emitting radionuclides deposited in bone, special S-factors are computed for the target tissues consisting of the endosteal cells and red marrow, when the source organ is cancellous or cortical bone. In the report of Dunning et al.,¹ which is based on the methods of Snyder et al.,^{3,4} these alpha doses were tabulated as zero as an interim default action. For the present report, these S-factors have been derived from absorbed fractions computed by

Thorne² for a discrete range of alpha energies and source activity at various depths in bone. The following paragraphs present some details of the translation of Thorne's information into alpha-component S-factors.

2.3.1. Alpha dose to endosteal cells and red marrow from radionuclides distributed in mineral bone volume

If 1 μCi of an alpha emitter is uniformly distributed throughout the bone, the fraction in a layer at depth z from the surface, with thickness Δz , is

$$\frac{\Delta M}{M_{\text{BONE}}} = \frac{A \cdot \Delta z \cdot \rho}{M_{\text{BONE}}}, \quad (10)$$

where M_{BONE} , the mass of mineral bone, is 5,000 g; A , the area of the total endosteal surface, is $12.5 \times 10^4 \text{ cm}^2$; and ρ , the density of soft tissue, is 1.00 g/cm^3 , the numerical values having been taken from the Reference Man report⁵ and Thorne.² If linear measures are converted to micrometers, we have

$$\frac{\Delta M}{M_{\text{BONE}}} = (2.5 \times 10^{-3}) \Delta z. \quad (11)$$

While there is some uncertainty about the location of the endosteal cells at risk for radiation-induced bone sarcoma, the layer between 0 and 10 μm from the surface has been used for these calculations.⁷ We write $\phi_e(E_\alpha, z)$ for the fraction of the alpha particle energy, initial energy E_α , emitted from depth z that is absorbed by the layer of target endosteal cells. Similarly, we use $\phi_m(E_\alpha, z)$ as the corresponding energy fraction absorbed in the red marrow, which is assumed to be contained entirely within cancellous bone. For an assumed uniform distribution of radioactivity throughout the bone

$$\begin{aligned} \Phi_{E_\alpha} \text{ (ENDOSTEAL CELLS } \leftarrow \text{ BONE VOLUME)} \\ = \frac{1}{M_e} \int_0^{z_{\max}} (2.5 \times 10^{-3}) \phi_e(E_\alpha, z) dz \end{aligned} \quad (12)$$

$$\begin{aligned} \Phi_E \text{ (RED MARROW } \leftarrow \text{ CANCELLOUS BONE VOLUME)} \\ = \frac{1}{M_m} \int_0^{z_{\max}} (2.5 \times 10^{-3}) \phi_m(E_\alpha, z) dz, \end{aligned} \quad (13)$$

where $M_e = 125$ g and $M_m = 1500$ g are the masses of the $10 \mu\text{m}$ layer of endosteal target cells and the red marrow, respectively, and z_{\max} is a depth beyond which the alpha penetration is negligible. Values of $\phi_e(E_\alpha, z)$ and $\phi_m(E_\alpha, z)$ were read from graphs given by Thorne² and the integrals estimated by the trapezoidal rule for each of the alpha energies $E_\alpha = 3, 4, \dots, 8$ MeV. These values are presented in Table 2.

2.3.2 Alpha contribution to endosteal cells and red marrow from radionuclides distributed on mineral bone surfaces

When the distribution of radioactivity is restricted to the bone surfaces, we may express the specific absorbed fractions for target endosteal cells and red marrow as

$$\Phi_{E_\alpha} \text{ (ENDOSTEAL CELLS } \leftarrow \text{ BONE SURFACE)} = \phi_e(E_\alpha, z = 0)/M_e, \text{ and} \quad (14)$$

$$\Phi_{E_\alpha} \text{ (RED MARROW } \leftarrow \text{ CANCELLOUS BONE SURFACE)} = 0.5/M_m. \quad (15)$$

Table 2. Specific absorbed fractions for alpha particles for endosteal cells and red marrow^a

E_{α} (MeV)	$\Phi_{E_{\alpha}}$ (ENDOSTEAL ← BONE)		$\Phi_{E_{\alpha}}$ (RED MARROW ← BONE)	
	Volume distribution	Surface distribution	Volume distribution	Surface distribution
3	5.8E-5	3.4E-3	5.1E-6	3.3E-4
4	7.8E-5	3.0E-3	8.1E-6	3.3E-4
5	9.2E-5	2.4E-3	1.2E-5	3.3E-4
6	9.5E-5	1.8E-3	1.5E-5	3.3E-4
7	1.1E-4	1.4E-3	2.0E-5	3.3E-4
8	1.0E-4	1.1E-3	2.5E-5	3.3E-4

^aCalculated from graphical information given by M. C. Thorne, "Aspects of the Dosimetry of Alpha-emitting Radionuclides in Bone with Particular Emphasis on ²²⁶Ra and ²³⁹Pu," *Phys. Med. Biol.* 22, 36-46 (1977).

For all decay emissions other than alpha particles, the assumption of a uniform volume distribution within bone remains intact. Moreover, the alpha dose to the target "BONE" in the tables assumes a volume distribution and contains the N-factor of 5. These inconsistencies are called to the reader's attention in the hope that once understood, they might not cause undue confusion until such time as comparable refinements for the other decay types can be implemented. The effect of the inconsistency for the two target tissues in question, endosteal cells and red marrow, is generally negligible for alpha-emitting radionuclides in view of the dominant magnitudes of the alpha energies.

2.4 S-Factors for Spontaneous Fission Decay

In the dosimetry of internally deposited transuranics, radiation resulting from spontaneous fission may also comprise an important component of $S(X \leftarrow Y)$. Because of the high energy associated with spontaneous fission, this decay mode may produce an important contribution to the total dose equivalent rate, even when the actual percentage of decay by this pathway is very small. Table 3 presents the fraction of decay by spontaneous fission for nuclides in Appendix III.

A methodology for estimation of dose equivalent rates to organs of a reference phantom from spontaneous fission of internally deposited radionuclides has been developed by Dillman and Jones.⁸ They compute components of $S(X \leftarrow Y)$ for spontaneously fissioning nuclides due to fission fragments, neutrons, electrons, and gamma radiation. We have adopted this methodology essentially intact, with the addition of reference ^{252}Cf neutron doses derived by Ford et al.⁹ for a larger array of source and target organs. Further additions to the basic methodology were incorporated to accommodate the special cases presented by this extended array of organs.

Table 3. Spontaneously fissioning isotopes in Appendix III

Radionuclide	Fission decay fraction (f_{sf})
U-238	4.5×10^{-7}
Pu-238	1.7×10^{-9}
Pu-240	4.9×10^{-8}
Pu-242	5.5×10^{-6}
Pu-244	1.0×10^{-3}
Cm-242	6.8×10^{-8}
Cm-244	1.3×10^{-6}
Cm-248	9.0×10^{-2}
Cf-252	3.1×10^{-2}

The principal energy associated with spontaneous fission is that of the fission fragments. Dillman and Jones⁸ indicate the range of fission fragments in tissue to be comparable to, or less than, that of alpha particles. We have assumed, therefore, that the energy is generally absorbed within the source organ, and that the dosimetric behavior of the fission fragments is essentially identical to that of alpha particles produced in normal alpha decay, as discussed in Sect. 2.3. For the fission fragment dosimetry, however, a quality factor of $Q_{FF}(X) = 20$ is used, as in the case of alpha recoil nuclei. The specific absorbed fraction is equal to the reciprocal mass of the organ for the general case where source and target organs are identical, and treatment of special cases (i.e., bone, walled organs, GI tract, and total body) is identical to that of alpha particle dosimetry. Sufficient data were not available for calculating fission fragment contributions to the dose equivalent rate to endosteal cells and red marrow from a source in bone as described in Sect. 2.3 for alphas; however, consideration of this contribution would lead to a significant elevation of the composite S-factors for those tissues for only a few radionuclides, such as ^{248}Cm and ^{252}Cf .

Neutron dosimetry associated with spontaneous fission is based upon reference dose distributions (picorads per neutron) for ^{252}Cf deposited uniformly within the organs of an adult phantom, as determined by Monte Carlo techniques.⁸ Neutron doses for radionuclides other than ^{252}Cf are computed by scaling these reference values on the basis of the total neutron energy relative to ^{252}Cf decay. In all cases where the target organ is bone, we have incorporated the modifying factor of 5 to account for the increased dose equivalent rate to bone. When the target under consideration is the total body, the equation of Dillman and Jones⁸ is modified to account for this increased dose equivalent rate to bone,

$$S'_n(\text{T BODY} \leftarrow Y) = S_n(\text{T BODY} \leftarrow Y) + \frac{4}{5} (M_{\text{BONE}}/M_{\text{TB}}) S_n(\text{BONE} \leftarrow Y), \quad (16)$$

where $S_n(\text{T BODY} \leftarrow Y)$ denotes the value from their original equation.

The dosimetry of fission-produced beta radiation is handled similarly to that described previously for betas from other decay schemes. The average energy of the betas produced following spontaneous fission is computed empirically using ^{236}U as a standard for comparison. Dose distributions among individual bone tissues are approximated according to ratios presented by Dillman and Jones.⁸

The component of $S(X \leftarrow Y)$ from prompt and delayed gamma rays associated with spontaneous fission is computed from reference ^{236}U spectral data. Dillman and Jones⁸ have approximated the prompt gamma spectrum of ^{236}U with a series of 42 monoenergetic photons; similarly, the delayed gamma spectrum was approximated with a series of 28 monoenergetic delayed gammas. With this information, $S_Y(X \leftarrow Y)$ in rem per microcurie-day can be computed in a straightforward manner as,

$$S_Y(X \leftarrow Y) = 51.15 \left[\sum_{i=1}^{42} E_{ip} f_{ip} \phi_i(X \leftarrow Y) + R \sum_{i=1}^{28} E_{id} f_{id} \phi_i(X \leftarrow Y) \right] \\ \times f_{sf} Q_Y(X) N_Y(X), \quad (17)$$

where subscripts p and d denote prompt and delayed gammas, respectively, R is an empirical ratio of the total energy released by delayed gammas for the fissioning species in question to that of ^{236}U , and f_{sf} is the fraction of decay by spontaneous fission. The factors $Q_Y(X)$ and $N_Y(X)$ are always equal to unity in this equation as in traditional gamma dosimetry.

3. THE SFACTOR CODE

The basic structure of the SFACTOR program is shown in Fig. 1. A complete listing of the PL/I source code with extensive commentary is found in Appendix I. Output tabulations are presented in Appendix III for those radionuclides listed in Fig. 2. The atomic and nuclear decay data are from Kocher.¹⁰

3.1 Input Requirements

Input to SFACTOR is accomplished within two procedures. In the first of these, INITIALIZE, all basic information which is not nuclide-specific is entered from cards or card images as shown in Fig. 3. The numbers of source and target organs (NSOURCE and NTARG, respectively) to be considered are read first, followed by the name and mass of each.

Photon specific absorbed fractions (PHIPHO) are then input for twelve monoenergetic photons and each source and target combination. This file must be arranged in blocks such that for each source, the twelve values for each target are listed sequentially (each set on a pair of cards with formats 7E10 and 5E10); that is, NSOURCE blocks of NTARG pairs of cards are required. The final input to the INITIALIZE procedure consists of reference neutron doses (picorads per neutron) for every source and target combination [SON(NSOURCE, NTARG)] for the spontaneous fission of ^{252}Cf . This file must be organized in such a manner that the doses for all source organs are listed sequentially for each target tissue (i.e., NTARG groups of cards, each group containing NSOURCE values).

The second stage of input is performed by procedure INDATA. This routine reads in the specific nuclear decay information for the nuclide under consideration. A lead card containing the name of the nuclide is required with the form NU-A or NU-AM, where NU is the one- or two-letter chemical abbreviation, A is the mass number, and M denotes the metastable state. The name must begin in card column 1. The hyphen is required, and imbedded blanks are not permitted.

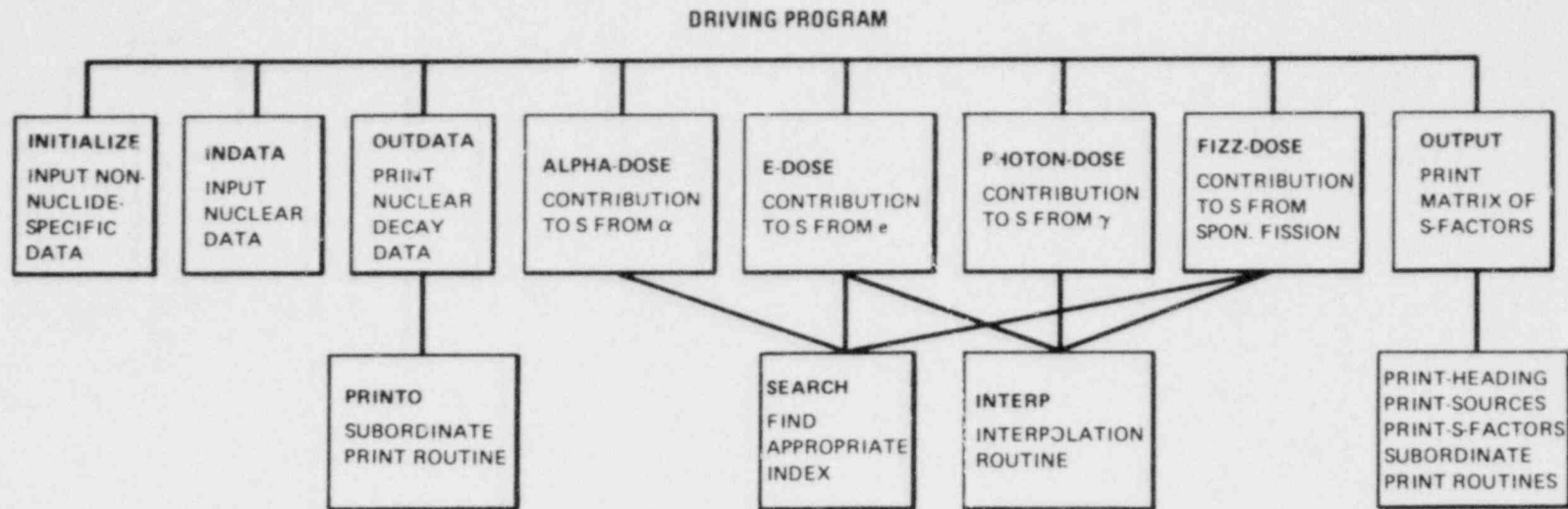


Fig. 1. Structure of the SFACOR program.

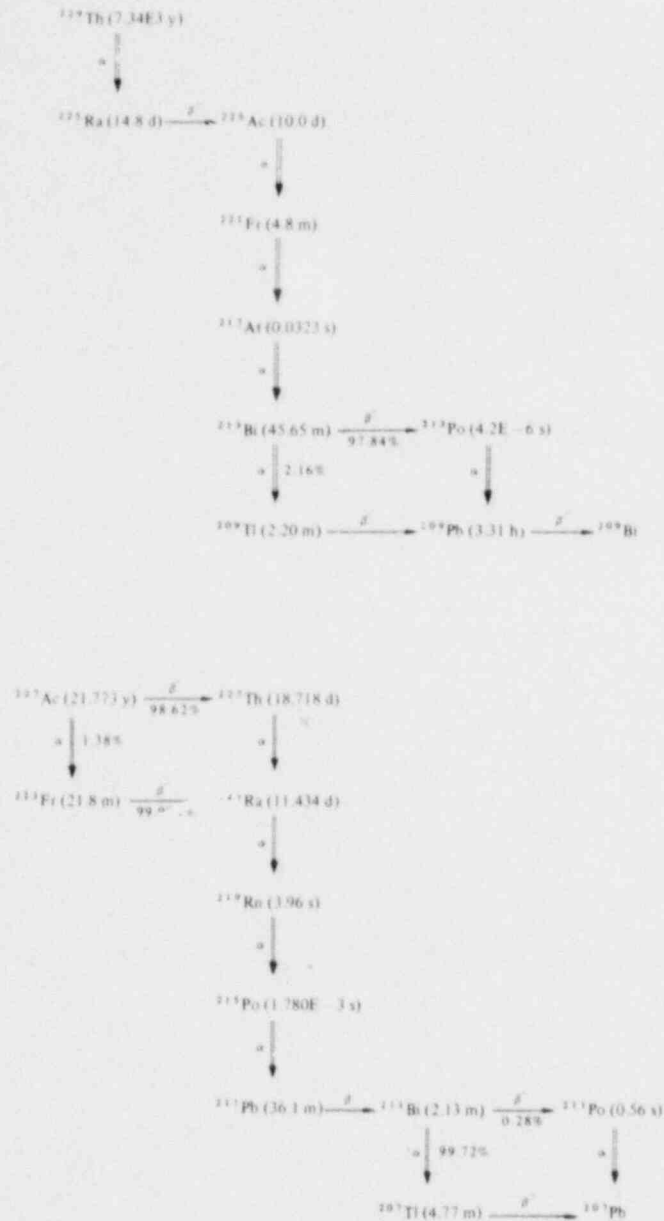


Fig. 2. Radionuclides for which S-factors are tabulated in APPENDIX II. (Radiological half-lives are indicated in parentheses; decay modes and branching fractions are shown with the directional arrows).

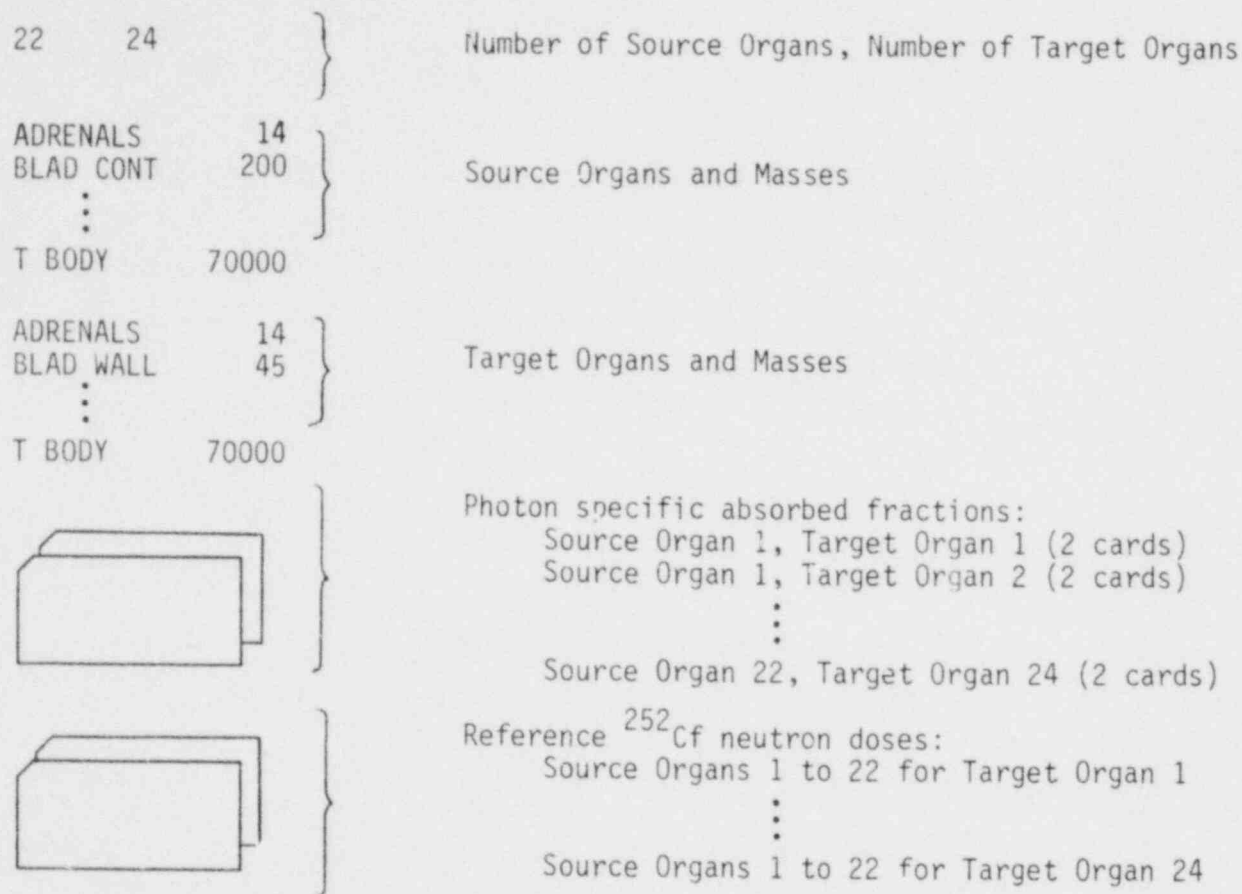


Fig. 3. Input data stream for procedure INITIALIZE.

The number of alpha particles (NALPHA) emitted during the decay of this species is required next, followed by the intensity [FALPHA (%)] and energy [EALPHA (MeV)] of each on subsequent cards. Similar information is required for beta, positron, discrete electron (including Auger electrons), and photon emissions in that order. A trailing card containing the fraction of decay by spontaneous fission, the average number of neutrons emitted per fission, the atomic number and a flag which identifies the nuclide as a surface or volume depositor in bone (SURVOL = 1.0 or 0.0, respectively), completes the input file for an individual nuclide. An example of an input file for INDATA is presented in Fig. 4 for ^{238}Pu . The entry for SURVOL is required even when the nuclides exhibit no alpha decay.

3.2 Computation of S

The equations for the calculation of $S_i(X + Y)$ for given source and target organs have been described in the preceding chapter. These equations have been implemented in four procedures for calculating the individual components of $S(X + Y)$ from alpha particles, electrons (including betas and positrons), photons, and spontaneous fission. These subroutine procedures are denoted by the identifiers ALPHA_DOSE, E_DOSE, PHOTON_DOSE, and FIZZ_DOSE. For each nuclide, SFACTOR receives the nuclear decay information detailed above, and proceeds to calculate the component of $S(X + Y)$ from each type of decay present for that nuclide through sequential calls to these four subroutines. The variable arrays SA, SE, SPH, SFF, SN, SB, and SGT contain the calculated components from alphas, electrons, photons, fission fragments, neutrons (prompt and delayed), fission-produced betas, and fission-produced gammas (prompt and delayed), respectively.

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```

PU-238      3.20E+4      1      U-234      1.0
  4
0.1000E+00  0.5358E+01  0.2830E+02  0.5456E+01  0.7160E+02  0.5499E+01
0.3198E-02  0.5174E+01
  0
  0
  4
0.9095E+01  0.9890E-02  0.2067E+02  0.2173E-01  0.5694E+01  0.3794E-01
0.1876E+01  0.4205E-01
  2
0.1157E+02  0.1360E-01  0.4747E-01  0.5546E-01
  1.7E-09      2.2E      94.0      1.0

```

Fig. 4. INDATA input file for ^{238}Pu .

3.3 Output from SFACTOR

Preliminary output from SFACTOR consists of a tabulation of names and masses of designated source and target organs (performed by INITIALIZE), and comprehensive listings of energy and intensity information for each decay type (performed by OUTDATA). Figure 5 shows an example of the output from INITIALIZE. This figure also serves to indicate selected organs and their respective masses used in the computations for this report. The masses listed are those of ICRP's Reference Man⁵ with the exception of total endosteal cells (ENDOSTEAL) for which no value is given; in this case, however, the mass is taken from Thorne.² The abbreviations shown should be adhered to very closely, as the exact spelling of the organ name is critical to the working of the program in cases of walled organs, respiratory tissues, bone tissues, and total body. Additional organs may be substituted or added to the list, the only stipulation being a 10 character limit in the name of each and a maximum of 24 source organs and 24 target organs. Some modification of the code will be necessary when nonprovisional calculation schemes are desired for the additional organs.

An example of output from OUTDATA for ^{238}Pu is presented in Fig. 6. Nuclear decay information for all calculations in this report is from Kocher.¹⁰ In these calculations, we have included detailed decay data for all decay branches, even those of very low intensity.

Following this preliminary information, SFACTOR prints out a tabulation of all components of $S(X \leftarrow Y)$ for every source and target organ combination. Tabulations of S-factors for selected nuclides are presented in Appendix III. A card deck containing the matrix of total S-factors for each source and target tissue is produced for input into INREM II.

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```

NSOURCE=      22      NTARG=      24;

SOURCE                MASS
ADRENALS              14.00
BLAD CONT            200.00
S CENT               250.00
SI CONT              400.00
JLI CONT             220.00
LLI CONT             135.00
KIDNEYS              310.00
LIVER                1800.00
LUNGS                1000.00
RESP LYMPH           15.00
MUSCLE               28000.00
OVARIES              11.00
PANCREAS             100.00
COR BONE             4000.00
CAN BONE             1000.00
R MAR                1500.00
Y MAR                1500.00
SKIN                 2600.00
SPLEEN              130.00
TESTES               35.00
THYROID              20.00
T BODY               70000.00

TARGET                MASS
ADRENALS              14.00
BLAD WALL            45.00
S WALL              150.00
ST WALL             640.00
ULI WALL            210.00
LLI WALL            160.00
KIDNEYS             310.00
LIVER               1800.00
LUNGS               1000.00
RESP LYMPH          15.00
MUSCLE              28000.00
OVARIES              11.00
PANCREAS            100.00
BONE                5000.00
R MAR               1500.00
Y MAR               1500.00
ENDOSTEAL           125.00
SKIN                2600.00
SPLEEN              130.00
TESTES              35.00
THYMUS              20.00
THYROID             20.00
UTERUS              80.00
T BODY              70000.00

```

Fig. 5. Output from procedure INITIALIZE.

NUCLEAR DATA FOR PU-238

ALPHA-RADIATION DATA FOR PU-238

ENERGY (MEV)	INTENSITY (%)
5.36E+00	0.100
5.46E+00	28.300
5.50E+00	71.600
5.17E+00	0.003

ELECTRON-RADIATION DATA FOR PU-238

ENERGY (MEV)	INTENSITY (%)
9.89E-03	9.095
2.17E-02	20.670
3.79E-02	5.694
4.20E-02	1.876

PHOTON-RADIATION DATA FOR PU-238

ENERGY (MEV)	INTENSITY (%)
1.36E-02	11.570
5.55E-02	0.047

FRACTION OF DECAY BY SPONTANEOUS FISSION= 1.70E-09

AVERAGE NUMBER OF NEUTRONS PRODUCED= 2.28E+00

SURFACE DEPOSITOR IN BONE

Fig. 6. Output from procedure OUTDATA for ^{238}Pu .

4. SUMMARY AND CONCLUSIONS

The purpose of this report is to describe recent revisions in the SFACTOR computer code and to provide useful documentation for that program.

The SFACTOR computer code has been developed to implement current methodologies for computing the average dose equivalent rate $S(X \leftarrow Y)$ to specified target organs in man due to 1 μCi of a given radionuclide uniformly distributed in designated source organs. The SFACTOR methodology is largely based upon that of Snyder et al.;^{3,4} however, it has been expanded to include components of S from alpha and spontaneous fission decay, in addition to electron and photon radiations. With this methodology, S -factors can be computed for any radionuclide for which decay data are available.

The tabulations in Appendix II provide a reference compilation of S -factors for several dosimetrically important radionuclides which are not available elsewhere in the literature. These S -factors are calculated for an adult with characteristics similar to those of the International Commission on Radiological Protection's Reference Man.⁵ Corrections to tabulations from Dunning et al.¹ are presented in Appendix III, based upon the methods described in Sect. 2.3. In that report, as an interim measure, components of S from alpha particles were tabulated as zero when the target organ was endosteal cells or red marrow and the source organ was cortical or cancellous bone.

REFERENCES

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3. W. S. Snyder, M. R. Ford, G. G. Warner, and S. B. Watson, *A Tabulation of Dose Equivalent per Microcurie-Day for Source and Target Organs of an Adult for Various Radionuclides*, ORNL-5000 Part 1 (November 1974).
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9. M. R. Ford, W. S. Snyder, L. T. Dillman, and S. B. Watson, *Health Physics Division Annual Progress Report, June 30, 1978*, ORNL-5171, pp. 1-11.
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APPENDIX I
SFACTOR Source Code Listing

SFACOR.. PRC OPTIONS (MAIN)..

/*

PROGRAM AUTHORS: D. E. DUNNING, J. C. PLEASANT, AND G. G. KILLOUGH

COMPUTES ABSORBED DOSE EQUIVALENT, S (REM/MICROCURIE-DAY),
TO VARIOUS ORGANS, RESULTING FROM BURDENS OF RADIOACTIVITY
IN THOSE ORGANS. THREE COMPONENTS OF S ARE CALCULATED:
ALPHA, ELECTRON (INCLUDING BETA AND POSITRON), AND
PHOTON (X-RAY AND GAMMA).

THE METHODOLOGY IS GENERALLY ADAPTED FROM
W. S. SNYDER, M. R. FORD, G. G. WARNER, AND S. B. WATSON,
A TABULATION OF DOSE EQUIVALENT PER MICROCURIE-DAY FOR
SOURCE AND TARGET ORGANS OF AN ADULT FOR VARIOUS RADIO-
NUCLIDES, ORNL-5000 (NOVEMBER 1974).
VARIOUS MODIFICATIONS HAVE BEEN MADE.

FOR RADIONUCLIDES DECAYING BY SPONTANEOUS FISSION, COMPONENTS OF S
FROM THE RESULTING FISSION FRAGMENTS, NEUTRONS, BETAS AND GAMMAS ARE
ALSO COMPUTED (BASED ON DILLMAN AND JONES, 1975).

ALPHA DOSE RATE CONTRIBUTIONS TO ENDOSTEAL CELLS AND RED BONE MARROW
FROM A SOURCE IN MINERAL BONE ARE ESTIMATED USING THE METHOD OF
THORNE (1977).

*/

```

DCL (NALPHA,NBETA,NPOSIT,NELECT,NPHOTON) BIN FIXED(15),
(FALPHA,FALPHA)(NALPHA) CTL DEC FLOAT(6), /*ALPHA INTENSITIES (%)
AND ENERGIES (MEV) */
(FBETA,EBETA)(NBETA) CTL DEC FLOAT(6),
(FPOSIT,EPCISIT)(NPOSIT) CTL DEC FLOAT(6),
(FELECT,EELECT)(NELECT) CTL DEC FLOAT(6),
(FPHOTON,EPHOTON)(NPHOTON) CTL DEC FLOAT(6),
NEL BIN FIXED(15), /* =NBETA+NPOSIT+NELECT */
(FE,EE)(NEL) CTL DEC FLOAT(6),
/* FE CONTAINS ALL INTENSITIES FBETA, FPOSIT, AND FELECT.
EE CONTAINS THE CORRESPONDING ENERGIES. */
NSOURCE BIN FIXED(15), /* NUMBER OF SOURCE ORGANS */
NTARG BIN FIXED(15), /* NUMBER OF TARGET ORGANS */
NAMSOURCE(NSOURCE) CTL CHAR(10), /* NAMES OF SOURCE ORGANS */
NAMTARG(NTARG) CTL CHAR(10), /* NAMES OF TARGET ORGANS */
SMASS(NSOURCE) CTL DEC FLOAT(6), /* MASSES (G) OF SOURCE ORGANS */
TMASS(NTARG) CTL DEC FLOAT(6), /* MASSES (G) OF TARGET ORGANS */
(SA,SE,SPH,STOTAL)(NTARG,NSOURCE) CTL FLOAT(6),
/* DOSE COMPONENTS AND TOTAL */
(SN,SFF,SGT,SB,SUMGP,SUMGD)(NTARG,NSOURCE) CTL FLOAT(6),
/* SN, SFF, SGT, AND SB ARE ARRAYS OF THE SPONTANEOUS
FISSION-PRODUCED DOSE COMPONENTS FROM NEUTRONS, FISSION
FRAGMENTS, GAMMAS, AND BETAS RESPECTIVELY. SUMGP AND
SUMGD ARE SUMMATIONS OF PROMPT AND DELAYED GAMMA DOSES FOR
THE REFERENCE U-236 CASE. */
M BIN FIXED(15) INITIAL(12),
PHIPHO(NSOURCE,NTARG,M) CTL DEC FLOAT(6), /* SPECIFIC ABSORBED
FRACTIONS OF PHOTON ENERGY FOR 12 TABULAR ENERGIES */
ENPHO(12) DEC FLOAT(6) INITIAL (.01,.015,.02,.03,.05,.1,
.2,.5,1.0,1.5,2.0,4.0), /* TABULAR PHOTON ENERGIES (MEV) */
NAMNUC CHAR(8), /* NAME OF NUCLIDE, MUST HAVE FORM
NU-A OR NU-AM, WHERE NU IS ONE- OR TWO-LETTER CHEMICAL
FORMULA, '-' IS NECESSARY, A IS THE MASS NUMBER (ONE TO
THREE DIGITS), AND 'M' INDICATES METASTABLE STATE. */
INTERP ENTRY (BIN FIXED(15),...),
A DEC FLOAT(6), /* MASS NO. OF THE NUCLIDE */
FIRST CHAR(5),
(FF,VBAR,Z) DEC FLOAT(6), /* SPONTANEOUS FISSION INFORMATION: FRACTION OF
DECAY BY FISSION, AVERAGE NUMBER OF NEUTRONS, AND ATOMIC NUMBER */
SON(NSOURCE,NTARG) CTL FLOAT(6),
SURVOL DEC FLOAT(6),
DCL PUNCHB FILE OUTPUT..

```



```

/* ----- */
ON UNDERFLOW..
CALL INITIALIZE.. /* INPUT DATA BASE */
BEGIN.. ON ENDFILE(SYSIN) STOP..
DO WHILE (I=1)..
  CALL INDATA.. /* READ DATA FOR NEXT NUCLIDE.
  ALLOCATE AND SET UP ARRAYS */
  CALL OUTDATA.. /* PRINT DATA FOR NUCLIDE */
  IF NALPHA GT 0 THEN FALPHA=.01*FALPHA..
  IF NEL GT 0 THEN FE=.01*FE..
  IF NPHOTON GT 0 THEN FPHOTON=.01*FPHOTON..
  CALL ALPHA DOSE.. /* COMPUTE ARRAY SA OF ALPHA DOSES */
  CALL E DCSE.. /* COMPUTE ARRAY SE OF BETA-ELECTRON
  DOSES */
  CALL PHOTON DOSE.. /* COMPUTE ARRAY SPH OF PHOTON DOSES */
  STOTAL=SA+SE+SPH.. /* COMPUTE ARRAY OF TOTAL DOSES */
  IF FF GT 0 THEN DD..
  CALL FIZZ DOSE.. /* COMPUTE SPONTANEOUS FISSION DOSES*/
  STOTAL=STOTAL+SN+SFF+SB+SST.. /* ADD DOSES FROM
  SPONTANEOUS FISSION RADIATIONS TO TOTAL */
  END..
  CALL OUTPUT.. /* PRINT OUT S-FACTOR MATRIX */
  FREE FALPHA,EALPHA,FBETA,EBETA,FPOSIT,EPOSIT,
  FELECT,FELECT,FE,EE,FPHOTON,EPHOTON..
END.. /* OF BEGIN BLOCK */
/* ----- */
INITIALIZE.. PROC..
/* READ NUMBER OF SOURCE AND TARGET ORGANS */
GET LIST(NSOURCE,NTARG)..
PUT SKIP DATA (NSOURCE,NTARG).. PUT SKIP..
ALLOCATE NAMSOURCE,NAMTARG,SMASS,TMASS,
  SA,SE,SPH,STOTAL,PHIPHO,SON,SN,SFF,SB,ST,SUMGP,SUMGD..
/* READ NAMES AND MASSES OF SOURCE ORGANS */
GET LIST((NAMSOURCE(I),SMASS(I))
  DO ISOURCE=1 TO NSOURCE)..
PUT SKIP EDIT('SOURCE','MASS')(A,COL(26),A).. PUT SKIP..
DO ISOURCE=1 TO NSOURCE..
  PUT SKIP EDIT(NAMSOURCE(I),SMASS(I))
  (A,COL(20),F(10,2))..
END..
/* READ NAMES AND MASSES OF TARGET ORGANS */
GET LIST((NAMTARG(ITARG),TMASS(ITARG))
  DO ITARG=1 TO NTARG)..
PUT SKIP(3) EDIT ('TARGET','MASS')(A,COL(26),A).. PUT SKIP..
DO ITARG=1 TO NTARG..
  PUT SKIP EDIT(NAMTARG(ITARG),TMASS(ITARG))
  (A,COL(20),F(10,2))..
END..
/* READ PHOTON SPECIFIC ABSORBED FRACTIONS */
DO ISOURCE=1 TO NSOURCE..
  DO ITARG=1 TO NTARG..
    GET EDIT ((PHIPHO(I,SOURCE,ITARG,J) DO J=1 TO 12))
    (SKIP, 7 E(10,0),SKIP, 5 E(10,0))..
  END.. /* ITARG LOOP */
END.. /* ISOURCE LOOP */
/* READ REFERENCE NEUTRON DOSES FOR SPONTANEOUS FISSION */
DO ITARG=1 TO NTARG..
  GET EDIT ((SON(I,SOURCE,ITARG) DO (SOURCE=1 TO NSOURCE))
  (SKIP,1 E(10,0),SKIP,COL(11),7 E(10,0),SKIP,
  COL(11),5 E(10,0),SKIP,COL(11),7 E(10,0),
  SKIP,COL(11),2 E(10,0))..
  END..
FIRST='TRUE'..
END..

```

```

/* ----- */
INDATA.. PROC..
DCL TEMP CHAR(8)..
/* READ NAME OF CURRENT NUCLIDE */
GET SKIP EDIT(NAMNUC)(A(8))..
TEMP= NAMNUC..
/* SEPARATE THE MASS NUMBER FROM THE NAME */
SUBSTR(TEMP,1,2)= ' '..
IF SUBSTR(TEMP,3,1)='-' THEN SUBSTR(TEMP,3,1)= ' '..
DO K=3 TO 8..
  IF SUBSTR(TEMP,K,1)='M' THEN SUBSTR(TEMP,K,1)= ' '..
END..
/* TEMP SHOULD NOW CONTAIN THE DIGITS OF THE MASS NO. A
  EMBEDDED IN A FIELD OF BLANKS. */
GET STRING(TEMP) LIST(A)..
/* READ ALPHA DATA */
GET SKIP LIST(NALPHA)..
IF NALPHA GT 0 THEN DO..
  ALLOCATE FALPHA,EALPHA..
  GET LIST((FALPHA(I),EALPHA(I)) DO I=1 TO NALPHA)..
END..
/* READ BETA, POSITRON, ELECTRON DATA */
/* READ BETA DECAY DATA */
GET LIST(NBETA)..
IF NBETA GT 0 THEN DO..
  ALLOCATE FBETA,EBETA..
  GET LIST((FBETA(I),EBETA(I)) DO I=1 TO NBETA)..
END..
/* READ POSITRON DATA */
GET LIST(NPOSIT)..
IF NPOSIT GT 0 THEN DO..
  ALLOCATE FPOSIT,EPOSIT..
  GET LIST((FPOSIT(I),EPOSIT(I)) DO I=1 TO NPOSIT)..
END..
/* READ ELECTRON DATA */
GET LIST(NELECT)..
IF NELECT GT 0 THEN DO..
  ALLOCATE FELECT,EELECT..
  GET LIST((FELECT(I),EELECT(I)) DO I=1 TO NELECT)..
END..
/* READ PHOTON DATA */
GET LIST(NPHOTON)..
IF NPHOTON GT 0 THEN DO..
  ALLOCATE FPHOTON,EPHOTON..
  GET LIST((FPHOTON(I),EPHOTON(I)) DO I=1 TO NPHOTON)..
END..
/* COMBINE BETA, POSITRON, AND ELECTRON ARRAYS */
NEL=NBETA+NPOSIT+NELECT..
IF NEL GT 0 THEN DO..
  ALLOCATE FE,EE..
  IF NBETA GT 0 THEN DO..
    DO I=1 TO NBETA..
      FE(I)=FBETA(I)..
      EE(I)=EBETA(I)..
    END..
  END..
  IF NPOSIT GT 0 THEN DO..
    K=NBETA..
    DO I=1 TO NPOSIT..
      FE(K+I)=FPOSIT(I)..
      EE(K+I)=EPOSIT(I)..
    END..
  END..
  IF NELECT GT 0 THEN DO..
    K=NBETA+NPOSIT..
    DO I=1 TO NELECT..
      FE(K+I)=FELECT(I)..
      EE(K+I)=EELECT(I)..
    END..
  END..
END..
GET LIST(FE,VBAR,Z,SURVOL).. /* SPONTANEOUS FISSION INFORMATION,
  AND A FLAG TO SPECIFY SURFACE OR
  VOLUME DEPOSITION IN BONE FOR
  ALPHA EMISSIONS */
END INDATA..

```

```

----- */
OUTDATA.. PROC..
/* PRINTS OUT INPUT DECAY INFORMATION FOR THIS NUCLIDE.
  CALLS SUBROUTINE PRINTO TO PRINT RADIATION DATA FOR EACH
  TYPE OF DECAY INVOLVED. */
DCL RADTYPE CHAR(10) VARYING..
PUT PAGE EDIT('NUCLEAR DATA FOR ',NAMNUC)(A,A(8))..
IF NALPHA GT 0 THEN DO..
  RADTYPE='ALPHA'..
  CALL PRINTO(RADTYPE,NALPHA,EALPHA,FALPHA)..
END..
IF NBETA GT 0 THEN DO..
  RADTYPE='BETA'..
  CALL PRINTO(RADTYPE,NBETA,EBETA,FBETA)..
END..
IF NPOSIT GT 0 THEN DO..
  RADTYPE='POSITRON'..
  CALL PRINTO(RADTYPE,NPOSIT,EPOSIT,FPOSIT)..
END..
IF NELECT GT 0 THEN DO..
  RADTYPE='ELECTRON'..
  CALL PRINTO(RADTYPE,NELECT,EELECT,FELECT)..
END..
IF NPHOTCN GT 0 THEN DO..
  RADTYPE='PHOTCN'..
  CALL PRINTO(RADTYPE,NPHOTCN,EPHOTCN,FPHOTCN)..
END..
IF FF GT 0
  THEN PUT SKIP(3) EDIT('FRACTION OF DECAY BY SPONTANEOUS',
  ' FISSION= ', FF,' AVERAGE NUMBER OF NEUTRONS PRODUCED= ',VBAR)
  (A,A,E(11,2),SKIP(2), A,X(5),E(11,2))..
IF NALPHA GT 0 THEN DO..
  IF SURVOL=1 THEN PUT SKIP(3) EDIT('SURFACE DEPOSITOR IN BONE')
  (A)..
  ELSE PUT SKIP(3) EDIT('VOLUME DEPOSITOR IN BONE')(A)..
END..
----- */
PRINTO.. PROC(RADTYPE,N,E,F)..
/* PRINTS RADIATION DATA FOR EACH DECAY TYPE */
DCL RACTYPE CHAR(*),
  N BIN FIXED(15),
  (E,F)(*) CTL DEC FLOAT(6),
  I BIN FIXED(15)..
ON ENDPAGE(SYSPRINT)
  BEGIN..
  IF I LE N THEN DO..
    PUT PAGE EDIT(RADTYPE,'-RADIATION DATA FOR ',NAMNUC,
    '(CONTINUED)', 'ENERGY', 'INTENSITY', '(MEV)', '(%)')(A,A,A(8),SKIP(2),
    COL(3),A,COL(15),A,SKIP,
    COL(3),A,COL(18),A)..
    PUT SKIP..
  END..
  ELSE PUT PAGE..
END..
PUT SKIP(3) EDIT(RADTYPE,'-RADIATION DATA FOR ',NAMNUC,
'ENERGY', 'INTENSITY', '(MEV)', '(%)')(A,A,A(8),SKIP(2),
COL(3),A,COL(15),A,SKIP,COL(3),A,COL(18),A)..
DO I=1 TO N..
  PUT EDIT(E(I),F(I))(SKIP,E(9,2),COL(15),F(8,3))..
END..
END PRINTO..
----- */
END OUTDATA..
----- */
ALPHA_DOSE.. PROC..
DCL (X,Y) CHAR(10) VARYING, (I,J,INDEX1,INDEX2) BIN FIXED(15),
  NAMORG CHAR(10),
  KALPH DEC FLOAT(6),
  ENGALF(6) DEC FLOAT(6) INITIAL(3.0,4.0,5.0,6.0,7.0,8.0),
  KEND1(6) DEC FLOAT(6) INITIAL(3.4E-03,3.0E-03,2.4E-03,1.8E-03,
  1.4E-03,1.1E-03),
  KEND0(6) DEC FLOAT(6) INITIAL(5.8E-05,7.8E-05,9.2E-05,
  9.5E-05,1.1E-04,1.0E-04),
  KMARD(6) DEC FLOAT(6) INITIAL(5.1E-06,8.1E-06,1.2E-05,1.5E-05,
  2.0E-05,2.5E-05)..

```

```

IF NALPHA .GT. 0 THEN DO..
  SA=0.. /* INITIALLY SET ALL SA(I,J)=0 SINCE GENERALLY SA(I,J)=0
          IF NAMTARG(I) AND NAMSOURCE(J) ARE SEPARATED */
  AEN=SUM(FALPHA*EALPHA)..
  SM=51.15*(AEN*10 + (4/(A-4))*AEN*20)..
  /* FIRST TERM IS KINETIC ENERGY OF ALPHA PARTICLE WITH OF=10
     (EQ 2-3). SECOND TERM IS RECOIL ENERGY WITH QF=20
     (EQ 2-4). */
  DO I=1 TO NTARG..
    DO J=1 TO NSOURCE..
      X=NAMTARG(I)..
      Y=NAMSOURCE(J)..
      IF X=Y THEN SA(I,J)=SM/TMASS(I)..
      IF X='BLAD WALL' AND Y='BLAD CONT'
        THEN SA(I,J)=SM/(2*SMASS(J))..
        /* DOSE RATE AT WALL OF BLADDER IS ONE-HALF THE DOSE
           RATE TO THE CONTENTS. */
      IF X='S WALL' AND Y='S CONT' OR
        X='SI WALL' AND Y='SI CONT' OR
        X='ULI WALL' AND Y='ULI CONT' OR
        X='LLI WALL' AND Y='LLI CONT'
        THEN SA(I,J)=51.15 * AEN * 10 / SMASS(J) * 0.5 * 0.01..
        /* DOSE RATE TO WALL OF G.I. TRACT IS ONE-HALF THE
           DOSE RATE TO CONTENTS. THE MODIFYING FACTOR OF
           0.01 IS APPLIED TO THE G.I. TRACT ALPHA DOSE TO
           COMPENSATE FOR LOW PENETRATION OF ALPHA PARTICLES
           THROUGH MUCOSA. RECOIL NUCLEI ARE ASSUMED NOT TO
           PENETRATE THE MUCUS. */
      IF X='BONE' AND Y='COR BONE' OR
        X='BONE' AND Y='CAN BONE'
        THEN SA(I,J)=5*SM/TMASS(I)..
        /* MODIFYING FACTOR N=5 IS USED FOR ALPHA EMITTERS
           DEPOSITING IN BONE.
           THIS FACTOR SHOULD BE OMITTED WHEN THE PARENT
           NUCLIDE IS RADIUM. */
      IF X='ENDOSTEAL' AND Y='COR BONE' OR
        X='ENDOSTEAL' AND Y='CAN BONE'
        THEN DO.. /* DOSE RATE TO THE CRITICAL OSTEOGENITOR
                  CELLS IN THE ENDOSTEUM IS CALCULATED WITH
                  THE METHOD OF THORNE(1977).*/
          IF SURVOL=1 THEN
            CALL INTERP(6,ENGALF,KEND1,AEN,KALPH)..
          ELSE CALL INTERP(6,ENGALF,KEND0,AEN,KALPH)..
          SA(I,J)=SM*KALPH..
        END.. /* END OF ENDOSTEAL CALCULATION */
      IF X='R MAR' AND Y='CAN BONE'
        THEN DO.. /*CALCULATION OF DOSE RATE TO RED MARROW IS
                  ADAPTED FROM THE METHOD OF THORNE(1977).*/
          IF SURVOL=1 THEN KALPH=3.3E-04..
          ELSE CALL INTERP(6,ENGALF,KNAR0,AEN,KALPH)..
          SA(I,J)=SM*KALPH..
        END.. /* END OF MARROW CALCULATION */
      /* THE FOLLOWING ARE SPECIAL CALCULATIONS WHERE THE SOURCE
         AND/OR TARGET TISSUE IS TOTAL BODY. */
      IF Y='T BCCY' THEN SA(I,J)=SM/SMASS(J)..
      IF Y='T BODY' AND X='BONE' THEN SA(I,J)=SA(I,J)*5..
      IF X='T BCCY' THEN DO..
        IF Y='BLAD CONT'
          THEN SA(I,J)=TMASS(J)/TMASS(I)*.5/SMASS(J)*SM..
          /* EQ 2-5 */
        ELSE IF Y='S CONT' OR Y='SI CONT' OR
              Y='ULI CONT' OR Y='LLI CONT'
          THEN SA(I,J)=TMASS(J)/TMASS(I)*.5/SMASS(J)*51.15*AEN*
                10.0*0.01.. /* LIMITED PENETRATION OF
                   THE MUCOUS LINING BY ALPHAS, AND NO
                   PENETRATION BY RECOIL NUCLEI IS ASSUMED. */
        ELSE IF Y='COR BONE' OR Y='CAN BONE'
          THEN SA(I,J)=SM*5.0/TMASS(I).. /* MODIFYING FACTOR OF 5
                   FOR BONE TISSUES */
        ELSE IF Y='T BODY' THEN DO..
          NAMORG='BONE'..
          CALL SEARCH(NAMTARG,NTARG,NAMORG,INDEX1)..
          NAMORG='T BODY'..
          CALL SEARCH(NAMTARG,NTARG,NAMORG,INDEX2)..
          SA(I,J)=SM/TMASS(I)*[1+(4*TMASS(INDEX1)/TMASS(INDEX2))].
          /* EQ 2-6 */
        END..
        ELSE SA(I,J)=SM/TMASS(I)..
      END..
    END.. /* J LOOP */
  END.. /* I LOOP */
END..
ELSE /* I.E. IF NALPHA=0 */ SA=0..
END ALPHA_DOSE..

```

```

/*-----*/
E_DOSE.. PROC.. /* BETA, POSITRON, ELECTRON */
DCL ( MASS_COR_BCNE, MASS_CAN_BONE, MASS_R_MAR ) DEC FLOAT(6),
ENGE(8) DEC FLOAT(6) INITIAL (0.0, .049, .076, .200, .218,
.253, .695, .927),
/* SPECIAL DISCRETE ENERGIES (MEV) CORRESPONDING
TO THE GIVEN VALUES FOR R_CORT_END_CORT, R_CANC_END_CANC,
R_CANC_END_CORT, R_RED_MAR_CANC, AND R_RED_MAR_CORT */
R_CORT_END_CORT(8) DEC FLOAT(6) INITIAL (0.0, .720, .820,
.920, .930, .935, .880, .815),
R_CANC_END_CORT(8) DEC FLOAT(6) INITIAL (0.0, .0025, .0045,
.0171, .0192, .0231, .0736, .0934),
R_RED_MAR_CORT(8) DEC FLOAT(6) INITIAL (0.0, .0017, .0031,
.0119, .0132, .0159, .0490, .0615),
R_CANC_END_CANC(8) DEC FLOAT(6) INITIAL (0.0, .3777, .4340,
.4334, .4308, .4256, .3607, .3155),
R_RED_MAR_CANC(8) DEC FLOAT(6) INITIAL (0.0, .0543, .1037,
.2183, .2203, .2242, .2730, .2661),
(X,Y) CHAR(10) VARYING,
(IT,JS) BIN FIXED(15),
NAMORG CHAR(10),
INDEX BIN FIXED(15)..
/* THE ABOVE DATA ARE RATIOS OF AVERAGE ENDOSTEAL DOSE AND AVERAGE
RED MARRCW DOSE TO EQUILIBRIUM DOSE IN BONE FROM BETA EMITTERS
AS REPORTED IN ORNL 5000 (THE DATA WAS SUPPLIED TO SNYDER ET
AL., GP, CIT., BY SPIERS). THE ENERGIES .049, .076, .200,
.218, .253, .695, AND .927 ARE FOR THE RADIONUCLIDES
C_14, CA_45, SR_90, NA_22, F_18, P_32, AND Y_90 RESPECTIVELY. */
IF NEL GT 0 THEN DO..
SE=0..
DO I=1 TO NEL..
DO IT=1 TO NTARG..
DO JS=1 TO NSOURCE..
X=NAMTARG(IT).. Y=NAMSOURCE(JS)..
IF X='S WALL' AND Y='S CONT' OR
X='BLAD WALL' AND Y='BLAD CONT' OR
X='ULI WALL' AND Y='ULI CONT' OR
X='LLI WALL' AND Y='LLI CONT' OR
X='SI WALL' AND Y='SI CONT'
THEN DO..
PHICAP=1/SMASS(JS)..
SE(IT,JS)=SE(IT,JS)+51.15*.5*FE(I)*EE(I)*PHICAP..
END..
ELSE IF X='BONE' AND Y='COR BONE' THEN DO..
NAMORG='COR BCNE'..
CALL SEARCH(NAMSOURCE,NSOURCE,NAMORG,INDEX)..
MASS_COR_BONE=SMASS(INDEX)..
NAMORG='CAN BONE'..
CALL SEARCH(NAMSOURCE,NSOURCE,NAMORG,INDEX)..
MASS_CAN_BONE=SMASS(INDEX)..
PHICAP=17(MASS_COR_BONE+MASS_CAN_BONE)..
SE(IT,JS)=SE(IT,JS)+51.15*FE(I)*EE(I)*PHICAP..
/* EQ 24, ORNL 5000 */
END..
ELSE IF X='BONE' AND Y='CAN BONE' THEN DO..
CALL INTERP(8,ENGE,R_RED_MAR_CANC,EE(I),R)..
NAMORG='CAN BONE'..
CALL SEARCH(NAMSOURCE,NSOURCE,NAMORG,INDEX)..
MASS_CAN_BONE=SMASS(INDEX)..
NAMORG='R MAR'..
CALL SEARCH(NAMSOURCE,NSOURCE,NAMORG,INDEX)..
MASS_R_MAR=SMASS(INDEX)..
NAMORG='COR BCNE'..
CALL SEARCH(NAMSOURCE,NSOURCE,NAMORG,INDEX)..
MASS_COR_BONE=SMASS(INDEX)..
PHICAP=(1-.075*R/(MASS_CAN_BONE+MASS_COR_BONE))/
(MASS_CAN_BONE+MASS_COR_BONE)..
SE(IT,JS)=SE(IT,JS)+51.15*FE(I)*EE(I)*PHICAP..
/* EQ 15, ORNL 5000 */
END..
ELSE IF X='BONE' AND Y='R MAR' THEN DO..
CALL INTERP(8,ENGE,R_RED_MAR_CANC,EE(I),R)..
NAMORG='CAN BONE'..
CALL SEARCH(NAMSOURCE,NSOURCE,NAMORG,INDEX)..
MASS_CAN_BONE=SMASS(INDEX)..
NAMORG='COR BCNE'..
CALL SEARCH(NAMSOURCE,NSOURCE,NAMORG,INDEX)..
MASS_COR_BONE=SMASS(INDEX)..
PHICAP=1.075*R/(MASS_CAN_BONE+MASS_COR_BONE)..
SE(IT,JS)=SE(IT,JS)+51.15*FE(I)*EE(I)*PHICAP..
/* EQ 16, ORNL 5000 */
END..

```

```

/* IF X='BONE' AND Y='COR BONE' THEN SE=0 EQ 18, ORNL 5000 */
ELSE IF X='R MAR' AND Y='COR BONE' THEN DO..
  CALL INTERP(B, ENGE, R_RED_MAR_CORT, EE(I), R)..
  PHICAP=(1.075*R)/SMASS(JS)..
  /* EQ 5, ORNL 5000 */
  SE(IT, JS)=SE(IT, JS)+51.15*FE(I)*EE(I)*PHICAP..
  END..
ELSE IF X='R MAR' AND Y='CAN BONE' THEN DO..
  CALL INTERP(B, ENGE, R_RED_MAR_CANC, EE(I), R)..
  PHICAP=(1.075*R)/SMASS(JS)..
  /* EQ 5, ORNL 5000 */
  SE(IT, JS)=SE(IT, JS)+51.15*FE(I)*EE(I)*PHICAP..
  END..
ELSE IF X='R MAR' AND Y='R MAR' THEN DO..
  CALL INTERP(B, ENGE, R_RED_MAR_CORT, EE(I), R1)..
  CALL INTERP(B, ENGE, R_RED_MAR_CANC, EE(I), R2)..
  PHICAP=(1-1.075*R1-1.075*R2)/TMASS(IT)..
  /* EQ 3, ORNL 5000, PART 2 */
  SE(IT, JS)=SE(IT, JS)+51.15*FE(I)*EE(I)*PHICAP..
  END..
/* IF X='R MAR' AND Y='Y MAR' THEN SE=0, EQ 19, ORNL 5000 */
/* IF X='Y MAR' AND Y='COR BONE' THEN SE=0, EQ 20, ORNL 5000 */
/* IF X='Y MAR' AND Y='CAN BONE' THEN SE=0, EQ 20 */
/* IF X='Y MAR' AND Y='R MAR' THEN SE=0 */
ELSE IF X='Y MAR' AND Y='Y MAR' THEN DO..
  PHICAP=1/TMASS(IT)..
  /* EQ 17, ORNL 5000 */
  SE(IT, JS)=SE(IT, JS)+51.15*FE(I)*EE(I)*PHICAP..
  END..
ELSE IF X='ENDOSTEAL' AND Y='COR BONE' THEN DO..
  CALL INTERP(B, ENGE, R_CORT_END_CORT, EE(I), R1)..
  CALL INTERP(B, ENGE, R_CANC_END_CORT, EE(I), R2)..
  PHICAP=(R1+R2)/SMASS(JS)..
  /* EQ 6A, ORNL 5000 */
  SE(IT, JS)=SE(IT, JS)+51.15*1.075*.5*FE(I)*EE(I)*PHICAP..
  END..
ELSE IF X='ENDOSTEAL' AND Y='CAN BONE' THEN DO..
  CALL INTERP(B, ENGE, R_CANC_END_CANC, EE(I), R)..
  PHICAP=R/SMASS(JS)..
  /* EQ 6B, ORNL 5000 */
  SE(IT, JS)=SE(IT, JS)+51.15*1.075*.5*FE(I)*EE(I)*PHICAP..
  END..
ELSE IF X='ENDOSTEAL' AND Y='R MAR' THEN DO..
  CALL INTERP(B, ENGE, R_CANC_END_CANC, EE(I), R)..
  PHICAP=(1-1.075*R)/(2*SMASS(JS))..
  /* EQ 10, ORNL 5000 */
  SE(IT, JS)=SE(IT, JS)+51.15*FE(I)*EE(I)*PHICAP..
  END..
ELSE IF X='ENDOSTEAL' AND Y='Y MAR' THEN DO..
  PHICAP=1/(4*SMASS(JS))..
  /* EQ 22, ORNL 5000 */
  SE(IT, JS)=SE(IT, JS)+51.15*FE(I)*EE(I)*PHICAP..
  END..
ELSE IF X='LUNGS' AND Y='RESP LYMPH' THEN DO..
  PHICAP=1/TMASS(IT)..
  SE(IT, JS)=SE(IT, JS)+51.15*FE(I)*EE(I)*PHICAP..
  END..
ELSE IF X='RESP LYMPH' AND Y='LUNGS' THEN DO..
  PHICAP=1/SMASS(JS)..
  SE(IT, JS)=SE(IT, JS)+51.15*FE(I)*EE(I)*PHICAP..
  END..
ELSE IF X='T BODY' THEN DO..
  IF Y='BLAD CONT' OR Y='S CONT' OR
  Y='SI CONT' OR Y='LLI CONT' OR
  Y='ULI CONT'
  THEN PHICAP=TMASS(JS)/TMASS(IT)*.5/SMASS(JS)..
  ELSE PHICAP=1/TMASS(IT)..
  SE(IT, JS)=SE(IT, JS)+51.15*FE(I)*EE(I)*PHICAP..
  END..
ELSE IF Y='T BODY' THEN DO..
  PHICAP=1/SMASS(JS)..
  SE(IT, JS)=SE(IT, JS)+51.15*FE(I)*EE(I)*PHICAP..
  END..
ELSE IF X=Y THEN DO..
  PHICAP=1/TMASS(IT)..
  SE(IT, JS)=SE(IT, JS)+51.15*FE(I)*EE(I)*PHICAP..
  END..
END.. /* JS LOOP */
END.. /* IT LOOP */
END.. /* I LOOP */
END..
ELSE /* I.E. IF NEL=0 */ SE=0..
END E_DOSE..

```

```

----- */
/* PHOTON DOSE.. PROC..
/* PHOTON DOSES ARE CALCULATED BY THE EQUATION,
51.15 * PHOTON INTENSITY * PHOTON ENERGY * SPECIFIC
ABSORBED FRACTION FOR SOURCE-TARGET COMBINATION.
(EQ. 2, ORNL 5000) */
DCL PHIARRAY(12) DEC FLOAT(6), X CHAR(10) VARYING,
Y CHAR(10) VARYING..
IF NPHOTON GT 0 THEN DO..
SPH=0..
DO I=1 TO NPHOTON..
DO ISOURCE=1 TO NSOURCE..
DO ITARG=1 TO NTARG..
X=NAMTARG(ITARG).. Y=NAMSOURCE(ISOURCE)..
IF EPHOTON(I) GE ENGPHO(I) THEN DO..
PHIARRAY=PHIPHO(ISOURCE,ITARG,*)..
/* INTERPOLATE BETWEEN TABULAR ENERGIES TO GET
APPROPRIATE SPECIFIC ABSORBED FRACTION. */
CALL INTERP(12,ENGPHO,PHIARRAY,EPHOTON(I),PHICAP)..
END..
/* SPECIAL INTERPOLATION CONDITION WHEN ENERGY IS LESS
THAN THE LOWEST TABULAR ENERGY VALUE */
ELSE IF X=Y THEN PHICAP=PHIPHO(ISOURCE,ITARG,1)*
(PHIPHO(ISOURCE,ITARG,1)-1/TNASS(ITARG))*
(EPHOTON(I)-ENGPHO(I))/ENGPHO(I)..
ELSE PHICAP=PHIPHO(ISOURCE,ITARG,1)+PHIPHO(ISOURCE,ITARG,1)*
(EPHOTON(I)-ENGPHO(I))/ENGPHO(I)..
SPH(ITARG,ISOURCE)=SPH(ITARG,ISOURCE)+51.15*FPHOTON(I)*
EPHOTON(I)*PHICAP..
END.. /* ITARG LOOP */
END.. /* ISOURCE LOOP */
END.. /* I LCCP */
END..
ELSE /* I.E.. NPHOTON=0 */ SPH=0..
END PHOTON_DOSE..
----- */
/* FIZZ DOSE.. PROC.. /* SPONTANEOUS FISSION RADIATIONS */
/* RADIATION TYPES PRODUCED BY SPONTANEOUS FISSION INCLUDE
FISSION FRAGMENTS, NEUTRONS, PROMPT AND DELAYED GAMMAS,
AND BETAS. REMS/MICROCURIE-DAY FROM EACH OF THESE RADIATIONS
IS ESTIMATED WITHIN THIS ROUTINE. THE METHODOLOGY IS BASED
GENERALLY UPON THAT OF DILLMAN AND JONES (1975), AND
FORD, ET. AL. (1976). */
DCL (X,Y) CHAR(10) VARYING,
PHIARRAY(12) DEC FLOAT(6),
NAMCRG CHAR(10),
(INDEX1,INDEX2) BIN FIXED(15),
EGP(42) DEC FLOAT(6) INITIAL(0.0148,0.0314,0.0453,0.0553,
0.0753,0.0853,0.0953,0.11,0.13,0.15,0.17,0.19,0.225,0.275,
0.325,0.375,0.425,0.475,0.525,0.575,0.649,0.749,0.849,
0.949,1.049,1.149,1.25,1.35,1.45,1.73,2.23,2.73,3.23,
3.73,4.23,4.73,5.23,5.91,6.91,7.91,8.91,9.91),
IGP(42) DEC FLOAT(6) INITIAL(0.0947,0.247,0.00716,0.0102,
0.0208,0.0295,0.0421,0.14,0.14,0.14,0.14,0.14,0.351,0.351,
0.351,0.351,0.351,0.351,0.676,0.565,0.474,0.396,
0.332,0.277,0.232,0.194,0.162,0.575,0.334,0.193,0.112,0.065,
0.0377,0.0218,0.0127,0.0116,0.0039,0.0013,0.00044,0.00015),
EGD(28) DEC FLOAT(6) INITIAL(0.03,0.05,0.07,0.09,0.11,0.13,
0.15,0.17,0.19,0.225,0.275,0.325,0.375,0.44,0.54,0.64,0.74,
0.84,1.10,1.56,2.00,2.40,2.80,3.25,3.75,4.25,4.75,5.25),
IGD(28) DEC FLOAT(6) INITIAL(0.11,0.11,0.11,0.11,0.11,
0.11,0.11,0.11,0.27,0.27,0.27,0.27,0.27,0.76,0.59,
0.46,0.36,0.28,1.18,0.72,0.38,0.28,0.16,0.12,0.086,0.042,
0.020,0.0095)..
/* EGP, IGP, EGD, AND IGD ARE ARRAYS OF ENERGIES AND INTENSITIES
OF PROMPT AND DELAYED GAMMA RAYS RELEASED IN THE FISSION OF
U-235 (FROM DILLMAN AND JONES (1975)). THESE ARE USED AS
REFERENCE VALUES IN THE CALCULATION OF THE FISSION-PRODUCED
GAMMA DOSE FOR ANY NUCLIDE, AS CALCULATED BELOW. */
/* INITIALIZE ALL ARRAYS */
SN=0.. SFF=0.. SGT=0.. SB=0..
/* CALCULATE SUMMATION ARRAYS FOR PROMPT AND DELAYED GAMMA RAYS */
IF FIRST='TRUE' THEN DO..
SUMGP=0.. SUMGD=0..
DO ISOURCE=1 TO NSOURCE..
DO JTARG=1 TO NTARG..
PHIARRAY=PHIPHO(ISOURCE,JTARG,*)..
DO IPROMPT=1 TO 42..
CALL INTERP(12,ENGPHO,PHIARRAY,EGP(IPROMPT),PHICAP)..
SUMGP(JTARG,ISOURCE)=SUMGP(JTARG,ISOURCE)+EGP(IPROMPT)
* IGP(IPROMPT) * PHICAP..
END..

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DO IDLAY=1 TO 28,,
  CALL INTERP(12,ENGPNO,PHIARRAY,EGD(IDLAY),PHICAP),,
  SUMGD(JTARG,ISOURCE)=SUMGD(JTARG,ISOURCE)+EGD(IDLAY)
  * IGD(IDLAY) * PHICAP,,
END,,
END,,
END,,
FIRST='FALSE',,
END,,
/* BEGIN ORGAN LOOP */
DO JTARG=1 TO NTARG,,
DO ISOURCE=1 TO NSOURCE,,
  X=NAMTARG(JTARG),, Y=NAMSOURCE(ISOURCE),,
  /* CALCULATE FISSION FRAGMENT DOSE EQUIVALENT RATES */
  EFF=0.13960*7**2/A**0.333-21.975,, /* FISSION FRAGMENT ENERGY */
  IF X=Y THEN SFF(JTARG,ISOURCE)=51.15*FF*EFF*20/SMASS(ISOURCE),,
  /* ALL DOSE IS ASSUMED TO BE ABSORBED WITHIN THE SOURCE TISSUE,
  EXCEPT FOR THE FOLLOWING SPECIAL CASES. REFER TO THE ALPHA
  METHODOLOGY FOR DISCUSSION OF THESE CASES. */
  /* SPECIAL CASES FOR WALLED ORGANS */
  IF X='BLAD WALL' AND Y='BLAD CNT'
    THEN SFF(JTARG,ISOURCE)=51.15*FF*EFF*20/SMASS(ISOURCE)*0.5,,
  IF X='S WALL' AND Y='S CNT' OR
  X='SI WALL' AND Y='SI CNT' OR
  X='ULI WALL' AND Y='ULI CNT' OR
  X='LLI WALL' AND Y='LLI CNT'
    THEN SFF(JTARG,ISOURCE)=51.15*FF*EFF*20/SMASS(ISOURCE)*0.5*
    0.01,,
  /* SPECIAL CASES FOR BONE TISSUES */
  IF X='BONE' AND Y='COR BONE' OR X='BONE' AND Y='CAN BONE'
    THEN SFF(JTARG,ISOURCE)=51.15*FF*EFF*20/TMASS(JTARG)*5,,
  /* MODIFYING FACTOR OF 5 IS USED FOR BONE */
  /* SPECIAL CASES FOR TOTAL BODY */
  IF Y='T BODY'
    THEN SFF(JTARG,ISOURCE)=51.15*FF*EFF*20/SMASS(ISOURCE),,
  IF Y='T BODY' AND X='BONE'
    THEN SFF(JTARG,ISOURCE)=SFF(JTARG,ISOURCE)*5,,
  IF X='T BODY' THEN DO,,
  SFF(JTARG,ISOURCE)=51.15*FF*EFF*20/TMASS(JTARG),,
  IF Y='S CNT' OR Y='SI CNT' OR
  Y='ULI CNT' OR Y='LLI CNT'
    THEN SFF(JTARG,ISOURCE)=SFF(JTARG,ISOURCE)*TMASS(ISOURCE)
    /SMASS(ISOURCE)*0.5*0.01,,
  IF Y='BLAD CNT'
    THEN SFF(JTARG,ISOURCE)=SFF(JTARG,ISOURCE)*TMASS(ISOURCE)
    /SMASS(ISOURCE)*0.5,,
  IF Y='COR BONE' OR Y='CAN BONE'
    THEN SFF(JTARG,ISOURCE)=SFF(JTARG,ISOURCE)*5.0,,
  IF Y='T BODY' THEN DO,,
  NAMORG='BONE',,
  CALL SEARCH(NAMTARG,NTARG,NAMORG,INDEX1),,
  NAMORG='T BODY',,
  CALL SEARCH(NAMTARG,NTARG,NAMORG,INDEX2),,
  SFF(JTARG,ISOURCE)=SFF(JTARG,ISOURCE)*(1+(4*
  TMASS(INDEX1)/TMASS(INDEX2))),,
  END,,
END,,
/* CALCULATE NEUTRON DOSE EQUIVALENT RATES */
EN=0.75 + 0.65*(VBAR+1)**0.5,, /* NEUTRON ENERGY */
NX=1,,
IF X='BONE'
  THEN NX=5,, /* MODIFYING FACTOR FOR BONE */
SN(JTARG,ISOURCE)=3.1969E-3*VBAR*EN*FF*SON(ISOURCE,JTARG)
  * 10/2.164*NX,,
IF X='T BODY' THEN DO,,
  NAMORG='BONE',,
  CALL SEARCH(NAMTARG,NTARG,NAMORG,INDEX1),,
  NAMORG='T BODY',,
  CALL SEARCH(NAMTARG,NTARG,NAMORG,INDEX2),,
  SN(JTARG,ISOURCE)=SN(JTARG,ISOURCE) + 4/5*TMASS(INDEX1)/
  TMASS(INDEX2)*SN(INDEX1,ISOURCE),,
END,, /* SPECIAL CALCULATION WHERE THE TARGET IS TOTAL
BODY, TO ACCOUNT FOR INCREASED DOSE RATE FROM BONE.
(EQ 2-7). */

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/* CALCULATE DOSE EQUIVALENT RATES FOR PROMPT AND DELAYED GAMMAS */
R=0.02796*(5.98+92/236*(A-Z)**2), /* R IS THE RATIO OF THE TOTAL
ENERGY RELEASE BY DELAYED GAMMAS FOR ANY FISSIONING SPECIES
TO THAT OF U-236, THE REFERENCE NUCLIDE. */
SGT(JTARG,ISOURCE)=51.15*(SUMGP(JTARG,ISOURCE)+R*
SUMGD(JTARG,ISOURCE))*FF, /* EQ 2-8 */
/* CALCULATE BETA DOSE EQUIVALENT RATES */
FB=0.2058*(5.98+92/236*(A-Z)**2), /* BETA ENERGY */
IF X=Y THEN SB(JTARG,ISOURCE)=51.15*FF*EB/SMASS(ISOURCE),
/* ALL DOSE IS ASSUMED TO BE ABSORBED WITHIN THE SOURCE TISSUE
EXCEPT FOR THE SPECIAL CASES BELOW */
/* SPECIAL CASES FOR WALLED ORGANS */
IF X='BLAD WALL' AND Y='BLAD CONT' OR
X='S WALL' AND Y='S CONT' OR
X='SI WALL' AND Y='SI CONT' OR
X='ULI WALL' AND Y='ULI CONT' OR
X='LLI WALL' AND Y='LLI CONT'
THEN SB(JTARG,ISOURCE)=51.15*FF*EB/SMASS(ISOURCE)*0.5,
/* SPECIAL CASES FOR BONE TISSUES */
DSKEL=51.15*FF*EB/10000, /* DSKEL IS THE DOSE EQUIVALENT
FOR THE TOTAL SKELETON. THE DOSE-EQUIVALENTS TO INDIVIDUAL BONE
TISSUES ARE CALCULATED AS FACTORS OF THIS DSKEL, TAKEN FROM
TABLE 9, DILLMAN AND JONES (1975). THESE FACTORS MAY BE DERIVED
VIA THE METHCODOLOGY PRESENTED IN E_DOSE FOR BETA DOSE DISTRIBUTION
IN BCNE TISSUES. */
IF X='BONE' THEN DO,
IF Y='COR BCNE'
THEN SB(JTARG,ISOURCE)=DSKEL*75.0/35.9,
IF Y='CAN BCNE'
THEN SB(JTARG,ISOURCE)=DSKEL*42.8/35.9,
IF Y='R MAR'
THEN SB(JTARG,ISOURCE)=DSKEL*21.5/35.9,
END,
IF X='ENDOSTEAL' THEN DO,
IF Y='COR BCNE'
THEN SB(JTARG,ISOURCE)=DSKEL*45.8/35.9,
IF Y='CAN BCNE'
THEN SB(JTARG,ISOURCE)=DSKEL*63.7/35.9,
IF Y='R MAR'
THEN SB(JTARG,ISOURCE)=DSKEL*82.7/35.9,
IF Y='Y MAR'
THEN SB(JTARG,ISOURCE)=DSKEL*62.6/35.9,
END,
IF X='R MAR' THEN DO,
IF Y='COR BCNE'
THEN SB(JTARG,ISOURCE)=DSKEL*6.2/35.9,
IF Y='CAN BCNE'
THEN SB(JTARG,ISOURCE)=DSKEL*107.0/35.9,
IF Y='R MAR'
THEN SB(JTARG,ISOURCE)=DSKEL*179.0/35.9,
END,
IF X='Y MAR' AND Y='Y MAR'
THEN SB(JTARG,ISOURCE)=DSKEL*250.0/35.9,
/* SPECIAL CASES FOR RESPIRATORY TISSUES */
IF X='LUNGS' AND Y='RESP LYMPH'
THEN SB(JTARG,ISOURCE)=51.15*FF*EB/TMASS(JTARG),
IF X='RESP LYMPH' AND Y='LUNGS'
THEN SB(JTARG,ISOURCE)=51.15*FF*EB/SMASS(ISOURCE),
/* SPECIAL CASES FOR TOTAL BODY */
IF Y='T BODY'
THEN SB(JTARG,ISOURCE)=51.15*FF*EB/SMASS(ISOURCE),
IF X='T BODY' THEN DO,
SB(JTARG,ISOURCE)=51.15*FF*EB/TMASS(JTARG),
IF Y='BLAD CONT' OR Y='S CONT' OR Y='SI CONT' OR
Y='ULI CONT' OR Y='LLI CONT'
THEN SB(JTARG,ISOURCE)=SB(JTARG,ISOURCE)*TMASS(ISOURCE)/
SMASS(ISOURCE)*0.5,
END,
END, /* ISOURCE LOOP */
END, /* JTARG LOOP */
END FIZZ_DOSE,

```

```

/* ----- */
OUTPUT.. PROC..
/* PRINTS S-FACTOR MATRIX FOR SOURCE AND TARGET COMBINATIONS
FOR THE NUCLIDE */
DCL (NUMRAD,NDIV) BIN FIXED(15)..
ON ENDPAGE (SYSPRINT)..
/* GENERATE A CARD DECK OF TOTAL S-FACTORS FOR THE MATRIX
OF SOURCE AND TARGET COMBINATIONS */
PUT SKIP FILE(PUNCHB) EDIT(NAMNUC)(COL(1),A)..
DO (TARG=1 TO 24)..
PUT SKIP FILE(PUNCHB) EDIT((STOTAL(TARG,ISOURCE)
DO ISOURCE=1 TO NSOURCE))(8 E(10,3))..
END..
/* PRINT HEADING FOR NUCLIDE */
PUT PAGE EDIT('S FACTORS (REM/MICROCURIE-DAY) FOR ',NAMNUC)
(COL(30),A,A)..
PUT SKIP(2) EDIT('TARGET',SOURCE ORGANS')
(COL(1),A,COL(43),A)..
PUT SKIP EDIT('ORGANS')(COL(1),A)..
NUMRAD=1..
IF NALPHA GT 0 THEN NUMRAD=NUMRAD+1..
IF NFL GT 0 THEN NUMRAD=NUMRAD+1..
IF NPHCTON GT 0 THEN NUMRAD=NUMRAD+1..
IF FF GT 0 THEN NUMRAD=NUMRAD+4..
IF NUMRAD GT 4 THEN NDIV=3..
IF NUMRAD=4 THEN NDIV=2..
IF NUMRAD LT 4 THEN NDIV=1..
DO I=1 TO 3..
IF I=1 THEN IFIRST=1..
IF I=1 THEN LAST=8..
IF I=2 THEN IFIRST=9..
IF I=2 THEN LAST=16..
IF I=3 THEN IFIRST=17..
IF I=3 THEN LAST=NSOURCE..
IF I NE 1 THEN CALL PRINT_HEADING..
JFIRST=1.. JLAST=NTARG/NDIV..
CALL PRINT_SOURCES..
CALL PRINT_S_FACTORS..
IF JLAST LT NTARG THEN DO..
JFIRST=JLAST+1.. JLAST=JLAST + NTARG/NDIV..
CALL PRINT_HEADING..
CALL PRINT_SOURCES..
CALL PRINT_S_FACTORS..
END..
IF JLAST LT NTARG THEN DO..
CALL PRINT_HEADING..
JFIRST=JLAST+1.. JLAST=JLAST + NTARG/NDIV..
CALL PRINT_SOURCES..
CALL PRINT_S_FACTORS..
END..
END..
GO TO END_UP.. /*END_UP IS END OF OUTPUT PROCEDURE.*/
/* ----- */
PRINT_SOURCES.. PROC..
/* PRINTS SOURCE ORGANS FOR S-FACTOR TABULATIONS */
PUT SKIP(2) EDIT((NAMSOURCE(ISOURCE) DO ISOURCE=IFIRST
TO LAST))(COL(16),A,7 (X(1),A))..
PUT SKIP..
END PRINT_SOURCES..

```

```

/* ----- */
PRINT S_FACTORS,,PROC,,
/* PRINTS S-FACTORS FOR GIVEN SOURCE-TARGET COMBINATIONS */
DO ITARG=JFIRST TO JLAST,,
  PUT SKIP EDIT(NAMTARG(ITARG))(COL(1),A),,
  LINES=0,,
  IF NALPHA GT 0 THEN DO,,
    PUT SKIP(LINES) EDIT('A',(SA(ITARG,ISOURCE)
      DC ISOURCE=IFIRST TO LAST))(COL(12),A,8 E(11,2)),,
    LINES=1,,
  END,,
  IF NEL GT 0 THEN DO,,
    PUT SKIP(LINES) EDIT('E',(SE(ITARG,ISOURCE)
      DC ISOURCE=IFIRST TO LAST))(COL(12),A,8 E(11,2)),,
    LINES=1,,
  END,,
  IF NPHOTON GT 0 THEN
    PUT SKIP(LINES) EDIT('P',(SPH(ITARG,ISOURCE)
      DC ISOURCE=IFIRST TO LAST))(COL(12),A,8 E(11,2)),,
  IF NFF GT 0 THEN DO,,
    PUT SKIP EDIT('S/-F',(SFF(ITARG,ISOURCE)
      DC ISOURCE=IFIRST TO LAST))(COL(9),A,8 E(11,2)),,
    PUT SKIP EDIT('SF<-',(SN(ITARG,ISOURCE)
      DC ISOURCE=IFIRST TO LAST))(COL(9),A,8 E(11,2)),,
    PUT SKIP EDIT('SF-E',(SB(ITARG,ISOURCE)
      DC ISOURCE=IFIRST TO LAST))(COL(9),A,8 E(11,2)),,
    PUT SKIP EDIT('SF-P',(SGT(ITARG,ISOURCE)
      DC ISOURCE=IFIRST TO LAST))(COL(9),A,8 E(11,2)),,
  END,,
  PUT SKIP EDIT('T',(STOTAL(ITARG,ISOURCE)
    DC ISOURCE=IFIRST TO LAST))(COL(12),A,8 E(11,2)),,
  PUT SKIP,,
  IF NUMRAD NE 3 THEN PUT SKIP,,
  IF NCIV GT 1 THEN PUT SKIP,,
END,, /* ITARG LOOP */
END PRINT_S_FACTORS,,
/* ----- */
PRINT HEADING,,PROC,,
/* PRINTS HEADINGS FOR CONTINUATION PAGES */
PUT SKIP(4) EDIT(NAMNUC,' CONTINUED')(COL(42),A,A),,
PUT SKIP(2) EDIT('TARGET','SOURCE ORGANS'
  (COL(1),A,COL(44),A),,
  PUT SKIP EDIT('ORGANS')(COL(1),A),,
  PUT SKIP,,
END PRINT_HEADING,,
/* ----- */
END_UP,,END OUTPUT,,
/* ----- */
SEARCH,, PROC (NAME ARRAY,N,NAME,INDEX),,
/* SEARCHES NAME-ARRAY (A ONE-DIMENSIONAL ARRAY OF SIZE N)
FOR NAME AND RETURNS THE INDEX OF THE (FIRST) OCCURRENCE
OF NAME IN THE ARRAY. IF NAME IS NOT FOUND, AN ERROR MESSAGE
IS PRINTED */
DCL NAME_ARRAY(*) CHAR(10),
(N,I,INDEX) BIN FIXED(15),
NAME CHAR(10),
I=1,,
DO WHILE (I LE N AND NAME NE NAME_ARRAY(I)),
  I=I+1,,
END,,
IF I LE N THEN INDEX=I,,
ELSE
  PUT SKIP LIST ('SEARCH PROCEDURE FAILED TO FIND NAME OF',
    'ORGAN IN NAME-ARRAY'),,
END SEARCH,,
/* ----- */
INTERP,, PROC (NTABLE,XARRAY,YARRAY,X,Y),,
/* INTERPOLATION ROUTINE FOR PHOTON_DOSE, E_DOSE, AND
FIZZ_DOSE PROCEDURES */
DCL NTABLE BIN FIXED(15),
(XARRAY,YARRAY)(*) DEC FLOAT(6),
(X,Y) DEC FLCAT(6),,
IF X LT XARRAY(1) THEN DO,,
  Y=YARRAY(1)+YARRAY(1)*(X-XARRAY(1))/XARRAY(1),,
  RETURN,,
END,,
DO L=1 TO NTABLE-1,,
  IF X GE XARRAY(L) AND X LT XARRAY(L+1) THEN DO,,
    Y=YARRAY(L)+(YARRAY(L+1)-YARRAY(L))
      /(XARRAY(L+1)-XARRAY(L))
      *(X-XARRAY(L)),,
    RETURN,,
  END,,
END,,
Y=YARRAY(NTABLE)+(YARRAY(NTABLE)-YARRAY(NTABLE-1))
  *(X-XARRAY(NTABLE))/(XARRAY(NTABLE)-XARRAY(NTABLE-1)),,
Y=MAX(Y,0),,
END INTERP,,
/* ----- */
END SFACOR,,

```

APPENDIX II
Tabulations of S-factors

TL-209 CONTINUED
 SOURCE ORGANS

TARGET ORGANS		Y MAR	SKIN	SPLEEN	TESTES	THYROID	T BODY
ADRENALS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-04
	P	4.38E-04	2.52E-04	2.16E-03	3.23E-05	7.67E-05	9.58E-04
	T	4.38E-04	2.52E-04	2.16E-03	3.23E-05	7.67E-05	1.46E-03
BLAD WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-04
	P	1.42E-04	2.69E-04	8.47E-05	1.51E-03	6.74E-06	6.20E-04
	T	1.42E-04	2.69E-04	8.47E-05	1.61E-03	6.74E-06	1.12E-03
S WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-04
	P	2.55E-04	2.24E-04	3.45E-03	4.25E-05	5.88E-05	5.09E-04
	T	2.55E-04	2.24E-04	3.45E-03	4.25E-05	5.88E-05	1.01E-03
ST WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-04
	P	3.61E-04	2.66E-04	5.07E-04	1.92E-04	1.60E-05	6.61E-04
	T	3.61E-04	2.66E-04	5.07E-04	1.92E-04	1.60E-05	1.16E-03
ULI WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-04
	P	3.43E-04	1.58E-04	5.11E-04	1.36E-04	1.89E-05	1.89E-04
	T	3.43E-04	1.58E-04	5.11E-04	1.36E-04	1.89E-05	1.12E-03
LLI WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-04
	P	3.38E-04	2.11E-04	2.37E-04	9.14E-04	9.24E-06	6.75E-04
	T	3.38E-04	2.11E-04	2.37E-04	9.14E-04	9.24E-06	1.18E-03
KIDNEYS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-04
	P	4.07E-04	2.60E-04	2.89E-03	5.16E-05	5.04E-05	5.61E-04
	T	4.00E-04	2.60E-04	2.89E-03	5.16E-05	5.04E-05	1.06E-03
LIVER	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-04
	P	3.85E-04	2.40E-04	3.79E-04	3.76E-05	7.37E-05	5.70E-04
	T	3.85E-04	2.40E-04	3.79E-04	3.76E-05	7.37E-05	1.07E-03
LUNGS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-04
	P	3.59E-04	2.51E-04	7.21E-04	1.35E-05	3.69E-04	4.74E-04
	T	3.59E-04	2.51E-04	7.21E-04	1.35E-05	3.69E-04	9.76E-04
RESP LYMPH	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-04
	P	3.59E-04	2.51E-04	7.21E-04	1.35E-05	3.69E-04	4.74E-04
	T	3.59E-04	2.51E-04	7.21E-04	1.35E-05	3.69E-04	9.76E-04
MUSCLE	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-04
	P	3.54E-04	3.21E-04	5.07E-04	4.45E-04	4.68E-04	4.94E-04
	T	3.54E-04	3.21E-04	5.07E-04	4.45E-04	4.68E-04	9.95E-04
OVARIES	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-04
	P	3.40E-04	1.76E-04	2.41E-04	0.00E+00	1.09E-05	6.95E-04
	T	3.40E-04	1.76E-04	2.41E-04	0.00E+00	1.09E-05	1.20E-03
PANCREAS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-04
	P	3.93E-04	1.58E-04	6.03E-03	4.21E-05	1.18E-04	6.08E-04
	T	3.93E-04	1.58E-04	6.03E-03	4.21E-05	1.18E-04	1.11E-03
BONE	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-04
	P	8.88E-04	3.07E-04	2.76E-04	2.34E-04	2.70E-04	5.11E-04
	T	8.88E-04	3.07E-04	2.76E-04	2.34E-04	2.70E-04	1.01E-03
R MAR	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-04
	P	9.07E-04	2.89E-04	3.98E-04	1.81E-04	2.97E-04	5.64E-04
	T	9.07E-04	2.89E-04	3.98E-04	1.81E-04	2.97E-04	1.07E-03
Y MAR	E	2.34E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-04
	P	1.51E-03	3.26E-04	4.11E-04	1.05E-04	1.50E-04	4.73E-04
	T	2.49E-02	3.26E-04	4.11E-04	1.05E-04	1.50E-04	9.74E-04
ENDOSTEAL	E	5.85E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-04
	P	9.79E-04	3.07E-04	2.76E-04	2.34E-04	2.70E-04	5.12E-04
	T	6.83E-03	3.07E-04	2.76E-04	2.34E-04	2.70E-04	1.01E-03
SKIN	E	0.00E+00	1.35E-02	0.00E+00	0.00E+00	0.00E+00	5.01E-04
	P	3.26E-04	7.02E-04	2.20E-04	5.56E-04	3.17E-04	3.33E-04
	T	3.26E-04	1.42E-02	2.20E-04	5.56E-04	3.17E-04	8.34E-04
SPLEEN	E	0.00E+00	0.00E+00	1.95E-01	0.00E+00	0.00E+00	5.01E-04
	P	4.16E-04	2.12E-04	4.28E-02	3.23E-05	6.04E-05	5.45E-04
	T	4.16E-04	2.12E-04	2.38E-01	3.23E-05	6.04E-05	1.05E-03
TESTES	E	0.00E+00	0.00E+00	0.00E+00	1.00E+00	0.00E+00	5.01E-04
	P	3.18E-04	3.29E-04	4.13E-05	1.17E-01	3.15E-06	5.54E-04
	T	3.18E-04	3.29E-04	4.13E-05	1.12E+00	3.15E-06	1.06E-03
THYMUS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-04
	P	2.51E-04	2.43E-04	9.45E-05	7.53E-06	1.51E-03	6.36E-04
	T	2.51E-04	2.43E-04	9.45E-05	7.53E-06	1.51E-03	1.14E-03
THYROID	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E+00	5.01E-04
	P	2.59E-04	2.70E-04	5.96E-05	3.14E-06	1.63E-01	4.55E-04
	T	2.59E-04	2.70E-04	5.96E-05	3.14E-06	1.92E+00	9.56E-04
UTERUS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-04
	P	1.87E-04	2.16E-04	1.07E-04	0.00E+00	1.05E-05	5.96E-04
	T	1.87E-04	2.16E-04	1.07E-04	0.00E+00	1.01E-05	1.10E-03
T BODY	E	5.01E-04	5.01E-04	5.01E-04	5.01E-04	5.01E-04	5.01E-04
	P	4.43E-04	3.24E-04	5.79E-04	4.96E-04	4.77E-04	4.94E-04
	T	9.44E-04	8.25E-04	1.08E-03	9.97E-04	9.97E-04	9.95E-04

S FACTORS (REM/MICROCURIE-DAY) FOR PB-209

TARGET ORGANS		SOURCE ORGANS							
		ADRENALS	BLAD CENT	S CONT	SI CONT	ULI CONT	LLI CONT	KIDNEYS	LIVER
ADRENALS	E	7.22E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	7.22E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BLAD WALL	E	0.00E+00	2.53E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	2.53E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S WALL	E	0.00E+00	0.00E+00	2.02E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	2.02E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SI WALL	E	0.00E+00	0.00E+00	0.00E+00	1.26E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	1.26E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ULI WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E-02	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E-02	0.00E+00	0.00E+00	0.00E+00
LLI WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.74E-02	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.74E-02	0.00E+00	0.00E+00
KIDNEYS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.26E-02	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.26E-02	0.00E+00
LIVER	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.62E-03
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.62E-03
LUNGS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RESP LYMPH	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MUSCLE	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
OVARIES	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PANCREAS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BONE	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
R MAR	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Y MAR	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ENDOSTEAL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SKIN	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SPLEEN	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TESTES	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
THYMUS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
THYROID	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
UTERUS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
T BODY	E	1.44E-04	1.62E-05	4.33E-05	1.16E-04	6.89E-05	8.56E-05	1.44E-04	1.44E-04
	T	1.44E-04	1.62E-05	4.33E-05	1.16E-04	6.89E-05	8.56E-05	1.44E-04	1.44E-04

S FACTORS (REM/MICROCURIE-DAY) FOR PB-211

TARGET ORGANS	SOURCE ORGANS							
	ADRENALS	BLAD CFNT	S CONT	SI CONT	ULI CONT	LLI CONT	KIDNEYS	LIVER
ADRENALS	E	1.66E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.03E-03	2.06E-06	1.89E-05	1.10E-05	9.54E-06	4.30E-06	1.06E-04
	T	1.67E+00	2.16E-06	1.89E-05	1.10E-05	9.54E-06	4.30E-06	1.06E-04
BLAD WALL	E	0.00E+00	5.82E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.45E-06	6.27E-04	3.91E-06	2.47E-05	1.77E-05	4.81E-05	3.59E-06
	T	1.45E-06	5.88E-02	3.91E-06	2.47E-05	1.77E-05	4.81E-05	3.59E-06
S WALL	E	0.00E+00	0.00E+00	4.66E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.58E-05	3.55E-06	4.49E-04	3.02E-05	3.15E-05	1.49E-05	2.91E-05
	T	2.58E-05	3.55E-06	4.70E-02	3.02E-05	3.15E-05	1.49E-05	2.91E-05
SI WALL	E	0.00E+00	0.00E+00	0.00E+00	2.91E-02	0.00E+00	0.00E+00	0.00E+00
	P	8.24E-06	2.34E-05	2.26E-05	2.66E-04	1.40E-04	7.78E-05	2.41E-05
	T	8.24E-06	2.34E-05	2.26E-05	2.94E-02	1.40E-04	7.78E-05	2.41E-05
ULI WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.29E-02	0.00E+00	0.00E+00
	P	9.35E-06	1.52E-05	2.79E-05	1.98E-04	3.72E-04	3.57E-05	2.49E-05
	T	9.35E-06	1.52E-05	2.79E-05	1.98E-04	5.33E-02	3.57E-05	2.49E-05
LLI WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.62E-02	0.00E+00
	P	2.63E-06	5.58E-05	1.15E-05	5.93E-05	2.72E-05	4.43E-04	7.61E-06
	T	2.63E-06	5.58E-05	1.15E-05	5.93E-05	2.72E-05	4.67E-02	7.61E-06
KIDNEYS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.51E-02
	P	9.89E-05	3.17E-06	2.88E-05	2.75E-05	2.43E-05	7.72E-06	6.26E-04
	T	9.89E-05	3.17E-06	2.88E-05	2.75E-05	2.43E-05	7.72E-06	6.26E-04
LIVER	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-02
	P	4.19E-05	2.49E-06	1.74E-05	1.60E-05	2.17E-05	3.11E-06	3.40E-05
	T	4.19E-05	2.49E-06	1.74E-05	1.60E-05	2.17E-05	3.11E-06	3.40E-05
LUNGS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.06E-05	5.19E-07	1.57E-05	2.91E-06	3.17E-06	1.08E-06	8.39E-06
	T	2.06E-05	5.19E-07	1.57E-05	2.91E-06	3.17E-06	1.08E-06	8.39E-06
RESP LYMPH	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.06E-05	5.19E-07	1.57E-05	2.91E-06	3.17E-06	1.08E-06	8.39E-06
	T	2.06E-05	5.19E-07	1.57E-05	2.91E-06	3.17E-06	1.08E-06	8.39E-06
MUSCLE	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.33E-05	1.55E-05	1.23E-05	1.35E-05	1.29E-05	1.48E-05	1.25E-05
	T	1.33E-05	1.55E-05	1.23E-05	1.35E-05	1.29E-05	1.48E-05	1.25E-05
OVARIES	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.83E-06	4.56E-05	7.65E-06	8.35E-05	9.21E-05	1.46E-04	1.18E-05
	T	4.83E-06	4.56E-05	7.65E-06	8.35E-05	9.21E-05	1.46E-04	1.18E-05
PANCREAS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	7.44E-05	2.45E-06	1.49E-04	1.79E-05	1.72E-05	6.47E-06	5.81E-05
	T	7.44E-05	2.45E-06	1.49E-04	1.79E-05	1.72E-05	6.47E-06	5.81E-05
BONE	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.22E-05	5.21E-06	5.37E-06	7.10E-06	6.41E-06	9.28E-06	8.73E-06
	T	1.22E-05	5.21E-06	5.37E-06	7.10E-06	6.41E-06	9.28E-06	8.73E-06
R MAR	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.18E-05	1.12E-05	9.24E-06	2.24E-05	1.91E-05	2.78E-05	2.21E-05
	T	2.18E-05	1.12E-05	9.24E-06	2.24E-05	1.91E-05	2.78E-05	2.21E-05
Y MAR	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.18E-05	4.80E-06	7.44E-06	9.82E-06	9.10E-06	1.14E-05	1.08E-05
	T	1.18E-05	4.80E-06	7.44E-06	9.82E-06	9.10E-06	1.14E-05	1.08E-05
ENDOSTEAL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.22E-05	5.21E-06	5.37E-06	7.10E-06	6.41E-06	9.28E-06	8.73E-06
	T	1.22E-05	5.21E-06	5.37E-06	7.10E-06	6.41E-06	9.28E-06	8.73E-06
SKIN	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.06E-06	5.81E-06	5.18E-06	4.75E-06	4.80E-06	5.20E-06	5.78E-06
	T	6.06E-06	5.81E-06	5.18E-06	4.75E-06	4.80E-06	5.20E-06	5.78E-06
SPLEEN	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.51E-05	2.05E-06	8.30E-05	1.36E-05	1.14E-05	8.52E-06	7.29E-05
	T	5.51E-05	2.05E-06	8.30E-05	1.36E-05	1.14E-05	8.52E-06	7.29E-05
TESTES	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.61E-07	4.30E-05	7.32E-07	3.74E-06	4.52E-06	1.62E-05	1.36E-06
	T	6.61E-07	4.30E-05	7.32E-07	3.74E-06	4.52E-06	1.62E-05	1.36E-06
THYMUS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.67E-06	3.11E-07	4.09E-06	1.26E-06	1.38E-06	5.47E-07	2.31E-06
	T	6.67E-06	3.11E-07	4.09E-06	1.26E-06	1.38E-06	5.47E-07	2.31E-06
THYROID	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.77E-06	1.02E-07	1.38E-06	3.84E-07	4.09E-07	1.82E-07	8.72E-07
	T	1.77E-06	1.02E-07	1.38E-06	3.84E-07	4.09E-07	1.82E-07	8.72E-07
UTERUS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.71E-06	1.29E-04	8.02E-06	7.55E-05	4.00E-05	5.00E-05	7.57E-06
	T	5.71E-06	1.29E-04	8.02E-06	7.55E-05	4.00E-05	5.00E-05	7.57E-06
T BODY	E	3.33E-04	3.74E-05	9.98E-05	2.66E-04	1.59E-04	1.97E-04	3.33E-04
	P	1.47E-05	1.62E-05	1.55E-05	1.70E-05	1.66E-05	1.65E-05	1.48E-05
	T	3.47E-04	5.36E-05	1.15E-04	2.83E-04	1.75E-04	2.14E-04	3.47E-04

PB-211 CONTINUED

TARGET ORGANS		SOURCE ORGANS					
		Y MAR	SKIN	SPLEEN	TESTES	THYROID	T BODY
ADRENALS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-04
	P	7.94E-06	6.55E-06	5.69E-05	6.61E-07	1.77E-06	1.79E-05
	T	7.94E-06	6.55E-06	5.69E-05	6.61E-07	1.77E-06	3.50E-04
BLAD WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-04
	P	2.58E-06	5.56E-06	1.99E-06	4.49E-05	1.03E-07	1.66E-05
	T	2.58E-06	5.56E-06	1.99E-06	4.49E-05	1.03E-07	3.49E-04
S WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-04
	P	6.59E-06	5.69E-06	8.30E-05	8.45E-07	1.07E-06	1.54E-05
	T	6.59E-06	5.69E-06	8.30E-05	8.45E-07	1.07E-06	3.48E-04
ST WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-04
	P	9.11E-06	4.55E-06	1.22E-05	4.59E-06	1.83E-07	1.72E-05
	T	9.11E-06	4.55E-06	1.22E-05	4.59E-06	1.83E-07	3.50E-04
ULI WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-04
	P	7.60E-06	5.30E-06	1.21E-05	3.19E-06	2.07E-07	1.54E-05
	T	7.60E-06	5.30E-06	1.21E-05	3.19E-06	2.07E-07	3.49E-04
LLI WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-04
	P	7.24E-06	5.43E-06	5.83E-06	2.28E-05	1.54E-07	1.70E-05
	T	7.24E-06	5.43E-06	5.83E-06	2.28E-05	1.54E-07	3.50E-04
KIDNEYS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-04
	P	1.04E-05	6.59E-06	7.29E-05	1.01E-06	6.63E-07	1.55E-05
	T	1.04E-05	6.59E-06	7.29E-05	1.01E-06	6.63E-07	3.48E-04
LIVER	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-04
	P	9.53E-06	5.84E-06	9.35E-06	6.26E-07	1.48E-06	1.54E-05
	T	9.53E-06	5.84E-06	9.35E-06	6.26E-07	1.48E-06	3.48E-04
LUNGS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-04
	P	8.84E-06	6.04E-06	1.90E-05	1.75E-07	9.53E-06	1.30E-05
	T	8.84E-06	6.04E-06	1.90E-05	1.75E-07	9.53E-06	3.46E-04
RESP LYMPH	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-04
	P	8.84E-06	6.04E-06	1.90E-05	1.75E-07	9.53E-06	1.30E-05
	T	8.84E-06	6.04E-06	1.90E-05	1.75E-07	9.53E-06	3.46E-04
MUSCLE	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-04
	P	8.94E-06	8.00E-06	1.28E-05	1.08E-05	1.20E-05	1.26E-05
	T	8.94E-06	8.00E-06	1.28E-05	1.08E-05	1.20E-05	3.45E-04
OVARIES	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-04
	P	8.30E-06	3.51E-06	7.08E-06	0.00E+00	1.83E-07	1.37E-05
	T	8.30E-06	3.51E-06	7.08E-06	0.00E+00	1.83E-07	3.46E-04
PANCREAS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-04
	P	1.05E-05	4.82E-06	1.64E-04	5.97E-07	6.00E-07	1.52E-05
	T	1.05E-05	4.82E-06	1.64E-04	5.97E-07	6.00E-07	3.48E-04
BONE	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-04
	P	2.27E-05	7.54E-06	6.90E-06	5.91E-06	6.66E-06	1.31E-05
	T	2.27E-05	7.54E-06	6.90E-06	5.91E-06	6.66E-06	3.46E-04
R MAR	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-04
	P	2.35E-05	7.02E-06	1.02E-05	4.70E-06	7.28E-06	1.46E-05
	T	2.35E-05	7.02E-06	1.02E-05	4.70E-06	7.28E-06	3.47E-04
Y MAR	E	1.55E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-04
	P	3.85E-05	7.57E-06	1.03E-05	2.52E-06	3.55E-06	1.23E-05
	T	1.56E-02	7.57E-06	1.03E-05	2.52E-06	3.55E-06	3.45E-04
ENDOSTEAL	E	3.88E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-04
	P	3.50E-05	7.54E-06	6.90E-06	5.91E-06	6.66E-06	1.32E-05
	T	3.90E-03	7.54E-06	6.90E-06	5.91E-06	6.66E-06	3.46E-04
SKIN	E	0.30E+00	8.55E-03	0.00E+00	0.00E+00	0.00E+00	3.33E-04
	P	8.34E-06	1.79E-05	5.50E-06	1.37E-05	7.72E-06	7.95E-06
	T	8.34E-06	8.57E-03	5.50E-06	1.37E-05	7.72E-06	3.41E-04
SPLEEN	E	0.00E+00	0.00E+00	1.29E-01	0.00E+00	0.00E+00	3.33E-04
	P	9.15E-06	6.19E-06	1.12E-03	8.24E-07	1.40E-06	1.55E-05
	T	9.15E-06	6.19E-06	1.12E-03	8.24E-07	1.40E-06	3.48E-04
TESTES	E	0.00E+00	0.00E+00	0.00E+00	6.65E-01	0.00E+00	3.33E-04
	P	8.46E-06	7.00E-06	8.79E-07	3.11E-03	4.02E-08	1.52E-05
	T	8.46E-06	7.00E-06	8.79E-07	6.68E-01	4.02E-08	3.48E-04
THYMUS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-04
	P	3.81E-06	7.00E-06	4.89E-06	1.17E-07	3.64E-05	1.33E-05
	T	3.81E-06	7.00E-06	4.89E-06	1.17E-07	3.64E-05	3.46E-04
THYROID	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E+00	3.33E-04
	P	4.96E-06	6.52E-06	1.34E-06	4.03E-08	4.19E-03	1.29E-05
	T	4.96E-06	6.52E-06	1.34E-06	4.03E-08	1.17E+00	3.45E-04
UTERUS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-04
	P	5.88E-06	5.49E-06	4.57E-06	0.00E+00	1.74E-07	1.79E-05
	T	5.88E-06	5.49E-06	4.57E-06	0.00E+00	1.74E-07	3.50E-04
T BODY	E	3.33E-04	3.23E-04	3.33E-04	3.33E-04	3.33E-04	3.33E-04
	P	1.12E-05	8.05E-06	1.47E-05	1.24E-05	1.14E-05	1.26E-05
	T	3.44E-04	3.41E-04	3.47E-04	3.45E-04	3.44E-04	3.45E-04

S FACTORS (REM/MICROCURIE-DAY) FOR BI-211

TARGET ORGANS		SOURCE ORGANS							
		ADRENALS	BLAD CNT	S CNT	SI CNT	ULI CON	LLI CONT	KIDNEYS	LIVER
ADRENALS	A	2.48E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	3.35E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.75E-03	1.68E-06	1.84E-05	1.13E-05	7.70E-06	3.79E-06	9.04E-05	4.01E-05
	T	2.49E+02	1.68E-06	1.84E-05	1.13E-05	7.70E-06	3.79E-06	9.04E-05	4.01E-05
BLAD WALL	A	0.00E+00	8.70E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	1.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	9.09E-07	5.89E-04	2.69E-06	2.41E-05	1.63E-05	4.98E-05	2.74E-06	1.98E-06
	T	9.09E-07	8.70E+00	2.69E-06	2.41E-05	1.63E-05	4.98E-05	2.74E-06	1.98E-06
S WALL	A	0.00E+00	0.00E+00	6.70E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	9.37E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.37E-05	2.40E-06	4.18E-04	2.86E-05	2.98E-05	1.45E-05	2.73E-05	1.55E-05
	T	2.37E-05	2.40E-06	7.83E-02	2.86E-05	2.98E-05	1.45E-05	2.73E-05	1.55E-05
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	4.19E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	5.85E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	7.22E-06	2.22E-05	2.12E-05	2.53E-04	1.34E-04	7.43E-05	2.27E-05	1.32E-05
	T	7.22E-06	2.22E-05	2.12E-05	4.27E-02	1.34E-04	7.43E-05	2.27E-05	1.32E-05
ULI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.61E-02	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-02	0.00E+00	0.00E+00	0.00E+00
	P	7.86E-06	1.50E-05	2.78E-05	1.89E-04	3.44E-04	3.43E-05	2.32E-05	2.03E-05
	T	7.86E-06	1.50E-05	2.78E-05	1.89E-04	7.75E-02	3.43E-05	2.32E-05	2.03E-05
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-01	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.73E-03	0.00E+00	0.00E+00
	P	2.31E-06	5.77E-05	1.03E-05	5.66E-05	2.42E-05	4.11E-04	6.87E-06	2.23E-06
	T	2.31E-06	5.77E-05	1.03E-05	5.66E-05	2.42E-05	1.26E-01	6.87E-06	2.23E-06
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E+01	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.51E-03	0.00E+00
	P	9.34E-05	2.63E-06	2.77E-05	2.51E-05	2.21E-05	7.18E-06	5.86E-04	3.08E-05
	T	9.34E-05	2.63E-06	2.77E-05	2.51E-05	2.21E-05	7.18E-06	1.12E+01	3.08E-05
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.68E-04
	P	3.99E-05	1.56E-06	1.62E-05	1.48E-05	2.05E-05	2.49E-06	3.17E-05	2.08E-04
	T	3.99E-05	1.56E-06	1.62E-05	1.48E-05	2.05E-05	2.49E-06	3.17E-05	1.53E+00
LUNGS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.97E-05	2.89E-07	1.44E-05	2.32E-06	2.44E-06	7.47E-07	7.19E-06	1.59E-05
	T	1.97E-05	2.89E-07	1.44E-05	2.32E-06	2.44E-06	7.47E-07	7.19E-06	1.59E-05
RESP LYMPH	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.95E-05	2.89E-07	1.44E-05	2.32E-06	2.44E-06	7.47E-07	7.19E-06	1.59E-05
	T	1.95E-05	2.89E-07	1.44E-05	2.32E-06	2.44E-06	7.47E-07	7.19E-06	1.59E-05
MUSCLE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.21E-05	1.44E-05	1.13E-05	1.25E-05	1.19E-05	1.37E-05	1.14E-05	8.86E-06
	T	1.21E-05	1.44E-05	1.13E-05	1.25E-05	1.19E-05	1.37E-05	1.14E-05	8.86E-06
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.52E-06	5.67E-05	3.75E-06	7.90E-05	9.80E-05	1.46E-04	9.57E-06	2.83E-06
	T	4.52E-06	5.67E-05	3.75E-06	7.90E-05	9.80E-05	1.46E-04	9.57E-06	2.83E-06

BI-211 CONTINUED
 SOURCE ORGANS

TARGET ORGANS		ADRENALS	BLAD CNT	S CNT	SI CNT	ULI CNT	LLI CNT	KIDNEYS	LIVER
PANCREAS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.89E-05	2.24E-06	1.45E-04	1.66E-05	1.71E-05	5.78E-06	5.24E-05	3.49E-05
	T	6.89E-05	2.24E-06	1.45E-04	1.66E-05	1.71E-05	5.78E-06	5.24E-05	3.49E-05
BONE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.25E-05	5.58E-06	5.57E-06	7.48E-06	6.80E-06	9.81E-06	8.95E-06	6.85E-06
	T	1.25E-05	5.58E-06	5.57E-06	7.48E-06	6.80E-06	9.81E-06	8.95E-06	6.85E-06
R MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.26E-05	1.25E-05	9.78E-06	2.44E-05	2.11E-05	2.99E-05	2.31E-05	9.94E-06
	T	2.26E-05	1.25E-05	9.78E-06	2.44E-05	2.11E-05	2.99E-05	2.31E-05	9.94E-06
Y MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.20E-05	5.15E-06	7.75E-06	1.04E-05	9.69E-06	1.22E-05	1.11E-05	1.01E-05
	T	1.20E-05	5.15E-06	7.75E-06	1.04E-05	9.69E-06	1.22E-05	1.11E-05	1.01E-05
ENDOSTEAL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.25E-05	5.58E-06	5.57E-06	7.48E-06	6.80E-06	9.81E-06	8.95E-06	6.85E-06
	T	1.25E-05	5.58E-06	5.57E-06	7.48E-06	6.80E-06	9.81E-06	8.95E-06	6.85E-06
SKIN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.05E-06	4.67E-06	4.25E-06	3.95E-06	4.04E-06	4.48E-06	4.97E-06	4.53E-06
	T	5.05E-06	4.67E-06	4.25E-06	3.95E-06	4.04E-06	4.48E-06	4.97E-06	4.53E-06
SPLEEN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.31E-05	1.63E-06	7.95E-05	1.25E-05	1.07E-05	6.89E-06	6.94E-05	7.75E-06
	T	5.31E-05	1.63E-06	7.95E-05	1.25E-05	1.07E-05	6.89E-06	6.94E-05	7.75E-06
TESTES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.57E-07	3.89E-05	3.62E-07	2.84E-06	3.28E-06	1.65E-05	1.05E-06	7.76E-07
	T	4.57E-07	3.89E-05	3.62E-07	2.84E-06	3.28E-06	1.65E-05	1.05E-06	7.76E-07
THYMUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.25E-06	1.50E-07	1.96E-06	9.70E-07	1.07E-06	3.77E-07	2.37E-06	7.80E-06
	T	5.25E-06	1.50E-07	1.96E-06	9.70E-07	1.07E-06	3.77E-07	2.37E-06	7.80E-06
THYROID	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.42E-06	5.09E-08	1.07E-06	2.45E-07	2.65E-07	1.05E-07	6.13E-07	1.62E-06
	T	1.42E-06	5.09E-08	1.07E-06	2.45E-07	2.65E-07	1.05E-07	6.13E-07	1.62E-06
UTERUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.09E-05	1.24E-04	6.84E-06	7.36E-05	3.77E-05	5.17E-05	7.67E-06	3.32E-06
	T	1.09E-05	1.24E-04	6.84E-06	7.36E-05	3.77E-05	5.17E-05	7.67E-06	3.32E-06
T BODY	A	4.97E-02	5.59E-03	1.44E-04	3.83E-04	2.28E-04	2.84E-04	4.97E-02	4.97E-02
	E	6.69E-06	7.53E-07	2.01E-06	5.35E-06	3.19E-06	3.96E-06	6.69E-06	6.69E-06
	P	1.36E-05	1.52E-05	1.44E-05	1.60E-05	1.56E-05	1.55E-05	1.37E-05	1.38E-05
	T	4.97E-02	5.61E-03	1.60E-04	4.04E-04	2.47E-04	3.03E-04	4.97E-02	4.97E-02

BI-211 CONTINUED

TARGET
ORGANS

SOURCE ORGANS

		LUNGS	RESP LYMPH	MUSCLE	OVARIES	PANCREAS	COR BONE	CAN BONE	R MAR
ADRENALS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.99E-05	1.59E-05	1.21E-05	3.88E-06	6.85E-05	1.18E-05	1.18E-05	1.79E-05
	T	1.99E-05	1.59E-05	1.21E-05	3.88E-06	6.85E-05	1.18E-05	1.18E-05	1.79E-05
BLAD WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.88E-07	4.88E-07	1.44E-05	5.52E-05	1.40E-06	4.53E-06	4.53E-06	5.52E-06
	T	4.88E-07	4.88E-07	1.44E-05	5.52E-05	1.40E-06	4.53E-06	4.53E-06	5.52E-06
S WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.50E-05	1.50E-05	1.13E-05	6.54E-06	1.44E-04	4.68E-06	4.68E-06	6.43E-06
	T	1.50E-05	1.50E-05	1.13E-05	6.54E-06	1.44E-04	4.68E-06	4.68E-06	6.43E-05
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.88E-06	1.88E-06	1.25E-05	9.63E-05	1.46E-05	6.31E-06	6.31E-06	2.13E-05
	T	1.88E-06	1.88E-06	1.25E-05	9.63E-05	1.46E-05	6.31E-06	6.31E-06	2.13E-05
ULT WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.46E-06	2.46E-06	1.31E-05	9.07E-05	1.76E-05	5.81E-06	5.81E-06	1.69E-05
	T	2.46E-06	2.46E-06	1.31E-05	9.07E-05	1.76E-05	5.81E-06	5.81E-06	1.69E-05
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	7.51E-07	7.51E-07	1.37E-05	1.16E-04	4.46E-06	8.13E-06	8.13E-06	2.41E-05
	T	7.51E-07	7.51E-07	1.37E-05	1.16E-04	4.46E-06	8.13E-06	8.13E-06	2.41E-05
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	7.71E-06	7.71E-06	1.14E-05	8.40E-06	5.11E-05	7.33E-06	7.33E-06	1.86E-05
	T	7.71E-06	7.71E-06	1.14E-05	8.40E-06	5.11E-05	7.33E-06	7.33E-06	1.86E-05
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.97E-05	1.57E-05	8.86E-06	4.78E-06	3.45E-05	5.53E-06	5.53E-06	8.03E-06
	T	1.97E-05	1.57E-05	8.86E-06	4.78E-06	3.45E-05	5.53E-06	5.53E-06	8.03E-06
LUNGS	A	3.48E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	4.68E-04	4.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.21E-04	1.21E-04	1.07E-05	7.22E-07	1.99E-05	7.93E-06	7.93E-06	9.74E-06
	T	3.48E+00	5.29E-04	1.07E-05	7.22E-07	1.99E-05	7.93E-06	7.93E-06	9.74E-06
RESP LYMPH	A	0.00E+00	2.32E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	4.68E-04	3.12E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.21E-04	1.21E-04	1.07E-05	7.22E-07	1.99E-05	7.93E-06	7.93E-06	9.74E-06
	T	5.89E-04	2.32E+02	1.07E-05	7.22E-07	1.99E-05	7.93E-06	7.93E-06	9.74E-06
MUSCLE	A	0.00E+00	0.00E+00	1.24E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	1.67E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.07E-05	1.07E-05	1.19E-05	1.61E-05	1.45E-05	8.65E-06	8.65E-06	1.03E-05
	T	1.07E-05	1.07E-05	1.24E-01	1.61E-05	1.45E-05	8.65E-06	8.65E-06	1.03E-05
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	3.16E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	4.26E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.09E-06	1.09E-06	1.61E-05	6.36E-03	2.80E-06	7.11E-06	7.11E-06	2.38E-05
	T	1.09E-06	1.09E-06	1.61E-05	3.16E+02	2.80E-06	7.11E-06	7.11E-06	2.38E-05

BI-211 CONTINUED
 SOURCE ORGANS

TARGET ORGANS		LUNGS	RESP LYMPH	MUSCLE	OVARIES	PANCREAS	COR BONE	CAN BONE	R MAR
PANCREAS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E+01	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.68E-03	0.00E+00	0.00E+00	0.00E+00
	P	2.15E-05	2.15E-05	1.45E-05	4.16E-06	1.71E-03	7.98E-06	7.98E-06	1.35E-05
	T	2.15E-05	2.15E-05	1.45E-05	4.16E-06	3.48E+01	7.98E-06	7.98E-06	1.35E-05
BONE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E+00	3.48E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.37E-05	6.01E-05	2.24E-05
	P	9.13E-06	9.13E-06	8.65E-06	8.93E-06	8.61E-06	3.05E-05	3.05E-05	2.03E-05
	T	9.13E-06	9.13E-06	8.65E-06	8.93E-06	8.61E-06	3.48E+00	3.48E+00	4.27E-05
R MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E+00	2.32E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-06	1.12E-04	2.32E-04
	P	1.16E-05	1.16E-05	1.25E-05	3.06E-05	1.64E-05	2.73E-05	2.73E-05	6.56E-05
	T	1.16E-05	1.16E-05	1.25E-05	3.06E-05	1.64E-05	2.95E-05	1.15E+00	2.32E+00
Y MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	9.53E-06	9.53E-06	9.86E-06	1.20E-05	1.01E-05	2.63E-05	2.63E-05	2.52E-05
	T	9.53E-06	9.53E-06	9.86E-06	1.20E-05	1.01E-05	2.63E-05	2.63E-05	2.52E-05
ENDOSTEAL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.50E+00	5.50E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.94E-05	1.05E-04	8.61E-05
	P	9.13E-06	9.13E-06	8.65E-06	8.93E-06	8.61E-06	3.05E-05	3.05E-05	2.75E-05
	T	9.13E-06	9.13E-06	8.65E-06	8.93E-06	8.61E-06	5.50E+00	5.50E+00	1.14E-04
SKIN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.07E-06	5.07E-06	6.77E-06	3.91E-06	3.77E-06	6.41E-06	6.41E-06	5.69E-06
	T	5.07E-06	5.07E-06	6.77E-06	3.91E-06	3.77E-06	6.41E-06	6.41E-06	5.69E-06
SPLEEN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.79E-05	1.79E-05	1.18E-05	4.95E-06	1.55E-04	5.97E-06	5.97E-06	6.99E-06
	T	1.79E-05	1.79E-05	1.18E-05	4.95E-06	1.55E-04	5.97E-06	5.97E-06	6.99E-06
TESTES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.45E-07	1.45E-07	9.69E-06	0.00E+00	5.48E-07	4.82E-06	4.82E-06	2.56E-06
	T	1.45E-07	1.45E-07	9.69E-06	0.00E+00	5.48E-07	4.82E-06	4.82E-06	2.56E-06
THYMUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.12E-05	3.12E-05	1.85E-05	3.89E-07	5.53E-06	4.90E-06	4.90E-06	4.94E-06
	T	3.12E-05	3.12E-05	1.85E-05	3.89E-07	5.53E-06	4.90E-06	4.90E-06	4.94E-06
THYROID	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	8.11E-06	8.11E-06	1.09E-05	1.02E-07	1.34E-06	1.14E-06	8.14E-06	6.50E-06
	T	8.11E-06	8.11E-06	1.09E-05	1.02E-07	1.34E-06	8.14E-06	8.14E-06	6.50E-06
UTERUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	7.70E-07	7.70E-07	1.72E-05	1.60E-04	5.06E-06	4.80E-06	4.80E-06	1.71E-05
	T	7.70E-07	7.70E-07	1.72E-05	1.60E-04	5.06E-06	4.80E-06	4.80E-06	1.71E-05
T BODY	A	4.97E-02	4.57E-02	4.97E-02	4.97E-02	4.97E-02	2.48E-01	2.48E-01	4.97E-02
	E	6.69E-06	6.69E-06	6.69E-06	6.69E-06	6.69E-06	6.69E-06	6.69E-06	6.69E-06
	P	1.18E-05	1.18E-05	1.14E-05	1.64E-05	1.60E-05	1.17E-05	1.17E-05	1.30E-05
	T	4.97E-02	4.57E-02	4.97E-02	4.97E-02	4.97E-02	2.48E-01	2.48E-01	4.97E-02

BI-211 CGNT INUED

TARGET ORGANS	SOURCE ORGANS					
	Y MAR	SKIN	SPLEEN	TESTES	THYROID	T BODY
ADRENALS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.69E-06
	P	1.01E-05	6.01E-06	5.08E-05	4.57E-07	1.65E-05
	T	1.01E-05	6.01E-06	5.08E-05	4.57E-07	1.42E-06
BLAD WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.69E-06
	P	2.56E-06	4.64E-06	1.21E-06	4.00E-05	5.13E-08
	T	2.56E-06	4.64E-06	1.21E-06	4.00E-05	5.13E-08
S WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.69E-06
	P	5.99E-06	4.64E-06	7.87E-05	6.43E-07	6.67E-07
	T	5.99E-06	4.64E-06	7.87E-05	6.43E-07	6.67E-07
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.69E-06
	P	8.54E-06	4.15E-06	1.13E-05	3.78E-06	9.16E-08
	T	8.54E-06	4.15E-06	1.13E-05	3.78E-06	9.16E-08
ULI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.69E-06
	P	7.33E-06	4.20E-06	1.06E-05	2.75E-06	8.63E-08
	T	7.33E-06	4.20E-06	1.06E-05	2.75E-06	8.63E-08
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.69E-06
	P	7.03E-06	4.40E-06	5.35E-06	2.28E-05	8.64E-08
	T	7.03E-06	4.40E-06	5.35E-06	2.28E-05	8.64E-08
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.69E-06
	P	9.28E-06	5.60E-06	7.07E-05	6.18E-07	3.46E-07
	T	9.28E-06	5.60E-06	7.07E-05	6.18E-07	3.46E-07
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.69E-06
	P	8.38E-06	4.59E-06	8.40E-06	3.63E-07	1.10E-06
	T	8.38E-06	4.59E-06	8.40E-06	3.63E-07	1.10E-06
LUNGS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.69E-06
	P	7.99E-06	5.30E-06	1.80E-05	1.03E-07	8.09E-06
	T	7.99E-06	5.30E-06	1.80E-05	1.03E-07	8.09E-06
RESP LYMPH	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.69E-06
	P	7.99E-06	5.30E-06	1.80E-05	1.03E-07	8.09E-06
	T	7.99E-06	5.30E-06	1.80E-05	1.03E-07	8.09E-06
MUSCLE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.69E-06
	P	7.89E-06	6.77E-06	1.18E-05	9.69E-06	1.09E-05
	T	7.89E-06	6.77E-06	1.18E-05	9.69E-06	1.09E-05
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.69E-06
	P	9.21E-06	3.20E-06	6.43E-06	0.00E+00	1.02E-07
	T	9.21E-06	3.20E-06	6.43E-06	0.00E+00	1.02E-07

BI-211 CONTINUED

TARGET ORGANS		SOURCE ORGANS					
		Y MAR	SKIN	SPLEEN	TESTES	THYROID	T BODY
PANCREAS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.69E-06
	P	1.06E-05	4.63E-06	1.55E-04	4.52E-07	7.05E-07	1.58E-05
	T	1.06E-05	4.63E-06	1.55E-04	4.52E-07	7.05E-07	4.97E-02
BONE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E-01
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.69E-06
	P	2.24E-05	7.08E-06	7.09E-06	5.89E-06	6.63E-06	1.31E-05
	T	2.24E-05	7.08E-06	7.09E-06	5.89E-06	6.63E-06	2.48E-01
R MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.69E-06
	P	2.31E-05	6.66E-06	1.06E-05	4.75E-06	7.28E-06	1.49E-05
	T	2.31E-05	6.66E-06	1.06E-05	4.75E-06	7.28E-06	4.97E-02
Y MAR	A	2.32E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-02
	E	3.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.69E-06
	P	3.82E-05	7.45E-06	1.06E-05	2.38E-06	3.48E-06	1.23E-05
	T	2.32E+00	7.45E-06	1.06E-05	2.38E-06	3.48E-06	4.97E-02
ENDOSTEAL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-02
	E	7.81E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.69E-06
	P	2.48E-05	7.08E-06	7.09E-06	5.89E-06	6.63E-06	1.32E-05
	T	1.03E-04	7.08E-06	7.09E-06	5.89E-06	6.63E-06	4.97E-02
SKIN	A	0.00E+00	1.34E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-02
	E	0.00E+00	1.60E-04	0.00E+00	0.00E+00	0.00E+00	6.69E-06
	P	7.14E-06	1.59E-05	4.56E-06	1.22E-05	6.71E-06	6.83E-06
	T	7.14E-06	1.34E+00	4.56E-06	1.22E-05	6.71E-06	4.97E-02
SPLEEN	A	0.00E+00	0.00E+00	1.93E+01	0.00E+00	0.00E+00	4.97E-02
	E	0.00E+00	0.00E+00	2.60E-03	0.00E+00	0.00E+00	6.69E-06
	P	8.25E-06	4.57E-06	1.05E-03	5.88E-07	9.84E-07	1.44E-05
	T	8.25E-06	4.57E-06	1.93E+01	5.88E-07	9.84E-07	4.97E-02
TESTES	A	0.00E+00	0.00E+00	0.00E+00	9.94E+01	0.00E+00	4.97E-02
	E	0.00E+00	0.00E+00	0.00E+00	1.34E-02	0.00E+00	6.69E-06
	P	8.32E-06	7.69E-06	6.39E-07	2.89E-03	1.68E-08	1.19E-05
	T	8.32E-06	7.69E-06	6.39E-07	9.94E+01	1.68E-08	4.97E-02
THYMUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.69E-06
	P	4.55E-06	6.22E-06	3.33E-06	6.01E-08	3.52E-05	1.59E-05
	T	4.55E-06	6.22E-06	3.33E-06	6.01E-08	3.52E-05	4.97E-02
THYROID	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E+02	4.97E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.34E-02	6.69E-06
	P	6.91E-06	6.45E-06	1.03E-06	1.68E-08	3.92E-03	1.08E-05
	T	6.91E-06	6.45E-06	1.03E-06	1.68E-08	1.74E+02	4.97E-02
UTERUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.69E-06
	P	5.25E-06	3.84E-06	3.43E-06	0.00E+00	9.61E-08	1.57E-05
	T	5.25E-06	3.84E-06	3.43E-06	0.00E+00	9.61E-08	4.97E-02
T BODY	A	4.97E-02	4.57E-02	4.97E-02	4.97E-02	4.97E-02	6.39E-02
	E	6.69E-06	6.69E-06	6.69E-06	6.69E-06	6.69E-06	6.69E-06
	P	1.03E-05	6.54E-06	1.37E-05	1.13E-05	1.04E-05	1.16E-05
	T	4.97E-02	4.57E-02	4.97E-02	4.97E-02	4.97E-02	6.39E-02

TARGET ORGANS	S FACTORS (REM/MICROCURIE-DAY) FOR BI-213								
		ADRENALS	BLAD CENT	S CONT	SI CONT	ULI CONT	LLI CONT	KIDNEYS	LIVER
ADRENALS	A	4.79E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	1.64E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.10E-02	5.23E-C6	5.20E-05	3.05E-05	2.34E-05	1.14E-05	2.81E-04	1.16E-04
	T	6.44E+00	5.23E-C6	5.20E-05	3.05E-05	2.34E-05	1.14E-05	2.81E-04	1.16E-04
BLAD WALL	A	0.00E+00	1.68E-C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	5.72E-C2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.74E-06	1.74E-C3	9.60E-06	7.51E-05	4.62E-05	1.38E-04	8.68E-06	7.04E-06
	T	2.74E-06	2.27E-C1	9.60E-06	7.51E-05	4.62E-05	1.38E-04	8.68E-06	7.04E-06
S WALL	A	0.00E+00	0.00E+00	1.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	4.58E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.93E-05	7.54E-C6	1.22E-03	8.15E-05	8.59E-05	4.23E-05	7.94E-05	4.49E-05
	T	6.93E-05	7.54E-C6	4.93E-02	8.15E-05	8.59E-05	4.23E-05	7.94E-05	4.49E-05
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	8.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	2.86E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.20E-05	6.31E-C5	6.20E-05	7.36E-04	3.87E-04	2.13E-04	6.54E-05	3.78E-05
	T	2.20E-05	6.31E-C5	6.20E-05	3.02E-02	3.87E-04	2.13E-04	6.54E-05	3.78E-05
ULI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.47E-03	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.20E-02	0.00E+00	0.00E+00	0.00E+00
	P	2.40E-05	5.52E-C5	7.89E-05	5.45E-04	1.01E-03	9.96E-05	6.78E-05	5.58E-05
	T	2.40E-05	5.52E-C5	7.89E-05	5.45E-04	5.45E-02	9.96E-05	6.78E-05	5.58E-05
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.39E-03	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.48E-02	0.00E+00	0.00E+00
	P	7.62E-06	1.67E-C4	3.01E-05	1.62E-04	7.09E-05	1.21E-03	2.04E-05	7.14E-06
	T	7.62E-06	1.67E-C4	3.01E-05	1.62E-04	7.09E-05	8.84E-02	2.04E-05	7.14E-06
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.16E-01	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.38E-02	0.00E+00
	P	2.71E-04	8.51E-C6	7.88E-05	7.41E-05	6.44E-05	2.02E-05	1.73E-03	8.52E-05
	T	2.71E-04	8.51E-C6	7.88E-05	7.41E-05	6.44E-05	2.02E-05	2.92E-01	8.52E-05
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.73E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-02
	P	1.16E-04	6.28E-C6	4.76E-05	4.28E-05	5.87E-05	7.84E-06	9.33E-05	6.08E-04
	T	1.16E-04	6.28E-C6	4.76E-05	4.28E-05	5.87E-05	7.84E-06	9.33E-05	5.06E-02
LUNGS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.58E-05	1.05E-C6	4.30E-05	7.45E-06	7.73E-06	2.37E-06	2.19E-05	5.72E-05
	T	5.58E-05	1.05E-C6	4.30E-05	7.45E-06	7.73E-06	2.37E-06	2.19E-05	5.72E-05
RESP LYMPH	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.58E-05	1.05E-C6	4.30E-05	7.45E-06	7.73E-06	2.37E-06	2.19E-05	5.72E-05
	T	5.58E-05	1.05E-C6	4.30E-05	7.45E-06	7.73E-06	2.37E-06	2.19E-05	5.72E-05
MUSCLE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.57E-05	4.20E-C5	3.32E-05	3.66E-05	3.49E-05	4.00E-05	3.36E-05	2.62E-05
	T	3.57E-05	4.20E-C5	3.32E-05	3.66E-05	3.49E-05	4.00E-05	3.36E-05	2.62E-05
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.30E-05	1.54E-C4	1.24E-05	2.18E-04	2.89E-04	3.95E-04	2.79E-05	6.70E-06
	T	1.30E-05	1.54E-C4	1.24E-05	2.18E-04	2.89E-04	3.95E-04	2.79E-05	6.70E-06

BI-213 CONTINUED

TARGET ORGANS	SOURCE ORGANS							
	ADRENALS	BLAD CONT	S CONT	SI CONT	ULI CONT	LLI CONT	KIDNEYS	LIVER
PANCREAS	A	0.30E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.00E-04	6.31E-06	4.15E-04	4.88E-05	4.55E-05	1.73E-05	1.54E-04
	T	2.00E-04	6.31E-06	4.15E-04	4.88E-05	4.55E-05	1.73E-05	1.54E-04
BONE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.42E-05	1.49E-05	1.52E-05	2.00E-05	1.83E-05	2.64E-05	2.46E-05
	T	3.42E-05	1.49E-05	1.52E-05	2.00E-05	1.83E-05	2.64E-05	2.46E-05
R MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.15E-05	3.26E-05	2.64E-05	6.44E-05	5.57E-05	7.99E-05	6.27E-05
	T	6.15E-05	3.26E-05	2.64E-05	6.44E-05	5.57E-05	7.99E-05	6.27E-05
Y MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.30E-05	1.37E-05	2.11E-05	2.78E-05	2.60E-05	3.27E-05	3.04E-05
	T	3.30E-05	1.37E-05	2.11E-05	2.78E-05	2.60E-05	3.27E-05	3.04E-05
ENDOSTEAL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.42E-05	1.49E-05	1.52E-05	2.00E-05	1.83E-05	2.64E-05	2.46E-05
	T	3.42E-05	1.49E-05	1.52E-05	2.00E-05	1.83E-05	2.64E-05	2.46E-05
SKIN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.56E-05	1.49E-05	1.33E-05	1.22E-05	1.26E-05	1.36E-05	1.52E-05
	T	1.56E-05	1.49E-05	1.33E-05	1.22E-05	1.26E-05	1.36E-05	1.52E-05
SPLEEN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.53E-04	5.28E-06	2.27E-04	3.69E-05	3.00E-05	2.15E-05	1.98E-04
	T	1.53E-04	5.28E-06	2.27E-04	3.69E-05	3.00E-05	2.15E-05	1.98E-04
TESTES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.55E-06	1.17E-04	9.19E-07	8.60E-06	1.11E-05	4.79E-05	3.36E-06
	T	1.55E-06	1.17E-04	9.19E-07	8.60E-06	1.11E-05	4.79E-05	3.36E-06
THYMUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.91E-05	6.83E-07	6.16E-06	3.12E-06	3.43E-06	1.28E-06	8.20E-06
	T	1.91E-05	6.83E-07	6.16E-06	3.12E-06	3.43E-06	1.28E-06	8.20E-06
THYROID	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.47E-06	2.00E-07	3.41E-06	8.62E-07	9.25E-07	3.87E-07	2.09E-06
	T	4.47E-06	2.00E-07	3.41E-06	8.62E-07	9.25E-07	3.87E-07	2.09E-06
UTERUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.83E-05	3.55E-04	2.07E-05	2.09E-04	1.08E-04	1.39E-04	2.08E-05
	T	1.83E-05	3.55E-04	2.07E-05	2.09E-04	1.08E-04	1.39E-04	2.08E-05
T BODY	A	9.58E-04	1.08E-04	2.77E-06	7.38E-06	4.40E-06	5.47E-06	9.58E-04
	E	3.27E-04	3.08E-05	9.81E-05	2.62E-04	1.56E-04	1.94E-04	3.27E-04
	P	3.97E-05	4.42E-05	4.20E-05	4.65E-05	4.53E-05	4.50E-05	4.00E-05
	T	1.32E-03	1.09E-04	1.43E-04	3.15E-04	2.06E-04	2.44E-04	1.33E-03

BI-213 CONTINUED

TARGET
ORGANS

SOURCE ORGANS

		LUNGS	RESP LYMPH	MUSCLE	OVARIES	PANCREAS	COR BONE	CAN BONE	R MAR
ADRENALS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.77E-05	5.77E-05	3.57E-05	1.30E-05	1.99E-04	3.79E-05	3.79E-05	4.64E-05
	T	5.77E-05	5.77E-05	3.57E-05	1.30E-05	1.99E-04	3.79E-05	3.79E-05	4.64E-05
BLAD WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.63E-06	1.63E-06	4.20E-05	1.59E-04	4.37E-06	1.44E-05	1.44E-05	1.70E-05
	T	1.63E-06	1.63E-06	4.20E-05	1.59E-04	4.37E-06	1.44E-05	1.44E-05	1.70E-05
S WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.36E-05	4.36E-05	3.31E-05	1.95E-05	4.09E-04	1.37E-05	1.37E-05	2.41E-05
	T	4.36E-05	4.36E-05	3.31E-05	1.95E-05	4.09E-04	1.37E-05	1.37E-05	2.41E-05
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.16E-06	6.16E-06	3.66E-05	2.79E-04	4.20E-05	1.88E-05	1.88E-05	6.29E-05
	T	6.16E-06	6.16E-06	3.66E-05	2.79E-04	4.20E-05	1.88E-05	1.88E-05	6.29E-05
ULI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	8.28E-06	8.28E-06	3.84E-05	2.62E-04	5.12E-05	1.68E-05	1.68E-05	4.88E-05
	T	8.28E-06	8.28E-06	3.84E-05	2.62E-04	5.12E-05	1.68E-05	1.68E-05	4.88E-05
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.99E-06	1.99E-06	4.00E-05	3.35E-04	1.28E-05	2.30E-05	2.30E-05	7.16E-05
	T	1.99E-06	1.99E-06	4.00E-05	3.35E-04	1.28E-05	2.30E-05	2.30E-05	7.16E-05
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.37E-05	2.37E-05	3.36E-05	2.58E-05	1.47E-04	2.17E-05	2.17E-05	5.53E-05
	T	2.37E-05	2.37E-05	3.36E-05	2.58E-05	1.47E-04	2.17E-05	2.17E-05	5.53E-05
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.67E-05	5.67E-05	2.62E-05	1.43E-05	9.83E-05	1.65E-05	1.65E-05	2.38E-05
	T	5.67E-05	5.67E-05	2.62E-05	1.43E-05	9.83E-05	1.65E-05	1.65E-05	2.38E-05
LUNGS	A	6.71E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	2.29E-02	2.29E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.49E-04	3.49E-04	3.15E-05	2.48E-06	5.69E-05	2.32E-05	2.32E-05	2.84E-05
	T	9.03E-02	2.32E-02	3.15E-05	2.48E-06	5.69E-05	2.32E-05	2.32E-05	2.84E-05
RESP LYMPH	A	0.00E+00	4.47E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	2.29E-02	1.53E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.49E-04	3.49E-04	3.15E-05	2.48E-06	5.69E-05	2.32E-05	2.32E-05	2.84E-05
	T	2.32E-02	6.00E+00	3.15E-05	2.48E-06	5.69E-05	2.32E-05	2.32E-05	2.84E-05
MUSCLE	A	0.00E+00	0.00E+00	2.39E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	3.18E-04	0.00E+00	0.00E+00	0.00E+00	0.10E+00	0.00E+00
	P	3.15E-05	3.15E-05	3.54E-05	4.69E-05	4.24E-05	2.58E-05	2.58E-05	3.05E-05
	T	3.15E-05	3.15E-05	3.25E-03	4.69E-05	4.24E-05	2.58E-05	2.58E-05	3.05E-05
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	6.10E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	2.08E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.44E-06	3.44E-06	4.69E-05	1.84E-02	9.22E-06	2.35E-05	2.35E-05	7.82E-05
	T	3.44E-06	3.44E-06	4.69E-05	8.20E+00	9.22E-06	2.35E-05	2.35E-05	7.82E-05

BI-213 CONTINUED
 SOURCE ORGANS

TARGET ORGANS		LUNGS	RESP LYMPH	MUSCLE	OVARIES	PANCREAS	COR BONE	CAN BONE	R MAR
PANCREAS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.71E-01	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.29E-01	0.00E+00	0.00E+00	0.00E+00
	P	6.40E-05	6.40E-05	4.24E-05	1.30E-05	5.03E-03	2.22E-05	2.22E-05	3.56E-05
	T	6.40E-05	6.40E-05	4.24E-05	1.30E-05	9.05E-01	2.22E-05	2.22E-05	3.56E-05
BONE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.71E-02	6.71E-02	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.58E-03	2.77E-03	1.21E-03
	P	2.50E-05	2.50E-05	2.58E-05	2.37E-05	2.33E-05	8.54E-05	8.54E-05	5.71E-05
	T	2.50E-05	2.50E-05	2.58E-05	2.37E-05	2.33E-05	7.17E-02	6.99E-02	1.26E-03
R MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.21E-02	4.47E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-04	6.03E-03	1.07E-02
	P	3.16E-05	3.16E-05	3.43E-05	8.02E-05	4.41E-05	7.63E-05	7.63E-05	1.84E-04
	T	3.16E-05	3.16E-05	3.43E-05	8.02E-05	4.41E-05	2.63E-04	2.82E-02	5.56E-02
Y MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.63E-05	2.63E-05	2.76E-05	3.17E-05	2.72E-05	7.37E-05	7.37E-05	7.05E-05
	T	2.63E-05	2.63E-05	2.76E-05	3.17E-05	2.72E-05	7.37E-05	7.37E-05	7.05E-05
ENDOSTEAL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.60E-03	9.60E-03	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-03	4.89E-03	4.37E-03
	P	2.50E-05	2.50E-05	2.58E-05	2.37E-05	2.33E-05	8.54E-05	8.54E-05	2.33E-05
	T	2.50E-05	2.50E-05	2.58E-05	2.37E-05	2.33E-05	1.26E-02	1.46E-02	4.45E-03
SKIN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.55E-05	1.55E-05	2.08E-05	1.20E-05	1.16E-05	1.98E-05	1.98E-05	1.72E-05
	T	1.55E-05	1.55E-05	2.08E-05	1.20E-05	1.16E-05	1.98E-05	1.98E-05	1.72E-05
SPLEEN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.11E-05	5.11E-05	3.47E-05	1.55E-05	4.51E-04	1.88E-05	1.88E-05	1.58E-05
	T	5.11E-05	5.11E-05	3.47E-05	1.55E-05	4.51E-04	1.88E-05	1.88E-05	1.58E-05
TESTES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.24E-07	5.24E-07	2.89E-05	0.00E+00	1.59E-06	1.39E-05	1.39E-05	9.58E-06
	T	5.24E-07	5.24E-07	2.89E-05	0.00E+00	1.59E-06	1.39E-05	1.39E-05	9.58E-06
THYMUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	8.89E-05	8.89E-05	4.53E-05	1.33E-06	1.40E-05	1.65E-05	1.65E-05	1.25E-05
	T	8.89E-05	8.89E-05	4.53E-05	1.33E-06	1.40E-05	1.65E-05	1.65E-05	1.25E-05
THYROID	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.66E-05	2.66E-05	3.23E-05	3.83E-07	4.07E-06	2.47E-05	2.47E-05	2.04E-05
	T	2.66E-05	2.66E-05	3.23E-05	3.83E-07	4.07E-06	2.47E-05	2.47E-05	2.04E-05
UTERUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.30E-06	2.30E-06	4.76E-05	4.40E-04	1.48E-05	1.41E-05	1.41E-05	4.68E-05
	T	2.30E-06	2.30E-06	4.76E-05	4.40E-04	1.48E-05	1.41E-05	1.41E-05	4.68E-05
T BODY	A	9.58E-04	9.58E-04	9.58E-04	9.58E-04	9.58E-04	4.79E-03	4.79E-03	9.58E-04
	E	3.27E-04	3.27E-04	3.27E-04	3.27E-04	3.27E-04	3.27E-04	3.27E-04	3.27E-04
	P	3.44E-05	3.44E-05	3.37E-05	4.75E-05	4.65E-05	3.40E-05	3.40E-05	3.78E-05
	T	1.32E-03	1.32E-03	1.32E-03	1.33E-03	1.33E-03	5.15E-03	5.15E-03	1.32E-03

BI-213 CONTINUED
 SOURCE ORGANS

 TARGET
 ORGANS

		Y MAR	SKIN	SPLEEN	TESTES	THYROID	T BODY
ADRENALS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.58E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-04
	P	2.66E-05	1.65E-05	1.46E-04	1.55E-06	4.46E-06	5.14E-05
	T	2.66E-05	1.65E-05	1.46E-04	1.55E-06	4.46E-06	1.34E-03
BLAD WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.58E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-04
	P	6.75E-06	1.44E-05	3.50E-06	1.19E-04	2.02E-07	4.28E-05
	T	6.75E-06	1.44E-05	3.50E-06	1.19E-04	2.02E-07	1.33E-03
S WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.58E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-04
	P	1.76E-05	1.48E-05	2.31E-04	2.37E-06	2.60E-06	4.25E-05
	T	1.76E-05	1.48E-05	2.31E-04	2.37E-06	2.60E-06	1.33E-03
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.58E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-04
	P	2.49E-05	1.27E-05	3.29E-05	1.20E-05	2.47E-07	4.68E-05
	T	2.49E-05	1.27E-05	3.29E-05	1.20E-05	2.47E-07	1.33E-03
ULI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.58E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-04
	P	2.07E-05	1.32E-05	3.22E-05	7.84E-06	2.90E-07	4.54E-05
	T	2.07E-05	1.32E-05	3.22E-05	7.84E-06	2.90E-07	1.33E-03
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.58E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-04
	P	1.99E-05	1.37E-05	1.61E-05	6.64E-05	3.22E-07	4.54E-05
	T	1.99E-05	1.37E-05	1.61E-05	6.64E-05	3.22E-07	1.33E-03
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.58E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-04
	P	2.80E-05	1.72E-05	2.03E-04	2.20E-06	1.18E-06	4.14E-05
	T	2.80E-05	1.72E-05	2.03E-04	2.20E-06	1.18E-06	1.33E-03
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.58E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-04
	P	2.53E-05	1.54E-05	2.50E-05	1.21E-06	3.56E-06	4.07E-05
	T	2.53E-05	1.54E-05	2.50E-05	1.21E-06	3.56E-06	1.33E-03
LUNGS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.58E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-04
	P	2.35E-05	1.58E-05	5.20E-05	3.40E-07	2.46E-05	3.60E-05
	T	2.35E-05	1.58E-05	5.20E-05	3.40E-07	2.46E-05	1.32E-03
RESP LYMPH	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.58E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-04
	P	2.35E-05	1.58E-05	5.20E-05	3.40E-07	2.46E-05	3.60E-05
	T	2.35E-05	1.58E-05	5.20E-05	3.40E-07	2.46E-05	1.32E-03
MUSCLE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.58E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-04
	P	2.38E-05	2.08E-05	3.47E-05	2.89E-05	3.23E-05	3.37E-05
	T	2.38E-05	2.08E-05	3.47E-05	2.89E-05	3.23E-05	1.32E-03
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.58E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-04
	P	2.30E-05	8.31E-06	2.19E-05	0.00E+00	3.83E-07	4.06E-05
	T	2.30E-05	8.31E-06	2.19E-05	0.00E+00	3.83E-07	1.33E-03

BI-213 CONTINUED

TARGET ORGANS		SOURCE ORGANS					
		Y MAR	SKIN	SPLEEN	TESTES	THYROID	T BODY
PANCREAS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.58E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-04
	P	3.07E-05	1.36E-05	4.55E-04	1.14E-06	1.83E-06	4.29E-05
	T	3.07E-05	1.36E-05	4.55E-04	1.14E-06	1.83E-06	1.33E-03
BONE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.79E-03
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-04
	P	6.32E-05	2.04E-05	1.93E-05	1.63E-05	1.86E-05	3.68E-05
	T	6.32E-05	2.04E-05	1.93E-05	1.63E-05	1.86E-05	5.15E-03
R MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.58E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-04
	P	6.55E-05	1.51E-05	2.87E-05	1.31E-05	2.05E-05	4.10E-05
	T	6.55E-05	1.51E-05	2.87E-05	1.31E-05	2.05E-05	1.33E-03
Y MAR	A	4.47E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.58E-04
	E	1.53E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-04
	P	1.07E-04	2.16E-05	1.90E-05	6.83E-06	9.80E-06	3.44E-05
	T	6.01E-02	2.16E-05	2.90E-05	6.83E-06	9.80E-06	1.32E-03
ENDOSTEAL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.58E-04
	E	3.82E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-04
	P	6.98E-05	2.04E-05	1.93E-05	1.63E-05	1.86E-05	3.69E-05
	T	3.89E-03	2.04E-05	1.93E-05	1.63E-05	1.86E-05	1.32E-03
SKIN	A	0.00E+00	2.58E-02	0.00E+00	0.00E+00	0.00E+00	9.58E-04
	E	0.00E+00	8.00E-03	0.00E+00	0.00E+00	0.00E+00	3.27E-04
	P	2.21E-05	4.76E-05	1.43E-05	3.68E-05	2.01E-05	2.07E-05
	T	2.21E-05	3.46E-02	1.43E-05	3.68E-05	2.01E-05	1.31E-03
SPLEEN	A	0.00E+00	0.00E+00	3.73E-01	0.00E+00	0.00E+00	9.58E-04
	E	0.00E+00	0.00E+00	1.27E-01	0.00E+00	0.00E+00	3.27E-04
	P	2.57E-05	1.52E-05	3.08E-03	2.45E-06	3.04E-06	1.21E-05
	T	2.37E-05	1.52E-05	5.03E-01	2.45E-06	3.04E-06	1.33E-03
TESTES	A	0.00E+00	0.00E+00	0.00E+00	1.92E+00	0.00E+00	9.58E-04
	E	0.00E+00	0.00E+00	0.00E+00	6.54E-01	0.00E+00	3.27E-04
	P	2.35E-05	2.09E-05	2.11E-06	8.49E-03	7.13E-08	4.03E-05
	T	2.35E-05	2.09E-05	2.11E-06	2.58E+00	7.13E-08	1.33E-03
THYMUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.58E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-04
	P	1.07E-05	1.53E-05	1.08E-05	2.34E-07	1.03E-04	4.00E-05
	T	1.07E-05	1.53E-05	1.08E-05	2.34E-07	1.03E-04	1.32E-03
THYROID	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.35E+00	9.58E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E+00	3.27E-04
	P	1.47E-05	1.53E-05	3.31E-06	7.13E-08	1.15E-02	3.30E-05
	T	1.47E-05	1.53E-05	3.31E-06	7.13E-08	4.51E+00	1.32E-03
UTERUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.58E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-04
	P	1.56E-05	1.27E-05	1.07E-05	0.00E+00	3.63E-07	4.37E-05
	T	1.56E-05	1.27E-05	1.07E-05	0.00E+00	3.63E-07	1.33E-03
T BODY	A	9.58E-04	9.58E-04	9.58E-04	9.58E-04	9.58E-04	1.23E-03
	E	3.27E-04	3.27E-04	3.27E-04	3.27E-04	3.27E-04	3.27E-04
	P	3.03E-05	2.11E-05	4.00E-05	3.34E-05	3.07E-05	3.40E-05
	T	1.32E-03	1.31E-03	1.33E-03	1.32E-03	1.32E-03	1.59E-03

S FACTORS (REM/MICROCURIE-DAY) FOR PG-211

TARGET ORGANS	SOURCE ORGANS							
	ADRENALS	BLAD CNT	S CONT	SI CONT	ULI CONT	LLI CONT	KIDNEYS	LIVER
ADRENALS	A 2.82E+02 P 6.22E-04 T 2.82E+02	0.00E+00 3.31E-07 3.31E-07	0.00E+00 2.88E-06 2.88E-06	0.00E+00 1.63E-06 1.63E-06	0.00E+00 1.55E-06 1.55E-06	0.00E+00 6.73E-07 6.73E-07	0.00E+00 1.67E-05 1.67E-05	0.00E+00 6.53E-06 6.53E-06
BLAD WALL	A 0.00E+00 P 2.56E-07 T 2.56E-07	9.88E+00 9.61E-05 9.88E+00	0.00E+00 6.54E-07 6.54E-07	0.00E+00 3.68E-06 3.68E-06	0.00E+00 2.75E-06 2.75E-06	0.00E+00 7.13E-06 7.13E-06	0.00E+00 5.90E-07 5.90E-07	0.00E+00 3.52E-07 3.52E-07
S WALL	A 0.00E+00 P 3.99E-06 T 3.99E-06	0.00E+00 6.08E-07 6.08E-07	7.61E-02 6.93E-05 7.62E-02	0.00E+00 4.64E-06 4.64E-06	0.00E+00 4.83E-06 4.83E-06	0.00E+00 2.25E-06 2.25E-06	0.00E+00 4.48E-06 4.48E-06	0.00E+00 2.61E-06 2.61E-06
SI WALL	A 0.00E+00 P 1.29E-06 T 1.29E-06	0.00E+00 3.59E-06 3.59E-06	0.00E+00 3.47E-06 3.47E-06	4.76E-02 4.07E-05 4.76E-02	0.00E+00 2.14E-05 2.14E-05	0.00E+00 1.19E-05 1.19E-05	0.00E+00 3.72E-06 3.72E-06	0.00E+00 2.14E-06 2.14E-06
ULI WALL	A 0.00E+00 P 1.49E-06 T 1.49E-06	0.00E+00 2.87E-06 2.87E-06	0.00E+00 4.20E-06 4.20E-06	0.00E+00 3.03E-05 3.03E-05	8.65E-02 5.76E-05 8.65E-02	0.00E+00 5.43E-06 5.43E-06	0.00E+00 3.85E-06 3.85E-06	0.00E+00 3.32E-06 3.32E-06
LLI WALL	A 0.00E+00 P 4.05E-07 T 4.05E-07	0.00E+00 9.10E-06 9.10E-06	0.00E+00 1.80E-06 1.80E-06	0.00E+00 9.08E-06 9.08E-06	0.00E+00 4.27E-06 4.27E-06	1.41E-01 6.82E-06 1.41E-01	0.00E+00 1.18E-06 1.18E-06	0.00E+00 4.02E-07 4.02E-07
KIDNEYS	A 0.00E+00 P 1.52E-05 T 1.52E-05	0.00E+00 5.02E-07 5.02E-07	0.00E+00 4.41E-06 4.41E-06	0.00E+00 4.27E-06 4.27E-06	0.00E+00 3.78E-06 3.78E-06	0.00E+00 1.20E-06 1.20E-06	1.28E+01 9.62E-06 1.28E+01	0.00E+00 4.58E-06 4.58E-06
LIVER	A 0.00E+00 P 6.41E-06 T 6.41E-06	0.00E+00 4.03E-07 4.03E-07	0.00E+00 2.69E-06 2.69E-06	0.00E+00 2.48E-06 2.48E-06	0.00E+00 3.34E-06 3.34E-06	0.00E+00 5.03E-07 5.03E-07	0.00E+00 5.23E-06 5.23E-06	2.20E+00 2.40E-05 2.20E+00
LUNGS	A 0.00E+00 P 3.17E-06 T 3.17E-06	0.00E+00 9.21E-08 9.21E-08	0.00E+00 2.44E-06 2.44E-06	0.00E+00 4.70E-07 4.70E-07	0.00E+00 5.19E-07 5.19E-07	0.00E+00 1.84E-07 1.84E-07	0.00E+00 1.32E-06 1.32E-06	0.00E+00 3.25E-06 3.25E-06
RESP LYMPH	A 0.00E+00 P 3.17E-06 T 3.17E-06	0.00E+00 9.21E-08 9.21E-08	0.00E+00 2.44E-06 2.44E-06	0.00E+00 4.70E-07 4.70E-07	0.00E+00 5.19E-07 5.19E-07	0.00E+00 1.84E-07 1.84E-07	0.00E+00 1.32E-06 1.32E-06	0.00E+00 3.25E-06 3.25E-06
MUSCLE	A 0.00E+00 P 2.07E-06 T 2.07E-06	0.00E+00 2.38E-06 2.38E-06	0.00E+00 1.90E-06 1.90E-06	0.00E+00 2.08E-06 2.08E-06	0.00E+00 1.99E-06 1.99E-06	0.00E+00 2.28E-06 2.28E-06	0.00E+00 1.94E-06 1.94E-06	0.00E+00 1.52E-06 1.52E-06
OVARIES	A 0.00E+00 P 7.44E-07 T 7.44E-07	0.00E+00 6.59E-06 6.59E-06	0.00E+00 1.42E-06 1.42E-06	0.00E+00 1.29E-05 1.29E-05	0.00E+00 1.32E-05 1.32E-05	0.00E+00 2.20E-05 2.20E-05	0.00E+00 1.92E-06 1.92E-06	0.00E+00 6.60E-07 6.60E-07
PANCREAS	A 0.00E+00 P 1.15E-05 T 1.15E-05	0.00E+00 3.84E-07 3.84E-07	0.00E+00 2.26E-05 2.26E-05	0.00E+00 2.76E-06 2.76E-06	0.00E+00 2.62E-06 2.62E-06	0.00E+00 1.01E-06 1.01E-06	0.00E+00 9.06E-06 9.06E-06	0.00E+00 6.04E-06 6.04E-06
BONE	A 0.00E+00 P 1.83E-06 T 1.83E-06	0.00E+00 7.65E-07 7.65E-07	0.00E+00 7.99E-07 7.99E-07	0.00E+00 1.05E-06 1.05E-06	0.00E+00 9.46E-07 9.46E-07	0.00E+00 1.38E-06 1.38E-06	0.00E+00 1.31E-06 1.31E-06	0.00E+00 5.71E-07 5.71E-07
R MAR	A 0.00E+00 P 3.25E-06 T 3.25E-06	0.00E+00 1.62E-06 1.62E-06	0.00E+00 1.36E-06 1.36E-06	0.00E+00 3.29E-06 3.29E-06	0.00E+00 2.78E-06 2.78E-06	0.00E+00 4.10E-06 4.10E-06	0.00E+00 3.29E-06 3.29E-06	0.00E+00 1.39E-06 1.39E-06
Y MAR	A 0.00E+00 P 1.77E-06 T 1.77E-06	0.00E+00 7.05E-07 7.05E-07	0.00E+00 1.11E-06 1.11E-06	0.00E+00 1.45E-06 1.45E-06	0.00E+00 1.34E-06 1.34E-06	0.00E+00 1.69E-06 1.69E-06	0.00E+00 1.62E-06 1.62E-06	0.00E+00 1.44E-06 1.44E-06
ENDOSTEAL	A 0.00E+00 P 1.83E-06 T 1.83E-06	0.00E+00 7.65E-07 7.65E-07	0.00E+00 7.99E-07 7.99E-07	0.00E+00 1.05E-06 1.05E-06	0.00E+00 9.46E-07 9.46E-07	0.00E+00 1.38E-06 1.38E-06	0.00E+00 1.31E-06 1.31E-06	0.00E+00 5.71E-07 5.71E-07
SP IN	A 0.00E+00 P 9.67E-07 T 9.67E-07	0.00E+00 9.28E-07 9.28E-07	0.00E+00 8.30E-07 8.30E-07	0.00E+00 7.61E-07 7.61E-07	0.00E+00 7.63E-07 7.63E-07	0.00E+00 8.23E-07 8.23E-07	0.00E+00 9.13E-07 9.13E-07	0.00E+00 8.40E-07 8.40E-07
SPLEEN	A 0.00E+00 P 8.38E-06 T 8.38E-06	0.00E+00 3.32E-07 3.32E-07	0.00E+00 1.27E-05 1.27E-05	0.00E+00 2.11E-06 2.11E-06	0.00E+00 1.77E-06 1.77E-06	0.00E+00 1.38E-06 1.38E-06	0.00E+00 1.12E-05 1.12E-05	0.00E+00 1.47E-06 1.47E-06
TESTES	A 0.00E+00 P 1.11E-07 T 1.11E-07	0.00E+00 6.68E-06 6.68E-06	0.00E+00 1.39E-07 1.39E-07	0.00E+00 6.20E-07 6.20E-07	0.00E+00 7.47E-07 7.47E-07	0.00E+00 2.39E-06 2.39E-06	0.00E+00 2.22E-07 2.22E-07	0.00E+00 2.63E-07 2.63E-07
THYMUS	A 0.00E+00 P 1.05E-06 T 1.05E-06	0.00E+00 5.39E-08 5.39E-08	0.00E+00 7.66E-07 7.66E-07	0.00E+00 2.06E-07 2.06E-07	0.00E+00 2.24E-07 2.24E-07	0.00E+00 9.20E-08 9.20E-08	0.00E+00 3.24E-07 3.24E-07	0.00E+00 1.42E-06 1.42E-06
THYROID	A 0.00E+00 P 2.87E-07 T 2.87E-07	0.00E+00 1.84E-08 1.84E-08	0.00E+00 2.24E-07 2.24E-07	0.00E+00 6.58E-08 6.58E-08	0.00E+00 6.99E-08 6.99E-08	0.00E+00 3.19E-08 3.19E-08	0.00E+00 1.45E-07 1.45E-07	0.00E+00 2.66E-07 2.66E-07
UTERUS	A 0.00E+00 P 6.11E-07 T 6.11E-07	0.00E+00 1.57E-05 1.57E-05	0.00E+00 1.27E-06 1.27E-06	0.00E+00 1.15E-05 1.15E-05	0.00E+00 6.18E-06 6.18E-06	0.00E+00 7.46E-06 7.46E-06	0.00E+00 1.14E-06 1.14E-06	0.00E+00 5.61E-07 5.61E-07
T BODY	A 5.65E-02 P 2.27E-06 T 5.65E-02	6.35E-03 2.50E-06 6.35E-03	1.63E-04 2.39E-06 1.63E-04	4.35E-04 2.62E-06 4.35E-04	2.59E-04 2.56E-06 2.62E-04	3.22E-04 2.54E-06 3.25E-04	5.65E-02 2.28E-06 5.65E-02	5.65E-02 2.29E-06 5.65E-02

PG-213 CONT INUED

TARGET ORGANS		Y MAR	SKIN	SPLEEN	TESTES	THYROID	T BODY
ADRENALS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-02
	P	3.98E-09	3.57E-C9	3.46E-08	4.29E-10	1.11E-09	1.04E-08
	T	3.98E-09	3.57E-C9	3.46E-08	4.29E-10	1.11E-09	6.36E-02
BLAD WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-02
	P	1.52E-09	3.70E-C9	1.39E-09	2.71E-08	7.20E-11	1.02E-08
	T	1.52E-09	3.78E-C9	1.39E-09	2.71E-08	7.20E-11	6.36E-02
S WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-02
	P	3.95E-09	3.47E-C9	4.87E-08	5.15E-10	7.05E-10	8.97E-09
	T	3.95E-09	3.47E-C9	4.87E-08	5.15E-10	7.05E-10	6.36E-02
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-02
	P	5.38E-09	3.05E-C9	7.24E-09	2.82E-09	1.36E-10	1.02E-08
	T	5.38E-09	3.05E-C9	7.24E-09	2.82E-09	1.36E-10	6.36E-02
ULT WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-02
	P	4.46E-09	3.32E-C9	7.28E-09	1.97E-09	1.56E-10	9.86E-09
	T	4.46E-09	3.32E-C9	7.28E-09	1.97E-09	1.56E-10	6.36E-02
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-02
	P	4.23E-09	3.38E-C9	3.44E-09	1.30E-08	1.06E-10	1.02E-08
	T	4.23E-09	3.38E-C9	3.44E-09	1.30E-08	1.06E-10	6.36E-02
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-02
	P	6.23E-09	4.03E-C9	4.25E-08	6.81E-10	4.72E-10	9.29E-09
	T	6.23E-09	4.03E-C9	4.25E-08	6.81E-10	4.72E-10	6.36E-02
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-02
	P	5.76E-09	3.55E-C9	5.60E-09	4.34E-10	9.44E-10	9.25E-09
	T	5.76E-09	3.55E-C9	5.60E-09	4.34E-10	9.44E-10	6.36E-02
LUNGS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-02
	P	5.31E-09	3.66E-C9	1.11E-08	1.21E-10	5.84E-09	7.65E-09
	T	5.31E-09	3.66E-C9	1.11E-08	1.21E-10	5.84E-09	6.36E-02
RESP LYMPH	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-02
	P	5.31E-09	3.66E-C9	1.11E-08	1.21E-10	5.84E-09	7.65E-09
	T	5.31E-09	3.66E-C9	1.11E-08	1.21E-10	5.84E-09	6.36E-02
MUSCLE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-02
	P	5.38E-09	4.69E-C9	7.64E-09	6.47E-09	7.13E-09	7.53E-09
	T	5.38E-09	4.69E-C9	7.64E-09	6.47E-09	7.13E-09	6.36E-02
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-02
	P	4.68E-09	2.63E-C9	4.02E-09	0.00E+00	1.26E-10	7.65E-09
	T	4.68E-09	2.63E-C9	4.02E-09	0.00E+00	1.26E-10	6.36E-02
PANCREAS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-02
	P	5.96E-09	2.80E-C9	9.64E-08	4.00E-10	3.24E-10	8.68E-09
	T	5.96E-09	2.80E-C9	9.64E-08	4.00E-10	3.24E-10	6.36E-02
BONE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.18E-01
	P	1.32E-08	4.48E-C9	3.97E-09	3.43E-09	3.87E-09	7.61E-09
	T	1.32E-08	4.48E-C9	3.97E-09	3.43E-09	3.87E-09	3.18E-01
R MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-02
	P	1.37E-08	4.15E-C9	5.83E-09	2.71E-09	4.21E-09	8.39E-09
	T	1.37E-08	4.15E-C9	5.83E-09	2.71E-09	4.21E-09	6.36E-02
Y MAR	A	2.97E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-02
	P	2.24E-08	4.74E-C9	5.93E-09	1.49E-09	2.07E-09	7.13E-09
	T	2.97E+00	4.74E-C9	5.93E-09	1.49E-09	2.07E-09	6.36E-02
ENDOSTEAL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-02
	P	1.46E-08	4.48E-C9	3.97E-09	3.43E-09	3.87E-09	7.61E-09
	T	1.46E-08	4.48E-C9	3.97E-09	3.43E-09	3.87E-09	6.36E-02
SKIN	A	0.00E+00	1.71E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-02
	P	5.07E-09	1.08E-C8	3.38E-09	8.23E-09	4.70E-09	4.85E-09
	T	5.07E-09	1.71E+00	3.38E-09	8.23E-09	4.70E-09	6.36E-02
SPLEEN	A	0.00E+00	0.00E+00	2.47E+01	0.00E+00	0.00E+00	6.36E-02
	P	5.54E-09	3.88E-C9	6.64E-07	4.98E-10	9.26E-10	9.21E-09
	T	5.54E-09	3.88E-C9	2.47E+01	4.98E-10	9.26E-10	6.36E-02
TESTES	A	0.00E+00	0.00E+00	0.00E+00	1.27E+02	0.00E+00	6.36E-02
	P	4.92E-09	4.65E-C9	5.63E-10	1.85E-06	2.93E-11	9.41E-09
	T	4.92E-09	4.65E-C9	5.63E-10	1.27E+02	2.93E-11	6.36E-02
THYMUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-02
	P	2.09E-09	4.16E-C9	3.23E-09	8.19E-11	2.11E-08	7.15E-09
	T	2.09E-09	4.16E-C9	3.23E-09	8.19E-11	2.11E-08	6.36E-02
THYROID	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.22E+02	6.36E-02
	P	2.54E-09	4.06E-C9	0.43E-10	2.93E-11	2.48E-06	7.93E-09
	T	2.54E-09	4.06E-C9	0.43E-10	2.93E-11	2.22E+02	6.36E-02
UTERUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-02
	P	3.54E-09	3.58E-C9	2.93E-09	0.00E+00	1.20E-10	1.10E-08
	T	3.54E-09	3.58E-C9	2.93E-09	0.00E+00	1.20E-10	6.36E-02
T BODY	A	6.36E-02	6.36E-C2	6.36E-02	6.36E-02	6.36E-02	8.17E-02
	P	6.67E-09	4.50E-C9	8.73E-09	7.44E-09	6.78E-09	7.51E-09
	T	6.36E-02	6.36E-C2	6.36E-02	6.36E-02	6.36E-02	8.17E-02

S FACTORS (REM/MICROCURIE-DAY) FOR PO-215

TARGET ORGANS		SOURCE ORGANS							
		ADRENALS	BLAD CNT	S CNT	SI CNT	ULI CNT	LLI CNT	KIDNEYS	LIVER
ADRENALS	A	2.80E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	2.80E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BLAD WALL	A	0.00E+00	9.80E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	9.80E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S WALL	A	0.00E+00	0.00E+00	7.56E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	7.56E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	4.72E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	4.72E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ULI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.59E-02	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.59E-02	0.00E+00	0.00E+00	0.00E+00
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-01	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-01	0.00E+00	0.00E+00
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E+01	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E+01	0.00E+00
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.18E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.18E+00
LUNGS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RESP LYMPH	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MUSCLE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PANCREAS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BONE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
R MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Y MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ENDOSTEAL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SKIN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SPL'N	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TESTES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
THYMUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
THYROID	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
UTERUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
T BODY	A	5.60E-02	6.30E-03	1.62E-04	4.32E-04	2.58E-04	3.20E-04	5.60E-02	5.60E-02
	T	5.60E-02	6.30E-03	1.62E-04	4.32E-04	2.58E-04	3.20E-04	5.60E-02	5.60E-02

PD-215 CONTINUED

TARGET ORGANS	SOURCE ORGANS								
		LUNGS	RESP LYMPH	MUSCLE	OVARIES	PANCREAS	COR BONE	CAN BONE	R MAR
ADRENALS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BLAD WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
S WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ULI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LUNGS	A	3.92E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	3.92E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RESP LYMPH	A	0.00E+00	2.41E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	2.41E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MUSCLE	A	0.00E+00	0.00E+00	1.40E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	1.40E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	3.56E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	3.56E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PANCREAS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.92E+01	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.92E+01	0.00E+00	0.00E+00	0.00E+00
BONE		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.92E+00	3.92E+00	0.00E+00
		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.92E+00	3.92E+00	0.00E+00
R MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E+00	2.61E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E+00	2.61E+00
Y MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ENDOSTEAL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.04E+00	5.04E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.04E+00	5.04E+00	0.00E+00
SKIN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SPLEEN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TESTES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
THYMUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
THYROID	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
UTERUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
T BODY	A	5.60E-02	5.60E-02	5.60E-02	5.60E-02	5.60E-02	2.80E-01	2.80E-01	5.60E-02
	T	5.60E-02	5.60E-02	5.60E-02	5.60E-02	5.60E-02	2.80E-01	2.80E-01	5.60E-02

AT-217 CONTINUED
 SOURCE ORGANS

TARGET ORGANS		Y MAR	SKIN	SPLEEN	TESTES	THYROID	T BODY
ADRENALS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-02
	P	5.86E-08	3.54E-C8	3.18E-07	3.60E-09	1.02E-08	1.19E-07
	T	5.86E-C8	3.54E-C8	3.18E-07	3.60E-09	1.02E-08	5.36E-02
EL AD WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-02
	P	1.41E-08	3.24E-C8	7.12E-09	2.65E-07	4.73E-10	9.47E-08
	T	1.41E-08	3.24E-C8	7.12E-09	2.65E-07	4.73E-10	5.36E-02
S WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-02
	P	3.90E-08	3.36E-C8	5.14E-07	5.85E-09	6.31E-09	9.43E-08
	T	3.90E-08	3.36E-C8	5.14E-07	5.85E-09	6.31E-09	5.36E-02
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-02
	P	5.55E-08	2.87E-C8	7.29E-08	2.76E-08	4.24E-10	1.04E-07
	T	5.55E-C8	2.87E-C8	7.29E-08	2.76E-08	4.24E-10	5.36E-02
ULI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-02
	P	4.55E-08	2.59E-C8	7.24E-08	1.71E-08	5.57E-10	1.02E-07
	T	4.55E-C8	2.59E-C8	7.24E-08	1.71E-08	5.57E-10	5.36E-02
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-02
	P	4.38E-08	3.12E-C8	3.65E-08	1.50E-07	7.55E-10	1.02E-07
	T	4.38E-C8	3.12E-C8	3.65E-08	1.50E-07	7.55E-10	5.36E-02
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-02
	P	6.35E-08	3.50E-C8	4.48E-07	5.13E-09	2.53E-09	9.22E-08
	T	6.35E-C8	3.50E-C8	4.48E-07	5.13E-09	2.53E-09	5.36E-02
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-02
	P	5.70E-08	3.51E-C8	5.61E-08	2.65E-09	8.17E-09	9.08E-08
	T	5.70E-C8	3.51E-C8	5.61E-08	2.65E-09	8.17E-09	5.36E-02
LUNGS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-02
	P	5.24E-08	3.55E-C8	1.15E-07	7.43E-10	5.53E-08	8.09E-08
	T	5.24E-08	3.55E-C8	1.15E-07	7.43E-10	5.53E-08	5.36E-02
RESP LYMPH	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-02
	P	5.24E-08	3.55E-C8	1.15E-07	7.43E-10	5.53E-08	8.09E-08
	T	5.24E-08	3.55E-C8	1.15E-07	7.43E-10	5.53E-08	5.36E-02
MUSCLE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-02
	P	5.38E-08	4.72E-C8	7.72E-08	6.48E-08	7.21E-08	7.53E-08
	T	5.38E-C8	4.72E-C8	7.72E-08	6.48E-08	7.21E-08	5.36E-02
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-02
	P	4.72E-08	1.66E-C8	5.38E-08	0.00E+00	8.98E-10	8.97E-08
	T	4.72E-C8	1.66E-C8	5.38E-08	0.00E+00	8.98E-10	5.36E-02
PANCREAS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-02
	P	6.95E-08	3.08E-C8	1.02E-06	2.16E-09	3.79E-09	9.29E-08
	T	6.95E-08	3.08E-C8	1.02E-06	2.16E-09	3.79E-09	5.36E-02
BONE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.68E-01
	P	1.35E-07	4.46E-C8	4.11E-08	3.53E-08	4.02E-08	7.93E-08
	T	1.35E-07	4.46E-C8	4.11E-08	3.53E-08	4.02E-08	2.68E-01
R MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-02
	P	1.40E-07	4.16E-C8	6.09E-08	2.82E-08	4.45E-08	8.76E-08
	T	1.40E-07	4.16E-C8	6.09E-08	2.82E-08	4.45E-08	5.36E-02
Y MAR	A	2.50E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-02
	P	2.29E-07	4.71E-C8	6.18E-08	1.50E-08	2.13E-08	7.40E-08
	T	2.50E+00	4.71E-C8	6.18E-08	1.50E-08	2.13E-08	5.36E-02
ENDOSTEAL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-02
	P	1.49E-07	4.46E-C8	4.11E-08	3.53E-08	4.02E-08	7.93E-08
	T	1.49E-07	4.46E-C8	4.11E-08	3.53E-08	4.02E-08	5.36E-02
SKIN	A	0.00E+00	1.44E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-02
	P	5.04E-08	1.09E-C7	3.27E-08	8.29E-08	4.50E-08	4.66E-08
	T	5.04E-08	1.44E+00	3.27E-08	8.29E-08	4.50E-08	5.36E-02
SPLEEN	A	0.00E+00	0.00E+00	2.08E+01	0.00E+00	0.00E+00	5.36E-02
	P	5.17E-08	3.43E-C8	6.81E-06	6.38E-09	6.68E-09	9.37E-08
	T	5.17E-08	3.43E-C8	2.08E+01	6.38E-09	6.68E-09	5.36E-02
TESTES	A	0.00E+00	0.00E+00	0.00E+00	1.07E+02	0.00E+00	5.36E-02
	P	5.17E-08	4.48E-C8	4.89E-09	1.86E-05	1.66E-10	9.49E-08
	T	5.17E-08	4.48E-C8	4.89E-09	1.07E+02	1.66E-10	5.36E-02
THYMUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-02
	P	2.11E-08	4.47E-C8	2.46E-08	5.49E-10	2.31E-07	8.41E-08
	T	2.11E-08	4.47E-C8	2.46E-08	5.49E-10	2.31E-07	5.36E-02
THYROID	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.88E+02	5.36E-02
	P	2.71E-08	4.37E-C8	7.62E-09	1.66E-10	2.50E-05	7.42E-08
	T	2.71E-08	4.37E-C8	7.62E-09	1.66E-10	1.88E+02	5.36E-02
UTERUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-02
	P	3.49E-08	2.50E-C8	2.42E-08	0.00E+00	8.51E-10	9.29E-08
	T	3.49E-08	2.50E-C8	2.42E-08	0.00E+00	8.51E-10	5.36E-02
T BODY	A	5.36E-02	5.36E-C2	5.36E-02	5.36E-02	5.36E-02	6.89E-02
	P	6.71E-08	4.74E-C8	8.87E-08	7.45E-08	6.83E-08	7.56E-08
	T	5.36E-02	5.36E-C2	5.36E-02	5.36E-02	5.36E-02	6.89E-02

S FACTORS (REM/MICROCURIE-DAY) FOR RN-219

TARGET ORGANS		SOURCE ORGANS							
		ADRENALS	BLAD CENT	S CONT	SI CONT	ULI CONT	LLI CONT	KIDNEYS	LIVER
ADRENALS	A	2.58E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	2.11E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.58E-03	2.10E-06	2.30E-05	1.43E-05	9.57E-06	4.75E-06	1.11E-04	5.00E-05
	T	2.58E+02	2.10E-06	2.30E-05	1.43E-05	9.57E-06	4.75E-06	1.11E-04	5.00E-05
BLAD WALL	A	0.00E+00	9.03E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	7.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.15E-06	7.26E-04	3.26E-06	2.07E-05	2.05E-05	6.21E-05	3.42E-06	2.41E-06
	T	1.15E-06	9.04E+00	3.26E-06	2.97E-05	2.05E-05	6.21E-05	3.42E-06	2.41E-06
S WALL	A	0.00E+00	0.00E+00	6.97E-02	0.00E+00	0.00E+00	2.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	5.91E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.95E-05	2.59E-06	5.16E-04	3.57E-05	3.70E-05	1.80E-05	3.39E-05	1.53E-05
	T	2.95E-05	2.59E-06	7.08E-02	3.57E-05	3.70E-05	1.80E-05	3.39E-05	1.53E-05
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	4.35E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	3.69E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	9.00E-06	2.78E-05	2.64E-05	3.12E-04	1.66E-04	9.22E-05	2.83E-05	1.64E-05
	T	9.00E-06	2.78E-05	2.64E-05	4.42E-02	1.66E-04	9.22E-05	2.83E-05	1.64E-05
ULI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.92E-02	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.71E-04	0.00E+00	0.00E+00	0.00E+00
	P	9.78E-06	2.36E-05	3.46E-05	2.34E-04	4.25E-04	4.26E-05	2.89E-05	2.52E-05
	T	9.78E-06	2.36E-05	3.46E-05	2.34E-04	8.03E-02	4.26E-05	2.89E-05	2.52E-05
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-01	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-03	0.00E+00	0.00E+00
	P	2.84E-06	7.14E-05	1.29E-05	7.01E-05	3.01E-05	5.08E-04	8.60E-06	2.76E-06
	T	2.84E-06	7.14E-05	1.29E-05	7.01E-05	3.01E-05	1.31E-01	8.60E-06	2.76E-06
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E+01	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.53E-04	0.00E+00
	P	1.16E-04	3.26E-06	3.45E-05	3.11E-05	2.76E-05	9.05E-06	7.21E-04	3.83E-05
	T	1.16E-04	3.26E-06	3.45E-05	3.11E-05	2.76E-05	9.05E-06	1.17E+01	3.83E-05
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-04
	P	4.96E-05	2.43E-06	2.01E-05	1.84E-05	2.56E-05	3.10E-06	3.93E-05	2.57E-04
	T	4.96E-05	2.43E-06	2.01E-05	1.84E-05	2.56E-05	3.10E-06	3.93E-05	2.01E+00
LUNGS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.44E-05	3.55E-07	1.77E-05	2.88E-06	3.03E-06	9.33E-07	8.91E-06	2.46E-05
	T	2.44E-05	3.55E-07	1.77E-05	2.88E-06	3.03E-06	9.33E-07	8.91E-06	2.46E-05
RESP LYMPH	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.44E-05	3.55E-07	1.77E-05	2.88E-06	3.03E-06	9.33E-07	8.91E-06	2.46E-05
	T	2.44E-05	3.55E-07	1.77E-05	2.88E-06	3.03E-06	9.33E-07	8.91E-06	2.46E-05
MUSCLE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.50E-05	1.78E-05	1.41E-05	1.56E-05	1.48E-05	1.70E-05	1.42E-05	1.10E-05
	T	1.50E-05	1.78E-05	1.41E-05	1.56E-05	1.48E-05	1.70E-05	1.42E-05	1.10E-05
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.69E-06	7.09E-05	4.63E-06	9.84E-05	1.21E-04	1.82E-04	1.20E-05	3.66E-06
	T	5.69E-06	7.09E-05	4.63E-06	9.84E-05	1.21E-04	1.82E-04	1.20E-05	3.66E-06

RN-219 CONTINUED

TARGET ORGANS	SOURCE ORGANS								
	ADRENALS	BLAD CCNT	S CONT	SI CONT	ULI CONT	LLI CONT	KIDNEYS	LIVER	
PANCREAS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	8.54E-05	2.24E-06	1.79E-04	2.07E-05	2.16E-05	7.22E-06	6.5CE-05	4.28E-05
	T	8.54E-05	2.24E-06	1.79E-04	2.07E-05	2.16E-05	7.22E-06	6.5CE-05	4.28E-05
BONE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.53E-05	6.56E-06	6.89E-06	9.26E-06	8.41E-06	1.20E-05	1.10E-05	8.45E-06
	T	1.53E-05	6.56E-06	6.89E-06	9.26E-06	8.41E-06	1.20E-05	1.10E-05	8.45E-06
R MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.78E-05	1.55E-05	1.22E-05	3.01E-05	2.60E-05	3.65E-05	2.84E-05	1.23E-05
	T	2.78E-05	1.55E-05	1.22E-05	3.01E-05	2.60E-05	3.65E-05	2.84E-05	1.23E-05
Y MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.48E-05	6.42E-06	9.58E-06	1.29E-05	1.20E-05	1.49E-05	1.36E-05	1.25E-05
	T	1.48E-05	6.42E-06	9.58E-06	1.29E-05	1.20E-05	1.49E-05	1.36E-05	1.25E-05
ENDOSTEAL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.53E-05	6.56E-06	6.89E-06	9.26E-06	8.41E-06	1.20E-05	1.10E-05	8.45E-06
	T	1.53E-05	6.56E-06	6.89E-06	9.26E-06	8.41E-06	1.20E-05	1.10E-05	8.45E-06
SKIN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.26E-06	6.03E-06	5.24E-06	4.90E-06	5.00E-06	5.56E-06	6.17E-06	5.62E-06
	T	6.26E-06	6.03E-06	5.24E-06	4.90E-06	5.00E-06	5.56E-06	6.17E-06	5.62E-06
SPLEEN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.60E-05	1.59E-06	9.86E-05	1.57E-05	1.33E-05	8.51E-06	8.61E-05	9.65E-06
	T	6.60E-05	1.59E-06	9.86E-05	1.57E-05	1.33E-05	8.51E-06	8.61E-05	9.65E-06
TESTES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.66E-07	4.80E-05	4.76E-07	3.57E-06	4.04E-06	2.05E-05	1.31E-06	9.67E-07
	T	5.66E-07	4.80E-05	4.76E-07	3.57E-06	4.04E-06	2.05E-05	1.31E-06	9.67E-07
THYMUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.33E-06	2.34E-07	2.43E-06	1.21E-06	1.34E-06	4.67E-07	2.88E-06	9.46E-06
	T	6.33E-06	2.34E-07	2.43E-06	1.21E-06	1.34E-06	4.67E-07	2.88E-06	9.46E-06
THYROID	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.77E-06	6.16E-08	1.34E-06	3.02E-07	3.26E-07	1.28E-07	7.86E-07	2.06E-06
	T	1.77E-06	6.16E-08	1.34E-06	3.02E-07	3.26E-07	1.28E-07	7.86E-07	2.06E-06
UTERUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.47E-05	1.54E-04	8.55E-06	9.12E-05	4.67E-05	6.47E-05	9.75E-06	4.14E-06
	T	1.47E-05	1.54E-04	8.55E-06	9.12E-05	4.67E-05	6.47E-05	9.75E-06	4.14E-06
T BODY	A	5.16E-02	5.81E-03	1.49E-04	3.98E-04	2.38E-04	2.95E-04	5.16E-02	5.16E-02
	E	4.22E-06	4.75E-07	1.27E-06	3.38E-06	2.01E-06	2.50E-06	4.22E-06	4.22E-06
	P	1.68E-05	1.88E-05	1.78E-05	1.99E-05	1.93E-05	1.92E-05	1.65E-05	1.70E-05
	T	5.16E-02	5.83E-03	1.68E-04	4.21E-04	2.59E-04	3.17E-04	5.16E-02	5.16E-02

RN-219 CONT INUED

TARGET ORGANS		SOURCE ORGANS							
		LUNGS	RESP LYMPH	MUSCLE	OVARIES	PANCREAS	COR BONE	CAN BONE	R MAR
ADRENALS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.47E-05	2.47E-05	1.50E-05	4.77E-06	8.47E-05	1.45E-05	1.45E-05	2.28E-05
	T	2.47E-05	2.47E-05	1.50E-05	4.77E-06	8.47E-05	1.45E-05	1.45E-05	2.28E-05
BLAD WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.05E-07	6.05E-07	1.78E-05	6.85E-05	1.74E-06	5.58E-06	5.58E-06	7.39E-06
	T	6.05E-07	6.05E-07	1.78E-05	6.85E-05	1.74E-06	5.58E-06	5.58E-06	7.39E-06
S WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.86E-05	1.86E-05	1.40E-05	8.15E-06	1.79E-04	5.84E-06	5.84E-06	1.06E-05
	T	1.86E-05	1.86E-05	1.40E-05	8.15E-06	1.79E-04	5.84E-06	5.84E-06	1.06E-05
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.33E-06	2.33E-06	1.56E-05	1.19E-04	1.83E-05	7.85E-06	7.85E-06	2.65E-05
	T	2.33E-06	2.33E-06	1.56E-05	1.19E-04	1.83E-05	7.85E-06	7.85E-06	2.65E-05
UL I WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.02E-06	3.02E-06	1.63E-05	1.12E-04	2.20E-05	7.28E-06	7.28E-06	2.10E-05
	T	3.02E-06	3.02E-06	1.63E-05	1.12E-04	2.20E-05	7.28E-06	7.28E-06	2.10E-05
UL I WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	9.62E-07	9.62E-07	1.70E-05	1.44E-04	5.59E-06	1.02E-05	1.02E-05	2.59E-05
	T	9.62E-07	9.62E-07	1.70E-05	1.44E-04	5.59E-06	1.02E-05	1.02E-05	2.59E-05
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	9.55E-06	9.55E-06	1.42E-05	1.04E-05	6.35E-05	9.15E-06	9.15E-06	2.31E-05
	T	9.55E-06	9.55E-06	1.42E-05	1.04E-05	6.35E-05	9.15E-06	9.15E-06	2.31E-05
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.45E-05	2.45E-05	1.10E-05	5.98E-06	4.29E-05	6.88E-06	6.88E-06	1.00E-05
	T	2.45E-05	2.45E-05	1.10E-05	5.98E-06	4.29E-05	6.88E-06	6.88E-06	1.00E-05
LUNGS	A	3.61E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	2.95E-04	2.55E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.48E-04	1.48E-04	1.33E-05	8.90E-07	2.47E-05	9.86E-06	9.86E-06	1.21E-05
	T	3.61E+00	4.44E-04	1.33E-05	8.90E-07	2.47E-05	9.86E-06	9.86E-06	1.21E-05
RESP LYMPH	A	0.00E+00	2.41E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	2.95E-04	1.50E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.48E-04	1.48E-04	1.33E-05	8.90E-07	2.47E-05	9.86E-06	9.86E-06	1.21E-05
	T	4.44E-04	2.41E+12	1.33E-05	8.90E-07	2.47E-05	9.86E-06	9.86E-06	1.21E-05
MUSCLE	A	0.00E+00	0.00E+00	1.29E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	1.06E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.33E-05	1.33E-05	1.47E-05	1.99E-05	1.80E-05	1.08E-05	1.08E-05	1.28E-05
	T	1.33E-05	1.73E-05	1.29E-01	1.99E-05	1.80E-05	1.08E-05	1.08E-05	1.28E-05
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	3.29E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	2.69E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.35E-06	1.35E-06	1.99E-05	7.76E-03	3.46E-06	8.68E-06	8.68E-06	2.89E-05
	T	1.35E-06	1.35E-06	1.99E-05	3.29E+02	3.46E-06	8.68E-06	8.68E-06	2.89E-05

RN-219 CONTINUED
 SOURCE ORGANS

TARGET ORGANS		LUNGS	RESP LYMPH	MUSCLE	OVARIES	PANCREAS	COR BONE	CAN BONE	R MAR
PANCREAS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.61E+01	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-03	0.00E+00	0.00E+00	0.00E+00
	P	2.65E-05	2.65E-05	1.80E-05	5.19E-06	2.10E-03	1.01E-05	1.01E-05	1.67E-05
	T	2.65E-05	2.65E-05	1.80E-05	5.19E-06	3.61E+01	1.01E-05	1.01E-05	1.67E-05
BONE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.61E+00	3.61E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.91E-05	3.96E-05	1.30E-05
	P	1.12E-05	1.12E-05	1.08E-05	1.10E-05	1.06E-05	3.71E-05	3.71E-05	2.48E-05
	T	1.12E-05	1.12E-05	1.08E-05	1.10E-05	1.06E-05	3.61E+00	3.61E+00	3.78E-05
F MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E+00	2.41E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-06	6.51E-03	1.51E-04
	P	1.42E-05	1.42E-05	1.53E-05	3.75E-05	2.03E-05	3.32E-05	3.32E-05	7.96E-05
	T	1.42E-05	1.42E-05	1.53E-05	3.75E-05	2.03E-05	3.43E-05	1.19E+00	2.41E+00
Y MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.17E-05	1.17E-05	1.21E-05	1.47E-05	1.24E-05	3.20E-05	3.20E-05	3.06E-05
	T	1.17E-05	1.17E-05	1.21E-05	1.47E-05	1.24E-05	3.20E-05	3.20E-05	3.06E-05
ENDOSTEAL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.33E+00	5.33E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.62E-05	6.59E-05	5.45E-05
	P	1.12E-05	1.12E-05	1.08E-05	1.10E-05	1.06E-05	3.71E-05	3.71E-05	3.34E-05
	T	1.12E-05	1.12E-05	1.08E-05	1.10E-05	1.06E-05	5.33E+00	5.33E+00	8.80E-05
SKIN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.29E-06	6.29E-06	8.36E-06	4.87E-06	4.69E-06	7.95E-06	7.95E-06	7.08E-06
	T	6.29E-06	6.29E-06	8.36E-06	4.87E-06	4.69E-06	7.95E-06	7.95E-06	7.08E-06
SPLEEN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.24E-05	2.24E-05	1.47E-05	6.15E-06	1.92E-04	7.36E-06	7.36E-06	8.76E-06
	T	2.24E-05	2.24E-05	1.47E-05	6.15E-06	1.92E-04	7.36E-06	7.36E-06	8.76E-06
TESTES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.77E-07	1.77E-07	1.20E-05	0.00E+00	6.98E-07	6.05E-06	6.05E-06	3.64E-06
	T	1.77E-07	1.77E-07	1.20E-05	0.00E+00	6.98E-07	6.05E-06	6.05E-06	3.64E-06
THYMUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.88E-05	3.88E-05	2.35E-05	4.81E-07	7.03E-06	5.98E-06	5.98E-06	6.28E-06
	T	3.88E-05	3.88E-05	2.35E-05	4.81E-07	7.03E-06	5.98E-06	5.98E-06	6.28E-06
THYROID	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	9.99E-06	9.99E-06	1.35E-05	1.25E-07	1.68E-06	1.01E-05	1.01E-05	8.06E-06
	T	9.99E-06	9.99E-06	1.35E-05	1.25E-07	1.68E-06	1.01E-05	1.01E-05	8.06E-06
UTERUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	9.67E-07	9.67E-07	2.16E-05	1.99E-04	6.36E-06	6.03E-06	6.03E-06	2.15E-05
	T	9.67E-07	9.67E-07	2.16E-05	1.99E-04	6.36E-06	6.03E-06	6.03E-06	2.15E-05
T BODY	A	5.16E-02	5.16E-02	5.16E-02	5.16E-02	5.16E-02	2.58E-01	2.58E-01	5.16E-02
	E	4.22E-06	4.22E-06	4.22E-06	4.22E-06	4.22E-06	4.22E-06	4.22E-06	4.22E-06
	P	1.46E-05	1.46E-05	1.41E-05	2.03E-05	1.9E-05	1.44E-05	1.44E-05	1.60E-05
	T	5.16E-02	5.16E-02	5.16E-02	5.16E-02	5.16E-02	2.58E-01	2.58E-01	5.16E-02

RN-219 CONTINUED
 SOURCE ORGANS

TARGET ORGANS

		Y MAR	SKIN	SPLEEN	TESTES	THYROID	T BODY
ADRENALS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.16E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.22E-06
	P	1.29E-05	7.61E-06	6.32E-05	5.66E-07	1.77E-06	2.04E-05
	T	1.29E-05	7.61E-06	6.32E-05	5.66E-07	1.77E-06	5.16E-02
BLAD WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.16E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.22E-06
	P	3.25E-06	5.75E-06	1.54E-06	4.95E-05	6.22E-08	1.79E-05
	T	3.25E-06	5.75E-06	1.54E-06	4.95E-05	6.22E-08	5.16E-02
S WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.16E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.22E-06
	P	7.46E-06	5.58E-06	2.72E-05	7.79E-07	7.95E-07	1.85E-05
	T	7.46E-06	5.58E-06	2.72E-05	7.79E-07	7.95E-07	5.16E-02
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.16E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.22E-06
	P	1.07E-05	5.15E-06	1.41E-05	4.69E-06	1.20E-07	1.99E-05
	T	1.07E-05	5.15E-06	1.41E-05	4.69E-06	1.20E-07	5.16E-02
ULI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.16E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.22E-06
	P	9.19E-06	5.18E-06	1.31E-05	3.47E-06	1.09E-07	1.88E-05
	T	9.19E-06	5.18E-06	1.31E-05	3.47E-06	1.09E-07	5.16E-02
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.16E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.22E-06
	P	8.78E-06	5.45E-06	6.65E-06	2.83E-05	1.06E-07	1.83E-05
	T	8.78E-06	5.45E-06	6.65E-06	2.83E-05	1.06E-07	5.16E-02
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.16E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.22E-06
	P	1.15E-05	6.52E-06	8.77E-05	7.60E-07	4.32E-07	1.75E-05
	T	1.15E-05	6.52E-06	8.77E-05	7.60E-07	4.32E-07	5.16E-02
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.16E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.22E-06
	P	1.04E-05	6.17E-06	1.05E-05	4.53E-07	1.36E-06	1.69E-05
	T	1.04E-05	6.17E-06	1.05E-05	4.53E-07	1.36E-06	5.16E-02
LUNGS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.16E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.22E-06
	P	9.92E-06	6.57E-06	2.23E-05	1.29E-07	1.00E-05	1.49E-05
	T	9.92E-06	6.57E-06	2.23E-05	1.29E-07	1.00E-05	5.16E-02
RESP LYMPH	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.16E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.22E-06
	P	9.92E-06	6.57E-06	2.23E-05	1.29E-07	1.00E-05	1.49E-05
	T	9.92E-06	6.57E-06	2.23E-05	1.29E-07	1.00E-05	5.16E-02
MUSCLE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.16E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.22E-06
	P	9.79E-06	8.36E-06	1.47E-05	1.20E-05	1.35E-05	1.41E-05
	T	9.79E-06	8.36E-06	1.47E-05	1.20E-05	1.35E-05	5.16E-02
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.16E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.22E-06
	P	1.17E-05	4.07E-06	7.86E-06	0.00E+00	1.24E-07	1.79E-05
	T	1.17E-05	4.07E-06	7.86E-06	0.00E+00	1.24E-07	5.16E-02

S FACTORS (REM/MICROCURIE-DAY) FOR FR-221

TARGET ORGANS		SOURCE ORGANS							
		ADRENALS	BLAD CENT	S CNT	SI CNT	ULI CNT	LLI CNT	KIDNEYS	LIVER
ADRENALS	A	2.41E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	3.33E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.90E-03	1.00E-06	1.36E-05	8.53E-06	5.17E-06	2.54E-06	5.74E-05	2.82E-05
	T	2.41E+02	1.00E-06	1.36E-05	8.53E-06	5.17E-06	2.54E-06	5.74E-05	2.82E-05
BLAD WALL	A	0.00E+00	8.43E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	1.16E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.69E-07	4.08E-04	1.34E-06	1.49E-05	1.20E-05	3.70E-05	1.74E-06	9.36E-07
	T	6.69E-07	8.43E+00	1.34E-06	1.49E-05	1.20E-05	3.70E-05	1.74E-06	9.36E-07
S WALL	A	0.00E+00	0.00E+00	6.50E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	9.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.65E-05	1.58E-06	2.91E-04	2.07E-05	2.11E-05	1.00E-05	1.91E-05	1.09E-05
	T	1.65E-05	1.58E-06	6.62E-02	2.07E-05	2.11E-05	1.00E-05	1.91E-05	1.09E-05
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	4.06E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	5.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.78E-06	1.62E-05	1.47E-05	1.91E-04	9.43E-05	5.29E-05	1.61E-05	9.40E-06
	T	4.78E-06	1.62E-05	1.47E-05	4.14E-02	9.43E-05	5.29E-05	1.61E-05	9.40E-06
ULI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.39E-02	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-03	0.00E+00	0.00E+00	0.00E+00
	P	5.20E-06	1.31E-05	2.00E-05	1.37E-04	2.41E-04	2.40E-05	1.62E-05	1.39E-05
	T	5.20E-06	1.31E-05	2.00E-05	1.37E-04	7.52E-02	2.40E-05	1.62E-05	1.39E-05
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-01	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.73E-03	0.00E+00	0.00E+00
	P	1.31E-06	4.03E-05	7.25E-06	4.06E-05	1.70E-05	2.87E-04	4.69E-06	1.35E-06
	T	1.31E-06	4.03E-05	7.25E-06	4.06E-05	1.70E-05	1.22E-01	4.69E-06	1.35E-06
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E+01	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.50E-03	0.00E+00
	P	6.54E-05	1.59E-06	1.99E-05	1.72E-05	1.56E-05	5.31E-06	4.22E-04	2.17E-05
	T	6.54E-05	1.59E-06	1.99E-05	1.72E-05	1.56E-05	5.31E-06	1.09E+01	2.17E-05
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.59E-04
	P	2.80E-05	1.19E-06	1.11E-05	1.04E-05	1.46E-05	1.59E-06	2.17E-05	1.48E-04
	T	2.80E-05	1.19E-06	1.11E-05	1.04E-05	1.46E-05	1.59E-06	2.17E-05	1.87E+00
LUNGS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.40E-05	1.50E-07	9.61E-06	1.42E-06	1.55E-06	4.87E-07	4.75E-06	1.41E-05
	T	1.40E-05	1.50E-07	9.61E-06	1.42E-06	1.55E-06	4.87E-07	4.75E-06	1.41E-05
RESP LYMPH	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.40E-05	1.50E-07	9.61E-06	1.42E-06	1.55E-06	4.87E-07	4.75E-06	1.41E-05
	T	1.40E-05	1.50E-07	9.61E-06	1.42E-06	1.55E-06	4.87E-07	4.75E-06	1.41E-05
MUSCLE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	8.27E-06	9.59E-06	7.89E-06	8.74E-06	8.29E-06	9.53E-06	7.86E-06	6.08E-06
	T	8.27E-06	9.59E-06	7.89E-06	8.74E-06	8.29E-06	9.53E-06	7.86E-06	6.08E-06
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.25E-06	4.25E-05	2.49E-06	5.95E-05	6.57E-05	1.11E-04	6.86E-06	2.67E-06
	T	3.25E-06	4.25E-05	2.49E-06	5.95E-05	6.57E-05	1.11E-04	6.86E-06	2.67E-06

TARGET ORGANS		FR-221 CONTINUED							
		SOURCE ORGANS							
		ADRENALS	BLAD CONT	S CONT	SI CONT	ULI CONT	LLI CONT	KIDNEYS	LIVER
PANCREAS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.85E-05	1.65E-05	1.02E-04	1.15E-05	1.34E-05	3.93E-06	3.63E-05	2.22E-05
	T	4.85E-05	1.65E-05	1.02E-04	1.15E-05	1.34E-05	3.93E-06	3.63E-05	2.22E-05
BONE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	9.38E-06	4.33E-06	4.22E-06	5.80E-06	5.21E-06	7.49E-06	6.71E-06	5.22E-06
	T	9.38E-06	4.33E-06	4.22E-06	5.80E-06	5.21E-06	7.49E-06	6.71E-06	5.22E-06
R MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.71E-05	9.52E-06	7.51E-06	1.92E-05	1.65E-05	2.29E-05	1.75E-05	7.55E-06
	T	1.71E-05	9.52E-06	7.51E-06	1.92E-05	1.65E-05	2.29E-05	1.75E-05	7.55E-06
Y MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	9.02E-06	4.02E-06	5.88E-06	8.10E-06	7.45E-06	9.25E-06	8.26E-06	7.73E-06
	T	9.02E-06	4.02E-06	5.88E-06	8.10E-06	7.45E-06	9.25E-06	8.26E-06	7.73E-06
ENDOSTEAL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	9.38E-06	4.33E-06	4.22E-06	5.80E-06	5.21E-06	7.49E-06	6.71E-06	5.22E-06
	T	9.38E-06	4.33E-06	4.22E-06	5.80E-06	5.21E-06	7.49E-06	6.71E-06	5.22E-06
SKIN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.28E-06	3.19E-06	2.67E-06	2.57E-06	2.57E-06	2.97E-06	3.25E-06	2.97E-06
	T	3.28E-06	3.19E-06	2.67E-06	2.57E-06	2.57E-06	2.97E-06	3.25E-06	2.97E-06
SPLEEN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.75E-05	1.11E-05	5.67E-05	8.71E-06	7.87E-06	4.42E-06	4.95E-05	5.25E-06
	T	3.75E-05	1.11E-05	5.67E-05	8.71E-06	7.87E-06	4.42E-06	4.95E-05	5.25E-06
TESTES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.58E-07	2.58E-05	3.48E-07	1.95E-06	1.82E-06	1.13E-05	6.48E-07	4.68E-07
	T	2.58E-07	2.58E-05	3.48E-07	1.95E-06	1.82E-06	1.13E-05	6.48E-07	4.68E-07
THYMUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.35E-06	5.73E-08	1.42E-06	5.95E-07	6.69E-07	2.14E-07	1.16E-06	3.80E-06
	T	2.35E-06	5.73E-08	1.42E-06	5.95E-07	6.69E-07	2.14E-07	1.16E-06	3.80E-06
THYROID	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	8.95E-07	2.17E-08	6.63E-07	1.29E-07	1.42E-07	5.05E-08	3.71E-07	1.21E-06
	T	8.95E-07	2.17E-08	6.63E-07	1.29E-07	1.42E-07	5.05E-08	3.71E-07	1.21E-06
UTERUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.19E-05	8.82E-05	4.60E-06	5.28E-05	2.71E-05	3.96E-05	5.90E-06	2.20E-06
	T	1.19E-05	8.82E-05	4.60E-06	5.28E-05	2.71E-05	3.96E-05	5.90E-06	2.20E-06
T BODY	A	4.81E-02	5.42E-03	1.39E-04	3.71E-04	2.22E-04	2.75E-04	4.81E-02	4.81E-02
	E	6.66E-06	7.49E-07	2.00E-06	5.32E-06	3.18E-06	3.94E-06	6.66E-06	6.66E-06
	P	9.54E-06	1.07E-05	1.01E-05	1.14E-05	1.10E-05	1.10E-05	9.58E-06	9.58E-06
	T	4.82E-02	5.43E-03	1.51E-04	3.88E-04	2.36E-04	2.90E-04	4.82E-02	4.82E-02

FR-221 CONTINUED

TARGET
ORGANS

SOURCE ORGANS

		LUNGS	RESP LYMPH	MUSCLE	OVARIES	PANCREAS	COR BONE	CAN BONE	R MAR
ADRENALS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.40E-05	1.40E-05	8.27E-06	2.15E-06	4.75E-05	7.17E-06	7.17E-06	1.48E-05
	T	1.40E-05	1.40E-05	3.27E-06	2.15E-06	4.75E-05	7.17E-06	7.17E-06	1.48E-05
BLAD WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.83E-07	2.83E-07	9.99E-06	3.92E-05	8.75E-07	2.73E-06	2.73E-06	4.43E-06
	T	2.83E-07	2.83E-07	9.99E-06	3.92E-05	8.75E-07	2.73E-06	2.73E-06	4.43E-06
S WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.05E-05	1.05E-05	7.83E-06	4.45E-06	1.04E-04	3.23E-06	3.23E-06	6.12E-06
	T	1.05E-05	1.05E-05	7.83E-06	4.45E-06	1.04E-04	3.23E-06	3.23E-06	6.12E-06
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.13E-06	1.13E-06	0.74E-06	6.72E-05	1.04E-05	4.30E-06	4.30E-06	1.46E-05
	T	1.13E-06	1.13E-06	0.74E-06	6.72E-05	1.04E-05	4.30E-06	4.30E-06	1.46E-05
ULI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.38E-06	1.38E-06	9.13E-06	6.36E-05	1.24E-05	4.15E-06	4.15E-06	1.18E-05
	T	1.38E-06	1.38E-06	9.13E-06	6.36E-05	1.24E-05	4.15E-06	4.15E-06	1.18E-05
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.91E-07	5.91E-07	9.53E-06	8.14E-05	3.21E-06	5.96E-06	5.96E-06	1.64E-05
	T	5.91E-07	5.91E-07	9.53E-06	8.14E-05	3.21E-06	5.96E-06	5.96E-06	1.64E-05
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.97E-06	4.97E-06	7.86E-06	5.45E-06	3.61E-05	5.12E-06	5.12E-06	1.26E-05
	T	4.97E-06	4.97E-06	7.86E-06	5.45E-06	3.61E-05	5.12E-06	5.12E-06	1.26E-05
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.40E-05	1.40E-05	6.08E-06	3.26E-06	2.47E-05	3.76E-06	3.76E-06	5.49E-06
	T	1.40E-05	1.40E-05	6.08E-06	3.26E-06	2.47E-05	3.76E-06	3.76E-06	5.49E-06
LUNGS	A	3.37E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	4.66E-04	4.66E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	8.97E-05	8.97E-05	7.40E-06	4.04E-07	1.41E-05	5.52E-06	5.52E-06	6.81E-06
	T	3.37E+00	5.56E-04	7.40E-06	4.04E-07	1.41E-05	5.52E-06	5.52E-06	6.81E-06
RESP LYMPH	A	0.00E+00	2.25E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	4.66E-04	3.11E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	8.97E-05	8.97E-05	7.40E-06	4.04E-07	1.41E-05	5.52E-06	5.52E-06	6.81E-06
	T	5.56E-04	2.25E+02	7.40E-06	4.04E-07	1.41E-05	5.52E-06	5.52E-06	6.81E-06
MUSCLE	A	0.00E+00	0.00E+00	1.20E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	1.66E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	7.40E-06	7.40E-06	3.22E-06	1.12E-05	1.01E-05	5.87E-06	5.87E-06	7.03E-06
	T	7.40E-06	7.40E-06	1.20E-01	1.12E-05	1.01E-05	5.87E-06	5.87E-06	7.03E-06
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	3.06E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	4.24E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.82E-07	6.82E-07	1.12E-05	5.02E-03	1.86E-06	4.05E-06	4.05E-06	1.37E-05
	T	6.82E-07	6.82E-07	1.12E-05	3.06E+02	1.86E-06	4.05E-06	4.05E-06	1.37E-05

FR-221 CONTINUED
SOURCE ORGANSTARGET
ORGANS

		LUNGS	RESP LYMPH	MUSCLE	OVARIES	PANCREAS	COR BONE	CAN BONE	R MAR
PANCREAS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E+01	0.00E+00	0.30E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.66E-03	0.00E+00	0.00E+00	0.00E+00
	P	1.43E-05	1.43E-05	1.01E-05	2.77E-06	1.27E-03	5.92E-06	5.92E-06	5.17E-06
	T	1.43E-05	1.43E-05	1.01E-05	2.77E-06	3.37E+01	5.92E-06	5.92E-06	5.17E-06
BONE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E+00	3.37E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.32E-05	6.51E-05	1.87E-05
	P	6.82E-06	6.82E-06	5.87E-06	6.94E-06	6.59E-06	2.27E-05	2.27E-05	1.51E-05
	T	6.82E-06	6.82E-06	5.87E-06	6.94E-06	6.59E-06	3.37E+00	3.37E+00	3.38E-05
R MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E+00	2.25E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-06	9.35E-05	2.45E-04
	P	8.67E-06	8.67E-06	9.31E-06	2.40E-05	1.27E-05	2.05E-05	2.05E-05	4.92E-05
	T	8.67E-06	8.67E-06	9.31E-06	2.40E-05	1.27E-05	2.17E-05	1.11E+00	2.25E+00
Y MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	7.07E-06	7.07E-06	7.20E-06	9.29E-06	7.68E-06	1.97E-05	1.97E-05	1.88E-05
	T	7.07E-06	7.07E-06	7.20E-06	9.29E-06	7.68E-06	1.97E-05	1.97E-05	1.88E-05
ENDOSTEAL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.59E+00	5.59E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.56E-05	1.05E-04	8.50E-05
	P	6.82E-06	6.82E-06	5.87E-06	6.94E-06	6.59E-06	2.27E-05	2.27E-05	2.05E-05
	T	6.82E-06	6.82E-06	5.87E-06	6.94E-06	6.59E-06	5.59E+00	5.59E+00	1.06E-04
SKIN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.30E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.31E-06	3.31E-06	4.41E-06	2.55E-06	2.46E-06	4.14E-06	4.14E-06	3.78E-06
	T	3.31E-06	3.31E-06	4.41E-06	2.55E-06	2.46E-06	4.14E-06	4.14E-06	3.78E-06
SPLEEN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.30E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.30E+00	0.00E+00
	P	1.29E-05	1.29E-05	3.19E-06	3.10E-06	1.08E-04	3.71E-06	3.71E-06	5.17E-06
	T	1.29E-05	1.29E-05	3.19E-06	3.10E-06	1.08E-04	3.71E-06	3.71E-06	5.17E-06
TESTES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.30E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	7.27E-08	7.27E-08	6.57E-06	0.00E+00	4.09E-07	3.48E-06	3.48E-06	1.81E-06
	T	7.27E-08	7.27E-08	6.57E-06	0.00E+00	4.09E-07	3.48E-06	3.48E-06	1.81E-06
THYMUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.30E+00	0.00E+00
	P	2.27E-05	2.27E-05	1.56E-05	2.16E-07	4.53E-06	2.74E-06	2.74E-06	4.20E-06
	T	2.27E-05	2.27E-05	1.56E-05	2.16E-07	4.53E-06	2.74E-06	2.74E-06	4.20E-06
THYROID	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.30E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.30E+00	0.00E+00
	P	4.82E-06	4.82E-06	7.44E-06	4.78E-08	8.44E-07	5.19E-06	5.19E-06	4.11E-06
	T	4.82E-06	4.82E-06	7.44E-06	4.78E-08	8.44E-07	5.19E-06	5.19E-06	4.11E-06
UTERUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.39E-07	5.39E-07	1.32E-05	1.19E-04	3.53E-06	3.46E-06	3.46E-06	1.28E-05
	T	5.39E-07	5.39E-07	1.32E-05	1.19E-04	3.53E-06	3.46E-06	3.46E-06	1.28E-05
T BODY	A	4.81E-02	4.81E-02	4.81E-02	4.81E-02	4.81E-02	2.41E-01	2.41E-01	4.81E-02
	E	6.66E-06	6.66E-06	6.66E-06	6.66E-06	6.66E-06	6.66E-06	6.66E-06	6.66E-06
	P	8.35E-06	8.35E-06	7.81E-06	1.16E-05	1.13E-05	8.24E-06	8.24E-06	9.14E-06
	T	4.82E-02	4.82E-02	4.82E-02	4.82E-02	4.82E-02	2.41E-01	2.41E-01	4.82E-02

FR-221 CCNT INUED

TARGET ORGANS		SOURCE ORGANS					
		Y MAR	SKIN	SPLEEN	TESTES	THYROID	T BODY
ADRENALS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-06
	P	7.86E-06	4.58E-06	3.65E-05	2.58E-07	8.95E-07	1.05E-05
	T	7.86E-06	4.50E-06	3.65E-05	2.58E-07	8.95E-07	4.82E-02
BLAD WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-06
	P	2.06E-06	3.11E-06	9.25E-07	2.72E-05	2.19E-08	9.99E-06
	T	2.06E-06	3.11E-06	9.25E-07	2.72E-05	2.19E-08	4.82E-02
S WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-06
	P	4.19E-06	3.15E-06	5.42E-05	2.82E-07	2.64E-07	1.07E-05
	T	4.19E-06	3.15E-06	5.42E-05	2.82E-07	2.64E-07	4.82E-02
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-06
	P	5.98E-06	2.73E-06	7.98E-06	2.35E-06	8.24E-08	1.13E-05
	T	5.98E-06	2.73E-06	7.98E-06	2.35E-06	8.24E-08	4.82E-02
ULI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-06
	P	5.35E-06	2.66E-06	7.08E-06	2.02E-06	6.17E-08	1.03E-05
	T	5.35E-06	2.66E-06	7.08E-06	2.02E-06	6.17E-08	4.82E-02
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-06
	P	5.10E-06	2.82E-06	3.57E-06	1.57E-05	4.12E-08	9.77E-06
	T	5.10E-06	2.82E-06	3.57E-06	1.57E-05	4.12E-08	4.82E-02
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-06
	P	6.17E-06	3.63E-06	5.02E-05	3.22E-07	2.16E-07	9.81E-06
	T	6.17E-06	3.63E-06	5.02E-05	3.22E-07	2.16E-07	4.82E-02
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-06
	P	5.59E-06	3.21E-06	5.74E-06	2.26E-07	6.65E-07	9.41E-06
	T	5.59E-06	3.21E-06	5.74E-06	2.26E-07	6.65E-07	4.82E-02
LUNGS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-06
	P	5.51E-06	3.58E-06	1.26E-05	6.52E-08	5.37E-06	8.16E-06
	T	5.51E-06	3.58E-06	1.26E-05	6.52E-08	5.37E-06	4.82E-02
RESP LYMPH	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-06
	P	5.51E-06	3.58E-06	1.26E-05	6.52E-08	5.37E-06	8.16E-06
	T	5.51E-06	3.58E-06	1.26E-05	6.52E-08	5.37E-06	4.82E-02
MUSCLE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-06
	P	5.25E-06	4.41E-06	8.19E-06	6.57E-06	7.44E-06	7.81E-06
	T	5.25E-06	4.41E-06	8.19E-06	6.57E-06	7.44E-06	4.82E-02
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-06
	P	7.78E-06	2.66E-06	3.28E-06	0.00E+00	4.78E-08	1.05E-05
	T	7.78E-06	2.66E-06	3.28E-06	0.00E+00	4.78E-08	4.82E-02

FR-223 CONTINUED

TARGET ORGANS	SOURCE ORGANS								
	LUNGS	RESP Lymph	MUSCLE	OVARIES	PANCREAS	COR BONE	CAN BONE	R MAR	
ADRENALS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.91E-05	2.51E-C5	1.83E-05	3.33E-06	1.08E-04	1.50E-05	1.50E-05	2.27E-05
	T	2.91E-05	2.51E-C5	1.83E-05	3.33E-06	1.08E-04	1.50E-05	1.50E-05	2.27E-05
BLAD WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.76E-C7	3.76E-C7	2.18E-05	8.94E-05	1.17E-06	5.07E-06	5.07E-06	5.46E-06
	T	3.76E-C7	3.76E-C7	2.18E-05	8.94E-05	1.17E-06	5.07E-06	5.07E-06	5.46E-06
S WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.24E-05	2.24E-C5	1.68E-05	7.80E-06	2.43E-04	5.53E-06	5.53E-06	1.00E-05
	T	2.24E-05	2.24E-C5	1.68E-05	7.80E-06	2.43E-04	5.53E-06	5.53E-06	1.00E-05
ST WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.77E-C6	1.77E-C6	1.84E-05	1.59E-04	1.86E-05	8.32E-06	8.32E-06	2.85E-05
	T	1.77E-C6	1.77E-C6	1.84E-05	1.59E-04	1.86E-05	8.32E-06	8.32E-06	2.85E-05
ULT WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.30E-06	2.30E-C6	1.96E-05	1.48E-04	2.30E-05	7.39E-06	7.39E-06	2.27E-05
	T	2.30E-06	2.30E-C6	1.96E-05	1.48E-04	2.30E-05	7.39E-06	7.39E-06	2.27E-05
LLI WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.61E-07	6.61E-C7	2.00E-05	1.98E-04	5.47E-06	1.12E-05	1.12E-05	3.40E-05
	T	6.61E-07	6.61E-C7	2.00E-05	1.98E-04	5.47E-06	1.12E-05	1.12E-05	3.40E-05
KIDNEYS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	9.05E-06	9.05E-C6	1.68E-05	9.20E-06	7.87E-05	9.29E-06	9.29E-06	2.46E-05
	T	9.05E-06	9.05E-C6	1.68E-05	9.20E-06	7.87E-05	9.29E-06	9.29E-06	2.46E-05
LIVFR	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.02E-05	3.02E-C5	1.29E-05	5.09E-06	5.26E-05	6.94E-06	6.94E-06	9.56E-06
	T	3.02E-05	3.02E-C5	1.29E-05	5.09E-06	5.26E-05	6.94E-06	6.94E-06	9.56E-06
LUNGS	E	1.90E-02	1.50E-C2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.13E-04	3.13E-C4	1.70E-05	5.96E-07	3.03E-05	1.11E-05	1.11E-05	1.30E-05
	T	1.93E-02	1.53E-C2	1.70E-05	5.96E-07	3.03E-05	1.11E-05	1.11E-05	1.30E-05
RESP LYMPH	E	1.90E-02	1.27E+C0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.13E-04	3.13E-C4	1.70E-05	5.96E-07	3.03E-05	1.11E-05	1.11E-05	1.30E-05
	T	1.93E-02	1.27E+C0	1.70E-05	5.96E-07	3.03E-05	1.11E-05	1.11E-05	1.30E-05
MUSCLE	E	0.00E+00	0.00E+C0	6.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.70E-05	1.70E-C5	1.99E-05	2.48E-05	2.27E-05	1.09E-05	1.09E-05	1.33E-05
	T	1.70E-05	1.70E-C5	7.00E-04	2.48E-05	2.27E-05	1.09E-05	1.09E-05	1.33E-05
OVARIES	E	0.00E+00	0.00E+00	0.00E+00	1.73E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	9.97E-07	9.97E-C7	2.48E-05	2.14E-05	4.06E-06	8.72E-06	8.72E-06	3.88E-05
	T	9.97E-07	9.97E-C7	2.48E-05	1.75E+00	4.06E-06	8.72E-06	8.72E-06	3.88E-05
PANCREAS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-01	0.00E+00	0.00E+00	0.00E+00
	P	3.08E-05	3.08E-C5	2.27E-05	4.31E-06	4.59E-03	9.47E-06	9.47E-06	1.78E-05
	T	3.08E-05	3.08E-C5	2.27E-05	4.31E-06	1.95E-01	9.47E-06	9.47E-06	1.78E-05
BONE	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.81E-03	2.44E-03	9.12E-04
	P	2.18E-05	2.18E-C5	1.09E-05	2.12E-05	1.87E-05	8.69E-05	8.69E-05	5.71E-05
	T	2.18E-05	2.18E-C5	1.09E-05	2.12E-05	1.87E-05	3.89E-03	2.53E-03	5.69E-04
R MAR	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-04	4.56E-03	9.35E-03
	P	2.69E-05	2.69E-C5	2.92E-05	7.99E-05	3.53E-05	8.07E-05	8.07E-05	2.02E-04
	T	2.69E-05	2.69E-C5	2.92E-05	7.99E-05	3.53E-05	1.91E-04	4.64E-03	9.56E-03
Y MAR	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.32E-05	2.32E-C5	2.29E-05	2.94E-05	2.14E-05	7.80E-05	7.80E-05	7.57E-05
	T	2.32E-05	2.32E-C5	2.29E-05	2.94E-05	2.14E-05	7.80E-05	7.80E-05	7.57E-05
ENDOSTEAL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.38E-03	4.13E-03	3.59E-03
	P	2.18E-05	2.18E-C5	1.09E-05	2.12E-05	1.87E-05	8.69E-05	8.69E-05	8.05E-05
	T	2.18E-05	2.18E-C5	1.09E-05	2.12E-05	1.87E-05	2.47E-03	4.22E-03	3.67E-03
SKIN	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.17E-06	6.17E-C6	9.69E-06	4.39E-06	4.36E-06	7.45E-06	7.45E-06	6.55E-06
	T	6.17E-06	6.17E-C6	9.69E-06	4.39E-06	4.36E-06	7.45E-06	7.45E-06	6.55E-06
SPLEEN	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.68E-05	2.68E-C5	1.81E-05	4.65E-06	2.66E-04	7.48E-06	7.48E-06	5.50E-06
	T	2.68E-05	2.68E-C5	1.81E-05	4.65E-06	2.66E-04	7.48E-06	7.48E-06	5.50E-06
TESTES	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	9.51E-08	9.51E-C8	1.36E-05	0.00E+00	4.29E-07	5.87E-06	5.87E-06	3.70E-06
	T	9.51E-08	9.51E-C8	1.36E-05	0.00E+00	4.29E-07	5.87E-06	5.87E-06	3.70E-06
THYMUS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.95E-05	4.95E-C5	3.05E-05	2.56E-07	5.83E-06	5.86E-06	5.86E-06	7.74E-06
	T	4.95E-05	4.95E-C5	3.05E-05	2.56E-07	5.83E-06	5.86E-06	5.86E-06	7.74E-06
THYROID	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	8.85E-06	8.85E-C6	1.74E-05	6.29E-08	9.42E-07	8.83E-06	8.83E-06	7.07E-06
	T	8.85E-06	8.85E-C6	1.74E-05	6.29E-08	9.42E-07	8.83E-06	8.83E-06	7.07E-06
UTERUS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	7.73E-07	7.73E-C7	3.03E-05	2.69E-04	4.75E-06	5.60E-06	5.60E-06	2.26E-05
	T	7.73E-07	7.73E-C7	3.03E-05	2.69E-04	4.75E-06	5.60E-06	5.60E-06	2.26E-05
T BODY	E	2.72E-04	2.72E-C4	2.72E-04	2.72E-04	2.72E-04	2.72E-04	2.72E-04	2.72E-04
	P	2.15E-05	2.15E-C5	1.83E-05	2.79E-05	2.74E-05	2.20E-05	2.20E-05	2.35E-05
	T	2.93E-04	2.53E-C4	2.90E-04	3.00E-04	2.99E-04	2.94E-04	2.94E-04	2.59E-04

FR-223 CONTINUED
SOURCE ORGANSTARGET
ORGANS

		Y MAR	SKIN	SPLEEN	TESTES	THYROID	T BODY
ADRENALS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-04
	P	1.05E-05	6.86E-06	7.86E-05	3.05E-07	1.06E-06	2.06E-05
	T	1.05E-05	6.86E-06	7.86E-05	3.05E-07	1.06E-06	2.92E-04
BLAD WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-04
	P	3.24E-06	5.65E-06	1.15E-06	5.92E-05	3.13E-08	2.50E-05
	T	3.24E-06	5.65E-06	1.15E-06	5.92E-05	3.13E-08	2.97E-04
S WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-04
	P	8.20E-06	6.59E-06	1.29E-04	4.35E-07	6.67E-07	2.29E-05
	T	8.20E-06	6.59E-06	1.29E-04	4.35E-07	6.67E-07	2.95E-04
SI WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-04
	P	1.12E-05	5.03E-06	1.46E-05	3.54E-06	7.60E-08	2.60E-05
	T	1.12E-05	5.03E-06	1.46E-05	3.54E-06	7.60E-08	2.98E-04
ULI WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-04
	P	9.47E-06	5.41E-06	1.54E-05	2.81E-06	8.40E-08	2.52E-05
	T	9.47E-06	5.41E-06	1.54E-05	2.81E-06	8.40E-08	2.97E-04
LLI WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-04
	P	5.77E-06	5.16E-06	6.28E-06	3.21E-05	5.39E-08	2.02E-05
	T	5.77E-06	5.16E-06	6.28E-06	3.21E-05	5.39E-08	2.97E-04
KIDNEYS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-04
	P	1.14E-05	7.37E-06	1.17E-04	4.42E-07	2.91E-07	2.22E-05
	T	1.14E-05	7.37E-06	1.17E-04	4.42E-07	2.91E-07	2.94E-04
LIVER	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-04
	P	1.09E-05	6.29E-06	9.69E-06	2.91E-07	9.65E-07	2.30E-05
	T	1.09E-05	6.29E-06	9.69E-06	2.91E-07	9.65E-07	2.95E-04
LUNGS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-04
	P	1.16E-05	7.28E-06	2.81E-05	6.82E-08	1.06E-05	2.08E-05
	T	1.16E-05	7.28E-06	2.81E-05	6.82E-08	1.06E-05	2.93E-04
RESP LYMPH	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-04
	P	1.16E-05	7.28E-06	2.81E-05	6.82E-08	1.06E-05	2.08E-05
	T	1.16E-05	7.28E-06	2.81E-05	6.82E-08	1.06E-05	2.93E-04
MUSCLE	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-04
	P	1.02E-05	9.69E-06	1.81E-05	1.36E-05	1.74E-05	1.83E-05
	T	1.02E-05	9.69E-06	1.81E-05	1.36E-05	1.74E-05	2.90E-04
OVARIES	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-04
	P	1.28E-05	4.59E-06	5.10E-06	0.00E+00	6.28E-08	2.37E-05
	T	1.28E-05	4.59E-06	5.10E-06	0.00E+00	6.28E-08	2.96E-04
PANCREAS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-04
	P	1.13E-05	4.79E-06	2.63E-04	3.83E-07	5.71E-07	2.67E-05
	T	1.13E-05	4.79E-06	2.63E-04	3.83E-07	5.71E-07	2.99E-04
BONE	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-04
	P	6.78E-05	1.55E-05	1.57E-05	1.01E-05	1.29E-05	3.12E-05
	T	6.78E-05	1.55E-05	1.57E-05	1.01E-05	1.29E-05	3.03E-04
R MAR	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-04
	P	6.93E-05	1.44E-05	2.14E-05	7.75E-06	1.36E-05	3.73E-05
	T	6.93E-05	1.44E-05	2.14E-05	7.75E-06	1.36E-05	3.09E-04
Y MAR	E	1.27E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-04
	P	1.20E-04	1.71E-05	2.43E-05	3.52E-06	6.54E-06	3.11E-05
	T	1.28E-02	1.71E-05	2.43E-05	3.52E-06	6.54E-06	3.03E-04
ENDOSTEAL	E	3.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-04
	P	7.99E-05	1.55E-05	1.57E-05	1.01E-05	1.29E-05	3.24E-05
	T	3.25E-03	1.55E-05	1.57E-05	1.01E-05	1.29E-05	3.04E-04
SKIN	E	0.00E+00	7.32E-03	0.00E+00	0.00E+00	0.00E+00	2.72E-04
	P	8.56E-06	4.57E-05	5.54E-06	1.84E-05	9.20E-06	1.06E-05
	T	8.56E-06	7.37E-03	5.54E-06	1.84E-05	9.20E-06	2.83E-04
SPLEEN	E	0.00E+00	0.00E+00	1.06E-01	0.00E+00	0.00E+00	2.72E-04
	P	1.15E-05	6.57E-06	2.42E-03	3.27E-07	8.74E-07	2.28E-05
	T	1.15E-05	6.57E-06	1.08E-01	3.27E-07	8.74E-07	2.95E-04
TESTES	E	0.00E+00	0.00E+00	0.00E+00	5.44E-01	0.00E+00	2.72E-04
	P	1.11E-05	1.18E-05	4.40E-07	7.61E-03	1.03E-08	1.77E-05
	T	1.11E-05	1.18E-05	4.40E-07	5.51E-01	1.03E-08	2.90E-04
THYMUS	E	1.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-04
	P	3.76E-06	6.55E-06	2.61E-06	3.67E-08	5.26E-05	2.56E-05
	T	6.76E-06	6.55E-06	2.61E-06	3.67E-08	5.26E-05	2.97E-04
THYROID	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.52E-11	2.72E-04
	P	1.17E-05	8.70E-06	7.50E-07	1.03E-08	1.15E-02	1.85E-05
	T	1.17E-05	8.70E-06	7.50E-07	1.03E-08	9.63E-01	2.93E-04
UTERUS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-04
	P	7.18E-06	4.59E-06	3.45E-06	0.00E+00	5.91E-08	2.69E-05
	T	7.18E-06	4.59E-06	3.45E-06	0.00E+00	5.91E-08	2.99E-04
T BODY	E	2.72E-04	2.72E-04	2.72E-04	2.72E-04	2.72E-04	2.72E-04
	P	1.97E-05	1.16E-05	2.37E-05	1.86E-05	1.81E-05	2.04E-05
	T	2.92E-04	2.83E-04	2.96E-04	2.90E-04	2.90E-04	2.92E-04

S FACTORS (REM/MICROCURIE-DAY) FOR RA-223

TARGET ORGANS	SOURCE ORGANS							
	ADRENALS	BLAD CENT	S CONT	SI CONT	ULI CONT	LLI CONT	KIDNEYS	LIVER
ADRENALS	A	2.16E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	2.61E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.68E-02	4.06E-06	6.38E-05	2.85E-05	2.28E-05	9.52E-06	2.85E-04
	T	2.16E+02	4.06E-06	6.38E-05	2.85E-05	2.28E-05	9.52E-06	2.85E-04
BLAD WALL	A	0.00E+00	7.55E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	9.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.87E-06	1.56E-03	6.94E-06	6.79E-05	5.22E-05	1.67E-04	7.05E-06
	T	2.87E-06	7.55E+00	6.94E-06	6.79E-05	5.22E-05	1.67E-04	7.05E-06
S WALL	A	0.00E+00	0.00E+00	5.83E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	7.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	7.25E-05	6.63E-06	1.38E-03	9.16E-05	9.59E-05	4.46E-05	8.77E-05
	T	7.25E-05	6.63E-06	6.69E-02	9.16E-05	9.59E-05	4.46E-05	8.77E-05
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	3.54E-02	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	4.56E-03	0.00E+00	0.00E+00	0.00E+00
	P	2.05E-05	7.22E-05	6.69E-05	8.84E-04	4.34E-04	2.41E-04	7.13E-05
	T	2.05E-05	7.22E-05	6.69E-05	4.19E-02	4.34E-04	2.41E-04	7.13E-05
ULI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.62E-02	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-03	0.00E+00	0.00E+00
	P	2.29E-05	5.58E-05	0.96E-05	6.58E-04	1.14E-03	1.09E-04	7.13E-05
	T	2.29E-05	5.58E-05	0.96E-05	6.58E-04	7.57E-02	1.09E-04	7.13E-05
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-01	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-02	0.00E+00
	P	5.78E-06	1.88E-04	3.04E-05	1.89E-04	7.88E-05	1.36E-03	1.85E-05
	T	5.78E-06	1.88E-04	3.04E-05	1.89E-04	7.88E-05	1.23E-01	1.85E-05
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.74E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-02
	P	2.90E-04	6.70E-06	0.73E-05	7.83E-05	7.01E-05	2.11E-05	2.16E-03
	T	2.90E-04	6.76E-06	0.73E-05	7.83E-05	7.01E-05	2.11E-05	9.76E+00
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.26E-04	4.68E-06	4.99E-05	4.56E-05	6.43E-05	6.45E-06	9.86E-05
	T	1.26E-04	4.68E-06	4.99E-05	4.56E-05	6.43E-05	6.45E-06	9.86E-05
LUNGS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.17E-05	6.60E-07	4.48E-05	5.88E-06	6.62E-06	1.97E-06	2.13E-05
	T	6.17E-05	6.60E-07	4.48E-05	5.88E-06	6.62E-06	1.97E-06	2.13E-05
RESP LYMPH	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.17E-05	6.60E-07	4.48E-05	5.88E-06	6.62E-06	1.97E-06	2.13E-05
	T	6.17E-05	6.60E-07	4.48E-05	5.88E-06	6.62E-06	1.97E-06	2.13E-05
MUSCLE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.71E-05	4.50E-05	3.54E-05	3.90E-05	3.72E-05	4.25E-05	3.50E-05
	T	3.71E-05	4.50E-05	3.54E-05	3.90E-05	3.72E-05	4.25E-05	3.50E-05
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.36E-05	1.82E-04	1.22E-05	2.71E-04	3.00E-04	4.66E-04	2.80E-05
	T	1.36E-05	1.82E-04	1.22E-05	2.71E-04	3.00E-04	4.66E-04	2.80E-05

RA-223 CONTINUED
 SOURCE ORGANS

TARGET ORGANS		ADRENALS	BLAD. CNT	S CNT	SI CNT	ULI CNT	LLI CNT	KIDNEYS	LIVER
PANCREAS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.25E-04	5.83E-06	4.69E-04	5.08E-05	5.52E-05	1.74E-05	1.65E-04	1.09E-04
	T	2.25E-04	5.83E-06	4.69E-04	5.08E-05	5.52E-05	1.74E-05	1.65E-04	1.09E-04
BONE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.96E-05	2.10E-05	2.14E-05	2.98E-05	2.69E-05	4.00E-05	3.51E-05	2.69E-05
	T	4.96E-05	2.10E-05	2.14E-05	2.98E-05	2.69E-05	4.00E-05	3.51E-05	2.69E-05
R MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	8.91E-05	5.03E-05	3.72E-05	1.01E-04	8.73E-05	1.27E-04	9.18E-05	3.79E-05
	T	8.91E-05	5.03E-05	3.72E-05	1.01E-04	8.73E-05	1.27E-04	9.18E-05	3.79E-05
Y MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.72E-05	2.00E-05	3.01E-05	4.18E-05	3.87E-05	5.02E-05	4.30E-05	4.03E-05
	T	4.72E-05	2.00E-05	3.01E-05	4.18E-05	3.87E-05	5.02E-05	4.30E-05	4.03E-05
ENDOSTEAL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.96E-05	2.10E-05	2.14E-05	2.98E-05	2.69E-05	4.00E-05	3.51E-05	2.69E-05
	T	4.96E-05	2.10E-05	2.14E-05	2.98E-05	2.69E-05	4.00E-05	3.51E-05	2.69E-05
SKIN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.38E-05	1.41E-05	1.18E-05	1.09E-05	1.11E-05	1.27E-05	1.40E-05	1.27E-05
	T	1.38E-05	1.41E-05	1.18E-05	1.09E-05	1.11E-05	1.27E-05	1.40E-05	1.27E-05
SPLEEN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.65E-04	1.04E-05	2.58E-04	3.75E-05	3.48E-05	2.03E-05	2.24E-04	2.27E-05
	T	1.65E-04	1.04E-05	2.58E-04	3.75E-05	3.48E-05	2.03E-05	2.24E-04	2.27E-05
TESTES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	9.64E-07	1.72E-04	1.12E-06	7.64E-06	7.67E-06	4.73E-05	2.42E-06	1.75E-06
	T	9.64E-07	1.72E-04	1.12E-06	7.64E-06	7.67E-06	4.73E-05	2.42E-06	1.75E-06
THYMUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.22E-05	3.67E-07	6.62E-06	2.23E-06	2.62E-06	8.02E-07	5.59E-06	1.64E-05
	T	1.22E-05	3.67E-07	6.62E-06	2.23E-06	2.62E-06	8.02E-07	5.59E-06	1.64E-05
THYROID	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.37E-06	8.76E-08	2.43E-06	4.87E-07	5.32E-07	1.95E-07	1.39E-06	3.89E-06
	T	3.37E-06	8.76E-08	2.43E-06	4.87E-07	5.32E-07	1.95E-07	1.39E-06	3.89E-06
UTERUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.71E-05	4.08E-04	1.89E-05	2.44E-04	1.30E-04	1.74E-04	2.22E-05	5.45E-06
	T	2.71E-05	4.08E-04	1.89E-05	2.44E-04	1.30E-04	1.74E-04	2.22E-05	5.45E-06
T BODY	A	4.31E-02	4.65E-03	1.25E-04	3.33E-04	1.99E-04	2.47E-04	4.31E-02	4.31E-02
	E	5.22E-05	5.87E-06	1.56E-05	4.17E-05	2.49E-05	3.09E-05	5.22E-05	5.22E-05
	P	4.47E-05	4.56E-05	4.71E-05	5.27E-05	5.13E-05	5.14E-05	4.46E-05	4.52E-05
	T	4.32E-02	4.51E-03	1.88E-04	4.27E-04	2.75E-04	3.29E-04	4.32E-02	4.32E-02

RA-223 CONTINUED

TARGET ORGANS		SOURCE ORGANS							
		LUNGS	RESP LYMPH	MUSCLE	OVARIES	PANCREAS	COR BONE	CAN BONE	R MAR
ADRENALS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.44E-05	6.44E-05	3.71E-05	9.20E-06	2.26E-04	3.15E-05	3.15E-05	5.50E-05
	T	6.44E-05	6.44E-05	3.71E-05	9.20E-06	2.26E-04	3.15E-05	3.15E-05	5.50E-05
BLAD WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.08E-06	1.08E-06	4.50E-05	1.81E-04	3.59E-06	1.28E-05	1.28E-05	2.17E-05
	T	1.08E-06	1.08E-06	4.50E-05	1.81E-04	3.59E-06	1.28E-05	1.28E-05	2.17E-05
S WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.69E-05	4.69E-05	3.39E-05	1.96E-05	4.65E-04	1.37E-05	1.37E-05	2.42E-05
	T	4.69E-05	4.69E-05	3.39E-05	1.96E-05	4.65E-04	1.37E-05	1.37E-05	2.42E-05
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.87E-06	4.87E-06	3.90E-05	3.12E-04	4.46E-05	1.87E-05	1.87E-05	6.48E-05
	T	4.87E-06	4.87E-06	3.90E-05	3.12E-04	4.46E-05	1.87E-05	1.87E-05	6.48E-05
URI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.08E-06	6.08E-06	4.09E-05	2.88E-04	5.35E-05	1.73E-05	1.73E-05	5.19E-05
	T	6.08E-06	6.08E-06	4.09E-05	2.88E-04	5.35E-05	1.73E-05	1.73E-05	5.19E-05
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.87E-06	1.87E-06	4.25E-05	3.77E-04	1.36E-05	2.54E-05	2.54E-05	7.39E-05
	T	1.87E-06	1.87E-06	4.25E-05	3.77E-04	1.36E-05	2.54E-05	2.54E-05	7.39E-05
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.18E-05	2.18E-05	3.50E-05	2.34E-04	1.65E-04	2.13E-05	2.13E-05	5.56E-05
	T	2.18E-05	2.18E-05	3.50E-05	2.34E-04	1.65E-04	2.13E-05	2.13E-05	5.56E-05
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.23E-05	6.23E-05	2.72E-05	1.34E-05	1.11E-04	1.64E-05	1.64E-05	2.32E-05
	T	6.23E-05	6.23E-05	2.72E-05	1.34E-05	1.11E-04	1.64E-05	1.64E-05	2.32E-05
LUNGS	A	3.02E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	3.65E-03	3.65E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.73E-04	4.73E-04	3.37E-05	1.68E-06	6.39E-05	2.42E-05	2.42E-05	2.54E-05
	T	3.02E+00	4.12E-03	3.37E-05	1.68E-06	6.39E-05	2.42E-05	2.42E-05	2.54E-05
RESP LYMPH	A	0.00E+00	2.01E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	3.65E-03	2.43E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.73E-04	4.73E-04	3.37E-05	1.68E-06	6.39E-05	2.42E-05	2.42E-05	2.54E-05
	T	4.12E-03	2.02E+02	3.37E-05	1.68E-06	6.39E-05	2.42E-05	2.42E-05	2.54E-05
MUSCLE	A	0.00E+00	0.00E+00	1.08E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	1.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.37E-05	3.37E-05	3.80E-05	5.06E-05	4.58E-05	2.51E-05	2.51E-05	3.03E-05
	T	3.37E-05	3.37E-05	1.08E-01	5.06E-05	4.58E-05	2.51E-05	2.51E-05	3.03E-05
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	2.75E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	3.32E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.65E-06	2.65E-06	5.06E-05	2.92E-02	9.27E-06	1.94E-05	1.94E-05	7.50E-05
	T	2.65E-06	2.65E-06	5.06E-05	2.75E+02	9.27E-06	1.94E-05	1.94E-05	7.50E-05

RA-223 CONTINUED

TARGET ORGANS		SOURCE ORGANS							
		LUNGS	RESP LYMPH	MUSCLE	OVARIES	PANCREAS	COR BONE	CAN BONE	R MAR
PANCREAS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.02E+01	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.65E-02	0.00E+00	0.00E+00	0.00E+00
	P	6.61E-05	6.61E-05	4.58E-05	1.17E-05	6.81E-03	2.25E-05	2.25E-05	4.15E-05
	T	6.61E-05	6.61E-05	4.58E-05	1.19E-05	3.02E+01	2.25E-05	2.25E-05	4.15E-05
BONE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.02E+00	3.02E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.30E-04	5.69E-04	1.07E-04
	P	3.66E-05	3.66E-05	2.51E-05	3.69E-05	3.45E-05	1.27E-04	1.27E-04	8.41E-05
	T	3.66E-05	3.66E-05	2.51E-05	3.69E-05	3.45E-05	3.02E+00	3.02E+00	1.52E-04
R MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.97E-01	2.01E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.24E-06	5.37E-04	2.06E-03
	P	4.61E-05	4.61E-05	4.96E-05	1.32E-04	1.8E-05	1.16E-04	1.16E-04	2.84E-04
	T	4.61E-05	4.61E-05	4.96E-05	1.32E-04	1.58E-05	1.23E-04	9.97E-01	2.02E+00
Y MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.82E-05	3.82E-05	3.80E-05	5.01E-05	3.98E-05	1.11E-04	1.11E-04	1.08E-04
	T	3.82E-05	3.82E-05	3.80E-05	5.01E-05	3.98E-05	1.11E-04	1.11E-04	1.08E-04
ENDOSTEAL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.99E+00	5.99E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.82E-04	7.42E-04	7.22E-04
	P	3.66E-05	3.66E-05	2.51E-05	3.69E-05	3.45E-05	1.27E-04	1.27E-04	1.16E-04
	T	3.66E-05	3.66E-05	2.51E-05	3.69E-05	3.45E-05	5.99E+00	5.99E+00	6.38E-04
SKIN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.41E-05	1.41E-05	1.98E-05	1.07E-05	1.05E-05	1.75E-05	1.75E-05	1.56E-05
	T	1.41E-05	1.41E-05	1.98E-05	1.07E-05	1.05E-05	1.75E-05	1.75E-05	1.56E-05
SPLEEN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.73E-05	5.73E-05	3.69E-05	1.28E-05	5.05E-04	1.62E-05	1.62E-05	2.21E-05
	T	5.73E-05	5.73E-05	3.69E-05	1.28E-05	5.05E-04	1.62E-05	1.62E-05	2.21E-05
TESTES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.79E-07	2.79E-07	2.91E-05	0.00E+00	1.38E-06	1.50E-05	1.50E-05	9.85E-06
	T	2.79E-07	2.79E-07	2.91E-05	0.00E+00	1.38E-06	1.50E-05	1.50E-05	9.85E-06
THYMUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.05E-04	1.05E-04	5.82E-05	8.08E-07	1.53E-05	1.36E-05	1.36E-05	1.87E-05
	T	1.05E-04	1.05E-04	5.82E-05	8.08E-07	1.53E-05	1.36E-05	1.36E-05	1.87E-05
THYROID	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.28E-05	2.28E-05	3.39E-05	1.86E-07	3.17E-06	2.15E-05	2.15E-05	1.77E-05
	T	2.28E-05	2.28E-05	3.39E-05	1.86E-07	3.17E-06	2.15E-05	2.15E-05	1.77E-05
UTERUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.08E-06	2.08E-06	5.90E-05	5.29E-04	1.34E-05	1.40E-05	1.40E-05	5.34E-05
	T	2.08E-06	2.08E-06	5.90E-05	5.29E-04	1.34E-05	1.40E-05	1.40E-05	5.34E-05
T BODY	A	4.31E-02	4.31E-02	4.31E-02	4.31E-02	4.31E-02	2.16E-01	2.16E-01	4.31E-02
	E	5.22E-05	5.22E-05	5.22E-05	5.22E-05	5.22E-05	5.22E-05	5.22E-05	5.22E-05
	P	3.97E-05	3.97E-05	3.57E-05	5.42E-05	5.31E-05	3.97E-05	3.97E-05	3.36E-05
	T	4.32E-02	4.32E-02	4.32E-02	4.32E-02	4.32E-02	2.16E-01	2.16E-01	3.32E-02

RA-223 CONTINUED
 SOURCE ORGANS

TARGET ORGANS		Y MAR	SKIN	SPLEEN	TESTES	THYROID	T BODY
ADRENALS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.31E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.22E-05
	P	2.88E-05	1.71E-05	1.61E-04	9.64E-07	3.37E-06	4.70E-05
	T	2.88E-05	1.71E-05	1.61E-04	9.64E-07	3.37E-06	4.32E-02
BLAD WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.31E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.22E-05
	P	8.69E-06	1.29E-05	3.08E-06	1.24E-04	8.85E-08	4.64E-05
	T	8.69E-06	1.29E-05	3.08E-06	1.24E-04	8.85E-08	4.32E-02
S WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.31E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.22E-05
	P	1.91E-05	1.42E-05	2.56E-04	1.21E-06	1.49E-06	4.56E-05
	T	1.91E-05	1.42E-05	2.56E-04	1.21E-06	1.49E-06	4.32E-02
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.31E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.22E-05
	P	2.61E-05	1.17E-05	3.47E-05	9.57E-06	2.32E-07	5.17E-05
	T	2.61E-05	1.17E-05	3.47E-05	9.57E-06	2.32E-07	4.32E-02
ULI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.31E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.22E-05
	P	2.25E-05	1.21E-05	3.45E-05	7.65E-06	2.48E-07	4.94E-05
	T	2.25E-05	1.21E-05	3.45E-05	7.65E-06	2.48E-07	4.32E-02
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.31E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.22E-05
	P	2.22E-05	1.24E-05	1.54E-05	6.97E-05	1.60E-07	4.73E-05
	T	2.22E-05	1.24E-05	1.54E-05	6.97E-05	1.60E-07	4.32E-02
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.31E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.22E-05
	P	2.70E-05	1.57E-05	2.32E-04	1.28E-06	8.60E-07	4.40E-05
	T	2.70E-05	1.57E-05	2.32E-04	1.28E-06	8.60E-07	4.32E-02
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.31E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.22E-05
	P	2.49E-05	1.41E-05	2.44E-05	8.48E-07	2.63E-06	4.40E-05
	T	2.49E-05	1.41E-05	2.44E-05	8.48E-07	2.63E-06	4.32E-02
LUNGS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.31E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.22E-05
	P	2.46E-05	1.55E-05	5.75E-05	2.10E-07	2.39E-05	3.88E-05
	T	2.46E-05	1.55E-05	5.75E-05	2.10E-07	2.39E-05	4.32E-02
RESP LYMPH	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.31E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.22E-05
	P	2.46E-05	1.55E-05	5.75E-05	2.10E-07	2.39E-05	3.88E-05
	T	2.46E-05	1.55E-05	5.75E-05	2.10E-07	2.39E-05	4.32E-02
MUSCLE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.31E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.22E-05
	P	2.28E-05	1.58E-05	3.69E-05	2.91E-05	3.39E-05	3.57E-05
	T	2.28E-05	1.58E-05	3.69E-05	2.91E-05	3.39E-05	4.32E-02
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.31E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.22E-05
	P	3.32E-05	9.81E-06	1.35E-05	0.00E+00	1.86E-07	4.76E-05
	T	3.32E-05	9.81E-06	1.35E-05	0.00E+00	1.86E-07	4.32E-02

TARGET ORGANS		SOURCE ORGANS					
		Y MAR	SKIN	SPLEEN	TESTES	THYROID	T BODY
ADRENALS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.66E-05
	P	1.96E-06	1.34E-C6	2.01E-05	3.17E-09	2.64E-08	6.25E-06
	T	1.96E-06	1.34E-C6	2.01E-05	3.17E-09	2.64E-08	8.28E-05
BLAD WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.66E-05
	P	4.75E-C7	1.17E-C6	6.92E-08	1.26E-05	4.78E-11	7.59E-06
	T	4.75E-C7	1.17E-C6	6.92E-08	1.26E-05	4.78E-11	8.42E-05
S WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.66E-05
	P	1.45E-C6	1.40E-C6	3.33E-05	1.85E-08	5.99E-08	7.28E-06
	T	1.45E-C6	1.40E-C6	3.33E-05	1.85E-08	5.99E-08	8.39E-05
ST WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.66E-05
	P	1.99E-06	7.74E-C7	1.95E-06	2.52E-07	1.04E-09	6.30E-06
	T	1.99E-06	7.74E-C7	1.95E-06	2.52E-07	1.04E-09	8.49E-05
ULI WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.66E-05
	P	1.60E-06	9.47E-C7	2.40E-06	2.13E-07	1.25E-09	8.34E-06
	T	1.60E-06	9.47E-C7	2.40E-06	2.13E-07	1.25E-09	8.49E-05
LLI WALL	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.66E-05
	P	2.16E-06	7.66E-C7	7.33E-07	5.93E-06	1.97E-10	8.11E-06
	T	2.16E-06	7.66E-C7	7.33E-07	5.93E-06	1.97E-10	8.47E-05
KIDNEYS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.66E-05
	P	1.95E-06	1.72E-C6	3.63E-05	1.14E-08	6.15E-09	6.95E-06
	T	1.95E-06	1.72E-C6	3.63E-05	1.14E-08	6.15E-09	8.35E-05
LIVER	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.66E-05
	P	2.08E-06	1.22E-C6	1.05E-06	8.19E-09	5.75E-08	7.67E-06
	T	2.08E-06	1.22E-C6	1.05E-06	8.19E-09	5.75E-08	8.43E-05
LUNGS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.66E-05
	P	2.68E-06	1.64E-C6	7.42E-06	4.42E-10	1.52E-06	7.51E-06
	T	2.68E-06	1.64E-C6	7.42E-06	4.42E-10	1.52E-06	8.41E-05
RESP LYMPH	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.66E-05
	P	2.68E-06	1.64E-C6	7.42E-06	4.42E-10	1.52E-06	7.51E-06
	T	2.68E-06	1.64E-C6	7.42E-06	4.42E-10	1.52E-06	8.41E-05
MUSCLE	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.66E-05
	P	2.22E-C6	3.13E-C6	5.31E-06	3.37E-06	6.18E-06	6.25E-06
	T	2.22E-C6	3.13E-C6	5.31E-06	3.37E-06	6.18E-06	8.28E-05
OVARIES	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.66E-05
	P	1.63E-06	7.81E-C7	3.79E-07	0.00E+00	1.77E-10	8.09E-06
	T	1.63E-06	7.81E-C7	3.79E-07	0.00E+00	1.77E-10	8.47E-05
PANCREAS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.66E-05
	P	1.40E-C6	7.00E-C7	9.43E-05	7.42E-09	2.39E-08	8.32E-06
	T	1.40E-C6	7.00E-C7	9.43E-05	7.42E-09	2.39E-08	8.49E-05
BONE	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.66E-05
	P	3.35E-05	5.30E-C6	4.20E-06	1.64E-06	2.77E-06	1.17E-05
	T	3.35E-05	5.30E-C6	4.20E-06	1.64E-06	2.77E-06	8.83E-05
F MAR	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.66E-05
	P	3.38E-05	4.83E-C6	4.94E-06	1.15E-06	2.73E-06	1.40E-05
	T	3.38E-05	4.83E-C6	4.94E-06	1.15E-06	2.73E-06	9.06E-05
Y MAR	E	3.57E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.66E-05
	P	6.27E-05	6.29E-C6	6.55E-06	4.77E-07	1.37E-06	1.23E-05
	T	3.64E-03	6.29E-C6	6.55E-06	4.77E-07	1.37E-06	8.89E-05
ENDOSTEAL	E	8.93E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.66E-05
	P	3.75E-05	5.30E-C6	4.20E-06	1.64E-06	2.77E-06	1.23E-05
	T	9.31E-04	5.30E-C6	4.20E-06	1.64E-06	2.77E-06	8.89E-05
SKIN	E	0.00E+00	2.06E-C3	0.00E+00	0.00E+00	0.00E+00	7.66E-05
	P	1.88E-06	2.34E-C5	1.05E-06	6.90E-06	2.74E-06	3.61E-06
	T	1.88E-06	2.09E-C3	1.05E-06	6.90E-06	2.74E-06	8.02E-05
SPLEEN	E	0.00E+00	0.00E+00	2.98E-02	0.00E+00	0.00E+00	7.66E-05
	P	2.06E-06	1.23E-C6	1.25E-03	6.25E-09	3.46E-08	7.61E-06
	T	2.06E-06	1.23E-C6	3.10E-02	6.25E-09	3.46E-08	8.42E-05
TESTES	E	0.00E+00	0.00E+00	0.00E+00	1.53E-01	0.00E+00	7.66E-05
	P	1.52E-06	4.58E-C6	6.23E-09	4.14E-03	4.26E-12	5.81E-06
	T	1.52E-06	4.58E-C6	6.23E-09	1.57E-01	4.96E-12	8.24E-05
THYMUS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.66E-05
	P	1.51E-06	1.14E-C6	7.99E-08	6.44E-11	1.01E-05	7.79E-06
	T	1.51E-06	1.14E-C6	7.99E-08	6.44E-11	1.01E-05	8.44E-05
THYROID	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.68E-01	7.66E-05
	P	2.07E-06	2.70E-C6	1.54E-08	4.99E-12	6.32E-03	6.32E-06
	T	2.07E-06	2.70E-C6	1.54E-08	4.99E-12	2.74E-01	8.29E-05
UTERUS	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.66E-05
	P	1.13E-06	7.45E-C7	2.16E-07	0.00E+00	1.57E-10	8.13E-06
	T	1.13E-06	7.45E-C7	2.16E-07	0.00E+00	1.57E-10	8.47E-05
T BODY	E	7.66E-05	7.66E-C5	7.66E-05	7.66E-05	7.66E-05	7.66E-05
	P	7.45E-06	4.05E-C6	8.04E-06	6.34E-06	6.64E-06	7.14E-06
	T	8.40E-05	2.06E-C5	8.46E-05	8.29E-05	8.32E-05	8.37E-05

S FACTORS (REM/MICROCURIE-DAY) FOR AC-225

TARGET ORGANS		SOURCE ORGANS							
		ADRENALS	BLAD CNT	S CONT	SI CONT	ULI CONT	LLI CONT	KIDNEYS	LIVER
ADRENALS	A	2.18E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	6.33E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.78E-03	4.29E-07	8.26E-06	2.89E-06	2.72E-06	1.01E-06	3.55E-05	1.38E-05
	T	2.18E+02	4.29E-07	8.26E-06	2.89E-06	2.72E-06	1.01E-06	3.55E-05	1.38E-05
BLAD WALL	A	0.00E+00	7.43E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	2.21E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.77E-07	3.22E-04	8.02E-07	7.83E-06	6.54E-06	2.10E-05	7.99E-07	4.61E-07
	T	3.77E-07	7.43E+00	8.02E-07	7.83E-06	6.54E-06	2.10E-05	7.99E-07	4.61E-07
S WALL	A	0.00E+00	0.00E+00	5.89E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	1.77E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	8.72E-06	7.82E-07	2.06E-04	1.13E-05	1.18E-05	5.36E-06	1.09E-05	5.67E-06
	T	8.72E-06	7.82E-07	6.09E-02	1.13E-05	1.18E-05	5.36E-06	1.09E-05	5.67E-06
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	3.68E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	1.11E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.41E-06	9.03E-06	3.19E-06	1.65E-04	5.40E-05	3.01E-05	8.70E-06	4.89E-06
	T	2.41E-06	9.03E-06	3.19E-06	3.81E-02	5.40E-05	3.01E-05	8.70E-06	4.89E-06
ULI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.69E-02	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-03	0.00E+00	0.00E+00	0.00E+00
	P	2.75E-06	6.55E-06	1.10E-05	1.17E-04	1.81E-04	1.43E-05	8.62E-06	7.69E-06
	T	2.75E-06	6.55E-06	1.10E-05	1.17E-04	6.91E-02	1.43E-05	8.62E-06	7.69E-06
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-01	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.28E-03	0.00E+00	0.00E+00
	P	6.32E-07	2.30E-05	3.55E-06	2.61E-05	1.00E-05	2.27E-04	2.06E-06	6.56E-07
	T	6.32E-07	2.30E-05	3.55E-06	2.61E-05	1.00E-05	1.13E-01	2.06E-06	6.56E-07
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.84E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.86E-03	0.00E+00
	P	3.58E-05	7.58E-07	1.06E-05	9.63E-06	8.59E-06	2.49E-06	5.15E-04	1.22E-05
	T	3.58E-05	7.58E-07	1.06E-05	9.63E-06	8.59E-06	2.49E-06	9.84E+00	1.22E-05
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.92E-04
	P	1.53E-05	4.81E-07	6.03E-06	5.52E-06	7.79E-06	7.14E-07	1.19E-05	1.29E-04
	T	1.53E-05	4.81E-07	6.03E-06	5.52E-06	7.79E-06	7.14E-07	1.19E-05	1.70E+00
LUNGS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	7.46E-06	6.83E-08	5.38E-06	6.38E-07	7.60E-07	2.23E-07	2.55E-06	7.90E-06
	T	7.46E-06	6.83E-08	5.38E-06	6.38E-07	7.60E-07	2.23E-07	2.55E-06	7.90E-06
RESP LYMPH	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	7.46E-06	6.83E-08	5.38E-06	6.38E-07	7.60E-07	2.23E-07	2.55E-06	7.90E-06
	T	7.46E-06	6.83E-08	5.38E-06	6.38E-07	7.60E-07	2.23E-07	2.55E-06	7.90E-06
MUSCLE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.90E-06	5.47E-06	4.27E-06	4.77E-06	4.50E-06	5.14E-06	4.34E-06	3.33E-06
	T	4.90E-06	5.47E-06	4.27E-06	4.77E-06	4.50E-06	5.14E-06	4.34E-06	3.33E-06
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.73E-06	2.22E-05	1.53E-06	3.48E-05	3.76E-05	5.87E-05	3.28E-06	1.28E-06
	T	1.73E-06	2.22E-05	1.53E-06	3.48E-05	3.76E-05	5.87E-05	3.28E-06	1.28E-06

AC-225 CONTINUED

TARGET ORGANS	SOURCE ORGANS							
	ADRENALS	BLAD CCNT	S CONT	SI CONT	ULI CONT	LLI CONT	KIDNEYS	LIVER
PANCREAS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.78E-05	6.37E-C7	5.72E-05	6.14E-06	6.87E-06	2.16E-06	2.01E-05
	T	2.78E-05	6.37E-C7	5.72E-05	6.14E-06	6.87E-06	2.16E-06	2.01E-05
BONE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.52E-06	2.82E-06	2.85E-06	4.03E-06	3.62E-06	5.34E-06	4.65E-06
	T	6.52E-06	2.82E-06	2.85E-06	4.03E-06	3.62E-06	5.34E-06	4.65E-06
R MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.17E-05	6.50E-C6	4.99E-06	1.38E-05	1.19E-05	1.71E-05	1.22E-05
	T	1.17E-05	6.50E-C6	4.99E-06	1.38E-05	1.19E-05	1.71E-05	1.22E-05
Y MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.19E-06	2.71E-C6	4.01E-06	5.67E-06	5.21E-06	6.70E-06	5.69E-06
	T	6.19E-06	2.71E-C6	4.01E-06	5.67E-06	5.21E-06	6.70E-06	5.69E-06
ENDOSTEAL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.52E-06	2.82E-C6	2.85E-06	4.03E-06	3.62E-06	5.34E-06	4.65E-06
	T	6.52E-06	2.82E-C6	2.85E-06	4.03E-06	3.62E-06	5.34E-06	4.65E-06
SKIN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.53E-06	1.45E-C6	1.33E-06	1.23E-06	1.24E-06	1.46E-06	1.60E-06
	T	1.53E-06	1.45E-C6	1.33E-06	1.23E-06	1.24E-06	1.46E-06	1.60E-06
SPLEEN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.95E-05	1.53E-C6	3.12E-05	4.51E-06	4.34E-06	2.42E-06	2.73E-05
	T	1.95E-05	1.53E-C6	3.12E-05	4.51E-06	4.34E-06	2.42E-06	2.73E-05
TESTES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	8.80E-08	1.46E-C5	1.36E-07	8.71E-07	7.81E-07	5.32E-06	2.44E-07
	T	8.80E-08	1.46E-C5	1.36E-07	8.71E-07	7.81E-07	5.32E-06	2.44E-07
THYMUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.25E-06	3.42E-C8	8.21E-07	2.24E-07	2.82E-07	7.40E-08	5.94E-07
	T	1.25E-06	3.42E-C8	8.21E-07	2.24E-07	2.82E-07	7.40E-08	5.94E-07
THYROID	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.49E-07	5.54E-C9	2.40E-07	4.14E-08	4.57E-08	1.51E-08	1.32E-07
	T	3.49E-07	5.54E-C9	2.40E-07	4.14E-08	4.57E-08	1.51E-08	1.32E-07
UTERUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.50E-06	4.57E-C5	2.21E-06	2.99E-05	1.65E-05	2.15E-05	2.64E-06
	T	2.50E-06	4.57E-C5	2.21E-06	2.99E-05	1.65E-05	2.15E-05	2.64E-06
T BODY	A	4.36E-02	4.50E-C3	1.26E-04	3.36E-04	2.01E-04	2.49E-04	4.36E-02
	E	1.27E-05	1.42E-C6	3.80E-06	1.01E-05	6.04E-06	7.50E-06	1.27E-05
	P	6.59E-06	7.18E-C6	6.88E-06	7.59E-06	7.42E-06	7.43E-06	6.56E-06
	T	4.36E-02	4.51E-C3	1.37E-04	3.54E-04	2.15E-04	2.64E-04	4.36E-02

AC-225 CONTINUED
SOURCE ORGANSTARGET
ORGANS

		LUNGS	RESP LYMPH	MUSCLE	OVARIES	PANCREAS	COR BONE	CAN BONE	R MAR
ADRENALS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	8.16E-06	8.16E-06	4.90E-06	9.50E-07	2.82E-05	3.39E-06	3.39E-06	6.60E-06
	T	8.16E-06	8.16E-06	4.90E-06	9.50E-07	2.82E-05	3.39E-06	3.39E-06	6.60E-06
BLAD WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.02E-07	1.02E-07	5.47E-06	2.22E-05	4.02E-07	1.53E-06	1.53E-06	2.56E-06
	T	1.02E-07	1.02E-07	5.47E-06	2.22E-05	4.02E-07	1.53E-06	1.53E-06	2.56E-06
S WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.68E-06	5.68E-06	3.92E-06	2.38E-06	5.67E-05	1.64E-06	1.64E-06	2.79E-06
	T	5.68E-06	5.68E-06	3.92E-06	2.38E-06	5.67E-05	1.64E-06	1.64E-06	2.79E-06
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.44E-07	5.44E-07	4.77E-06	3.86E-05	5.40E-06	2.22E-06	2.22E-06	7.83E-06
	T	5.44E-07	5.44E-07	4.77E-06	3.86E-05	5.40E-06	2.22E-06	2.22E-06	7.83E-06
ULT WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.54E-07	6.54E-07	5.27E-06	3.69E-05	6.41E-06	2.06E-06	2.06E-06	6.36E-06
	T	6.54E-07	6.54E-07	5.27E-06	3.69E-05	6.41E-06	2.06E-06	2.06E-06	6.36E-06
LLT WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.91E-07	1.91E-07	5.14E-06	4.86E-05	1.66E-06	3.15E-06	3.15E-06	8.58E-06
	T	1.91E-07	1.91E-07	5.14E-06	4.86E-05	1.66E-06	3.15E-06	3.15E-06	8.58E-06
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.52E-06	2.52E-06	4.34E-06	2.71E-06	2.02E-05	2.48E-06	2.48E-06	6.63E-06
	T	2.52E-06	2.52E-06	4.34E-06	2.71E-06	2.02E-05	2.48E-06	2.48E-06	6.63E-06
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	7.57E-06	7.57E-06	3.33E-06	1.56E-06	1.35E-05	1.96E-06	1.96E-06	2.73E-06
	T	7.57E-06	7.57E-06	3.33E-06	1.56E-06	1.35E-05	1.96E-06	1.96E-06	2.73E-06
LUNGS	A	3.05E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.86E-04	0.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.20E-04	1.20E-04	4.41E-06	1.71E-07	7.80E-06	2.88E-06	2.88E-06	3.50E-06
	T	3.05E+00	1.01E-03	4.41E-06	1.71E-07	7.80E-06	2.88E-06	2.88E-06	3.50E-06
RESP LYMPH	A	0.00E+00	2.03E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	8.86E-04	5.50E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.20E-04	1.20E-04	4.41E-06	1.71E-07	7.80E-06	2.88E-06	2.88E-06	3.50E-06
	T	1.01E-03	2.03E+02	4.41E-06	1.71E-07	7.80E-06	2.88E-06	2.88E-06	3.50E-06
MUSCLE	A	0.00E+00	0.00E+00	1.09E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	3.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.41E-06	4.41E-06	5.95E-06	6.58E-06	5.83E-06	2.97E-06	2.97E-06	3.62E-06
	T	4.41E-06	4.41E-06	1.09E-01	6.58E-06	5.83E-06	2.97E-06	2.97E-06	3.62E-06
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	2.77E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	8.05E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.72E-07	2.72E-07	6.58E-06	1.04E-02	1.22E-06	2.18E-06	2.18E-06	1.01E-05
	T	2.72E-07	2.72E-07	6.58E-06	2.77E+02	1.22E-06	2.18E-06	2.18E-06	1.01E-05

AC-225 CONTINUED
 SOURCE ORGANS

TARGET ORGANS		LUNGS	RESP LYMPH	MUSCLE	OVARIES	PANCREAS	COR BONE	CAN BONE	R MAR
PANCREAS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.05E+01	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.86E-03	0.00E+00	0.00E+00	0.00E+00
	P	7.94E-06	7.54E-06	5.83E-06	1.44E-06	1.93E-03	2.53E-06	2.53E-06	5.07E-06
	T	7.94E-06	7.54E-06	5.83E-06	1.44E-06	3.05E+01	2.53E-06	2.53E-06	5.07E-06
BONE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.05E+00	3.05E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-04	1.61E-04	1.09E-05
	P	4.83E-06	4.83E-06	2.97E-06	4.96E-06	4.64E-06	2.38E-05	2.38E-05	1.67E-05
	T	4.83E-06	4.83E-06	2.97E-06	4.96E-06	4.64E-06	3.05E+00	3.05E+00	2.65E-05
R MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E+00	2.03E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.44E-07	5.43E-05	5.53E-04
	P	6.11E-04	6.11E-04	6.76E-06	1.79E-05	8.89E-06	2.25E-05	2.25E-05	5.47E-05
	T	6.11E-04	6.11E-04	6.76E-06	1.79E-05	8.89E-06	2.29E-05	1.01E+00	2.03E+00
Y MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.03E-06	5.03E-06	5.10E-06	6.76E-06	5.35E-06	2.17E-05	2.17E-05	2.13E-05
	T	5.03E-06	5.03E-06	5.10E-06	6.76E-06	5.35E-06	2.17E-05	2.17E-05	2.13E-05
ENDOSTEAL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.94E+00	5.94E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.63E-05	1.38E-04	2.03E-04
	P	4.83E-06	4.83E-06	2.97E-06	4.96E-06	4.64E-06	2.38E-05	2.38E-05	2.24E-05
	T	4.83E-06	4.83E-06	2.97E-06	4.96E-06	4.64E-06	5.94E+00	5.94E+00	2.25E-04
SK IN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.59E-06	1.59E-06	2.65E-06	1.21E-06	1.19E-06	2.01E-06	2.01E-06	1.81E-06
	T	1.59E-06	1.59E-06	2.65E-06	1.21E-06	1.19E-06	2.01E-06	2.01E-06	1.81E-06
SPLEEN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	7.05E-06	7.05E-06	4.57E-06	1.81E-06	6.22E-05	1.84E-06	1.84E-06	2.75E-06
	T	7.05E-06	7.05E-06	4.57E-06	1.81E-06	6.22E-05	1.84E-06	1.84E-06	2.75E-06
TESTES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.24E-08	2.24E-08	3.43E-06	0.00E+00	1.48E-07	1.88E-06	1.88E-06	1.34E-06
	T	2.24E-08	2.24E-08	3.43E-06	0.00E+00	1.48E-07	1.88E-06	1.88E-06	1.34E-06
THYMUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.32E-05	1.32E-05	8.21E-06	7.24E-08	1.68E-06	1.62E-06	1.62E-06	2.57E-06
	T	1.32E-05	1.32E-05	8.21E-06	7.24E-08	1.68E-06	1.62E-06	1.62E-06	2.57E-06
THYROID	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.72E-06	2.72E-06	4.45E-06	1.39E-08	3.27E-07	2.35E-06	2.35E-06	2.01E-06
	T	2.72E-06	2.72E-06	4.45E-06	1.39E-08	3.27E-07	2.35E-06	2.35E-06	2.01E-06
UTERUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.33E-07	2.33E-07	8.88E-06	6.43E-05	1.50E-06	1.65E-06	1.65E-06	6.49E-06
	T	2.33E-07	2.33E-07	8.88E-06	6.43E-05	1.50E-06	1.65E-06	1.65E-06	6.49E-06
T BODY	A	4.36E-02	4.36E-02	4.36E-02	4.36E-02	4.36E-02	2.18E-01	2.18E-01	4.36E-02
	E	1.27E-05	1.27E-05	1.27E-05	1.27E-05	1.27E-05	1.27E-05	1.27E-05	1.27E-05
	P	5.99E-06	5.99E-06	5.38E-06	7.78E-06	7.65E-06	6.01E-06	6.01E-06	6.48E-06
	T	4.36E-02	4.36E-02	4.36E-02	4.36E-02	4.36E-02	2.18E-01	2.18E-01	4.36E-02

AC-225 CONTINUED
SOURCE ORGANSTARGET
ORGANS

		Y MAR	SKIN	SPLEEN	TESTES	THYROID	T BODY
ADRENALS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.36E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-05
	P	3.32E-06	1.55E-06	1.92E-05	8.80E-08	3.49E-07	6.77E-06
	T	3.32E-06	1.55E-06	1.92E-05	8.80E-08	3.49E-07	4.36E-02
BLAD WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.36E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-05
	P	1.15E-06	1.48E-06	3.20E-07	1.47E-05	6.01E-09	6.54E-06
	T	1.15E-06	1.48E-06	3.20E-07	1.47E-05	6.01E-09	4.36E-02
S WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.36E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-05
	P	2.41E-06	1.67E-06	3.13E-05	9.50E-08	1.46E-07	6.39E-06
	T	2.41E-06	1.67E-06	3.13E-05	9.50E-08	1.46E-07	4.36E-02
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.36E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-05
	P	3.19E-06	1.35E-06	4.22E-06	1.03E-06	2.37E-08	7.43E-06
	T	3.19E-06	1.35E-06	4.22E-06	1.03E-06	2.37E-08	4.36E-02
URI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.36E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-05
	P	2.74E-06	1.42E-06	4.37E-06	8.75E-07	3.08E-08	7.22E-06
	T	2.74E-06	1.42E-06	4.37E-06	8.75E-07	3.08E-08	4.36E-02
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.36E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-05
	P	2.77E-06	1.43E-06	1.81E-06	8.28E-06	1.22E-08	6.71E-06
	T	2.77E-06	1.43E-06	1.81E-06	8.28E-06	1.22E-08	4.36E-02
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.36E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-05
	P	3.23E-06	1.77E-06	2.89E-05	1.14E-07	9.43E-08	6.35E-06
	T	3.23E-06	1.77E-06	2.89E-05	1.14E-07	9.43E-08	4.36E-02
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.36E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-05
	P	2.98E-06	1.61E-06	2.89E-06	8.60E-08	2.69E-07	6.44E-06
	T	2.98E-06	1.61E-06	2.89E-06	8.60E-08	2.69E-07	4.36E-02
LUNGS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.36E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-05
	P	2.93E-06	1.79E-06	7.03E-06	1.75E-08	2.82E-06	5.71E-06
	T	2.93E-06	1.79E-06	7.03E-06	1.75E-08	2.82E-06	4.36E-02
RESP LYMPH	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.36E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-05
	P	2.93E-06	1.79E-06	7.03E-06	1.75E-08	2.82E-06	5.71E-06
	T	2.93E-06	1.79E-06	7.03E-06	1.75E-08	2.82E-06	4.36E-02
MUSCLE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.36E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-05
	P	2.73E-06	2.65E-06	4.57E-06	3.43E-06	4.45E-06	5.38E-06
	T	2.73E-06	2.65E-06	4.57E-06	3.43E-06	4.45E-06	4.36E-02
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.36E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-05
	P	4.49E-06	1.12E-06	1.18E-06	0.00E+00	1.39E-08	7.49E-06
	T	4.49E-06	1.12E-06	1.18E-06	0.00E+00	1.39E-08	4.36E-02

S FACTORS (REM/MICROCURIE-DAY) FOR AC-227

TARGET ORGANS		SOURCE ORGANS							
		ADRENALS	BLAD CNT	S CONT	SI CNT	ULI CONT	LLI CONT	KIDNEYS	LIVER
ADRENALS	A	2.55E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	4.69E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.32E-04	3.19E-09	6.54E-08	1.89E-08	2.10E-08	7.22E-09	3.47E-07	1.08E-07
	T	2.59E+00	3.19E-09	6.54E-08	1.89E-08	2.10E-08	7.22E-09	3.47E-07	1.08E-07
BLAD WALL	A	0.00E+00	0.52E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	1.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.19E-09	5.34E-06	6.57E-09	5.94E-08	5.16E-08	1.62E-07	6.23E-09	3.59E-09
	T	3.19E-09	9.08E-02	6.57E-09	5.94E-08	5.16E-08	1.62E-07	6.23E-09	3.59E-09
S WALL	A	0.00E+00	0.00E+00	6.89E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	1.31E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.64E-08	6.19E-09	3.04E-06	8.90E-08	9.59E-08	4.07E-08	8.42E-08	4.34E-08
	T	6.64E-08	6.19E-09	2.01E-03	8.90E-08	9.59E-08	4.07E-08	8.42E-08	4.34E-08
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	4.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	8.21E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.88E-08	7.02E-08	6.35E-08	2.03E-06	4.94E-07	2.75E-07	6.66E-08	3.78E-08
	T	1.88E-08	7.02E-08	6.35E-08	1.25E-03	4.94E-07	2.75E-07	6.66E-08	3.78E-08
ULI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.83E-04	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49E-03	0.00E+00	0.00E+00	0.00E+00
	P	2.15E-08	4.52E-08	8.49E-08	1.92E-06	2.96E-06	1.52E-07	6.60E-08	5.53E-08
	T	2.15E-08	4.52E-08	8.49E-08	1.92E-06	2.20E-03	1.52E-07	6.60E-08	5.53E-08
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-03	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.43E-03	0.00E+00	0.00E+00
	P	4.88E-09	1.75E-07	2.65E-08	3.02E-07	8.56E-08	3.99E-06	1.53E-08	5.16E-09
	T	4.88E-09	1.75E-07	2.65E-08	3.02E-07	8.56E-08	3.71E-03	1.53E-08	5.16E-09
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-01	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-03	0.00E+00
	P	3.34E-07	5.51E-09	7.98E-08	7.51E-08	6.60E-08	1.88E-08	1.06E-01	9.53E-08
	T	3.34E-07	5.51E-09	7.98E-08	7.51E-08	6.60E-08	1.88E-08	1.17E-01	9.53E-08
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.98E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.65E-04
	P	1.22E-07	3.49E-09	4.75E-08	4.28E-08	5.94E-08	5.41E-09	9.11E-08	2.14E-06
	T	1.22E-07	3.49E-09	4.75E-08	4.28E-08	5.94E-08	5.41E-09	9.11E-08	2.02E-02
LUNGS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.71E-08	5.30E-10	4.09E-08	4.80E-09	5.88E-09	1.73E-09	1.97E-08	6.48E-08
	T	5.71E-08	5.30E-10	4.09E-08	4.80E-09	5.88E-09	1.73E-09	1.97E-08	6.48E-08
RESP LYMPH	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.71E-08	5.30E-10	4.09E-08	4.80E-09	5.88E-09	1.73E-09	1.97E-08	6.48E-08
	T	5.71E-08	5.30E-10	4.09E-08	4.80E-09	5.88E-09	1.73E-09	1.97E-08	6.48E-08
MUSCLE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.57E-08	4.47E-08	3.40E-08	4.01E-08	3.55E-08	4.11E-08	4.10E-08	2.27E-08
	T	5.57E-08	4.47E-08	3.40E-08	4.01E-08	3.55E-08	4.11E-08	4.10E-08	2.27E-08
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.44E-08	1.66E-07	1.20E-08	3.05E-07	3.50E-07	5.57E-07	2.47E-08	9.79E-09
	T	1.44E-08	1.66E-07	1.20E-08	3.05E-07	3.50E-07	5.57E-07	2.47E-08	9.79E-09

TARGET ORGANS	AC-227 CONTINUED							
	SOURCE ORGANS							
	ADRENALS	BLAD CCNT	S CONG	SI CONT	ULI CONT	LLI CONT	KIDNEYS	LIVER
PANCREAS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.13E-07	4.65E-09	4.52E-07	4.73E-08	5.30E-08	1.75E-08	1.53E-07
	T	2.13E-07	4.65E-09	4.52E-07	4.73E-08	5.30E-08	1.75E-08	1.53E-07
BONE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.09E-08	2.27E-08	2.25E-08	3.29E-08	2.90E-08	4.34E-08	3.67E-08
	T	5.09E-08	2.27E-08	2.25E-08	3.29E-08	2.90E-08	4.34E-08	3.67E-08
R MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	9.15E-08	5.55E-08	3.99E-08	1.14E-07	9.50E-08	1.39E-07	9.65E-08
	T	9.15E-08	5.55E-08	3.99E-08	1.14E-07	9.50E-08	1.39E-07	9.65E-08
Y MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.84E-08	3.17E-08	3.16E-08	4.63E-08	4.17E-08	5.43E-08	4.42E-08
	T	4.84E-08	3.17E-08	3.16E-08	4.63E-08	4.17E-08	5.43E-08	4.42E-08
ENDOSTEAL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.09E-08	2.27E-08	2.25E-08	3.29E-08	2.90E-08	4.34E-08	3.67E-08
	T	5.09E-08	2.27E-08	2.25E-08	3.29E-08	2.90E-08	4.34E-08	3.67E-08
SKIN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.13E-08	1.26E-08	9.91E-09	9.31E-09	9.13E-09	1.13E-08	1.23E-08
	T	1.13E-08	1.26E-08	9.91E-09	9.31E-09	9.13E-09	1.13E-08	1.23E-08
SPLEEN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.44E-07	1.56E-08	2.31E-07	3.48E-08	3.36E-08	1.86E-08	2.21E-07
	T	1.44E-07	1.56E-08	2.31E-07	3.48E-08	3.36E-08	1.86E-08	2.21E-07
TESTES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.02E-10	1.09E-07	1.02E-09	6.67E-09	5.73E-09	3.81E-08	1.77E-09
	T	6.02E-10	1.09E-07	1.02E-09	6.67E-09	5.73E-09	3.81E-08	1.77E-09
THYMUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	9.52E-09	1.52E-10	6.16E-09	1.62E-09	2.16E-09	5.10E-10	4.65E-09
	T	9.52E-09	1.52E-10	6.16E-09	1.62E-09	2.16E-09	5.10E-10	4.65E-09
THYROID	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.57E-09	3.29E-11	1.70E-09	2.70E-10	3.01E-10	9.32E-11	9.28E-10
	T	2.57E-09	3.29E-11	1.70E-09	2.70E-10	3.01E-10	9.32E-11	9.28E-10
UTERUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.26E-08	3.79E-07	1.72E-08	2.28E-07	1.29E-07	1.63E-07	2.02E-08
	T	1.26E-08	3.79E-07	1.72E-08	2.28E-07	1.29E-07	1.63E-07	2.02E-08
T BODY	A	5.10E-04	5.73E-05	1.48E-06	3.94E-06	2.35E-06	2.92E-06	5.10E-04
	E	9.39E-06	1.06E-06	2.82E-06	7.51E-06	4.48E-06	5.56E-06	9.39E-06
	P	8.30E-08	8.76E-08	8.52E-08	9.07E-08	8.94E-08	8.94E-08	8.27E-08
	T	5.19E-04	5.75E-05	4.38E-06	1.15E-05	6.92E-06	8.57E-06	5.15E-04

AC-227 CONTINUED

TARGET ORGANS		SOURCE ORGANS							
		LUNGS	RESP LYMPH	MUSCLE	OVARIES	PANCREAS	COR BONE	CAN BONE	R MAR
ADRENALS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.77E-08	6.77E-08	5.57E-08	7.06E-09	2.18E-07	2.52E-08	2.52E-08	5.09E-08
	T	6.77E-08	6.77E-08	5.57E-08	7.06E-09	2.18E-07	2.52E-08	2.52E-08	5.09E-08
BL AD WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.30E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.97E-10	6.97E-10	4.47E-08	1.68E-07	3.13E-09	1.21E-08	1.21E-08	2.46E-08
	T	6.97E-10	6.97E-10	4.47E-08	1.68E-07	3.13E-09	1.21E-08	1.21E-08	2.46E-08
S WALL	A	0.00E+00	0.00E+00	0.00E+00	0.30E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.30E+00	0.00E+00
	P	4.44E-08	4.44E-08	3.02E-08	1.88E-08	4.85E-07	1.31E-08	1.31E-08	2.09E-08
	T	4.44E-08	4.44E-08	3.02E-08	1.88E-08	4.85E-07	1.31E-08	1.31E-08	2.09E-08
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.21E-09	4.21E-09	4.01E-08	3.30E-07	4.16E-08	1.72E-08	1.72E-08	6.15E-08
	T	4.21E-09	4.21E-09	4.01E-08	3.30E-07	4.16E-08	1.72E-08	1.72E-08	6.15E-08
ULI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.96E-09	4.96E-09	5.07E-08	3.97E-07	4.88E-08	1.62E-08	1.62E-08	5.10E-08
	T	4.96E-09	4.96E-09	5.07E-08	3.97E-07	4.88E-08	1.62E-08	1.62E-08	5.10E-08
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.30E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.27E-09	1.27E-09	4.11E-08	5.12E-07	1.30E-08	2.61E-08	2.61E-08	7.31E-08
	T	1.27E-09	1.27E-09	4.11E-08	5.12E-07	1.30E-08	2.61E-08	2.61E-08	7.31E-08
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.30E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.91E-08	1.51E-08	4.10E-08	2.08E-08	1.54E-07	1.93E-08	1.93E-08	5.11E-08
	T	1.91E-08	1.51E-08	4.10E-08	2.08E-08	1.54E-07	1.93E-08	1.93E-08	5.11E-08
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.30E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.08E-08	6.08E-08	2.87E-08	1.19E-08	1.03E-07	1.55E-08	1.55E-08	2.10E-08
	T	6.08E-08	6.08E-08	2.87E-08	1.19E-08	1.03E-07	1.55E-08	1.55E-08	2.10E-08
LUNGS	A	3.57E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.30E+00	0.00E+00
	E	6.57E-04	6.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.54E-06	2.54E-06	4.71E-08	1.27E-09	5.91E-08	2.21E-08	2.21E-08	2.69E-08
	T	3.63E-02	6.60E-04	4.71E-08	1.27E-09	5.91E-08	2.21E-08	2.21E-08	2.69E-08
RESP LYMPH	A	0.00E+00	2.38E+00	0.00E+00	0.00E+00	0.00E+00	0.30E+00	0.30E+00	0.00E+00
	E	6.57E-04	4.38E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.54E-06	2.54E-06	4.71E-08	1.27E-09	5.91E-08	2.21E-08	2.21E-08	2.69E-08
	T	6.60E-04	2.42E+00	4.71E-08	1.27E-09	5.91E-08	2.21E-08	2.21E-08	2.69E-08
MUSCLE	A	0.00E+00	0.00E+00	1.27E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	2.35E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.71E-08	4.71E-08	0.48E-08	6.82E-08	5.69E-08	42E-08	2.42E-08	2.56E-08
	T	4.71E-08	4.71E-08	1.30E-03	6.82E-08	5.69E-08	42E-08	2.42E-08	2.56E-08
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	3.24E+00	0.00E+00	0.00E+00	0.30E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	5.97E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.92E-09	1.52E-09	6.82E-08	2.39E-04	1.01E-08	1.64E-08	1.64E-08	8.25E-08
	T	1.92E-09	1.52E-09	6.82E-08	2.39E-04	1.01E-08	1.64E-08	1.64E-08	8.25E-08

AC-227 CONTINUED

TARGET ORGANS		SOURCE ORGANS							
		LUNGS	RESP LYMPH	MUSCLE	OVARIES	PANCREAS	COR BONE	CAN BONE	R MAR
PANCREAS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.57E-01	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.57E-03	0.00E+00	0.00E+00	0.00E+00
	P	6.02E-08	6.02E-08	5.69E-08	1.16E-08	4.22E-05	1.92E-08	1.92E-08	3.56E-08
	T	6.02E-08	6.02E-08	5.69E-08	1.16E-08	3.63E-01	1.92E-08	1.92E-08	3.56E-08
BONE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.57E-02	3.57E-02	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E-04	1.29E-04	1.47E-06
	P	3.81E-08	3.81E-08	2.42E-08	3.86E-08	3.66E-08	3.89E-07	3.89E-07	2.55E-07
	T	3.81E-08	3.81E-08	2.42E-08	3.86E-08	3.66E-08	3.58E-02	3.58E-02	1.72E-06
R MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-02	2.38E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.74E-08	7.33E-06	4.33E-04
	P	4.82E-08	4.82E-08	6.10E-08	1.39E-07	7.05E-08	3.78E-07	3.78E-07	5.88E-07
	T	4.82E-08	4.82E-08	6.10E-08	1.39E-07	7.05E-08	4.35E-07	1.4E-02	2.42E-02
Y MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.97E-08	3.97E-08	4.60E-08	5.25E-08	4.22E-08	3.73E-07	3.73E-07	3.68E-07
	T	3.97E-08	3.97E-08	4.60E-08	5.25E-08	4.22E-08	3.73E-07	3.73E-07	3.68E-07
ENDOSTEAL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-03	2.72E-03	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-05	2.55E-05	2.02E-04
	P	3.81E-08	3.81E-08	2.42E-08	3.86E-08	3.66E-08	3.89E-07	3.89E-07	3.76E-07
	T	3.81E-08	3.81E-08	2.42E-08	3.86E-08	3.66E-08	2.73E-03	2.75E-03	2.02E-04
SKIN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.18E-08	1.18E-08	3.25E-08	9.03E-09	8.95E-09	1.72E-08	1.72E-08	1.55E-08
	T	1.18E-08	1.18E-08	3.25E-08	9.03E-09	8.95E-09	1.72E-08	1.72E-08	1.55E-08
SPLEEN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.57E-08	5.57E-08	4.14E-08	1.07E-08	5.42E-07	1.53E-08	1.53E-08	2.18E-08
	T	5.57E-08	5.57E-08	4.14E-08	1.07E-08	5.42E-07	1.53E-08	1.53E-08	2.18E-08
TESTES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.40E-10	1.40E-10	2.68E-08	0.00E+00	1.08E-09	1.50E-08	1.50E-08	1.17E-08
	T	1.40E-10	1.40E-10	2.68E-08	0.00E+00	1.08E-09	1.50E-08	1.50E-08	1.17E-08
THYMUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.03E-07	1.03E-07	1.11E-07	4.90E-10	1.16E-08	1.37E-08	1.37E-08	2.12E-08
	T	1.03E-07	1.03E-07	1.11E-07	4.90E-10	1.16E-08	1.37E-08	1.37E-08	2.12E-08
THYROID	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.19E-08	2.19E-08	5.01E-08	8.31E-11	2.40E-09	1.74E-08	1.74E-08	1.56E-08
	T	2.19E-08	2.19E-08	5.01E-08	8.31E-11	2.40E-09	1.74E-08	1.74E-08	1.56E-08
UTERUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.73E-09	1.73E-09	1.10E-07	4.81E-07	1.11E-08	1.26E-08	1.26E-08	4.55E-08
	T	1.73E-09	1.73E-09	1.10E-07	4.81E-07	1.11E-08	1.26E-08	1.26E-08	4.55E-08
T BODY	A	5.10E-04	5.10E-04	5.10E-04	5.10E-04	5.10E-04	2.55E-03	2.55E-03	5.10E-04
	E	9.39E-06	9.39E-06	9.39E-06	9.39E-06	9.39E-06	9.39E-06	9.39E-06	9.39E-06
	P	7.83E-08	7.83E-08	7.25E-08	9.22E-08	9.11E-08	7.82E-08	7.82E-08	8.18E-08
	T	5.19E-04	5.19E-04	5.19E-04	5.19E-04	5.19E-04	2.56E-03	2.56E-03	5.19E-04

AC-227 CONTINUED
 SOURCE ORGANS

 TARGET
 ORGANS

		Y MAR	SKIN	SPLEEN	TESTES	THYROID	T BODY
ADRENALS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.10E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.39E-06
	P	2.50E-08	1.45E-08	1.42E-07	6.02E-10	2.57E-09	9.06E-08
	T	2.50E-08	1.45E-08	1.42E-07	6.02E-10	2.57E-09	5.19E-04
BLAD WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.10E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.39E-06
	P	9.39E-09	1.16E-08	2.16E-09	1.10E-07	3.34E-11	8.02E-08
	T	9.39E-09	1.16E-08	2.16E-09	1.10E-07	3.34E-11	5.19E-04
S WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.10E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.39E-06
	P	1.99E-08	1.33E-08	2.39E-07	5.90E-10	1.08E-09	7.93E-08
	T	1.99E-08	1.33E-08	2.39E-07	5.90E-10	1.08E-09	5.19E-04
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.10E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.39E-06
	P	2.55E-08	1.03E-08	3.26E-08	7.65E-09	1.54E-10	8.99E-08
	T	2.55E-08	1.03E-08	3.26E-08	7.65E-09	1.54E-10	5.19E-04
ULI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.10E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.39E-06
	P	2.17E-08	1.12E-08	3.49E-08	6.55E-09	2.54E-10	8.98E-08
	T	2.17E-08	1.12E-08	3.49E-08	6.55E-09	2.54E-10	5.19E-04
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.10E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.39E-06
	P	2.28E-08	1.11E-08	1.38E-08	6.20E-08	7.47E-11	7.99E-08
	T	2.28E-08	1.11E-08	1.38E-08	6.20E-08	7.47E-11	5.19E-04
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.10E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.39E-06
	P	2.63E-08	1.33E-08	2.40E-07	7.73E-10	7.30E-10	8.07E-08
	T	2.63E-08	1.33E-08	2.40E-07	7.73E-10	7.30E-10	5.19E-04
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.10E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.39E-06
	P	2.34E-08	1.21E-08	2.23E-08	6.21E-10	1.93E-09	8.14E-08
	T	2.34E-08	1.21E-08	2.23E-08	6.21E-10	1.93E-09	5.19E-04
LUNGS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.10E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.39E-06
	P	2.24E-08	1.33E-08	5.50E-08	1.03E-10	2.14E-08	7.37E-08
	T	2.24E-08	1.33E-08	5.50E-08	1.03E-10	2.14E-08	5.19E-04
RESP LYMPH	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.10E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.39E-06
	P	2.24E-08	1.33E-08	5.50E-08	1.03E-10	2.14E-08	7.37E-08
	T	2.24E-08	1.33E-08	5.50E-08	1.03E-10	2.14E-08	5.19E-04
MUSCLE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.10E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.39E-06
	P	2.37E-08	3.25E-08	4.14E-08	2.68E-08	5.01E-08	7.25E-08
	T	2.37E-08	3.25E-08	4.14E-08	2.68E-08	5.01E-08	5.19E-04
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.10E-04
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.39E-06
	P	3.70E-08	7.75E-09	7.60E-09	0.00E+00	8.31E-11	1.10E-07
	T	3.70E-08	7.75E-09	7.60E-09	0.00E+00	8.31E-11	5.19E-04

S FACTORS (REM/MICROCURIE-DAY) FOR TH-227

TARGET ORGANS		SOURCE ORGANS							
		ADRENALS	BLAD CENT	S CONT	SI CONT	ULI CONT	LLI CONT	KIDNEYS	LIVER
ADRENALS	A	2.23E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	F	1.39E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.94E-02	3.56E-06	4.62E-05	2.68E-05	1.76E-05	8.36E-06	2.12E-04	9.58E-05
	T	2.24E+02	3.56E-06	4.62E-05	2.68E-05	1.76E-05	8.36E-06	2.12E-04	9.58E-05
BLAD WALL	A	0.00E+00	7.82E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	F	0.00E+00	4.86E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.17E-06	1.68E-03	5.06E-06	5.24E-05	3.98E-05	1.25E-04	5.85E-06	3.53E-06
	T	2.17E-06	7.82E+00	5.06E-06	5.24E-05	3.98E-05	1.25E-04	5.85E-06	3.53E-06
S WALL	A	0.00E+00	0.00E+00	6.04E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	F	0.00E+00	0.00E+00	3.89E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.60E-05	5.20E-06	1.14E-03	7.03E-05	7.31E-05	3.43E-05	6.55E-05	3.72E-05
	T	5.60E-05	5.20E-06	6.54E-02	7.03E-05	7.31E-05	3.43E-05	6.55E-05	3.72E-05
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	3.77E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	F	0.00E+00	0.00E+00	0.00E+00	2.43E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.62E-05	5.45E-05	5.05E-05	7.82E-04	3.33E-04	1.85E-04	5.46E-05	3.16E-05
	T	1.62E-05	5.45E-05	5.05E-05	4.10E-02	3.33E-04	1.85E-04	5.46E-05	3.16E-05
ULI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.86E-02	0.00E+00	0.00E+00	0.00E+00
	F	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.42E-03	0.00E+00	0.00E+00	0.00E+00
	P	1.77E-05	4.42E-05	6.84E-05	5.72E-04	9.69E-04	8.61E-05	5.45E-05	4.79E-05
	T	1.77E-05	4.42E-05	6.84E-05	5.72E-04	7.40E-02	8.61E-05	5.45E-05	4.79E-05
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-01	0.00E+00	0.00E+00
	F	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.20E-03	0.00E+00	0.00E+00
	P	4.63E-06	1.40E-04	2.43E-05	1.49E-04	5.91E-05	1.18E-03	1.55E-05	4.64E-06
	T	4.63E-06	1.40E-04	2.43E-05	1.49E-04	5.91E-05	1.20E-01	1.55E-05	4.64E-06
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E+01	0.00E+00
	F	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.27E-03	0.00E+00
	P	2.28E-04	5.46E-06	6.72E-05	5.89E-05	5.31E-05	1.73E-05	2.12E-03	7.46E-05
	T	2.28E-04	5.46E-06	6.72E-05	5.89E-05	5.31E-05	1.73E-05	1.01E+01	7.46E-05
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E+00
	F	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-03
	P	9.64E-05	4.05E-06	3.80E-05	3.53E-05	4.96E-05	5.35E-06	7.50E-05	6.27E-04
	T	9.64E-05	4.05E-06	3.80E-05	3.53E-05	4.96E-05	5.35E-06	7.50E-05	1.74E+00
LUNGS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	F	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.76E-05	5.40E-07	3.37E-05	4.85E-06	5.28E-06	1.62E-06	1.64E-05	4.89E-05
	T	4.76E-05	5.40E-07	3.37E-05	4.85E-06	5.28E-06	1.62E-06	1.64E-05	4.89E-05
RESP LYMPH	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	F	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.76E-05	5.40E-07	3.37E-05	4.85E-06	5.28E-06	1.62E-06	1.64E-05	4.89E-05
	T	4.76E-05	5.40E-07	3.37E-05	4.85E-06	5.28E-06	1.62E-06	1.64E-05	4.89E-05
MUSCLE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	F	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.00E-05	3.46E-05	2.73E-05	3.02E-05	2.86E-05	3.28E-05	2.76E-05	2.12E-05
	T	3.00E-05	3.46E-05	2.73E-05	3.02E-05	2.86E-05	3.28E-05	2.76E-05	2.12E-05
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	F	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.06E-05	1.42E-04	3.78E-06	2.06E-04	2.33E-04	3.82E-04	2.27E-05	6.18E-06
	T	1.06E-05	1.42E-04	3.78E-06	2.06E-04	2.33E-04	3.82E-04	2.27E-05	6.18E-06

TH-227 CONTINUED

TARGET ORGANS		SOURCE ORGANS							
		ADRENALS	BLAD CENT	S CONT	SI CONT	ULI CONT	LLI CONT	KIDNEYS	LIVER
PANCREAS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.67E-04	5.22E-06	3.56E-04	3.91E-05	4.35E-05	1.32E-05	1.25E-04	7.56E-05
	T	1.67E-04	5.22E-06	3.56E-04	3.91E-05	4.35E-05	1.32E-05	1.25E-04	7.56E-05
BONE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.37E-05	1.47E-05	1.47E-05	2.03E-05	1.83E-05	2.70E-05	2.39E-05	1.84E-05
	T	3.37E-05	1.47E-05	1.47E-05	2.03E-05	1.83E-05	2.70E-05	2.39E-05	1.84E-05
R MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.09E-05	3.40E-05	2.58E-05	6.80E-05	5.83E-05	8.44E-05	6.21E-05	2.62E-05
	T	6.09E-05	3.40E-05	2.58E-05	6.80E-05	5.83E-05	8.44E-05	6.21E-05	2.62E-05
Y MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.23E-05	1.37E-05	2.06E-05	2.84E-05	2.62E-05	3.36E-05	2.94E-05	2.75E-05
	T	3.23E-05	1.37E-05	2.06E-05	2.84E-05	2.62E-05	3.36E-05	2.94E-05	2.75E-05
ENOSTEAL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.37E-05	1.47E-05	1.47E-05	2.03E-05	1.83E-05	2.70E-05	2.39E-05	1.84E-05
	T	3.37E-05	1.47E-05	1.47E-05	2.03E-05	1.83E-05	2.70E-05	2.39E-05	1.84E-05
SKIN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.13E-05	1.10E-05	9.33E-06	8.79E-06	8.88E-06	1.02E-05	1.12E-05	1.02E-05
	T	1.13E-05	1.10E-05	9.33E-06	8.79E-06	8.88E-06	1.02E-05	1.12E-05	1.02E-05
SPLEEN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.28E-04	4.21E-06	1.95E-04	2.93E-05	2.64E-05	1.54E-05	1.72E-04	1.78E-05
	T	1.28E-04	4.21E-06	1.95E-04	2.93E-05	2.64E-05	1.54E-05	1.72E-04	1.78E-05
TESTES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	8.85E-07	9.11E-05	1.02E-06	6.40E-06	6.44E-06	3.84E-05	2.16E-06	1.57E-06
	T	8.85E-07	9.11E-05	1.02E-06	6.40E-06	6.44E-06	3.84E-05	2.16E-06	1.57E-06
THYMUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	9.26E-06	3.45E-07	4.90E-06	1.99E-06	2.24E-06	7.32E-07	4.34E-06	1.43E-05
	T	9.26E-06	3.45E-07	4.90E-06	1.99E-06	2.24E-06	7.32E-07	4.34E-06	1.43E-05
THYROID	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.97E-06	8.27E-08	2.21E-06	4.53E-07	4.94E-07	1.83E-07	1.26E-06	3.75E-06
	T	2.97E-06	8.27E-08	2.21E-06	4.53E-07	4.94E-07	1.83E-07	1.26E-06	3.75E-06
UTERUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.25E-05	3.07E-04	1.53E-05	1.83E-04	9.36E-05	1.32E-04	1.87E-05	7.43E-06
	T	3.25E-05	3.07E-04	1.53E-05	1.83E-04	9.36E-05	1.32E-04	1.87E-05	7.43E-06
T BODY	A	4.47E-02	5.03E-03	1.29E-04	3.45E-04	6.6E-04	2.56E-04	4.47E-02	4.47E-02
	E	2.78E-05	3.13E-06	8.34E-06	2.22E-05	1.33E-05	1.65E-05	2.78E-05	2.78E-05
	P	3.61E-05	3.59E-05	3.80E-05	4.22E-05	4.11E-05	4.10E-05	3.62E-05	3.66E-05
	T	4.47E-02	5.03E-03	1.29E-04	3.45E-04	2.60E-04	3.13E-04	4.47E-02	4.47E-02

TH-227 CONTINUED

TARGET
ORGANS

SOURCE ORGANS

		LUNGS	RESP LYMPH	MUSCLE	OVARIES	PANCREAS	COR BONE	CAN BONE	R MAR
ADRENALS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.81E-05	4.81E-05	3.00E-05	7.61E-06	1.65E-04	2.55E-05	2.55E-05	4.67E-05
	T	4.81E-05	4.81E-05	3.00E-05	7.61E-06	1.65E-04	2.55E-05	2.55E-05	4.67E-05
BLAD WALL	A	0.70E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	9.70E-07	9.70E-07	3.46E-05	1.35E-04	2.95E-06	9.64E-06	9.64E-06	1.50E-05
	T	9.70E-07	9.70E-07	3.46E-05	1.35E-04	2.95E-06	9.64E-06	9.64E-06	1.50E-05
S WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.61E-05	3.61E-05	2.70E-05	1.51E-05	3.62E-04	1.09E-05	1.09E-05	2.01E-05
	T	3.61E-05	3.61E-05	2.70E-05	1.51E-05	3.62E-04	1.09E-05	1.09E-05	2.01E-05
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.91E-06	3.91E-06	3.02E-05	2.36E-04	3.48E-05	1.47E-05	1.47E-05	5.00E-05
	T	3.91E-06	3.91E-06	3.02E-05	2.36E-04	3.48E-05	1.47E-05	1.47E-05	5.00E-05
ULI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.89E-06	4.89E-06	3.23E-05	2.28E-04	4.18E-05	1.39E-05	1.39E-05	4.02E-05
	T	4.89E-06	4.89E-06	3.23E-05	2.28E-04	4.18E-05	1.39E-05	1.39E-05	4.02E-05
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.81E-06	1.81E-06	3.28E-05	2.93E-04	1.06E-05	2.00E-05	2.00E-05	5.69E-05
	T	1.81E-06	1.81E-06	3.28E-05	2.93E-04	1.06E-05	2.00E-05	2.00E-05	5.69E-05
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.71E-05	1.71E-05	2.76E-05	1.86E-05	1.24E-04	1.72E-05	1.72E-05	4.32E-05
	T	1.71E-05	1.71E-05	2.76E-05	1.86E-05	1.24E-04	1.72E-05	1.72E-05	4.32E-05
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.80E-05	4.80E-05	2.12E-05	1.09E-05	8.41E-05	1.28E-05	1.28E-05	1.85E-05
	T	4.80E-05	4.80E-05	2.12E-05	1.09E-05	8.41E-05	1.28E-05	1.28E-05	1.85E-05
LUNGS	A	3.13E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	1.94E-03	1.94E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.74E-04	4.74E-04	2.68E-05	1.42E-06	4.83E-05	1.88E-05	1.88E-05	2.31E-05
	T	3.13E+00	2.42E-03	2.68E-05	1.42E-06	4.83E-05	1.88E-05	1.88E-05	2.31E-05
RESP LYMPH	A	0.00E+00	2.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	1.94E-03	1.30E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.74E-04	4.81E-04	2.68E-05	1.42E-06	4.83E-05	1.88E-05	1.88E-05	2.31E-05
	T	2.42E-03	2.00E+00	2.68E-05	1.42E-06	4.83E-05	1.88E-05	1.88E-05	2.31E-05
MUSCLE	A	0.00E+00	0.00E+00	1.12E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	6.95E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.68E-05	2.68E-05	3.22E-05	3.99E-05	3.58E-05	2.01E-05	2.01E-05	2.40E-05
	T	2.68E-05	2.68E-05	1.12E-01	3.99E-05	3.58E-05	2.01E-05	2.01E-05	2.40E-05
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	2.84E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	1.77E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.30E-06	2.30E-06	3.99E-05	3.43E-02	6.47E-06	1.48E-05	1.48E-05	5.21E-05
	T	2.30E-06	2.30E-06	3.99E-05	2.85E+02	6.47E-06	1.48E-05	1.48E-05	5.21E-05

TH-227 CONTINUED

TARGET ORGANS	SOURCE ORGANS								
		LUNGS	RESP LYMPH	MUSCLE	OVARIES	PANCREAS	COR BONE	CAN BONE	R MAR
PANCREAS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E+01	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.94E-02	0.00E+00	0.00E+00	0.00E+00
	P	4.99E-05	4.59E-05	3.58E-05	9.28E-06	7.21E-03	1.93E-05	1.93E-05	3.14E-05
	T	4.99E-05	4.59E-05	3.58E-05	9.28E-06	3.13E+01	1.93E-05	1.93E-05	3.14E-05
BONE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E+00	3.13E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-04	3.35E-04	3.57E-05
	P	2.46E-05	2.46E-05	2.01E-05	2.46E-05	2.32E-05	1.03E-04	1.03E-04	6.50E-05
	T	2.46E-05	2.46E-05	2.01E-05	2.46E-05	2.32E-05	3.13E+00	3.13E+00	1.04E-04
R MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E+00	2.08E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.26E-06	1.79E-04	1.17E-03
	P	3.11E-05	3.11E-05	3.41E-05	8.64E-05	4.43E-05	9.48E-05	9.48E-05	2.35E-04
	T	3.11E-05	3.11E-05	3.41E-05	8.64E-05	4.43E-05	9.70E-05	1.03E+00	2.09E+00
Y MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.57E-05	2.57E-05	2.66E-05	3.31E-05	2.69E-05	9.19E-05	9.19E-05	8.88E-05
	T	2.57E-05	2.57E-05	2.66E-05	3.31E-05	2.69E-05	9.19E-05	9.19E-05	8.88E-05
ENDOSTEAL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.81E+00	5.81E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.47E-04	2.90E-04	4.55E-04
	P	2.46E-05	2.46E-05	2.01E-05	2.46E-05	2.32E-05	1.03E-04	1.03E-04	9.48E-05
	T	2.46E-05	2.46E-05	2.01E-05	2.46E-05	2.32E-05	5.81E+00	5.81E+00	5.50E-04
SKIN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.14E-05	1.14E-05	1.65E-05	8.69E-06	8.41E-06	1.44E-05	1.44E-05	1.29E-05
	T	1.14E-05	1.14E-05	1.65E-05	8.69E-06	8.41E-06	1.44E-05	1.44E-05	1.29E-05
SPLEEN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.40E-05	4.40E-05	2.88E-05	1.05E-05	3.83E-04	1.32E-05	1.32E-05	1.72E-05
	T	4.40E-05	4.40E-05	2.88E-05	1.05E-05	3.83E-04	1.32E-05	1.32E-05	1.72E-05
TESTES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.60E-07	2.60E-07	2.27E-05	0.00E+00	1.28E-06	1.15E-05	1.15E-05	6.49E-06
	T	2.60E-07	2.60E-07	2.27E-05	0.00E+00	1.28E-06	1.15E-05	1.15E-05	6.49E-06
THYMUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	7.74E-05	7.74E-05	5.43E-05	7.44E-07	1.40E-05	1.01E-05	1.01E-05	1.35E-05
	T	7.74E-05	7.74E-05	5.43E-05	7.44E-07	1.40E-05	1.01E-05	1.01E-05	1.35E-05
THYROID	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.71E-05	1.71E-05	2.72E-05	1.75E-07	2.80E-06	1.78E-05	1.78E-05	1.41E-05
	T	1.71E-05	1.71E-05	2.72E-05	1.75E-07	2.80E-06	1.78E-05	1.78E-05	1.41E-05
UTERUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.76E-06	1.76E-06	4.84E-05	4.04E-04	1.15E-05	1.14E-05	1.14E-05	4.22E-05
	T	1.76E-06	1.76E-06	4.84E-05	4.04E-04	1.15E-05	1.14E-05	1.14E-05	4.22E-05
T BODY	A	4.47E-02	4.47E-02	4.47E-02	4.47E-02	4.47E-02	2.23E-01	2.23E-01	4.47E-02
	E	2.78E-05	2.78E-05	2.78E-05	2.78E-05	2.78E-05	2.78E-05	2.78E-05	2.78E-05
	P	3.22E-05	3.22E-05	3.00E-05	4.31E-05	4.23E-05	3.19E-05	3.19E-05	3.49E-05
	T	4.47E-02	4.47E-02	4.47E-02	4.47E-02	4.47E-02	2.23E-01	2.23E-01	4.47E-02

TH-227 CONTINUED

TARGET ORGANS		SOURCE ORGANS					
		Y MAR	SKIN	SPLEEN	TESTES	THYROID	T BODY
ADRENALS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-05
	P	2.49E-05	1.47E-05	1.24E-04	8.85E-07	2.97E-06	4.00E-05
	T	2.49E-05	1.47E-05	1.24E-04	8.85E-07	2.97E-06	4.47E-02
BLAD WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-05
	P	6.61E-06	1.04E-05	2.89E-06	9.42E-05	8.35E-08	3.76E-05
	T	6.61E-06	1.04E-05	2.89E-06	9.42E-05	8.35E-08	4.47E-02
S WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-05
	P	1.43E-05	1.11E-05	1.90E-04	1.08E-06	1.11E-06	3.90E-05
	T	1.43E-05	1.11E-05	1.90E-04	1.08E-06	1.11E-06	4.47E-02
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-05
	P	2.02E-05	9.35E-06	2.68E-05	7.99E-06	2.40E-07	4.19E-05
	T	2.02E-05	9.35E-06	2.68E-05	7.99E-06	2.40E-07	4.47E-02
ULT WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-05
	P	1.72E-05	9.34E-06	2.48E-05	6.49E-06	1.99E-07	3.94E-05
	T	1.72E-05	9.34E-06	2.48E-05	6.49E-06	1.99E-07	4.47E-02
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-05
	P	1.72E-05	9.73E-06	1.21E-05	5.37E-05	1.50E-07	3.76E-05
	T	1.72E-05	9.73E-06	1.21E-05	5.37E-05	1.50E-07	4.47E-02
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-05
	P	2.12E-05	1.26E-05	1.75E-04	1.15E-06	7.25E-07	3.67E-05
	T	2.12E-05	1.26E-05	1.75E-04	1.15E-06	7.25E-07	4.47E-02
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-05
	P	1.92E-05	1.11E-05	1.93E-05	7.54E-07	2.27E-06	3.58E-05
	T	1.92E-05	1.11E-05	1.93E-05	7.54E-07	2.27E-06	4.47E-02
LUNGS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-05
	P	1.89E-05	1.23E-05	4.37E-05	2.12E-07	1.85E-05	3.15E-05
	T	1.89E-05	1.23E-05	4.37E-05	2.12E-07	1.85E-05	4.47E-02
RESP LYMPH	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-05
	P	1.89E-05	1.23E-05	4.37E-05	2.12E-07	1.85E-05	3.15E-05
	T	1.89E-05	1.23E-05	4.37E-05	2.12E-07	1.85E-05	4.47E-02
MUSCLE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-05
	P	1.83E-05	1.65E-05	2.88E-05	2.27E-05	2.72E-05	3.00E-05
	T	1.83E-05	1.65E-05	2.88E-05	2.27E-05	2.72E-05	4.47E-02
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-05
	P	2.48E-05	8.43E-06	1.19E-05	0.07E+00	1.75E-07	3.99E-05
	T	2.48E-05	8.43E-06	1.19E-05	0.07E+00	1.75E-07	4.47E-02

TH-227 CONTINUED

TARGET ORGANS	SOURCE ORGANS					
	Y MAR	SKIN	SPLEEN	TESTES	THYROID	T BODY
PANCREAS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-05
	P	2.42E-05	1.75E-05	3.78E-04	1.18E-06	4.33E-05
	T	2.42E-05	1.05E-05	3.78E-04	1.18E-06	4.47E-02
BONE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.23E-01
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-05
	P	7.82E-05	1.87E-05	1.90E-05	1.50E-05	3.66E-05
	T	7.82E-05	1.87E-05	1.90E-05	1.50E-05	2.23E-01
R MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-05
	P	8.09E-05	1.76E-05	2.83E-05	1.21E-05	4.37E-05
	T	8.09E-05	1.76E-05	2.83E-05	1.21E-05	4.47E-02
Y MAR	A	2.09E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-02
	E	1.30E-03	0.00E+00	0.00E+00	0.00E+00	2.78E-05
	P	1.78E-04	1.59E-05	2.84E-05	5.81E-06	8.86E-06
	T	2.09E+00	1.59E-05	2.84E-05	5.81E-06	4.47E-02
ENDOSTEAL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-02
	E	3.24E-04	0.00E+00	0.00E+00	0.00E+00	2.78E-05
	P	8.70E-05	1.87E-05	1.90E-05	1.50E-05	3.85E-05
	T	4.11E-04	1.87E-05	1.90E-05	1.50E-05	4.47E-02
SKIN	A	0.00E+00	1.20E+00	0.00E+00	0.00E+00	4.47E-02
	E	0.00E+00	7.48E-04	0.00E+00	0.00E+00	2.78E-05
	P	1.60E-05	7.48E-05	1.00E-05	2.96E-05	1.81E-05
	T	1.60E-05	1.20E+00	1.00E-05	2.96E-05	4.47E-02
SPLEEN	A	0.00E+00	0.00E+00	1.74E+01	0.00E+00	4.47E-02
	E	0.00E+00	0.00E+00	1.08E-02	0.00E+00	2.78E-05
	P	2.00E-05	1.13E-05	3.74E-03	7.61E-07	3.76E-05
	T	2.00E-05	1.13E-05	1.74E+01	7.61E-07	4.47E-02
TESTES	A	0.00E+00	0.00E+00	0.00E+00	8.94E+01	4.47E-02
	E	0.00E+00	0.00E+00	0.00E+00	5.56E-02	2.78E-05
	P	2.02E-05	2.01E-05	1.27E-06	1.21E-02	2.77E-05
	T	2.02E-05	2.01E-05	1.27E-06	8.94E+01	4.47E-02
THYMUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-05
	P	1.27E-05	1.35E-05	6.89E-06	9.90E-08	4.55E-05
	T	1.27E-05	1.35E-05	6.89E-06	9.90E-08	4.47E-02
THYROID	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-05
	P	2.06E-05	1.52E-05	2.13E-06	2.49E-08	2.86E-05
	T	2.06E-05	1.52E-05	2.13E-06	2.49E-08	4.47E-02
UTERUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.47E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-05
	P	1.23E-05	8.19E-06	7.54E-06	0.00E+00	4.33E-05
	T	1.23E-05	8.19E-06	7.54E-06	0.00E+00	4.47E-02
T BODY	A	4.47E-02	4.47E-02	4.47E-02	4.47E-02	5.74E-02
	E	2.78E-05	2.78E-05	2.78E-05	2.78E-05	2.78E-05
	P	2.83E-05	1.84E-05	3.65E-05	3.01E-05	3.12E-05
	T	4.47E-02	4.47E-02	4.47E-02	4.47E-02	5.75E-02

S FACTORS (REM/MICROCURIE-DAY) FOR TH-229

TARGET ORGANS		SOURCE ORGANS							
		ADRENALS	BLAD CNT	S CONT	SI CONT	ULI CONT	LLI CONT	KIDNEYS	LIVER
ADRENALS	A	1.84E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	3.81E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.17E-02	1.24E-06	4.72E-05	1.57E-05	1.52E-05	5.38E-06	2.20E-04	8.15E-05
	T	1.85E+02	2.24E-06	4.72E-05	1.57E-05	1.52E-05	5.38E-06	2.20E-04	8.15E-05
BLAD WALL	A	0.00E+00	6.45E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	1.33E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.03E-06	1.58E-03	4.29E-06	4.42E-05	3.70E-05	1.23E-04	4.24E-06	2.40E-06
	T	2.03E-06	6.47E+00	4.29E-06	4.42E-05	3.70E-05	1.23E-04	4.24E-06	2.40E-06
S WALL	A	0.30E+00	0.00E+00	4.98E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	1.07E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.96E-05	4.20E-06	1.29E-03	6.59E-05	7.03E-05	3.09E-05	6.23E-05	3.25E-05
	T	4.96E-05	4.20E-06	6.18E-02	6.59E-05	7.03E-05	3.09E-05	6.23E-05	3.25E-05
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	3.11E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	6.67E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.32E-05	5.14E-05	4.71E-05	9.77E-04	3.35E-04	1.85E-04	4.98E-05	2.77E-05
	T	1.32E-05	5.14E-05	4.71E-05	3.88E-02	3.35E-04	1.85E-04	4.98E-05	2.77E-05
ULI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.66E-02	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-02	0.00E+00	0.00E+00	0.00E+00
	P	1.51E-05	3.49E-05	6.49E-05	6.97E-04	1.12E-03	8.58E-05	4.91E-05	4.46E-05
	T	1.51E-05	3.49E-05	6.49E-05	6.97E-04	6.99E-02	8.58E-05	4.91E-05	4.46E-05
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.23E-02	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.98E-02	0.00E+00	0.00E+00
	P	3.38E-06	1.37E-04	2.00E-05	1.59E-04	5.94E-05	1.40E-03	1.13E-05	3.49E-06
	T	3.38E-06	1.37E-04	2.00E-05	1.59E-04	5.94E-05	1.13E-01	1.13E-05	3.49E-06
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.32E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.72E-02	0.00E+00
	P	2.18E-04	4.03E-06	6.09E-05	5.49E-05	4.92E-05	1.39E-05	2.97E-03	7.12E-05
	T	2.18E-04	4.03E-06	6.09E-05	5.49E-05	4.92E-05	1.39E-05	8.34E+00	7.12E-05
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.43E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.96E-03
	P	9.07E-05	2.54E-06	3.46E-05	3.16E-05	4.50E-05	3.82E-06	6.96E-05	7.64E-04
	T	9.07E-05	2.54E-06	3.46E-05	3.16E-05	4.50E-05	3.82E-06	6.96E-05	1.44E+00
LUNGS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.38E-05	3.52E-07	3.18E-05	3.42E-06	4.12E-06	1.19E-06	1.43E-05	4.78E-05
	T	4.38E-05	3.52E-07	3.18E-05	3.42E-06	4.12E-06	1.19E-06	1.43E-05	4.78E-05
RESPIRATORY	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.38E-05	3.52E-07	3.18E-05	3.42E-06	4.12E-06	1.19E-06	1.43E-05	4.78E-05
	T	4.38E-05	3.52E-07	3.18E-05	3.42E-06	4.12E-06	1.19E-06	1.43E-05	4.78E-05
MUSCLE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.94E-05	3.26E-05	2.55E-05	2.81E-05	2.65E-05	3.03E-05	2.60E-05	1.57E-05
	T	2.94E-05	3.26E-05	2.55E-05	2.81E-05	2.65E-05	3.03E-05	2.60E-05	1.57E-05
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	9.31E-06	1.30E-04	8.69E-06	2.10E-04	2.23E-04	3.64E-04	1.82E-05	7.22E-06
	T	9.31E-06	1.30E-04	8.69E-06	2.10E-04	2.23E-04	3.64E-04	1.82E-05	7.22E-06

TH-229 CONTINUED

TARGET ORGANS		ADRENALS	BLAD CENT	S CONT	SI CONT	ULI CONT	LLI CONT	KIDNEYS	LIVER
PANCREAS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.64E-04	3.39E-06	3.51E-04	3.46E-05	3.87E-05	1.19E-05	1.17E-04	7.78E-05
	T	1.64E-04	3.39E-06	3.51E-04	3.46E-05	3.87E-05	1.19E-05	1.17E-04	7.78E-05
BONE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.08E-05	1.62E-05	1.69E-05	2.43E-05	2.18E-05	3.37E-05	2.84E-05	2.19E-05
	T	4.08E-05	1.62E-05	1.69E-05	2.43E-05	2.18E-05	3.37E-05	2.84E-05	2.19E-05
R MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	7.25E-05	4.04E-05	2.92E-05	8.44E-05	7.26E-05	1.11E-04	7.49E-05	3.01E-05
	T	7.25E-05	4.04E-05	2.92E-05	8.44E-05	7.26E-05	1.11E-04	7.49E-05	3.01E-05
Y MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.86E-05	1.57E-05	2.40E-05	3.42E-05	3.15E-05	4.27E-05	3.47E-05	3.30E-05
	T	3.86E-05	1.57E-05	2.40E-05	3.42E-05	3.15E-05	4.27E-05	3.47E-05	3.30E-05
ENDOSTEAL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.08E-05	1.62E-05	1.69E-05	2.43E-05	2.18E-05	3.37E-05	2.84E-05	2.19E-05
	T	4.08E-05	1.62E-05	1.69E-05	2.43E-05	2.18E-05	3.37E-05	2.84E-05	2.19E-05
SKIN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	8.82E-06	5.46E-06	7.66E-06	6.90E-06	6.99E-06	8.26E-06	9.26E-06	8.32E-06
	T	8.82E-06	5.46E-06	7.66E-06	6.90E-06	6.99E-06	8.26E-06	9.26E-06	8.32E-06
SPLEEN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.16E-04	1.05E-05	1.87E-04	2.53E-05	2.46E-05	1.35E-05	1.67E-04	1.50E-05
	T	1.16E-04	1.05E-05	1.87E-04	2.53E-05	2.46E-05	1.35E-05	1.67E-04	1.50E-05
TESTES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.46E-07	8.56E-05	7.32E-07	4.67E-06	4.12E-06	3.05E-05	1.27E-06	8.89E-07
	T	4.46E-07	8.56E-05	7.32E-07	4.67E-06	4.12E-06	3.05E-05	1.27E-06	8.89E-07
THYMUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.67E-06	1.49E-07	4.71E-06	1.16E-06	1.47E-06	3.76E-07	3.13E-06	1.02E-05
	T	6.67E-06	1.49E-07	4.71E-06	1.16E-06	1.47E-06	3.76E-07	3.13E-06	1.02E-05
THYROID	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.82E-06	2.79E-08	1.24E-06	2.06E-07	2.28E-07	7.38E-08	6.76E-07	2.05E-06
	T	1.82E-06	2.79E-08	1.24E-06	2.06E-07	2.28E-07	7.38E-08	6.76E-07	2.05E-06
UTERUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.31E-05	3.04E-04	1.19E-05	1.80E-04	9.65E-05	1.26E-04	1.44E-05	6.12E-04
	T	1.31E-05	3.04E-04	1.19E-05	1.80E-04	9.65E-05	1.26E-04	1.44E-05	6.12E-04
T BODY	A	3.69E-02	4.15E-03	1.07E-04	2.85E-04	1.70E-04	2.11E-04	3.69E-02	3.69E-02
	E	7.62E-05	8.57E-06	2.29E-05	6.10E-05	3.64E-05	4.52E-05	7.62E-05	7.62E-05
	P	3.90E-05	4.24E-05	4.07E-05	4.48E-05	4.38E-05	4.40E-05	3.87E-05	3.64E-05
	T	3.70E-02	4.20E-03	1.70E-04	3.91E-04	2.50E-04	3.00E-04	3.70E-02	3.70E-02

TH-229 CONTINUED
 SOURCE ORGANS

TARGET ORGANS

TARGET ORGANS		LUNGS	RESP LYMPH	MUSCLE	OVARIES	PANCREAS	CDR BONE	CAN BONE	R MAR
ADRENALS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.70E-05	4.70E-05	2.94E-05	5.03E-06	1.66E-04	1.95E-05	1.95E-05	3.77E-05
	T	4.70E-05	4.70E-05	2.94E-05	5.03E-06	1.66E-04	1.95E-05	1.95E-05	3.77E-05
BLAD WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	5.29E-07	5.29E-07	3.26E-05	1.31E-04	2.13E-06	8.40E-06	8.40E-06	1.68E-05
	T	5.29E-07	5.29E-07	3.26E-05	1.31E-04	2.13E-06	8.40E-06	8.40E-06	1.68E-05
S WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.35E-05	3.35E-05	2.35E-05	1.32E-05	3.52E-04	9.19E-06	9.19E-06	1.56E-05
	T	3.35E-05	3.35E-05	2.35E-05	1.32E-05	3.52E-04	9.19E-06	9.19E-06	1.56E-05
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.92E-06	2.92E-06	2.81E-05	2.36E-04	3.02E-05	1.27E-05	1.27E-05	4.47E-05
	T	2.92E-06	2.92E-06	2.81E-05	2.36E-04	3.02E-05	1.27E-05	1.27E-05	4.47E-05
ULI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.51E-06	3.51E-06	3.09E-05	2.28E-04	3.61E-05	1.17E-05	1.17E-05	3.64E-05
	T	3.51E-06	3.51E-06	3.09E-05	2.28E-04	3.61E-05	1.17E-05	1.17E-05	3.64E-05
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.01E-06	1.01E-06	3.03E-05	3.03E-04	9.22E-06	1.81E-05	1.81E-05	5.25E-05
	T	1.01E-06	1.01E-06	3.03E-05	3.03E-04	9.22E-06	1.81E-05	1.81E-05	5.25E-05
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.41E-05	1.41E-05	2.60E-05	1.49E-05	1.19E-04	1.41E-05	1.41E-05	3.78E-05
	T	1.41E-05	1.41E-05	2.60E-05	1.49E-05	1.19E-04	1.41E-05	1.41E-05	3.78E-05
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.53E-05	4.53E-05	1.97E-05	8.51E-06	7.93E-05	1.11E-05	1.11E-05	1.53E-05
	T	4.53E-05	4.53E-05	1.97E-05	8.51E-06	7.93E-05	1.11E-05	1.11E-05	1.53E-05
LUNGS	A	2.58E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	5.33E-03	5.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.93E-04	6.93E-04	2.66E-05	8.97E-07	4.56E-05	1.67E-05	1.67E-05	2.01E-05
	T	2.59E+00	6.03E-03	2.66E-05	8.97E-07	4.56E-05	1.67E-05	1.67E-05	2.01E-05
RESP LYMPH	A	0.00E+00	1.72E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	5.32E-03	3.56E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	6.93E-04	6.93E-04	2.66E-05	8.97E-07	4.56E-05	1.67E-05	1.67E-05	2.01E-05
	T	6.03E-03	1.72E+02	2.66E-05	8.97E-07	4.56E-05	1.67E-05	1.67E-05	2.01E-05
MUSCLE	A	0.00E+00	0.00E+00	9.24E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	1.91E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	2.66E-05	2.66E-05	3.49E-05	3.92E-05	3.50E-05	1.70E-05	1.70E-05	2.08E-05
	T	2.66E-05	2.66E-05	9.24E-02	3.92E-05	3.50E-05	1.70E-05	1.70E-05	2.08E-05
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	2.35E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	4.85E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.45E-06	1.45E-06	3.92E-05	5.68E-02	6.76E-06	1.27E-05	1.27E-05	5.84E-05
	T	1.45E-06	1.45E-06	3.92E-05	2.35E+02	6.76E-06	1.27E-05	1.27E-05	5.84E-05

TH-229 CONT INUED

TARGET ORGANS	SOURCE ORGANS								
		LUNGS	RESP LYMPH	MUSCLE	OVARIES	PANCREAS	COR BONE	CAN BONE	R MAR
PANCREAS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.58E+01	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.33E-02	0.00E+00	0.00E+00	0.00E+00
	P	4.62E-05	4.62E-05	3.50E-05	7.77E-06	1.09E-02	1.42E-05	1.42E-05	2.86E-05
	T	4.62E-05	4.62E-05	3.50E-05	7.77E-06	2.59E+01	1.42E-05	1.42E-05	2.86E-05
BONE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.58E+00	2.58E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-03	9.29E-04	9.21E-05
	P	3.02E-05	3.02E-05	1.70E-05	3.04E-05	2.78E-05	1.47E-04	1.47E-04	9.66E-05
	T	3.02E-05	3.02E-05	1.70E-05	3.04E-05	2.78E-05	2.58E+00	2.58E+00	1.89E-04
R MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.51E-01	1.72E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.41E-06	4.61E-04	3.24E-03
	P	3.79E-05	3.79E-05	4.23E-05	1.12E-04	5.31E-05	1.39E-04	1.35E-04	3.51E-04
	T	3.79E-05	3.79E-05	4.23E-05	1.12E-04	5.31E-05	1.43E-04	8.52E-01	1.72E+00
Y MAR	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	3.18E-05	3.18E-05	3.21E-05	4.17E-05	3.19E-05	1.35E-04	1.35E-04	1.32E-04
	T	3.18E-05	3.18E-05	3.21E-05	4.17E-05	3.19E-05	1.35E-04	1.35E-04	1.32E-04
ENDOSTEAL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.39E+00	6.39E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.52E-04	9.28E-04	1.16E-03
	P	3.02E-05	3.02E-05	1.70E-05	3.04E-05	2.78E-05	1.47E-04	1.47E-04	1.38E-04
	T	3.02E-05	3.02E-05	1.70E-05	3.04E-05	2.78E-05	6.39E+00	6.39E+00	1.30E-03
SKIN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	9.10E-06	9.10E-06	1.56E-05	6.71E-06	6.64E-06	1.14E-05	1.14E-05	1.03E-05
	T	9.10E-06	9.10E-06	1.56E-05	6.71E-06	6.64E-06	1.14E-05	1.14E-05	1.03E-05
SPLEEN	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	4.18E-05	4.18E-05	2.75E-05	7.60E-06	3.88E-04	1.05E-05	1.05E-05	1.55E-05
	T	4.18E-05	4.18E-05	2.75E-05	7.60E-06	3.88E-04	1.05E-05	1.05E-05	1.55E-05
TESTES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.11E-07	1.11E-07	2.02E-05	0.00E+00	7.76E-07	1.05E-05	1.05E-05	7.40E-06
	T	1.11E-07	1.11E-07	2.02E-05	0.00E+00	7.76E-07	1.05E-05	1.05E-05	7.40E-06
THYMUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	7.78E-05	7.78E-05	4.85E-05	3.65E-07	9.20E-06	9.02E-06	9.02E-06	1.46E-05
	T	7.78E-05	7.78E-05	4.85E-05	3.65E-07	9.20E-06	9.02E-06	9.02E-06	1.46E-05
THYROID	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.49E-05	1.49E-05	2.72E-05	6.72E-08	1.70E-06	1.32E-05	1.32E-05	1.11E-05
	T	1.49E-05	1.49E-05	2.72E-05	6.72E-08	1.70E-06	1.32E-05	1.32E-05	1.11E-05
UTERUS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	P	1.26E-06	1.26E-06	5.20E-05	3.92E-04	8.05E-06	9.27E-06	9.27E-06	3.67E-05
	T	1.26E-06	1.26E-06	5.20E-05	3.92E-04	8.05E-06	9.27E-06	9.27E-06	3.67E-05
T BODY	A	3.69E-02	3.69E-02	3.69E-02	3.69E-02	3.69E-02	1.84E-01	1.84E-01	3.69E-02
	E	7.62E-05	7.62E-05	7.62E-05	7.62E-05	7.62E-05	7.62E-05	7.62E-05	7.62E-05
	P	3.58E-05	3.58E-05	3.15E-05	4.60E-05	4.52E-05	3.60E-05	3.60E-05	3.66E-05
	T	3.70E-02	3.70E-02	3.70E-02	3.70E-02	3.70E-02	1.84E-01	1.84E-01	3.70E-02

TH-229 CONTINUED

TARGET ORGANS		SOURCE ORGANS					
		Y MAR	SKIN	SPLEEN	TESTES	THYROID	T BODY
ADRENALS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.62E-05
	P	1.87E-05	1.11E-05	1.15E-04	4.46E-07	1.82E-06	3.85E-05
	T	1.87E-05	1.11E-05	1.15E-04	4.46E-07	1.82E-06	3.70E-02
BLAD WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.62E-05
	P	6.43E-06	8.48E-06	1.71E-06	8.62E-05	2.82E-06	3.87E-05
	T	6.43E-06	8.48E-06	1.71E-06	8.62E-05	2.82E-06	3.70E-02
S WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.62E-05
	P	1.37E-05	9.67E-06	1.88E-04	4.76E-07	7.85E-07	3.75E-05
	T	1.37E-05	9.67E-06	1.88E-04	4.76E-07	7.85E-07	3.70E-02
SI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.62E-05
	P	1.81E-05	7.60E-06	2.36E-05	5.53E-06	1.24E-07	4.37E-05
	T	1.81E-05	7.60E-06	2.36E-05	5.53E-06	1.24E-07	3.70E-02
ULI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.62E-05
	P	1.56E-05	9.10E-06	2.48E-05	4.75E-06	1.63E-07	4.26E-05
	T	1.56E-05	9.10E-06	2.48E-05	4.75E-06	1.63E-07	3.70E-02
LLI WALL	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.62E-05
	P	1.60E-05	8.01E-06	1.00E-05	4.77E-05	5.95E-08	3.98E-05
	T	1.60E-05	8.01E-06	1.00E-05	4.77E-05	5.95E-08	3.70E-02
KIDNEYS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.62E-05
	P	1.83E-05	1.04E-05	1.76E-04	5.79E-07	4.94E-07	3.71E-05
	T	1.83E-05	1.04E-05	1.76E-04	5.79E-07	4.94E-07	3.70E-02
LIVER	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.62E-05
	P	1.71E-05	9.25E-06	1.59E-05	4.48E-07	1.43E-06	3.80E-05
	T	1.71E-05	9.25E-06	1.59E-05	4.48E-07	1.43E-06	3.70E-02
LUNGS	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.62E-05
	P	1.72E-05	1.05E-05	4.20E-05	8.78E-08	1.59E-05	3.41E-05
	T	1.72E-05	1.05E-05	4.20E-05	8.78E-08	1.59E-05	3.70E-02
RESP LYMPH	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.62E-05
	P	1.72E-05	1.05E-05	4.20E-05	8.78E-08	1.59E-05	3.41E-05
	T	1.72E-05	1.05E-05	4.20E-05	8.78E-08	1.59E-05	3.70E-02
MUSCLE	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.62E-05
	P	1.57E-05	1.56E-05	2.75E-05	2.02E-05	2.72E-05	3.15E-05
	T	1.57E-05	1.56E-05	2.75E-05	2.02E-05	2.72E-05	3.70E-02
OVARIES	A	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-02
	E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.62E-05
	P	2.52E-05	6.46E-06	6.20E-06	0.00E+00	6.71E-08	4.38E-05
	T	2.52E-05	6.46E-06	6.20E-06	0.00E+00	6.71E-08	3.70E-02

APPENDIX III

Corrections to Previous SFACTOR Tabulations

S-FACTORS FOR α EMISSIONS IN BONE
(rem/microcurie-day)

Nuclide	Source distribution	Target organ*	Source organ*	
			Cor bone	Can bone
Bi-212	Surface	R. Mar	0	3.81E-01
		Endost	2.84E+00	2.84E+00
Po-210	Volume	R. Mar	0	3.64E-02
		Endost	2.62E-01	2.62E-01
Po-212	Surface	R. Mar	0	1.54E+00
		Endost	4.03E+00	4.03E+00
Po-214	Surface	R. Mar	0	1.35E+00
		Endost	4.87E+00	4.87E+00
Po-216	Surface	R. Mar	0	1.19E+00
		Endost	5.36E+00	5.36E+00
Po-218	Surface	R. Mar	0	1.05E+00
		Endost	5.73E+00	5.73E+00
Rn-220	Surface	R. Mar	0	1.10E+00
		Endost	5.62E+00	5.62E+00
Rn-222	Surface	P. Mar	0	9.61E-01
		Endost	6.13E+00	6.13E+00
Rn-224	Surface	R. Mar	0	9.93E-01
		Endost	5.00E+00	6.00E+00
Ra-226	Volume	R. Mar	0	2.81E-02
		Endost	2.25E-01	2.25E-01
Th-228	Surface	R. Mar	0	9.44E-01
		Endost	6.18E-00	6.18E+00
Th-230	Surface	R. Mar	0	8.15E-01
		Endost	6.43E+00	6.43E+00
Th-232	Surface	R. Mar	0	6.98E-01
		Endost	6.35E+00	6.35E+00
Pa-231	Surface	R. Mar	0	8.60E-01
		Endost	6.38E+00	6.38E+00
U-233	Volume	R. Mar	0	2.87E-02
		Endost	2.28E-01	2.28E-01
U-234	Volume	R. Mar	0	2.80E-02
		Endost	2.24E-01	2.24E-01
U-235	Volume	R. Mar	0	2.09E-02
		Endost	1.86E-01	1.86E-01

S-FACTORS FOR α EMISSIONS IN BONE (Cont'd)
(rem/microcurie-day)

Nuclide	Source distribution	Target organ*	Source organ*	
			Cor bone	Can bone
U-236	Volume	R. Mar	0	2.38E-02
		Endost	2.02E-01	2.02E-01
U-238	Volume	R. Mar	0	1.97E-02
		Endost	1.79E-01	1.79E-01
Np-237	Surface	R. Mar	0	8.78E-01
		Endost	6.34E+00	6.34E+00
Pu-238	Surface	R. Mar	0	9.58E-01
		Endost	6.12E+00	6.12E+00
Pu-239	Surface	R. Mar	0	8.99E-01
		Endost	6.29E+00	6.29E+00
Pu-240	Surface	R. Mar	0	9.00E-01
		Endost	6.29E+00	6.29E+00
Pu-242	Surface	R. Mar	0	8.53E-01
		Endost	6.37E+00	6.37E+00
Pu-244	Surface	R. Mar	0	7.98E-01
		Endost	6.42E+00	6.42E+00
Am-241	Surface	R. Mar	0	9.56E-01
		Endost	6.12E+00	6.12E+00
Cm-242	Surface	R. Mar	0	1.06E+00
		Endost	5.67E+00	5.67E+00
Cm-244	Surface	R. Mar	0	1.01E+00
		Endost	5.89E+00	5.89E+00
Cm-248	Surface	R. Mar	0	8.11E-01
		Endost	6.43E+00	6.43E+00
Cf-252	Surface	R. Mar	0	1.03E+00
		Endost	5.77E+00	5.77E+00

*R. Mar = red bone marrow
Endost = bone endosteal cells
Cor bone = cortical bone
Can bone = cancellous bone

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TO A TARGET ORGAN PER MICROCURIE-DAY RESIDENCE OF
A RADIONUCLIDE IN A SOURCE ORGAN --
SUPPLEMENTARY REPORT

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