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THE ARGONNE RADIUM STUDIES
Computed Radiobiological Indices

Charles E. Miller, Asher J. Finkel,
and Robert J. Hasterlik

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Charles E. Miller,* Asher J. Finkel,**
and Robert J. Hasterlik†

April 1969

*Argonne National Laboratory and Loyola University Medical School, Maywood, Illinois. Work supported in part by USAEC Contract (AT)11-(1)-2088.
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THE ARGONNE RADIUM STUDIES

Computed Radiobiological Indices

INTRODUCTION TO THE TABLES

In a previous report[1] we recorded the essential data that had been collected for approximately 300 patients who had or were suspected of having a measurable radium burden. In the present report we present a number of calculated radiobiological indices for those patients of the previous series who acquired their radium burdens by ingestion during occupational exposure. This group consisted of 208 patients who worked in the radium industry, principally as dial painters. The most significant exposures to ingested and absorbed radium occurred during the period when the dial painters tipped the camel hair brushes between their lips in order to produce a fine point. Camel hair brushes were replaced with glass pens about January 1, 1926, and subsequent exposures were small.

Table 1

Table 1 summarizes the basic data for the 208 patients who acquired their radium by occupational exposure. The information given in this table abstracts the material presented in ANL-7531.[1] The patients are listed serially by identification numbers, with one line for each measurement of retained radium. Exposure experience consists of the place of major employment, the dates worked (by month and year), and the number of days in the significant work span. The significant work span is considered to be the total employment period if the complete employment period occurred before or after January 1, 1926, but only the days from the date of employment until January 1, 1926 if it spanned this date. The identification of the place where occupational exposure occurred is given for each case in the previous report.[1] Computations have been based on the simplifying assumption that each person worked every day during the period of employment.

The radium burden measurements were made by several techniques and, apart from a few exceptions such as field studies, always in a shielded, whole-body counting facility.[2] Where two measurements are given for the same date, one was made by the conventional, single detection crystal placed over the patient in a tilting chair and the other by the single-crystal multiple-position technique with the patient supine.[3] The amount of radium determined by the whole-body measurement is given in microcuries. The number of elapsed days is the time between the last day of employment and the date of measurement if the entire period of work was either before or after January 1, 1926. If the employment period spanned this date, the elapsed time is the number of days from January 1, 1926 to the date of measurement.

The data under x-ray examination give the date (month and year) when the films were taken, the general degree of radiographic change attributable to radium, and the damage score.[1,4,5] The general diagnostic categories are listed by self-explanatory abbreviations for negative, minimal, mild, moderate, and advanced changes typical of radium deposition in the skeleton. A terminal "M" signifies the presence of a radium-related malignancy regardless of the results of the radiographic survey. An example is Case 3-407 who had a carcinoma of the mastoid but whose skeletal survey radiographs were read as showing moderate changes typical of radium deposition. Malignant disease attributable to radium without a radiographic survey is shown by MAL (see Reference 1 for details for each case). One case was omitted from any table in which the data were sorted by clinical diagnosis: Patient 3-487 developed chronic lymphatic leukemia (CLL), a disease generally thought to be unrelated etiologically to radiation, and although this patient had a single radium body burden measurement, no x rays of the skeleton were made.[6]

Table 2

This table presents a sample and abbreviated set of calculations for a hypothetical patient who is assumed to have contained 1.0 μCi of radium on the 14,000 day (= 38.33 years) after cessation of employment and who worked for a total of 30 days. These calculations are given in explanation of the procedure used to compute the various dose parameters given in the subsequent tables. Two comparable sets of data were computed for each measurement for each patient, first, on the assumption that the retention of radium could be described by a power function and, second, that it could be described by a sum of three exponential terms.

The quantity of radium that entered the bloodstream each day during the significant period of employment was computed first and is given at the top of Table 2, Part 2. If retention of radium is assumed to follow a power function, at^{-b}, and if the patient had ingested a unit amount of radium per day, the amount of radium that would be present in the body at any time t after an ingestion period of F days is given by the equation

$$R(F,t) = \frac{a}{b+1}\left[(t+F)^{b+1} - t^{b+1}\right].$$

The amount Q that entered the bloodstream each day by absorption from the gut is found by dividing the actual measured value of body radium at any time t by the computed value for t based on unit absorption per day.

The time in days (T) during the patient's employment and after cessation of employment are given in Column 1 (Table 2, Part 1). The amount of radium (RA) that would have been present in the body on each of these days if the patient had received a single injection of Q μCi of radium on the

first day of employment is given in Column 2. For these calculations the time used is the actual length of time that the patient was employed, plus the number of days after employment ceased. Since the power function is not valid as a description of radium retention during the first day, the value for the middle of the first day (0.5) was calculated as:

$$Ra = \frac{Q(1 + at^{-b})}{2},$$

where t = 1 day.

The running sum of the figures in Column 2 during the patient's period of employment is given in Column 3. This value (SRA) in Column 3 represents the amount of radium in the patient's body at any particular day. For example, the radium body content on the sixth day represents that component remaining from 6 days earlier, plus that from 5 days earlier, etc., plus that from the sixth or current day. The value given in this third column for any day after cessation of employment is simply the sum, in this case, of the 30 values given in Column 2 beginning with that particular day and going backward in time for 30 days. For example, the radium content present on the 32nd day after cessation of employment can be found by adding the values in Column 2 between day 3 and 32 days inclusive after cessation of employment. The values given in Column 4 are simply the continuous running sum of the values given in Column 3. These values (SSRA) are the cumulative microcurie-days to which the body has been exposed.

The amount of radon (RN) present in the body, again from a single injection of Q μCi of radium on the first day of employment is given in Column 5. Previous experimentation with animals has demonstrated that the RaB and RaC content of an animal is equal to the ^{226}Ra content on that day multiplied by the power function, ct^d, where d has a value of 0.18. It should be emphasized that the RaB and RaC content of the organism on any particular day after a single injection represents the buildup, i.e., integration, of the radon retained from numerous previous days. Since it already represents the integration of radon by the animal's metabolism, this expression, ct^d, cannot be integrated further in the case of multiple injections or continuous ingestion.

The ^{226}Ra content (RA) based on a single injection of Q μCi of radium, and given in Column 2 has been multiplied by

$$Rn = (1 - e^{-\lambda t})(ct^d)$$

to obtain the amount of radon present. Here, the term $(1 - e^{-\lambda t})$ represents the initial buildup of radon. The retained radon daughters, RaB and RaC, in equilibrium with Rn are given by this equation in Column 5 for each day during and after exposure. The RaB and RaC value for any day during the

lifetime of the patient from, in this case, a 30 day exposure, is given in Column 6. This value (SRN) represents the cumulative sum of the values given in Column 5 for the first 30 days and then the total of the preceding 30 days for any day thereafter. The running sum of the actual RaB and RaC content is given in Column 7 and represents the cumulative microcurie-days of RaB and RaC (SSRN). The percentage retention of radon (RET) defined as RaB and RaC present in the body divided by ^{226}Ra in the body on the same day is given in Column 2 (Table 2, Part 2). The day-by-day values of ^{226}Ra present in the body and RaB and RaC in the body (Columns 4 and 7, respectively, Table 2, Part 1) were multiplied by 0.0348 rads/day and 0.140 rads/day, respectively, to compute the dose per day in rads.[7] These values (DSRA and DSRN) are given in Columns 3 and 4 and the sum of the two values (DTOT), which is the daily dose to the skeleton, is given in Column 5. The running sum of the daily dose is given in Column 6 and represents the total cumulative rads to the skeleton for any day during employment or any day thereafter. Calculations such as these were made for each measurement for each patient out to 17,532 days (48 years) after cessation of employment. The actual tables obtained for each measurement on each patient contained the values of the parameters given in Table 2, Parts 1 and 2, for the 1st and last days of the significant exposure period, for the 1st, 10th, and 100th day and for the last day of each year through 48 years after the cessation of ingestion. Specific items of information were then selected from these computer outputs and appear in subsequent tables.

An additional set of calculations was made based on the sum of three exponentials as a description of the retention of radium in humans. The only differences between these calculations and those based on the power function were that 1) the daily amount that was absorbed from the gut, Q, was defined as

$$Q = \frac{Ra}{0.246Fe^{(-0.693T/5472)}}$$

where Ra was the measured quantity at any time T and F was the length of the significant exposure period, and 2) the radium content on any day based on a single injection of Q amount was calculated by

$$Ra = 0.85FQe^{-0.693T/2.4} + 0.125FQe^{-0.693T/30} + 0.025FQe^{-0.693T/5472}.$$

Table 3

This table gives the amount of radium that was computed to have entered the bloodstream from the gut each day during the significant exposure period, the total amount that entered the bloodstream, and the maximum amount of radium computed to have been present in the body at any time. These values are listed for each measurement on each patient, and have been calculated by both the power function and by the sum of three exponential terms.

The amount that entered the bloodstream was calculated as in Table 2. The total amount that entered the bloodstream is the product of Q and F, where F is the significant exposure period in days. The estimated maximum was the largest value obtained for SRA and occurred on the last day of the significant exposure period.

Table 4

Table 4 has four parts. The values for the amount Q that entered the bloodstream each day, the total amount that entered the bloodstream, and the estimated maximum radium burden that was computed for each measurement for each patient (Table 3) were averaged in those cases where two or more measurements had been obtained on a patient.

Table 4A. The mean values for these three parameters are given in Table 4A. The patients are listed by ascending patient identification number.

Tables 4B, 4C, 4D. The data of Table 4A were sorted into six categories based on the severity of the radiological diagnosis or the most recent clinical diagnosis. These groups are listed as negative, minimal, mild, moderate, and advanced nonmalignant changes typical of radium deposition, and malignant changes attributable to radium deposition. The values within each diagnosis group were then sorted according to ascending magnitude of: Estimated Maximum Burden as computed by power function (Table 4B), Daily Amount Absorbed by ingestion as computed by power function (Table 4C), and Total Amount Absorbed by ingestion as computed by power function (Table 4D). Data computed by the sum of three exponentials are included for comparison.

Table 5

The computer program described under Table 2 compiled the following data per each measurement: The patient's identification number, the elapsed time between the end of the significant exposure period and the date of the measurement, as well as the dose rate received by the patient on the 1st, 10th, and 100th day, and on the last day of the 1st, 5th, 20th, 40th, and 48th years after the end of the significant exposure. The dose rates to the skeleton in rads for these selected days when the retention of radium was assumed to follow the power function, $R = 0.30t^{-0.44}$, are given in Table 5A, and when the retention of radium was assumed to follow the sum of three exponentials in Table 5B. Several entries are given for those patients who were measured on different dates or who were measured by different techniques on the same date.

The mean daily dose rates at the same selected times for each patient are given in Table 5C (power function) and Table 5D (sum of three exponentials). The number of measurements used to calculate mean daily dose rates for each patient is given in Column 2 of these tables.

The mean daily dose rates on the patients were sorted into the six clinical categories used in Table 4B, 4C, and 4D: negative, minimal, mild, moderate, and advanced nonmalignant changes typical of radium deposition, as well as malignant changes attributable to radium deposition. The data within each group were sorted according to ascending dose rate at one day after cessation of ingestion. The values based on the power function are given in Table 5E and those on the sum of exponentials in Table 5F.

Table 6

The computer program under Table 2 compiled the following data for each measurement: The patient's identification number, the days between the last day of significant exposure and the day of the measurement, as well as the total cumulative dose in rads delivered to the skeleton during the significant exposure period and through one day afterward, and through the last day of the 1st, 5th, 10th, 20th, 30th, 40th, and 48th years after the end of the significant exposure period. The values for the total dose to the skeleton in rads for these selected days are given in Table 6A when the retention of radium was assumed to follow the power function, $R = 0.30t^{-0.44}$, and in Table 6B when the retention of radium was assumed to follow the sum of three exponentials. Several entries are given for those patients who were measured on different dates or who were measured by different techniques on the same date. Inspection of these data (see five measurements on Patient 3-402) demonstrate the close agreement between total dose values based on whole-body measurements made eight or ten years apart.

The values for mean total dose absorbed by the skeleton at the selected days for each patient are given in Table 6C (power function) and Table 6D (sum of three exponentials). The number of measurements used to calculate the mean total dose are given in Column 2.

The mean total dose data for each patient were sorted into the six clinical categories of negative, minimal, mild, moderate, and advanced nonmalignant changes typical of radium deposition as well as malignant changes attributable to radium deposition. The data within each clinical group were sorted according to ascending total dose to the skeleton at 48 years after cessation of ingestion. The values based on the power function are given in Table 6E and on the sum of exponentials in Table 6F.

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TABLES

TABLE 1

RETENTION OF RADIUM AFTER CONTINUOUS INGESTION BY OCCUPATIONAL EXPOSURE

BASIC DATA

	EXPOSURE EXPERIENCE			RA BURDEN MEAS.			X-RAY EXAM		
PT. NO.	FIRM	WORK DATES	DAYS WORKED	DATE	AMT.	ELAPSED DAYS	DATE	DIAG.	SCORE
3-401	RDO	6/23- 4/25	669	3/57	2.450	11673	3/57	ADVM	39.5
3-401	RDO	6/23- 4/25	669	7/60	2.287	12888	7/60	ADVM	43.5
3-402	RDO	7/23- 7/26	914	8/57	1.200	11546	8/57	ADVM	24.0
3-402	RDO	7/23- 7/26	914	11/59	1.170	12365	11/59	ADVM	26.0
3-402	RDO	7/23- 7/26	914	3/62	1.163	13215	3/62	ADVM	33.0
3-402	RDO	7/23- 7/26	914	3/62	1.420	13215	3/62	ADVM	33.0
3-402	RDO	7/23- 7/26	914	8/65	1.059	14473	3/62	ADVM	33.0
3-403	LPI	3/35- 9/43	3105	9/57	.008	5130	5/58	NEG.	.0
3-404	RDO	5/23- 2/27	975	9/57	.980	11582	5/58	MOD.	17.0
3-404	RDO	5/23- 2/27	975	10/62	.829	13423	10/62	MOD.	24.0
3-404	RDO	5/23- 2/27	975	10/62	.758	13423	10/62	MOD.	24.0
3-404	RDO	5/23- 2/27	975	9/66	.748	14870	9/66	ADV.	22.0
3-404	RDO	5/23- 2/27	975	9/66	.825	14870	9/66	ADV.	22.0
3-405	RDO	3/24- 6/29	670	9/57	.660	11582	5/58	MOD.	15.5
3-405	RDO	3/24- 6/29	670	9/59	.580	12323	5/58	MOD.	15.5
3-405	RDO	3/24- 6/29	670	10/62	.655	13423	10/62	MOD.	22.0
3-405	RDO	3/24- 6/29	670	10/62	.625	13423	10/62	MOD.	22.0
3-406	LPI	3/35- 6/44	3379	9/57	.016	4856	5/58	NEG.	.0
3-407	RDO	6/23- 6/46	944	9/57	1.400	11582	8/58	MODM	19.0
3-408	RDO	8/24- 4/26	517	9/57	.160	11589	11/58	NEG.	.0
3-410	RDO	4/23- 4/25	730	10/57	.060	11870	1/58	NEG.	.0
3-411	LPI	7/31- 7/42	4017	10/57	.001	5570	8/58	NEG.	.0
3-412	RDO	9/22- 4/25	941	10/57	.330	11870	7/58	MIN.	1.0
3-412	RDO	9/22- 4/25	941	6/63	.244	13958	6/63	MIN.	8.0
3-412	RDO	9/22- 4/25	941	6/63	.208	13958	6/63	MIN.	8.0
3-412	RDO	9/22- 4/25	941	4/65	.212	14623	6/63	MIN.	8.0
3-415	RDO	6/30- 6/45	5478	10/57	.015	4505	8/58	NEG.	.0
3-416	RDO	7/24-10/25	456	10/57	1.430	11688	10/58	MILD	10.5
3-416	RDO	7/24-10/25	456	10/58	1.333	12064	10/58	MILD	10.5
3-416	RDO	7/24-10/25	456	9/62	1.303	13510	9/62	MILD	16.0
3-416	RDO	7/24-10/25	456	9/66	1.199	14969	9/66	MOD.	18.0
3-416	RDO	7/24-10/25	456	9/66	1.452	14969	9/66	MOD.	18.0

3-417	RDO	7/24- 9/25	426	10/57	.890	11718	6/58	MINM	2.5
3-417	RDO	7/24- 9/25	426	4/62	.760	13365	4/62	MILM	10.0
3-417	RDO	7/24- 9/25	426	1/64	.606	14028	4/62	MILM	10.0
3-417	RDO	7/24- 9/25	426	1/64	.597	14028	4/62	MILM	10.0
3-417	RDO	7/24- 9/25	426	1/64	.649	14028	4/62	MILM	10.0
3-418	RDO	12/26-07/38	4230	10/57	.007	7036	10/58	NEG.	.0
3-419	RDO	12/24-12/28	395	10/57	.740	11598	12/57	MIN.	2.0
3-419	RDO	12/24-12/28	395	7/59	.761	12254	12/57	MIN.	2.0
3-419	RDO	12/24-12/28	395	10/62	.653	13425	10/62	MIN.	5.0
3-419	RDO	12/24-12/28	395	10/62	.679	13425	10/62	MIN.	5.0
3-420	RDO	9/22-10/26	1217	10/57	.018	11603	2/58	NEG.	.0
3-422	RDO	4/25- 4/26	274	10/57	.029	11603	11/57	NEG.	.0
3-423	RDO	7/23-11/35	914	10/57	.765	11603	2/58	MOD.	12.5
3-423	RDO	7/23-11/35	914	11/59	.590	12364	9/59	MOD.	22.0
3-423	RDO	7/23-11/35	914	9/62	.552	13418	9/62	MOD.	27.0
3-423	RDO	7/23-11/35	914	9/62	.591	13418	9/62	MOD.	27.0
3-424	RDO	6/23- 1/27	944	10/57	.364	11604	10/58	MIN.	6.0
3-426	RDO	7/24- 7/29	548	10/57	.220	11612	7/58	NEG.	.0
3-427	RDS	5/25- 3/41	244	10/57	.043	11617	10/58	NEG.	.0
3-427	RDS	5/25- 3/41	244	10/62	.028	13422	10/58	NEG.	.0
3-428	RDS	5/25- 7/28	244	10/57	.710	11617	8/58	MILD	7.0
3-428	RDS	5/25- 7/28	244	12/62	.593	13493	12/62	MILD	9.0
3-428	RDS	5/25- 7/28	244	12/62	.596	13493	12/62	MILD	9.0
3-429	RDO	8/23- 8/27	883	10/57	2.100	11617	11/58	MILM	14.0
3-429	RDO	8/23- 8/27	883	10/62	1.730	13422	10/62	MODM	18.0
3-429	RDO	8/23- 8/27	883	12/62	1.839	13493	10/62	MODM	18.0
3-429	RDO	8/23- 8/27	883	12/62	1.794	13493	10/62	MODM	18.0
3-429	RDO	8/23- 8/27	883	10/66	1.700	14884	10/66	MODM	28.0
3-429	RDO	8/23- 8/27	883	10/66	2.000	14884	10/66	MODM	28.0
3-431	RDO	12/22-12/25	1095	10/57	1.500	11650	2/58	MOD.	11.0
3-431	RDO	12/22-12/25	1095	6/63	1.366	13721	6/63	ADV.	16.0
3-431	RDO	12/22-12/25	1095	6/63	1.297	13721	6/63	ADV.	16.0
3-432	RDO	1/24-10/26	730	10/57	.045	11622	2/58	NEG.	.0
3-433	RDO	4/24- 7/26	639	10/57	1.350	11622	2/58	MILD	15.0
3-433	RDO	4/24- 7/26	639	10/64	1.075	14157	10/64	MILD	15.0
3-433	RDO	4/24- 7/26	639	10/64	1.052	14157	10/64	MILD	15.0
3-434	LPI	1/41- 6/43	880	11/57	.015	5277	1/58	NEG.	.0
3-434	LPI	1/41- 6/43	880	4/60	.015	6160	1/58	NEG.	.0
3-435	LPI	7/35- 7/37	730	11/57	.007	7438	10/58	NEG.	.0
3-436	RDO	8/26- 7/38	4351	11/57	.025	7073	10/58	NEG.	.0
3-437	RDO	3/26- 3/27	364	11/57	.055	11215	11/58	NEG.	.0

3-441	RDS	5/25- 7/35	244	11/57	.056	11639	8/58	NEG.	.0
3-442	RDO	7/24-10/24	91	11/57	.013	12101	11/57	NEG.	.0
3-443	LPI	9/35-10/41	2221	1/58	.001	5957	10/58	NEG.	.0
3-444	RDO	11/25- 3/27	60	1/58	.025	11709	8/58	NEG.	.0
3-444	RDO	11/25- 3/27	60	9/62	.016	13416	8/58	NEG.	.0
3-445	RDO	11/22-11/27	1156	1/58	1.620	11709	11/59	MIN.	5.5
3-445	RDO	11/22-11/27	1156	11/59	1.590	12366	11/59	MIN.	5.5
3-445	RDO	11/22-11/27	1156	2/64	1.423	13928	2/64	MILD	11.0
3-445	RDO	11/22-11/27	1156	2/64	1.743	13928	2/64	MILD	11.0
3-445	RDO	11/22-11/27	1156	10/66	1.367	14907	10/66	MILD	17.0
3-446	RDO	7/22-12/27	1279	1/58	.130	11709	8/58	NEG.	.0
3-446	RDO	7/22-12/27	1279	11/66	.077	14914	11/66	NEG.	1.0
3-446	RDO	7/22-12/27	1279	11/66	.088	14914	11/66	NEG.	1.0
3-447	RDO	8/24- 9/24	30	2/58	.002	12232	2/58	NEG.	.0
3-449	RDO	9/22- 7/50	1217	6/58	1.610	11841	9/58	MILD	10.0
3-449	RDO	9/22- 7/50	1217	8/64	1.135	14093	8/64	ADV.	30.0
3-450	RDS	6/24-10/24	121	6/58	.020	12298	11/58	NEG.	.0
3-452	RDO	7/25- 7/39	183	6/58	.042	11841	11/58	NEG.	.0
3-452	RDO	7/25- 7/39	183	11/66	.022	14919	11/66	NEG.	.0
3-455	RDO	7/22- 8/23	395	7/58	.810	12767	8/58	MODM	15.0
3-456	LPI	7/43- 7/51	2921	7/58	.033	2577	7/58	NEG.	.0
3-457	LPI	7/33- 7/43	3651	7/58	.004	5499	7/58	NEG.	.0
3-458	LPI	3/46- 7/58	4532	7/58	.017	1	7/58	NEG.	.0
3-459	RDO	8/24- 6/25	303	7/58	1.160	12111	7/58	MOD.	18.0
3-459	RDO	8/24- 6/25	303	2/64	.935	14134	2/64	MOD.	19.0
3-459	RDO	8/24- 6/25	303	2/64	.949	14134	2/64	MOD.	19.0
3-459	RDO	8/24- 6/25	303	3/65	.818	14519	2/64	MOD.	19.0
3-460	RDO	7/23-11/23	136	7/58	.012	12676	7/58	NEG.	1.0
3-461	RDO	7/22- 8/22	44	7/58	.006	13133	7/58	NEG.	.0
3-462	RDO	9/22-10/62	1217	8/58	.480	11900	8/58	MILD	5.0
3-462	RDO	9/22-10/62	1217	2/59	.474	12110	8/58	MILD	5.0
3-462	RDO	9/22-10/62	1217	10/62	.367	13426	10/62	MILD	14.0
3-462	RDO	9/22-10/62	1217	10/62	.329	13426	10/62	MILD	14.0
3-464	RDO	7/23- 7/24	365	8/58	.001	12452	8/58	NEG.	.0
3-465	RDO	7/25- 9/25	61	8/58	.002	12025	8/58	NEG.	.0
3-466	RDO	7/24- 9/24	75	8/58	.004	12390	8/58	NEG.	.0
3-467	RDO	9/26- 9/34	2921	8/58	.015	8752	8/58	NEG.	.0

3-468	RDS	2/26- 6/28	850	8/58	.029	11036	8/58	NEG.	.0
3-469	RDS	4/25-11/25	213	8/58	.010	11961	8/58	NEG.	.0
3-471	RDO	9/26- 6/28	638	10/58	.013	11090	10/58	NEG.	.0
3-473	RDO	07/22-01/25	916	10/58	1.260	12348	10/58	ADV.	39.0
3-473	RDO	07/22-01/25	916	9/62	1.170	13782	9/62	ADV.	43.0
3-474	RDO	11/25- 4/26	60	10/58	.019	11981	10/58	NEG.	.0
3-475	RDO	11/22- 2/24	456	10/58	.001	12681	10/58	NEG.	.0
3-476	RDO	10/27-11/27	44	10/58	.001	11304	10/58	NEG.	.0
3-477	RDO	6/27- 8/27	60	9/59	.011	11746	9/59	NEG.	.0
3-478	RDO	8/24-10/24	60	10/58	.005	12445	10/58	NEG.	.0
3-479	RDO	6/24-12/24	182	10/58	.072	12386	10/58	NEG.	.0
3-480	RDO	4/24- 6/24	74	10/58	.001	12555	10/58	NEG.	.0
3-481	LPI	12/41- 3/51	3376	11/58	.020	2805	11/58	NEG.	.0
3-482	LPI	1/44- 7/46	911	11/58	.001	4509	11/58	NEG.	.0
3-483	RDO	2/22- 7/25	1245	8/59	.001	12474	11/58	MIN.	2.0
3-484	RDC	7/19- 7/22	1095	11/58	1.550	13283	11/58	MOD.	18.0
3-484	RDC	7/19- 7/22	1095	12/62	1.440	14774	12/62	MOD.	22.0
3-484	RDC	7/19- 7/22	1095	12/62	1.622	14774	12/62	MOD.	22.0
3-485	RDO	7/29- 7/36	2556	11/58	.001	8175	11/58	NEG.	.0
3-486	RDO	7/25- 7/28	183	11/58	.400	12015	11/58	NEG.	.0
3-486	RDO	7/25- 7/28	183	11/66	.267	14919	11/66	NEG.	1.0
3-487	RDO	9/24- 7/37	549	12/58	.367	12031		CLL	
3-488	RDO	9/22- 3/23	180	12/58	.170	13067	12/58	MIN.	2.0
3-489	RDO	10/26- 3/28	516	12/58	.120	11240	12/58	NEG.	.0
3-490	RDO	3/25- 8/28	1278	12/58	.029	11063	12/58	MIN.	3.0
3-491	RDS	7/24- 7/24	14	1/59	.056	12593	1/59	NEG.	.0
3-492	LPI	3/46- 6/52	2283	1/59	.005	2410	1/59	NEG.	.0
3-493	RDC	7/20- 5/24	1399	1/59	.007	12681	1/59	NEG.	.0
3-494	RDS	5/25-10/28	244	1/59	.004	12078	1/59	NEG.	.0
3-495	RDO	7/23- 9/23	61	1/59	.001	12931	1/59	NEG.	.0

3-496	RDO	7/23- 9/23	61	1/59	.002	12931	1/59	NEG.	.0
3-499	RDO	06/24-07/25	395	01/59	.260	12265	1/59	MOD.	19.0
3-499	RDO	06/24-07/25	395	02/64	.225	14120	9/66	MOD.	18.0
3-500	RDO	4/22- 6/22	60	1/59	.001	13390	1/59	MIN.	5.0
3-501	RDO	8/28-10/28	60	1/59	.007	11076	1/59	NEG.	.0
3-502	RDC	7/18- 7/21	1095	2/59	.170	13733	2/59	MILD	7.0
3-503	RDP	4/22- 6/24	791	2/59	.125	12684	2/59	NEG.	.0
3-504	RDP	7/22- 2/23	214	2/59	.022	13170	2/59	NEG.	.0
3-505	RDO	7/23- 7/24	365	2/59	.180	12655	2/59	NEG.	.0
3-505	RDO	7/23- 7/24	365	3/65	.150	14854	3/65	MIN.	4.0
3-505	RDC	7/23- 7/24	365	3/65	.169	14854	3/65	MIN.	4.0
3-506	LPI	10/35- 6/45	3530	2/59	.017	5015	2/59	NEG.	.0
3-507	RDO	6/23- 8/23	46	2/59	.012	12992	2/59	NEG.	.0
3-508	RDO	6/23- 8/23	60	2/59	.010	12978	2/59	NEG.	.0
3-509	LPI	7/36- 2/59	8275	2/59	.110	1	2/59	NEG.	.0
3-510	RDO	9/23-10/62	852	2/59	.894	12110	2/59	MIN.	3.5
3-510	RDO	9/23-10/62	852	10/62	.734	13426	10/62	MILD	14.0
3-510	RDO	9/23-10/62	852	10/62	.729	13426	10/62	MILD	14.0
3-512	RDS	10/25- 4/26	91	3/59	.011	12114	3/59	NEG.	.0
3-513	RDS	7/25- 6/26	183	3/59	.135	12114	3/59	NEG.	.0
3-513	RDS	7/25- 6/26	183	9/66	.094	14872	9/66	NEG.	.0
3-513	RDS	7/25- 6/26	183	9/66	.098	14872	9/66	NEG.	.0
3-515	RDS	7/25- 4/27	183	3/59	.011	12115	3/59	NEG.	.0
3-516	RDS	8/25- 3/29	152	3/59	.018	12115	3/59	NEG.	.0
3-518	RDS	5/40- 4/49	3256	3/59	.011	3625	3/59	NEG.	.0
3-519	RDO	7/24- 9/24	61	3/59	.098	12606	3/59	NEG.	.0
3-520	RDO	7/25- 4/27	183	3/59	.157	12119	3/59	NEG.	.0
3-520	RDO	7/25- 4/27	183	10/66	.106	14891	10/66	MIN.	5.0
3-520	RDO	7/25- 4/27	183	10/66	.123	14891	10/66	MIN.	5.0
3-521	RDO	7/25- 4/26	183	3/59	.010	12119	3/59	NEG.	.0
3-522	RDP	6/21- 6/22	364	3/59	.197	13430	3/59	NEG.	.0
3-522	RDP	6/21- 6/22	364	9/64	.121	15459	9/64	NEG.	.0
3-522	RDP	6/21- 6/22	364	9/64	.140	15459	9/64	NEG.	.0
3-523	RDO	9/23- 4/24	212	3/59	.023	12760	3/59	NEG.	.0
3-524	RDO	7/25- 7/29	183	3/59	.067	12129	3/59	MIN.	2.5

3-525	RDO	1/31- 3/59	10302	3/59	.019	1	3/59	NEG.	.0
3-526	RDS	5/25- 5/26	244	4/59	.001	12162	4/59	MIN.	3.0
3-527	RDS	1/26- 7/28	911	4/59	.005	11250	4/59	NEG.	.0
3-528	RDO	6/22- 7/32	1309	5/59	1.630	12176	5/59	ADV.	17.0
3-529	RDP	3/21- 7/23	851	5/59	.155	13093	5/59	NEG.	.0
3-529	RDP	3/21- 7/23	851	10/66	.100	15801	10/66	MILD	12.0
3-529	RDP	3/21- 7/23	851	10/66	.127	15801	10/66	MILD	12.0
3-530	RDO	7/23- 4/25	639	5/59	.523	12456	5/59	MILD	7.0
3-530	RDO	7/23- 4/25	639	6/63	.497	13944	6/63	MILD	13.0
3-530	RDO	7/23- 4/25	639	6/63	.474	13964	6/63	MILD	13.0
3-531	IWC	10/25- 7/33	2282	5/59	.041	9988	5/59	NEG.	.0
3-532	IWC	9/26- 5/30	1337	5/59	.097	10598	5/59	NEG.	.0
3-533	RDO	7/25- 7/30	183	5/59	.016	12179	5/59	NEG.	.0
3-534	RDS	5/25- 5/27	244	5/59	.003	12184	5/59	NEG.	.0
3-535	RDP	6/22-11/22	152	5/59	.310	13342	5/59	NEG.	.0
3-535	RDP	6/22-11/22	152	10/64	.228	15313	10/64	NEG.	.0
3-535	RDP	6/22-11/22	152	10/64	.227	15313	10/64	NEG.	.0
3-536	RDO	7/25- 8/25	51	5/59	.035	12317	5/59	NEG.	.0
3-539	RDO	4/23-10/23	182	10/59	.015	13168	5/59	NEG.	.0
3-540	RDO	7/23- 7/30	914	5/59	2.200	12192	5/59	ADV.	29.0
3-540	RDO	7/23- 7/30	914	9/62	1.890	13417	9/62	ADV.	34.0
3-540	RDO	7/23- 7/30	914	9/66	1.789	14878	9/66	ADV.	33.0
3-540	RDO	7/23- 7/30	914	9/66	2.027	14878	9/66	ADV.	33.0
3-542	RDO	6/22- 9/22	91	6/59	.030	13431	6/59	NEG.	.0
3-544	RDP	3/22- 9/22	183	6/59	.005	13431	6/59	NEG.	.0
3-546	RDO	10/25-10/26	91	6/59	.095	12217	6/59	NEG.	.0
3-547	RDO	7/23- 8/25	761	6/59	.019	12381	6/59	NEG.	.0
3-548	RDP	6/22-10/22	121	10/59	.190	13527	10/59	NEG.	.0
3-549	RDO	6/25-10/33	213	7/59	.061	12234	7/59	NEG.	.0
3-550	CLM	6/17- 6/19	729	7/59	.013	14647	7/59	NEG.	1.0
3-551	RDO	7/22- 1/29	1279	9/56	1.200	11212	9/56	ADV.	39.5
3-551	RDO	7/22- 1/29	1279	8/59	1.330	12267	8/59	ADV.	51.0
3-551	RDO	7/22- 1/29	1279	8/63	1.348	13743	8/63	ADV.	38.0
3-551	RDO	7/22- 1/29	1279	8/64	1.129	14107	8/63	ADV.	38.0
3-551	RDO	7/22- 1/29	1279	7/67	1.166	15184	7/67	ADV.	41.0

3-552	RDO	2/24- 3/26	699	10/59	.162	12338	10/59	NEG.	.0
3-553	RDO	7/24-10/24	91	7/59	.026	12702	7/59	NEG.	.0
3-554	RDO	9/24- 1/33	486	8/61	2.000	13012	8/61	ADV.	19.0
3-555	RDO	8/28- 8/30	729	7/59	.011	10580	7/59	NEG.	.0
3-556	RDO	8/28- 7/30	698	7/59	.007	10611	7/59	NEG.	.0
3-558	RDO	6/23- 9/23	91	7/59	.115	13107	7/59	MOD.	15.0
3-559	RDP	8/22- 1/23	152	10/59	.017	13435	10/59	NEG.	.0
3-561	RDO	7/24- 9/24	61	7/59	.067	12750	7/59	NEG.	.0
3-562	RDO	1/30- 1/37	2556	8/59	.009	8248	8/59	NEG.	.0
3-563	RDO	7/24- 9/24	75	8/59	.015	12743	8/59	NEG.	.0
3-564	RDO	7/23- 7/23	21	8/59	.010	13168	8/59	NEG.	.0
3-565	RDO	7/30- 7/43	4747	8/59	.020	5893	8/59	NEG.	.0
3-566	RDO	7/30- 2/41	3867	8/59	.001	6773	8/59	NEG.	.0
3-567	RDP	9/22- 9/24	730	8/59	.045	12774	8/59	NEG.	1.0
3-568	RDP	7/22- 7/27	1279	8/59	.120	12288	8/59	MIN.	4.5
3-569	RDP	7/22- 7/26	1279	8/59	.144	12288	8/59	NEG.	.0
3-570	RDS	5/25- 3/26	244	8/59	.001	12291	8/59	NEG.	.0
3-571	RDS	7/25- 7/26	183	8/59	1.100	12291	8/59	ADV.	20.0
3-571	RDS	7/25- 7/26	183	10/62	.954	13425	10/62	ADV.	16.0
3-571	RDS	7/25- 7/26	183	10/62	.930	13425	10/62	ADV.	16.0
3-571	RDS	7/25- 7/26	183	9/66	.919	14872	9/66	ADV.	18.0
3-571	RDS	7/25- 7/26	183	9/66	1.109	14872	9/66	ADV.	18.0
3-572	RDO	6/25- 7/26	213	9/59	.086	12295	9/59	MIN.	3.0
3-573	RDO	4/25- 4/26	274	9/59	.028	12295	9/59	NEG.	.0
3-574	IWC	8/20- 8/32	4141	9/59	.001	10105	9/59	NEG.	.0
3-575	IWC	7/31- 7/32	182	9/59	.001	9743	9/59	NEG.	.0
3-576	RDS	5/25- 5/27	244	9/59	.007	12297	9/59	NEG.	.0
3-577	RDP	7/21- 7/23	729	9/59	.081	13218	9/59	MIN.	4.0
3-578	RDS	5/25-12/25	213	9/59	.017	12334	9/59	NEG.	.0
3-579	RDP	6/22- 9/22	91	9/59	.030	13521	9/59	NEG.	.0
3-580	RDO	8/23- 9/23	30	9/59	.002	13157	9/59	NEG.	.0
3-581	RDP	6/22- 8/22	74	9/59	.013	13539	9/59	NEG.	.0

3-585	RDC	6/18- 6/23	1825	10/59	.113	13289	9/59	NEG.	.0
3-585	RDC	6/18- 6/23	1825	11/66	.074	15860	11/66	NEG.	2.0
3-585	RDC	6/18- 6/23	1825	11/66	.091	15860	11/66	NEG.	2.0
3-586	RDS	1/26- 8/27	576	10/59	1.270	11767	2/64	MILD	10.0
3-586	RDS	1/26- 8/27	576	2/64	.986	13335	2/64	MILD	10.0
3-586	RDS	1/26- 8/27	576	2/64	1.010	13335	2/64	MILD	10.0
3-586	RDS	1/26- 8/27	576	6/67	.893	14767	6/67	MOD.	20.0
3-586	RDS	1/26- 8/27	576	6/67	.900	14767	6/67	MOD.	20.0
3-587	RDO	7/25- 3/26	183	10/59	.013	12352	10/59	NEG.	.0
3-588	RDP	10/22- 3/27	1187	11/59	.445	12366	11/59	MILD	6.0
3-588	RDP	10/22- 3/27	1187	12/62	.343	13487	12/62	MILD	15.0
3-588	RDP	10/22- 3/27	1187	12/62	.316	13487	12/62	MILD	15.0
3-589	RDO	3/24- 8/24	152	11/59	.077	12884	11/59	NEG.	.0
3-590	RDP	5/22-11/22	183	11/59	.126	13531	11/59	NEG.	.0
3-590	RDP	5/22-11/22	183	3/65	.087	15469	3/65	NEG.	1.0
3-590	RDP	5/22-11/22	183	3/65	.104	15469	3/65	NEG.	1.0
3-591	RDO	1/26-11/59	12372	11/59	.029	1	11/59	MIN.	1.0
3-592	RDP	1/22- 5/22	118	11/59	.197	13716	11/59	NEG.	.0
3-592	RDP	1/22- 5/22	118	10/66	.136	16234	10/66	NEG.	.0
3-592	RDP	1/22- 5/22	118	10/66	.123	16234	10/66	NEG.	.0
3-593	RDP	7/22- 9/22	61	11/59	.017	13593	11/59	NEG.	.0
3-594	RDP	7/22- 7/23	364	11/59	.041	13291	11/59	MILD	13.0
3-595	RDO	2/28-12/28	303	11/59	.001	11313	11/59	NEG.	.0
3-596	RDP	7/22- 9/22	61	11/59	.009	13598	11/59	NEG.	.0
3-597	RDS	5/25-11/29	244	12/59	.154	12386	12/59	NEG.	.0
3-598	RDO	7/33- 7/34	364	12/59	.001	9283	12/59	NEG.	.0
3-599	RDP	3/22- 9/22	183	12/59	.009	13606	12/59	NEG.	.0
3-600	FNW	3/26- 3/45	6939	2/60	.001	5472	2/60	NEG.	.0
3-604	FNW	7/16- 7/24	2921	6/60	.010	13123	6/60	MIN.	1.0
3-605	FNW	7/23- 7/25	730	6/60	.003	12765	6/60	NEG.	.5
3-607	RDP	6/22- 1/23	213	7/60	.194	13722	3/61	NEG.	1.0
3-612	RDC	7/18- 1/23	1644	7/60	.450	13723	10/60	NEG.	.0
3-612	RDC	7/18- 1/23	1644	10/60	.500	13811	10/60	NEG.	.0
3-613	RDO	4/25- 2/27	274	8/60	.008	12631	8/60	NEG.	.0
3-614	RDO	6/24- 7/25	394	9/60	.137	12870	9/60	MIN.	4.0

3-615	RDO	6/23- 7/25	749	9/60	.023	12870	9/60	MIN.	1.0
3-618	RDO	9/20- 7/21	302	10/60	.010	14342	10/60	NEG.	.0
3-619	RDO	8/22- 4/23	242	3/62	1.500	14220	3/62	MALM	
3-620	LPI	7/42- 7/46	1460	11/60	.017	5250	10/60	NEG.	.0
3-621	LPI	7/42- 7/46	1460	10/60	.013	5229	10/60	NEG.	.0
3-628	RDP	6/21- 2/22	244	12/62	.001	14917	12/62	NEG.	.0
3-640	RDO	10/24-12/25	425	6/60	.005	12627	6/60	NEG.	.0
3-645	RDO	10/24- 7/26	456	10/59	.056	12338	10/59	NEG.	.0
3-648	RDP	1/22-12/24	1090	7/55	7.610	11170	7/55	MALM	
3-649	RDO	10/24-10/50	455	10/51	1.300	9409	10/53	ADVM	18.5
3-657	RDP	7/22- 7/36	1279	7/36	18.000	3835	3/37	MALM	
3-671	RDP	7/22- 9/22	61	2/52	3.820	10755	10/51	MALM	
3-674	RDS	5/25- 3/26	244	11/60	.009	12739	11/60	NEG.	.0
3-679	RDO	12/29- 3/30	68	9/61	.057	11508	9/61	NEG.	.0
3-685	RDP	10/21- 1/23	456	12/62	.167	14594	12/62	NEG.	.0
3-685	RDP	10/21- 1/23	456	12/62	.154	14594	12/62	NEG.	.0
3-685	RDP	10/21- 1/23	456	5/66	.134	15850	5/66	NEG.	2.0
3-685	RDP	10/21- 1/23	456	5/66	.133	15850	5/66	NEG.	2.0
3-686	RDO	10/22-10/42	1187	2/64	.028	13912	2/64	NEG.	.0
3-687	RDS	5/25- 3/26	244	3/61	.051	12843	3/61	NEG.	.0
3-689	RDO	7/23- 7/27	914	3/61	.130	12842	3/61	NEG.	1.5
3-690	RDO	4/24-11/29	639	11/58	.320	12004	11/58	NEG.	.0
3-697	RDO	1/24- 9/24	242	5/67	.180	15588	3/64	NEG.	.0
3-726	RDO	3/22-10/25	1310	2/68	.574	15489	2/68	ADV.	25.0
3-727	RDO	3/22- 8/24	883	10/66	.194	15409	10/66	MIN.	6.0
3-727	RDO	3/22- 8/24	883	10/66	.241	15409	10/66	MIN.	6.0
3-778	RDO	7/22- 7/24	730	9/68	.055	16148	9/68	NEG.	3.0
3-801	RDO	10/24- 1/25	92	2/65	.001	14643	2/65	NEG.	.0
3-836	RDO	6/24-12/24	183	10/67	.001	15664	10/67	NEG.	.0
9- 1	RPA	7/17- 4/18	273	7/59	.014	15076	7/59	NEG.	.0
9- 2	RPA	6/17-11/17	152	7/59	.028	15227	7/59	MIN.	5.5

9- 4	RPA	7/12- 7/20	2922	6/60	.550	14600	6/60	MOD.	27.5
9- 7	RPA	7/17- 7/19	730	5/60	.033	14938	5/60	MIN.	3.0
9- 29	RPA	6/17- 9/17	91	5/60	.016	15577	5/60	NEG.	.0
9- 31	RPA	7/13- 7/20	2555	5/60	.286	14571	5/60	MIN.	8.5
9- 46	RPA	7/17- 7/19	729	2/60	.010	14847	2/60	NEG.	.0
9- 72	RPA	2/17-12/18	667	5/60	.055	15150	5/60	NEG.	.0
9- 74	SCP	10/15- 4/17	547	7/59	.064	15454	7/59	NEG.	.0

TABLE 2, PART 1

CALCULATIONS FOR HYPOTHETICAL PATIENT WHO WORKED 30 DAYS

POWER FUNCTION PARAMETERS A = .30, B = -.44, C = .057, D = .18

DURING INGESTION PERIOD

DAYS	RA	SRA	SSRA	RN	SRN	SSRN
.5	4.821149	4.821149	4.82	.021012	.021012	.02
1.5	1.861565	6.682714	11.50	.027167	.048179	.06
2.5	1.486842	8.169556	19.67	.036411	.084590	.15
3.5	1.282237	9.451794	29.12	.043009	.127600	.28
4.5	1.148008	10.599801	39.72	.047829	.175429	.45
5.5	1.050990	11.650792	51.37	.051368	.226798	.68
6.5	.976509	12.627302	64.00	.053954	.280753	.96
7.5	.916920	13.544222	77.54	.055817	.336570	1.30
8.5	.867788	14.412010	91.95	.057126	.393696	1.69
9.5	.826342	15.238353	107.19	.058006	.451703	2.14
10.5	.790742	16.029096	123.22	.058556	.510259	2.65
11.5	.759716	16.788812	140.01	.058849	.569108	3.22
12.5	.732348	17.521160	157.53	.058943	.628052	3.85
13.5	.707964	18.229125	175.76	.058885	.686937	4.54
14.5	.686051	18.915176	194.68	.058709	.745646	5.28
15.5	.666212	19.581388	214.26	.058445	.804091	6.09
16.5	.648134	20.229523	234.49	.058113	.862205	6.95
17.5	.631570	20.861092	255.35	.057733	.919939	7.87
18.5	.616315	21.477408	276.83	.057318	.977258	8.84
19.5	.602203	22.079611	298.91	.056879	1.034138	9.88
20.5	.589096	22.668708	321.57	.056424	1.090562	10.97
21.5	.576880	23.245588	344.82	.055960	1.146523	12.12
22.5	.565455	23.811043	368.63	.055493	1.202016	13.32
23.5	.554738	24.365781	393.00	.055026	1.257042	14.58
24.5	.544659	24.910441	417.91	.054562	1.311605	15.89
25.5	.535156	25.445598	443.35	.054104	1.365710	17.25
26.5	.526175	25.971773	469.32	.053654	1.419365	18.67
27.5	.517668	26.489441	495.81	.053213	1.472578	20.14
28.5	.509596	26.999038	522.81	.052781	1.525360	21.67
29.5	.501922	27.500960	550.31	.052360	1.577720	23.25

TABLE 2, PART 2

AND CONTAINED 1 MICROCURIE ON THE 14,000 DAY.

AMOUNT ABSORBED DAILY FROM GUT = 7.417 MICROCURIES

DURING INGESTION PERIOD

DAYS	RET	DSRA	DSRN	DTOT	SDTOT
.5	.0043	.167775	.002941	.170717	.17
1.5	.0072	.232558	.006745	.239303	.41
2.5	.0103	.284300	.011842	.296143	.70
3.5	.0135	.328922	.017864	.346786	1.05
4.5	.0165	.368873	.024560	.393433	1.44
5.5	.0194	.405447	.031751	.437199	1.88
6.5	.0222	.439430	.039305	.478735	2.36
7.5	.0248	.471338	.047119	.518458	2.88
8.5	.0273	.501537	.055117	.556655	3.43
9.5	.0296	.530294	.063238	.593533	4.03
10.5	.0318	.557812	.071436	.629248	4.66
11.5	.0338	.584250	.079675	.663925	5.32
12.5	.0358	.609736	.087927	.697663	6.02
13.5	.0376	.634373	.096171	.730544	6.75
14.5	.0394	.658248	.104390	.762638	7.51
15.5	.0410	.681432	.112572	.794005	8.30
16.5	.0426	.703987	.120708	.824696	9.13
17.5	.0440	.725966	.128791	.854757	9.98
18.5	.0455	.747413	.136816	.884230	10.87
19.5	.0468	.768370	.144779	.913149	11.78
20.5	.0481	.788871	.152678	.941549	12.72
21.5	.0493	.808946	.160513	.969459	13.69
22.5	.0504	.828624	.168282	.996906	14.69
23.5	.0515	.847929	.175985	1.023915	15.71
24.5	.0526	.866883	.183624	1.050508	16.76
25.5	.0536	.885506	.191199	1.076706	17.84
26.5	.0546	.903817	.198711	1.102528	18.94
27.5	.0555	.921832	.206160	1.127993	20.07
28.5	.0564	.939566	.213550	1.153116	21.22
29.5	.0573	.957033	.220880	1.177914	22.40

TABLE 2, PART 1, CONTINUED

AFTER INGESTION PERIOD STOPPED

DAYS	RA	SRA	SSRA	RN	SRN	SSRN
.5	.494614	23.174426	573.49	.051949	1.608658	24.86
1.5	.487642	21.800504	595.29	.051550	1.633041	26.49
2.5	.480982	20.794645	616.08	.051161	1.647791	28.14
3.5	.474611	19.987019	636.07	.050782	1.655564	29.79
4.5	.468509	19.307521	655.38	.050415	1.658150	31.45
5.5	.462655	18.719186	674.10	.050058	1.656839	33.11
6.5	.457035	18.199711	692.30	.049711	1.652596	34.76
7.5	.451631	17.734423	710.03	.049374	1.646153	36.41
8.5	.446432	17.313067	727.34	.049046	1.638073	38.04
9.5	.441423	16.928149	744.27	.048728	1.628794	39.67
10.5	.436594	16.574001	760.85	.048418	1.618657	41.29
11.5	.431933	16.246218	777.09	.048117	1.607925	42.90
12.5	.427432	15.941302	793.03	.047825	1.596807	44.50
13.5	.423080	15.656418	808.69	.047540	1.585462	46.08
14.5	.418870	15.389237	824.08	.047263	1.574016	47.66
15.5	.414794	15.137820	839.22	.046993	1.562564	49.22
16.5	.410846	14.900531	854.12	.046730	1.551181	50.77
17.5	.407017	14.675979	868.79	.046474	1.539921	52.31
18.5	.403303	14.462968	883.26	.046224	1.528827	53.84
19.5	.399698	14.260462	897.52	.045981	1.517929	55.36
20.5	.396196	14.067562	911.58	.045743	1.507248	56.86
21.5	.392792	13.883474	925.47	.045511	1.496709	58.36
22.5	.389482	13.707502	939.18	.045285	1.486592	59.85
23.5	.386262	13.539026	952.71	.045064	1.476630	61.32
24.5	.383128	13.377494	966.09	.044848	1.466916	62.79
25.5	.380075	13.222413	979.31	.044637	1.457448	64.25
26.5	.377100	13.073339	992.39	.044430	1.448224	65.70
27.5	.374200	12.929871	1005.32	.044228	1.439240	67.14
28.5	.371372	12.791646	1018.11	.044031	1.430489	68.57
29.5	.368613	12.658337	1030.77	.043837	1.421967	69.99
30.5	.365919	12.529643	1043.30	.043648	1.413665	71.40
31.5	.363289	12.405290	1055.70	.043462	1.405578	72.81

TABLE 2, PART 2, CONTINUED

AFTER INGESTION PERIOD STOPPED

DAYS	RFT	DSRA	DSRN	DTOT	SDTOT
.5	.0694	.806470	.225212	1.031682	23.43
1.5	.0749	.758657	.228625	.987283	24.42
2.5	.0792	.723653	.230690	.954344	25.37
3.5	.0828	.695548	.231778	.927327	26.30
4.5	.0858	.671901	.232141	.904042	27.21
5.5	.0885	.651427	.231957	.883385	28.09
6.5	.0908	.633349	.231363	.864713	28.95
7.5	.0928	.617157	.230461	.847619	29.80
8.5	.0946	.602494	.229330	.831825	30.63
9.5	.0962	.589099	.228031	.817130	31.45
10.5	.0976	.576775	.226611	.803387	32.25
11.5	.0989	.565368	.225109	.790478	33.04
12.5	.1001	.554757	.223553	.778310	33.82
13.5	.1012	.544843	.221964	.766808	34.59
14.5	.1022	.535545	.220362	.755907	35.35
15.5	.1032	.526796	.218759	.745555	36.09
16.5	.1041	.518538	.217165	.735703	36.83
17.5	.1049	.510724	.215589	.726313	37.55
18.5	.1057	.503311	.214035	.717347	38.27
19.5	.1064	.496264	.212510	.708774	38.98
20.5	.1071	.489551	.211014	.700565	39.68
21.5	.1078	.483144	.209551	.692696	40.37
22.5	.1084	.477021	.208122	.685143	41.06
23.5	.1090	.471158	.206728	.677886	41.74
24.5	.1096	.465536	.205368	.670905	42.41
25.5	.1102	.460139	.204042	.664182	43.07
26.5	.1107	.454952	.202751	.657703	43.73
27.5	.1113	.449959	.201493	.651453	44.38
28.5	.1118	.445149	.200268	.645417	45.03
29.5	.1123	.440510	.199075	.639585	45.66
30.5	.1128	.436031	.197913	.633944	46.30
31.5	.1133	.431704	.196781	.628485	46.93

TABLE 3

RETENTION OF RADIUM AFTER CONTINUOUS INGESTION BY OCCUPATIONAL EXPOSURE

COMPUTED VALUES FOR ESTIMATED MAXIMUM RADIUM BURDEN, DAILY AMOUNT ABSORBED FROM THE GUT, AND TOTAL AMOUNT ABSORBED DURING THE WORK SPAN

DATA COMPUTED FOR EACH MEASUREMENT AND LISTED BY PATIENT NUMBER

				POWER FUNCTION			THREE EXPONENTIALS		
PT. NO.	ELAPSED DAYS	MEAS. AMT.	DAYS WORKED	AMT. ABSORBED DAILY	AMT. ABSORBED TOTAL	ESTIM. MAX.	AMT. ABSORBED DAILY	AMT. ABSORBED TOTAL	ESTIM. MAX.
3-401	11673	2.450	669	.7612	509.29	15.186	.7285	487.38	16.243
3-401	12888	2.287	669	.7414	496.01	14.790	.7932	530.65	17.685
3-402	11546	1.200	914	.2728	249.39	6.509	.2609	238.52	7.143
3-402	12365	1.170	914	.2738	250.32	6.533	.2822	257.98	7.726
3-402	13215	1.163	914	.2800	255.96	6.680	.3124	285.59	8.553
3-402	13215	1.420	914	.3419	312.52	8.156	.3815	348.70	10.443
3-402	14473	1.059	914	.2650	242.28	6.323	.3336	304.97	9.133
3-403	5130	.008	3105	.0004	1.27	.019	.0002	.80	.017
3-404	11582	.980	975	.2093	204.16	5.183	.2014	196.42	5.764
3-404	13423	.829	975	.1885	183.84	4.667	.2151	209.79	6.156
3-404	13423	.758	975	.1724	168.09	4.267	.1967	191.83	5.629
3-404	14870	.748	975	.1777	173.26	4.398	.2332	227.38	6.672
3-404	14870	.825	975	.1960	191.10	4.851	.2572	250.78	7.359
3-405	13423	.625	670	.2058	137.94	4.110	.2316	155.19	5.169
3-405	11582	.660	670	.2040	136.74	4.074	.1937	129.79	4.323
3-405	12323	.580	670	.1841	123.39	3.677	.1870	125.29	4.173
3-405	13423	.655	670	.2157	144.56	4.307	.2427	162.64	5.417
3-406	4856	.016	3379	.0007	2.52	.037	.0004	1.58	.032
3-407	11582	1.400	944	.3087	291.49	7.503	.2966	280.06	8.302
3-408	11589	.160	517	.0639	33.06	1.100	.0603	31.19	1.150
3-410	11870	.060	730	.0172	12.57	.361	.0168	12.28	.396
3-411	5570	.001	4017	.0000	.16	.002	.0000	.11	.002
3-412	11870	.330	941	.0737	69.42	1.789	.0727	68.45	2.031
3-412	13958	.244	941	.0584	54.98	1.417	.0700	65.94	1.956
3-412	13958	.208	941	.0498	46.87	1.208	.0597	56.21	1.668
3-412	14623	.212	941	.0517	48.73	1.256	.0662	62.32	1.849
3-415	4505	.015	5478	.0004	2.45	.029	.0002	1.59	.028
3-416	11688	1.430	456	.6497	296.27	10.393	.6167	281.24	10.945
3-416	12064	1.333	456	.6139	279.97	9.822	.6029	274.95	10.700
3-416	13510	1.303	456	.6302	287.40	10.082	.7078	322.79	12.562
3-416	14969	1.199	456	.6063	276.47	9.699	.7835	357.32	13.906
3-416	14969	1.452	456	.7342	334.81	11.746	.9489	432.71	16.840
3-417	11718	.890	426	.4330	184.49	6.661	.4116	175.37	7.037
3-417	13365	.760	426	.3914	166.77	6.021	.4330	184.49	7.403
3-417	14028	.606	426	.3187	135.79	4.902	.3755	160.00	6.420
3-417	14028	.597	426	.3140	133.78	4.830	.3700	157.62	6.325
3-417	14028	.649	426	.3413	145.43	5.250	.4022	171.35	6.876
3-418	7036	.007	4230	.0003	1.28	.017	.0002	.96	.018
3-419	11598	.740	395	.3864	152.63	5.688	.3628	143.33	5.958
3-419	12254	.761	395	.4069	160.74	5.991	.4055	160.17	6.658
3-419	13425	.653	395	.3632	143.50	5.348	.4036	159.42	6.626
3-419	13425	.679	395	.3777	149.21	5.561	.4196	165.77	6.890
3-420	11603	.018	1217	.0030	3.76	.087	.0030	3.67	.100

3-422	11603	.029	274	.0217	5.96	.259	.0203	5.57	.279
3-423	11603	.765	914	.1743	159.31	4.158	.1675	153.15	4.587
3-423	12364	.590	914	.1381	126.22	3.294	.1423	130.07	3.895
3-423	13418	.552	914	.1337	122.27	3.191	.1521	139.08	4.165
3-423	13418	.591	914	.1432	130.91	3.417	.1629	148.90	4.459
3-424	11604	.364	944	.0803	75.85	1.952	.0773	73.02	2.164
3-426	11612	.220	548	.0830	45.52	1.477	.0786	43.10	1.551
3-427	11617	.043	244	.0362	8.85	.403	.0338	8.27	.443
3-427	13422	.028	244	.0251	6.13	.279	.0277	6.76	.362
3-428	11617	.710	244	.5989	146.14	6.662	.5596	136.55	7.315
3-428	13493	.593	244	.5339	130.28	5.939	.5928	144.64	7.748
3-428	13493	.596	244	.5366	130.94	5.969	.5958	145.37	7.788
3-429	11617	2.100	883	.4952	437.32	11.584	.4760	420.37	12.730
3-429	13422	1.730	883	.4338	383.09	10.147	.4929	435.27	13.181
3-429	13493	1.839	883	.4622	408.14	10.811	.5287	466.87	14.138
3-429	13493	1.794	883	.4509	398.15	10.546	.5158	455.45	13.792
3-429	14884	1.700	883	.4455	393.43	10.421	.5829	514.74	15.588
3-429	14884	2.000	883	.5241	462.86	12.260	.6858	605.58	18.339
3-431	11650	1.500	1095	.2866	313.93	7.583	.2790	305.51	8.655
3-431	13721	1.366	1095	.2797	306.32	7.399	.3303	361.67	10.246
3-431	13721	1.297	1095	.2656	290.85	7.025	.3136	343.40	9.728
3-432	11622	.045	730	.0128	9.34	.268	.0122	8.92	.288
3-433	11622	1.350	639	.4381	279.95	8.512	.4167	266.33	9.028
3-433	14157	1.075	639	.3797	242.63	7.377	.4575	292.38	9.912
3-433	14157	1.052	639	.3715	237.44	7.219	.4477	286.12	9.700
3-434	5277	.015	880	.0025	2.24	.059	.0015	1.34	.040
3-434	6160	.015	880	.0027	2.39	.063	.0017	1.50	.045
3-435	7438	.007	730	.0016	1.20	.034	.0011	.81	.026
3-436	7073	.001	4351	.0000	.18	.002	.0000	.13	.002
3-437	11215	.055	364	.0306	11.17	.431	.0278	10.12	.438
3-441	11639	.056	244	.0472	11.53	.525	.0442	10.80	.578
3-442	12101	.013	91	.0298	2.71	.185	.0289	2.63	.260
3-443	5957	.001	2221	.0000	.16	.002	.0000	.10	.002
3-444	11709	.025	60	.0857	5.14	.412	.0801	4.80	.609
3-444	13416	.016	60	.0582	3.49	.280	.0636	3.82	.483
3-445	11709	1.620	1156	.2942	340.13	8.027	.2886	333.68	9.303
3-445	12366	1.590	1156	.2954	341.58	8.061	.3078	355.93	9.923
3-445	13928	1.423	1156	.2780	321.43	7.585	.3358	388.24	10.824
3-445	13928	1.743	1156	.3405	393.71	9.291	.4113	475.54	13.259
3-445	14907	1.367	1156	.2749	317.79	7.500	.3652	422.20	11.771
3-446	11709	.130	1279	.0213	27.35	.618	.0210	26.98	.730
3-446	14914	.077	1279	.0140	17.93	.405	.0187	23.98	.649
3-446	14914	.088	1279	.0160	20.49	.463	.0214	27.41	.742
3-447	12232	.002	30	.0139	.41	.043	.0136	.41	.076
3-449	11841	1.610	1217	.2793	339.98	7.848	.2781	338.49	9.298
3-449	14093	1.135	1217	.2119	257.89	5.953	.2608	317.39	8.719
3-450	12298	.020	121	.0348	4.21	.255	.0343	4.16	.343
3-452	11841	.042	183	.0475	8.70	.447	.0452	8.27	.526
3-452	14919	.022	183	.0275	5.04	.259	.0349	6.40	.407
3-455	12767	.810	395	.4409	174.16	6.491	.4606	181.93	7.562
3-456	2577	.033	2921	.0014	4.18	.066	.0008	2.38	.051
3-457	5499	.004	3651	.0001	.66	.009	.0001	.43	.008
3-458	1	.017	4532	.0002	1.30	.016	.0002	.96	.018
3-459	12111	1.160	303	.8032	243.39	10.138	.7867	238.39	11.325
3-459	14134	.935	303	.6924	209.81	8.740	.8194	248.27	11.794
3-459	14134	.949	303	.7028	212.95	8.871	.8316	251.99	11.971
3-459	14519	.818	303	.6129	185.72	7.736	.7526	228.06	10.834

3-460	12676	.012	136	.0188	2.56	.148	.0192	2.62	.201
3-461	13133	.006	44	.0295	1.29	.117	.0313	1.38	.208
3-462	11900	.480	1217	.0834	101.57	2.344	.0835	101.67	2.793
3-462	12110	.474	1217	.0830	101.04	2.332	.0847	103.10	2.832
3-462	13426	.367	1217	.0671	81.70	1.886	.0774	94.31	2.590
3-462	13426	.329	1217	.0601	73.24	1.690	.0694	84.54	2.322
3-464	12452	.001	365	.0005	.21	.008	.0005	.21	.009
3-465	12025	.002	61	.0068	.41	.033	.0065	.40	.050
3-466	12390	.004	75	.0112	.84	.062	.0111	.83	.093
3-467	8752	.015	2921	.0009	2.89	.045	.0008	2.36	.051
3-468	11036	.029	850	.0069	5.90	.159	.0063	5.38	.165
3-469	11961	.010	213	.0097	2.08	.100	.0094	2.00	.116
3-471	11090	.013	638	.0041	2.64	.080	.0037	2.39	.081
3-473	12348	1.260	916	.2941	269.43	7.025	.3026	277.26	8.298
3-473	13782	1.170	916	.2861	262.15	6.836	.3370	308.74	9.240
3-474	11981	.019	60	.0658	3.95	.316	.0630	3.78	.479
3-475	12681	.001	456	.0004	.21	.007	.0004	.22	.008
3-476	11304	.001	44	.0046	.20	.018	.0041	.18	.027
3-477	11746	.011	60	.0377	2.26	.181	.0354	2.12	.269
3-478	12445	.005	60	.0176	1.05	.084	.0175	1.05	.133
3-479	12386	.072	182	.0836	15.22	.783	.0835	15.20	.971
3-480	12555	.001	74	.0028	.21	.015	.0028	.21	.024
3-481	2805	.020	3376	.0007	2.65	.039	.0004	1.52	.031
3-482	4509	.001	911	.0001	.14	.003	.0000	.08	.002
3-483	12474	.001	1245	.0001	.21	.004	.0001	.22	.006
3-484	13283	1.550	1095	.3131	342.85	8.281	.3545	388.24	10.999
3-484	14774	1.440	1095	.3042	333.20	8.048	.3978	435.67	12.342
3-484	14774	1.622	1095	.3427	375.32	9.066	.4481	490.74	13.902
3-485	8175	.001	2556	.0000	.18	.003	.0000	.14	.003
3-486	12015	.400	183	.4560	83.45	4.284	.4404	80.59	5.130
3-486	14919	.267	183	.3346	61.23	3.143	.4247	77.72	4.947
3-487	12031	.367	549	.1404	77.08	2.590	.1381	75.82	2.847
3-488	13067	.170	180	.2044	36.79	1.901	.2173	39.13	2.516
3-489	11240	.120	516	.0474	24.47	.814	.0433	22.38	.825
3-490	11063	.029	1278	.0046	5.95	.134	.0043	5.54	.150
3-491	12593	.056	14	.8493	11.89	1.613	.8580	12.01	3.401
3-492	2410	.005	2283	.0002	.60	.010	.0001	.34	.007
3-493	12681	.007	1399	.0010	1.52	.033	.0011	1.65	.043
3-494	12078	.004	244	.0034	.83	.038	.0033	.81	.043
3-495	12931	.001	61	.0035	.21	.017	.0036	.22	.028
3-496	12931	.002	61	.0070	.42	.034	.0073	.44	.056
3-499	12265	.260	395	.1390	54.94	2.047	.1387	54.80	2.278
3-499	14120	.225	395	.1279	50.53	1.883	.1518	59.98	2.493
3-500	13390	.001	60	.0036	.21	.017	.0039	.23	.030
3-501	11076	.007	60	.0234	1.40	.112	.0207	1.24	.157
3-502	13733	.170	1095	.0348	38.13	.921	.0411	45.08	1.277
3-503	12684	.125	791	.0341	26.98	.749	.0360	28.47	.894
3-504	13170	.022	214	.0223	4.78	.230	.0240	5.14	.297
3-505	12655	.180	365	.1055	38.53	1.484	.1090	39.78	1.718
3-505	14854	.150	365	.0943	34.42	1.326	.1200	43.80	1.891
3-505	14854	.169	365	.1062	38.78	1.494	.1352	49.35	2.131
3-506	5015	.017	3530	.0007	2.72	.039	.0004	1.72	.035
3-507	12992	.012	46	.0561	2.58	.229	.0589	2.71	.399
3-508	12978	.010	60	.0358	2.15	.172	.0376	2.25	.286
3-509	1	.110	8275	.0013	10.93	.109	.0009	7.72	.115
3-510	12475	.894	487	.3914	190.61	6.503	.3996	194.63	7.360
3-510	13791	.734	487	.3355	163.42	5.576	.3876	188.78	7.139
3-510	13791	.729	487	.3332	162.31	5.538	.3850	187.50	7.090

3-512	12114	.011	91	.0252	2.29	.156	.0245	2.23	.220
3-513	12114	.135	183	.1544	28.26	1.451	.1505	27.54	1.753
3-513	14872	.094	183	.1176	21.52	1.105	.1486	27.20	1.731
3-513	14872	.098	183	.1226	22.44	1.152	.1549	28.35	1.804
3-515	12115	.011	183	.0125	2.30	.118	.0122	2.24	.142
3-516	12115	.018	152	.0247	3.76	.208	.0241	3.66	.262
3-518	3625	.011	3256	.0004	1.57	.023	.0002	.92	.019
3-519	12606	.098	61	.3415	20.83	1.660	.3462	21.11	2.649
3-520	12119	.157	183	.1796	32.88	1.688	.1751	32.05	2.040
3-520	14891	.106	183	.1327	24.29	1.247	.1680	30.74	1.957
3-520	14891	.123	183	.1540	28.18	1.447	.1949	35.67	2.270
3-521	12119	.010	183	.0114	2.09	.107	.0111	2.04	.129
3-522	13430	.197	364	.1188	43.27	1.669	.1319	48.03	2.077
3-522	15459	.121	364	.0776	28.25	1.090	.1048	38.14	1.649
3-522	15459	.140	364	.0898	32.69	1.261	.1212	44.13	1.908
3-523	12760	.023	212	.0232	4.92	.238	.0240	5.10	.296
3-524	12129	.067	183	.0767	14.03	.720	.0748	13.69	.871
3-525	1	.019	10302	.0002	2.08	.018	.0001	1.48	.019
3-526	12162	.001	244	.0008	.21	.009	.0008	.20	.011
3-527	11250	.005	911	.0011	1.02	.026	.0010	.95	.028
3-528	12176	1.630	1309	.2664	348.79	7.803	.2747	359.58	9.675
3-529	13093	.155	851	.0398	33.94	.913	.0438	37.33	1.144
3-529	15801	.100	851	.0278	23.73	.638	.0398	33.94	1.040
3-529	15801	.127	851	.0354	30.14	.811	.0506	43.10	1.321
3-530	13964	.523	639	.1836	117.35	3.568	.2172	138.81	4.705
3-530	13964	.497	639	.1745	111.51	3.390	.2064	131.91	4.471
3-530	13964	.474	639	.1664	106.35	3.233	.1968	125.80	4.265
3-531	9988	.041	2282	.0036	8.23	.144	.0031	7.27	.168
3-532	10598	.097	1337	.0146	19.60	.434	.0131	17.55	.469
3-533	12179	.016	183	.0183	3.35	.172	.0179	3.29	.209
3-534	12184	.003	244	.0025	.63	.028	.0025	.62	.033
3-535	13342	.310	152	.4452	67.67	3.748	.4852	73.75	5.273
3-535	15313	.228	152	.3478	52.86	2.928	.4580	69.62	4.978
3-535	15313	.227	152	.3462	52.63	2.915	.4560	69.32	4.957
3-536	12317	.035	51	.1444	7.36	.629	.1424	7.26	1.009
3-539	13168	.015	182	.0178	3.25	.167	.0192	3.49	.223
3-540	12192	2.200	914	.5119	467.89	12.212	.5192	474.57	14.213
3-540	13417	1.890	914	.4580	418.65	10.927	.5209	476.14	14.260
3-540	14878	1.789	914	.4531	414.14	10.809	.5933	542.32	16.242
3-540	14878	2.027	914	.5133	469.23	12.247	.6722	614.47	18.403
3-542	13431	.030	91	.0721	6.56	.446	.0790	7.19	.710
3-544	13431	.005	183	.0059	1.09	.056	.0065	1.20	.076
3-546	12217	.095	91	.2190	19.93	1.357	.2145	19.52	1.929
3-547	12381	.019	761	.0053	4.05	.114	.0054	4.15	.132
3-548	13527	.190	121	.3446	41.70	2.534	.3816	46.18	3.817
3-549	12234	.061	213	.0602	12.83	.619	.0594	12.66	.734
3-550	14647	.013	729	.0040	2.98	.085	.0051	3.78	.122
3-551	11212	1.200	1279	.1938	247.96	5.603	.1828	233.86	6.334
3-551	12267	1.330	1279	.2231	285.34	6.447	.2316	296.25	8.024
3-551	13743	1.348	1279	.2371	303.33	6.854	.2830	361.99	9.804
3-551	14107	1.129	1279	.2008	256.86	5.804	.2482	317.49	8.599
3-551	15184	1.166	1279	.2139	273.64	6.183	.2938	375.82	10.179
3-552	12338	.162	699	.0493	34.50	1.009	.0502	35.12	1.152
3-553	12702	.026	91	.0609	5.54	.378	.0624	5.68	.561
3-554	13012	2.000	486	.8935	434.25	14.829	.9589	466.04	17.639
3-555	10580	.011	729	.0030	2.19	.063	.0026	1.91	.061
3-556	10611	.007	698	.0020	1.39	.040	.0017	1.21	.040

3-558	13107	.115	91	.2734	24.88	1.695	.2907	26.45	2.614
3-559	13435	.017	152	.0244	3.72	.206	.0269	4.09	.292
3-561	12750	.067	61	.2346	14.31	1.141	.2410	14.70	1.844
3-562	8248	.009	2556	.0006	1.68	.028	.0005	1.30	.029
3-563	12743	.015	75	.0427	3.20	.235	.0438	3.29	.365
3-564	13168	.010	21	.1031	2.16	.256	.1099	2.30	.520
3-565	5893	.020	4747	.0007	3.49	.044	.0005	2.43	.045
3-566	6773	.001	3867	.0000	.17	.002	.0000	.13	.002
3-567	12774	.045	730	.0133	9.73	.279	.0141	10.33	.333
3-568	12288	.120	1279	.0201	25.76	.582	.0209	26.80	.725
3-569	12288	.144	1279	.0241	30.91	.698	.0251	32.16	.871
3-570	12291	.001	244	.0008	.21	.009	.0008	.20	.011
3-571	12291	1.100	183	1.2666	231.79	11.900	1.2542	229.53	14.610
3-571	13425	.954	183	1.1417	208.93	10.727	1.2558	229.82	14.628
3-571	13425	.930	183	1.1129	203.67	10.457	1.2242	224.03	14.260
3-571	14872	.919	183	1.1501	210.47	10.806	1.4531	265.92	16.926
3-571	14872	1.109	183	1.3879	253.99	13.040	1.7535	320.90	20.425
3-572	12295	.086	213	.0851	18.13	.874	.0844	17.98	1.043
3-573	12295	.028	274	.0215	5.91	.256	.0214	5.87	.294
3-574	10105	.001	4141	.0000	.20	.002	.0000	.20	.003
3-575	9743	.001	182	.0010	.19	.009	.0008	.15	.009
3-576	12297	.007	244	.0060	1.47	.067	.0060	1.46	.078
3-577	13218	.081	729	.0243	17.77	.511	.0269	19.67	.635
3-578	12334	.017	213	.0168	3.58	.173	.0167	3.57	.207
3-579	13521	.030	91	.0723	6.58	.448	.0799	7.27	.718
3-580	13157	.002	30	.0144	.43	.045	.0153	.46	.085
3-581	13539	.013	74	.0385	2.85	.210	.0426	3.15	.353
3-585	13289	.113	1825	.0138	25.28	.490	.0162	29.62	.728
3-585	15860	.074	1825	.0097	17.81	.345	.0147	26.86	.660
3-585	15860	.091	1825	.0120	21.90	.424	.0181	33.03	.812
3-586	11767	1.270	576	.4591	264.46	8.404	.4413	254.18	8.969
3-586	13335	.986	576	.3761	216.67	6.885	.4178	240.70	8.493
3-586	13335	1.010	576	.3853	221.95	7.053	.4280	246.56	8.700
3-586	14767	.893	576	.3560	205.06	6.516	.4537	261.36	9.222
3-586	14767	.900	576	.3588	206.67	6.567	.4573	263.41	9.295
3-587	12352	.013	183	.0150	2.74	.140	.0149	2.73	.174
3-588	12366	.445	1187	.0805	95.64	2.231	.0840	99.80	2.761
3-588	13487	.343	1187	.0644	76.46	1.784	.0746	88.66	2.453
3-588	13487	.316	1187	.0593	70.44	1.643	.0688	81.68	2.260
3-589	12884	.077	152	.1089	16.55	.917	.1137	17.28	1.236
3-590	13531	.126	183	.1513	27.68	1.421	.1681	30.76	1.958
3-590	15469	.087	183	.1107	20.27	1.040	.1483	27.15	1.728
3-590	15469	.104	183	.1324	24.23	1.244	.1773	32.45	2.065
3-591	1	.029	12372	.0002	3.43	.028	.0002	2.49	.029
3-592	13716	.197	118	.3686	43.50	2.670	.4155	49.03	4.118
3-592	16234	.136	118	.2740	32.33	1.985	.3946	46.57	3.911
3-592	16234	.123	118	.2478	29.24	1.795	.3569	42.12	3.537
3-593	13593	.017	61	.0612	3.73	.297	.0680	4.15	.520
3-594	13291	.041	364	.0246	8.96	.345	.0269	9.82	.424
3-595	11313	.001	303	.0006	.20	.008	.0006	.18	.008
3-596	13598	.009	61	.0324	1.97	.157	.0360	2.19	.275
3-597	12386	.154	244	.1335	32.59	1.485	.1338	32.64	1.749
3-598	9283	.001	364	.0005	.18	.007	.0003	.14	.006
3-599	13606	.009	183	.0108	1.98	.101	.0121	2.21	.141
3-600	5472	.001	6939	.0000	.18	.001	.0000	.13	.002
3-604	13123	.010	2921	.0007	2.26	.035	.0009	2.74	.059
3-605	12765	.003	730	.0008	.64	.018	.0009	.68	.022

3-607	13722	.194	213	.2014	42.91	2.069	.2282	48.61	2.821
3-612	13723	.450	1644	.0618	101.75	2.063	.0749	123.27	3.116
3-612	13811	.500	1644	.0689	113.35	2.299	.0842	138.50	3.502
3-613	12631	.008	274	.0062	1.70	.074	.0063	1.75	.087
3-614	12870	.137	394	.0750	29.56	1.102	.0791	31.17	1.297
3-615	12870	.023	749	.0066	4.99	.141	.0071	5.35	.171
3-618	14342	.010	302	.0074	2.25	.094	.0090	2.72	.129
3-619	14220	1.500	242	1.3933	337.17	15.424	1.6575	401.12	21.591
3-620	5250	.017	1460	.0017	2.59	.055	.0010	1.57	.041
3-621	5229	.013	1460	.0013	1.98	.042	.0008	1.20	.031
3-628	14917	.001	244	.0009	.22	.010	.0011	.29	.015
3-640	12627	.005	425	.0025	1.07	.038	.0026	1.10	.044
3-645	12338	.056	456	.0260	11.87	.416	.0262	11.95	.465
3-648	11170	7.610	1090	1.4354	1564.59	38.782	1.3377	1458.09	41.364
3-649	9409	1.300	455	0.5392	245.34	8.953	.4210	191.56	7.462
3-657	3835	18.000	1279	1.8908	2418.43	54.649	1.0773	1377.92	37.320
3-671	10755	3.820	61	12.4183	757.51	60.386	10.6744	651.13	81.694
3-674	12739	.009	244	.0079	1.92	.087	.0081	1.99	.106
3-679	11508	.057	68	.1712	11.64	.889	.1572	10.69	1.259
3-685	14594	.167	456	.0835	38.08	1.336	.1040	47.46	1.847
3-685	14594	.154	456	.0770	35.12	1.232	.0959	43.76	1.703
3-685	15850	.134	456	.0694	31.67	1.111	.0979	44.64	1.737
3-685	15850	.133	456	.0689	31.43	1.102	.0971	44.31	1.724
3-686	13912	.028	1187	.0053	6.32	.147	.0064	7.63	.211
3-687	12843	.051	244	.0449	10.96	.499	.0469	11.45	.613
3-689	12842	.130	914	.0309	28.26	.737	.0333	30.44	.911
3-690	360	.320	639	.0286	18.32	.557	.0237	15.15	.513
3-697	15588	.180	242	.1740	42.11	1.926	.2365	57.24	3.081
3-726	15489	.574	1310	.1037	135.90	3.039	.1470	192.66	5.183
3-727	15409	.194	883	.0516	45.56	1.207	.0710	62.78	1.901
3-727	15409	.241	883	.0641	56.60	1.499	.0883	77.99	2.361
3-778	16148	.055	730	.0570	41.61	.380	.0265	19.36	.625
3-801	14643	.001	92	.0024	.22	.015	.0030	.27	.027
3-836	15664	.001	183	.0012	.23	.012	.0017	.31	.020
9- 1	15076	.014	273	.0118	3.22	.140	.0153	4.18	.210
9- 2	15227	.028	152	.0426	6.47	.358	.0556	8.45	.604
9- 4	14600	.550	2922	.0444	129.83	2.053	.0622	181.85	3.943
9- 7	14938	.033	730	.0104	7.63	.219	.0136	9.96	.321
9- 29	15577	.016	91	.0410	3.73	.254	.0553	5.03	.497
9- 31	14571	.286	2555	.0262	67.13	1.125	.0360	92.17	2.073
9- 46	14847	.010	729	.0031	2.30	.066	.0040	2.98	.096
9- 72	15150	.055	667	.0191	12.78	.381	.0294	16.99	.566
9- 74	15454	.064	547	.0273	14.98	.486	.0372	20.39	.734

TABLE 4A

RETENTION OF RADIUM AFTER CONTINUOUS INGESTION BY OCCUPATIONAL EXPOSURE

COMPUTED VALUES FOR ESTIMATED MAXIMUM RADIUM BURDEN, DAILY AMOUNT ABSORBED FROM THE GUT, AND TOTAL AMOUNT ABSORBED DURING THE WORK SPAN

MEAN VALUES FOR EACH PATIENT LISTED BY PATIENT NUMBER

		POWER FUNCTION			THREE EXPONENTIALS		
PT. NO.	DAYS WORKED	AMT. ABSORBED DAILY	AMT. ABSORBED TOTAL	ESTIM. MAX.	AMT. ABSORBED DAILY	AMT. ABSORBED TOTAL	ESTIM. MAX.
3-401	669	.7513	502.65	14.988	.7608	509.01	16.964
3-402	914	.2867	262.09	6.840	.3141	287.15	8.599
3-403	3105	.0004	1.27	.019	.0002	.80	.017
3-404	975	.1887	184.09	4.673	.2207	215.24	6.316
3-405	670	.2024	135.65	4.042	.2137	143.22	4.770
3-406	3379	.0007	2.52	.037	.0004	1.58	.032
3-407	944	.3087	291.49	7.503	.2966	280.06	8.302
3-408	517	.0639	33.06	1.100	.0603	31.19	1.150
3-410	730	.0172	12.57	.361	.0168	12.28	.396
3-411	4017	.0000	.16	.002	.0000	.11	.002
3-412	941	.0584	54.99	1.417	.0671	63.23	1.876
3-415	5478	.0004	2.45	.029	.0002	1.59	.028
3-416	456	.6468	294.98	10.348	.7319	333.80	12.990
3-417	426	.3596	153.25	5.532	.3984	169.76	6.812
3-418	4230	.0003	1.28	.017	.0002	.96	.018
3-419	395	.3835	151.52	5.647	.3978	157.17	6.533
3-420	1217	.0030	3.76	.087	.0030	3.67	.100
3-422	274	.0217	5.96	.259	.0203	5.57	.279
3-423	914	.1473	134.67	3.515	.1562	142.80	4.276
3-424	944	.0803	75.85	1.952	.0773	73.02	2.164
3-426	548	.0830	45.52	1.477	.0786	43.10	1.551
3-427	244	.0306	7.49	.341	.0307	7.51	.402
3-428	244	.5564	135.78	6.190	.5827	142.18	7.617
3-429	883	.4686	413.83	10.961	.5470	483.04	14.628
3-431	1095	.2773	303.70	7.335	.3076	336.86	9.543
3-432	730	.0128	9.34	.268	.0122	8.92	.288
3-433	639	.3964	253.34	7.702	.4406	281.61	9.546
3-434	880	.0026	2.31	.061	.0016	1.42	.042
3-435	730	.0016	1.20	.034	.0011	.81	.026
3-436	4351	.0000	.18	.002	.0000	.13	.002
3-437	364	.0306	11.17	.431	.0278	10.12	.438
3-441	244	.0472	11.53	.525	.0442	10.80	.578
3-442	91	.0298	2.71	.185	.0289	2.63	.260
3-443	2221	.0000	.16	.002	.0000	.10	.002
3-444	60	.0719	4.31	.346	.0718	4.31	.546
3-445	1156	.2966	342.92	8.092	.3417	395.11	11.016
3-446	1279	.0171	21.92	.495	.0203	26.12	.707
3-447	30	.0139	.41	.043	.0136	.41	.076
3-449	1217	.2456	298.93	6.900	.2694	327.94	9.008
3-450	121	.0348	4.21	.255	.0343	4.16	.343
3-452	183	.0375	6.87	.353	.0400	7.33	.466

3-455	395	.4409	174.16	6.491	.4606	181.93	7.562
3-456	2921	.0014	4.18	.066	.0008	2.38	.051
3-457	3651	.0001	.66	.009	.0001	.43	.008
3-458	4532	.0002	1.30	.016	.0002	.96	.018
3-459	303	.7028	212.96	8.871	.7975	241.67	11.481
3-460	136	.0188	2.56	.148	.0192	2.62	.201
3-461	44	.0295	1.29	.117	.0313	1.38	.208
3-462	1217	.0734	89.38	2.063	.0787	95.90	2.634
3-464	365	.0005	.21	.008	.0005	.21	.009
3-465	61	.0068	.41	.033	.0065	.40	.050
3-466	75	.0112	.84	.062	.0111	.83	.093
3-467	2921	.0009	2.89	.045	.0008	2.36	.051
3-468	850	.0069	5.90	.159	.0063	5.38	.165
3-469	213	.0097	2.08	.100	.0094	2.00	.116
3-471	638	.0041	2.64	.080	.0037	2.39	.081
3-473	916	.2901	265.79	6.930	.3198	292.99	8.769
3-474	60	.0658	3.95	.316	.0630	3.78	.479
3-475	456	.0004	.21	.007	.0004	.22	.008
3-476	44	.0046	.20	.018	.0041	.18	.027
3-477	60	.0377	2.26	.181	.0354	2.12	.269
3-478	60	.0176	1.05	.084	.0175	1.05	.133
3-479	182	.0836	15.22	.783	.0835	15.20	.971
3-480	74	.0028	.21	.015	.0028	.21	.024
3-481	3376	.0007	2.65	.039	.0004	1.52	.031
3-482	911	.0001	.14	.003	.0000	.08	.002
3-483	1245	.0001	.21	.004	.0001	.22	.006
3-484	1095	.3200	350.45	8.465	.4001	438.21	12.414
3-485	2556	.0000	.18	.003	.0000	.14	.003
3-486	183	.3953	72.34	3.713	.4325	79.15	5.038
3-487	549	.1404	77.08	2.590	.1381	75.82	2.847
3-488	180	.2044	36.79	1.901	.2173	39.13	2.516
3-489	516	.0474	24.47	.814	.0433	22.38	.825
3-490	1278	.0046	5.95	.134	.0043	5.54	.150
3-491	14	.8493	11.89	1.613	.8580	12.01	3.401
3-492	2283	.0002	.60	.010	.0001	.34	.007
3-493	1399	.0010	1.52	.033	.0011	1.65	.043
3-494	244	.0034	.83	.038	.0033	.81	.043
3-495	61	.0035	.21	.017	.0036	.22	.028
3-496	61	.0070	.42	.034	.0073	.44	.056
3-499	395	.1334	52.73	1.965	.1452	57.39	2.385
3-500	60	.0036	.21	.017	.0039	.23	.030
3-501	60	.0234	1.40	.112	.0207	1.24	.157
3-502	1095	.0348	38.13	.921	.0411	45.08	1.277
3-503	791	.0341	26.98	.749	.0360	28.47	.894
3-504	214	.0223	4.78	.230	.0240	5.14	.297
3-505	365	.1020	37.24	1.434	.1214	44.31	1.913
3-506	3530	.0007	2.72	.039	.0004	1.72	.035
3-507	46	.0561	2.58	.229	.0589	2.71	.399
3-508	60	.0358	2.15	.172	.0376	2.25	.286
3-509	8275	.0013	10.93	.109	.0009	7.72	.115
3-510	487	.3533	172.11	5.872	.3907	190.30	7.196
3-512	91	.0252	2.29	.156	.0245	2.23	.220
3-513	183	.1315	24.07	1.236	.1513	27.69	1.762
3-515	183	.0125	2.30	.118	.0122	2.24	.142
3-516	152	.0247	3.76	.208	.0241	3.66	.262
3-518	3256	.0004	1.57	.023	.0002	.92	.019
3-519	61	.3415	20.83	1.660	.3462	21.11	2.649

3-520	183	.1554	28.45	1.460	.1793	32.82	2.089
3-521	183	.0114	2.09	.107	.0111	2.04	.129
3-522	364	.0954	34.73	1.340	.1193	43.43	1.878
3-523	212	.0232	4.92	.238	.0240	5.10	.296
3-524	183	.0767	14.03	.720	.0748	13.69	.871
3-525	10302	.0002	2.08	.018	.0001	1.48	.019
3-526	244	.0008	.21	.009	.0008	.20	.011
3-527	911	.0011	1.02	.026	.0010	.95	.028
3-528	1309	.2664	348.79	7.803	.2747	359.58	9.675
3-529	851	.0343	29.27	.787	.0447	38.12	1.168
3-530	639	.1748	111.73	3.397	.2068	132.17	4.480
3-531	2282	.0036	8.23	.144	.0031	7.27	.168
3-532	1337	.0146	19.60	.434	.0131	17.55	.469
3-533	183	.0183	3.35	.172	.0179	3.29	.209
3-534	244	.0025	.63	.028	.0025	.62	.033
3-535	152	.3797	57.72	3.197	.4664	70.89	5.069
3-536	51	.1444	7.36	.629	.1424	7.26	1.009
3-539	182	.0178	3.25	.167	.0192	3.49	.223
3-540	914	.4840	442.47	11.548	.5764	526.87	15.779
3-542	91	.0721	6.56	.446	.0790	7.19	.710
3-544	183	.0059	1.09	.056	.0065	1.20	.076
3-546	91	.2190	19.93	1.357	.2145	19.52	1.929
3-547	761	.0053	4.05	.114	.0054	4.15	.132
3-548	121	.3446	41.70	2.534	.3816	46.18	3.817
3-549	213	.0602	12.83	.619	.0594	12.66	.734
3-550	729	.0040	2.98	.085	.0051	3.78	.122
3-551	1279	.2137	273.42	6.178	.2478	317.08	8.588
3-552	699	.0493	34.50	1.009	.0502	35.12	1.152
3-553	91	.0609	5.54	.378	.0624	5.68	.561
3-554	486	.8935	434.25	14.829	.9589	466.04	17.639
3-555	729	.0030	2.19	.063	.0026	1.91	.061
3-556	698	.0020	1.39	.040	.0017	1.21	.040
3-558	91	.2734	24.88	1.695	.2907	26.45	2.614
3-559	152	.0244	3.72	.206	.0269	4.09	.292
3-561	61	.2346	14.31	1.141	.2410	14.70	1.844
3-562	2556	.0006	1.68	.028	.0005	1.30	.029
3-563	75	.0427	3.20	.235	.0438	3.29	.365
3-564	21	.1031	2.16	.256	.1099	2.30	.520
3-565	4747	.0007	3.49	.044	.0005	2.43	.045
3-566	3867	.0000	.17	.002	.0000	.13	.002
3-567	730	.0133	9.73	.279	.0141	10.33	.333
3-568	1279	.0201	25.76	.582	.0209	26.80	.725
3-569	1279	.0241	30.91	.698	.0251	32.16	.871
3-570	244	.0008	.21	.009	.0008	.20	.011
3-571	183	1.2118	221.77	11.386	1.3881	254.04	16.169
3-572	213	.0851	18.13	.874	.0844	17.98	1.043
3-573	274	.0215	5.91	.256	.0214	5.87	.294
3-574	4141	.0000	.20	.002	.0000	.20	.003
3-575	182	.0010	.19	.009	.0008	.15	.009
3-576	244	.0060	1.47	.067	.0060	1.46	.078
3-577	729	.0243	17.77	.511	.0269	19.67	.635
3-578	213	.0168	3.58	.173	.0167	3.57	.207
3-579	91	.0723	6.58	.448	.0799	7.27	.718
3-580	30	.0144	.43	.045	.0153	.46	.085
3-581	74	.0385	2.85	.210	.0426	3.15	.353
3-585	1825	.0118	21.66	.419	.0163	29.83	.733

3-586	576	.3870	222.96	7.085	.4396	253.24	8.935
3-587	183	.0150	2.74	.140	.0149	2.73	.174
3-588	1187	.0680	80.84	1.885	.0758	90.04	2.491
3-589	152	.1089	16.55	.917	.1137	17.28	1.236
3-590	183	.1314	24.06	1.235	.1645	30.12	1.917
3-591	12372	.0002	3.43	.028	.0002	2.49	.029
3-592	118	.2968	35.02	2.150	.3890	45.90	3.855
3-593	61	.0612	3.73	.297	.0680	4.15	.520
3-594	364	.0246	8.96	.345	.0269	9.82	.424
3-595	303	.0006	.20	.008	.0006	.18	.008
3-596	61	.0324	1.97	.157	.0360	2.19	.275
3-597	244	.1335	32.59	1.485	.1338	32.64	1.749
3-598	364	.0005	.18	.007	.0003	.14	.006
3-599	183	.0108	1.98	.101	.0121	2.21	.141
3-600	6939	.0000	.18	.001	.0000	.13	.002
3-604	2921	.0007	2.26	.035	.0009	2.74	.059
3-605	730	.0008	.64	.018	.0009	.68	.022
3-607	213	.2014	42.91	2.069	.2282	48.61	2.821
3-612	1644	.0653	107.55	2.181	.0795	130.88	3.309
3-613	274	.0062	1.70	.074	.0063	1.75	.087
3-614	394	.0750	29.56	1.102	.0791	31.17	1.297
3-615	749	.0066	4.99	.141	.0071	5.35	.171
3-618	302	.0074	2.25	.094	.0090	2.72	.129
3-619	242	1.3933	337.17	15.424	1.6575	401.12	21.591
3-620	1460	.0017	2.59	.055	.0010	1.57	.041
3-621	1460	.0013	1.98	.042	.0008	1.20	.031
3-628	244	.0009	.22	.010	.0011	.29	.015
3-640	425	.0025	1.07	.038	.0026	1.10	.044
3-645	456	.0260	11.87	.416	.0262	11.95	.465
3-648	1090	1.4354	1564.59	38.782	1.3377	1458.09	41.364
3-649	455	.5392	245.34	8.953	.4210	191.56	7.462
3-657	1279	1.8908	2418.43	54.649	1.0773	1377.92	37.320
3-671	61	12.4183	757.51	60.386	10.6744	651.13	81.694
3-674	244	.0079	1.92	.087	.0081	1.99	.106
3-679	68	.1712	11.64	.889	.1572	10.69	1.259
3-685	456	.0747	34.07	1.195	.0987	45.04	1.752
3-686	1187	.0053	6.32	.147	.0064	7.63	.211
3-687	244	.0449	10.96	.499	.0469	11.45	.613
3-689	914	.0309	28.26	.737	.0333	30.44	.911
3-690	639	.0286	18.32	.557	.0237	15.15	.513
3-697	242	.1740	42.11	1.926	.2365	57.24	3.081
3-726	1310	.1037	135.90	3.039	.1470	192.66	5.183
3-727	883	.0578	51.08	1.353	.0796	70.38	2.131
3-778	730	.0570	41.61	.380	.0265	19.36	.625
3-801	92	.0024	.22	.015	.0030	.27	.027
3-836	183	.0012	.23	.012	.0017	.31	.020
9- 1	273	.0118	3.22	.140	.0153	4.18	.210
9- 2	152	.0426	6.47	.358	.0556	8.45	.604
9- 4	2922	.0444	129.83	2.053	.0622	181.85	3.943
9- 7	730	.0104	7.63	.219	.0136	9.96	.321
9- 29	91	.0410	3.73	.254	.0553	5.03	.497
9- 31	2555	.0262	67.13	1.125	.0360	92.17	2.073
9- 46	729	.0031	2.30	.066	.0040	2.98	.096
9- 72	667	.0191	12.78	.381	.0254	16.99	.566
9- 74	547	.0273	14.98	.486	.0372	20.39	.734

TABLE 4B

RETENTION OF RADIUM AFTER CONTINUOUS INGESTION BY OCCUPATIONAL EXPOSURE

COMPUTED VALUES FOR ESTIMATED MAXIMUM RADIUM BURDEN, DAILY AMOUNT ABSORBED FROM THE GUT, AND TOTAL AMOUNT ABSORBED DURING THE WORK SPAN

MEAN VALUES FOR EACH PATIENT, LISTED BY LATEST DIAGNOSIS AND BY ESTIMATED MAXIMUM BURDEN AS COMPUTED BY POWER FUNCTION

		POWER FUNCTION			THREE EXPONENTIALS		
PT. NO.	DAYS WORKED	AMT. ABSORBED DAILY	AMT. ABSORBED TOTAL	ESTIM. MAX.	AMT. ABSORBED DAILY	AMT. ABSORBED TOTAL	ESTIM. MAX.
		NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION					
3-600	6939	.0000	.18	.001	.0000	.13	.002
3-411	4017	.0000	.16	.002	.0000	.11	.002
3-436	4351	.0000	.18	.002	.0000	.13	.002
3-443	2221	.0000	.16	.002	.0000	.10	.002
3-566	3867	.0000	.17	.002	.0000	.13	.002
3-574	4141	.0000	.20	.002	.0000	.20	.003
3-482	911	.0001	.14	.003	.0000	.08	.002
3-485	2556	.0000	.18	.003	.0000	.14	.003
3-475	456	.0004	.21	.007	.0004	.22	.008
3-598	364	.0005	.18	.007	.0003	.14	.006
3-464	365	.0005	.21	.008	.0005	.21	.009
3-595	303	.0006	.20	.008	.0006	.18	.008
3-457	3651	.0001	.66	.009	.0001	.43	.008
3-570	244	.0008	.21	.009	.0008	.20	.011
3-575	182	.0010	.19	.009	.0008	.15	.009
3-492	2283	.0002	.60	.010	.0001	.34	.007
3-628	244	.0009	.22	.010	.0011	.29	.015
3-836	183	.0012	.23	.012	.0017	.31	.020
3-480	74	.0028	.21	.015	.0028	.21	.024
3-801	92	.0024	.22	.015	.0030	.27	.027
3-458	4532	.0002	1.30	.016	.0002	.96	.018
3-418	4230	.0003	1.28	.017	.0002	.96	.018
3-495	61	.0035	.21	.017	.0036	.22	.028
3-476	44	.0046	.20	.018	.0041	.18	.027
3-525	10302	.0002	2.08	.018	.0001	1.48	.019
3-605	730	.0008	.64	.018	.0009	.68	.022
3-403	3105	.0004	1.27	.019	.0002	.80	.017
3-518	3256	.0004	1.57	.023	.0002	.92	.019
3-527	911	.0011	1.02	.026	.0010	.95	.028
3-534	244	.0025	.63	.028	.0025	.62	.033
3-562	2556	.0006	1.68	.028	.0005	1.30	.029
3-415	5478	.0004	2.45	.029	.0002	1.59	.028
3-465	61	.0068	.41	.033	.0065	.40	.050
3-493	1399	.0010	1.52	.033	.0011	1.65	.043
3-435	730	.0016	1.20	.034	.0011	.81	.026
3-496	61	.0070	.42	.034	.0073	.44	.056
3-406	3379	.0007	2.52	.037	.0004	1.58	.032

3-494	244	.0034	.83	.038	.0033	.81	.043
3-640	425	.0025	1.07	.038	.0026	1.10	.044
3-481	3376	.0007	2.65	.039	.0004	1.52	.031
3-506	3530	.0007	2.72	.039	.0004	1.72	.035
3-556	698	.0020	1.39	.040	.0017	1.21	.040
3-621	1460	.0013	1.98	.042	.0008	1.20	.031
3-447	30	.0139	.41	.043	.0136	.41	.076
3-565	4747	.0007	3.49	.044	.0005	2.43	.045
3-467	2921	.0009	2.89	.045	.0008	2.36	.051
3-580	30	.0144	.43	.045	.0153	.46	.085
3-620	1460	.0017	2.59	.055	.0010	1.57	.041
3-544	183	.0059	1.09	.056	.0065	1.20	.076
3-434	880	.0026	2.31	.061	.0016	1.42	.042
3-466	75	.0112	.84	.062	.0111	.83	.093
3-555	729	.0030	2.19	.063	.0026	1.91	.061
3-456	2921	.0014	4.18	.066	.0008	2.38	.051
9- 46	729	.0031	2.30	.066	.0040	2.98	.096
3-576	244	.0060	1.47	.067	.0060	1.46	.078
3-613	274	.0062	1.70	.074	.0063	1.75	.087
3-471	638	.0041	2.64	.080	.0037	2.39	.081
3-478	60	.0176	1.05	.084	.0175	1.05	.133
3-550	729	.0040	2.98	.085	.0051	3.78	.122
3-420	1217	.0030	3.76	.087	.0030	3.67	.100
3-674	244	.0079	1.92	.087	.0081	1.99	.106
3-618	302	.0074	2.25	.094	.0090	2.72	.129
3-469	213	.0097	2.08	.100	.0094	2.00	.116
3-599	183	.0108	1.98	.101	.0121	2.21	.141
3-521	183	.0114	2.09	.107	.0111	2.04	.129
3-509	8275	.0013	10.93	.109	.0009	7.72	.115
3-501	60	.0234	1.40	.112	.0207	1.24	.157
3-547	761	.0053	4.05	.114	.0054	4.15	.132
3-461	44	.0295	1.29	.117	.0313	1.38	.208
3-515	183	.0125	2.30	.118	.0122	2.24	.142
3-587	183	.0150	2.74	.140	.0149	2.73	.174
9- 1	273	.0118	3.22	.140	.0153	4.18	.210
3-531	2282	.0036	8.23	.144	.0031	7.27	.168
3-686	1187	.0053	6.32	.147	.0064	7.63	.211
3-460	136	.0188	2.56	.148	.0192	2.62	.201
3-512	91	.0252	2.29	.156	.0245	2.23	.220
3-596	61	.0324	1.97	.157	.0360	2.19	.275
3-468	850	.0069	5.90	.159	.0063	5.38	.165
3-539	182	.0178	3.25	.167	.0192	3.49	.223
3-508	60	.0358	2.15	.172	.0376	2.25	.286
3-533	183	.0183	3.35	.172	.0179	3.29	.209
3-578	213	.0168	3.58	.173	.0167	3.57	.207
3-477	60	.0377	2.26	.181	.0354	2.12	.269
3-442	91	.0298	2.71	.185	.0289	2.63	.260
3-559	152	.0244	3.72	.206	.0269	4.09	.292
3-516	152	.0247	3.76	.208	.0241	3.66	.262
3-581	74	.0385	2.85	.210	.0426	3.15	.353
3-507	46	.0561	2.58	.229	.0580	2.71	.399
3-504	214	.0223	4.78	.230	.0240	5.14	.297
3-563	75	.0427	3.20	.235	.0438	3.29	.365
3-523	212	.0232	4.92	.238	.0240	5.10	.296
9- 29	91	.0410	3.73	.254	.0553	5.03	.497

3-450	121	.0348	4.21	.255	.0343	4.16	.343
3-564	21	.1031	2.16	.256	.1099	2.30	.520
3-573	274	.0215	5.91	.256	.0214	5.87	.294
3-422	274	.0217	5.96	.259	.0203	5.57	.279
3-432	730	.0128	9.34	.268	.0122	8.92	.288
3-567	730	.0133	9.73	.279	.0141	10.33	.333
3-593	61	.0612	3.73	.297	.0680	4.15	.520
3-474	60	.0658	3.95	.316	.0630	3.78	.479
3-427	244	.0306	7.49	.341	.0307	7.51	.402
3-444	60	.0719	4.31	.346	.0718	4.31	.546
3-452	183	.0375	6.87	.353	.0400	7.33	.466
3-410	730	.0172	12.57	.361	.0168	12.28	.396
3-553	91	.0609	5.54	.378	.0624	5.68	.561
3-778	730	.0570	41.61	.380	.0265	19.36	.625
9- 72	667	.0191	12.78	.381	.0254	16.99	.566
3-645	456	.0260	11.87	.416	.0262	11.95	.465
3-585	1825	.0118	21.66	.419	.0163	29.83	.733
3-437	364	.0306	11.17	.431	.0278	10.12	.438
3-532	1337	.0146	19.60	.434	.0131	17.55	.469
3-542	91	.0721	6.56	.446	.0790	7.19	.710
3-579	91	.0723	6.58	.448	.0799	7.27	.718
9- 74	547	.0273	14.98	.486	.0372	20.39	.734
3-446	1279	.0171	21.92	.495	.0203	26.12	.707
3-687	244	.0449	10.96	.499	.0469	11.45	.613
3-441	244	.0472	11.53	.525	.0442	10.80	.578
3-690	639	.0286	18.32	.557	.0237	15.15	.513
3-549	213	.0602	12.83	.619	.0594	12.66	.734
3-536	51	.1444	7.36	.629	.1424	7.26	1.009
3-569	1279	.0241	30.91	.698	.0251	32.16	.871
3-689	914	.0309	28.26	.737	.0333	30.44	.911
3-503	791	.0341	26.98	.749	.0360	28.47	.894
3-479	182	.0836	15.22	.783	.0835	15.20	.971
3-489	516	.0474	24.47	.814	.0433	22.38	.825
3-572	213	.0851	18.13	.874	.0844	17.98	1.043
3-679	68	.1712	11.64	.889	.1572	10.69	1.259
3-589	152	.1089	16.55	.917	.1137	17.28	1.236
3-552	699	.0493	34.50	1.009	.0502	35.12	1.152
3-408	517	.0639	33.06	1.100	.0603	31.19	1.150
3-561	61	.2346	14.31	1.141	.2410	14.70	1.844
3-685	456	.0747	34.07	1.195	.0987	45.04	1.752
3-590	183	.1314	24.06	1.235	.1645	30.12	1.917
3-513	183	.1315	24.07	1.236	.1513	27.69	1.762
3-522	364	.0954	34.73	1.340	.1193	43.43	1.878
3-546	91	.2190	19.93	1.357	.2145	19.52	1.929
3-426	548	.0830	45.52	1.477	.0786	43.10	1.551
3-597	244	.1335	32.59	1.485	.1338	32.64	1.749
3-491	14	.8493	11.89	1.613	.8580	12.01	3.401
3-519	61	.3415	20.83	1.660	.3462	21.11	2.649
3-697	242	.1740	42.11	1.926	.2365	57.24	3.081
3-607	213	.2014	42.91	2.069	.2282	48.61	2.821
3-592	118	.2968	35.02	2.150	.3890	45.90	3.855
3-612	1644	.0653	107.55	2.181	.0795	130.88	3.309
3-548	121	.3446	41.70	2.534	.3816	46.18	3.817
3-535	152	.3797	57.72	3.197	.4664	70.89	5.069
3-486	183	.3953	72.34	3.713	.4325	79.15	5.038

MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION

3-483	1245	.0001	.21	.004	.0001	.22	.006
3-526	244	.0008	.21	.009	.0008	.20	.011
3-500	60	.0036	.21	.017	.0039	.23	.030
3-591	12372	.0002	3.43	.028	.0002	2.49	.029
3-604	2921	.0007	2.26	.035	.0009	2.74	.059
3-490	1278	.0046	5.95	.134	.0043	5.54	.150
3-615	749	.0066	4.99	.141	.0071	5.35	.171
9- 7	730	.0104	7.63	.219	.0136	9.96	.321
9- 2	152	.0426	6.47	.358	.0556	8.45	.604
3-577	729	.0243	17.77	.511	.0269	19.67	.635
3-568	1279	.0201	25.76	.582	.0209	26.80	.725
3-524	183	.0767	14.03	.720	.0748	13.69	.871
3-614	394	.0750	29.56	1.102	.0791	31.17	1.297
9- 31	2555	.0262	67.13	1.125	.0360	92.17	2.073
3-727	883	.0578	51.08	1.353	.0796	70.38	2.131
3-412	941	.0584	54.99	1.417	.0671	63.23	1.876
3-505	365	.1020	37.24	1.434	.1214	44.31	1.913
3-520	183	.1554	28.45	1.460	.1793	32.82	2.089
3-488	180	.2044	36.79	1.901	.2173	39.13	2.516
3-424	944	.0803	75.85	1.952	.0773	73.02	2.164
3-419	395	.3835	151.52	5.647	.3978	157.17	6.533

MILD CHANGES TYPICAL OF RADIUM DEPOSITION

3-594	364	.0246	8.96	.345	.0269	9.82	.424
3-529	851	.0343	29.27	.787	.0447	38.12	1.168
3-502	1095	.0348	38.13	.921	.0411	45.08	1.277
3-588	1187	.0680	80.84	1.885	.0758	90.04	2.491
3-462	1217	.0734	89.38	2.063	.0787	95.90	2.634
3-530	639	.1748	111.73	3.397	.2068	132.17	4.480
3-510	487	.3533	172.11	5.872	.3907	190.30	7.196
3-428	244	.5564	135.78	6.190	.5827	142.18	7.617
3-433	639	.3964	253.34	7.702	.4406	281.61	9.546
3-445	1156	.2966	342.92	8.092	.3417	395.11	11.016

MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION

3-558	91	.2734	24.88	1.695	.2907	26.45	2.614
3-499	395	.1334	52.73	1.945	.1452	57.39	2.385
9- 4	2922	.0444	129.83	2.053	.0622	181.85	3.943
3-423	914	.1473	134.67	3.515	.1562	142.80	4.276
3-405	670	.2024	135.65	4.042	.2137	143.22	4.770
3-586	576	.3870	222.96	7.085	.4396	253.24	8.935
3-484	1095	.3200	350.45	8.465	.4001	438.21	12.414
3-459	303	.7028	212.96	8.871	.7975	241.67	11.481
3-416	456	.6468	294.98	10.348	.7319	333.80	12.990

ADVANCED, NON-MALIGNANT CHANGES TYPICAL OF RADIUM DEPOSITION

3-726	1310	.1037	135.90	3.039	.1470	192.66	5.183
3-404	975	.1887	184.09	4.673	.2207	215.24	6.316
3-551	1279	.2137	273.42	6.178	.2478	317.08	8.588
3-449	1217	.2456	298.93	6.900	.2694	327.94	9.008
3-473	916	.2901	265.79	6.930	.3198	292.99	8.769
3-431	1095	.2773	303.70	7.335	.3076	336.86	9.543
3-528	1309	.2664	348.79	7.803	.2747	359.58	9.675
3-571	183	1.2118	221.77	11.386	1.3881	254.04	16.169
3-540	914	.4840	442.47	11.548	.5764	526.87	15.779
3-554	486	.8935	434.25	14.829	.9589	466.04	17.639

MALIGNANT CHANGES ATTRIBUTABLE TO RADIUM DEPOSITION

3-417	426	.3596	153.25	5.532	.3984	169.76	6.812
3-455	395	.4409	174.16	6.491	.4606	181.93	7.562
3-402	914	.2867	262.09	6.840	.3141	287.15	8.599
3-407	944	.3087	291.49	7.503	.2966	280.06	8.302
3-649	455	.5392	245.34	8.953	.4210	191.56	7.462
3-429	883	.4686	413.83	10.961	.5470	483.04	14.628
3-401	669	.7513	502.65	14.988	.7608	509.01	16.964
3-619	242	1.3933	337.17	15.424	1.6575	401.12	21.591
3-648	1090	1.4354	1564.59	38.782	1.3377	1458.09	41.364
3-657	1279	1.8908	2418.43	54.649	1.0773	1377.92	37.320
3-671	61	12.4183	757.51	60.386	10.6744	651.13	81.694

TABLE 4C

RETENTION OF RADIUM AFTER CONTINUOUS INGESTION BY OCCUPATIONAL EXPOSURE

COMPUTED VALUES FOR ESTIMATED MAXIMUM RADIUM BURDEN, DAILY AMOUNT ABSORBED FROM THE GUT, AND TOTAL AMOUNT ABSORBED DURING THE WORK SPAN

MEAN VALUES FOR EACH PATIENT, LISTED BY LATEST DIAGNOSIS AND BY DAILY AMOUNT ABSORBED BY INGESTION AS COMPUTED BY POWER FUNCTION

		POWER FUNCTION			THREE EXPONENTIALS		
PT. NO.	DAYS WORKED	AMT. ABSORBED DAILY	AMT. ABSORBED TOTAL	ESTIM. MAX.	AMT. ABSORBED DAILY	AMT. ABSORBED TOTAL	ESTIM. MAX.
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION							
3-411	4017	.0000	.16	.002	.0000	.11	.002
3-436	4351	.0000	.18	.002	.0000	.13	.002
3-443	2221	.0000	.16	.002	.0000	.10	.002
3-485	2556	.0000	.18	.003	.0000	.14	.003
3-566	3867	.0000	.17	.002	.0000	.13	.002
3-574	4141	.0000	.20	.002	.0000	.20	.003
3-600	6939	.0000	.18	.001	.0000	.13	.002
3-457	3651	.0001	.66	.009	.0001	.43	.008
3-482	911	.0001	.14	.003	.0000	.08	.002
3-458	4532	.0002	1.30	.016	.0002	.96	.018
3-492	2283	.0002	.60	.010	.0001	.34	.007
3-525	10302	.0002	2.08	.018	.0001	1.48	.019
3-418	4230	.0003	1.28	.017	.0002	.96	.018
3-403	3105	.0004	1.27	.019	.0002	.80	.017
3-415	5478	.0004	2.45	.029	.0002	1.59	.028
3-475	456	.0004	.21	.007	.0004	.22	.008
3-518	3256	.0004	1.57	.023	.0002	.92	.019
3-464	365	.0005	.21	.008	.0005	.21	.009
3-598	364	.0005	.18	.007	.0003	.14	.006
3-562	2556	.0006	1.68	.028	.0005	1.30	.029
3-595	303	.0006	.20	.008	.0006	.18	.008
3-406	3379	.0007	2.52	.037	.0004	1.58	.032
3-481	3376	.0007	2.65	.039	.0004	1.52	.031
3-506	3530	.0007	2.72	.039	.0004	1.72	.035
3-565	4747	.0007	3.49	.044	.0005	2.43	.045
3-570	244	.0008	.21	.009	.0008	.20	.011
3-605	730	.0008	.64	.018	.0009	.68	.022
3-467	2921	.0009	2.89	.045	.0008	2.36	.051
3-628	244	.0009	.22	.010	.0011	.29	.015
3-493	1399	.0010	1.52	.033	.0011	1.65	.043
3-575	182	.0010	.19	.009	.0008	.15	.009
3-527	911	.0011	1.02	.026	.0010	.95	.028
3-836	183	.0012	.23	.012	.0017	.31	.020
3-509	8275	.0013	10.93	.109	.0009	7.72	.115
3-621	1460	.0013	1.98	.042	.0008	1.20	.031
3-456	2921	.0014	4.18	.066	.0008	2.38	.051
3-435	730	.0016	1.20	.034	.0011	.81	.026

3-620	1460	.0017	2.59	.055	.0010	1.57	.041
3-556	698	.0020	1.39	.040	.0017	1.21	.040
3-801	92	.0024	.22	.015	.0030	.27	.027
3-534	244	.0025	.63	.028	.0025	.62	.033
3-640	425	.0025	1.07	.038	.0026	1.10	.044
3-434	880	.0026	2.31	.061	.0016	1.42	.042
3-480	74	.0028	.21	.015	.0028	.21	.024
3-420	1217	.0030	3.76	.087	.0030	3.67	.100
3-555	729	.0030	2.19	.063	.0026	1.91	.061
9- 46	729	.0031	2.30	.066	.0040	2.98	.096
3-494	244	.0034	.83	.038	.0033	.81	.043
3-495	61	.0035	.21	.017	.0036	.22	.028
3-531	2282	.0036	8.23	.144	.0031	7.27	.168
3-550	729	.0040	2.98	.085	.0051	3.78	.122
3-471	638	.0041	2.64	.080	.0037	2.39	.081
3-476	44	.0046	.20	.018	.0041	.18	.027
3-547	761	.0053	4.05	.114	.0054	4.15	.132
3-686	1187	.0053	6.32	.147	.0064	7.63	.211
3-544	183	.0059	1.09	.056	.0065	1.20	.076
3-576	244	.0060	1.47	.067	.0060	1.46	.078
3-613	274	.0062	1.70	.074	.0063	1.75	.087
3-465	61	.0068	.41	.033	.0065	.40	.050
3-468	850	.0069	5.90	.159	.0063	5.38	.165
3-496	61	.0070	.42	.034	.0073	.44	.056
3-618	302	.0074	2.25	.094	.0090	2.72	.129
3-674	244	.0079	1.92	.087	.0081	1.99	.106
3-469	213	.0097	2.08	.100	.0094	2.00	.116
3-599	183	.0108	1.98	.101	.0121	2.21	.141
3-466	75	.0112	.84	.062	.0111	.83	.093
3-521	183	.0114	2.09	.107	.0111	2.04	.129
3-585	1825	.0118	21.66	.419	.0163	29.83	.733
9- 1	273	.0118	3.22	.140	.0153	4.18	.210
3-515	183	.0125	2.30	.118	.0122	2.24	.142
3-432	730	.0128	9.34	.268	.0122	8.92	.288
3-567	730	.0133	9.73	.279	.0141	10.33	.333
3-447	30	.0139	.41	.043	.0136	.41	.076
3-580	30	.0144	.43	.045	.0153	.46	.085
3-532	1337	.0146	19.60	.434	.0131	17.55	.469
3-587	183	.0150	2.74	.140	.0149	2.73	.174
3-578	213	.0168	3.58	.173	.0167	3.57	.207
3-446	1279	.0171	21.92	.495	.0203	26.12	.707
3-410	730	.0172	12.57	.361	.0168	12.28	.396
3-478	60	.0176	1.05	.084	.0175	1.05	.133
3-539	182	.0178	3.25	.167	.0192	3.49	.223
3-533	183	.0183	3.35	.172	.0179	3.29	.209
3-460	136	.0188	2.56	.148	.0192	2.62	.201
9- 72	667	.0191	12.78	.381	.0254	16.99	.566
3-573	274	.0215	5.91	.256	.0214	5.87	.294
3-422	274	.0217	5.96	.259	.0203	5.57	.279
3-504	214	.0223	4.78	.230	.0240	5.14	.297
3-523	212	.0232	4.92	.238	.0240	5.10	.296
3-501	60	.0234	1.40	.112	.0207	1.24	.157
3-569	1279	.0241	30.91	.698	.0251	32.16	.871
3-559	152	.0244	3.72	.206	.0269	4.09	.292
3-516	152	.0247	3.76	.208	.0241	3.66	.262

3-512	91	.0252	2.29	.156	.0245	2.23	.220
3-645	456	.0260	11.87	.416	.0262	11.95	.465
9- 74	547	.0273	14.98	.486	.0372	20.39	.734
3-690	639	.0286	18.32	.557	.0237	15.15	.513
3-461	44	.0295	1.29	.117	.0313	1.38	.208
3-442	91	.0298	2.71	.185	.0289	2.63	.260
3-427	244	.0306	7.49	.341	.0307	7.51	.402
3-437	364	.0306	11.17	.431	.0278	10.12	.438
3-689	914	.0309	28.26	.737	.0333	30.44	.911
3-596	61	.0324	1.97	.157	.0360	2.19	.275
3-503	791	.0341	26.98	.749	.0360	28.47	.894
3-450	121	.0348	4.21	.255	.0343	4.16	.343
3-508	60	.0358	2.15	.172	.0376	2.25	.286
3-452	183	.0375	6.87	.353	.0400	7.33	.466
3-477	60	.0377	2.26	.181	.0354	2.12	.269
3-581	74	.0385	2.85	.210	.0426	3.15	.353
9- 29	91	.0410	3.73	.254	.0553	5.03	.497
3-563	75	.0427	3.20	.235	.0438	3.29	.365
3-687	244	.0449	10.96	.499	.0469	11.45	.613
3-441	244	.0472	11.53	.525	.0442	10.80	.578
3-489	516	.0474	24.47	.814	.0433	22.38	.825
3-552	699	.0493	34.50	1.009	.0502	35.12	1.152
3-507	46	.0561	2.58	.229	.0589	2.71	.399
3-778	730	.0570	41.61	.380	.0265	19.36	.625
3-549	213	.0602	12.83	.619	.0594	12.66	.734
3-553	91	.0609	5.54	.378	.0624	5.68	.561
3-593	61	.0612	3.73	.297	.0680	4.15	.520
3-408	517	.0639	33.06	1.100	.0603	31.19	1.150
3-612	1644	.0653	107.55	2.181	.0795	130.88	3.309
3-474	60	.0658	3.95	.316	.0630	3.78	.479
3-444	60	.0719	4.31	.346	.0718	4.31	.546
3-542	91	.0721	6.56	.446	.0790	7.19	.710
3-579	91	.0723	6.58	.448	.0799	7.27	.718
3-685	456	.0747	34.07	1.195	.0987	45.04	1.752
3-426	548	.0830	45.52	1.477	.0786	43.10	1.551
3-479	182	.0836	15.22	.783	.0835	15.20	.971
3-572	213	.0851	18.13	.874	.0844	17.98	1.043
3-522	364	.0954	34.73	1.340	.1193	43.43	1.878
3-564	21	.1031	2.16	.256	.1099	2.30	.520
3-589	152	.1089	16.55	.917	.1137	17.28	1.236
3-590	183	.1314	24.06	1.235	.1645	30.12	1.917
3-513	183	.1315	24.07	1.236	.1513	27.69	1.762
3-597	244	.1335	32.59	1.485	.1338	32.64	1.749
3-536	51	.1444	7.36	.629	.1424	7.26	1.009
3-679	68	.1712	11.64	.889	.1572	10.69	1.259
3-697	242	.1740	42.11	1.926	.2365	57.24	3.081
3-607	213	.2014	42.91	2.069	.2282	48.61	2.821
3-546	91	.2190	19.93	1.357	.2145	19.52	1.929
3-561	61	.2346	14.31	1.141	.2410	14.70	1.844
3-592	118	.2968	35.02	2.150	.3890	45.90	3.855
3-519	61	.3415	20.83	1.660	.3462	21.11	2.649
3-548	121	.3446	41.70	2.534	.3816	46.18	3.817
3-535	152	.3797	57.72	3.197	.4664	70.89	5.069
3-486	183	.3953	72.34	3.713	.4325	79.15	5.038
3-491	14	.8493	11.89	1.613	.8580	12.01	3.401

MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION

3-483	1245	.0001	.21	.004	.0001	.22	.006
3-591	12372	.0002	3.43	.028	.0002	2.49	.029
3-604	2921	.0007	2.26	.035	.0009	2.74	.059
3-526	244	.0008	.21	.009	.0008	.20	.011
3-500	60	.0036	.21	.017	.0039	.23	.030
3-490	1278	.0046	5.95	.134	.0043	5.54	.150
3-615	749	.0066	4.99	.141	.0071	5.35	.171
9- 7	730	.0104	7.63	.219	.0136	9.96	.321
3-568	1279	.0201	25.76	.582	.0209	26.80	.725
3-577	729	.0243	17.77	.511	.0269	19.67	.635
9- 31	2555	.0262	67.13	1.125	.0360	92.17	2.073
9- 2	152	.0426	6.47	.358	.0556	8.45	.604
3-727	883	.0578	51.08	1.353	.0796	70.38	2.131
3-412	941	.0584	54.99	1.417	.0671	63.23	1.876
3-614	394	.0750	29.56	1.102	.0791	31.17	1.297
3-524	183	.0767	14.03	.720	.0748	13.69	.871
3-424	944	.0803	75.85	1.952	.0773	73.02	2.164
3-505	365	.1020	37.24	1.434	.1214	44.31	1.913
3-520	183	.1554	28.45	1.460	.1793	32.82	2.089
3-488	180	.2044	36.79	1.901	.2173	39.13	2.516
3-419	395	.3835	151.52	5.647	.3978	157.17	6.533

MILD CHANGES TYPICAL OF RADIUM DEPOSITION

3-594	364	.0246	8.96	.345	.0269	9.82	.424
3-529	851	.0343	29.27	.787	.0447	38.12	1.168
3-502	1095	.0348	38.13	.921	.0411	45.08	1.277
3-588	1187	.0680	80.84	1.885	.0758	90.04	2.491
3-462	1217	.0734	89.38	2.063	.0787	95.90	2.634
3-530	639	.1748	111.73	3.397	.2068	132.17	4.480
3-445	1156	.2966	342.92	8.092	.3417	395.11	11.016
3-510	487	.3533	172.11	5.872	.3907	190.30	7.196
3-433	639	.3964	253.34	7.702	.4406	281.61	9.546
3-428	244	.5564	135.78	6.190	.5827	142.18	7.617

MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION

9- 4	2922	.0444	129.83	2.053	.0622	181.85	3.943
3-499	395	.1334	52.73	1.965	.1452	57.39	2.385
3-423	914	.1473	134.67	3.515	.1562	142.80	4.276
3-405	670	.2024	135.65	4.042	.2137	143.22	4.770
3-558	91	.2734	24.88	1.695	.2907	26.45	2.614
3-484	1095	.3200	350.45	8.465	.4001	438.21	12.414
3-586	576	.3870	222.96	7.085	.4396	253.24	8.935
3-416	456	.6468	294.98	10.348	.7319	333.80	12.990
3-459	303	.7028	212.96	8.871	.7975	241.67	11.481

ADVANCED, NON-MALIGNANT CHANGES TYPICAL OF RADIUM DEPOSITION

3-726	1310	.1037	135.90	3.039	.1470	192.66	5.183
3-404	975	.1887	184.09	4.673	.2207	215.24	6.316
3-551	1279	.2137	273.42	6.178	.2478	317.08	8.588
3-449	1217	.2456	298.93	6.900	.2694	327.94	9.008
3-528	1309	.2664	348.79	7.803	.2747	359.58	9.675
3-431	1095	.2773	303.70	7.335	.3076	336.86	9.543
3-473	916	.2901	265.79	6.930	.3198	292.99	8.769
3-540	914	.4840	442.47	11.548	.5764	526.87	15.779
3-554	486	.8935	434.25	14.829	.9589	466.04	17.639
3-571	183	1.2118	221.77	11.386	1.3881	254.04	16.169

MALIGNANT CHANGES ATTRIBUTABLE TO RADIUM DEPOSITION

3-402	914	.2867	262.09	6.840	.3141	287.15	8.599
3-407	944	.3087	291.49	7.503	.2966	280.06	8.302
3-417	426	.3596	153.25	5.532	.3984	169.76	6.812
3-455	395	.4409	174.16	6.491	.4608	181.93	7.562
3-429	883	.4686	413.83	10.961	.5470	483.04	14.628
3-649	455	.5392	245.34	8.953	.4210	191.56	7.462
3-401	669	.7513	502.65	14.988	.7608	509.01	16.964
3-619	242	1.3933	337.17	15.424	1.6575	401.12	21.591
3-648	1090	1.4354	1564.59	38.782	1.3377	1458.09	41.364
3-657	1279	1.8908	2418.43	54.649	1.0773	1377.92	37.320
3-671	61	12.4183	757.51	60.386	10.6744	651.13	81.694

TABLE 4D

RETENTION OF RADIUM AFTER CONTINUOUS INGESTION BY OCCUPATIONAL EXPOSURE

COMPUTED VALUES FOR ESTIMATED MAXIMUM RADIUM BURDEN, DAILY AMOUNT ABSORBED FROM THE GUT, AND TOTAL AMOUNT ABSORBED DURING THE WORK SPAN

MEAN VALUES FOR EACH PATIENT, LISTED BY LATEST DIAGNOSIS AND BY TOTAL AMOUNT ABSORBED BY INGESTION AS COMPUTED BY POWER FUNCTION

		POWER FUNCTION			THREE EXPONENTIALS		
		AMT. ABSORBED			AMT. ABSORBED		
PT. NO.	DAYS WORKED	DAILY	TOTAL	ESTIM. MAX.	DAILY	TOTAL	ESTIM. MAX.
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION							
3-482	911	.0001	.14	.003	.0000	.08	.002
3-411	4017	.0000	.16	.002	.0000	.11	.002
3-443	2221	.0000	.16	.002	.0000	.10	.002
3-566	3867	.0000	.17	.002	.0000	.13	.002
3-436	4351	.0000	.18	.002	.0000	.13	.002
3-485	2556	.0000	.18	.003	.0000	.14	.003
3-598	364	.0005	.18	.007	.0003	.14	.006
3-600	6939	.0000	.18	.001	.0000	.13	.002
3-575	182	.0010	.19	.009	.0008	.15	.009
3-476	44	.0046	.20	.018	.0041	.18	.027
3-574	4141	.0000	.20	.002	.0000	.20	.003
3-595	303	.0006	.20	.008	.0006	.18	.008
3-464	365	.0005	.21	.008	.0005	.21	.009
3-475	456	.0004	.21	.007	.0004	.22	.008
3-480	74	.0028	.21	.015	.0028	.21	.024
3-495	61	.0035	.21	.017	.0036	.22	.028
3-570	244	.0008	.21	.009	.0008	.20	.011
3-628	244	.0009	.22	.010	.0011	.29	.015
3-801	92	.0024	.22	.015	.0030	.27	.027
3-836	183	.0012	.23	.012	.0017	.31	.020
3-447	30	.0139	.41	.043	.0136	.41	.076
3-465	61	.0068	.41	.033	.0065	.40	.050
3-496	61	.0070	.42	.034	.0073	.44	.056
3-580	30	.0144	.43	.045	.0153	.46	.085
3-492	2283	.0002	.60	.010	.0001	.34	.007
3-534	244	.0025	.63	.028	.0025	.62	.033
3-605	730	.0008	.64	.018	.0009	.68	.022
3-457	3651	.0001	.66	.009	.0001	.43	.008
3-494	244	.0034	.83	.038	.0033	.81	.043
3-466	75	.0112	.84	.062	.0111	.83	.093
3-527	911	.0011	1.02	.026	.0010	.95	.028
3-478	60	.0176	1.05	.084	.0175	1.05	.133
3-640	425	.0025	1.07	.038	.0026	1.10	.044
3-544	183	.0059	1.09	.056	.0065	1.20	.076
3-435	730	.0016	1.20	.034	.0011	.81	.026
3-403	3105	.0004	1.27	.019	.0002	.80	.017
3-418	4230	.0003	1.28	.017	.0002	.96	.018

3-461	44	.0295	1.29	.117	.0313	1.38	.208
3-458	4532	.0002	1.30	.016	.0002	.96	.018
3-556	698	.0020	1.39	.040	.0017	1.21	.040
3-501	60	.0234	1.40	.112	.0207	1.24	.157
3-576	244	.0060	1.47	.067	.0060	1.46	.078
3-493	1399	.0010	1.52	.033	.0011	1.65	.043
3-518	3256	.0004	1.57	.023	.0002	.92	.019
3-562	2556	.0006	1.68	.028	.0005	1.30	.029
3-613	274	.0062	1.70	.074	.0063	1.75	.087
3-674	244	.0079	1.92	.087	.0081	1.99	.106
3-596	61	.0324	1.97	.157	.0360	2.19	.275
3-599	183	.0108	1.98	.101	.0121	2.21	.141
3-621	1460	.0013	1.98	.042	.0008	1.20	.031
3-469	213	.0097	2.08	.100	.0094	2.00	.116
3-525	10302	.0002	2.08	.018	.0001	1.48	.019
3-521	183	.0114	2.09	.107	.0111	2.04	.129
3-508	60	.0358	2.15	.172	.0376	2.25	.286
3-564	21	.1031	2.16	.256	.1099	2.30	.520
3-555	729	.0030	2.19	.063	.0026	1.91	.061
3-618	302	.0074	2.25	.094	.0090	2.72	.129
3-477	60	.0377	2.26	.181	.0354	2.12	.269
3-512	91	.0252	2.29	.156	.0245	2.23	.220
3-515	183	.0125	2.30	.118	.0122	2.24	.142
9- 46	729	.0031	2.30	.066	.0040	2.98	.096
3-434	880	.0026	2.31	.061	.0016	1.42	.042
3-415	5478	.0004	2.45	.029	.0002	1.59	.028
3-406	3379	.0007	2.52	.037	.0004	1.58	.032
3-460	136	.0188	2.56	.148	.0192	2.62	.201
3-507	46	.0561	2.58	.229	.0589	2.71	.399
3-620	1460	.0017	2.59	.055	.0010	1.57	.041
3-471	638	.0041	2.64	.080	.0037	2.39	.081
3-481	3376	.0007	2.65	.039	.0004	1.52	.031
3-442	91	.0298	2.71	.185	.0289	2.63	.260
3-506	3530	.0007	2.72	.039	.0004	1.72	.035
3-587	183	.0150	2.74	.140	.0149	2.73	.174
3-581	74	.0385	2.85	.210	.0426	3.15	.353
3-467	2921	.0009	2.89	.045	.0008	2.36	.051
3-550	729	.0040	2.98	.085	.0051	3.78	.122
3-563	75	.0427	3.20	.235	.0438	3.29	.365
9- 1	273	.0118	3.22	.140	.0153	4.18	.210
3-539	182	.0178	3.25	.167	.0192	3.49	.223
3-533	183	.0183	3.35	.172	.0179	3.29	.209
3-565	4747	.0007	3.49	.044	.0005	2.43	.045
3-578	213	.0168	3.58	.173	.0167	3.57	.207
3-559	152	.0244	3.72	.206	.0269	4.09	.292
3-593	61	.0612	3.73	.297	.0680	4.15	.520
9- 29	91	.0410	3.73	.254	.0553	5.03	.497
3-420	1217	.0030	3.76	.087	.0030	3.67	.100
3-516	152	.0247	3.76	.208	.0241	3.66	.262
3-474	60	.0658	3.95	.316	.0630	3.78	.479
3-547	761	.0053	4.05	.114	.0054	4.15	.132
3-456	2921	.0014	4.18	.066	.0008	2.38	.051
3-450	121	.0348	4.21	.255	.0343	4.16	.343
3-444	60	.0719	4.31	.346	.0718	4.31	.546
3-504	214	.0223	4.78	.230	.0240	5.14	.297

3-523	212	.0232	4.92	.238	.0240	5.10	.296
3-553	91	.0609	5.54	.378	.0624	5.68	.561
3-468	850	.0069	5.90	.159	.0063	5.38	.165
3-573	274	.0215	5.91	.256	.0214	5.87	.294
3-422	274	.0217	5.96	.259	.0203	5.57	.279
3-686	1187	.0053	6.32	.147	.0064	7.63	.211
3-542	91	.0721	6.56	.446	.0790	7.19	.710
3-579	91	.0723	6.58	.448	.0799	7.27	.718
3-452	183	.0375	6.87	.353	.0400	7.33	.466
3-536	51	.1444	7.36	.629	.1424	7.26	1.009
3-427	244	.0306	7.49	.341	.0307	7.51	.402
3-531	2282	.0036	8.23	.144	.0031	7.27	.168
3-432	730	.0128	9.34	.268	.0122	8.92	.288
3-567	730	.0133	9.73	.279	.0141	10.33	.333
3-509	8275	.0013	10.93	.109	.0009	7.72	.115
3-687	244	.0449	10.96	.499	.0469	11.45	.613
3-437	364	.0306	11.17	.431	.0278	10.12	.438
3-441	244	.0472	11.53	.525	.0442	10.80	.578
3-679	68	.1712	11.64	.889	.1572	10.69	1.259
3-645	456	.0260	11.87	.416	.0262	11.95	.465
3-491	14	.8493	11.89	1.613	.8580	12.01	3.401
3-410	730	.0172	12.57	.361	.0168	12.28	.396
9- 72	667	.0191	12.78	.381	.0254	16.99	.566
3-549	213	.0602	12.83	.619	.0594	12.66	.734
3-561	61	.2346	14.31	1.141	.2410	14.70	1.844
9- 74	547	.0273	14.98	.486	.0372	20.39	.734
3-479	182	.0836	15.22	.783	.0835	15.20	.971
3-589	152	.1089	16.55	.917	.1137	17.28	1.236
3-572	213	.0851	18.13	.874	.0844	17.98	1.043
3-690	639	.0286	18.32	.557	.0237	15.15	.513
3-532	1337	.0146	19.60	.434	.0131	17.55	.469
3-546	91	.2190	19.93	1.357	.2145	19.52	1.929
3-519	61	.3415	20.83	1.660	.3462	21.11	2.649
3-585	1825	.0118	21.66	.419	.0163	29.83	.733
3-446	1279	.0171	21.92	.495	.0203	26.12	.707
3-590	183	.1314	24.06	1.235	.1645	30.12	1.917
3-513	183	.1315	24.07	1.236	.1513	27.69	1.762
3-489	516	.0474	24.47	.814	.0433	22.38	.825
3-503	791	.0341	26.98	.749	.0360	28.47	.894
3-689	914	.0309	28.26	.737	.0333	30.44	.911
3-569	1279	.0241	30.91	.698	.0251	32.16	.871
3-597	244	.1335	32.59	1.485	.1338	32.64	1.749
3-408	517	.0639	33.06	1.100	.0603	31.19	1.150
3-685	456	.0747	34.07	1.195	.0987	45.04	1.752
3-552	699	.0493	34.50	1.009	.0502	35.12	1.152
3-522	364	.0954	34.73	1.340	.1193	43.43	1.878
3-592	118	.2968	35.02	2.150	.3890	45.90	3.855
3-778	730	.0570	41.61	.380	.0265	19.36	.625
3-548	121	.3446	41.70	2.534	.3816	46.18	3.817
3-697	242	.1740	42.11	1.926	.2365	57.24	3.081
3-607	213	.2014	42.91	2.069	.2282	48.61	2.821
3-426	548	.0830	45.52	1.477	.0786	43.10	1.551
3-535	152	.3797	57.72	3.197	.4664	70.89	5.069
3-486	183	.3953	72.34	3.713	.4325	79.15	5.038
3-612	1644	.0653	107.55	2.181	.0795	130.88	3.309

MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION

3-483	1245	.0001	.21	.004	.0001	.22	.006
3-500	60	.0036	.21	.017	.0039	.23	.030
3-526	244	.0008	.21	.009	.0008	.20	.011
3-604	2921	.0007	2.26	.035	.0009	2.74	.059
3-591	12372	.0002	3.43	.028	.0002	2.49	.029
3-615	749	.0066	4.99	.141	.0071	5.35	.171
3-490	1278	.0046	5.95	.134	.0043	5.54	.150
9- 2	152	.0426	6.47	.358	.0556	8.45	.604
9- 7	730	.0104	7.63	.219	.0136	9.96	.321
3-524	183	.0767	14.03	.720	.0748	13.69	.871
3-577	729	.0243	17.77	.511	.0269	19.67	.635
3-568	1279	.0201	25.76	.582	.0209	26.80	.725
3-520	183	.1554	28.45	1.460	.1793	32.82	2.089
3-614	394	.0750	29.56	1.102	.0791	31.17	1.297
3-488	180	.2044	36.79	1.901	.2173	39.13	2.516
3-505	365	.1020	37.24	1.434	.1214	44.31	1.913
3-727	883	.0578	51.08	1.353	.0796	70.38	2.131
3-412	941	.0584	54.99	1.417	.0671	63.23	1.876
9- 31	2555	.0262	67.13	1.125	.0360	92.17	2.073
3-424	944	.0803	75.85	1.952	.0773	73.02	2.164
3-419	395	.3835	151.52	5.647	.3978	157.17	6.533

MILD CHANGES TYPICAL OF RADIUM DEPOSITION

3-594	364	.0246	8.96	.345	.0269	9.82	.424
3-529	851	.0343	29.27	.787	.0447	38.12	1.168
3-502	1095	.0348	38.13	.921	.0411	45.08	1.277
3-588	1187	.0680	80.84	1.885	.0758	90.04	2.491
3-462	1217	.0734	89.38	2.063	.0787	95.90	2.634
3-530	639	.1748	111.73	3.397	.2068	132.17	4.480
3-428	244	.5564	135.78	6.190	.5827	142.18	7.617
3-510	487	.3533	172.11	5.872	.3907	190.30	7.196
3-433	639	.3964	253.34	7.702	.4406	281.61	9.546
3-445	1156	.2966	342.92	8.092	.3417	395.11	11.016

MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION

3-558	91	.2734	24.88	1.695	.2907	26.45	2.614
3-499	395	.1334	52.73	1.965	.1452	57.39	2.385
9- 4	2922	.0444	129.83	2.053	.0622	181.85	3.943
3-423	914	.1473	134.67	3.515	.1562	142.80	4.276
3-405	670	.2024	135.65	4.042	.2137	143.22	4.770
3-459	303	.7028	212.96	8.871	.7975	241.67	11.481
3-586	576	.3870	222.96	7.085	.4396	253.24	8.935
3-416	456	.6468	294.98	10.348	.7319	333.80	12.990
3-484	1095	.3200	350.45	8.465	.4001	438.21	12.414

ADVANCED, NON-MALIGNANT CHANGES TYPICAL OF RADIUM DEPOSITION

3-726	1310	.1037	135.90	3.039	.1470	192.66	5.183
3-404	975	.1887	184.09	4.673	.2207	215.24	6.316
3-571	183	1.2118	221.77	11.386	1.3881	254.04	16.169
3-473	916	.2901	265.79	6.930	.3198	292.99	8.769
3-551	1279	.2137	273.42	6.178	.2478	317.08	8.588
3-449	1217	.2456	298.93	6.900	.2694	327.94	9.008
3-431	1095	.2773	303.70	7.335	.3076	336.86	9.543
3-528	1309	.2664	348.79	7.803	.2747	359.58	9.675
3-554	486	.8935	434.25	14.829	.9589	466.04	17.639
3-540	914	.4840	442.47	11.548	.5764	526.87	15.779

MALIGNANT CHANGES ATTRIBUTABLE TO RADIUM DEPOSITION

3-417	426	.3596	153.25	5.532	.3984	169.76	6.812
3-455	395	.4409	174.16	6.491	.4606	181.93	7.562
3-649	455	.5392	245.34	8.953	.4210	191.56	7.462
3-402	914	.2867	262.09	6.840	.3141	287.15	8.599
3-407	944	.3087	291.49	7.503	.2966	280.06	8.302
3-619	242	1.3933	337.17	15.424	1.6575	401.12	21.591
3-429	883	.4686	413.83	10.961	.5470	483.04	14.628
3-401	669	.7513	502.65	14.988	.7608	509.01	16.964
3-671	61	12.4183	757.51	60.386	10.6744	651.13	81.694
3-648	1090	1.4354	1564.59	38.782	1.3377	1458.09	41.364
3-657	1279	1.8908	2418.43	54.649	1.0773	1377.92	37.320

TABLE 5A

DAILY DOSE RATE TO SKELETON IN RADS. COMPUTED BY POWER FUNCTION

LISTED FOR EACH MEASUREMENT FOR EACH PATIENT

PT. NO.	DAYS TO MEAS.	ELAPSED TIME IN DAYS 1	10	100	ELAPSED TIME IN YEARS 1	5	20	40	48
3-401	11673	0.8242	0.7879	0.6614	0.5309	0.3476	0.2234	0.1776	0.1672
3-401	12888	0.8027	0.7674	0.6442	0.5171	0.3386	0.2175	0.1730	0.1629
3-402	11546	0.3608	0.3475	0.2997	0.2472	0.1672	0.1088	0.0867	0.0817
3-402	12365	0.3621	0.3488	0.3008	0.2482	0.1678	0.1092	0.0871	0.0820
3-402	13215	0.3703	0.3566	0.3076	0.2538	0.1716	0.1117	0.0890	0.0839
3-402	13215	0.4521	0.4355	0.3755	0.3098	0.2095	0.1363	0.1087	0.1024
3-402	14473	0.3505	0.3376	0.2911	0.2402	0.1624	0.1057	0.0843	0.0794
3-403	5130	0.0012	0.0012	0.0011	0.0010	0.0008	0.0005	0.0004	0.0004
3-404	11582	0.2886	0.2783	0.2413	0.2001	0.1363	0.0889	0.0710	0.0669
3-404	13423	0.2598	0.2506	0.2172	0.1802	0.1227	0.0801	0.0639	0.0602
3-404	13423	0.2376	0.2292	0.1986	0.1648	0.1122	0.0732	0.0584	0.0550
3-404	14870	0.2449	0.2362	0.2047	0.1699	0.1156	0.0755	0.0602	0.0567
3-404	14870	0.2701	0.2605	0.2258	0.1873	0.1275	0.0833	0.0664	0.0626
3-405	13423	0.2231	0.2133	0.1791	0.1438	0.0941	0.0605	0.0481	0.0453
3-405	11582	0.2212	0.2114	0.1775	0.1425	0.0933	0.0600	0.0477	0.0449
3-405	12323	0.1996	0.1908	0.1602	0.1286	0.0842	0.0541	0.0430	0.0405
3-405	13423	0.2338	0.2235	0.1877	0.1507	0.0987	0.0634	0.0504	0.0475
3-406	4856	0.0023	0.0022	0.0021	0.0019	0.0015	0.0011	0.0009	0.0008
3-407	11582	0.4168	0.4017	0.3474	0.2874	0.1950	0.1271	0.1014	0.0955
3-408	11589	0.0587	0.0557	0.0456	0.0357	0.0228	0.0146	0.0116	0.0109
3-410	11870	0.0197	0.0189	0.0160	0.0129	0.0085	0.0055	0.0044	0.0041
3-411	5570	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
3-412	11870	0.0994	0.0958	0.0828	0.0685	0.0464	0.0303	0.0241	0.0227
3-412	13958	0.0787	0.0759	0.0656	0.0542	0.0368	0.0240	0.0191	0.0180
3-412	13958	0.0671	0.0647	0.0559	0.0462	0.0314	0.0204	0.0163	0.0153
3-412	14623	0.0698	0.0672	0.0581	0.0481	0.0326	0.0212	0.0169	0.0160
3-415	4505	0.0019	0.0018	0.0018	0.0016	0.0013	0.0010	0.0008	0.0008
3-416	11688	0.5502	0.5201	0.4201	0.3254	0.2057	0.1306	0.1036	0.0982
3-416	12064	0.5199	0.4915	0.3970	0.3075	0.1944	0.1234	0.0979	0.0921
3-416	13510	0.5337	0.5045	0.4075	0.3157	0.1995	0.1266	0.1005	0.0946
3-416	14969	0.5134	0.4853	0.3920	0.3037	0.1919	0.1218	0.0967	0.0910
3-416	14969	0.6217	0.5877	0.4748	0.3678	0.2324	0.1475	0.1171	0.1102
3-417	11718	0.3510	0.3311	0.2655	0.2043	0.1284	0.0814	0.0645	0.0607
3-417	13365	0.3173	0.2993	0.2400	0.1847	0.1161	0.0735	0.0583	0.0549
3-417	14028	0.2584	0.2437	0.1954	0.1504	0.0945	0.0599	0.0475	0.0447
3-417	14028	0.2545	0.2401	0.1925	0.1482	0.0931	0.0590	0.0468	0.0440
3-417	14028	0.2767	0.2610	0.2093	0.1611	0.1012	0.0641	0.0509	0.0479
3-418	7036	0.0011	0.0011	0.0010	0.0009	0.0007	0.0005	0.0004	0.0004
3-419	11598	0.2984	0.2807	0.2231	0.1705	0.1065	0.0674	0.0534	0.0503
3-419	12254	0.3142	0.2956	0.2350	0.1796	0.1122	0.0709	0.0562	0.0529
3-419	13425	0.2805	0.2639	0.2098	0.1603	0.1001	0.0633	0.0502	0.0472
3-419	13425	0.2917	0.2744	0.2181	0.1667	0.1041	0.0658	0.0522	0.0491
3-420	11603	0.0049	0.0048	0.0042	0.0035	0.0025	0.0016	0.0013	0.0012
3-422	11603	0.0133	0.0123	0.0094	0.0069	0.0042	0.0026	0.0021	0.0020

3-423	11603	0.2305	0.2220	0.1914	0.1579	0.1068	0.0695	0.0554	0.0522
3-423	12364	0.1826	0.1759	0.1517	0.1251	0.0846	0.0551	0.0439	0.0414
3-423	13418	0.1769	0.1704	0.1469	0.1212	0.0820	0.0533	0.0425	0.0401
3-423	13418	0.1894	0.1824	0.1573	0.1298	0.0878	0.0571	0.0455	0.0429
3-424	11604	0.1085	0.1045	0.0904	0.0748	0.0507	0.0331	0.0264	0.0248
3-426	11612	0.0792	0.0753	0.0620	0.0488	0.0314	0.0200	0.0159	0.0150
3-427	11617	0.0205	0.0189	0.0142	0.0104	0.0063	0.0039	0.0031	0.0029
3-427	13422	0.0142	0.0131	0.0098	0.0072	0.0043	0.0027	0.0022	0.0020
3-428	11617	0.3390	0.3129	0.2343	0.1712	0.1033	0.0647	0.0512	0.0482
3-428	13493	0.3022	0.2789	0.2089	0.1526	0.0921	0.0577	0.0457	0.0430
3-428	13493	0.3037	0.2804	0.2099	0.1534	0.0926	0.0580	0.0459	0.0432
3-429	11617	0.6405	0.6165	0.5302	0.4361	0.2938	0.1909	0.1522	0.1433
3-429	13422	0.5611	0.5400	0.4644	0.3820	0.2573	0.1672	0.1333	0.1255
3-429	13493	0.5978	0.5753	0.4948	0.4070	0.2742	0.1782	0.1420	0.1347
3-429	13493	0.5832	0.5613	0.4827	0.3971	0.2675	0.1738	0.1385	0.1304
3-429	14884	0.5763	0.5546	0.4770	0.3924	0.2643	0.1717	0.1369	0.1289
3-429	14884	0.6779	0.6525	0.5611	0.4616	0.3109	0.2020	0.1611	0.1517
3-431	11650	0.4256	0.4114	0.3598	0.3014	0.2078	0.1364	0.1090	0.1027
3-431	13721	0.4152	0.4015	0.3511	0.2941	0.2027	0.1331	0.1063	0.1002
3-431	13721	0.3943	0.3812	0.3334	0.2792	0.1925	0.1264	0.1010	0.0951
3-432	11622	0.0147	0.0140	0.0119	0.0096	0.0064	0.0041	0.0033	0.0031
3-433	11622	0.4606	0.4398	0.3676	0.2938	0.1915	0.1229	0.0977	0.0902
3-433	14157	0.3992	0.3812	0.3186	0.2547	0.1660	0.1065	0.0847	0.0797
3-433	14157	0.3907	0.3730	0.3118	0.2492	0.1624	0.1042	0.0828	0.0780
3-434	5277	0.0033	0.0032	0.0027	0.0022	0.0015	0.0010	0.0008	0.0007
3-434	6160	0.0035	0.0034	0.0029	0.0024	0.0016	0.0010	0.0008	0.0008
3-435	7438	0.0019	0.0018	0.0015	0.0012	0.0008	0.0005	0.0004	0.0004
3-436	7073	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
3-437	11215	0.0225	0.0211	0.0166	0.0126	0.0078	0.0049	0.0039	0.0037
3-441	11639	0.0268	0.0247	0.0185	0.0135	0.0082	0.0051	0.0040	0.0038
3-442	12101	0.0089	0.0077	0.0050	0.0034	0.0019	0.0012	0.0010	0.0009
3-443	5957	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001
3-444	11709	0.0193	0.0163	0.0098	0.0065	0.0037	0.0023	0.0018	0.0017
3-444	13416	0.0131	0.0111	0.0067	0.0044	0.0025	0.0016	0.0012	0.0012
3-445	11709	0.4522	0.4376	0.3842	0.3233	0.2242	0.1476	0.1180	0.1112
3-445	12366	0.4541	0.4395	0.3859	0.3246	0.2251	0.1482	0.1185	0.1117
3-445	13928	0.4273	0.4136	0.3631	0.3055	0.2119	0.1395	0.1115	0.1051
3-445	13928	0.5234	0.5066	0.4448	0.3742	0.2595	0.1709	0.1366	0.1287
3-445	14907	0.4225	0.4089	0.3590	0.3020	0.2095	0.1379	0.1102	0.1039
3-446	11709	0.0351	0.0340	0.0301	0.0255	0.0179	0.0118	0.0095	0.0089
3-446	14914	0.0230	0.0223	0.0197	0.0167	0.0117	0.0078	0.0062	0.0059
3-446	14914	0.0263	0.0255	0.0225	0.0191	0.0134	0.0089	0.0071	0.0067
3-447	12232	0.0019	0.0015	0.0008	0.0005	0.0003	0.0002	0.0001	0.0001
3-449	11841	0.4437	0.4299	0.3788	0.3200	0.2232	0.1474	0.1179	0.1111
3-449	14093	0.3366	0.3261	0.2873	0.2427	0.1693	0.1118	0.0894	0.0843
3-450	12298	0.0125	0.0111	0.0075	0.0052	0.0030	0.0019	0.0015	0.0014
3-452	11841	0.0223	0.0203	0.0146	0.0104	0.0062	0.0039	0.0031	0.0029
3-452	14919	0.0129	0.0118	0.0085	0.0060	0.0036	0.0022	0.0018	0.0017
3-455	12767	0.3405	0.3203	0.2546	0.1946	0.1215	0.0769	0.0609	0.0573
3-456	2577	0.0040	0.0039	0.0036	0.0033	0.0025	0.0018	0.0014	0.0013
3-457	5499	0.0006	0.0006	0.0005	0.0005	0.0004	0.0003	0.0002	0.0002
3-458	1	0.0011	0.0010	0.0010	0.0009	0.0007	0.0005	0.0004	0.0004
3-459	12111	0.5229	0.4871	0.3751	0.2796	0.1712	0.1076	0.0852	0.0802
3-459	14134	0.4508	0.4199	0.3234	0.2410	0.1476	0.0928	0.0735	0.0691
3-459	14134	0.4575	0.4262	0.3282	0.2446	0.1498	0.0942	0.0746	0.0702
3-459	14519	0.3990	0.3717	0.2862	0.2133	0.1306	0.0821	0.0650	0.0612

3-460	12676	0.0073	0.0065	0.0045	0.0031	0.0018	0.0011	0.0009	0.0008
3-461	13133	0.0054	0.0044	0.0025	0.0016	0.0009	0.0006	0.0005	0.0004
3-462	11900	0.1326	0.1284	0.1132	0.0956	0.0667	0.0440	0.0352	0.0332
3-462	12110	0.1319	0.1278	0.1126	0.0951	0.0663	0.0438	0.0350	0.0330
3-462	13426	0.1066	0.1033	0.0910	0.0769	0.0536	0.0354	0.0283	0.0267
3-462	13426	0.0956	0.0926	0.0816	0.0689	0.0481	0.0317	0.0254	0.0239
3-464	12452	0.0004	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001
3-465	12025	0.0016	0.0013	0.0008	0.0005	0.0003	0.0002	0.0001	0.0001
3-466	12390	0.0029	0.0025	0.0016	0.0011	0.0006	0.0004	0.0003	0.0003
3-467	8752	0.0028	0.0027	0.0025	0.0023	0.0017	0.0012	0.0010	0.0009
3-468	11036	0.0088	0.0084	0.0072	0.0059	0.0040	0.0026	0.0021	0.0019
3-469	11961	0.0051	0.0047	0.0034	0.0025	0.0015	0.0009	0.0007	0.0007
3-471	11090	0.0043	0.0042	0.0035	0.0028	0.0018	0.0012	0.0009	0.0009
3-473	12348	0.3895	0.3751	0.3236	0.2670	0.1806	0.1175	0.0937	0.0883
3-473	13782	0.3789	0.3650	0.3148	0.2598	0.1757	0.1144	0.0912	0.0859
3-474	11981	0.0148	0.0125	0.0075	0.0050	0.0028	0.0018	0.0014	0.0013
3-475	12681	0.0004	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001
3-476	11304	0.0008	0.0007	0.0004	0.0003	0.0001	0.0001	0.0001	0.0001
3-477	11746	0.0085	0.0072	0.0043	0.0029	0.0016	0.0010	0.0008	0.0007
3-478	12445	0.0040	0.0033	0.0020	0.0013	0.0008	0.0005	0.0004	0.0003
3-479	12386	0.0391	0.0356	0.0256	0.0182	0.0108	0.0068	0.0053	0.0050
3-480	12555	0.0007	0.0006	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001
3-481	2805	0.0024	0.0024	0.0022	0.0020	0.0016	0.0011	0.0009	0.0009
3-482	4509	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0000	0.0000
3-483	12474	0.0003	0.0003	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001
3-484	13283	0.4648	0.4494	0.3930	0.3291	0.2269	0.1490	0.1190	0.1121
3-484	14774	0.4517	0.4367	0.3819	0.3190	0.2205	0.1448	0.1157	0.1090
3-484	14774	0.5088	0.4919	0.4302	0.3603	0.2484	0.1631	0.1303	0.1228
3-485	8175	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001
3-486	12015	0.2142	0.1950	0.1403	0.0999	0.0593	0.0370	0.0293	0.0275
3-486	14919	0.1572	0.1431	0.1029	0.0733	0.0435	0.0272	0.0215	0.0202
3-487	12031	0.1340	0.1274	0.1049	0.0827	0.0531	0.0339	0.0269	0.0254
3-488	13067	0.0950	0.0864	0.0620	0.0441	0.0262	0.0163	0.0129	0.0121
3-489	11240	0.0435	0.0413	0.0338	0.0265	0.0169	0.0108	0.0086	0.0080
3-490	11063	0.0076	0.0074	0.0066	0.0056	0.0039	0.0026	0.0021	0.0019
3-491	12593	0.0678	0.0493	0.0243	0.0153	0.0086	0.0053	0.0042	0.0039
3-492	2410	0.0006	0.0006	0.0006	0.0005	0.0004	0.0003	0.0002	0.0002
3-493	12681	0.0019	0.0018	0.0016	0.0014	0.0010	0.0007	0.0005	0.0005
3-494	12078	0.0019	0.0018	0.0013	0.0010	0.0006	0.0004	0.0003	0.0003
3-495	12931	0.0008	0.0007	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001
3-496	12931	0.0016	0.0014	0.0008	0.0005	0.0003	0.0002	0.0002	0.0001
3-499	12265	0.1074	0.1010	0.0803	0.0614	0.0383	0.0242	0.0192	0.0181
3-499	14120	0.0988	0.0929	0.0739	0.0565	0.0353	0.0223	0.0177	0.0166
3-500	13390	0.0008	0.0007	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001
3-501	11076	0.0053	0.0044	0.0027	0.0018	0.0010	0.0006	0.0005	0.0005
3-502	13733	0.0517	0.0500	0.0437	0.0366	0.0252	0.0166	0.0132	0.0124
3-503	12684	0.0411	0.0395	0.0336	0.0274	0.0182	0.0118	0.0094	0.0089
3-504	13170	0.0116	0.0107	0.0078	0.0057	0.0034	0.0021	0.0017	0.0016
3-505	12655	0.0775	0.0727	0.0573	0.0434	0.0270	0.0170	0.0135	0.0127
3-505	14854	0.0692	0.0649	0.0512	0.0388	0.0241	0.0152	0.0120	0.0113
3-505	14854	0.0780	0.0732	0.0576	0.0437	0.0271	0.0171	0.0136	0.0128
3-506	5015	0.0024	0.0024	0.0022	0.0020	0.0016	0.0011	0.0009	0.0009
3-507	12992	0.0105	0.0087	0.0050	0.0033	0.0019	0.0011	0.0009	0.0009
3-508	12978	0.0081	0.0068	0.0041	0.0027	0.0015	0.0010	0.0008	0.0007
3-509	1	0.0072	0.0071	0.0068	0.0064	0.0055	0.0042	0.0035	0.0034
3-510	12475	0.3457	0.3275	0.2664	0.2076	0.1320	0.0839	0.0666	0.0627
3-510	13791	0.2964	0.2808	0.2284	0.1780	0.1132	0.0720	0.0571	0.0538
3-510	13791	0.2944	0.2789	0.2269	0.1768	0.1124	0.0715	0.0567	0.0534

3-512	12114	0.0075	0.0065	0.0042	0.0029	0.0016	0.0010	0.0008	0.0008
3-513	12114	0.0725	0.0660	0.0475	0.0338	0.0201	0.0125	0.0099	0.0093
3-513	14872	0.0553	0.0503	0.0362	0.0258	0.0153	0.0095	0.0076	0.0071
3-513	14872	0.0576	0.0524	0.0377	0.0269	0.0160	0.0100	0.0079	0.0074
3-515	12115	0.0059	0.0054	0.0039	0.0028	0.0016	0.0010	0.0008	0.0008
3-516	12115	0.0103	0.0093	0.0065	0.0046	0.0027	0.0017	0.0013	0.0012
3-518	3625	0.0014	0.0014	0.0013	0.0012	0.0009	0.0007	0.0005	0.0005
3-519	12606	0.0776	0.0656	0.0398	0.0262	0.0150	0.0093	0.0073	0.0069
3-520	12119	0.0844	0.0768	0.0553	0.0394	0.0234	0.0146	0.0115	0.0108
3-520	14891	0.0623	0.0568	0.0408	0.0291	0.0173	0.0108	0.0085	0.0080
3-520	14891	0.0723	0.0659	0.0474	0.0337	0.0200	0.0125	0.0099	0.0093
3-521	12119	0.0054	0.0049	0.0035	0.0025	0.0015	0.0009	0.0007	0.0007
3-522	13430	0.0871	0.0817	0.0643	0.0488	0.0303	0.0191	0.0151	0.0143
3-522	15459	0.0569	0.0533	0.0420	0.0319	0.0198	0.0125	0.0099	0.0093
3-522	15459	0.0658	0.0617	0.0486	0.0369	0.0229	0.0144	0.0114	0.0108
3-523	12760	0.0120	0.0110	0.0081	0.0058	0.0035	0.0022	0.0017	0.0016
3-524	12129	0.0360	0.0328	0.0236	0.0168	0.0100	0.0062	0.0049	0.0046
3-525	1	0.0013	0.0013	0.0012	0.0011	0.0010	0.0008	0.0007	0.0006
3-526	12162	0.0005	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001
3-527	11250	0.0015	0.0014	0.0012	0.0010	0.0007	0.0004	0.0004	0.0003
3-528	12176	0.4434	0.4302	0.3810	0.3237	0.2276	0.1509	0.1208	0.1139
3-529	13093	0.0504	0.0484	0.0415	0.0341	0.0229	0.0148	0.0118	0.0111
3-529	15801	0.0447	0.0430	0.0369	0.0302	0.0203	0.0132	0.0105	0.0099
3-529	15801	0.0352	0.0339	0.0290	0.0238	0.0160	0.0104	0.0083	0.0078
3-530	13964	0.1931	0.1843	0.1541	0.1232	0.0803	0.0515	0.0409	0.0385
3-530	13964	0.1835	0.1752	0.1464	0.1170	0.0763	0.0489	0.0389	0.0366
3-530	13960	0.1750	0.1671	0.1397	0.1116	0.0728	0.0467	0.0371	0.0349
3-531	9988	0.0086	0.0084	0.0077	0.0068	0.0051	0.0035	0.0028	0.0027
3-532	10598	0.0247	0.0240	0.0213	0.0181	0.0128	0.0085	0.0068	0.0064
3-533	12179	0.0086	0.0078	0.0056	0.0040	0.0024	0.0015	0.0012	0.0011
3-534	12184	0.0015	0.0013	0.0010	0.0007	0.0004	0.0003	0.0002	0.0002
3-535	13342	0.1853	0.1670	0.1169	0.0820	0.0482	0.0300	0.0237	0.0223
3-535	15313	0.1447	0.1304	0.0913	0.0640	0.0377	0.0235	0.0185	0.0174
3-535	15313	0.1441	0.1299	0.0909	0.0637	0.0375	0.0234	0.0185	0.0174
3-536	12317	0.0290	0.0242	0.0142	0.0093	0.0053	0.0033	0.0026	0.0024
3-539	13168	0.0084	0.0076	0.0055	0.0039	0.0023	0.0014	0.0011	0.0011
3-540	12192	0.6769	0.6519	0.5622	0.4639	0.3136	0.2041	0.1628	0.1533
3-540	13417	0.6056	0.5833	0.5031	0.4151	0.2806	0.1826	0.1456	0.1372
3-540	14878	0.5991	0.5770	0.4976	0.4106	0.2776	0.1807	0.1441	0.1357
3-540	14878	0.6788	0.6538	0.5638	0.4652	0.3145	0.2047	0.1632	0.1537
3-542	13431	0.0214	0.0187	0.0121	0.0081	0.0047	0.0029	0.0023	0.0022
3-544	13431	0.0028	0.0026	0.0018	0.0013	0.0008	0.0005	0.0004	0.0004
3-546	12217	0.0650	0.0567	0.0367	0.0247	0.0143	0.0089	0.0070	0.0066
3-547	12381	0.0063	0.0060	0.0051	0.0041	0.0027	0.0018	0.0014	0.0013
3-548	13527	0.1235	0.1098	0.0742	0.0511	0.0298	0.0185	0.0146	0.0138
3-549	12234	0.0312	0.0286	0.0211	0.0152	0.0091	0.0057	0.0045	0.0042
3-550	14647	0.0047	0.0045	0.0038	0.0031	0.0020	0.0013	0.0010	0.0010
3-551	11212	0.3179	0.3082	0.2725	0.2311	0.1621	0.1073	0.0859	0.0810
3-551	12267	0.3658	0.3547	0.3136	0.2660	0.1866	0.1235	0.0989	0.0932
3-551	13743	0.3888	0.3771	0.3334	0.2828	0.1983	0.1313	0.1051	0.0990
3-551	14107	0.3293	0.3193	0.2823	0.2394	0.1679	0.1112	0.0890	0.0839
3-551	15184	0.3508	0.3402	0.3008	0.2551	0.1789	0.1184	0.0948	0.0894
3-552	12338	0.0550	0.0526	0.0443	0.0357	0.0235	0.0151	0.0120	0.0113
3-553	12702	0.0181	0.0158	0.0102	0.0069	0.0040	0.0025	0.0019	0.0018
3-554	13012	0.7882	0.7466	0.6072	0.4732	0.3007	0.1912	0.1518	0.1428
3-555	10580	0.0034	0.0033	0.0028	0.0023	0.0015	0.0010	0.0008	0.0007

3-556	10611	0.0022	0.0021	0.0018	0.0014	0.0010	0.0006	0.0005	0.0004
3-558	13107	0.0812	0.0708	0.0458	0.0309	0.0178	0.0111	0.0087	0.0082
3-559	13435	0.0102	0.0092	0.0064	0.0045	0.0027	0.0017	0.0013	0.0012
3-561	12750	0.0533	0.0451	0.0273	0.0180	0.0103	0.0064	0.0050	0.0047
3-562	8248	0.0017	0.0017	0.0015	0.0014	0.0010	0.0007	0.0006	0.0005
3-563	12743	0.0112	0.0096	0.0060	0.0040	0.0023	0.0014	0.0011	0.0011
3-564	13168	0.0111	0.0085	0.0044	0.0028	0.0016	0.0010	0.0008	0.0007
3-565	5893	0.0028	0.0028	0.0026	0.0024	0.0019	0.0014	0.0012	0.0011
3-566	6773	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
3-567	12774	0.0153	0.0146	0.0124	0.0100	0.0066	0.0043	0.0034	0.0032
3-568	12288	0.0330	0.0320	0.0283	0.0240	0.0168	0.0112	0.0089	0.0084
3-569	12288	0.0396	0.0384	0.0340	0.0288	0.0202	0.0134	0.0107	0.0101
3-570	12291	0.0005	0.0005	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001
3-571	12291	0.5949	0.5415	0.3896	0.2774	0.1648	0.1028	0.0813	0.0764
3-571	13425	0.5362	0.4881	0.3512	0.2501	0.1485	0.0926	0.0733	0.0689
3-571	13425	0.5227	0.4758	0.3423	0.2438	0.1448	0.0903	0.0714	0.0672
3-571	14872	0.5402	0.4917	0.3537	0.2519	0.1496	0.0933	0.0738	0.0694
3-571	14872	0.6519	0.5934	0.4269	0.3040	0.1805	0.1126	0.0891	0.0838
3-572	12295	0.0441	0.0405	0.0298	0.0215	0.0129	0.0080	0.0064	0.0060
3-573	12295	0.0132	0.0122	0.0093	0.0069	0.0042	0.0026	0.0021	0.0019
3-574	10105	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001
3-575	9743	0.0005	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001
3-576	12297	0.0034	0.0032	0.0024	0.0017	0.0010	0.0007	0.0005	0.0005
3-577	13218	0.0279	0.0267	0.0226	0.0183	0.0121	0.0078	0.0062	0.0058
3-578	12334	0.0087	0.0080	0.0059	0.0042	0.0025	0.0016	0.0013	0.0012
3-579	13521	0.0215	0.0185	0.0121	0.0082	0.0047	0.0029	0.0023	0.0022
3-580	13157	0.0020	0.0016	0.0009	0.0006	0.0003	0.0002	0.0002	0.0001
3-581	13539	0.0100	0.0086	0.0054	0.0036	0.0020	0.0013	0.0010	0.0009
3-585	13289	0.0285	0.0278	0.0252	0.0219	0.0160	0.0108	0.0087	0.0082
3-585	15860	0.0201	0.0196	0.0177	0.0154	0.0113	0.0076	0.0061	0.0058
3-585	15860	0.0247	0.0241	0.0218	0.0190	0.0139	0.0094	0.0075	0.0071
3-586	11767	0.4516	0.4300	0.3558	0.2917	0.1818	0.1162	0.0923	0.0869
3-586	13335	0.3700	0.3523	0.2915	0.2308	0.1490	0.0952	0.0757	0.0712
3-586	13335	0.3790	0.3609	0.2986	0.2364	0.1526	0.0975	0.0775	0.0729
3-586	14767	0.3502	0.3334	0.2759	0.2184	0.1410	0.0901	0.0716	0.0674
3-586	14767	0.3529	0.3360	0.2781	0.2202	0.1421	0.0908	0.0722	0.0679
3-587	12352	0.0070	0.0064	0.0046	0.0033	0.0020	0.0012	0.0010	0.0009
3-588	12366	0.1259	0.1220	0.1073	0.0905	0.0629	0.0415	0.0332	0.0313
3-588	13487	0.1007	0.0975	0.0858	0.0723	0.0503	0.0332	0.0265	0.0250
3-588	13487	0.0928	0.0898	0.0790	0.0666	0.0463	0.0306	0.0244	0.0230
3-589	12884	0.0453	0.0408	0.0286	0.0200	0.0118	0.0073	0.0058	0.0055
3-590	13531	0.0711	0.0647	0.0465	0.0331	0.0197	0.0123	0.0097	0.0091
3-590	15469	0.0520	0.0474	0.0341	0.0243	0.0144	0.0090	0.0071	0.0067
3-590	15469	0.0622	0.0566	0.0407	0.0290	0.0172	0.0107	0.0085	0.0080
3-591	1	0.0020	0.0020	0.0019	0.0018	0.0016	0.0013	0.0011	0.0010
3-592	13716	0.1300	0.1154	0.0777	0.0534	0.0311	0.0193	0.0153	0.0144
3-592	16234	0.0966	0.0858	0.0577	0.0397	0.0231	0.0144	0.0113	0.0107
3-592	16234	0.0874	0.0776	0.0522	0.0350	0.0209	0.0130	0.0103	0.0097
3-593	13593	0.0139	0.0118	0.0071	0.0047	0.0027	0.0017	0.0013	0.0012
3-594	13291	0.0180	0.0169	0.0133	0.0101	0.0063	0.0040	0.0031	0.0030
3-595	11313	0.0004	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001
3-596	13598	0.0074	0.0062	0.0038	0.0025	0.0014	0.0009	0.0007	0.0007
3-597	12386	0.0756	0.0698	0.0523	0.0382	0.0230	0.0144	0.0114	0.0107
3-598	9283	0.0004	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001
3-599	13606	0.0051	0.0046	0.0033	0.0024	0.0014	0.0009	0.0007	0.0007
3-600	5472	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

3-604	13123	0.0022	0.0021	0.0020	0.0018	0.0014	0.0009	0.0008	0.0007
3-605	12765	0.0010	0.0010	0.0008	0.0007	0.0004	0.0003	0.0002	0.0002
3-607	13722	0.1044	0.0958	0.0704	0.0508	0.0304	0.0190	0.0150	0.0142
3-612	13723	0.1192	0.1161	0.1043	0.0901	0.0650	0.0437	0.0351	0.0331
3-612	13811	0.1328	0.1293	0.1162	0.1004	0.0724	0.0487	0.0391	0.0369
3-613	12631	0.0038	0.0035	0.0027	0.0020	0.0012	0.0008	0.0006	0.0006
3-614	12870	0.0578	0.0544	0.0432	0.0330	0.0206	0.0130	0.0103	0.0097
3-615	12870	0.0078	0.0074	0.0063	0.0051	0.0034	0.0022	0.0017	0.0016
3-618	14342	0.0049	0.0045	0.0035	0.0026	0.0016	0.0010	0.0008	0.0007
3-619	14220	0.7844	0.7237	0.5413	0.3952	0.2384	0.1493	0.1182	0.1112
3-620	5250	0.0032	0.0031	0.0028	0.0024	0.0017	0.0011	0.0009	0.0008
3-621	5229	0.0024	0.0024	0.0021	0.0018	0.0013	0.0009	0.0007	0.0006
3-628	14917	0.0005	0.0005	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001
3-640	12627	0.0020	0.0019	0.0015	0.0012	0.0007	0.0005	0.0004	0.0004
3-645	12338	0.0221	0.0208	0.0168	0.0130	0.0082	0.0052	0.0042	0.0039
3.648	11170	2.1244	2.0538	1.7954	1.5033	1.0359	0.6800	0.5432	0.5118
3-649	9409	0.4559	0.4309	0.3480	0.2695	0.1703	0.1081	0.0858	0.0807
3-657	3835	3.1002	3.0064	2.6582	2.2544	1.5812	1.0468	0.8379	0.7897
3-671	10755	2.8201	2.3862	1.4454	0.9528	0.5446	0.3368	0.2661	0.2502
3-674	12739	0.0045	0.0041	0.0031	0.0023	0.0014	0.0009	0.0007	0.0006
3-679	11508	0.0418	0.0357	0.0220	0.0146	0.0084	0.0052	0.0041	0.0038
3-685	14594	0.0707	0.0669	0.0540	0.0418	0.0264	0.0168	0.0133	0.0125
3-685	14594	0.0652	0.0617	0.0498	0.0386	0.0244	0.0155	0.0123	0.0116
3-685	15850	0.0588	0.0556	0.0449	0.0348	0.0220	0.0140	0.0111	0.0104
3-685	15850	0.0584	0.0552	0.0446	0.0345	0.0218	0.0139	0.0110	0.0103
3-686	13912	0.0083	0.0081	0.0071	0.0060	0.0042	0.0027	0.0022	0.0021
3-687	12843	0.0254	0.0235	0.0176	0.0128	0.0078	0.0049	0.0038	0.0036
3-689	12842	0.0409	0.0394	0.0340	0.0280	0.0189	0.0123	0.0098	0.0093
3-690	360	0.0302	0.0288	0.0241	0.0192	0.0125	0.0080	0.0064	0.0060
3-697	15588	0.0980	0.0904	0.0676	0.0494	0.0298	0.0186	0.0148	0.0139
3-726	15489	0.1727	0.1676	0.1484	0.1261	0.0887	0.0588	0.0471	0.0444
3-727	15409	0.0667	0.0642	0.0552	0.0454	0.0306	0.0199	0.0159	0.0149
3-727	15409	0.0829	0.0798	0.0686	0.0565	0.0380	0.0247	0.0197	0.0186
3-801	14643	0.0007	0.0006	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001
3-836	15664	0.0006	0.0005	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001
9- 1	15076	0.0072	0.0067	0.0051	0.0037	0.0023	0.0014	0.0011	0.0011
9- 2	15227	0.0177	0.0160	0.0112	0.0078	0.0046	0.0029	0.0023	0.0021
9- 4	14600	0.1237	0.1215	0.1125	0.1009	0.0776	0.0544	0.0442	0.0418
9- 7	14938	0.0120	0.0115	0.0097	0.0079	0.0052	0.0033	0.0027	0.0025
9- 29	15577	0.0122	0.0106	0.0069	0.0046	0.0027	0.0017	0.0013	0.0012
9- 31	14571	0.0671	0.0658	0.0605	0.0539	0.0408	0.0283	0.0229	0.0217
9- 46	14847	0.0036	0.0035	0.0029	0.0024	0.0016	0.0010	0.0008	0.0008
9- 72	15150	0.0207	0.0198	0.0166	0.0133	0.0087	0.0056	0.0045	0.0042
9- 74	15454	0.0261	0.0248	0.0204	0.0161	0.0103	0.0066	0.0052	0.0049

TABLE 58

DAILY DOSE RATE TO SKELETON IN RADS. COMPUTED BY THREE EXPONENTIALS

LISTED FOR EACH MEASUREMENT FOR EACH PATIENT

PT. NO.	DAYS TO MEAS.	ELAPSED TIME IN DAYS			ELAPSED TIME IN YEARS				
		1	10	100	1	5	20	40	48
3-401	11673	0.8599	0.7734	0.6376	0.6205	0.5666	0.3174	0.1340	0.0939
3-401	12888	0.9363	0.8420	0.6942	0.6756	0.6169	0.3456	0.1458	0.1070
3-402	11546	0.3893	0.3583	0.3094	0.3022	0.2741	0.1530	0.0644	0.0451
3-402	12365	0.4210	0.3875	0.3346	0.3269	0.2965	0.1655	0.0697	0.0488
3-402	13215	0.4661	0.4290	0.3704	0.3619	0.3282	0.1832	0.0771	0.0540
3-402	13215	0.5691	0.5237	0.4523	0.4418	0.4007	0.2237	0.0942	0.0660
3-402	14473	0.4977	0.4581	0.3956	0.3864	0.3505	0.1956	0.0824	0.0577
3-403	5130	0.0010	0.0010	0.0010	0.0009	0.0008	0.0005	0.0002	0.0001
3-404	11582	0.3161	0.2921	0.2543	0.2485	0.2251	0.1255	0.0528	0.0370
3-404	13423	0.3376	0.3120	0.2716	0.2655	0.2404	0.1341	0.0564	0.0395
3-404	13423	0.3087	0.2853	0.2483	0.2427	0.2198	0.1226	0.0516	0.0361
3-404	14870	0.3659	0.3381	0.2944	0.2877	0.2606	0.1453	0.0612	0.0428
3-404	14870	0.4035	0.3729	0.3247	0.3173	0.2874	0.1603	0.0674	0.0472
3-405	13423	0.2737	0.2462	0.2030	0.1976	0.1804	0.1011	0.0427	0.0299
3-405	11582	0.2289	0.2059	0.1698	0.1653	0.1509	0.0845	0.0357	0.0250
3-405	12323	0.2210	0.1988	0.1639	0.1595	0.1457	0.0816	0.0344	0.0241
3-405	13423	0.2869	0.2580	0.2128	0.2071	0.1891	0.1059	0.0447	0.0313
3-406	4856	0.0020	0.0020	0.0019	0.0018	0.0016	0.0009	0.0004	0.0002
3-407	11582	0.4538	0.4185	0.3629	0.3546	0.3214	0.1793	0.0755	0.0529
3-408	11589	0.0595	0.0523	0.0411	0.0398	0.0365	0.0205	0.0087	0.0061
3-410	11870	0.0212	0.0192	0.0160	0.0156	0.0142	0.0080	0.0034	0.0024
3-411	5570	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000
3-412	11870	0.1110	0.1024	0.0887	0.0867	0.0786	0.0438	0.0185	0.0129
3-412	13958	0.1069	0.0986	0.0855	0.0835	0.0757	0.0422	0.0178	0.0124
3-412	13958	0.0911	0.0840	0.0728	0.0712	0.0645	0.0360	0.0152	0.0106
3-412	14623	0.1011	0.0932	0.0808	0.0789	0.0715	0.0399	0.0168	0.0118
3-415	4505	0.0018	0.0018	0.0017	0.0017	0.0015	0.0008	0.0003	0.0002
3-416	11688	0.5604	0.4871	0.3722	0.3590	0.3302	0.1855	0.0785	0.0551
3-416	12064	0.5479	0.4762	0.3639	0.3509	0.3228	0.1814	0.0767	0.0539
3-416	13510	0.6432	0.5591	0.4272	0.4120	0.3790	0.2130	0.0901	0.0632
3-416	14969	0.7120	0.6189	0.4729	0.4561	0.4195	0.2357	0.0997	0.0700
3-416	14969	0.8623	0.7495	0.5727	0.5523	0.5080	0.2855	0.1207	0.0848
3-417	11718	0.3583	0.3094	0.2327	0.2239	0.2062	0.1159	0.0490	0.0344
3-417	13365	0.3770	0.3255	0.2448	0.2355	0.2169	0.1219	0.0516	0.0362
3-417	14028	0.3269	0.2823	0.2123	0.2043	0.1881	0.1058	0.0447	0.0314
3-417	14028	0.3221	0.2781	0.2091	0.2012	0.1853	0.1042	0.0441	0.0310
3-417	14028	0.3501	0.3023	0.2273	0.2188	0.2015	0.1133	0.0479	0.0336
3-418	7036	0.0012	0.0011	0.0011	0.0011	0.0009	0.0005	0.0002	0.0001
3-419	11598	0.3015	0.2584	0.1907	0.1830	0.1687	0.0949	0.0402	0.0282
3-419	12254	0.3370	0.2888	0.2131	0.2045	0.1886	0.1061	0.0449	0.0315
3-419	13425	0.3354	0.2874	0.2121	0.2036	0.1877	0.1056	0.0447	0.0314
3-419	13425	0.3487	0.2989	0.2206	0.2117	0.1952	0.1098	0.0465	0.0326
3-420	11603	0.0056	0.0053	0.0047	0.0046	0.0042	0.0023	0.0010	0.0007
3-422	11603	0.0138	0.0114	0.0076	0.0071	0.0066	0.0037	0.0016	0.0011

3-423	11603	0.2500	0.2300	0.1987	0.1941	0.1760	0.0982	0.0414	0.0290
3-423	12364	0.2123	0.1954	0.1687	0.1648	0.1495	0.0834	0.0351	0.0246
3-423	13418	0.2270	0.2089	0.1804	0.1762	0.1598	0.0892	0.0376	0.0263
3-423	13418	0.2430	0.2237	0.1931	0.1887	0.1711	0.0955	0.0402	0.0282
3-424	11604	0.1183	0.1091	0.0946	0.0925	0.0838	0.0468	0.0197	0.0138
3-426	11612	0.0807	0.0714	0.0567	0.0550	0.0504	0.0283	0.0119	0.0084
3-427	11617	0.0217	0.0176	0.0113	0.0106	0.0098	0.0055	0.0023	0.0016
3-427	13422	0.0177	0.0144	0.0092	0.0086	0.0080	0.0045	0.0019	0.0013
3-428	11617	0.3577	0.2912	0.1865	0.1744	0.1619	0.0913	0.0387	0.0272
3-428	13493	0.3789	0.3084	0.1976	0.1847	0.1714	0.0967	0.0410	0.0288
3-428	13493	0.3808	0.3100	0.1986	0.1856	0.1723	0.0972	0.0412	0.0289
3-429	11617	0.6915	0.6349	0.5458	0.5330	0.4838	0.2702	0.1138	0.0797
3-429	13422	0.7160	0.6574	0.5651	0.5519	0.5010	0.2797	0.1178	0.0825
3-429	13493	0.7680	0.7051	0.6061	0.5920	0.5373	0.3001	0.1264	0.0885
3-429	13493	0.7492	0.6879	0.5913	0.5775	0.5242	0.2927	0.1233	0.0864
3-429	14884	0.8467	0.7774	0.6683	0.6527	0.5924	0.3308	0.1393	0.0976
3-429	14884	0.9962	0.9146	0.7862	0.7679	0.6970	0.3892	0.1639	0.1148
3-431	11650	0.4798	0.4466	0.3940	0.3854	0.3481	0.1938	0.0815	0.0570
3-431	13721	0.5680	0.5287	0.4665	0.4562	0.4121	0.2295	0.0965	0.0674
3-431	13721	0.5393	0.5020	0.4429	0.4332	0.3913	0.2179	0.0916	0.0641
3-432	11622	0.0154	0.0139	0.0117	0.0114	0.0104	0.0058	0.0024	0.0017
3-433	11622	0.4760	0.4265	0.3488	0.3392	0.3101	0.1737	0.0734	0.0514
3-433	14157	0.5226	0.4682	0.3830	0.3724	0.3404	0.1907	0.0805	0.0564
3-433	14157	0.5114	0.4582	0.3748	0.3645	0.3331	0.1867	0.0788	0.0553
3-434	5277	0.0022	0.0020	0.0017	0.0017	0.0015	0.0009	0.0004	0.0003
3-434	6160	0.0025	0.0023	0.0020	0.0019	0.0017	0.0010	0.0004	0.0003
3-435	7438	0.0014	0.0013	0.0011	0.0010	0.0009	0.0005	0.0002	0.0002
3-436	7073	0.0002	0.0002	0.0002	0.0002	0.0001	0.0001	0.0000	0.0000
3-437	11215	0.0220	0.0187	0.0135	0.0129	0.0119	0.0067	0.0028	0.0020
3-441	11639	0.0283	0.0230	0.0148	0.0138	0.0128	0.0072	0.0031	0.0020
3-442	12101	0.0120	0.0088	0.0040	0.0034	0.0031	0.0018	0.0008	0.0005
3-443	5957	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000
3-444	11709	0.0275	0.0190	0.0076	0.0061	0.0057	0.0033	0.0014	0.0010
3-444	13416	0.0219	0.0151	0.0061	0.0049	0.0046	0.0026	0.0011	0.0008
3-445	11709	0.5184	0.4841	0.4296	0.4202	0.3791	0.2109	0.0886	0.0620
3-445	12366	0.5530	0.5163	0.4582	0.4483	0.4043	0.2250	0.0945	0.0661
3-445	13928	0.6032	0.5632	0.4998	0.4889	0.4410	0.2454	0.1031	0.0721
3-445	13928	0.7388	0.6898	0.6122	0.5989	0.5402	0.3006	0.1263	0.0883
3-445	14907	0.6559	0.6125	0.5435	0.5317	0.4796	0.2669	0.1121	0.0784
3-446	11709	0.0411	0.0386	0.0346	0.0339	0.0305	0.0169	0.0071	0.0050
3-446	14914	0.0365	0.0343	0.0308	0.0301	0.0271	0.0150	0.0063	0.0044
3-446	14914	0.0418	0.0392	0.0352	0.0344	0.0310	0.0172	0.0072	0.0050
3-447	12232	0.0033	0.0020	0.0007	0.0005	0.0005	0.0003	0.0001	0.0001
3-449	11841	0.5207	0.4875	0.4349	0.4256	0.3834	0.2132	0.0895	0.0626
3-449	14093	0.4882	0.4572	0.4078	0.3990	0.3595	0.1999	0.0839	0.0587
3-450	12298	0.0162	0.0122	0.0061	0.0053	0.0050	0.0028	0.0012	0.0008
3-452	11841	0.0253	0.0200	0.0116	0.0106	0.0098	0.0056	0.0024	0.0017
3-452	14919	0.0196	0.0154	0.0090	0.0082	0.0076	0.0043	0.0018	0.0013
3-455	12767	0.3828	0.3280	0.2421	0.2323	0.2142	0.1205	0.0510	0.0358
3-456	2577	0.0031	0.0030	0.0029	0.0028	0.0025	0.0014	0.0006	0.0004
3-457	5499	0.0005	0.0005	0.0005	0.0005	0.0004	0.0002	0.0001	0.0001
3-458	1	0.0012	0.0011	0.0011	0.0011	0.0009	0.0005	0.0002	0.0001
3-459	12111	0.5619	0.4683	0.3213	0.3044	0.2818	0.1588	0.0672	0.0473
3-459	14134	0.5852	0.4877	0.3346	0.3171	0.2935	0.1653	0.0700	0.0492
3-459	14134	0.5939	0.4950	0.3396	0.3218	0.2979	0.1678	0.0711	0.0499
3-459	14519	0.5375	0.4480	0.3073	0.2913	0.2696	0.1519	0.0643	0.0452

3-460	12676	0.0095	0.0073	0.0038	0.0033	0.0031	0.0018	0.0007	0.0005
3-461	13133	0.0092	0.0061	0.0023	0.0018	0.0017	0.0009	0.0004	0.0003
3-462	11900	0.1564	0.1464	0.1306	0.1278	0.1152	0.0640	0.0269	0.0188
3-462	12110	0.1586	0.1485	0.1325	0.1296	0.1168	0.0649	0.0273	0.0191
3-462	13426	0.1451	0.1358	0.1212	0.1186	0.1068	0.0594	0.0249	0.0174
3-462	13426	0.1301	0.1218	0.1086	0.1063	0.0958	0.0532	0.0224	0.0156
3-464	12452	0.0005	0.0004	0.0003	0.0003	0.0003	0.0001	0.0001	0.0000
3-465	12025	0.0023	0.0016	0.0006	0.0005	0.0005	0.0003	0.0001	0.0001
3-466	12390	0.0043	0.0030	0.0013	0.0011	0.0010	0.0006	0.0002	0.0002
3-467	8752	0.0031	0.0030	0.0029	0.0028	0.0025	0.0013	0.0006	0.0004
3-468	11036	0.0089	0.0082	0.0070	0.0068	0.0062	0.0035	0.0015	0.0010
3-469	11061	0.0056	0.0045	0.0028	0.0026	0.0024	0.0013	0.0006	0.0004
3-471	11090	0.0043	0.0038	0.0031	0.0031	0.0028	0.0016	0.0007	0.0004
3-473	12348	0.4523	0.4163	0.3596	0.3513	0.3186	0.1778	0.0749	0.0524
3-473	13782	0.5036	0.4636	0.4004	0.3912	0.3548	0.1980	0.0834	0.0584
3-474	11981	0.0217	0.0149	0.0060	0.0048	0.0045	0.0026	0.0011	0.0008
3-475	12681	0.0004	0.0004	0.0003	0.0003	0.0003	0.0001	0.0001	0.0000
3-476	11304	0.0012	0.0008	0.0003	0.0002	0.0002	0.0001	0.0001	0.0000
3-477	11746	0.0122	0.0084	0.0034	0.0027	0.0025	0.0014	0.0006	0.0004
3-478	12445	0.0060	0.0042	0.0017	0.0013	0.0013	0.0007	0.0003	0.0002
3-479	12386	0.0467	0.0368	0.0213	0.0194	0.0181	0.0102	0.0043	0.0030
3-480	12555	0.0011	0.0008	0.0003	0.0003	0.0003	0.0001	0.0001	0.0000
3-481	2805	0.0020	0.0019	0.0018	0.0018	0.0015	0.0008	0.0003	0.0002
3-482	4509	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000
3-483	12474	0.0003	0.0003	0.0003	0.0003	0.0003	0.0001	0.0001	0.0000
3-484	13283	0.6097	0.5675	0.5007	0.4898	0.4423	0.2463	0.1035	0.0724
3-484	14774	0.6842	0.6369	0.5619	0.5496	0.4964	0.2764	0.1162	0.0813
3-484	14774	0.7707	0.7174	0.6329	0.6191	0.5591	0.3113	0.1309	0.0916
3-485	8175	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	0.0000	0.0000
3-486	12015	0.2465	0.1944	0.1127	0.1029	0.0958	0.0541	0.0229	0.0161
3-486	14919	0.2377	0.1875	0.1087	0.0992	0.0924	0.0521	0.0221	0.0155
3-487	12031	0.1419	0.1254	0.0997	0.0967	0.0886	0.0497	0.0210	0.0148
3-488	13067	0.1208	0.0951	0.0548	0.0499	0.0465	0.0263	0.0111	0.0078
3-489	11240	0.0427	0.0376	0.0295	0.0286	0.0262	0.0147	0.0062	0.0044
3-490	11063	0.0085	0.0079	0.0071	0.0070	0.0063	0.0035	0.0015	0.0010
3-491	12593	0.1401	0.0682	0.0214	0.0153	0.0144	0.0081	0.0035	0.0024
3-492	2410	0.0005	0.0005	0.0004	0.0004	0.0004	0.0002	0.0001	0.0001
3-493	12681	0.0025	0.0023	0.0021	0.0021	0.0019	0.0010	0.0004	0.0003
3-494	12078	0.0021	0.0017	0.0011	0.0010	0.0010	0.0005	0.0002	0.0002
3-495	12931	0.0013	0.0009	0.0004	0.0003	0.0003	0.0002	0.0001	0.0000
3-496	12931	0.0026	0.0018	0.0007	0.0006	0.0005	0.0003	0.0001	0.0001
3-499	12265	0.1153	0.0988	0.0729	0.0700	0.0645	0.0363	0.0154	0.0108
3-499	14120	0.1262	0.1081	0.0798	0.0766	0.0706	0.0397	0.0168	0.0118
3-500	13390	0.0014	0.0009	0.0004	0.0003	0.0003	0.0002	0.0001	0.0000
3-501	11076	0.0071	0.0049	0.0020	0.0016	0.0015	0.0008	0.0004	0.0003
3-502	13733	0.0708	0.0659	0.0581	0.0569	0.0514	0.0286	0.0120	0.0084
3-503	12684	0.0481	0.0438	0.0371	0.0362	0.0329	0.0184	0.0078	0.0054
3-504	13170	0.0144	0.0116	0.0071	0.0066	0.0061	0.0034	0.0015	0.0010
3-505	12655	0.0864	0.0735	0.0531	0.0508	0.0469	0.0264	0.0112	0.0078
3-505	14854	0.0952	0.0809	0.0585	0.0559	0.0516	0.0291	0.0123	0.0086
3-505	14854	0.1072	0.0911	0.0659	0.0630	0.0582	0.0327	0.0139	0.0097
3-506	5015	0.0022	0.0021	0.0020	0.0020	0.0017	0.0009	0.0004	0.0003
3-507	12992	0.0178	0.0117	0.0044	0.0035	0.0032	0.0018	0.0008	0.0005
3-508	12978	0.0129	0.0089	0.0036	0.0029	0.0027	0.0015	0.0006	0.0004
3-509	1	0.0076	0.0075	0.0073	0.0071	0.0061	0.0032	0.0013	0.0009
3-510	12475	0.3789	0.3315	0.2570	0.2484	0.2282	0.1282	0.0542	0.0380
3-510	13791	0.3676	0.3215	0.2493	0.2409	0.2213	0.1243	0.0526	0.0369
3-510	13791	0.3651	0.3193	0.2476	0.2393	0.2198	0.1235	0.0522	0.0366

3-512	12114	0.0102	0.0074	0.0034	0.0028	0.0027	0.0015	0.0006	0.0004
3-513	12114	0.0843	0.0664	0.0385	0.0352	0.0327	0.0185	0.0078	0.0055
3-513	14872	0.0832	0.0656	0.0380	0.0347	0.0323	0.0182	0.0077	0.0054
3-513	14872	0.0867	0.0684	0.0396	0.0362	0.0337	0.0190	0.0081	0.0056
3-515	12115	0.0069	0.0054	0.0031	0.0029	0.0027	0.0015	0.0006	0.0004
3-516	12115	0.0125	0.0096	0.0052	0.0047	0.0044	0.0025	0.0010	0.0007
3-518	3625	0.0012	0.0012	0.0011	0.0011	0.0009	0.0005	0.0002	0.0001
3-519	12606	0.1199	0.0829	0.0334	0.0269	0.0252	0.0143	0.0061	0.0043
3-520	12119	0.0980	0.0773	0.0448	0.0409	0.0381	0.0215	0.0091	0.0064
3-520	14891	0.0940	0.0742	0.0430	0.0392	0.0365	0.0206	0.0087	0.0062
3-520	14891	0.1091	0.0861	0.0499	0.0455	0.0424	0.0239	0.0101	0.0071
3-521	12119	0.0062	0.0049	0.0029	0.0026	0.0024	0.0014	0.0006	0.0004
3-522	13430	0.1045	0.0888	0.0641	0.0613	0.0566	0.0319	0.0135	0.0094
3-522	15459	0.0830	0.0705	0.0509	0.0487	0.0450	0.0253	0.0107	0.0075
3-522	15459	0.0960	0.0816	0.0589	0.0564	0.0520	0.0293	0.0124	0.0087
3-523	12760	0.0144	0.0115	0.0070	0.0065	0.0061	0.0034	0.0014	0.0010
3-524	12129	0.0419	0.0330	0.0191	0.0175	0.0163	0.0092	0.0039	0.0027
3-525	1	0.0013	0.0013	0.0013	0.0012	0.0011	0.0006	0.0002	0.0001
3-526	12162	0.0005	0.0004	0.0003	0.0003	0.0002	0.0001	0.0001	0.0000
3-527	11250	0.0016	0.0014	0.0012	0.0012	0.0011	0.0006	0.0003	0.0002
3-528	12176	0.5456	0.5128	0.4607	0.4509	0.4055	0.2252	0.0945	0.0660
3-529	13093	0.0619	0.0567	0.0485	0.0474	0.0430	0.0240	0.0101	0.0071
3-529	15801	0.0563	0.0516	0.0441	0.0431	0.0391	0.0219	0.0092	0.0064
3-529	15801	0.0715	0.0655	0.0560	0.0547	0.0497	0.0278	0.0117	0.0082
3-530	13964	0.2481	0.2223	0.1818	0.1768	0.1616	0.0906	0.0382	0.0268
3-530	13964	0.2358	0.2112	0.1728	0.1680	0.1536	0.0861	0.0363	0.0254
3-530	13964	0.2249	0.2015	0.1648	0.1602	0.1465	0.0821	0.0347	0.0253
3-531	9988	0.0100	0.0096	0.0090	0.0088	0.0078	0.0043	0.0018	0.0012
3-532	10598	0.0265	0.0250	0.0225	0.0220	0.0198	0.0110	0.0046	0.0032
3-533	12179	0.0101	0.0079	0.0046	0.0042	0.0039	0.0022	0.0009	0.0007
3-534	12184	0.0016	0.0013	0.0008	0.0008	0.0007	0.0004	0.0002	0.0001
3-535	13342	0.2509	0.1938	0.1050	0.0941	0.0878	0.0496	0.0210	0.0148
3-535	15313	0.2368	0.1829	0.0991	0.0888	0.0829	0.0468	0.0198	0.0140
3-535	15313	0.2358	0.1821	0.0987	0.0884	0.0825	0.0466	0.0198	0.0139
3-536	12317	0.0452	0.0304	0.0117	0.0093	0.0087	0.0049	0.0021	0.0014
3-539	13168	0.0107	0.0085	0.0049	0.0045	0.0042	0.0023	0.0010	0.0007
3-540	12192	0.7746	0.7128	0.6155	0.6013	0.5454	0.3044	0.1282	0.0898
3-540	13417	0.7771	0.7152	0.6176	0.6033	0.5472	0.3054	0.1286	0.0901
3-540	14878	0.8851	0.8146	0.7034	0.6872	0.6233	0.3479	0.1465	0.1026
3-540	14878	1.0029	0.9229	0.7970	0.7786	0.7062	0.3942	0.1660	0.1163
3-542	13431	0.0329	0.0240	0.0109	0.0092	0.0086	0.0049	0.0021	0.0014
3-544	13431	0.0037	0.0029	0.0017	0.0015	0.0014	0.0008	0.0003	0.0002
3-546	12217	0.0893	0.0651	0.0295	0.0249	0.0233	0.0132	0.0056	0.0039
3-547	12381	0.0071	0.0064	0.0054	0.0053	0.0048	0.0027	0.0011	0.0008
3-548	13527	0.1794	0.1351	0.0674	0.0589	0.0550	0.0311	0.0132	0.0093
3-549	12234	0.0356	0.0286	0.0175	0.0162	0.0150	0.0085	0.0036	0.0025
3-550	14647	0.0065	0.0059	0.0049	0.0048	0.0044	0.0025	0.0010	0.0007
3-551	11212	0.3564	0.3346	0.2999	0.2935	0.2641	0.1467	0.0616	0.0430
3-551	12267	0.4514	0.4238	0.3799	0.3718	0.3346	0.1859	0.0780	0.0545
3-551	13743	0.5516	0.5179	0.4642	0.4543	0.4088	0.2271	0.0953	0.0666
3-551	14107	0.4838	0.4542	0.4072	0.3984	0.3585	0.1992	0.0836	0.0584
3-551	15184	0.5727	0.5377	0.4820	0.4716	0.4244	0.2358	0.0989	0.0692
3-552	12338	0.0612	0.0553	0.0459	0.0447	0.0408	0.0228	0.0096	0.0068
3-553	12702	0.0260	0.0189	0.0086	0.0072	0.0068	0.0038	0.0016	0.0011
3-554	13012	0.9080	0.7941	0.6154	0.5947	0.5464	0.3069	0.1298	0.0911
3-555	10580	0.0033	0.0030	0.0025	0.0024	0.0022	0.0012	0.0005	0.0004

3-556	10611	0.0021	0.0019	0.0016	0.0016	0.0014	0.0008	0.0003	0.0002
3-558	13107	0.1210	0.0882	0.0399	0.0337	0.0316	0.0178	0.0076	0.0053
3-559	13435	0.0139	0.0108	0.0058	0.0052	0.0049	0.0028	0.0012	0.0008
3-561	12750	0.0835	0.0577	0.0233	0.0187	0.0176	0.0099	0.0042	0.0030
3-562	8248	0.0018	0.0017	0.0016	0.0016	0.0014	0.0008	0.0003	0.0002
3-563	12743	0.0168	0.0119	0.0051	0.0042	0.0039	0.0022	0.0009	0.0007
3-564	13168	0.0220	0.0122	0.0040	0.0029	0.0028	0.0016	0.0007	0.0004
3-565	5893	0.0029	0.0028	0.0027	0.0027	0.0023	0.0012	0.0005	0.0003
3-566	6773	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0000	0.0000
3-567	12774	0.0178	0.0161	0.0135	0.0131	0.0120	0.0067	0.0028	0.0020
3-568	12288	0.0408	0.0383	0.0344	0.0336	0.0303	0.0168	0.0071	0.0049
3-569	12288	0.0490	0.0460	0.0412	0.0404	0.0363	0.0202	0.0085	0.0059
3-570	12291	0.0005	0.0004	0.0003	0.0003	0.0002	0.0001	0.0001	0.0000
3-571	12291	0.7021	0.5536	0.3209	0.2930	0.2728	0.1540	0.0653	0.0459
3-571	13425	0.7030	0.5543	0.3213	0.2933	0.2731	0.1542	0.0654	0.0460
3-571	13425	0.6853	0.5404	0.3132	0.2859	0.2663	0.1503	0.0637	0.0448
3-571	14872	0.8134	0.6414	0.3718	0.3394	0.3160	0.1784	0.0756	0.0532
3-571	14872	0.9816	0.7740	0.4487	0.4096	0.3814	0.2153	0.0913	0.0642
3-572	12295	0.0506	0.0406	0.0248	0.0230	0.0214	0.0120	0.0051	0.0036
3-573	12295	0.0145	0.0120	0.0080	0.0075	0.0070	0.0039	0.0017	0.0012
3-574	10105	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	0.0000	0.0000
3-575	9743	0.0005	0.0004	0.0002	0.0002	0.0002	0.0001	0.0000	0.0000
3-576	12297	0.0038	0.0031	0.0020	0.0019	0.0017	0.0010	0.0004	0.0003
3-577	13218	0.0339	0.0307	0.0257	0.0250	0.0228	0.0128	0.0054	0.0038
3-578	12334	0.0101	0.0081	0.0049	0.0046	0.0042	0.0024	0.0010	0.0007
3-579	13521	0.0333	0.0242	0.0110	0.0093	0.0087	0.0049	0.0021	0.0014
3-580	13157	0.0037	0.0022	0.0008	0.0006	0.0006	0.0003	0.0001	0.0001
3-581	13539	0.0162	0.0115	0.0049	0.0040	0.0038	0.0021	0.0009	0.0006
3-585	13289	0.0424	0.0405	0.0373	0.0365	0.0326	0.0180	0.0075	0.0052
3-585	15860	0.0385	0.0367	0.0338	0.0331	0.0295	0.0163	0.0068	0.0047
3-585	15860	0.0473	0.0451	0.0416	0.0407	0.0363	0.0201	0.0084	0.0058
3-586	11767	0.4685	0.4161	0.3339	0.3241	0.2968	0.1665	0.0703	0.0493
3-586	13335	0.4437	0.3940	0.3162	0.3069	0.2810	0.1576	0.0666	0.0467
3-586	13335	0.4545	0.4036	0.3239	0.3143	0.2879	0.1615	0.0682	0.0479
3-586	14767	0.4818	0.4278	0.3433	0.3332	0.3052	0.1712	0.0723	0.0507
3-586	14767	0.4855	0.4312	0.3460	0.3358	0.3076	0.1725	0.0729	0.0511
3-587	12352	0.0084	0.0066	0.0038	0.0035	0.0032	0.0018	0.0008	0.0005
3-588	12366	0.1543	0.1443	0.1284	0.1256	0.1132	0.0630	0.0264	0.0184
3-588	13487	0.1370	0.1282	0.1140	0.1116	0.1006	0.0559	0.0235	0.0164
3-588	13487	0.1263	0.1181	0.1051	0.1028	0.0927	0.0515	0.0216	0.0151
3-589	12884	0.0588	0.0454	0.0246	0.0221	0.0206	0.0116	0.0049	0.0034
3-590	13531	0.0941	0.0742	0.0430	0.0393	0.0366	0.0206	0.0088	0.0062
3-590	15469	0.0831	0.0655	0.0380	0.0347	0.0323	0.0182	0.0077	0.0054
3-590	15469	0.0993	0.0783	0.0454	0.0414	0.0386	0.0218	0.0092	0.0064
3-591	1	0.0020	0.0020	0.0020	0.0019	0.0016	0.0008	0.0003	0.0002
3-592	13716	0.1933	0.1451	0.0718	0.0625	0.0584	0.0330	0.0140	0.0099
3-592	16234	0.1836	0.1378	0.0682	0.0594	0.0555	0.0314	0.0133	0.0094
3-592	16234	0.1660	0.1247	0.0617	0.0537	0.0502	0.0284	0.0120	0.0084
3-593	13593	0.0236	0.0163	0.0066	0.0053	0.0050	0.0028	0.0012	0.0008
3-594	13291	0.0214	0.0182	0.0131	0.0125	0.0116	0.0065	0.0028	0.0019
3-595	11313	0.0004	0.0004	0.0003	0.0002	0.0002	0.0001	0.0001	0.0000
3-596	13598	0.0125	0.0086	0.0035	0.0028	0.0026	0.0015	0.0006	0.0004
3-597	12386	0.0855	0.0696	0.0446	0.0417	0.0387	0.0218	0.0092	0.0065
3-598	9283	0.0003	0.0003	0.0002	0.0002	0.0002	0.0001	0.0000	0.0000
3-599	13606	0.0068	0.0054	0.0031	0.0028	0.0026	0.0015	0.0006	0.0004
3-600	5472	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000
3-604	13123	0.0036	0.0035	0.0033	0.0032	0.0029	0.0016	0.0006	0.0004
3-605	12765	0.0012	0.0011	0.0009	0.0009	0.0008	0.0004	0.0002	0.0001

3-607	13722	0.1368	0.1097	0.0671	0.0621	0.0577	0.0326	0.0138	0.0097
3-612	13723	0.1796	0.1706	0.1562	0.1529	0.1367	0.0756	0.0316	0.0221
3-612	13811	0.2018	0.1917	0.1755	0.1718	0.1536	0.0850	0.0355	0.0248
3-613	12631	0.0043	0.0036	0.0024	0.0022	0.0021	0.0012	0.0005	0.0003
3-614	12870	0.0656	0.0562	0.0415	0.0398	0.0367	0.0206	0.0087	0.0061
3-615	12870	0.0092	0.0083	0.0070	0.0068	0.0062	0.0035	0.0015	0.0010
3-618	14342	0.0064	0.0054	0.0037	0.0035	0.0032	0.0018	0.0008	0.0005
3-619	14220	1.0551	0.8581	0.5483	0.5122	0.4755	0.2681	0.1136	0.0799
3-620	5250	0.0023	0.0022	0.0020	0.0020	0.0018	0.0010	0.0004	0.0003
3-621	5229	0.0018	0.0017	0.0015	0.0015	0.0013	0.0007	0.0003	0.0002
3-628	14917	0.0008	0.0006	0.0004	0.0004	0.0003	0.0002	0.0001	0.0001
3-640	12627	0.0023	0.0020	0.0015	0.0014	0.0013	0.0007	0.0003	0.0002
3-645	12338	0.0238	0.0207	0.0158	0.0153	0.0140	0.0079	0.0033	0.0023
3-648	1170	2.2920	2.1328	1.8809	1.8396	1.6617	0.9253	0.3890	0.2722
3-649	9409	0.3820	0.3320	0.2535	0.2445	0.2249	0.1264	0.0534	0.0375
3-657	3835	2.0997	1.9713	1.7670	1.7292	1.5560	0.8644	0.3627	0.2535
3-671	10755	3.6974	2.5556	1.0311	0.8296	0.7780	0.4401	0.1868	0.1314
3-674	12739	0.0052	0.0043	0.0027	0.0025	0.0024	0.0013	0.0006	0.0004
3-679	11508	0.0574	0.0403	0.0167	0.0136	0.0128	0.0072	0.0031	0.0022
3-685	14594	0.0946	0.0822	0.0628	0.0606	0.0557	0.0313	0.0132	0.0093
3-685	14594	0.0872	0.0758	0.0579	0.0559	0.0514	0.0289	0.0122	0.0086
3-685	15850	0.0890	0.0773	0.0591	0.0570	0.0524	0.0295	0.0125	0.0087
3-685	15850	0.0883	0.0768	0.0586	0.0566	0.0520	0.0292	0.0124	0.0087
3-686	13912	0.0118	0.0110	0.0098	0.0096	0.0087	0.0048	0.0020	0.0014
3-687	12843	0.0300	0.0244	0.0157	0.0146	0.0136	0.0077	0.0032	0.0023
3-689	12842	0.0497	0.0457	0.0395	0.0386	0.0350	0.0195	0.0082	0.0058
3-690	360	0.0271	0.0243	0.0199	0.0193	0.0176	0.0099	0.0042	0.0029
3-697	15588	0.1506	0.1225	0.0782	0.0731	0.0679	0.0383	0.0162	0.0114
3-726	15489	0.2923	0.2748	0.2468	0.2416	0.2172	0.1206	0.0506	0.0354
3-727	15409	0.1033	0.0948	0.0815	0.0796	0.0723	0.0403	0.0170	0.0119
3-727	15409	0.1283	0.1178	0.1013	0.0980	0.0898	0.0501	0.0211	0.0148
3-801	14643	0.0013	0.0009	0.0004	0.0004	0.0003	0.0002	0.0001	0.0001
3-836	15664	0.0010	0.0008	0.0004	0.0004	0.0004	0.0002	0.0001	0.0001
9- 1	15076	0.0104	0.0085	0.0057	0.0053	0.0049	0.0028	0.0012	0.0008
9- 2	15227	0.0288	0.0222	0.0120	0.0108	0.0101	0.0057	0.0024	0.0017
9- 4	14600	0.2397	0.2322	0.2195	0.2145	0.1891	0.1033	0.0427	0.0296
9- 7	14938	0.0172	0.0156	0.0130	0.0127	0.0116	0.0065	0.0027	0.0019
9- 29	15577	0.0230	0.0168	0.0076	0.0064	0.0060	0.0034	0.0014	0.0010
9- 31	14571	0.1245	0.1202	0.1129	0.1104	0.0977	0.0535	0.0222	0.0154
9- 46	14847	0.0051	0.0047	0.0039	0.0038	0.0035	0.0019	0.0008	0.0006
9- 72	15150	0.0300	0.0270	0.0222	0.0216	0.0198	0.0111	0.0047	0.0033
9- 74	15454	0.0382	0.0338	0.0268	0.0260	0.0238	0.0134	0.0057	0.0040

TABLE 5C

MEAN DAILY DOSE RATE TO SKELETON IN RADS, COMPUTED BY POWER FUNCTION

LISTED BY PATIENT NUMBER

PT. NO.	N	ELAPSED TIME IN DAYS 1	10	100	ELAPSED TIME IN YEARS 1	5	20	40	48
3-401	2	0.8134	0.7776	0.6528	0.5240	0.3431	0.2204	0.1753	0.1650
3-402	5	0.3791	0.3652	0.3149	0.2508	0.1757	0.1143	0.0911	0.0858
3-403	1	0.0012	0.0012	0.0011	0.0010	0.0008	0.0005	0.0004	0.0004
3-404	5	0.2602	0.2509	0.2175	0.1804	0.1228	0.0801	0.0639	0.0602
3-405	4	0.2194	0.2097	0.1761	0.1414	0.0925	0.0595	0.0473	0.0445
3-406	1	0.0023	0.0022	0.0021	0.0019	0.0015	0.0011	0.0009	0.0008
3-407	1	0.4168	0.4017	0.3474	0.2874	0.1950	0.1271	0.1014	0.0955
3-408	1	0.0587	0.0557	0.0456	0.0357	0.0228	0.0146	0.0116	0.0109
3-410	1	0.0197	0.0189	0.0160	0.0129	0.0085	0.0055	0.0044	0.0041
3-411	1	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
3-412	4	0.0787	0.0759	0.0656	0.0542	0.0368	0.0239	0.0191	0.0180
3-415	1	0.0019	0.0018	0.0018	0.0016	0.0013	0.0010	0.0008	0.0008
3-416	5	0.5477	0.5178	0.4182	0.3240	0.2047	0.1299	0.1031	0.0972
3-417	5	0.2915	0.2750	0.2205	0.1697	0.1066	0.0675	0.0536	0.0504
3-418	1	0.0011	0.0011	0.0010	0.0009	0.0007	0.0005	0.0004	0.0004
3-419	4	0.2962	0.2786	0.2215	0.1692	0.1057	0.0668	0.0530	0.0498
3-420	1	0.0049	0.0048	0.0042	0.0035	0.0025	0.0016	0.0013	0.0012
3-422	1	0.0133	0.0123	0.0094	0.0069	0.0042	0.0026	0.0021	0.0020
3-423	4	0.1948	0.1876	0.1618	0.1335	0.0903	0.0587	0.0468	0.0441
3-424	1	0.1085	0.1045	0.0904	0.0748	0.0507	0.0331	0.0264	0.0248
3-426	1	0.0792	0.0753	0.0620	0.0488	0.0314	0.0200	0.0159	0.0150
3-427	2	0.0173	0.0160	0.0120	0.0088	0.0053	0.0033	0.0026	0.0024
3-428	3	0.3149	0.2907	0.2177	0.1590	0.0960	0.0601	0.0476	0.0448
3-429	6	0.6061	0.5833	0.5017	0.4127	0.2780	0.1806	0.1440	0.1357
3-431	3	0.4117	0.3980	0.3481	0.2915	0.2010	0.1319	0.1054	0.0993
3-432	1	0.0147	0.0140	0.0119	0.0096	0.0064	0.0041	0.0033	0.0031
3-433	3	0.4168	0.3980	0.3326	0.2659	0.1733	0.1112	0.0884	0.0826
3-434	2	0.0034	0.0033	0.0028	0.0023	0.0015	0.0010	0.0008	0.0007
3-435	1	0.0019	0.0018	0.0015	0.0012	0.0008	0.0005	0.0004	0.0004
3-436	1	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
3-437	1	0.0225	0.0211	0.0166	0.0126	0.0078	0.0049	0.0039	0.0037
3-441	1	0.0268	0.0247	0.0185	0.0135	0.0082	0.0051	0.0040	0.0038
3-442	1	0.0089	0.0077	0.0050	0.0034	0.0019	0.0012	0.0010	0.0009
3-443	1	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001
3-444	2	0.0162	0.0137	0.0082	0.0054	0.0031	0.0019	0.0015	0.0014
3-445	5	0.4559	0.4412	0.3874	0.3259	0.2260	0.1488	0.1189	0.1121
3-446	3	0.0281	0.0272	0.0241	0.0204	0.0143	0.0095	0.0076	0.0071
3-447	1	0.0019	0.0015	0.0008	0.0005	0.0003	0.0002	0.0001	0.0001
3-449	2	0.3901	0.3780	0.3330	0.2813	0.1962	0.1296	0.1036	0.0977
3-450	1	0.0125	0.0111	0.0075	0.0052	0.0030	0.0019	0.0015	0.0014
3-452	2	0.0176	0.0160	0.0115	0.0082	0.0049	0.0030	0.0024	0.0023
3-455	1	0.3405	0.3203	0.2546	0.1946	0.1215	0.0769	0.0609	0.0573
3-456	1	0.0040	0.0039	0.0036	0.0033	0.0025	0.0018	0.0014	0.0013
3-457	1	0.0006	0.0006	0.0005	0.0005	0.0004	0.0003	0.0002	0.0002
3-458	1	0.0011	0.0010	0.0010	0.0009	0.0007	0.0005	0.0004	0.0004

3-459	4	0.4575	0.4262	0.3282	0.2446	0.1498	0.0941	0.0745	0.0701
3-460	1	0.0073	0.0065	0.0045	0.0031	0.0018	0.0011	0.0009	0.0008
3-461	1	0.0054	0.0044	0.0025	0.0016	0.0009	0.0006	0.0005	0.0004
3-462	4	0.1166	0.1130	0.0995	0.0841	0.0586	0.0387	0.0309	0.0292
3-464	1	0.0004	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001
3-465	1	0.0016	0.0013	0.0008	0.0005	0.0003	0.0002	0.0001	0.0001
3-466	1	0.0029	0.0025	0.0016	0.0011	0.0006	0.0004	0.0003	0.0003
3-467	1	0.0028	0.0027	0.0025	0.0023	0.0017	0.0012	0.0010	0.0009
3-468	1	0.0088	0.0084	0.0072	0.0059	0.0040	0.0026	0.0021	0.0019
3-469	1	0.0051	0.0047	0.0034	0.0025	0.0015	0.0009	0.0007	0.0007
3-471	1	0.0043	0.0042	0.0035	0.0028	0.0018	0.0012	0.0009	0.0009
3-473	2	0.3842	0.3700	0.3192	0.2634	0.1781	0.1159	0.0924	0.0871
3-474	1	0.0148	0.0125	0.0075	0.0050	0.0028	0.0018	0.0014	0.0013
3-475	1	0.0004	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001
3-476	1	0.0008	0.0007	0.0004	0.0003	0.0001	0.0001	0.0001	0.0001
3-477	1	0.0085	0.0072	0.0043	0.0029	0.0016	0.0010	0.0008	0.0007
3-478	1	0.0040	0.0033	0.0020	0.0013	0.0008	0.0005	0.0004	0.0003
3-479	1	0.0391	0.0356	0.0256	0.0182	0.0108	0.0068	0.0053	0.0050
3-480	1	0.0007	0.0006	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001
3-481	1	0.0024	0.0024	0.0022	0.0020	0.0016	0.0011	0.0009	0.0009
3-482	1	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0000	0.0000
3-483	1	0.0003	0.0003	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001
3-484	3	0.4751	0.4593	0.4017	0.3364	0.2319	0.1523	0.1216	0.1146
3-485	1	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001
3-486	2	0.1857	0.1690	0.1216	0.0866	0.0514	0.0321	0.0254	0.0238
3-487	1	0.1340	0.1274	0.1049	0.0827	0.0531	0.0339	0.0269	0.0254
3-488	1	0.0950	0.0864	0.0620	0.0441	0.0262	0.0163	0.0129	0.0121
3-489	1	0.0435	0.0413	0.0338	0.0265	0.0169	0.0108	0.0086	0.0080
3-490	1	0.0076	0.0074	0.0066	0.0056	0.0039	0.0026	0.0021	0.0019
3-491	1	0.0678	0.0493	0.0243	0.0153	0.0086	0.0053	0.0042	0.0039
3-492	1	0.0006	0.0006	0.0006	0.0005	0.0004	0.0003	0.0002	0.0002
3-493	1	0.0019	0.0018	0.0016	0.0014	0.0010	0.0007	0.0005	0.0005
3-494	1	0.0019	0.0018	0.0013	0.0010	0.0006	0.0004	0.0003	0.0003
3-495	1	0.0008	0.0007	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001
3-496	1	0.0016	0.0014	0.0008	0.0005	0.0003	0.0002	0.0002	0.0001
3-499	2	0.1031	0.0969	0.0771	0.0589	0.0368	0.0232	0.0184	0.0173
3-500	1	0.0008	0.0007	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001
3-501	1	0.0053	0.0044	0.0027	0.0018	0.0010	0.0006	0.0005	0.0005
3-502	1	0.0517	0.0500	0.0437	0.0366	0.0252	0.0166	0.0132	0.0124
3-503	1	0.0411	0.0395	0.0336	0.0274	0.0182	0.0118	0.0094	0.0089
3-504	1	0.0116	0.0107	0.0078	0.0057	0.0034	0.0031	0.0017	0.0016
3-505	3	0.0749	0.0702	0.0553	0.0419	0.0260	0.0164	0.0130	0.0122
3-506	1	0.0024	0.0024	0.0022	0.0020	0.0016	0.0011	0.0009	0.0009
3-507	1	0.0105	0.0087	0.0050	0.0033	0.0019	0.0011	0.0009	0.0009
3-508	1	0.0081	0.0068	0.0041	0.0027	0.0015	0.0010	0.0008	0.0007
3-509	1	0.0072	0.0071	0.0068	0.0064	0.0055	0.0042	0.0035	0.0034
3-510	3	0.3121	0.2957	0.2405	0.1874	0.1192	0.0758	0.0601	0.0566
3-512	1	0.0075	0.0065	0.0042	0.0029	0.0016	0.0010	0.0008	0.0008
3-513	3	0.0618	0.0562	0.0404	0.0288	0.0171	0.0106	0.0084	0.0079
3-515	1	0.0059	0.0054	0.0039	0.0028	0.0016	0.0010	0.0008	0.0008
3-516	1	0.0103	0.0093	0.0065	0.0046	0.0027	0.0017	0.0013	0.0012
3-518	1	0.0014	0.0014	0.0013	0.0012	0.0009	0.0007	0.0005	0.0005
3-519	1	0.0776	0.0656	0.0398	0.0262	0.0150	0.0093	0.0073	0.0069
3-520	3	0.0730	0.0665	0.0478	0.0340	0.0202	0.0126	0.0099	0.0093
3-521	1	0.0054	0.0049	0.0035	0.0025	0.0015	0.0009	0.0007	0.0007
3-522	3	0.0699	0.0655	0.0516	0.0392	0.0243	0.0153	0.0121	0.0114
3-523	1	0.0120	0.0110	0.0081	0.0058	0.0035	0.0022	0.0017	0.0016

3-524	1	0.0360	0.0328	0.0236	0.0168	0.0100	0.0062	0.0049	0.0046
3-525	1	0.0013	0.0013	0.0012	0.0011	0.0010	0.0008	0.0007	0.0006
3-526	1	0.0005	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001
3-527	1	0.0015	0.0014	0.0012	0.0010	0.0007	0.0004	0.0004	0.0003
3-528	1	0.4434	0.4302	0.3810	0.3237	0.2276	0.1509	0.1208	0.1139
3-529	3	0.0434	0.0417	0.0358	0.0293	0.0197	0.0128	0.0102	0.0096
3-530	3	0.1838	0.1755	0.1467	0.1172	0.0764	0.0490	0.0389	0.0366
3-531	1	0.0086	0.0084	0.0077	0.0068	0.0051	0.0035	0.0028	0.0027
3-532	1	0.0247	0.0240	0.0213	0.0181	0.0128	0.0085	0.0068	0.0064
3-533	1	0.0086	0.0078	0.0056	0.0040	0.0024	0.0015	0.0012	0.0011
3-534	1	0.0015	0.0013	0.0010	0.0007	0.0004	0.0003	0.0002	0.0002
3-535	3	0.1580	0.1424	0.0997	0.0699	0.0411	0.0256	0.0202	0.0190
3-536	1	0.0290	0.0242	0.0142	0.0093	0.0053	0.0033	0.0026	0.0024
3-539	1	0.0084	0.0076	0.0055	0.0039	0.0023	0.0014	0.0011	0.0011
3-540	4	0.6401	0.6165	0.5316	0.4387	0.2965	0.1930	0.1539	0.1449
3-542	1	0.0214	0.0187	0.0121	0.0081	0.0047	0.0029	0.0023	0.0022
3-544	1	0.0028	0.0026	0.0018	0.0013	0.0008	0.0005	0.0004	0.0004
3-546	1	0.0650	0.0567	0.0367	0.0247	0.0143	0.0089	0.0070	0.0066
3-547	1	0.0063	0.0060	0.0051	0.0041	0.0027	0.0018	0.0014	0.0013
3-548	1	0.1235	0.1098	0.0742	0.0511	0.0298	0.0185	0.0146	0.0138
3-549	1	0.0312	0.0286	0.0211	0.0152	0.0091	0.0057	0.0045	0.0042
3-550	1	0.0047	0.0045	0.0038	0.0031	0.0020	0.0013	0.0010	0.0010
3-551	5	0.3505	0.3399	0.3005	0.2548	0.1787	0.1183	0.0947	0.0893
3-552	1	0.0550	0.0526	0.0443	0.0357	0.0235	0.0151	0.0120	0.0113
3-553	1	0.0181	0.0158	0.0102	0.0069	0.0040	0.0025	0.0019	0.0018
3-554	1	0.7882	0.7466	0.6072	0.4732	0.3007	0.1912	0.1518	0.1428
3-555	1	0.0034	0.0033	0.0028	0.0023	0.0015	0.0010	0.0008	0.0007
3-556	1	0.0022	0.0021	0.0018	0.0014	0.0010	0.0006	0.0005	0.0004
3-558	1	0.0812	0.0708	0.0458	0.0309	0.0178	0.0111	0.0087	0.0082
3-559	1	0.0102	0.0092	0.0064	0.0045	0.0027	0.0017	0.0013	0.0012
3-561	1	0.0533	0.0451	0.0273	0.0180	0.0103	0.0064	0.0050	0.0047
3-562	1	0.0017	0.0017	0.0015	0.0014	0.0010	0.0007	0.0006	0.0005
3-563	1	0.0112	0.0096	0.0060	0.0040	0.0023	0.0014	0.0011	0.0011
3-564	1	0.0111	0.0085	0.0044	0.0028	0.0016	0.0010	0.0008	0.0007
3-565	1	0.0028	0.0028	0.0026	0.0024	0.0019	0.0014	0.0012	0.0011
3-566	1	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
3-567	1	0.0153	0.0146	0.0124	0.0100	0.0066	0.0043	0.0034	0.0032
3-568	1	0.0330	0.0320	0.0283	0.0240	0.0168	0.0112	0.0089	0.0084
3-569	1	0.0396	0.0384	0.0340	0.0288	0.0202	0.0134	0.0107	0.0101
3-570	1	0.0005	0.0005	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001
3-571	5	0.5491	0.5181	0.3727	0.2654	0.1576	0.0983	0.0777	0.0731
3-572	1	0.0441	0.0405	0.0298	0.0215	0.0129	0.0080	0.0064	0.0060
3-573	1	0.0132	0.0122	0.0093	0.0069	0.0042	0.0026	0.0021	0.0019
3-574	1	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001
3-575	1	0.0005	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001
3-576	1	0.0034	0.0032	0.0024	0.0017	0.0010	0.0007	0.0005	0.0005
3-577	1	0.0279	0.0267	0.0226	0.0183	0.0121	0.0078	0.0062	0.0058
3-578	1	0.0087	0.0080	0.0059	0.0042	0.0025	0.0016	0.0013	0.0012
3-579	1	0.0215	0.0187	0.0121	0.0082	0.0047	0.0029	0.0023	0.0022
3-580	1	0.0020	0.0016	0.0009	0.0006	0.0003	0.0002	0.0002	0.0001
3-581	1	0.0100	0.0086	0.0054	0.0036	0.0020	0.0013	0.0010	0.0009
3-585	3	0.0244	0.0238	0.0215	0.0187	0.0137	0.0092	0.0074	0.0070
3-586	5	0.3807	0.3625	0.2999	0.2374	0.1533	0.0979	0.0778	0.0732
3-587	1	0.0070	0.0064	0.0046	0.0033	0.0020	0.0012	0.0010	0.0009
3-588	3	0.1064	0.1031	0.0907	0.0764	0.0531	0.0351	0.0280	0.0264
3-589	1	0.0453	0.0408	0.0286	0.0200	0.0118	0.0073	0.0058	0.0055

3-590	3	0.0617	0.0562	0.0404	0.0288	0.0171	0.0106	0.0084	0.0079
3-591	1	0.0020	0.0020	0.0019	0.0018	0.0016	0.0013	0.0011	0.0010
3-592	3	0.1046	0.0929	0.0625	0.0430	0.0250	0.0155	0.0123	0.0116
3-593	1	0.0139	0.0118	0.0071	0.0047	0.0027	0.0017	0.0013	0.0012
3-594	1	0.0180	0.0169	0.0133	0.0101	0.0063	0.0040	0.0031	0.0030
3-595	1	0.0004	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001
3-596	1	0.0074	0.0062	0.0038	0.0025	0.0014	0.0009	0.0007	0.0007
3-597	1	0.0756	0.0698	0.0523	0.0382	0.0230	0.0144	0.0114	0.0107
3-598	1	0.0004	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001
3-599	1	0.0051	0.0046	0.0033	0.0024	0.0014	0.0009	0.0007	0.0007
3-600	1	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
3-604	1	0.0022	0.0021	0.0020	0.0018	0.0014	0.0009	0.0008	0.0007
3-605	1	0.0010	0.0010	0.0008	0.0007	0.0004	0.0003	0.0002	0.0002
3-607	1	0.1044	0.0958	0.0704	0.0508	0.0304	0.0190	0.0150	0.0142
3-612	2	0.1260	0.1227	0.1102	0.0952	0.0687	0.0462	0.0371	0.0350
3-613	1	0.0038	0.0035	0.0027	0.0020	0.0012	0.0008	0.0006	0.0006
3-614	1	0.0578	0.0544	0.0432	0.0330	0.0206	0.0130	0.0103	0.0097
3-615	1	0.0078	0.0074	0.0063	0.0051	0.0034	0.0022	0.0017	0.0016
3-618	1	0.0049	0.0045	0.0035	0.0026	0.0016	0.0010	0.0008	0.0007
3-619	1	0.7844	0.7237	0.5413	0.3952	0.2384	0.1493	0.1182	0.1112
3-620	1	0.0032	0.0031	0.0028	0.0024	0.0017	0.0011	0.0009	0.0008
3-621	1	0.0024	0.0024	0.0021	0.0018	0.0013	0.0009	0.0007	0.0006
3-628	1	0.0005	0.0005	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001
3-640	1	0.0020	0.0019	0.0015	0.0012	0.0007	0.0005	0.0004	0.0004
3-645	1	0.0221	0.0208	0.0168	0.0130	0.0082	0.0052	0.0042	0.0039
3-648	1	2.1244	2.0538	1.7954	1.5033	1.0359	0.6800	0.5432	0.5118
3-649	1	0.4559	0.4309	0.3480	0.2605	0.1703	0.1081	0.0858	0.0807
3-657	1	3.1002	3.0064	2.6582	2.2544	1.5812	1.0468	0.8379	0.7897
3-671	1	2.8201	2.3862	1.4454	0.9528	0.5446	0.3368	0.2661	0.2502
3-674	1	0.0045	0.0041	0.0031	0.0023	0.0014	0.0009	0.0007	0.0006
3-679	1	0.0418	0.0357	0.0220	0.0146	0.0084	0.0052	0.0041	0.0038
3-685	4	0.0632	0.0598	0.0483	0.0374	0.0236	0.0150	0.0119	0.0112
3-686	1	0.0083	0.0081	0.0071	0.0060	0.0042	0.0027	0.0022	0.0021
3-687	1	0.0254	0.0235	0.0176	0.0128	0.0078	0.0049	0.0038	0.0036
3-689	1	0.0409	0.0394	0.0340	0.0280	0.0189	0.0123	0.0098	0.0093
3-690	1	0.0302	0.0288	0.0241	0.0192	0.0125	0.0080	0.0064	0.0060
3-697	1	0.0980	0.0904	0.0676	0.0494	0.0298	0.0186	0.0148	0.0139
3-726	1	0.1727	0.1676	0.1484	0.1261	0.0887	0.0588	0.0471	0.0444
3-727	2	0.0748	0.0720	0.0619	0.0509	0.0343	0.0223	0.0178	0.0167
3-778	1	0.0206	0.0198	0.0167	0.0135	0.0089	0.0058	0.0046	0.0043
3-801	1	0.0007	0.0006	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001
3-836	1	0.0006	0.0005	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001
9- 1	1	0.0072	0.0067	0.0051	0.0037	0.0023	0.0014	0.0011	0.0011
9- 2	1	0.0177	0.0160	0.0112	0.0078	0.0046	0.0029	0.0023	0.0021
9- 4	1	0.1237	0.1215	0.1125	0.1009	0.0776	0.0544	0.0442	0.0418
9- 7	1	0.0120	0.0115	0.0097	0.0079	0.0052	0.0033	0.0027	0.0025
9- 29	1	0.0122	0.0106	0.0069	0.0046	0.0027	0.0017	0.0013	0.0012
9- 31	1	0.0671	0.0658	0.0605	0.0539	0.0408	0.0283	0.0229	0.0217
9- 46	1	0.0036	0.0035	0.0029	0.0024	0.0016	0.0010	0.0008	0.0008
9- 72	1	0.0207	0.0198	0.0166	0.0133	0.0087	0.0056	0.0045	0.0042
9- 74	1	0.0261	0.0248	0.0204	0.0161	0.0103	0.0066	0.0052	0.0049

TABLE 5D

MEAN DAILY DOSE RATE TO SKELETON IN RADS. COMPUTED BY THREE EXPONENTIALS

LISTED BY PATIENT NUMBER

PT. NO.	N	ELAPSED TIME IN DAYS 1	10	100	ELAPSED TIME IN YEARS 1	5	20	40	48
3-401	2	0.8981	0.8077	0.6659	0.6480	0.5917	0.3315	0.1399	0.1004
3-402	5	0.4686	0.4313	0.3724	0.3638	0.3300	0.1842	0.0775	0.0543
3-403	1	0.0010	0.0010	0.0010	0.0009	0.0008	0.0005	0.0002	0.0001
3-404	5	0.3463	0.3200	0.2786	0.2723	0.2466	0.1375	0.0578	0.0405
3-405	4	0.2526	0.2272	0.1873	0.1823	0.1665	0.0932	0.0393	0.0275
3-406	1	0.0020	0.0020	0.0019	0.0018	0.0016	0.0009	0.0004	0.0002
3-407	1	0.4538	0.4185	0.3629	0.3546	0.3214	0.1793	0.0755	0.0529
3-408	1	0.0595	0.0523	0.0411	0.0398	0.0365	0.0205	0.0087	0.0061
3-410	1	0.0212	0.0192	0.0160	0.0156	0.0142	0.0080	0.0034	0.0024
3-411	1	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000
3-412	4	0.1025	0.0945	0.0819	0.0800	0.0725	0.0404	0.0170	0.0119
3-415	1	0.0018	0.0018	0.0017	0.0017	0.0015	0.0008	0.0003	0.0002
3-416	5	0.6651	0.5781	0.4417	0.4260	0.3919	0.2202	0.0931	0.0654
3-417	5	0.3468	0.2995	0.2252	0.2167	0.1996	0.1122	0.0474	0.0333
3-418	1	0.0012	0.0011	0.0011	0.0011	0.0009	0.0005	0.0002	0.0001
3-419	4	0.3306	0.2833	0.2091	0.2007	0.1850	0.1041	0.0440	0.0309
3-420	1	0.0056	0.0053	0.0047	0.0046	0.0042	0.0023	0.0010	0.0007
3-422	1	0.0138	0.0114	0.0076	0.0071	0.0066	0.0037	0.0016	0.0011
3-423	4	0.2330	0.2145	0.1852	0.1809	0.1641	0.0915	0.0385	0.0270
3-424	1	0.1183	0.1091	0.0946	0.0925	0.0838	0.0468	0.0197	0.0138
3-426	1	0.0807	0.0714	0.0567	0.0550	0.0504	0.0283	0.0119	0.0084
3-427	2	0.0197	0.0160	0.0102	0.0096	0.0089	0.0050	0.0021	0.0014
3-428	3	0.3724	0.3032	0.1942	0.1815	0.1685	0.0950	0.0403	0.0283
3-429	6	0.7946	0.7295	0.6271	0.6125	0.5559	0.3104	0.1307	0.0915
3-431	3	0.5290	0.4924	0.4344	0.4249	0.3838	0.2137	0.0898	0.0628
3-432	1	0.0154	0.0139	0.0117	0.0114	0.0104	0.0058	0.0024	0.0017
3-433	3	0.5033	0.4509	0.3688	0.3587	0.3278	0.1837	0.0775	0.0543
3-434	2	0.0023	0.0021	0.0018	0.0018	0.0016	0.0009	0.0004	0.0003
3-435	1	0.0014	0.0013	0.0011	0.0010	0.0009	0.0005	0.0002	0.0002
3-436	1	0.0002	0.0002	0.0002	0.0002	0.0001	0.0001	0.0000	0.0000
3-437	1	0.0220	0.0187	0.0135	0.0129	0.0119	0.0067	0.0028	0.0020
3-441	1	0.0283	0.0230	0.0148	0.0138	0.0128	0.0072	0.0031	0.0020
3-442	1	0.0120	0.0088	0.0040	0.0034	0.0031	0.0018	0.0008	0.0005
3-443	1	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000
3-444	2	0.0247	0.0170	0.0068	0.0055	0.0051	0.0029	0.0012	0.0009
3-445	5	0.6138	0.5731	0.5086	0.4975	0.4488	0.2497	0.1049	0.0733
3-446	3	0.0398	0.0373	0.0335	0.0328	0.0295	0.0163	0.0068	0.0048
3-447	1	0.0033	0.0020	0.0007	0.0005	0.0005	0.0003	0.0001	0.0001
3-449	2	0.5044	0.4723	0.4213	0.4123	0.3714	0.2085	0.0867	0.0606
3-450	1	0.0162	0.0122	0.0061	0.0053	0.0050	0.0028	0.0012	0.0008
3-452	2	0.0224	0.0177	0.0103	0.0094	0.0087	0.0049	0.0021	0.0015
3-455	1	0.3828	0.3280	0.2421	0.2323	0.2142	0.1205	0.0510	0.0358
3-456	1	0.0031	0.0030	0.0029	0.0028	0.0025	0.0014	0.0006	0.0004
3-457	1	0.0005	0.0005	0.0005	0.0005	0.0004	0.0002	0.0001	0.0001
3-458	1	0.0012	0.0011	0.0011	0.0011	0.0009	0.0005	0.0002	0.0001

3-459	4	0.5696	0.4747	0.3257	0.3086	0.2857	0.1609	0.0681	0.0479
3-460	1	0.0095	0.0073	0.0038	0.0033	0.0031	0.0018	0.0007	0.0005
3-461	1	0.0092	0.0061	0.0023	0.0018	0.0017	0.0009	0.0004	0.0003
3-462	4	0.1475	0.1381	0.1232	0.1205	0.1086	0.0603	0.0253	0.0177
3-464	1	0.0005	0.0004	0.0003	0.0003	0.0003	0.0001	0.0001	0.0000
3-465	1	0.0023	0.0016	0.0006	0.0005	0.0005	0.0003	0.0001	0.0001
3-466	1	0.0043	0.0030	0.0013	0.0011	0.0010	0.0006	0.0002	0.0002
3-467	1	0.0031	0.0030	0.0029	0.0028	0.0025	0.0013	0.0006	0.0004
3-468	1	0.0089	0.0082	0.0070	0.0068	0.0062	0.0035	0.0015	0.0010
3-469	1	0.0056	0.0045	0.0028	0.0026	0.0024	0.0013	0.0006	0.0004
3-471	1	0.0043	0.0038	0.0031	0.0031	0.0028	0.0016	0.0007	0.0004
3-473	2	0.4779	0.4399	0.3800	0.3712	0.3367	0.1879	0.0791	0.0554
3-474	1	0.0217	0.0149	0.0060	0.0048	0.0045	0.0026	0.0011	0.0008
3-475	1	0.0004	0.0004	0.0003	0.0003	0.0003	0.0001	0.0001	0.0000
3-476	1	0.0012	0.0008	0.0003	0.0002	0.0002	0.0001	0.0001	0.0000
3-477	1	0.0122	0.0084	0.0034	0.0027	0.0025	0.0014	0.0006	0.0004
3-478	1	0.0060	0.0042	0.0017	0.0013	0.0013	0.0007	0.0003	0.0002
3-479	1	0.0467	0.0368	0.0213	0.0194	0.0181	0.0102	0.0043	0.0030
3-480	1	0.0011	0.0008	0.0003	0.0003	0.0003	0.0001	0.0001	0.0000
3-481	1	0.0020	0.0019	0.0018	0.0018	0.0015	0.0008	0.0003	0.0002
3-482	1	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000
3-483	1	0.0003	0.0003	0.0003	0.0003	0.0003	0.0001	0.0001	0.0000
3-484	3	0.6882	0.6406	0.5651	0.5528	0.4992	0.2780	0.1168	0.0817
3-485	1	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	0.0000	0.0000
3-486	2	0.2421	0.1909	0.1107	0.1010	0.0941	0.0531	0.0225	0.0158
3-487	1	0.1419	0.1254	0.0997	0.0967	0.0886	0.0497	0.0210	0.0148
3-488	1	0.1208	0.0951	0.0548	0.0499	0.0465	0.0263	0.0111	0.0078
3-489	1	0.0427	0.0376	0.0295	0.0286	0.0262	0.0147	0.0062	0.0044
3-490	1	0.0085	0.0079	0.0071	0.0070	0.0063	0.0035	0.0015	0.0010
3-491	1	0.1401	0.0682	0.0214	0.0153	0.0144	0.0081	0.0035	0.0024
3-492	1	0.0005	0.0005	0.0004	0.0004	0.0004	0.0002	0.0001	0.0001
3-493	1	0.0025	0.0023	0.0021	0.0021	0.0019	0.0010	0.0004	0.0003
3-494	1	0.0021	0.0017	0.0011	0.0010	0.0010	0.0005	0.0002	0.0002
3-495	1	0.0013	0.0009	0.0004	0.0003	0.0003	0.0002	0.0001	0.0000
3-496	1	0.0026	0.0018	0.0007	0.0006	0.0005	0.0003	0.0001	0.0001
3-499	2	0.1207	0.1034	0.0763	0.0733	0.0675	0.0380	0.0161	0.0113
3-500	1	0.0014	0.0009	0.0004	0.0003	0.0003	0.0002	0.0001	0.0000
3-501	1	0.0071	0.0049	0.0020	0.0016	0.0015	0.0008	0.0004	0.0003
3-502	1	0.0708	0.0659	0.0581	0.0569	0.0514	0.0286	0.0120	0.0084
3-503	1	0.0481	0.0438	0.0371	0.0362	0.0329	0.0184	0.0078	0.0054
3-504	1	0.0144	0.0116	0.0071	0.0066	0.0061	0.0034	0.0015	0.0010
3-505	3	0.0962	0.0818	0.0591	0.0565	0.0522	0.0294	0.0124	0.0087
3-506	1	0.0022	0.0021	0.0020	0.0020	0.0017	0.0009	0.0004	0.0003
3-507	1	0.0178	0.0117	0.0044	0.0035	0.0032	0.0018	0.0008	0.0005
3-508	1	0.0129	0.0089	0.0036	0.0029	0.0027	0.0015	0.0006	0.0004
3-509	1	0.0076	0.0075	0.0073	0.0071	0.0061	0.0032	0.0013	0.0009
3-510	3	0.3705	0.3241	0.2513	0.2428	0.2231	0.1253	0.0530	0.0371
3-512	1	0.0102	0.0074	0.0034	0.0028	0.0027	0.0015	0.0006	0.0004
3-513	3	0.0847	0.0668	0.0387	0.0353	0.0329	0.0185	0.0078	0.0055
3-515	1	0.0069	0.0054	0.0031	0.0029	0.0027	0.0015	0.0006	0.0004
3-516	1	0.0125	0.0096	0.0052	0.0047	0.0044	0.0025	0.0010	0.0007
3-518	1	0.0012	0.0012	0.0011	0.0011	0.0009	0.0005	0.0002	0.0001
3-519	1	0.1199	0.0829	0.0334	0.0269	0.0252	0.0143	0.0061	0.0043
3-520	3	0.1003	0.0792	0.0459	0.0418	0.0390	0.0220	0.0093	0.0065
3-521	1	0.0062	0.0049	0.0029	0.0026	0.0024	0.0014	0.0006	0.0004
3-522	3	0.0945	0.0803	0.0579	0.0554	0.0512	0.0288	0.0122	0.0085
3-523	1	0.0144	0.0115	0.0070	0.0065	0.0061	0.0034	0.0014	0.0010

3-524	1	0.0419	0.0330	0.0191	0.0175	0.0163	0.0092	0.0039	0.0027
3-525	1	0.0013	0.0013	0.0013	0.0012	0.0011	0.0006	0.0002	0.0001
3-526	1	0.0005	0.0004	0.0003	0.0003	0.0002	0.0001	0.0001	0.0000
3-527	1	0.0016	0.0014	0.0012	0.0012	0.0011	0.0006	0.0003	0.0002
3-528	1	0.5456	0.5128	0.4607	0.4509	0.4055	0.2252	0.0945	0.0660
3-529	3	0.0632	0.0579	0.0495	0.0484	0.0439	0.0245	0.0103	0.0072
3-530	3	0.2362	0.2116	0.1731	0.1683	0.1539	0.0862	0.0364	0.0258
3-531	1	0.0100	0.0096	0.0090	0.0088	0.0078	0.0043	0.0018	0.0012
3-532	1	0.0265	0.0250	0.0225	0.0220	0.0198	0.0110	0.0046	0.0032
3-533	1	0.0101	0.0079	0.0046	0.0042	0.0039	0.0022	0.0009	0.0007
3-534	1	0.0016	0.0013	0.0008	0.0008	0.0007	0.0004	0.0002	0.0001
3-535	3	0.2411	0.1862	0.1009	0.0904	0.0844	0.0476	0.0202	0.0142
3-536	1	0.0452	0.0304	0.0117	0.0093	0.0087	0.0049	0.0021	0.0014
3-539	1	0.0107	0.0085	0.0049	0.0045	0.0042	0.0023	0.0010	0.0007
3-540	4	0.8599	0.7913	0.6833	0.6676	0.6055	0.3379	0.1423	0.0997
3-542	1	0.0329	0.0240	0.0109	0.0092	0.0086	0.0049	0.0021	0.0014
3-544	1	0.0037	0.0029	0.0017	0.0015	0.0014	0.0008	0.0003	0.0002
3-546	1	0.0893	0.0651	0.0295	0.0249	0.0233	0.0132	0.0056	0.0039
3-547	1	0.0071	0.0064	0.0054	0.0053	0.0048	0.0027	0.0011	0.0008
3-548	1	0.1794	0.1351	0.0674	0.0589	0.0550	0.0311	0.0132	0.0093
3-549	1	0.0356	0.0286	0.0175	0.0162	0.0150	0.0085	0.0036	0.0025
3-550	1	0.0065	0.0059	0.0049	0.0048	0.0044	0.0025	0.0010	0.0007
3-551	5	0.4831	0.4536	0.4066	0.3979	0.3580	0.1989	0.0834	0.0583
3-552	1	0.0612	0.0553	0.0459	0.0447	0.0408	0.0228	0.0096	0.0068
3-553	1	0.0260	0.0189	0.0086	0.0072	0.0068	0.0038	0.0016	0.0011
3-554	1	0.9080	0.7941	0.6154	0.5947	0.5464	0.3069	0.1298	0.0911
3-555	1	0.0033	0.0030	0.0025	0.0024	0.0022	0.0012	0.0005	0.0004
3-556	1	0.0021	0.0019	0.0016	0.0016	0.0014	0.0008	0.0003	0.0002
3-558	1	0.1210	0.0882	0.0399	0.0337	0.0316	0.0178	0.0076	0.0053
3-559	1	0.0139	0.0108	0.0058	0.0052	0.0049	0.0028	0.0012	0.0008
3-561	1	0.0835	0.0577	0.0233	0.0187	0.0176	0.0099	0.0042	0.0030
3-562	1	0.0018	0.0017	0.0016	0.0016	0.0014	0.0008	0.0003	0.0002
3-563	1	0.0168	0.0119	0.0051	0.0042	0.0039	0.0022	0.0009	0.0007
3-564	1	0.0220	0.0122	0.0040	0.0029	0.0028	0.0016	0.0007	0.0004
3-565	1	0.0029	0.0028	0.0027	0.0027	0.0023	0.0012	0.0005	0.0003
3-566	1	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0000	0.0000
3-567	1	0.0178	0.0161	0.0135	0.0131	0.0120	0.0067	0.0028	0.0020
3-568	1	0.0408	0.0383	0.0344	0.0336	0.0303	0.0168	0.0071	0.0049
3-569	1	0.0490	0.0460	0.0412	0.0404	0.0363	0.0202	0.0085	0.0059
3-570	1	0.0005	0.0004	0.0003	0.0003	0.0002	0.0001	0.0001	0.0000
3-571	5	0.7770	0.6127	0.3551	0.3242	0.3019	0.1704	0.0722	0.0508
3-572	1	0.0506	0.0406	0.0248	0.0230	0.0214	0.0120	0.0051	0.0036
3-573	1	0.0145	0.0120	0.0080	0.0075	0.0070	0.0039	0.0017	0.0012
3-574	1	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	0.0000	0.0000
3-575	1	0.0005	0.0004	0.0002	0.0002	0.0002	0.0001	0.0000	0.0000
3-576	1	0.0038	0.0031	0.0020	0.0019	0.0017	0.0010	0.0004	0.0003
3-577	1	0.0339	0.0307	0.0257	0.0250	0.0228	0.0128	0.0054	0.0038
3-578	1	0.0101	0.0081	0.0049	0.0046	0.0042	0.0024	0.0010	0.0007
3-579	1	0.0333	0.0242	0.0110	0.0093	0.0087	0.0049	0.0021	0.0014
3-580	1	0.0037	0.0022	0.0008	0.0006	0.0006	0.0003	0.0001	0.0001
3-581	1	0.0162	0.0115	0.0049	0.0040	0.0038	0.0031	0.0009	0.0006
3-585	3	0.0427	0.0407	0.0375	0.0367	0.0328	0.0181	0.0075	0.0052
3-586	5	0.4668	0.4145	0.3326	0.3228	0.2957	0.1658	0.0700	0.0491
3-587	1	0.0084	0.0066	0.0038	0.0035	0.0032	0.0018	0.0008	0.0005
3-588	3	0.1392	0.1302	0.1158	0.1133	0.1021	0.0568	0.0238	0.0166
3-589	1	0.0588	0.0454	0.0246	0.0221	0.0206	0.0116	0.0049	0.0034

3-590	3	0.0921	0.0726	0.0421	0.0384	0.0358	0.0202	0.0085	0.0060
3-591	1	0.0020	0.0020	0.0020	0.0019	0.0016	0.0008	0.0003	0.0002
3-592	3	0.1809	0.1358	0.0672	0.0585	0.0547	0.0309	0.0131	0.0092
3-593	1	0.0236	0.0163	0.0066	0.0053	0.0050	0.0028	0.0012	0.0008
3-594	1	0.0214	0.0182	0.0131	0.0125	0.0116	0.0065	0.0028	0.0019
3-595	1	0.0004	0.0004	0.0003	0.0002	0.0002	0.0001	0.0001	0.0000
3-596	1	0.0125	0.0086	0.0035	0.0028	0.0026	0.0015	0.0006	0.0004
3-597	1	0.0855	0.0696	0.0446	0.0417	0.0387	0.0218	0.0092	0.0065
3-598	1	0.0003	0.0003	0.0002	0.0002	0.0002	0.0001	0.0000	0.0000
3-599	1	0.0068	0.0054	0.0031	0.0028	0.0026	0.0015	0.0006	0.0004
3-600	1	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000
3-604	1	0.0036	0.0035	0.0033	0.0032	0.0029	0.0016	0.0006	0.0004
3-605	1	0.0012	0.0011	0.0009	0.0009	0.0008	0.0004	0.0002	0.0001
3-607	1	0.1368	0.1097	0.0671	0.0621	0.0577	0.0326	0.0138	0.0097
3-612	2	0.1907	0.1811	0.1658	0.1623	0.1451	0.0803	0.0335	0.0234
3-613	1	0.0043	0.0036	0.0024	0.0022	0.0021	0.0012	0.0005	0.0003
3-614	1	0.0456	0.0562	0.0415	0.0398	0.0367	0.0206	0.0087	0.0061
3-615	1	0.0092	0.0083	0.0070	0.0068	0.0062	0.0035	0.0015	0.0010
3-618	1	0.0064	0.0054	0.0037	0.0035	0.0032	0.0018	0.0008	0.0005
3-619	1	0.0551	0.8581	0.5483	0.5122	0.4755	0.2681	0.1136	0.0799
3-620	1	0.0023	0.0022	0.0020	0.0020	0.0018	0.0010	0.0004	0.0003
3-621	1	0.0018	0.0017	0.0015	0.0015	0.0013	0.0007	0.0003	0.0002
3-628	1	0.0008	0.0006	0.0004	0.0004	0.0003	0.0002	0.0001	0.0001
3-640	1	0.0023	0.0020	0.0015	0.0014	0.0013	0.0007	0.0003	0.0002
3-645	1	0.0238	0.0207	0.0158	0.0153	0.0140	0.0079	0.0033	0.0023
3-648	1	2.2920	2.1328	1.8809	1.8396	1.6617	0.9253	0.3890	0.2722
3-649	1	0.3820	0.3320	0.2535	0.2445	0.2249	0.1264	0.0534	0.0375
3-657	1	2.0997	1.9713	1.7670	1.7292	1.5560	0.8644	0.3627	0.2535
3-671	1	1.6974	1.5556	1.0311	0.8296	0.7780	0.4401	0.1868	0.1314
3-674	1	0.0052	0.0043	0.0027	0.0025	0.0024	0.0013	0.0006	0.0004
3-679	1	0.0574	0.0403	0.0167	0.0136	0.0128	0.0072	0.0031	0.0022
3-685	4	0.0897	0.0780	0.0596	0.0575	0.0528	0.0297	0.0125	0.0088
3-686	1	0.0118	0.0110	0.0098	0.0096	0.0087	0.0048	0.0020	0.0014
3-687	1	0.0300	0.0244	0.0157	0.0146	0.0136	0.0077	0.0032	0.0023
3-689	1	0.0497	0.0457	0.0395	0.0386	0.0350	0.0195	0.0082	0.0058
3-690	1	0.0271	0.0243	0.0199	0.0193	0.0176	0.0099	0.0042	0.0029
3-697	1	0.1506	0.1225	0.0782	0.0731	0.0679	0.0383	0.0162	0.0114
3-726	1	0.2923	0.2748	0.2468	0.2416	0.2172	0.1206	0.0506	0.0354
3-727	2	0.1158	0.1063	0.0914	0.0892	0.0810	0.0452	0.0190	0.0133
3-778	1	0.0334	0.0302	0.0253	0.0246	0.0224	0.0126	0.0053	0.0037
3-801	1	0.0013	0.0009	0.0004	0.0004	0.0003	0.0002	0.0001	0.0001
3-836	1	0.0010	0.0008	0.0004	0.0004	0.0004	0.0002	0.0001	0.0001
9- 1	1	0.0104	0.0085	0.0057	0.0053	0.0049	0.0028	0.0012	0.0008
9- 2	1	0.0288	0.0222	0.0120	0.0108	0.0101	0.0057	0.0024	0.0017
9- 4	1	0.2397	0.2322	0.2195	0.2145	0.1891	0.1033	0.0427	0.0296
9- 7	1	0.0172	0.0156	0.0130	0.0127	0.0116	0.0065	0.0027	0.0019
9- 29	1	0.0230	0.0168	0.0076	0.0064	0.0060	0.0034	0.0014	0.0010
9- 31	1	0.1245	0.1202	0.1129	0.1104	0.0977	0.0535	0.0222	0.0154
9- 46	1	0.0051	0.0047	0.0039	0.0038	0.0035	0.0019	0.0008	0.0006
9- 72	1	0.0300	0.0270	0.0222	0.0216	0.0198	0.0111	0.0047	0.0033
9- 74	1	0.0382	0.0338	0.0268	0.0260	0.0238	0.0134	0.0057	0.0040

TABLE 5E

MEAN DAILY DOSE RATE TO SKELETON IN RADS. COMPUTED BY POWER FUNCTION

LISTED BY LATEST RADIOLOGICAL OR CLINICAL DIAGNOSIS AND BY INCREASING VALUES ONE DAY AFTER CESSATION OF INGESTION

PT. NO.	N	ELAPSED TIME IN DAYS 1	10	100	ELAPSED TIME IN YEARS 1	5	20	40	48
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.									
3-411	1	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
3-600	1	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
3-482	1	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0000	0.0000
3-436	1	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
3-566	1	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
3-443	1	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001
3-485	1	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001
3-574	1	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001
3-464	1	0.0004	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001
3-475	1	0.0004	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001
3-595	1	0.0004	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001
3-598	1	0.0004	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001
3-575	1	0.0005	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001
3-570	1	0.0005	0.0005	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001
3-628	1	0.0005	0.0005	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001
3-836	1	0.0006	0.0005	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001
3-457	1	0.0006	0.0006	0.0005	0.0005	0.0004	0.0003	0.0002	0.0002
3-492	1	0.0006	0.0006	0.0006	0.0005	0.0004	0.0003	0.0002	0.0002
3-480	1	0.0007	0.0006	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001
3-801	1	0.0007	0.0006	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001
3-476	1	0.0008	0.0007	0.0004	0.0003	0.0001	0.0001	0.0001	0.0001
3-495	1	0.0008	0.0007	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001
3-605	1	0.0010	0.0010	0.0008	0.0007	0.0004	0.0003	0.0002	0.0002
3-458	1	0.0011	0.0010	0.0010	0.0009	0.0007	0.0005	0.0004	0.0004
3-418	1	0.0011	0.0011	0.0010	0.0009	0.0007	0.0005	0.0004	0.0004
3-403	1	0.0012	0.0012	0.0011	0.0010	0.0008	0.0005	0.0004	0.0004
3-525	1	0.0013	0.0013	0.0012	0.0011	0.0010	0.0008	0.0007	0.0006
3-518	1	0.0014	0.0014	0.0013	0.0012	0.0009	0.0007	0.0005	0.0005
3-534	1	0.0015	0.0013	0.0010	0.0007	0.0004	0.0003	0.0002	0.0002
3-527	1	0.0015	0.0014	0.0012	0.0010	0.0007	0.0004	0.0004	0.0003
3-465	1	0.0016	0.0013	0.0008	0.0005	0.0003	0.0002	0.0001	0.0001
3-496	1	0.0016	0.0014	0.0008	0.0005	0.0003	0.0002	0.0002	0.0001
3-562	1	0.0017	0.0017	0.0015	0.0014	0.0010	0.0007	0.0006	0.0005
3-447	1	0.0019	0.0015	0.0008	0.0005	0.0003	0.0002	0.0001	0.0001
3-494	1	0.0019	0.0018	0.0013	0.0010	0.0006	0.0004	0.0003	0.0003
3-435	1	0.0019	0.0018	0.0015	0.0012	0.0008	0.0005	0.0004	0.0004
3-493	1	0.0019	0.0018	0.0016	0.0014	0.0010	0.0007	0.0005	0.0005
3-415	1	0.0019	0.0018	0.0018	0.0016	0.0013	0.0010	0.0008	0.0008
3-580	1	0.0020	0.0016	0.0009	0.0006	0.0003	0.0002	0.0002	0.0001
3-640	1	0.0020	0.0019	0.0015	0.0012	0.0007	0.0005	0.0004	0.0004
3-556	1	0.0022	0.0021	0.0018	0.0014	0.0010	0.0006	0.0005	0.0004
3-406	1	0.0023	0.0022	0.0021	0.0019	0.0015	0.0011	0.0009	0.0008

3-621	1	0.0024	0.0024	0.0021	0.0018	0.0013	0.0009	0.0007	0.0006
3-481	1	0.0024	0.0024	0.0022	0.0020	0.0016	0.0011	0.0009	0.0009
3-506	1	0.0024	0.0024	0.0022	0.0020	0.0016	0.0011	0.0009	0.0009
3-544	1	0.0028	0.0026	0.0018	0.0013	0.0008	0.0005	0.0004	0.0004
3-467	1	0.0028	0.0027	0.0025	0.0023	0.0017	0.0012	0.0010	0.0009
3-565	1	0.0028	0.0028	0.0026	0.0024	0.0019	0.0014	0.0012	0.0011
3-466	1	0.0029	0.0025	0.0016	0.0011	0.0006	0.0004	0.0003	0.0003
3-620	1	0.0032	0.0031	0.0028	0.0024	0.0017	0.0011	0.0009	0.0008
3-576	1	0.0034	0.0032	0.0024	0.0017	0.0010	0.0007	0.0005	0.0005
3-434	2	0.0034	0.0033	0.0028	0.0023	0.0015	0.0010	0.0008	0.0007
3-555	1	0.0034	0.0033	0.0028	0.0023	0.0015	0.0010	0.0008	0.0007
9- 46	1	0.0036	0.0035	0.0029	0.0024	0.0016	0.0010	0.0008	0.0008
3-613	1	0.0038	0.0035	0.0027	0.0020	0.0012	0.0008	0.0006	0.0006
3-478	1	0.0040	0.0033	0.0020	0.0013	0.0008	0.0005	0.0004	0.0003
3-456	1	0.0040	0.0039	0.0036	0.0033	0.0025	0.0018	0.0014	0.0013
3-471	1	0.0043	0.0042	0.0035	0.0028	0.0018	0.0012	0.0009	0.0009
3-674	1	0.0045	0.0041	0.0031	0.0023	0.0014	0.0009	0.0007	0.0006
3-550	1	0.0047	0.0045	0.0038	0.0031	0.0020	0.0013	0.0010	0.0010
3-618	1	0.0049	0.0045	0.0035	0.0026	0.0016	0.0010	0.0008	0.0007
3-420	1	0.0049	0.0048	0.0042	0.0035	0.0025	0.0016	0.0013	0.0012
3-599	1	0.0051	0.0046	0.0033	0.0024	0.0014	0.0009	0.0007	0.0007
3-469	1	0.0051	0.0047	0.0034	0.0025	0.0015	0.0009	0.0007	0.0007
3-501	1	0.0053	0.0044	0.0027	0.0018	0.0010	0.0006	0.0005	0.0005
3-461	1	0.0054	0.0044	0.0025	0.0016	0.0009	0.0006	0.0005	0.0004
3-521	1	0.0054	0.0049	0.0035	0.0025	0.0015	0.0009	0.0007	0.0007
3-515	1	0.0059	0.0054	0.0039	0.0028	0.0016	0.0010	0.0008	0.0008
3-547	1	0.0063	0.0060	0.0051	0.0041	0.0027	0.0018	0.0014	0.0013
3-587	1	0.0070	0.0064	0.0046	0.0033	0.0020	0.0012	0.0010	0.0009
9- 1	1	0.0072	0.0067	0.0051	0.0037	0.0023	0.0014	0.0011	0.0011
3-509	1	0.0072	0.0071	0.0068	0.0064	0.0055	0.0042	0.0035	0.0034
3-460	1	0.0073	0.0065	0.0045	0.0031	0.0018	0.0011	0.0009	0.0008
3-596	1	0.0074	0.0062	0.0038	0.0025	0.0014	0.0009	0.0007	0.0007
3-512	1	0.0075	0.0065	0.0042	0.0029	0.0016	0.0010	0.0008	0.0008
3-508	1	0.0081	0.0068	0.0041	0.0027	0.0015	0.0010	0.0008	0.0007
3-686	1	0.0083	0.0081	0.0071	0.0060	0.0042	0.0027	0.0022	0.0021
3-539	1	0.0084	0.0076	0.0055	0.0039	0.0023	0.0014	0.0011	0.0011
3-477	1	0.0085	0.0072	0.0043	0.0029	0.0016	0.0010	0.0008	0.0007
3-533	1	0.0086	0.0078	0.0056	0.0040	0.0024	0.0015	0.0012	0.0011
3-531	1	0.0086	0.0084	0.0077	0.0068	0.0051	0.0035	0.0028	0.0027
3-578	1	0.0087	0.0080	0.0059	0.0042	0.0025	0.0016	0.0013	0.0012
3-468	1	0.0088	0.0084	0.0072	0.0059	0.0040	0.0026	0.0021	0.0019
3-442	1	0.0089	0.0077	0.0050	0.0034	0.0019	0.0012	0.0010	0.0009
3-581	1	0.0100	0.0086	0.0054	0.0036	0.0020	0.0013	0.0010	0.0009
3-559	1	0.0102	0.0092	0.0064	0.0045	0.0027	0.0017	0.0013	0.0012
3-516	1	0.0103	0.0093	0.0065	0.0046	0.0027	0.0017	0.0013	0.0012
3-507	1	0.0105	0.0087	0.0050	0.0033	0.0019	0.0011	0.0009	0.0009
3-564	1	0.0111	0.0085	0.0044	0.0028	0.0016	0.0010	0.0008	0.0007
3-563	1	0.0112	0.0096	0.0060	0.0040	0.0023	0.0014	0.0011	0.0011
3-504	1	0.0116	0.0107	0.0078	0.0057	0.0034	0.0021	0.0017	0.0016
3-523	1	0.0120	0.0110	0.0081	0.0058	0.0035	0.0022	0.0017	0.0016
9- 29	1	0.0122	0.0106	0.0069	0.0046	0.0027	0.0017	0.0013	0.0012
3-450	1	0.0125	0.0111	0.0075	0.0052	0.0030	0.0019	0.0015	0.0014
3-573	1	0.0132	0.0122	0.0093	0.0069	0.0042	0.0026	0.0021	0.0019
3-422	1	0.0133	0.0123	0.0094	0.0069	0.0042	0.0026	0.0021	0.0020
3-593	1	0.0139	0.0118	0.0071	0.0047	0.0027	0.0017	0.0013	0.0012

3-432	1	0.0147	0.0140	0.0119	0.0096	0.0064	0.0041	0.0033	0.0031
3-474	1	0.0148	0.0125	0.0075	0.0050	0.0028	0.0018	0.0014	0.0013
3-567	1	0.0153	0.0146	0.0124	0.0100	0.0066	0.0043	0.0034	0.0032
3-444	2	0.0162	0.0137	0.0082	0.0054	0.0031	0.0019	0.0015	0.0014
3-427	2	0.0173	0.0160	0.0120	0.0088	0.0053	0.0033	0.0026	0.0024
3-452	2	0.0176	0.0160	0.0115	0.0082	0.0049	0.0030	0.0024	0.0023
3-553	1	0.0181	0.0158	0.0102	0.0069	0.0040	0.0025	0.0019	0.0018
3-410	1	0.0197	0.0189	0.0160	0.0129	0.0085	0.0055	0.0044	0.0041
3-778	1	0.0206	0.0198	0.0167	0.0135	0.0089	0.0058	0.0046	0.0043
9- 72	1	0.0207	0.0198	0.0166	0.0133	0.0087	0.0056	0.0045	0.0042
3-542	1	0.0214	0.0187	0.0121	0.0081	0.0047	0.0029	0.0023	0.0022
3-579	1	0.0215	0.0187	0.0121	0.0082	0.0047	0.0029	0.0023	0.0022
3-645	1	0.0221	0.0208	0.0168	0.0130	0.0082	0.0052	0.0042	0.0039
3-437	1	0.0225	0.0211	0.0166	0.0126	0.0078	0.0049	0.0039	0.0037
3-585	3	0.0244	0.0238	0.0215	0.0187	0.0137	0.0092	0.0074	0.0070
3-532	1	0.0247	0.0240	0.0213	0.0181	0.0128	0.0085	0.0068	0.0064
3-687	1	0.0254	0.0235	0.0176	0.0128	0.0078	0.0049	0.0038	0.0036
9- 74	1	0.0261	0.0248	0.0204	0.0161	0.0103	0.0066	0.0052	0.0049
3-441	1	0.0268	0.0247	0.0185	0.0135	0.0082	0.0051	0.0040	0.0038
3-446	3	0.0281	0.0272	0.0241	0.0204	0.0143	0.0095	0.0076	0.0071
3-536	1	0.0290	0.0242	0.0142	0.0093	0.0053	0.0033	0.0026	0.0024
3-690	1	0.0302	0.0288	0.0241	0.0192	0.0125	0.0080	0.0064	0.0060
3-549	1	0.0312	0.0286	0.0211	0.0152	0.0091	0.0057	0.0045	0.0042
3-479	1	0.0391	0.0356	0.0256	0.0182	0.0108	0.0068	0.0053	0.0050
3-569	1	0.0396	0.0384	0.0340	0.0288	0.0202	0.0134	0.0107	0.0101
3-689	1	0.0409	0.0394	0.0340	0.0280	0.0189	0.0123	0.0098	0.0093
3-503	1	0.0411	0.0395	0.0336	0.0274	0.0182	0.0118	0.0094	0.0089
3-679	1	0.0418	0.0357	0.0220	0.0146	0.0084	0.0052	0.0041	0.0038
3-489	1	0.0435	0.0413	0.0338	0.0245	0.0169	0.0108	0.0086	0.0080
3-589	1	0.0453	0.0408	0.0286	0.0200	0.0118	0.0073	0.0058	0.0055
3-561	1	0.0533	0.0451	0.0273	0.0180	0.0103	0.0064	0.0050	0.0047
3-552	1	0.0550	0.0526	0.0443	0.0357	0.0235	0.0151	0.0120	0.0113
3-408	1	0.0587	0.0557	0.0456	0.0357	0.0228	0.0146	0.0116	0.0109
3-590	3	0.0617	0.0562	0.0404	0.0288	0.0171	0.0106	0.0084	0.0079
3-513	3	0.0618	0.0562	0.0404	0.0288	0.0171	0.0106	0.0084	0.0079
3-685	4	0.0632	0.0598	0.0483	0.0374	0.0236	0.0150	0.0119	0.0112
3-546	1	0.0650	0.0567	0.0367	0.0247	0.0143	0.0089	0.0070	0.0066
3-491	1	0.0678	0.0493	0.0243	0.0153	0.0086	0.0053	0.0042	0.0039
3-522	3	0.0699	0.0655	0.0516	0.0302	0.0243	0.0153	0.0121	0.0114
3-597	1	0.0756	0.0698	0.0523	0.0382	0.0230	0.0144	0.0114	0.0107
3-519	1	0.0776	0.0656	0.0398	0.0242	0.0150	0.0093	0.0073	0.0069
3-426	1	0.0792	0.0753	0.0620	0.0488	0.0314	0.0200	0.0159	0.0150
3-697	1	0.0980	0.0904	0.0676	0.0494	0.0298	0.0186	0.0148	0.0139
3-607	1	0.1044	0.0958	0.0704	0.0508	0.0304	0.0190	0.0150	0.0142
3-592	3	0.1046	0.0929	0.0625	0.0430	0.0250	0.0155	0.0123	0.0116
3-548	1	0.1235	0.1098	0.0742	0.0511	0.0298	0.0185	0.0146	0.0138
3-612	2	0.1260	0.1227	0.1102	0.0952	0.0687	0.0462	0.0371	0.0350
3-535	3	0.1580	0.1424	0.0997	0.0609	0.0411	0.0256	0.0202	0.0190
3-486	2	0.1857	0.1690	0.1216	0.0866	0.0514	0.0321	0.0254	0.0238

MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION.

3-483	1	0.0003	0.0003	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001
3-526	1	0.0005	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001
3-500	1	0.0008	0.0007	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001
3-591	1	0.0020	0.0020	0.0019	0.0018	0.0016	0.0013	0.0011	0.0010
3-604	1	0.0022	0.0021	0.0020	0.0018	0.0014	0.0009	0.0008	0.0007
3-490	1	0.0076	0.0074	0.0066	0.0056	0.0039	0.0026	0.0021	0.0019
3-615	1	0.0078	0.0074	0.0063	0.0051	0.0034	0.0022	0.0017	0.0016
9- 7	1	0.0120	0.0115	0.0097	0.0079	0.0052	0.0033	0.0027	0.0025
9- 2	1	0.0177	0.0160	0.0112	0.0078	0.0046	0.0029	0.0023	0.0021
3-577	1	0.0279	0.0267	0.0226	0.0183	0.0121	0.0078	0.0062	0.0058
3-568	1	0.0330	0.0320	0.0283	0.0240	0.0168	0.0112	0.0089	0.0084
3-524	1	0.0360	0.0328	0.0236	0.0168	0.0100	0.0062	0.0049	0.0046
3-572	1	0.0441	0.0405	0.0298	0.0215	0.0129	0.0080	0.0064	0.0060
3-614	1	0.0578	0.0544	0.0432	0.0330	0.0206	0.0130	0.0103	0.0097
9- 31	1	0.0671	0.0658	0.0605	0.0539	0.0408	0.0283	0.0229	0.0217
3-520	3	0.0730	0.0665	0.0478	0.0340	0.0202	0.0126	0.0099	0.0093
3-727	2	0.0748	0.0720	0.0619	0.0509	0.0343	0.0223	0.0178	0.0167
3-505	3	0.0749	0.0702	0.0553	0.0419	0.0260	0.0164	0.0130	0.0122
3-412	4	0.0787	0.0759	0.0656	0.0542	0.0368	0.0239	0.0191	0.0180
3-488	1	0.0950	0.0864	0.0620	0.0441	0.0262	0.0163	0.0129	0.0121
3-424	1	0.1085	0.1045	0.0904	0.0748	0.0507	0.0331	0.0264	0.0248
3-419	4	0.2962	0.2786	0.2215	0.1692	0.1057	0.0668	0.0530	0.0498

MILD CHANGES TYPICAL OF RADIUM DEPOSITION

3-594	1	0.0180	0.0169	0.0133	0.0101	0.0063	0.0040	0.0031	0.0030
3-529	3	0.0434	0.0417	0.0358	0.0293	0.0197	0.0128	0.0102	0.0096
3-502	1	0.0517	0.0500	0.0437	0.0386	0.0252	0.0166	0.0132	0.0124
3-588	3	0.1064	0.1031	0.0907	0.0764	0.0531	0.0351	0.0280	0.0264
3-462	4	0.1166	0.1130	0.0995	0.0841	0.0586	0.0387	0.0309	0.0292
3-530	3	0.1838	0.1755	0.1467	0.1172	0.0764	0.0490	0.0389	0.0366
3-510	3	0.3121	0.2957	0.2405	0.1874	0.1192	0.0758	0.0601	0.0566
3-428	3	0.3149	0.2907	0.2177	0.1590	0.0960	0.0601	0.0476	0.0448
3-433	3	0.4168	0.3980	0.3326	0.2659	0.1733	0.1112	0.0884	0.0826
3-445	5	0.4559	0.4412	0.3874	0.3259	0.2260	0.1488	0.1189	0.1121

MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION

3-558	1	0.0812	0.0708	0.0458	0.0309	0.0178	0.0111	0.0087	0.0082
3-499	2	0.1031	0.0969	0.0771	0.0589	0.0368	0.0232	0.0184	0.0173
9- 4	1	0.1237	0.1215	0.1125	0.1009	0.0776	0.0544	0.0442	0.0418
3-423	4	0.1948	0.1876	0.1618	0.1335	0.0903	0.0587	0.0468	0.0441
3-405	4	0.2194	0.2097	0.1761	0.1414	0.0925	0.0595	0.0473	0.0445
3-586	5	0.3807	0.3625	0.2999	0.2374	0.1533	0.0979	0.0778	0.0732
3-459	4	0.4575	0.4262	0.3282	0.2446	0.1498	0.0941	0.0745	0.0701
3-484	3	0.4751	0.4593	0.4017	0.3364	0.2319	0.1523	0.1216	0.1146
3-416	5	0.5477	0.5178	0.4182	0.3240	0.2047	0.1299	0.1031	0.0972

ADVANCED, NON-MALIGNANT CHANGES TYPICAL OF RADIUM DEPOSITION

3-726	1	0.1727	0.1676	0.1484	0.1261	0.0887	0.0588	0.0471	0.0444
3-404	5	0.2602	0.2509	0.2175	0.1804	0.1228	0.0801	0.0639	0.0602
3-551	5	0.3505	0.3399	0.3005	0.2548	0.1787	0.1183	0.0947	0.0893
3-473	2	0.3842	0.3700	0.3192	0.2634	0.1781	0.1159	0.0924	0.0871
3-449	2	0.3901	0.3780	0.3330	0.2813	0.1962	0.1296	0.1036	0.0977
3-431	3	0.4117	0.3980	0.3481	0.2915	0.2010	0.1319	0.1054	0.0993
3-528	1	0.4434	0.4302	0.3810	0.3237	0.2276	0.1509	0.1208	0.1139
3-571	5	0.5691	0.5181	0.3727	0.2654	0.1576	0.0983	0.0777	0.0731
3-540	4	0.6401	0.6165	0.5316	0.4387	0.2965	0.1930	0.1539	0.1449
3-554	1	0.7882	0.7466	0.6072	0.4732	0.3007	0.1912	0.1518	0.1428

MALIGNANT CHANGES ATTRIBUTABLE TO RADIUM DEPOSITION

3-417	5	0.2915	0.2750	0.2205	0.1697	0.1066	0.0675	0.0536	0.0504
3-455	1	0.3405	0.3203	0.2546	0.1946	0.1215	0.0769	0.0609	0.0573
3-402	5	0.3791	0.3652	0.3149	0.2598	0.1757	0.1143	0.0911	0.0858
3-407	1	0.4168	0.4017	0.3474	0.2874	0.1950	0.1271	0.1014	0.0955
3-649	1	0.4559	0.4309	0.3480	0.2695	0.1703	0.1081	0.0858	0.0807
3-429	6	0.6061	0.5833	0.5017	0.4127	0.2780	0.1806	0.1440	0.1357
3-619	1	0.7844	0.7237	0.5413	0.3952	0.2384	0.1493	0.1182	0.1112
3-401	2	0.8134	0.7776	0.6528	0.5240	0.3431	0.2204	0.1753	0.1650
3-648	1	2.1244	2.0538	1.7954	1.5033	1.0359	0.6800	0.5432	0.5118
3-671	1	2.8201	2.3862	1.4454	0.9528	0.5446	0.3368	0.2661	0.2502
3-657	1	3.1002	3.0064	2.6582	2.2544	1.5812	1.0468	0.8379	0.7897

TABLE 5F

MEAN DAILY DOSE RATE TO SKELETON IN RADS. COMPUTED BY THREE EXPONENTIALS

LISTED BY LATEST RADIOLOGICAL OR CLINICAL DIAGNOSIS AND BY INCREASING VALUES ONE DAY AFTER CESSATION OF INGESTION

PT. NO.	N	ELAPSED TIME IN DAYS 1	10	100	ELAPSED TIME IN YEARS 1	5	20	40	48
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.									
3-411	1	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000
3-443	1	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000
3-482	1	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000
3-600	1	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000
3-566	1	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0000	0.0000
3-436	1	0.0002	0.0002	0.0002	0.0002	0.0001	0.0001	0.0000	0.0000
3-485	1	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	0.0000	0.0000
3-574	1	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	0.0000	0.0000
3-598	1	0.0003	0.0003	0.0002	0.0002	0.0002	0.0001	0.0000	0.0000
3-595	1	0.0004	0.0004	0.0003	0.0002	0.0002	0.0001	0.0001	0.0000
3-475	1	0.0004	0.0004	0.0003	0.0003	0.0003	0.0001	0.0001	0.0000
3-575	1	0.0005	0.0004	0.0002	0.0002	0.0002	0.0001	0.0000	0.0000
3-570	1	0.0005	0.0004	0.0003	0.0003	0.0002	0.0001	0.0001	0.0000
3-464	1	0.0005	0.0004	0.0003	0.0003	0.0003	0.0001	0.0001	0.0000
3-492	1	0.0005	0.0005	0.0004	0.0004	0.0004	0.0002	0.0001	0.0001
3-457	1	0.0005	0.0005	0.0005	0.0005	0.0004	0.0002	0.0001	0.0001
3-628	1	0.0008	0.0006	0.0004	0.0004	0.0003	0.0002	0.0001	0.0001
3-836	1	0.0010	0.0008	0.0004	0.0004	0.0004	0.0002	0.0001	0.0001
3-403	1	0.0010	0.0010	0.0010	0.0009	0.0008	0.0005	0.0002	0.0001
3-480	1	0.0011	0.0008	0.0003	0.0003	0.0003	0.0001	0.0001	0.0000
3-476	1	0.0012	0.0008	0.0003	0.0002	0.0002	0.0001	0.0001	0.0000
3-605	1	0.0012	0.0011	0.0009	0.0009	0.0008	0.0004	0.0002	0.0001
3-458	1	0.0012	0.0011	0.0011	0.0011	0.0009	0.0005	0.0002	0.0001
3-418	1	0.0012	0.0011	0.0011	0.0011	0.0009	0.0005	0.0002	0.0001
3-518	1	0.0012	0.0012	0.0011	0.0011	0.0009	0.0005	0.0002	0.0001
3-495	1	0.0013	0.0009	0.0004	0.0003	0.0003	0.0002	0.0001	0.0000
3-801	1	0.0013	0.0009	0.0004	0.0004	0.0003	0.0002	0.0001	0.0001
3-525	1	0.0013	0.0013	0.0013	0.0012	0.0011	0.0006	0.0002	0.0001
3-435	1	0.0014	0.0013	0.0011	0.0010	0.0009	0.0005	0.0002	0.0002
3-534	1	0.0016	0.0013	0.0008	0.0008	0.0007	0.0004	0.0002	0.0001
3-527	1	0.0016	0.0014	0.0012	0.0012	0.0011	0.0006	0.0003	0.0002
3-621	1	0.0018	0.0017	0.0015	0.0015	0.0013	0.0007	0.0003	0.0002
3-562	1	0.0018	0.0017	0.0016	0.0016	0.0014	0.0008	0.0003	0.0002
3-415	1	0.0018	0.0018	0.0017	0.0017	0.0015	0.0008	0.0003	0.0002
3-481	1	0.0020	0.0019	0.0018	0.0018	0.0015	0.0008	0.0003	0.0002
3-406	1	0.0020	0.0020	0.0019	0.0018	0.0016	0.0009	0.0004	0.0002
3-494	1	0.0021	0.0017	0.0011	0.0010	0.0010	0.0005	0.0002	0.0002
3-556	1	0.0021	0.0019	0.0016	0.0016	0.0014	0.0008	0.0003	0.0002
3-506	1	0.0022	0.0021	0.0020	0.0020	0.0017	0.0009	0.0004	0.0003
3-465	1	0.0023	0.0016	0.0006	0.0005	0.0005	0.0003	0.0001	0.0001
3-640	1	0.0023	0.0020	0.0015	0.0014	0.0013	0.0007	0.0003	0.0002
3-434	2	0.0023	0.0021	0.0018	0.0018	0.0016	0.0009	0.0004	0.0003
3-620	1	0.0023	0.0022	0.0020	0.0020	0.0018	0.0010	0.0004	0.0003

3-493	1	0.0025	0.0023	0.0021	0.0021	0.0019	0.0010	0.0004	0.0003
3-496	1	0.0026	0.0018	0.0007	0.0006	0.0005	0.0003	0.0001	0.0001
3-565	1	0.0029	0.0028	0.0027	0.0027	0.0023	0.0012	0.0005	0.0003
3-467	1	0.0031	0.0030	0.0029	0.0028	0.0025	0.0013	0.0006	0.0004
3-456	1	0.0031	0.0030	0.0029	0.0028	0.0025	0.0014	0.0006	0.0004
3-447	1	0.0033	0.0020	0.0007	0.0005	0.0005	0.0003	0.0001	0.0001
3-555	1	0.0033	0.0030	0.0025	0.0024	0.0022	0.0012	0.0005	0.0004
3-580	1	0.0037	0.0022	0.0008	0.0006	0.0006	0.0003	0.0001	0.0001
3-544	1	0.0037	0.0029	0.0017	0.0015	0.0014	0.0008	0.0003	0.0002
3-576	1	0.0038	0.0031	0.0020	0.0019	0.0017	0.0010	0.0004	0.0003
3-466	1	0.0043	0.0030	0.0013	0.0011	0.0010	0.0006	0.0002	0.0002
3-613	1	0.0043	0.0036	0.0024	0.0022	0.0021	0.0012	0.0005	0.0003
3-471	1	0.0043	0.0038	0.0031	0.0031	0.0028	0.0016	0.0007	0.0004
9- 46	1	0.0051	0.0047	0.0039	0.0038	0.0035	0.0019	0.0008	0.0006
3-674	1	0.0052	0.0043	0.0027	0.0025	0.0024	0.0013	0.0006	0.0004
3-469	1	0.0056	0.0045	0.0028	0.0026	0.0024	0.0013	0.0006	0.0004
3-420	1	0.0056	0.0053	0.0047	0.0046	0.0042	0.0023	0.0010	0.0007
3-478	1	0.0060	0.0042	0.0017	0.0013	0.0013	0.0007	0.0003	0.0002
3-521	1	0.0062	0.0049	0.0029	0.0026	0.0024	0.0014	0.0006	0.0004
3-618	1	0.0064	0.0054	0.0037	0.0035	0.0032	0.0018	0.0008	0.0005
3-550	1	0.0065	0.0059	0.0049	0.0048	0.0044	0.0025	0.0010	0.0007
3-599	1	0.0068	0.0054	0.0031	0.0028	0.0026	0.0015	0.0006	0.0004
3-515	1	0.0069	0.0054	0.0031	0.0029	0.0027	0.0015	0.0006	0.0004
3-501	1	0.0071	0.0049	0.0020	0.0016	0.0015	0.0008	0.0004	0.0003
3-547	1	0.0071	0.0064	0.0054	0.0053	0.0048	0.0027	0.0011	0.0008
3-509	1	0.0076	0.0075	0.0073	0.0071	0.0061	0.0032	0.0013	0.0009
3-587	1	0.0084	0.0066	0.0038	0.0035	0.0032	0.0018	0.0008	0.0005
3-468	1	0.0089	0.0082	0.0070	0.0068	0.0062	0.0035	0.0015	0.0010
3-461	1	0.0092	0.0061	0.0023	0.0018	0.0017	0.0009	0.0004	0.0003
3-460	1	0.0095	0.0073	0.0038	0.0033	0.0031	0.0018	0.0007	0.0005
3-531	1	0.0100	0.0096	0.0090	0.0088	0.0078	0.0043	0.0018	0.0012
3-533	1	0.0101	0.0079	0.0046	0.0042	0.0039	0.0022	0.0009	0.0007
3-578	1	0.0101	0.0081	0.0049	0.0046	0.0042	0.0024	0.0010	0.0007
3-512	1	0.0102	0.0074	0.0034	0.0028	0.0027	0.0015	0.0006	0.0004
9- 1	1	0.0104	0.0085	0.0057	0.0053	0.0049	0.0028	0.0012	0.0008
3-539	1	0.0107	0.0085	0.0049	0.0045	0.0042	0.0023	0.0010	0.0007
3-686	1	0.0118	0.0110	0.0098	0.0096	0.0087	0.0048	0.0020	0.0014
3-442	1	0.0120	0.0088	0.0040	0.0034	0.0031	0.0018	0.0008	0.0005
3-477	1	0.0122	0.0084	0.0034	0.0027	0.0025	0.0014	0.0006	0.0004
3-596	1	0.0125	0.0086	0.0035	0.0028	0.0026	0.0015	0.0006	0.0004
3-516	1	0.0125	0.0096	0.0052	0.0047	0.0044	0.0025	0.0010	0.0007
3-508	1	0.0129	0.0089	0.0036	0.0029	0.0027	0.0015	0.0006	0.0004
3-422	1	0.0138	0.0114	0.0076	0.0071	0.0066	0.0037	0.0016	0.0011
3-559	1	0.0139	0.0108	0.0058	0.0052	0.0049	0.0028	0.0012	0.0008
3-523	1	0.0144	0.0115	0.0070	0.0065	0.0061	0.0034	0.0014	0.0010
3-504	1	0.0144	0.0116	0.0071	0.0066	0.0061	0.0034	0.0015	0.0010
3-573	1	0.0145	0.0120	0.0080	0.0075	0.0070	0.0039	0.0017	0.0012
3-432	1	0.0154	0.0139	0.0117	0.0114	0.0104	0.0058	0.0024	0.0017
3-581	1	0.0162	0.0115	0.0049	0.0040	0.0038	0.0021	0.0009	0.0006
3-450	1	0.0162	0.0122	0.0061	0.0053	0.0050	0.0028	0.0012	0.0008
3-563	1	0.0168	0.0119	0.0051	0.0042	0.0039	0.0022	0.0009	0.0007
3-507	1	0.0178	0.0117	0.0044	0.0035	0.0032	0.0018	0.0008	0.0005
3-567	1	0.0178	0.0161	0.0135	0.0131	0.0120	0.0067	0.0028	0.0020
3-427	2	0.0197	0.0160	0.0102	0.0096	0.0089	0.0050	0.0021	0.0014
3-410	1	0.0212	0.0192	0.0160	0.0156	0.0142	0.0080	0.0034	0.0024
3-474	1	0.0217	0.0149	0.0060	0.0048	0.0045	0.0026	0.0011	0.0008

3-564	1	0.0220	0.0122	0.0040	0.0029	0.0028	0.0016	0.0007	0.0004
3-437	1	0.0220	0.0187	0.0135	0.0129	0.0119	0.0067	0.0028	0.0020
3-452	2	0.0224	0.0177	0.0103	0.0094	0.0087	0.0049	0.0021	0.0015
9- 29	1	0.0230	0.0168	0.0076	0.0064	0.0060	0.0034	0.0014	0.0010
3-593	1	0.0236	0.0163	0.0066	0.0053	0.0050	0.0028	0.0012	0.0008
3-645	1	0.0238	0.0207	0.0158	0.0153	0.0140	0.0079	0.0033	0.0023
3-444	2	0.0247	0.0170	0.0068	0.0055	0.0051	0.0029	0.0012	0.0009
3-553	1	0.0260	0.0189	0.0086	0.0072	0.0068	0.0038	0.0016	0.0011
3-532	1	0.0265	0.0250	0.0225	0.0220	0.0198	0.0110	0.0046	0.0032
3-690	1	0.0271	0.0243	0.0199	0.0193	0.0176	0.0099	0.0042	0.0029
3-441	1	0.0283	0.0230	0.0148	0.0138	0.0128	0.0072	0.0031	0.0020
3-687	1	0.0300	0.0244	0.0157	0.0146	0.0136	0.0077	0.0032	0.0023
9- 72	1	0.0300	0.0270	0.0222	0.0216	0.0198	0.0111	0.0047	0.0033
3-542	1	0.0329	0.0240	0.0109	0.0092	0.0086	0.0049	0.0021	0.0014
3-579	1	0.0333	0.0242	0.0110	0.0093	0.0087	0.0049	0.0021	0.0014
3-778	1	0.0334	0.0302	0.0253	0.0246	0.0224	0.0126	0.0053	0.0037
3-549	1	0.0356	0.0286	0.0175	0.0162	0.0150	0.0085	0.0036	0.0025
9- 74	1	0.0382	0.0338	0.0268	0.0260	0.0238	0.0134	0.0057	0.0040
3-446	3	0.0398	0.0373	0.0335	0.0328	0.0295	0.0163	0.0068	0.0048
3-489	1	0.0427	0.0376	0.0295	0.0286	0.0262	0.0147	0.0062	0.0044
3-585	3	0.0427	0.0407	0.0375	0.0367	0.0328	0.0181	0.0075	0.0052
3-536	1	0.0452	0.0304	0.0117	0.0093	0.0087	0.0049	0.0021	0.0014
3-479	1	0.0467	0.0368	0.0213	0.0194	0.0181	0.0102	0.0043	0.0030
3-503	1	0.0481	0.0438	0.0371	0.0362	0.0329	0.0184	0.0078	0.0054
3-569	1	0.0490	0.0460	0.0412	0.0404	0.0363	0.0202	0.0085	0.0059
3-689	1	0.0497	0.0457	0.0395	0.0386	0.0350	0.0195	0.0082	0.0058
3-679	1	0.0574	0.0403	0.0167	0.0136	0.0128	0.0072	0.0031	0.0022
3-589	1	0.0588	0.0454	0.0246	0.0221	0.0206	0.0116	0.0049	0.0034
3-408	1	0.0595	0.0523	0.0411	0.0398	0.0365	0.0205	0.0087	0.0061
3-552	1	0.0612	0.0553	0.0459	0.0447	0.0408	0.0228	0.0096	0.0068
3-426	1	0.0807	0.0714	0.0567	0.0550	0.0504	0.0283	0.0119	0.0084
3-561	1	0.0835	0.0577	0.0233	0.0187	0.0176	0.0099	0.0042	0.0030
3-513	3	0.0847	0.0668	0.0387	0.0353	0.0329	0.0185	0.0078	0.0055
3-597	1	0.0855	0.0696	0.0446	0.0417	0.0387	0.0218	0.0092	0.0065
3-546	1	0.0893	0.0651	0.0295	0.0249	0.0233	0.0132	0.0056	0.0039
3-685	4	0.0897	0.0780	0.0596	0.0575	0.0528	0.0297	0.0125	0.0088
3-590	3	0.0921	0.0726	0.0421	0.0384	0.0358	0.0202	0.0085	0.0060
3-522	3	0.0945	0.0803	0.0579	0.0554	0.0512	0.0288	0.0122	0.0085
3-519	1	0.1199	0.0829	0.0334	0.0269	0.0252	0.0143	0.0061	0.0043
3-607	1	0.1368	0.1097	0.0671	0.0621	0.0577	0.0326	0.0138	0.0097
3-491	1	0.1401	0.0682	0.0214	0.0153	0.0144	0.0081	0.0035	0.0024
3-697	1	0.1506	0.1225	0.0782	0.0731	0.0679	0.0383	0.0162	0.0114
3-548	1	0.1794	0.1351	0.0674	0.0589	0.0550	0.0311	0.0132	0.0093
3-592	3	0.1809	0.1358	0.0672	0.0585	0.0547	0.0309	0.0131	0.0092
3-612	2	0.1907	0.1811	0.1658	0.1623	0.1451	0.0803	0.0335	0.0234
3-535	3	0.2411	0.1862	0.1009	0.0904	0.0844	0.0476	0.0202	0.0142
3-486	2	0.2421	0.1909	0.1107	0.1010	0.0941	0.0531	0.0225	0.0158

MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION.

3-483	1	0.0003	0.0003	0.0003	0.0003	0.0003	0.0001	0.0001	0.0000
3-526	1	0.0005	0.0004	0.0003	0.0003	0.0002	0.0001	0.0001	0.0000
3-500	1	0.0014	0.0009	0.0004	0.0003	0.0003	0.0002	0.0001	0.0000
3-591	1	0.0020	0.0020	0.0020	0.0019	0.0016	0.0008	0.0003	0.0002
3-604	1	0.0036	0.0035	0.0033	0.0032	0.0029	0.0016	0.0006	0.0004
3-490	1	0.0085	0.0079	0.0071	0.0070	0.0063	0.0035	0.0015	0.0010
3-615	1	0.0092	0.0083	0.0070	0.0068	0.0062	0.0035	0.0015	0.0010
9- 7	1	0.0172	0.0156	0.0130	0.0127	0.0116	0.00=5	0.0027	0.0019
9- 2	1	0.0288	0.0222	0.0120	0.0108	0.0101	0.0057	0.0024	0.0017
3-577	1	0.0339	0.0307	0.0257	0.0250	0.0228	0.0128	0.0054	0.0038
3-568	1	0.0408	0.0383	0.0344	0.0336	0.0303	0.0168	0.0071	0.0049
3-524	1	0.0419	0.0330	0.0191	0.0175	0.0163	0.0092	0.0039	0.0027
3-572	1	0.0506	0.0406	0.0248	0.0230	0.0214	0.0120	0.0051	0.0036
3-614	1	0.0656	0.0562	0.0415	0.0398	0.0367	0.0206	0.0087	0.0061
3-505	3	0.0962	0.0818	0.0591	0.0565	0.0522	0.0294	0.0124	0.0087
3-520	3	0.1003	0.0792	0.0459	0.0418	0.0390	0.0220	0.0093	0.0065
3-412	4	0.1025	0.0945	0.0819	0.0800	0.0725	0.0404	0.0170	0.0119
3-727	2	0.1158	0.1063	0.0914	0.0892	0.0810	0.0452	0.0190	0.0133
3-424	1	0.1183	0.1091	0.0946	0.0925	0.0838	0.0468	0.0197	0.0138
3-488	1	0.1208	0.0951	0.0548	0.0409	0.0465	0.0263	0.0111	0.0078
9- 31	1	0.1245	0.1202	0.1129	0.1104	0.0977	0.0535	0.0222	0.0154
3-419	4	0.3306	0.2833	0.2091	0.2007	0.1850	0.1041	0.0440	0.0309

MILD CHANGES TYPICAL OF RADIUM DEPOSITION

3-594	1	0.0214	0.0182	0.0131	0.0125	0.0116	0.0065	0.0028	0.0019
3-529	3	0.0432	0.0579	0.0495	0.0484	0.0439	0.0245	0.0103	0.0072
3-502	1	0.0708	0.0659	0.0581	0.0549	0.0514	0.0286	0.0120	0.0084
3-588	3	0.1392	0.1302	0.1158	0.1133	0.1021	0.0568	0.0238	0.0166
3-462	4	0.1475	0.1381	0.1232	0.1205	0.1086	0.0603	0.0253	0.0177
3-530	3	0.2362	0.2116	0.1731	0.1683	0.1539	0.0862	0.0364	0.0258
3-510	3	0.3705	0.3241	0.2513	0.2428	0.2231	0.1253	0.0530	0.0371
3-428	3	0.3724	0.3032	0.1942	0.1815	0.1685	0.0950	0.0403	0.0283
3-433	3	0.5033	0.4509	0.3688	0.3587	0.3278	0.1837	0.0775	0.0543
3-445	5	0.6138	0.5731	0.5086	0.4975	0.4488	0.2497	0.1049	0.0733

MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION

3-499	2	0.1207	0.1034	0.0763	0.0733	0.0675	0.0380	0.0161	0.0113
3-558	1	0.1210	0.0882	0.0399	0.0337	0.0316	0.0178	0.0076	0.0053
3-423	4	0.2330	0.2145	0.1852	0.1809	0.1641	0.0915	0.0385	0.0270
9- 4	1	0.2397	0.2322	0.2195	0.2145	0.1891	0.1033	0.0427	0.0296
3-405	4	0.2526	0.2272	0.1873	0.1823	0.1665	0.0932	0.0393	0.0275
3-586	5	0.4668	0.4145	0.3326	0.3228	0.2957	0.1658	0.0700	0.0491
3-459	4	0.5696	0.4747	0.3257	0.3086	0.2857	0.1609	0.0681	0.0479
3-416	5	0.6651	0.5781	0.4417	0.4260	0.3919	0.2202	0.0931	0.0654
3-484	3	0.6882	0.6406	0.5651	0.5528	0.4992	0.2780	0.1168	0.0817

ADVANCED, NON-MALIGNANT CHANGES TYPICAL OF RADIUM DEPOSITION

3-726	1	0.2923	0.2748	0.2468	0.2416	0.2172	0.1206	0.0506	0.0354
3-404	5	0.3463	0.3200	0.2786	0.2723	0.2466	0.1375	0.0578	0.0405
3-473	2	0.4779	0.4399	0.3800	0.3712	0.3367	0.1879	0.0791	0.0554
3-551	5	0.4831	0.4536	0.4066	0.3979	0.3580	0.1989	0.0834	0.0583
3-449	2	0.5044	0.4723	0.4213	0.4123	0.3714	0.2065	0.0867	0.0606
3-431	3	0.5290	0.4924	0.4344	0.4249	0.3838	0.2137	0.0898	0.0628
3-528	1	0.5456	0.5128	0.4607	0.4509	0.4055	0.2252	0.0945	0.0660
3-571	5	0.7770	0.6127	0.3551	0.3242	0.3019	0.1704	0.0722	0.0508
3-540	4	0.8599	0.7913	0.6833	0.6676	0.6055	0.3379	0.1423	0.0997
3-554	1	0.9080	0.7941	0.6154	0.5947	0.5464	0.3069	0.1298	0.0911

MALIGNANT CHANGES ATTRIBUTABLE TO RADIUM DEPOSITION

3-619	1	0.0551	0.8581	0.5483	0.5122	0.4755	0.2681	0.1136	0.0799
3-417	5	0.3468	0.2995	0.2252	0.2167	0.1996	0.1122	0.0474	0.0333
3-649	1	0.3820	0.3320	0.2535	0.2445	0.2249	0.1264	0.0534	0.0375
3-455	1	0.3828	0.3280	0.2421	0.2323	0.2142	0.1205	0.0510	0.0358
3-407	1	0.4538	0.4185	0.3629	0.3546	0.3214	0.1793	0.0755	0.0529
3-402	5	0.4686	0.4313	0.3724	0.3638	0.3300	0.1842	0.0775	0.0543
3-429	6	0.7946	0.7295	0.6271	0.6125	0.5559	0.3104	0.1307	0.0915
3-401	2	0.8981	0.8077	0.6659	0.6480	0.5917	0.3315	0.1399	0.1004
3-671	1	1.6974	1.5556	1.0311	0.8296	0.7780	0.4401	0.1868	0.1314
3-657	1	2.0997	1.9713	1.7670	1.7292	1.5560	0.8644	0.3627	0.2535
3-648	1	2.2920	2.1328	1.8809	1.8396	1.6617	0.9253	0.3890	0.2722

TABLE 6A

TOTAL DOSE TO SKELETON IN RADS. COMPUTED BY POWER FUNCTION

LISTED FOR EACH MEASUREMENT FOR EACH PATIENT

PT. NO.	DAYS TO MEAS.	ELAPSED TIME SINCE CESSATION OF INGESTION							
		1 DAY	1 YR	5 YR	10 YR	20 YR	30 YR	40 YR	48 YR
3-401	11673	347.3	573.6	1178.9	1742.8	2646.0	3405.6	4084.3	4587.2
3-401	12888	338.2	558.7	1148.2	1697.3	2577.0	3316.8	3977.8	4467.6
3-402	11546	206.6	309.8	597.5	869.0	1309.0	1679.3	2010.6	2256.3
3-402	12365	207.3	311.0	599.7	873.2	1313.9	1685.6	2018.1	2264.7
3-402	13215	212.0	318.0	613.2	892.8	1343.4	1723.5	2063.6	2315.7
3-402	13215	258.9	388.3	748.8	1090.1	1640.3	2104.4	2519.6	2827.4
3-402	14473	200.7	301.0	580.5	845.1	1271.6	1631.4	1953.3	2191.9
3-403	5130	2.3	2.7	3.9	5.2	7.3	9.1	10.8	12.0
3-404	11582	176.1	259.3	493.2	715.5	1074.3	1377.1	1648.1	1849.1
3-404	13423	158.5	233.5	444.1	644.3	967.3	1240.1	1484.1	1665.1
3-404	13423	145.0	213.5	406.1	589.1	884.5	1133.9	1357.0	1522.4
3-404	14870	149.4	220.1	418.6	607.2	911.7	1168.7	1398.7	1569.3
3-404	14870	164.8	242.7	461.7	669.7	1005.5	1289.0	1542.7	1730.8
3-405	13423	94.1	155.4	319.3	472.1	716.7	922.4	1106.3	1242.4
3-405	11582	93.3	154.1	316.6	468.0	710.4	914.4	1096.6	1231.6
3-405	12323	84.2	139.0	285.7	422.3	641.1	825.2	989.6	1111.4
3-405	13423	98.7	162.9	334.7	494.7	751.1	966.7	1159.4	1302.1
3-406	4856	4.8	5.5	7.9	10.4	14.6	18.2	21.4	23.9
3-407	11582	246.4	366.1	701.2	1019.1	1531.8	1964.5	2351.6	2638.6
3-408	11589	19.2	34.7	74.8	111.8	170.7	220.1	264.3	297.0
3-410	11870	9.1	14.5	29.4	43.2	65.5	84.2	101.0	113.4
3-411	5570	0.4	0.4	0.6	0.7	1.0	1.2	1.4	1.6
3-412	11870	58.6	87.1	166.9	242.7	364.8	467.8	560.0	628.4
3-412	13958	46.4	69.0	132.2	192.2	288.9	370.6	443.6	497.7
3-412	13958	39.5	58.8	112.7	163.9	246.3	315.9	378.1	424.3
3-412	14623	41.1	61.1	117.2	170.3	256.1	328.4	393.1	441.1
3-415	4505	6.3	6.9	9.0	11.3	15.2	18.6	21.7	24.0
3-416	11688	159.2	301.8	664.4	996.6	1525.4	1969.1	2365.0	2622.4
3-416	12064	150.5	285.2	627.9	941.8	1441.5	1860.8	2234.9	2512.0
3-416	13510	154.5	292.8	644.5	966.7	1479.8	1910.1	2294.2	2578.6
3-416	14969	148.6	281.7	620.0	930.0	1423.5	1837.5	2207.0	2480.6
3-416	14969	179.9	341.1	750.9	1126.2	1723.9	2225.2	2672.7	3004.0
3-417	11718	95.1	185.0	411.9	619.1	948.7	1225.1	1471.8	1654.4
3-417	13365	85.9	167.3	372.3	559.6	857.6	1107.4	1330.4	1495.4
3-417	14028	70.0	136.2	303.1	455.7	698.3	901.8	1083.3	1217.7
3-417	14028	68.9	134.2	298.6	448.9	687.9	888.4	1067.2	1199.6
3-417	14028	74.9	145.9	324.7	488.0	747.9	965.7	1160.2	1304.1
3-418	7036	2.8	3.1	4.3	5.5	7.6	9.4	11.1	12.3
3-419	11598	75.1	150.6	339.1	510.8	783.8	1012.6	1216.8	1367.9
3-419	12254	79.0	158.6	357.1	538.0	825.5	1066.5	1281.5	1440.6
3-419	13425	70.6	141.6	318.8	480.3	736.9	952.0	1144.0	1286.0
3-419	13425	73.4	147.2	331.5	499.4	766.3	989.9	1189.5	1337.3
3-420	11603	3.7	5.2	9.4	13.5	20.0	25.6	30.6	34.3
3-422	11603	2.3	5.5	13.0	19.8	30.5	39.5	47.5	53.4

3-423	11603	132.0	197.9	381.7	555.7	836.2	1072.8	1284.4	1441.4
3-423	12364	104.6	156.8	302.4	440.3	662.5	850.0	1017.7	1142.0
3-423	13418	101.3	151.9	293.0	426.5	641.8	823.4	985.8	1106.3
3-423	13418	108.4	162.6	313.7	456.7	687.1	881.6	1055.5	1184.4
3-424	11604	64.1	95.3	182.5	265.2	398.6	511.2	611.9	686.6
3-426	11612	27.4	48.5	103.5	154.3	235.3	303.4	364.2	409.2
3-427	11617	3.2	8.0	19.2	29.3	45.2	58.5	70.3	79.1
3-427	13422	2.2	5.5	13.3	20.3	31.3	40.5	48.8	54.9
3-428	11617	53.4	132.0	317.0	483.0	745.6	965.3	1161.1	1306.1
3-428	13493	47.6	117.7	282.6	430.6	664.7	860.6	1035.2	1164.4
3-428	13493	47.8	118.3	284.0	432.8	668.1	864.9	1040.4	1170.3
3-429	11617	354.5	537.0	1043.3	1521.8	2292.4	2942.2	3523.4	3954.3
3-429	13422	310.5	470.4	913.9	1333.1	2008.1	2577.3	3086.4	3463.9
3-429	13493	330.9	501.2	973.7	1420.3	2139.5	2745.9	3288.3	3641.4
3-429	13493	322.8	488.9	949.9	1385.5	2087.1	2678.7	3207.8	3600.1
3-429	14884	318.9	483.1	938.6	1369.1	2062.3	2646.9	3169.8	3557.4
3-429	14884	375.2	568.4	1104.3	1610.7	2426.3	3114.0	3729.1	4185.2
3-431	11650	291.1	415.6	770.6	1110.2	1660.0	2124.7	2540.8	2849.4
3-431	13721	284.1	405.5	751.9	1083.3	1619.8	2073.2	2479.2	2780.4
3-431	13721	269.7	385.0	713.9	1028.6	1538.0	1968.5	2354.0	2640.0
3-432	11622	6.7	10.8	21.8	32.1	48.7	62.6	75.1	84.3
3-433	11622	185.5	311.2	645.2	955.7	1452.6	1870.4	2243.6	2520.2
3-433	14157	160.8	269.7	559.2	828.3	1259.0	1621.1	1944.6	2184.2
3-433	14157	157.3	263.9	547.2	810.6	1232.1	1586.4	1903.0	2137.4
3-434	5277	1.8	2.8	5.4	7.8	11.8	15.1	18.1	20.3
3-434	6160	1.9	2.9	5.7	8.3	12.6	16.1	19.3	21.7
3-435	7438	0.9	1.4	2.8	4.1	6.3	8.1	9.7	10.9
3-436	7073	0.4	0.5	0.6	0.8	1.1	1.4	1.6	1.8
3-437	11215	5.2	10.8	24.7	37.3	57.3	74.1	89.0	100.1
3-441	11639	4.2	10.4	25.0	38.1	58.9	76.2	91.7	103.1
3-442	12101	0.5	2.2	5.7	8.9	13.8	17.9	21.5	24.2
3-443	5957	0.2	0.3	0.5	0.6	0.9	1.1	1.4	1.5
3-444	11709	0.8	4.1	10.8	16.7	26.0	33.8	40.7	45.8
3-444	13416	0.5	2.8	7.4	11.4	17.7	23.0	27.7	31.1
3-445	11709	326.3	459.4	841.5	1208.4	1803.0	2306.0	2756.4	3090.6
3-445	12366	327.7	461.3	845.1	1213.5	1810.7	2315.8	2768.2	3103.8
3-445	13928	308.4	434.1	795.3	1142.0	1703.9	2179.2	2604.9	2920.7
3-445	13928	377.7	531.7	974.1	1398.8	2087.0	2669.2	3190.7	3577.5
3-445	14907	304.9	429.2	786.3	1129.0	1684.6	2154.5	2575.4	2887.6
3-446	11709	28.0	38.4	68.7	98.1	145.7	186.1	222.2	249.1
3-446	14914	18.3	25.2	45.1	64.3	95.5	122.0	145.7	163.3
3-446	14914	21.0	28.8	51.5	73.5	109.2	139.4	166.5	186.7
3-447	12232	0.0	0.3	0.9	1.4	2.1	2.8	3.3	3.7
3-449	11841	336.9	468.2	847.8	1213.4	1806.7	2308.9	2758.8	3092.7
3-449	14093	255.5	355.1	643.1	920.4	1370.4	1751.4	2092.6	2345.9
3-450	12298	1.0	3.5	9.0	13.8	21.4	27.7	33.4	37.5
3-452	11841	2.7	7.6	18.7	28.6	44.3	57.4	69.1	77.7
3-452	14919	1.5	4.4	10.8	16.6	25.7	33.3	40.0	45.0
3-455	12767	85.6	171.8	386.9	582.9	894.4	1155.5	1388.4	1560.9
3-456	2577	7.2	8.5	12.6	16.8	23.7	29.8	35.2	39.2
3-457	5499	1.3	1.5	2.1	2.8	3.9	4.8	5.7	6.3
3-458	1	3.0	3.3	4.5	5.7	7.8	9.6	11.3	12.5
3-459	12111	101.6	227.9	533.0	808.4	1245.0	1610.4	1936.3	2177.6
3-459	14134	87.6	196.5	459.4	696.9	1073.2	1388.3	1669.2	1877.2
3-459	14134	88.9	199.4	466.3	707.3	1089.3	1409.1	1694.2	1905.3
3-459	14519	77.5	173.9	406.7	616.8	950.0	1228.9	1477.5	1661.6

3-460	12676	0.7	2.2	5.5	8.4	13.0	16.9	20.3	22.8
3-461	13133	0.2	1.0	2.7	4.2	6.6	8.5	10.3	11.6
3-462	11900	100.6	139.9	253.3	362.5	539.8	689.8	824.2	924.0
3-462	12110	100.1	139.1	252.0	360.6	536.9	686.2	819.9	919.1
3-462	13426	80.9	112.5	203.7	291.6	434.2	554.8	663.0	743.2
3-462	13426	72.6	100.9	182.6	261.4	389.2	497.4	594.3	666.2
3-464	12452	0.1	0.2	0.5	0.7	1.1	1.4	1.7	1.9
3-465	12025	0.1	0.3	0.9	1.4	2.1	2.7	3.3	3.7
3-466	12390	0.2	0.7	1.8	2.8	4.3	5.5	6.7	7.5
3-467	8752	5.0	5.9	8.7	11.6	16.4	20.6	24.4	27.2
3-468	11036	4.7	7.2	14.0	20.5	30.9	39.7	47.5	53.4
3-469	11961	0.7	1.8	4.5	6.9	10.6	13.7	16.5	18.6
3-471	11090	1.7	2.9	6.1	9.0	13.7	17.7	21.2	23.8
3-473	12348	223.5	335.0	645.7	940.0	1414.3	1814.4	2172.3	2437.7
3-473	13782	217.4	325.9	628.3	914.6	1376.1	1765.4	2113.6	2371.8
3-474	11981	0.6	3.1	8.3	12.9	20.0	26.0	31.3	35.2
3-475	12681	0.1	0.2	0.5	0.7	1.1	1.4	1.7	1.9
3-476	11304	0.0	0.2	0.4	0.7	1.0	1.3	1.6	1.8
3-477	11746	0.4	1.8	4.8	7.4	11.5	14.9	17.9	20.2
3-478	12445	0.2	0.8	2.2	3.4	5.4	6.9	8.4	9.4
3-479	12386	4.6	13.2	32.7	50.0	77.5	100.4	120.8	135.9
3-480	12555	0.0	0.2	0.4	0.7	1.1	1.4	1.7	1.9
3-481	2805	5.0	5.8	8.3	10.9	15.3	19.1	22.5	25.1
3-482	4509	0.1	0.2	0.3	0.5	0.7	0.9	1.1	1.3
3-483	12474	0.2	0.3	0.5	0.8	1.1	1.5	1.8	2.0
3-484	13283	317.9	453.9	841.6	1212.5	1812.9	2320.4	2774.8	3111.9
3-484	14774	309.0	441.1	817.9	1178.4	1761.9	2255.2	2696.8	3024.4
3-484	14774	348.1	496.8	921.3	1327.3	1984.6	2540.2	3037.6	3406.6
3-485	8175	0.3	0.4	0.5	0.7	1.0	1.3	1.6	1.7
3-486	12015	25.6	72.5	179.2	274.4	424.7	550.3	662.2	74.5
3-486	14919	18.8	53.2	131.5	201.3	311.6	403.8	485.9	546.7
3.487	12031	46.5	82.3	175.4	261.4	398.6	513.9	616.9	693.1
3-488	13067	11.2	31.9	79.0	120.9	187.2	242.6	291.9	328.4
3-489	11240	14.2	25.7	55.4	82.7	126.3	162.9	195.6	219.8
3-490	11063	6.1	8.4	15.0	21.4	31.7	40.5	48.4	54.3
3-491	12593	0.8	9.1	24.8	38.5	60.1	78.0	94.0	105.8
3-492	2410	0.9	1.1	1.7	2.3	3.3	4.2	5.0	5.6
3-493	12681	1.6	2.2	3.9	5.5	8.2	10.4	12.4	13.9
3-494	12078	0.3	0.8	1.8	2.8	4.3	5.5	6.7	7.5
3-495	12931	0.0	0.2	0.5	0.7	1.1	1.4	1.7	1.9
3-496	12931	0.1	0.3	0.9	1.4	2.2	2.8	3.4	3.8
3-499	12265	27.0	54.2	122.1	183.9	282.1	364.5	438.0	492.4
3-499	14120	24.9	49.9	112.3	169.1	259.5	335.3	402.9	452.9
3-500	13390	0.0	0.2	0.5	0.7	1.1	1.4	1.7	1.9
3-501	11076	0.2	1.1	3.0	4.6	7.1	9.2	11.1	12.5
3-502	13733	35.4	50.5	93.6	134.9	201.7	258.1	308.7	346.2
3-503	12684	20.4	32.0	63.5	93.2	140.9	181.0	216.9	243.5
3-504	13170	1.6	4.2	10.3	15.8	24.4	31.5	38.0	42.7
3-505	12655	18.0	37.4	85.2	128.7	197.6	255.4	307.0	345.2
3-505	14854	16.1	33.4	76.1	114.9	176.6	228.2	274.3	308.4
3-505	14854	18.2	37.6	85.8	129.5	198.9	257.1	309.0	347.4
3-506	5015	5.3	6.1	8.7	11.3	15.8	19.7	23.2	25.8
3-507	12992	0.3	2.0	5.4	8.4	13.1	17.0	20.4	23.0
3-508	12978	0.3	1.7	4.5	7.0	10.9	14.1	17.0	19.2
3-509	1	36.5	38.9	47.5	56.9	73.4	88.1	101.5	111.6
3-510	12475	106.7	197.3	429.5	642.8	982.7	1268.0	1522.6	1711.1
3-510	13791	91.5	169.1	368.2	551.1	842.6	1087.1	1305.4	1467.1
3-510	13791	90.9	168.0	365.7	547.4	836.8	1079.7	1296.5	1457.1

3-512	12114	0.5	1.9	4.9	7.5	11.7	15.1	18.2	20.5
3-513	12114	8.7	24.5	60.7	92.0	143.8	186.4	224.3	25.2
3-513	14872	6.6	18.7	46.2	70.8	109.6	142.0	170.8	192.2
3-513	14872	6.9	19.5	48.2	73.8	114.2	148.0	178.1	200.4
3-515	12115	0.7	2.0	4.9	7.6	11.7	15.2	18.3	20.6
3-516	12115	1.0	3.2	8.0	12.4	19.1	24.8	29.9	33.6
3-518	3625	2.9	3.4	4.9	6.4	9.0	11.3	13.3	14.8
3-519	12606	3.3	16.6	43.8	67.8	105.5	136.9	164.9	185.6
3-520	12119	10.1	28.6	70.6	108.1	167.3	216.8	260.9	293.5
3-520	14891	7.4	21.1	52.2	79.9	123.6	160.2	192.7	216.8
3-520	14891	8.6	24.5	60.5	92.7	143.4	185.8	223.6	251.6
3-521	12119	0.6	1.8	4.5	6.0	10.7	13.8	16.6	18.7
3-522	13430	20.2	42.0	95.7	144.5	221.9	286.9	344.8	387.6
3-522	15459	13.2	27.4	62.5	94.3	144.9	187.3	225.1	253.1
3-522	15459	15.3	31.7	72.3	109.1	167.7	216.7	260.5	292.8
3-523	12760	1.7	4.4	10.6	16.2	25.1	32.5	39.1	44.0
3-524	12129	4.3	12.2	30.1	46.2	71.4	92.6	111.4	125.3
3-525	1	8.0	8.4	10.0	11.7	14.7	17.4	20.0	21.8
3-526	12162	0.1	0.2	0.5	0.7	1.1	1.4	1.7	1.9
3-527	11250	0.8	1.3	2.5	3.6	5.4	6.9	8.3	9.3
3-528	12176	361.7	494.0	879.9	1253.3	1860.4	2374.8	2835.8	3178.0
3-529	13093	26.9	41.2	80.6	117.8	177.7	228.2	273.3	306.8
3-529	15801	18.8	28.8	56.4	82.4	124.2	159.5	191.1	214.4
3-529	15801	23.9	36.6	71.6	104.6	157.8	202.6	242.7	272.4
3-530	13964	77.8	130.4	270.5	400.6	608.9	784.0	940.5	1056.4
3-530	13964	73.9	124.0	257.0	380.7	578.6	745.1	893.7	1003.9
3-530	13964	70.5	118.2	245.1	363.1	551.9	710.6	852.4	957.4
3-531	9988	12.1	14.8	23.2	31.6	45.6	57.6	68.3	76.3
3-532	10598	20.6	28.0	49.6	70.6	104.7	133.6	159.5	178.7
3-533	12179	1.0	2.9	7.2	11.0	17.1	22.1	26.6	30.0
3-534	12184	0.2	0.6	1.4	2.1	3.2	4.2	5.0	5.6
3-535	13342	18.5	57.5	144.6	221.0	343.9	445.8	536.6	60.4
3-535	15313	14.5	44.9	113.0	173.4	268.7	348.3	419.2	471.7
3-535	15313	14.4	44.8	112.5	172.6	267.5	346.7	417.4	469.6
3-536	12317	1.0	5.8	15.5	23.0	37.3	48.4	58.3	65.6
3-539	13168	1.0	2.8	7.0	10.7	16.6	21.5	25.8	29.1
3-540	12192	387.6	581.3	1121.0	1632.1	2455.8	3150.6	3772.2	4233.0
3-540	13417	346.8	520.1	1003.0	1460.4	2197.4	2819.1	3375.2	3787.6
3-540	14878	343.0	514.5	992.2	1444.6	2173.7	2788.7	3338.8	3746.8
3-540	14878	388.7	582.9	1124.2	1636.8	2462.8	3159.7	3783.0	4245.2
3-542	13431	1.3	5.3	13.9	21.4	33.3	43.1	52.0	58.4
3-544	13431	0.3	1.0	2.4	3.6	5.6	7.2	8.7	9.8
3-546	12217	4.0	16.2	42.2	65.0	101.0	131.1	157.8	177.6
3-547	12381	3.0	4.7	9.5	14.0	21.2	27.2	32.6	36.6
3-548	13527	9.9	34.7	88.7	136.4	211.7	274.5	330.5	371.9
3-549	12234	4.3	11.4	27.7	42.3	65.4	84.7	101.9	114.6
3-550	14647	2.1	3.4	7.0	10.3	15.5	20.0	23.9	26.9
3-551	11212	253.4	348.0	623.2	889.0	1321.0	1686.8	2014.7	2258.1
3-551	12267	291.7	400.5	717.2	1023.0	1520.1	1941.2	2318.5	2598.5
3-551	13743	310.0	425.8	762.4	1087.5	1616.0	2063.5	2464.7	2762.3
3-551	14107	262.6	360.5	645.6	920.9	1368.4	1747.4	2087.1	2339.2
3-551	15184	279.7	384.1	687.8	981.1	1457.8	1861.6	2223.4	2492.0
3-552	12338	24.2	39.4	80.2	118.3	179.5	230.9	276.9	310.9
3-553	12702	1.1	4.5	11.7	18.1	28.1	36.5	43.9	49.4
3-554	13012	242.8	449.2	978.3	1464.3	2238.7	2888.6	3468.6	3898.2
3-555	10580	1.6	2.5	5.1	7.5	11.4	14.7	17.6	19.8

3-556	10611	1.0	1.6	3.2	4.8	7.3	9.4	11.2	12.6
3-558	13107	5.0	20.2	52.6	81.2	126.1	163.6	197.1	221.8
3-559	13435	1.0	3.2	8.0	12.2	18.9	24.5	29.5	33.2
3-561	12750	2.3	11.4	30.1	46.6	72.5	94.1	113.3	127.5
3-562	8248	2.7	3.2	4.9	6.6	9.4	11.9	14.1	15.7
3-563	12743	0.6	2.6	6.8	10.4	16.2	21.1	25.4	28.6
3-564	13168	0.2	1.7	4.5	7.0	10.9	14.2	17.1	19.3
3-565	5893	8.2	9.1	12.2	15.5	21.1	26.0	30.5	33.8
3-566	6773	0.4	0.4	0.6	0.8	1.1	1.3	1.5	1.7
3-567	12774	7.0	11.2	22.7	33.5	50.7	65.2	78.2	87.8
3-568	12288	26.3	36.2	64.8	92.4	137.3	175.3	209.3	234.6
3-569	12288	31.6	43.4	77.7	110.8	164.7	210.3	251.2	281.5
3-570	12291	0.1	0.2	0.5	0.7	1.1	1.4	1.7	1.9
3-571	12291	71.0	201.3	497.8	762.1	1179.5	1528.4	1839.2	2069.3
3-571	13425	64.0	181.4	448.7	686.9	1063.2	1377.6	1657.8	1865.2
3-571	13425	62.4	176.9	437.4	669.7	1036.4	1342.9	1616.1	1818.2
3-571	14872	64.5	182.8	452.0	692.0	1071.0	1387.8	1670.1	1879.0
3-571	14872	77.8	220.6	545.5	835.1	1292.5	1674.7	2015.4	2267.4
3-572	12295	6.1	16.1	39.1	59.8	92.4	119.7	144.0	162.0
3-573	12295	2.3	5.4	12.9	19.6	30.2	39.1	47.0	52.9
3-574	10105	0.4	0.5	0.7	0.9	1.2	1.5	1.8	2.0
3-575	9743	0.1	0.2	0.4	0.6	1.0	1.3	1.5	1.7
3-576	12297	0.5	1.3	3.2	4.9	7.5	9.8	11.7	13.2
3-577	13218	12.8	20.5	41.5	61.1	92.6	119.1	142.7	160.3
3-578	12334	1.2	3.2	7.7	11.8	18.3	23.7	28.5	32.1
3-579	13521	1.3	5.4	13.9	21.5	33.4	43.3	52.1	58.6
3-580	13157	0.0	0.3	0.9	1.4	2.2	2.8	3.4	3.9
3-581	13539	0.5	2.3	6.0	9.3	14.4	18.7	22.6	25.4
3-585	13289	32.3	41.1	67.8	94.2	137.6	174.6	207.8	232.4
3-585	15860	22.8	29.0	47.8	66.4	97.0	123.0	146.4	163.8
3-585	15860	28.0	35.6	58.8	81.7	119.3	151.3	180.1	201.4
3-586	11767	164.3	285.7	603.9	898.3	1368.6	1763.8	2116.6	2378.0
3-586	13335	134.6	234.1	494.8	736.0	1121.3	1445.1	1734.1	1948.3
3-586	13335	137.9	239.8	506.8	753.9	1148.6	1480.2	1776.4	1995.7
3-586	14767	127.4	221.5	468.3	696.5	1061.2	1367.6	1641.2	1843.9
3-586	14767	128.4	223.2	471.9	702.0	1069.5	1378.3	1654.1	1858.3
3-587	12352	0.8	2.4	5.9	9.0	14.0	18.1	21.8	24.5
3-588	12366	93.3	130.5	237.6	340.6	507.7	649.0	775.6	869.6
3-588	13487	74.6	104.3	190.0	272.3	405.9	518.9	620.1	695.2
3-588	13487	68.7	96.1	175.0	250.9	373.9	478.0	571.3	640.5
3-589	12884	4.5	14.1	35.4	54.3	84.1	109.1	131.3	147.7
3-590	13531	8.5	24.0	59.5	91.0	140.9	182.6	219.7	247.2
3-590	15469	6.2	17.6	43.5	66.6	103.2	133.7	160.8	181.0
3-590	15469	7.4	21.0	52.0	79.7	123.3	159.8	192.3	216.3
3-591	1	14.8	15.5	18.0	20.7	25.6	30.0	34.1	37.2
3-592	13716	10.2	36.1	92.4	142.2	220.8	286.3	344.7	387.9
3-592	16234	7.6	26.8	68.7	105.7	164.1	212.8	256.2	288.3
3-592	16234	6.9	24.3	62.1	95.6	148.4	192.5	231.7	260.8
3-593	13593	0.6	3.0	7.9	12.2	18.9	24.5	29.6	33.3
3-594	13291	4.2	8.7	19.8	29.9	46.0	59.4	71.4	80.3
3-595	11313	0.1	0.2	0.4	0.7	1.0	1.3	1.6	1.8
3-596	13598	0.3	1.6	4.2	6.4	10.0	13.0	15.7	17.6
3-597	12386	11.9	29.5	70.7	107.7	166.3	215.3	259.0	291.3
3-598	9283	0.1	0.2	0.4	0.6	1.0	1.2	1.5	1.7
3-599	13606	0.6	1.7	4.3	6.5	10.1	13.1	15.7	17.7
3-600	5472	0.5	0.6	0.7	0.9	1.2	1.4	1.6	1.8

3-604	13123	3.9	4.6	6.8	9.1	12.8	16.1	19.0	21.2
3-605	12765	0.5	0.7	1.5	2.2	3.4	4.3	5.2	5.8
3-607	13722	14.4	38.0	92.6	141.5	218.7	283.2	340.7	383.3
3-612	13723	121.8	158.1	267.3	374.5	550.0	699.2	833.1	932.6
3-612	13811	135.6	176.2	297.8	417.2	612.7	778.9	928.2	1039.0
3-613	12631	0.7	1.6	3.7	5.7	8.7	11.3	13.6	15.3
3-614	12870	14.5	29.1	65.7	98.9	151.8	196.1	235.6	264.9
3-615	12870	3.7	5.8	11.7	17.2	26.0	33.5	40.1	45.0
3-618	14342	0.9	2.1	4.9	7.5	11.6	14.9	18.0	20.2
3-619	14220	122.6	304.3	731.2	1114.2	1720.2	2227.0	2678.9	3013.3
3-620	5250	2.9	3.8	6.7	9.4	13.9	17.8	21.2	23.7
3-621	5229	2.2	2.9	5.1	7.2	10.6	13.6	16.2	18.1
3-628	14917	0.1	0.2	0.5	0.8	1.2	1.5	1.8	2.1
3-640	12627	0.6	1.1	2.4	3.6	5.5	7.1	8.5	9.6
3-645	12338	6.4	12.1	26.6	39.9	61.2	78.9	94.8	106.6
3-648	11170	1446.8	2069.3	3838.0	5531.3	8271.6	10587.9	12661.8	14200.2
3-649	9409	131.7	250.1	550.1	825.1	1263.0	1630.3	1958.1	2200.9
3-657	3835	2472.0	3394.4	6078.3	8670.7	12883.7	16452.2	19650.2	22023.6
3-671	10755	119.9	602.2	1594.0	2464.6	3834.1	4976.9	5994.4	6747.2
3-674	12739	0.7	1.7	4.2	6.4	9.8	12.7	15.3	17.2
3-679	11508	2.0	9.3	24.5	37.0	59.0	76.5	92.2	103.7
3-685	14594	20.5	38.8	85.4	128.1	196.1	253.1	304.0	341.7
3-685	14594	18.9	35.8	78.8	118.1	180.8	233.4	280.4	315.1
3-685	15850	17.0	32.3	71.0	106.5	163.1	210.5	252.8	284.2
3-685	15850	16.9	32.0	70.5	105.7	161.9	208.9	251.0	282.1
3-686	13912	6.2	8.6	15.7	22.5	33.6	42.9	51.3	57.5
3-687	12843	4.0	9.9	23.8	36.2	56.0	72.4	87.1	98.0
3-689	12842	23.4	35.1	67.7	98.6	148.4	190.3	227.9	255.7
3-690	360	12.1	20.4	42.2	62.6	95.1	122.5	146.9	165.0
3-697	15588	15.3	38.0	91.3	139.2	214.9	278.2	334.6	376.4
3-726	15489	141.0	192.5	342.9	488.4	724.9	925.3	1105.0	1238.3
3-727	15409	36.9	56.0	108.7	158.6	238.9	306.6	367.1	412.0
3-727	15409	45.9	69.5	135.1	197.0	296.7	380.8	456.1	511.8
3-801	14643	0.0	0.2	0.5	0.7	1.2	1.5	1.8	2.0
3-836	15664	0.1	0.2	0.5	0.8	1.2	1.5	1.9	2.1
9- 1	15076	1.3	3.0	7.0	10.7	16.5	21.4	25.7	28.9
9- 2	15227	1.8	5.5	13.8	21.2	32.9	42.7	51.4	57.8
9- 4	14600	223.3	262.9	389.9	519.6	736.4	923.0	1091.3	1216.7
9- 7	14938	5.5	8.8	17.8	26.2	39.8	51.1	61.3	68.8
9- 29	15577	0.7	3.0	7.9	12.2	18.9	24.6	29.6	33.3
9- 31	14571	106.1	127.4	194.6	262.6	375.7	472.7	560.1	625.2
9- 46	14847	1.7	2.7	5.4	7.9	12.0	15.5	18.5	20.8
9- 72	15150	8.7	14.4	29.6	43.7	66.4	85.5	102.5	115.2
9- 74	15454	9.0	16.0	34.1	50.8	77.4	99.8	119.8	134.6

TABLE 6B

TOTAL DOSE TO SKELETON IN RADS. COMPUTED BY THREE EXPONENTIALS

LISTED FOR EACH MEASUREMENT FOR EACH PATIENT

PT. NO.	DAYS TO MEAS.	ELAPSED TIME SINCE CESSATION OF INGESTION							
		1 DAY	1 YR	5 YR	10 YR	20 YR	30 YR	40 YR	48 YR
3-401	11673	375.5	609.2	1483.0	2433.0	3863.5	4808.0	5421.5	5750.9
3-401	12888	408.8	663.3	1614.6	2649.0	4206.6	5234.9	5902.8	6223.3
3-402	11546	222.0	335.1	758.8	1217.9	1908.0	2363.1	2658.4	2816.8
3-402	12365	240.1	362.4	820.7	1317.2	2063.7	2555.9	2875.3	3046.6
3-402	13215	265.8	401.2	908.5	1458.2	2284.6	2829.5	3183.0	3372.6
3-402	13215	324.5	489.8	1109.3	1780.4	2789.4	3454.7	3886.4	4117.9
3-402	14473	283.8	428.4	970.2	1557.2	2439.6	3021.5	3399.1	3601.5
3-403	5130	1.8	2.2	3.5	4.0	6.9	8.3	9.1	9.6
3-404	11582	190.6	283.5	631.6	1008.5	1574.8	1948.1	2190.3	2320.1
3-404	13423	203.5	302.8	674.6	1077.1	1682.0	2080.8	2339.4	2478.1
3-404	13423	186.1	276.8	616.8	984.9	1538.0	1902.6	2139.1	2265.8
3-404	14870	220.6	328.1	731.1	1167.4	1823.0	2255.1	2535.5	2685.7
3-404	14870	243.3	361.9	806.4	1287.6	2010.6	2487.3	2796.5	2962.2
3-405	13423	119.7	194.1	472.3	774.8	1230.3	1531.0	1726.4	1831.3
3-405	11582	100.1	162.3	395.0	648.0	1029.0	1280.5	1443.9	1531.6
3-405	12323	96.6	156.7	381.3	625.5	993.2	1236.0	1393.7	1478.3
3-405	13423	125.4	203.4	495.0	812.0	1289.4	1604.5	1809.2	1919.2
3-406	4856	3.9	4.5	7.0	9.7	13.7	16.3	17.9	18.8
3-407	11582	266.1	398.7	895.6	1433.9	2242.8	2776.2	3122.2	3307.7
3-408	11589	20.9	36.0	92.2	153.5	245.9	306.9	346.6	367.9
3-410	11870	10.0	15.8	37.8	61.7	97.6	121.3	136.7	145.0
3-411	5570	0.3	0.4	0.5	0.7	1.0	1.2	1.3	1.3
3-412	11870	64.9	97.3	218.8	350.4	548.2	678.5	763.1	808.4
3-412	13958	62.5	93.7	210.8	337.5	528.0	653.6	735.1	778.8
3-412	13958	53.3	79.9	179.7	287.7	450.1	557.2	626.6	663.9
3-412	14623	59.1	88.6	199.2	319.0	499.1	617.8	694.8	736.1
3-415	4505	5.7	6.3	8.6	11.0	14.6	16.9	18.4	19.1
3-416	11688	176.5	313.4	821.4	1375.6	2211.4	2763.8	3123.0	3316.0
3-416	12064	172.5	306.4	803.0	1344.8	2161.9	2702.0	3053.1	3241.9
3-416	13510	202.5	359.7	942.7	1578.8	2538.1	3172.1	3584.3	3805.9
3-416	14969	224.2	398.2	1043.6	1747.7	2809.6	3511.4	3967.8	4213.1
3-416	14969	271.5	482.3	1263.8	2116.5	3402.4	4252.4	4805.0	5102.0
3-417	11718	106.4	192.1	509.1	855.3	1377.3	1722.5	1946.9	2067.6
3-417	13365	112.0	202.1	535.6	899.8	1449.0	1812.1	2048.2	2175.1
3-417	14028	97.1	175.3	464.5	780.3	1256.6	1571.5	1776.3	1886.3
3-417	14028	95.6	172.7	457.6	768.7	1238.0	1548.2	1749.9	1858.3
3-417	14028	104.0	187.7	497.5	835.7	1345.8	1683.0	1902.3	2020.2
3-418	7036	2.8	3.2	4.6	6.2	8.5	10.0	10.9	11.4
3-419	11598	83.9	154.2	413.6	696.9	1124.4	1407.0	1590.8	1689.7
3-419	12254	93.7	172.3	462.2	778.8	1256.5	1572.3	1777.7	1888.2
3-419	13425	93.3	171.5	460.0	775.1	1250.6	1564.9	1769.4	1879.3
3-419	13425	97.0	178.3	478.3	806.0	1300.4	1627.2	1839.8	1954.1
3-420	11603	4.1	5.9	12.3	19.3	29.7	36.6	41.0	43.4
3-422	11603	2.8	5.6	15.7	26.8	43.5	54.6	61.8	65.7

3-423	11603	142.5	215.1	487.2	782.0	1225.2	1517.4	1707.0	1808.7
3-423	12364	121.1	182.7	413.8	664.2	1040.5	1288.7	1449.8	1536.1
3-423	13418	129.4	195.4	442.4	710.1	1112.6	1377.9	1550.1	1642.4
3-423	13418	138.6	209.2	473.7	760.3	1191.2	1475.3	1659.6	1758.4
3-424	11604	69.4	104.0	233.5	373.9	584.8	723.8	814.0	862.4
3-426	11612	29.7	50.6	128.2	212.7	340.1	424.3	479.0	508.4
3-427	11617	3.9	8.1	23.1	39.6	64.5	81.0	91.7	97.4
3-427	13422	3.2	6.6	18.9	32.4	52.8	66.3	75.0	79.7
3-428	11617	64.5	133.7	382.0	654.0	1064.8	1336.7	1513.6	1608.8
3-428	13493	68.4	141.7	404.6	692.7	1127.9	1415.9	1603.3	1704.1
3-428	13493	68.7	142.4	406.7	696.2	1133.6	1423.0	1611.4	1712.8
3-429	11617	382.8	582.3	1330.0	2140.4	3358.9	4162.6	4684.1	4963.8
3-429	13422	396.3	602.9	1377.1	2216.2	3478.0	4310.1	4850.1	5139.7
3-429	13493	425.1	646.7	1477.1	2377.2	3730.5	4623.1	5202.3	5512.9
3-429	13493	414.7	630.9	1440.9	2319.0	3639.2	4509.9	5075.0	5378.0
3-429	14884	468.7	713.0	1628.5	2620.9	4113.0	5097.0	5735.6	6078.1
3-429	14884	551.4	838.8	1915.9	3083.4	4838.8	5996.5	6747.8	7150.7
3-431	11650	320.0	463.9	1002.7	1585.3	2460.0	3036.3	3409.9	3610.0
3-431	13721	378.9	549.1	1187.1	1876.7	2912.2	3594.5	4036.8	4273.7
3-431	13721	359.7	521.4	1127.1	1781.9	2765.1	3412.9	3832.8	4057.8
3-432	11622	7.2	11.5	27.5	44.8	70.9	88.2	99.4	105.4
3-433	11622	199.9	327.8	805.8	1325.8	2108.8	2625.9	2961.8	3142.2
3-433	14157	219.5	359.9	884.6	1455.4	2315.1	2882.8	3251.6	3449.6
3-433	14157	214.8	352.2	865.7	1424.3	2265.6	2821.1	3182.0	3375.8
3-434	5277	1.2	1.9	4.3	6.8	10.7	13.3	15.0	15.9
3-434	6160	1.4	2.1	4.8	7.7	12.0	14.9	16.8	17.8
3-435	7438	0.7	1.1	2.5	4.1	6.5	8.1	9.1	9.6
3-436	7073	0.4	0.5	0.7	0.9	1.2	1.4	1.6	1.7
3-437	11215	5.7	10.7	29.0	49.1	79.4	99.4	112.4	199.4
3-441	11639	5.1	10.6	30.2	51.7	84.2	105.7	119.7	127.2
3-442	12101	0.8	2.3	7.1	12.4	20.4	25.7	29.1	31.0
3-443	5957	0.2	0.2	0.4	0.6	0.9	1.1	1.2	1.3
3-444	11709	1.3	4.1	12.9	22.6	37.2	46.9	53.2	56.6
3-444	13416	1.0	3.3	10.3	18.0	29.6	37.3	42.3	45.0
3-445	11709	362.6	519.3	1106.4	1740.7	2692.7	3319.7	3726.1	3943.7
3-445	12366	386.8	554.0	1180.2	1856.7	2872.2	3541.0	3974.5	4206.6
3-445	13928	421.9	604.2	1287.3	2025.3	3132.9	3862.4	4335.3	4588.4
3-445	13928	516.8	740.1	1576.8	2480.7	3837.5	4731.0	5310.2	5620.3
3-445	14907	458.8	657.1	1400.0	2202.5	3407.0	4200.3	4714.5	4989.9
3-446	11709	31.4	44.1	91.3	142.2	218.7	269.0	301.6	319.0
3-446	14914	28.0	39.2	81.1	126.4	194.4	239.1	268.1	283.6
3-446	14914	31.9	44.8	92.7	144.5	222.2	273.3	306.4	324.1
3-447	12232	0.1	0.3	1.1	1.9	3.2	4.0	4.5	4.8
3-449	11841	381.1	539.7	1133.8	1775.1	2737.4	3371.0	3781.5	4001.3
3-449	14093	357.3	506.0	1063.1	1664.5	2566.8	3160.9	3545.9	3752.9
3-450	12298	1.5	3.7	11.3	19.7	32.3	40.6	46.1	49.0
3-452	11841	3.5	7.8	22.9	39.4	64.4	80.9	91.7	97.5
3-452	14919	2.7	6.0	17.7	30.5	49.8	62.6	70.9	75.4
3-455	12767	106.5	195.7	524.9	884.6	1427.2	1785.9	2019.2	2144.7
3-456	2577	5.2	6.2	10.1	14.2	20.3	24.3	26.9	28.3
3-457	5499	1.1	1.3	2.0	2.7	3.8	4.5	5.0	5.2
3-458	1	3.0	3.4	4.8	6.4	8.7	10.1	11.1	11.6
3-459	12111	123.6	242.4	675.1	1148.5	1863.3	2336.1	2643.8	2809.3
3-459	14134	128.7	252.5	703.1	1196.1	1940.6	2433.0	2753.4	2925.7
3-459	14134	130.7	256.3	713.6	1214.0	1969.6	2469.4	2794.6	2969.5
3-459	14519	118.3	231.9	645.8	1098.8	1782.6	2234.9	2529.2	2687.6

3-460	12676	1.0	2.4	7.2	12.4	20.4	25.6	29.0	30.9
3-461	13133	0.3	1.2	3.7	6.5	10.7	13.5	15.3	16.3
3-462	11900	114.5	162.1	340.5	533.2	822.2	1012.5	1135.9	1201.9
3-462	12110	116.1	164.4	345.4	540.7	833.8	1026.8	1151.9	1218.8
3-462	13426	106.2	150.4	315.9	494.6	762.7	939.3	1053.7	1114.9
3-462	13426	95.2	134.8	283.2	443.4	683.8	842.0	944.6	999.4
3-464	12452	0.1	0.2	0.6	1.0	1.7	2.1	2.4	2.5
3-465	12025	0.1	0.3	1.1	1.9	3.1	3.9	4.4	4.7
3-466	12390	0.2	0.7	2.3	4.0	6.5	8.2	9.3	9.9
3-467	8752	5.1	6.2	10.0	14.1	20.2	24.2	26.7	28.1
3-468	11036	4.8	7.3	16.9	27.3	43.0	53.3	60.0	63.5
3-469	11961	0.9	1.9	5.6	9.6	15.6	19.6	22.2	23.6
3-471	11090	1.8	2.9	7.3	11.9	19.0	23.6	26.7	28.3
3-473	12348	258.4	389.8	882.3	1415.9	2218.1	2747.1	3090.3	3274.3
3-473	13782	287.7	434.1	982.5	1576.7	2469.9	3058.9	3441.1	3646.0
3-474	11981	1.0	3.3	10.2	17.8	29.3	36.9	41.9	44.5
3-475	12681	0.1	0.2	0.7	1.1	1.8	2.2	2.5	2.6
3-476	11304	0.0	0.2	0.5	0.9	1.4	1.8	2.0	2.1
3-477	11746	0.6	1.8	5.7	10.0	16.5	20.7	23.5	25.0
3-478	12445	0.3	0.9	2.8	5.0	8.2	10.3	11.7	12.4
3-479	12386	6.4	14.3	42.0	72.4	118.3	148.7	168.4	179.1
3-480	12555	0.1	0.2	0.6	1.0	1.7	2.1	2.4	2.5
3-481	2805	3.7	4.4	6.8	9.4	13.2	15.7	17.3	18.1
3-482	4509	0.1	0.1	0.3	0.4	0.7	0.8	0.9	1.0
3-483	12474	0.3	0.4	0.8	1.2	1.8	2.3	2.5	2.7
3-484	13283	406.7	589.5	1274.3	2014.6	3126.2	3858.5	4333.3	4587.6
3-484	14774	456.4	661.5	1429.9	2260.7	3508.1	4329.9	4862.6	5148.0
3-484	14774	514.1	745.1	1610.6	2546.4	3951.4	4877.1	5477.2	5798.7
3-485	8175	0.3	0.3	0.6	0.8	1.2	1.5	1.6	1.7
3-486	12015	33.8	75.8	222.6	383.6	627.0	788.0	892.9	949.4
3-486	14919	32.6	73.1	214.6	369.9	604.6	759.9	861.0	915.4
3-487	12031	52.4	89.1	225.5	374.2	598.3	746.4	842.6	894.3
3-488	13067	16.3	36.7	108.0	186.2	304.4	382.6	433.5	460.9
3-489	11240	15.0	25.8	66.1	110.1	176.4	220.2	248.7	264.0
3-490	11063	6.5	9.1	18.8	29.2	44.9	55.3	62.0	65.6
3-491	12593	1.7	10.0	32.0	56.2	92.8	117.1	132.9	141.4
3-492	2410	0.6	0.8	1.3	1.9	2.8	3.4	3.8	4.0
3-493	12681	2.1	2.8	5.7	8.8	13.5	16.5	18.5	19.6
3-494	12078	0.4	0.8	2.3	3.9	6.4	8.0	9.0	9.6
3-495	12931	0.1	0.2	0.6	1.1	1.7	2.2	2.5	2.6
3-496	12931	0.1	0.4	1.2	2.1	3.5	4.4	5.0	5.3
3-499	12265	32.1	58.9	158.1	266.4	429.9	537.9	608.2	646.0
3-499	14120	35.1	64.5	173.1	291.7	470.6	588.8	665.8	707.1
3-500	13390	0.1	0.2	0.6	1.1	1.8	2.3	2.6	2.8
3-501	11076	0.3	1.1	3.3	5.8	9.6	12.1	13.8	14.6
3-502	13733	47.2	68.4	148.0	233.9	363.0	448.0	503.1	532.7
3-503	12684	24.2	37.8	88.6	143.8	226.8	281.6	317.1	336.2
3-504	13170	2.3	4.9	14.3	24.5	40.0	50.3	57.0	60.6
3-505	12655	22.4	42.0	114.1	192.9	311.7	390.3	441.5	468.9
3-505	14854	24.7	46.3	125.6	212.3	343.2	429.8	486.0	516.3
3-505	14854	27.8	52.1	141.5	239.2	386.7	484.2	547.6	581.7
3-506	5015	4.4	5.1	7.8	10.7	15.0	17.8	19.6	20.6
3-507	12992	0.6	2.3	7.3	12.7	21.0	26.5	30.0	31.9
3-508	12978	0.6	1.9	6.1	10.6	17.5	22.0	25.0	26.6
3-509	1	37.2	39.8	49.5	59.6	74.4	83.9	89.9	93.0
3-510	12475	126.3	220.8	571.9	954.9	1532.2	1913.8	2161.8	2295.1
3-510	13791	122.5	214.1	554.7	926.2	1486.2	1856.3	2096.9	2226.2
3-510	13791	121.6	212.7	551.0	919.9	1476.1	1843.6	2082.6	2211.0

3-512	12114	0.7	2.0	6.0	10.5	17.3	21.8	24.7	26.3
3-513	12114	11.6	25.9	76.1	131.1	214.3	269.3	305.2	324.4
3-513	14872	11.4	25.6	75.1	129.5	211.6	265.9	301.3	320.4
3-513	14872	11.9	26.7	78.3	135.0	220.6	277.3	314.2	334.0
3-515	12115	0.9	2.1	6.2	10.7	17.5	21.9	24.9	26.4
3-516	12115	1.4	3.4	10.1	17.4	28.5	35.8	40.6	43.2
3-518	3625	2.2	2.6	4.1	5.6	8.0	9.5	10.5	11.0
3-519	12606	5.5	18.2	56.8	99.3	163.5	206.0	233.7	248.6
3-520	12119	13.4	30.1	88.5	152.6	249.4	313.4	355.1	377.6
3-520	14891	12.9	28.9	84.9	146.3	239.2	300.6	340.6	362.2
3-520	14891	15.0	33.6	98.5	169.8	277.5	348.8	395.2	420.2
3-521	12119	0.9	1.9	5.6	9.7	15.9	20.0	22.6	24.0
3-522	13430	27.0	50.7	137.7	232.8	376.3	471.2	532.9	566.1
3-522	15459	21.5	40.3	109.4	184.9	298.9	374.3	423.3	449.6
3-522	15459	24.9	46.6	126.6	213.9	345.8	433.0	489.7	520.2
3-523	12760	2.3	4.9	14.2	24.4	39.7	49.9	56.5	60.1
3-524	12129	5.7	12.9	37.8	65.2	106.5	133.9	151.7	161.3
3-525	1	8.3	8.7	10.4	12.2	14.7	16.4	17.4	17.9
3-526	12162	0.1	0.2	0.6	1.0	1.6	2.0	2.3	2.4
3-527	11250	0.9	1.3	3.0	4.9	7.7	9.5	10.7	11.3
3-528	12176	425.9	593.8	1222.5	1900.6	2917.4	3586.5	4020.0	4251.8
3-529	13093	33.2	51.0	117.4	189.5	297.9	369.5	415.9	440.8
3-529	15801	30.2	46.3	106.8	172.3	270.9	335.9	378.1	400.7
3-529	15801	38.4	58.8	135.6	218.8	344.0	426.6	480.2	508.9
3-530	13964	104.2	170.9	420.0	691.0	1099.1	1368.6	1543.7	1637.7
3-530	13964	99.0	162.4	399.1	656.6	1044.5	1300.6	1467.0	1556.3
3-530	13964	94.4	154.9	380.6	626.2	996.2	1240.4	1399.1	1484.3
3-531	9988	13.0	16.3	28.5	41.5	60.9	73.7	81.9	86.3
3-532	10598	21.1	29.3	59.9	93.0	142.5	175.1	196.3	207.6
3-533	12179	1.4	3.1	9.1	15.7	25.6	32.2	36.5	38.8
3-534	12184	0.3	0.6	1.7	3.0	4.8	6.1	6.9	7.3
3-535	13342	28.7	67.9	202.3	349.9	573.0	720.7	816.9	868.6
3-535	15313	27.1	64.1	191.0	330.3	541.0	680.4	771.2	820.0
3-535	15313	26.9	63.8	190.2	328.9	538.6	677.4	767.8	816.4
3-536	12317	1.8	6.2	19.5	34.1	56.2	70.9	80.4	85.5
3-539	13168	1.5	3.3	9.7	16.6	27.2	34.2	38.7	41.2
3-540	12192	441.7	666.6	1509.7	2423.2	3796.4	4701.8	5289.4	5604.4
3-540	13417	443.1	668.8	1514.7	2431.2	3808.9	4717.4	5306.8	5622.9
3-540	14878	504.7	761.8	1725.2	2769.1	4338.3	5373.0	6044.4	6404.4
3-540	14878	571.9	863.2	1954.7	3137.5	4915.4	6087.8	6848.6	7256.4
3-542	13431	2.3	6.3	19.5	33.9	55.7	70.2	79.6	84.7
3-544	13431	0.5	1.1	3.3	5.7	9.4	11.8	13.4	14.2
3-546	12217	6.1	17.2	52.9	92.0	151.3	190.6	216.1	229.9
3-547	12381	3.5	5.4	12.9	20.9	33.1	41.1	46.3	49.1
3-548	13527	16.3	41.6	125.9	218.4	358.4	451.0	511.4	543.9
3-549	12234	5.7	12.1	35.2	60.4	98.6	123.9	140.3	149.1
3-550	14647	3.1	4.9	11.6	19.0	30.1	37.4	42.1	44.7
3-551	11212	272.5	381.9	791.3	1232.9	1895.4	2331.4	2613.9	2765.0
3-551	12267	345.2	483.7	1002.4	1561.9	2401.1	2953.4	3311.2	3502.7
3-551	13743	421.9	591.1	1224.8	1908.5	2933.9	3608.8	4046.0	4280.0
3-551	14107	370.0	518.4	1074.2	1673.8	2573.2	3165.1	3548.6	3753.8
3-551	15184	438.0	613.7	1271.6	1981.4	3045.9	3746.7	4200.6	4443.4
3-552	12338	27.8	44.6	107.5	175.8	278.8	346.7	390.8	414.5
3-553	12702	1.8	5.0	15.4	26.8	44.0	55.5	62.9	66.9
3-554	13012	302.0	528.3	1369.2	2286.1	3668.7	4582.3	5176.3	5495.5
3-555	10580	1.5	2.5	5.9	9.6	15.2	18.9	21.3	22.6

3-556	10611	1.0	1.5	3.7	6.1	9.7	12.0	13.6	14.4
3-558	13107	8.3	23.3	71.6	124.7	205.0	258.2	292.8	311.4
3-559	13435	1.6	3.8	11.2	19.4	31.8	40.0	45.3	48.2
3-561	12750	3.9	12.7	39.5	69.1	113.8	143.4	162.7	173.1
3-562	8248	2.5	3.1	5.3	7.6	11.0	13.2	14.7	15.4
3-563	12743	0.9	2.9	8.9	15.5	25.5	32.1	36.4	38.8
3-564	13168	0.4	1.9	6.2	10.8	17.8	22.5	25.5	27.2
3-565	5893	7.8	8.8	12.4	16.2	21.9	25.6	27.9	29.1
3-566	6773	0.4	0.4	0.6	0.8	1.1	1.3	1.5	1.5
3-567	12774	8.4	13.3	31.8	51.0	82.1	102.0	115.0	121.9
3-568	12288	31.2	43.8	90.7	141.3	217.2	267.2	299.6	316.9
3-569	12288	37.5	52.5	108.8	169.6	260.7	320.6	359.5	380.3
3-570	12291	0.1	0.2	0.6	1.0	1.6	2.1	2.3	2.4
3-571	12291	96.3	215.9	633.9	1092.5	1785.5	2244.2	2542.9	2703.6
3-571	13425	96.4	216.1	634.7	1093.8	1787.7	2247.0	2546.0	2706.9
3-571	13425	94.0	210.7	618.7	1066.3	1742.8	2190.5	2482.0	2638.9
3-571	14872	111.6	250.1	734.4	1265.7	2068.6	2600.0	2946.0	3132.2
3-571	14872	134.6	301.8	886.2	1527.3	2496.3	3137.6	3555.1	3779.8
3-572	12295	8.0	17.3	50.0	85.9	140.1	176.0	199.3	211.9
3-573	12295	2.9	5.9	16.5	28.2	45.9	57.6	65.2	69.3
3-574	10105	0.6	0.7	1.0	1.3	1.8	2.1	2.3	2.4
3-575	9743	0.1	0.1	0.4	0.7	1.2	1.5	1.7	1.8
3-576	12297	0.7	1.4	4.1	7.0	11.4	14.4	16.3	17.3
3-577	13218	15.9	25.3	60.5	98.7	156.3	194.3	218.9	232.1
3-578	12334	1.6	3.4	9.9	17.1	27.8	35.0	39.6	42.1
3-579	13521	2.3	6.4	19.7	34.3	56.4	71.0	80.5	85.6
3-580	13157	0.1	0.4	1.2	2.2	3.6	4.5	5.1	5.4
3-581	13539	0.9	2.7	8.5	14.0	24.4	30.8	34.9	37.2
3-585	13289	44.7	58.3	108.9	163.3	244.6	298.0	332.4	350.8
3-585	15860	40.5	52.9	98.8	148.1	221.8	270.2	301.5	318.2
3-585	15860	49.9	65.0	121.5	182.1	272.8	332.3	370.8	391.3
3-586	11767	180.1	302.7	759.9	1257.8	2007.9	2503.4	2825.4	2998.3
3-586	13335	170.6	286.6	719.6	1191.1	1901.4	2370.6	2675.5	2839.3
3-586	13335	174.7	293.6	737.1	1220.0	1947.7	2428.3	2740.6	2908.4
3-586	14767	185.2	311.2	781.4	1293.3	2064.6	2574.0	2905.1	3082.9
3-586	14767	186.7	313.7	787.5	1303.4	2080.7	2594.2	2927.9	3107.1
3-587	12352	1.1	2.6	7.5	13.0	21.3	26.7	30.3	32.2
3-588	12366	110.4	157.3	332.6	522.0	806.3	993.5	1114.7	1179.7
3-588	13487	98.1	139.7	295.5	463.8	716.3	882.6	990.3	1048.0
3-588	13487	90.4	128.7	272.3	427.3	659.9	813.1	912.4	965.5
3-589	12884	6.7	15.9	47.4	82.0	134.3	168.9	191.5	203.6
3-590	13531	12.9	28.9	85.0	146.4	239.3	300.8	340.8	362.4
3-590	15469	11.4	25.5	75.0	129.2	211.2	265.5	300.8	319.8
3-590	15469	13.6	30.5	89.6	154.5	252.5	317.4	359.6	382.3
3-591	1	15.7	16.4	19.0	21.6	25.5	28.0	29.6	30.3
3-592	13716	17.2	44.1	133.5	231.8	380.5	478.9	543.0	577.4
3-592	16234	16.3	41.9	126.8	220.2	361.3	454.8	515.7	548.4
3-592	16234	14.7	37.9	114.7	199.1	326.8	411.3	466.4	496.0
3-593	13593	1.1	3.6	11.2	19.5	32.1	40.5	45.9	48.9
3-594	13291	5.5	10.4	28.2	47.6	77.0	96.4	109.0	115.8
3-595	11313	0.1	0.2	0.5	0.9	1.5	1.8	2.1	2.2
3-596	13598	0.6	1.9	5.9	10.3	17.0	21.5	24.3	25.9
3-597	12386	15.4	32.0	91.3	156.4	254.6	319.6	361.9	384.7
3-598	9283	0.1	0.2	0.4	0.7	1.1	1.4	1.6	1.7
3-599	13606	0.9	2.1	6.1	10.6	17.3	21.7	24.6	26.1
3-600	5472	0.6	0.6	0.8	1.0	1.2	1.4	1.5	1.5

3-604	13123	6.0	7.2	11.6	16.4	23.4	28.0	31.0	32.6
3-605	12765	0.6	0.9	2.1	3.5	5.5	6.8	7.7	8.1
3-607	13722	21.7	46.7	135.1	232.1	378.7	475.6	538.8	572.7
3-612	13723	172.1	229.0	441.4	669.8	1011.6	1236.3	1381.5	1459.1
3-612	13811	193.4	257.2	496.0	752.6	1136.7	1389.0	1552.2	1639.4
3-613	12631	0.9	1.8	4.9	8.4	13.7	17.2	19.4	20.7
3-614	12870	18.2	33.5	89.9	151.6	244.5	306.0	346.0	367.4
3-615	12870	4.4	7.0	16.5	26.9	42.5	52.9	59.6	63.2
3-618	14342	1.4	2.8	7.7	13.1	21.3	26.7	30.2	32.1
3-619	14220	188.9	392.3	1121.6	1920.7	3127.7	3926.3	4446.1	4725.8
3-620	5250	2.0	2.7	5.5	8.4	12.8	15.7	17.6	18.6
3-621	5229	1.5	2.1	4.2	6.4	9.8	12.0	13.4	14.2
3-628	14917	0.1	0.3	0.8	1.4	2.3	2.9	3.2	3.4
3-640	12627	0.7	1.2	3.2	5.4	8.7	10.9	12.3	13.0
3-645	12338	7.5	13.3	34.9	58.5	94.0	117.5	132.8	141.0
3-648	11170	1522.8	2211.0	4781.5	7562.5	11738.4	14489.7	16273.4	17228.9
3-649	9409	120.1	213.6	559.3	936.8	1506.1	1882.3	2127.0	2258.5
3-657	3835	1605.8	2249.9	4662.1	7264.4	11167.5	13736.6	15400.8	1629.1
3-671	10755	171.0	561.7	1751.4	3060.2	5040.2	6351.5	7205.7	7665.7
3-674	12739	0.9	2.0	5.6	9.6	15.6	19.5	22.1	23.5
3-679	11508	2.9	9.3	28.8	50.3	82.8	104.3	118.3	125.9
3-685	14594	29.8	52.9	138.6	232.1	373.2	466.4	527.0	559.6
3-685	14594	27.5	48.8	127.8	214.1	344.1	430.1	486.0	516.0
3-685	15850	28.0	49.8	130.4	218.4	351.1	438.8	495.8	526.4
3-685	15850	27.8	49.4	129.4	216.8	348.4	435.5	492.1	522.5
3-686	13912	8.5	12.0	25.5	40.0	61.7	76.0	85.3	90.3
3-687	12843	5.4	11.2	32.0	54.9	89.3	112.1	127.0	134.9
3-689	12842	28.3	42.8	96.9	155.5	243.6	301.7	339.4	359.6
3-690	360	11.4	18.7	45.9	75.5	120.0	149.5	168.6	178.9
3-697	15588	27.0	56.0	160.1	274.1	446.3	560.3	634.5	674.4
3-726	15489	228.3	318.3	655.1	1018.4	1563.2	1921.7	2153.9	2278.2
3-727	15409	57.2	87.0	198.6	319.7	501.6	621.7	699.5	741.3
3-727	15409	71.0	108.0	246.7	397.1	623.2	772.3	869.0	920.9
3-801	14643	0.1	0.2	0.8	1.3	2.2	2.7	3.1	3.3
3-836	15664	0.1	0.3	0.9	1.5	2.5	3.1	3.5	3.8
9- 1	15076	2.1	4.2	11.8	20.1	32.6	40.9	46.4	49.3
9- 2	15227	3.3	7.8	23.2	40.1	65.7	82.7	93.7	99.6
9- 4	14600	394.9	474.6	770.1	1085.0	1553.3	1859.4	2056.2	2160.6
9- 7	14938	8.1	12.8	30.7	50.0	79.2	98.4	110.9	117.6
9- 29	15577	1.6	4.4	13.6	23.7	39.0	49.1	55.7	59.3
9- 31	14571	180.2	221.1	373.6	536.3	778.8	937.5	1039.7	1094.0
9- 46	14847	2.4	3.8	9.2	15.0	23.7	29.5	33.2	35.2
9- 72	15150	13.1	21.2	51.7	84.8	134.7	167.6	189.0	200.5
9- 74	15454	14.1	23.9	60.6	100.6	160.9	200.8	226.7	240.6

TABLE 6C

MEAN TOTAL DOSE TO SKELETON IN RADS, COMPUTED BY POWER FUNCTION

LISTED BY PATIENT NUMBER

PT. NO.	N	ELAPSED TIME SINCE CESSATION OF INGESTION							
		1 DAY	1 YR	5 YR	10 YR	20 YR	30 YR	40 YR	48 YR
3-401	2	342.7	566.1	1163.5	1720.0	2611.5	3361.2	4031.0	4527.4
3-402	5	217.1	325.6	627.9	914.2	1375.6	1764.8	2113.0	2371.2
3-403	1	2.3	2.7	3.9	5.2	7.3	9.1	10.8	12.0
3-404	5	158.7	233.8	444.7	645.1	968.6	1241.7	1486.1	1667.3
3-405	4	92.5	152.8	314.0	464.2	704.8	907.1	1087.9	1221.8
3-406	1	4.8	5.5	7.9	10.4	14.6	18>2	21.4	23.9
3-407	1	246.4	366.1	701.2	1019.1	1531.8	1964.5	2351.6	2638.6
3-408	1	19.2	34.7	74.8	111.8	170.7	220.1	264.3	297.0
3-410	1	9.1	14.5	29.4	43.2	65.5	84.2	101.0	113.4
3-411	1	.4	.4	.6	.7	1.0	1>2	1.4	1.6
3-412	4	46.4	68.9	132.2	192.2	289.0	370.6	443.7	497.8
3-415	1	6.3	6.9	9.0	11.3	15.2	18.6	21.7	24.0
3-416	5	158.5	300.5	661.5	992.2	1518.8	1960.5	2354.7	2639.5
3-417	5	78.9	153.7	342.1	514.2	788.0	1017.6	1222.5	1374.2
3-418	1	2.8	3.1	4.3	5.5	7.6	9.4	11.1	12.3
3-419	4	74.5	149.4	336.6	507.1	778.1	1005.2	1207.9	1357.9
3-420	1	3.7	5.2	9.4	13.5	20.0	25.6	30.6	34.3
3-422	1	2.3	5.5	13.0	19.8	30.5	39.5	47.5	53.4
3-423	4	111.5	167.3	322.7	469.8	706.9	906.9	1085.8	1218.5
3-424	1	64.1	95.3	182.5	265.2	398.6	511.2	611.9	686.6
3-426	1	27.4	48.5	103.5	154.3	235.3	303.4	364.2	409.2
3-427	2	2.7	6.7	16.2	24.8	38.2	49.5	59.5	66.9
3-428	3	49.6	122.6	294.5	448.8	692.8	896.9	1078.9	1213.6
3-429	6	335.4	508.1	987.2	1440.0	2169.2	2784.1	3334.1	3733.7
3-431	3	281.6	402.0	745.4	1074.0	1605.9	2055.4	2457.9	2756.6
3-432	1	6.7	10.8	21.8	32.1	48.7	62.6	75.1	84.3
3-433	3	167.8	281.6	583.8	864.8	1314.5	1692.6	2030.4	2280.6
3-434	2	1.8	2.8	5.5	8.0	12.2	15.6	18.7	21.0
3-435	1	.9	1.4	2.8	4.1	6.3	8.1	9.7	10.9
3-436	1	.4	.5	.6	.8	1.1	1.4	1.6	1.8
3-437	1	5.2	10.8	24.7	37.3	57.3	74.1	89.0	100.1
3-441	1	4.2	10.4	25.0	38.1	58.9	76.2	91.7	103.1
3-442	1	.5	2.2	5.7	8.9	13.8	17.9	21.5	24.2
3-443	1	.2	.3	.5	.6	.9	1.1	1.4	1.5
3-444	2	.6	3.4	9.1	14.0	21.8	28.4	34.2	38.4
3-445	5	328.9	463.1	848.4	1218.3	1817.8	2324.9	2779.1	3116.0
3-446	3	22.4	30.8	55.1	78.6	116.8	149.1	178.1	199.7
3-447	1	.0	.3	.9	1.4	2.1	2.8	3.3	3.7
3-449	2	296.2	411.6	745.4	1066.9	1588.5	2030.1	2425.7	2719.3
3-450	1	1.0	3.5	9.0	13.8	21.4	27.7	33.4	37.5
3-452	2	2.1	5.9	14.7	22.6	34.9	45.3	54.5	61.3
3-455	1	85.6	171.8	386.9	582.9	894.4	1155.5	1388.4	1560.9
3-456	1	7.2	8.5	12.6	16.8	23.7	29.8	35.2	39.2
3-457	1	1.3	1.5	2.1	2.8	3.9	4.8	5.7	6.3
3-458	1	3.0	3.3	4.5	5.7	7.8	9.6	11.3	12.5

3-459	4	88.9	199.4	466.3	707.3	1089.3	1409.1	1694.3	1905.4
3-460	1	.7	2.2	5.5	8.4	13.0	16.9	20.3	22.8
3-461	1	.2	1.0	2.7	4.2	6.6	8.5	10.3	11.6
3-462	4	88.5	123.1	222.9	319.0	475.0	607.0	725.3	813.1
3-464	1	.1	.2	.5	.7	1.1	1.4	1.7	1.9
3-465	1	.1	.3	.9	1.4	2.1	2.7	3.3	3.7
3-466	1	.2	.7	1.8	2.8	4.3	5.5	6.7	7.5
3-467	1	5.0	5.9	8.7	11.6	16.4	20.6	24.4	27.2
3-468	1	4.7	7.2	14.0	20.5	30.9	39.7	47.5	53.4
3-469	1	.7	1.8	4.5	6.9	10.6	13.7	16.5	18.6
3-471	1	1.7	2.9	6.1	9.0	13.7	17.7	21.2	23.8
3-473	2	220.4	330.4	636.9	927.3	1395.2	1789.9	2142.9	2404.7
3-474	1	.6	3.1	8.3	12.9	20.0	26.0	31.3	35.2
3-475	1	.1	.2	.5	.7	1.1	1.4	1.7	1.9
3-476	1	.0	.2	.4	.7	1.0	1.3	1.6	1.8
3-477	1	.4	1.8	4.8	7.4	11.5	14.9	17.9	20.2
3-478	1	.2	.8	2.2	3.4	5.4	6.9	8.4	9.4
3-479	1	4.6	13.2	32.7	50.0	77.5	100.4	120.8	135.9
3-480	1	.0	.2	.4	.7	1.1	1.4	1.7	1.9
3-481	1	5.0	5.8	8.3	10.9	15.3	19.1	22.5	25.1
3-482	1	.1	.2	.3	.5	.7	.9	1.1	1.3
3-483	1	.2	.3	.5	.8	1.1	1.5	1.8	2.0
3-484	3	324.9	463.9	860.2	1239.4	1853.1	2371.9	2836.4	3180.9
3-485	1	.3	.4	.5	.7	1.0	1.3	1.6	1.7
3-486	2	22.2	62.8	155.3	237.8	368.1	477.0	574.0	310.6
3-487	1	46.5	82.3	175.4	261.4	398.6	513.9	616.9	693.1
3-488	1	11.2	31.9	79.0	120.9	187.2	242.6	291.9	328.4
3-489	1	14.2	25.7	55.4	82.7	126.3	162.9	195.6	219.8
3-490	1	6.1	8.4	15.0	21.4	31.7	40.5	48.4	54.3
3-491	1	.8	9.1	24.8	38.5	60.1	78.0	94.0	105.8
3-492	1	.9	1.1	1.7	2.3	3.3	4.2	5.0	5.6
3-493	1	1.6	2.2	3.9	5.5	8.2	10.4	12.4	13.9
3-494	1	.3	.8	1.8	2.8	4.3	5.5	6.7	7.5
3-495	1	.0	.2	.5	.7	1.1	1.4	1.7	1.9
3-496	1	.1	.3	.9	1.4	2.2	2.8	3.4	3.8
3-499	2	25.9	52.0	117.2	176.4	270.8	349.9	420.4	472.6
3-500	1	.0	.2	.5	.7	1.1	1.4	1.7	1.9
3-501	1	.2	1.1	3.0	4.6	7.1	9.2	11.1	12.5
3-502	1	35.4	50.5	93.6	134.9	201.7	258.1	308.7	346.2
3-503	1	20.4	32.0	63.5	93.2	140.9	181.0	216.9	243.5
3-504	1	1.6	4.2	10.3	15.8	24.4	31.5	38.0	42.7
3-505	3	17.4	36.1	82.3	124.3	191.0	246.9	296.7	333.6
3-506	1	5.3	6.1	8.7	11.3	15.8	19.7	23.2	25.8
3-507	1	.3	2.0	5.4	8.4	13.1	17.0	20.4	23.0
3-508	1	.3	1.7	4.5	7.0	10.9	14.1	17.0	19.2
3-509	1	36.5	38.9	47.5	56.9	73.4	88.1	101.5	111.6
3-510	3	96.3	178.1	387.8	580.4	887.3	1144.9	1374.8	1545.1
3-512	1	.5	1.9	4.9	7.5	11.7	15.1	18.2	20.5
3-513	3	7.4	20.9	51.7	79.1	122.5	158.8	191.0	139.2
3-515	1	.7	2.0	4.9	7.6	11.7	15.2	18.3	20.6
3-516	1	1.0	3.2	8.0	12.4	19.1	24.8	29.9	33.6
3-518	1	2.9	3.4	4.9	6.4	9.0	11.3	13.3	14.8
3-519	1	3.3	16.6	43.8	67.8	105.5	136.9	164.9	185.6
3-520	3	8.7	24.7	61.1	93.5	144.7	187.6	225.7	253.9
3-521	1	.6	1.8	4.5	6.9	10.7	13.8	16.6	18.7
3-522	3	16.2	33.7	76.8	115.9	178.1	230.3	276.8	311.1
3-523	1	1.7	4.4	10.6	16.2	25.1	32.5	39.1	44.0

3-524	1	4.3	12.2	30.1	46.2	71.4	92.6	111.4	125.3
3-525	1	8.0	8.4	10.0	11.7	14.7	17.4	20.0	21.8
3-526	1	.1	.2	.5	.7	1.1	1.4	1.7	1.9
3-527	1	.8	1.3	2.5	3.6	5.4	6.9	8.3	9.3
3-528	1	361.7	494.0	879.9	1253.3	1860.4	2374.8	2835.8	3178.0
3-529	3	23.2	35.5	69.5	101.6	153.2	196.7	235.7	264.5
3-530	3	74.0	124.2	257.5	381.4	579.8	746.5	895.5	1005.9
3-531	1	12.1	14.8	23.2	31.6	45.6	57.6	68.3	76.3
3-532	1	20.6	28.0	49.6	70.6	104.7	133.6	159.5	178.7
3-533	1	1.0	2.9	7.2	11.0	17.1	22.1	26.6	30.0
3-534	1	.2	.6	1.4	2.1	3.2	4.2	5.0	5.6
3-535	3	15.8	49.0	123.3	189.3	293.3	380.2	457.7	333.9
3-536	1	1.0	5.8	15.5	23.9	37.3	48.4	58.3	65.6
3-539	1	1.0	2.8	7.0	10.7	16.6	21.5	25.8	29.1
3-540	4	366.5	549.7	1060.1	1543.4	2322.4	2979.5	3567.3	4003.1
3-542	1	1.3	5.3	13.9	21.4	33.3	43.1	52.0	58.4
3-544	1	.3	1.0	2.4	3.6	5.6	7.2	8.7	9.8
3-546	1	4.0	16.2	42.2	65.0	101.0	131.1	157.8	177.6
3-547	1	3.0	4.7	9.5	14.0	21.2	27.2	32.6	36.6
3-548	1	9.9	34.7	88.7	136.4	211.7	274.5	330.5	371.9
3-549	1	4.3	11.4	27.7	42.3	65.4	84.7	101.9	114.6
3-550	1	2.1	3.4	7.0	10.3	15.5	20.0	23.9	26.9
3-551	5	279.4	383.7	687.2	980.3	1456.6	1860.1	2221.6	2490.0
3-552	1	24.2	39.4	80.2	118.3	179.5	230.9	276.9	310.9
3-553	1	1.1	4.5	11.7	18.1	28.1	36.5	43.9	49.4
3-554	1	242.8	449.2	978.3	1464.3	2238.7	2888.6	3468.6	3898.2
3-555	1	1.6	2.5	5.1	7.5	11.4	14.7	17.6	19.8
3-556	1	1.0	1.6	3.2	4.8	7.3	9.4	11.2	12.6
3-558	1	5.0	20.2	52.6	81.2	126.1	163.6	197.1	221.8
3-559	1	1.0	3.2	8.0	12.2	18.9	24.5	29.5	33.2
3-561	1	2.3	11.4	30.1	46.6	72.5	94.1	113.3	127.5
3-562	1	2.7	3.2	4.9	6.6	9.4	11.9	14.1	15.7
3-563	1	.6	2.6	6.8	10.4	16.2	21.1	25.4	28.6
3-564	1	.2	1.7	4.5	7.0	10.9	14.2	17.1	19.3
3-565	1	8.2	9.1	12.2	15.5	21.1	26.0	30.5	33.8
3-566	1	.4	.4	.6	.8	1.1	1.3	1.5	1.7
3-567	1	7.0	11.2	22.7	33.5	50.7	65.2	78.2	87.8
3-568	1	26.3	36.2	64.8	92.4	137.3	175.3	209.3	234.6
3-569	1	31.6	43.4	77.7	110.8	164.7	210.3	251.2	281.5
3-570	1	.1	.2	.5	.7	1.1	1.4	1.7	1.9
3-571	5	67.9	192.6	476.2	729.1	1128.5	1462.2	1759.7	1979.8
3-572	1	6.1	16.1	39.1	59.8	92.4	119.7	144.0	162.0
3-573	1	2.3	5.4	12.9	19.6	30.2	39.1	47.0	52.9
3-574	1	.4	.5	.7	.9	1.2	1.5	1.8	2.0
3-575	1	.1	.2	.4	.6	1.0	1.3	1.5	1.7
3-576	1	.5	1.3	3.2	4.9	7.5	9.8	11.7	13.2
3-577	1	12.8	20.5	41.5	61.1	92.6	119.1	142.7	160.3
3-578	1	1.2	3.2	7.7	11.8	18.3	23.7	28.5	32.1
3-579	1	1.3	5.4	13.9	21.5	33.4	43.3	52.1	58.6
3-580	1	.0	.3	.9	1.4	2.2	2.8	3.4	3.9
3-581	1	.5	2.3	6.0	9.3	14.4	18.7	22.6	25.4
3-585	3	27.7	35.2	58.1	80.7	117.9	149.6	178.1	199.2
3-586	5	138.5	240.8	509.1	757.3	1153.8	1486.9	1784.4	2004.8
3-587	1	.8	2.4	5.9	9.0	14.0	18.1	21.8	24.5
3-588	3	78.8	110.3	200.8	287.9	429.1	548.6	655.6	735.1
3-589	1	4.5	14.1	35.4	54.3	84.1	109.1	131.3	147.7

3-590	3	7.3	20.8	51.6	79.1	122.4	158.7	190.9	214.8
3-591	1	14.8	15.5	18.0	20.7	25.6	30.0	34.1	37.2
3-592	3	8.2	29.0	74.4	114.4	177.7	230.5	277.5	312.3
3-593	1	.6	3.0	7.9	12.2	18.9	24.5	29.6	33.3
3-594	1	4.2	8.7	19.8	29.9	46.0	59.4	71.4	80.3
3-595	1	.1	.2	.4	.7	1.0	1.3	1.6	1.8
3-596	1	.3	1.6	4.2	6.4	10.0	13.0	15.7	17.6
3-597	1	11.0	29.5	70.7	107.7	166.3	215.3	259.0	291.3
3-598	1	.1	.2	.4	.6	1.0	1.2	1.5	1.7
3-599	1	.6	1.7	4.3	6.5	10.1	13.1	15.7	17.7
3-600	1	.5	.6	.7	.9	1.2	1.4	1.6	1.8
3-604	1	3.9	4.6	6.8	9.1	12.8	16.1	19.0	21.2
3-605	1	.5	.7	1.5	2.2	3.4	4.3	5.2	5.8
3-607	1	14.4	38.0	92.6	141.5	218.7	283.2	340.7	383.3
3-612	2	128.7	167.1	282.5	395.8	581.3	739.0	880.6	985.8
3-613	1	.7	1.6	3.7	5.7	8.7	11.3	13.6	15.3
3-614	1	14.5	29.1	65.7	98.9	151.8	196.1	235.6	264.9
3-615	1	3.7	5.8	11.7	17.2	26.0	33.5	40.1	45.0
3-618	1	.9	2.1	4.9	7.5	11.6	14.9	18.0	20.2
3-619	1	122.6	304.3	731.2	1114.2	1720.2	2227.0	2678.9	3013.3
3-620	1	2.9	3.8	6.7	9.4	13.9	17.8	21.2	23.7
3-621	1	2.2	2.9	5.1	7.2	10.6	13.6	16.2	18.1
3-628	1	.1	.2	.5	.8	1.2	1.5	1.8	2.1
3-640	1	.6	1.1	2.4	3.6	5.5	7.1	8.5	9.6
3-645	1	6.4	12.1	26.6	39.9	61.2	78.9	94.8	106.6
3-648	1	1446.8	2069.3	3838.0	5531.3	8271.6	10587.9	12661.8	14200.2
3-649	1	131.7	250.1	550.1	825.1	1263.0	1630.3	1958.1	2200.9
3-657	1	2472.0	3394.4	6078.3	8670.7	12883.7	16452.2	19650.2	22023.6
3-671	1	119.9	602.2	1594.0	2464.6	3834.1	4976.9	5994.4	6747.2
3-674	1	.7	1.7	4.2	6.4	9.8	12.7	15.3	17.2
3-679	1	2.0	9.3	24.5	37.9	59.0	76.5	92.2	103.7
3-685	4	18.3	34.7	76.4	114.6	175.4	226.4	272.0	305.7
3-686	1	6.2	8.6	15.7	22.5	33.6	42.9	51.3	57.5
3-687	1	4.0	9.9	23.8	36.2	56.0	72.4	87.1	98.0
3-689	1	23.4	35.1	67.7	98.6	148.4	190.3	227.9	255.7
3-690	1	12.1	20.4	42.2	62.6	95.1	122.5	146.9	165.0
3-697	1	15.3	38.0	91.3	139.2	214.9	278.2	334.6	376.4
3-726	1	141.0	192.5	342.9	488.4	724.9	925.3	1105.0	1238.3
3-727	2	41.4	62.7	121.9	177.8	267.8	343.7	411.6	461.9
3-778	1	9.4	15.2	30.7	45.2	68.5	88.1	105.6	118.6
3-801	1	.0	.2	.5	.7	1.2	1.5	1.8	2.0
3-836	1	.1	.2	.5	.8	1.2	1.5	1.9	2.1
9- 1	1	1.3	3.0	7.0	10.7	16.5	21.4	25.7	28.9
9- 2	1	1.8	5.5	13.8	21.2	32.9	42.7	51.4	57.8
9- 4	1	223.3	262.9	389.9	519.6	736.4	923.0	1091.3	1216.7
9- 7	1	5.5	8.8	17.8	26.2	39.8	51.1	61.3	68.8
9- 29	1	.7	3.0	7.9	12.2	18.9	24.6	29.6	33.3
9- 31	1	106.1	127.4	194.6	262.6	375.7	472.7	560.1	625.2
9- 46	1	1.7	2.7	5.4	7.9	12.0	15.5	18.5	20.8
9- 72	1	8.7	14.4	29.6	43.7	66.4	85.5	102.5	115.2
9- 74	1	9.0	16.0	34.1	50.8	77.4	99.8	119.8	134.6

TABLE 6D

MEAN TOTAL DOSE TO SKELETON IN RADS, COMPUTED BY THREE EXPONENTIALS

LISTED BY PATIENT NUMBER

PT. NO.	N	ELAPSED TIME SINCE CESSATION OF INGESTION							
		1 DAY	1 YR	5 YR	10 YR	20 YR	30 YR	40 YR	48 YR
3-401	1	392.1	636.2	1548.8	2541.0	4035.0	5021.4	5662.1	5987.1
3-402	1	267.2	403.3	913.4	1466.1	2297.0	2844.9	3200.4	3391.0
3-403	1	1.8	2.2	3.5	4.9	6.9	8.3	9.1	9.6
3-404	5	208.8	310.6	692.1	1105.1	1725.6	2134.7	2400.1	2542.3
3-405	4	110.4	179.1	435.9	715.0	1135.4	1413.0	1593.3	1690.1
3-406	1	3.9	4.5	7.0	9.7	13.7	16.3	17.9	18.8
3-407	1	266.1	398.7	895.6	1433.9	2242.8	2776.2	3122.2	3307.7
3-408	1	20.9	36.0	92.2	153.5	245.9	306.9	346.6	367.9
3-410	1	10.0	15.8	37.8	61.7	97.6	121.3	136.7	145.0
3-411	1	.3	.4	.5	.7	1.0	1.2	1.3	1.3
3-412	4	59.9	89.8	202.1	323.6	506.3	626.7	704.9	746.8
3-415	1	5.7	6.3	8.6	11.0	14.6	16.9	18.4	19.1
3-416	5	209.4	371.9	974.9	1632.6	2624.6	3280.3	3706.6	3935.7
3-417	5	103.0	185.9	492.8	827.9	1333.3	1667.4	1884.7	2001.4
3-418	1	2.8	3.2	4.6	6.2	8.5	10.0	10.9	11.4
3-419	4	91.9	169.0	453.5	764.2	1232.9	1542.8	1744.4	1852.8
3-420	1	4.1	5.9	12.3	19.3	29.7	36.6	41.0	43.4
3-422	1	2.8	5.6	15.7	26.8	43.5	54.6	61.8	65.7
3-423	4	132.9	200.6	454.2	729.1	1142.3	1414.8	1591.6	1686.4
3-424	1	69.4	104.0	233.5	373.9	584.8	723.8	814.0	862.4
3-426	1	29.7	50.6	128.2	212.7	340.1	424.3	479.0	508.4
3-427	2	3.5	7.3	20.9	35.9	58.6	73.6	83.3	88.5
3-428	3	67.2	139.2	397.7	680.9	1108.7	1391.8	1576.1	1675.2
3-429	6	439.8	669.1	1528.2	2459.5	3859.7	4783.2	5382.4	5703.8
3-431	3	352.8	511.4	1105.6	1747.9	2712.4	3347.9	3759.8	3980.4
3-432	1	7.2	11.5	27.5	44.8	70.9	88.2	99.4	105.4
3-433	3	211.4	346.6	852.0	1401.8	2229.8	2776.6	3131.8	3322.5
3-434	2	1.3	1.9	4.5	7.2	11.3	14.1	15.9	16.8
3-435	1	.7	1.1	2.5	4.1	6.5	8.1	9.1	9.6
3-436	1	.4	.5	.7	.9	1.2	1.4	1.6	1.7
3-437	1	5.7	10.7	29.0	49.1	79.4	99.4	112.4	199.4
3-441	1	5.1	10.6	30.2	51.7	84.2	105.7	119.7	127.2
3-442	1	.8	2.3	7.1	12.4	20.4	25.7	29.1	31.0
3-443	1	.2	.2	.4	.6	.9	1.1	1.2	1.3
3-444	2	1.1	3.7	11.6	20.3	33.4	42.1	47.7	50.8
3-445	5	429.3	614.9	1310.1	2061.1	3188.4	3930.8	4412.1	4669.7
3-446	3	30.4	42.7	88.3	137.7	211.7	260.4	292.0	308.9
3-447	1	.1	.3	1.1	1.9	3.2	4.0	4.5	4.8
3-449	2	369.2	522.8	1098.4	1719.8	2652.1	3265.9	3663.7	3877.1
3-450	1	1.5	3.7	11.3	19.7	32.3	40.6	46.1	49.0
3-452	2	3.1	6.9	20.3	34.9	57.1	71.7	81.3	86.4
3-455	1	106.5	195.7	524.9	884.6	1427.2	1785.9	2019.2	2144.7
3-456	1	5.2	6.2	10.1	14.2	20.3	24.3	26.9	28.3
3-457	1	1.1	1.3	2.0	2.7	3.8	4.5	5.0	5.2
3-458	1	3.0	3.4	4.8	6.4	8.7	10.1	11.1	11.6

3-459	4	125.3	245.7	684.4	1164.3	1889.0	2368.3	2680.2	2848.0
3-460	1	1.0	2.4	7.2	12.4	20.4	25.6	29.0	30.9
3-461	1	.3	1.2	3.7	6.5	10.7	13.5	15.3	16.3
3-462	4	107.9	152.9	321.2	502.9	775.6	955.1	1071.5	1133.7
3-464	1	.1	.2	.6	1.0	1.7	2.1	2.4	2.5
3-465	1	.1	.3	1.1	1.9	3.1	3.9	4.4	4.7
3-466	1	.2	.7	2.3	4.0	6.5	8.2	9.3	9.9
3-467	1	5.1	6.2	10.0	14.1	20.2	24.2	26.7	28.1
3-468	1	4.8	7.3	16.9	27.3	43.0	53.3	60.0	63.5
3-469	1	.9	1.9	5.6	9.6	15.6	19.6	22.2	23.6
3-471	1	1.8	2.9	7.3	11.9	19.0	23.6	26.7	28.3
3-473	2	273.0	411.9	932.4	1496.3	2343.9	2902.9	3265.7	3460.1
3-474	1	1.0	3.3	10.2	17.8	29.3	36.9	41.9	44.5
3-475	1	.1	.2	.7	1.1	1.8	2.2	2.5	2.6
3-476	1	.0	.2	.5	.9	1.4	1.8	2.0	2.1
3-477	1	.6	1.8	5.7	10.0	16.5	20.7	23.5	25.0
3-478	1	.3	.9	2.8	5.0	8.2	10.3	11.7	12.4
3-479	1	6.4	14.3	42.0	72.4	118.3	148.7	168.4	179.1
3-480	1	.1	.2	.6	1.0	1.7	2.1	2.4	2.5
3-481	1	3.7	4.4	6.8	9.4	13.2	15.7	17.3	18.1
3-482	1	.1	.1	.3	.4	.7	.8	.9	1.0
3-483	1	.3	.4	.8	1.2	1.8	2.3	2.5	2.7
3-484	3	459.0	665.3	1438.2	2273.9	3528.5	4355.1	4891.0	5178.1
3-485	1	.3	.3	.6	.8	1.2	1.5	1.6	1.7
3-486	2	33.2	74.4	218.6	376.7	615.8	773.9	876.9	932.4
3-487	1	52.4	89.1	225.5	374.2	598.3	746.4	842.6	894.3
3-488	1	16.3	36.7	108.0	186.2	304.4	382.6	433.5	460.9
3-489	1	15.0	25.8	66.1	110.1	176.4	220.2	248.7	264.0
3-490	1	6.5	9.1	18.8	29.2	44.9	55.3	62.0	65.6
3-491	1	1.7	10.0	32.0	56.2	92.8	117.1	132.9	141.4
3-492	1	.6	.8	1.3	1.9	2.8	3.4	3.8	4.0
3-493	1	2.1	2.8	5.7	8.8	13.5	16.5	18.5	19.6
3-494	1	.4	.8	2.3	3.9	6.4	8.0	9.0	9.6
3-495	1	.1	.2	.6	1.1	1.7	2.2	2.5	2.6
3-496	1	.1	.4	1.2	2.1	3.5	4.4	5.0	5.3
3-499	2	33.6	61.7	165.6	279.0	450.2	563.3	636.9	676.5
3-500	1	.1	.2	.6	1.1	1.8	2.3	2.6	2.8
3-501	1	.3	1.1	3.3	5.8	9.6	12.1	13.8	14.6
3-502	1	47.2	68.4	148.0	233.9	363.0	448.0	503.1	532.7
3-503	1	24.2	37.8	88.6	143.8	226.8	281.6	317.1	336.2
3-504	1	2.3	4.9	14.3	24.5	40.0	50.3	57.0	60.6
3-505	3	24.9	46.8	127.0	214.8	347.2	434.7	491.7	522.3
3-506	1	4.4	5.1	7.8	10.7	15.0	17.8	19.6	20.6
3-507	1	.6	2.3	7.3	12.7	21.0	26.5	30.0	31.9
3-508	1	.6	1.9	6.1	10.6	17.5	22.0	25.0	26.6
3-509	1	37.2	39.8	49.5	59.6	74.4	83.9	89.9	93.0
3-510	3	123.4	215.8	559.2	933.6	1498.1	1871.2	2113.7	2244.1
3-512	1	.7	2.0	6.0	10.5	17.3	21.8	24.7	26.3
3-513	3	11.6	26.0	76.4	131.8	215.4	270.8	306.9	326.2
3-515	1	.9	2.1	6.2	10.7	17.5	21.9	24.9	26.4
3-516	1	1.4	3.4	10.1	17.4	28.5	35.8	40.6	43.2
3-518	1	2.2	2.6	4.1	5.6	8.0	9.5	10.5	11.0
3-519	1	5.5	18.2	56.8	99.3	163.5	206.0	233.7	248.6
3-520	3	13.7	30.8	90.6	156.2	255.3	320.9	363.6	386.6
3-521	1	.9	1.9	5.6	9.7	15.9	20.0	22.6	24.0
3-522	3	24.4	45.8	124.5	210.5	340.3	426.1	481.9	511.9
3-523	1	2.3	4.9	14.2	24.4	39.7	49.9	56.5	60.1

3-524	1	5.7	12.9	37.8	65.2	106.5	133.9	151.7	161.3
3-525	1	8.3	8.7	10.4	12.2	14.7	16.4	17.4	17.9
3-526	1	.1	.2	.6	1.0	1.6	2.0	2.3	2.4
3-527	1	.9	1.3	3.0	4.9	7.7	9.5	10.7	11.3
3-528	1	425.9	593.8	1222.5	1900.6	2917.4	3586.5	4020.0	4251.8
3-529	3	33.9	52.0	119.9	193.5	304.2	377.3	424.7	450.1
3-530	3	99.2	162.7	399.9	657.9	1046.6	1303.2	1469.9	1559.4
3-531	1	13.0	16.3	28.5	41.5	60.9	73.7	81.9	86.3
3-532	1	21.1	29.3	59.9	93.0	142.5	175.1	196.3	207.6
3-533	1	1.4	3.1	9.1	15.7	25.6	32.2	36.5	38.8
3-534	1	.3	.6	1.7	3.0	4.8	6.1	6.9	7.3
3-535	3	27.5	65.2	194.4	336.3	550.8	692.8	785.3	834.9
3-536	1	1.8	6.2	19.5	34.1	56.2	70.9	80.4	85.5
3-539	1	1.5	3.3	9.7	16.6	27.2	34.2	38.7	41.2
3-540	4	490.3	740.1	1676.0	2690.2	4214.7	5219.9	5872.3	6222.0
3-542	1	2.3	6.3	19.5	33.9	55.7	70.2	79.6	84.7
3-544	1	.5	1.1	3.3	5.7	9.4	11.8	13.4	14.2
3-546	1	6.1	17.2	52.9	92.0	151.3	190.6	216.1	229.9
3-547	1	3.5	5.4	12.9	20.9	33.1	41.1	46.3	49.1
3-548	1	16.3	41.6	125.9	218.4	358.4	451.0	511.4	543.9
3-549	1	5.7	12.1	35.2	60.4	98.6	123.9	140.3	149.1
3-550	1	3.1	4.9	11.6	19.0	30.1	37.4	42.1	44.7
3-551	5	369.5	517.7	1072.8	1671.7	2569.9	3161.0	3544.0	3748.9
3-552	1	27.8	44.6	107.5	175.8	278.8	346.7	390.8	414.5
3-553	1	1.8	5.0	15.4	26.8	44.0	55.5	62.9	66.9
3-554	1	302.0	528.3	1369.2	2286.1	3668.7	4582.3	5176.3	5495.5
3-555	1	1.5	2.5	5.9	9.6	15.2	18.9	21.3	22.6
3-556	1	1.0	1.5	3.7	6.1	9.7	12.0	13.6	14.4
3-558	1	8.3	23.3	71.6	124.7	205.0	258.2	292.8	311.4
3-559	1	1.6	3.8	11.2	19.4	31.8	40.0	45.3	48.2
3-561	1	3.9	12.7	39.5	69.1	113.8	143.4	162.7	173.1
3-562	1	2.5	3.1	5.3	7.6	11.0	13.2	14.7	15.4
3-563	1	.9	2.9	8.9	15.5	25.5	32.1	36.4	38.8
3-564	1	.4	1.9	6.2	10.8	17.8	22.5	25.5	27.2
3-565	1	7.8	8.8	12.4	16.2	21.9	25.6	27.9	29.1
3-566	1	.4	.4	.6	.8	1.1	1.3	1.5	1.5
3-567	1	8.4	13.3	31.8	51.9	82.1	102.0	115.0	121.9
3-568	1	31.2	43.8	90.7	141.3	217.2	267.2	299.6	316.9
3-569	1	37.5	52.5	108.8	169.6	260.7	320.6	359.5	380.3
3-570	1	.1	.2	.6	1.0	1.6	2.1	2.3	2.4
3-571	5	106.5	238.9	701.5	1209.1	1976.1	2483.8	2814.4	2992.2
3-572	1	8.0	17.3	50.0	85.9	140.1	176.0	199.3	211.9
3-573	1	2.9	5.9	16.5	28.2	45.9	57.6	65.2	69.3
3-574	1	.6	.7	1.0	1.3	1.8	2.1	2.3	2.4
3-575	1	.1	.1	.4	.7	1.2	1.5	1.7	1.8
3-576	1	.7	1.4	4.1	7.0	11.4	14.4	16.3	17.3
3-577	1	15.9	25.3	60.5	98.7	156.3	194.3	218.9	232.1
3-578	1	1.6	3.4	9.9	17.1	27.8	35.0	39.6	42.1
3-579	1	2.3	6.4	19.7	34.3	56.4	71.0	80.5	85.6
3-580	1	.1	.4	1.2	2.2	3.6	4.5	5.1	5.4
3-581	1	.9	2.7	8.5	14.9	24.4	30.8	34.9	37.2
3-585	3	45.0	58.7	109.7	164.4	246.4	300.1	334.9	353.4
3-586	5	179.4	301.5	757.1	1253.1	2000.4	2494.1	2814.9	2987.2
3-587	1	1.1	2.6	7.5	13.0	21.3	26.7	30.3	32.2
3-588	3	99.6	141.9	300.1	471.0	727.4	896.4	1005.8	1064.4
3-589	1	6.7	15.9	47.4	82.0	134.3	168.9	191.5	203.6

3-590	3	12.6	28.3	83.2	143.3	234.3	294.5	333.7	354.8
3-591	1	15.7	16.4	19.0	21.6	25.5	28.0	29.6	30.3
3-592	3	16.0	41.3	124.9	217.0	356.2	448.3	508.3	540.6
3-593	1	1.1	3.6	11.2	19.5	32.1	40.5	45.9	48.9
3-594	1	5.5	10.4	28.2	47.6	77.0	96.4	109.0	115.8
3-595	1	.1	.2	.5	.9	1.5	1.8	2.1	2.2
3-596	1	.6	1.9	5.9	10.3	17.0	21.5	24.3	25.9
3-597	1	15.4	32.0	91.3	156.4	254.6	319.6	361.9	384.7
3-598	1	.1	.2	.4	.7	1.1	1.4	1.6	1.7
3-599	1	.9	2.1	6.1	10.6	17.3	21.7	24.6	26.1
3-600	1	.6	.6	.8	1.0	1.2	1.4	1.5	1.5
3-604	1	6.0	7.2	11.6	16.4	23.4	28.0	31.0	32.6
3-605	1	.6	.9	2.1	3.5	5.5	6.8	7.7	8.1
3-607	1	21.7	46.7	135.1	232.1	378.7	475.6	538.8	572.7
3-612	2	182.7	243.1	468.7	711.2	1074.1	1312.6	1466.8	1549.2
3-613	1	.9	1.8	4.9	8.4	13.7	17.2	19.4	20.7
3-614	1	18.2	33.5	89.9	151.6	244.5	306.0	346.0	367.4
3-615	1	4.4	7.0	16.5	26.9	42.5	52.9	59.6	63.2
3-618	1	1.4	2.8	7.7	13.1	21.3	26.7	30.2	32.1
3-619	1	188.9	392.3	1121.6	1920.7	3127.7	3926.3	4446.1	4725.8
3-620	1	2.0	2.7	5.5	8.4	12.8	15.7	17.6	18.6
3-621	1	1.5	2.1	4.2	6.4	9.8	12.0	13.4	14.2
3-628	1	.1	.3	.8	1.4	2.3	2.9	3.2	3.4
3-640	1	.7	1.2	3.2	5.4	8.7	10.9	12.3	13.0
3-645	1	7.5	13.3	34.9	58.5	94.0	117.5	132.8	141.0
3-648	1	1522.8	2211.0	4781.5	7562.5	11738.4	14489.7	16273.4	17228.9
3-649	1	120.1	213.6	559.3	936.8	1506.1	1882.3	2127.0	2258.5
3-657	1	1605.8	2249.9	4662.1	7264.4	11167.5	13736.6	15400.8	16196.7
3-671	1	171.0	561.7	1751.4	3060.2	5040.2	6351.5	7205.7	7665.7
3-674	1	.9	2.0	5.6	9.6	15.6	19.5	22.1	23.5
3-679	1	2.9	9.3	28.8	50.3	82.8	104.3	118.3	125.9
3-685	4	28.2	50.2	131.5	220.3	354.2	442.7	500.2	531.1
3-686	1	8.5	12.0	25.5	40.0	61.7	76.0	85.3	90.3
3-687	1	5.4	11.2	32.0	54.9	89.3	112.1	127.0	134.9
3-689	1	28.3	42.8	96.9	155.5	243.6	301.7	339.4	359.6
3-690	1	11.4	18.7	45.9	75.5	120.0	149.5	168.6	178.9
3-697	1	27.0	56.0	160.1	274.1	446.3	560.3	634.5	674.4
3-726	1	228.3	318.3	655.1	1018.4	1563.2	1921.7	2153.9	2278.2
3-727	2	64.1	97.5	222.6	358.4	562.4	696.9	784.2	831.1
3-778	1	15.7	24.9	59.6	97.2	153.8	191.2	215.5	228.1
3-801	1	.1	.2	.8	1.3	2.2	2.7	3.1	3.3
3-836	1	.1	.3	.9	1.5	2.5	3.1	3.5	3.8
9- 1	1	2.1	4.2	11.8	20.1	32.6	40.9	46.4	49.3
9- 2	1	3.3	7.8	23.2	40.1	65.7	82.7	93.7	99.6
9- 4	1	394.9	474.6	770.1	1085.0	1553.3	1859.4	2056.2	2160.6
9- 7	1	8.1	12.8	30.7	50.0	79.2	98.4	110.9	117.6
9- 29	1	1.6	4.4	13.6	23.7	39.0	49.1	55.7	59.3
9- 31	1	180.2	221.1	373.6	536.3	778.8	937.5	1039.7	1094.0
9- 46	1	2.4	3.8	9.2	15.0	23.7	29.5	33.2	35.2
9- 72	1	13.1	21.2	51.7	84.8	134.7	167.6	189.0	200.5
9- 74	1	14.1	23.9	60.6	100.6	160.9	200.8	226.7	240.6

TABLE 6E

MEAN TOTAL DOSE TO SKELETON IN RADS. COMPUTED BY POWER FUNCTION

LISTED BY LATEST RADIOLOGICAL OR CLINICAL DIAGNOSIS AND BY INCREASING VALUES 48 YEARS AFTER CESSATION OF INGESTION

PT. NO.	N	ELAPSED TIME SINCE CESSATION OF INGESTION							
		1 DAY	1 YR	5 YR	10 YR	20 YR	30 YR	40 YR	48 YR
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.									
3-482	1	.1	.2	.3	.5	.7	.9	1.1	1.3
3-443	1	.2	.3	.5	.6	.9	1.1	1.4	1.5
3-411	1	.4	.4	.6	.7	1.0	1.2	1.4	1.6
3-598	1	.1	.2	.4	.6	1.0	1.2	1.5	1.7
3-575	1	.1	.2	.4	.6	1.0	1.3	1.5	1.7
3-485	1	.3	.4	.5	.7	1.0	1.3	1.6	1.7
3-566	1	.4	.4	.6	.8	1.1	1.3	1.5	1.7
3-476	1	.0	.2	.4	.7	1.0	1.3	1.6	1.8
3-595	1	.1	.2	.4	.7	1.0	1.3	1.6	1.8
3-436	1	.4	.5	.6	.8	1.1	1.4	1.6	1.8
3-600	1	.5	.6	.7	.9	1.2	1.4	1.6	1.8
3-480	1	.0	.2	.4	.7	1.1	1.4	1.7	1.9
3-495	1	.0	.2	.5	.7	1.1	1.4	1.7	1.9
3-464	1	.1	.2	.5	.7	1.1	1.4	1.7	1.9
3-475	1	.1	.2	.5	.7	1.1	1.4	1.7	1.9
3-570	1	.1	.2	.5	.7	1.1	1.4	1.7	1.9
3-801	1	.0	.2	.5	.7	1.2	1.5	1.8	2.0
3-574	1	.4	.5	.7	.9	1.2	1.5	1.8	2.0
3-628	1	.1	.2	.5	.8	1.2	1.5	1.8	2.1
3-836	1	.1	.2	.5	.8	1.2	1.5	1.9	2.1
3-465	1	.1	.3	.9	1.4	2.1	2.7	3.3	3.7
3-447	1	.0	.3	.9	1.4	2.1	2.8	3.3	3.7
3-496	1	.1	.3	.9	1.4	2.2	2.8	3.4	3.8
3-580	1	.0	.3	.9	1.4	2.2	2.8	3.4	3.9
3-534	1	.2	.6	1.4	2.1	3.2	4.2	5.0	5.6
3-492	1	.9	1.1	1.7	2.3	3.3	4.2	5.0	5.6
3-605	1	.5	.7	1.5	2.2	3.4	4.3	5.2	5.8
3-457	1	1.3	1.5	2.1	2.8	3.9	4.8	5.7	6.3
3-466	1	.2	.7	1.8	2.8	4.3	5.5	6.7	7.5
3-494	1	.3	.8	1.8	2.8	4.3	5.5	6.7	7.5
3-527	1	.8	1.3	2.5	3.6	5.4	6.9	8.3	9.3
3-478	1	.2	.8	2.2	3.4	5.4	6.9	8.4	9.4
3-640	1	.6	1.1	2.4	3.6	5.5	7.1	8.5	9.6
3-544	1	.3	1.0	2.4	3.6	5.6	7.2	8.7	9.8
3-435	1	.9	1.4	2.8	4.1	6.3	8.1	9.7	10.9
3-461	1	.2	1.0	2.7	4.2	6.6	8.5	10.3	11.6
3-403	1	2.3	2.7	3.9	5.2	7.3	9.1	10.8	12.0
3-418	1	2.8	3.1	4.3	5.5	7.6	9.4	11.1	12.3
3-501	1	.2	1.1	3.0	4.6	7.1	9.2	11.1	12.5
3-458	1	3.0	3.3	4.5	5.7	7.8	9.6	11.3	12.5
3-556	1	1.0	1.6	3.2	4.8	7.3	9.4	11.2	12.6
3-576	1	.5	1.3	3.2	4.9	7.5	9.8	11.7	13.2
3-493	1	1.6	2.2	3.9	5.5	8.2	10.4	12.4	13.9

3-518	1	2.9	3.4	4.9	6.4	9.0	11.3	13.3	14.8
3-613	1	.7	1.6	3.7	5.7	8.7	11.3	13.6	15.3
3-562	1	2.7	3.2	4.9	6.6	9.4	11.9	14.1	15.7
3-674	1	.7	1.7	4.2	6.4	9.8	12.7	15.3	17.2
3-596	1	.3	1.6	4.2	6.4	10.0	13.0	15.7	17.6
3-599	1	.6	1.7	4.3	6.5	10.1	13.1	15.7	17.7
3-621	1	2.2	2.9	5.1	7.2	10.6	13.6	16.2	18.1
3-469	1	.7	1.8	4.5	6.9	10.6	13.7	16.5	18.6
3-521	1	.6	1.8	4.5	6.9	10.7	13.8	16.6	18.7
3-508	1	.3	1.7	4.5	7.0	10.9	14.1	17.0	19.2
3-564	1	.2	1.7	4.5	7.0	10.9	14.2	17.1	19.3
3-555	1	1.6	2.5	5.1	7.5	11.4	14.7	17.6	19.8
3-477	1	.4	1.8	4.8	7.4	11.5	14.9	17.9	20.2
3-618	1	.9	2.1	4.9	7.5	11.6	14.9	18.0	20.2
3-512	1	.5	1.9	4.9	7.5	11.7	15.1	18.2	20.5
3-515	1	.7	2.0	4.9	7.6	11.7	15.2	18.3	20.6
9- 46	1	1.7	2.7	5.4	7.9	12.0	15.5	18.5	20.8
3-434	2	1.8	2.8	5.5	8.0	12.2	15.6	18.7	21.0
3-525	1	8.0	8.4	10.0	11.7	14.7	17.4	20.0	21.8
3-460	1	.7	2.2	5.5	8.4	13.0	16.9	20.3	22.8
3-507	1	.3	2.0	5.4	8.4	13.1	17.0	20.4	23.0
3-620	1	2.9	3.8	6.7	9.4	13.9	17.8	21.2	23.7
3-471	1	1.7	2.9	6.1	9.0	13.7	17.7	21.2	23.8
3-406	1	4.8	5.5	7.9	10.4	14.6	18.2	21.4	23.9
3-415	1	6.3	6.9	9.0	11.3	15.2	18.6	21.7	24.0
3-442	1	.5	2.2	5.7	8.9	13.8	17.9	21.5	24.2
3-587	1	.8	2.4	5.9	9.0	14.0	18.1	21.8	24.5
3-481	1	5.0	5.8	8.3	10.9	15.3	19.1	22.5	25.1
3-581	1	.5	2.3	6.0	9.3	14.4	1827	22.6	25.4
3-506	1	5.3	6.1	8.7	11.3	15.8	19.7	23.2	25.8
3-550	1	2.1	3.4	7.0	10.3	15.5	20.0	23.9	26.9
3-467	1	5.0	5.9	8.7	11.6	16.4	20.6	24.4	27.2
3-563	1	.6	2.6	6.8	10.4	16.2	21.1	25.4	28.6
9- 1	1	1.3	3.0	7.0	10.7	16.5	21.4	25.7	28.9
3-539	1	1.0	2.8	7.0	10.7	16.6	21.5	25.8	29.1
3-533	1	1.0	2.9	7.2	11.0	17.1	22.1	26.6	30.0
3-578	1	1.2	3.2	7.7	11.8	18.3	23.7	28.5	32.1
3-559	1	1.0	3.2	8.0	12.2	18.9	24.5	29.5	33.2
3-593	1	.6	3.0	7.9	12.2	18.9	24.5	29.6	33.3
9- 29	1	.7	3.0	7.9	12.2	18.9	24.6	29.6	33.3
3-516	1	1.0	3.2	8.0	12.4	19.1	24.8	29.9	33.6
3-565	1	8.2	9.1	12.2	15.5	21.1	26.0	30.5	33.8
3-420	1	3.7	5.2	9.4	13.5	20.0	25.6	30.6	34.3
3-474	1	.6	3.1	8.3	12.9	20.0	26.0	31.3	35.2
3-547	1	3.0	4.7	9.5	14.0	21.2	27.2	32.6	36.6
3-450	1	1.0	3.5	9.0	13.8	21.4	27.7	33.4	37.5
3-444	2	.6	3.4	9.1	14.0	21.8	28.4	34.2	38.4
3-456	1	7.2	8.5	12.6	16.8	23.7	29.8	35.2	39.2
3-504	1	1.6	4.2	10.3	15.8	24.4	31.5	38.0	42.7
3-523	1	1.7	4.4	10.6	16.2	25.1	32.5	39.1	44.0
3-553	1	1.1	4.5	11.7	18.1	28.1	36.5	43.9	49.4
3-573	1	2.3	5.4	12.9	19.6	30.2	39.1	47.0	52.9
3-422	1	2.3	5.5	13.0	19.8	30.5	39.5	47.5	53.4
3-468	1	4.7	7.2	14.0	20.5	30.9	39.7	47.5	53.4
3-686	1	6.2	8.6	15.7	22.5	33.6	42.9	51.3	57.5
3-542	1	1.3	5.3	13.9	21.4	33.3	43.1	52.0	58.4

3-579	1	1.3	5.4	13.9	21.5	33.4	43.3	52.1	58.6
3-452	2	2.1	5.9	14.7	22.6	34.9	45.3	54.5	61.3
3-536	1	1.0	5.8	15.5	23.9	37.3	48.4	58.3	65.6
3-427	2	2.7	6.7	16.2	24.8	38.2	49.5	59.5	66.9
3-531	1	12.1	14.8	23.2	31.6	45.6	57.6	68.3	76.3
3-432	1	6.7	10.8	21.8	32.1	48.7	62.6	75.1	84.3
3-567	1	7.0	11.2	22.7	33.5	50.7	65.2	78.2	87.8
3-687	1	4.0	9.9	23.8	36.2	56.0	72.4	87.1	98.0
3-437	1	5.2	10.8	24.7	37.3	57.3	74.1	89.0	100.1
3-441	1	4.2	10.4	25.0	38.1	58.9	76>2	91.7	103.1
3-679	1	2.0	9.3	24.5	37.9	59.0	76.5	92.2	103.7
3-491	1	.8	9.1	24.8	38.5	60.1	78.0	94.0	105.8
3-645	1	6.4	12.1	26.6	39.9	61.2	78.9	94.8	106.6
3-509	1	36.5	38.9	47.5	56.9	73.4	88.1	101.5	111.6
3-410	1	9.1	14.5	29.4	43.2	65.5	84.2	101.0	113.4
3-549	1	4.3	11.4	27.7	42.3	65.4	84.7	101.9	114.6
9- 72	1	8.7	14.4	29.6	43.7	66.4	85.5	102.5	115.2
3-778	1	9.4	15.2	30.7	45.2	68.5	88.1	105.6	118.6
3-561	1	2.3	11.4	30.1	46.6	72.5	94.1	113.3	127.5
9- 74	1	9.0	16.0	34.1	50.8	77.4	99.8	119.8	134.6
3-479	1	4.6	13.2	32.7	50.0	77.5	100.4	120.8	135.9
3-513	3	7.4	20.9	51.7	79.1	122.5	158.8	191.0	139.2
3-589	1	4.5	14.1	35.4	54.3	84.1	109.1	131.3	147.7
3-690	1	12.1	20.4	42.2	62.6	95.1	122.5	146.9	165.0
3-546	1	4.0	16.2	42.2	65.0	101.0	131.1	157.8	177.6
3-532	1	20.6	28.0	49.6	70.6	104.7	133.6	159.5	178.7
3-519	1	3.3	16.6	43.8	67.8	105.5	136.9	164.9	185.6
3-585	3	27.7	35.2	58.1	80.7	117.9	149.6	178.1	199.2
3-446	3	22.4	30.8	55.1	78.6	116.8	149.1	178.1	199.7
3-590	3	7.3	20.8	51.6	79.1	122.4	158.7	190.9	214.8
3-489	1	14.2	25.7	55.4	82.7	126.3	162.9	195.6	219.8
3-503	1	20.4	32.0	63.5	93.2	140.9	181.0	216.9	243.5
3-689	1	23.4	35.1	67.7	98.6	148.4	190.3	227.9	255.7
3-569	1	31.6	43.4	77.7	110.8	164.7	210.3	251.2	281.5
3-507	1	11.9	29.5	70.7	107.7	166.3	215.3	259.0	291.3
3-408	1	19.2	34.7	74.8	111.8	170.7	220.1	264.3	297.0
3-685	4	18.3	34.7	76.4	114.6	175.4	226.4	272.0	305.7
3-486	2	22.2	62.8	155.3	237.8	368.1	477.0	574.0	310.6
3-552	1	24.2	39.4	80.2	118.3	179.5	230.9	276.9	310.9
3-522	3	16.2	33.7	76.8	115.9	178.1	230.3	276.8	311.1
3-592	3	8.2	29.0	74.4	114.4	177.7	230.5	277.5	312.3
3-535	3	15.8	49.0	123.3	189.3	293.3	380.2	457.7	333.9
3-548	1	9.9	34.7	88.7	136.4	211.7	274.5	330.5	371.9
3-697	1	15.3	38.0	91.3	139.2	214.9	278.2	334.6	376.4
3-607	1	14.4	38.0	92.6	141.5	218.7	283.2	340.7	383.3
3-426	1	27.4	48.5	103.5	154.3	235.3	303.4	364.2	409.2
3-612	2	128.7	167.1	282.5	395.8	581.3	739.0	880.6	985.8

MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION.

3-500	1	.0	.2	.5	.7	1.1	1.4	1.7	1.9
3-526	1	.1	.2	.5	.7	1.1	1.4	1.7	1.9
3-483	1	.2	.3	.5	.8	1.1	1.5	1.8	2.0
3-604	1	3.9	4.6	6.8	9.1	12.8	16.1	19.0	21.2
3-591	1	14.8	15.5	18.0	20.7	25.6	30.0	34.1	37.2
3-615	1	3.7	5.8	11.7	17.2	26.0	33.5	40.1	45.0
3-490	1	6.1	8.4	15.0	21.4	31.7	40.5	48.4	54.3
9- 2	1	1.8	5.5	13.8	21.2	32.9	42.7	51.4	57.8
9- 7	1	5.5	8.8	17.8	26.2	39.8	51.1	61.3	68.8
3-524	1	4.3	12.2	30.1	46.2	71.4	92.6	111.4	125.3
3-577	1	12.8	20.5	41.5	61.1	92.6	119.1	142.7	160.3
3-572	1	6.1	16.1	39.1	59.8	92.4	119.7	144.0	162.0
3-568	1	26.3	36.2	64.8	92.4	137.3	175.3	209.3	234.6
3-520	3	8.7	24.7	61.1	93.5	144.7	187.6	225.7	253.9
3-614	1	14.5	29.1	65.7	98.9	151.8	196.1	235.6	264.9
3-488	1	11.2	31.9	79.0	120.9	187.2	242.6	291.9	328.4
3-505	3	17.4	36.1	82.3	124.3	191.0	246.9	296.7	333.6
3-727	2	41.4	62.7	121.9	177.8	267.8	343.7	411.6	461.9
3-412	4	46.4	68.9	132.2	192.2	289.0	370.6	443.7	497.8
9- 31	1	106.1	127.4	194.6	262.6	375.7	472.7	560.1	625.2
3-424	1	64.1	95.3	182.5	265.2	398.6	511.2	611.9	686.6
3-419	4	74.5	149.4	336.6	507.1	778.1	1005.2	1207.9	1357.9

MILD CHANGES TYPICAL OF RADIUM DEPOSITION

3-594	1	4.2	8.7	19.9	29.9	46.0	59.4	71.4	80.3
3-529	3	23.2	35.5	69.5	101.6	153.2	196.7	235.7	264.5
3-502	1	35.4	50.5	93.6	134.9	201.7	258.1	308.7	346.2
3-588	3	78.8	110.3	200.8	287.9	429.1	548.6	655.6	735.1
3-462	4	88.5	123.1	222.9	319.0	475.0	607.0	725.3	813.1
3-530	3	74.0	124.2	257.5	381.4	570.8	746.5	895.5	1005.9
3-428	3	49.6	122.6	294.5	448.8	692.8	896.9	1078.9	1213.6
3-510	3	96.3	178.1	387.8	580.4	887.3	1144.9	1374.8	1545.1
3-433	3	167.8	281.6	583.8	864.8	1314.5	1692.6	2030.4	2280.6
3-445	5	328.9	463.1	848.4	1218.3	1817.8	2324.9	2779.1	3116.0

MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION

3-558	1	5.0	20.2	52.6	81.2	126.1	163.6	197.1	221.8
3-499	2	25.9	52.0	117.2	176.4	270.8	349.9	420.4	472.6
9- 4	1	223.3	262.9	389.9	519.6	736.4	923.0	1091.3	1216.7
3-423	4	111.5	167.3	322.7	469.8	706.0	906.9	1085.8	1218.5
3-405	4	92.5	152.8	314.0	464.2	704.8	907.1	1087.9	1221.8
3-459	4	88.9	199.4	466.3	707.3	1089.3	1409.1	1694.3	1905.4
3-586	5	138.5	240.8	509.1	757.3	1153.8	1486.9	1784.4	2004.8
3-416	5	158.5	300.5	661.5	992.2	1518.8	1960.5	2354.7	2639.5
3-484	3	324.9	463.9	860.2	1239.4	1853.1	2371.9	2836.4	3180.9

ADVANCED, NON-MALIGNANT CHANGES TYPICAL OF RADIUM DEPOSITION

3-726	1	141.0	192.5	342.9	488.4	724.9	925.3	1105.0	1238.3
3-404	5	158.7	233.8	444.7	645.1	968.6	1241.7	1486.1	1667.3
3-571	5	67.9	192.6	476.2	729.1	1128.5	1462.2	1759.7	1979.8
3-473	2	220.4	330.4	636.9	927.3	1395.2	1789.9	2142.9	2404.7
3-551	5	279.4	383.7	687.2	980.3	1456.6	1860.1	2221.6	2490.0
3-449	2	296.2	411.6	745.4	1066.9	1588.5	2030.1	2425.7	2719.3
3-431	3	281.6	402.0	745.4	1074.0	1605.9	2055.4	2457.9	2756.6
3-528	1	361.7	494.0	879.9	1253.3	1860.4	2374.8	2835.8	3178.0
3-554	1	242.8	449.2	978.3	1464.3	2238.7	2888.6	3468.6	3898.2
3-540	4	366.5	549.7	1060.1	1543.4	2322.4	2979.5	3567.3	4003.1

MALIGNANT CHANGES ATTRIBUTABLE TO RADIUM DEPOSITION

3-417	5	78.9	153.7	342.1	514.2	788.0	1017.6	1222.5	1374.2
3-455	1	85.6	171.8	386.9	582.9	894.4	1155.5	1388.4	1560.9
3-649	1	131.7	250.1	550.1	825.1	1263.0	1630.3	1958.1	2200.9
3-402	5	217.1	325.6	627.9	914.2	1375.6	1764.8	2113.0	2371.2
3-407	1	246.4	366.1	701.2	1019.1	1531.8	1964.5	2351.6	2638.6
3-619	1	122.6	304.3	731.2	1114.2	1720.2	2227.0	2678.9	3013.3
3-429	6	335.4	508.1	987.2	1440.0	2169.2	2784.1	3334.1	3733.7
3-401	2	342.7	566.1	1163.5	1720.0	2611.5	3361.2	4031.0	4527.4
3-671	1	119.9	602.2	1594.0	2464.6	3834.1	4976.9	5994.4	6747.2
3-648	1	1446.8	2069.3	3838.0	5531.3	8271.6	10587.9	12661.8	14200.2
3-657	1	2472.0	3394.4	6078.3	8670.7	12883.7	16452.2	19650.2	22023.6

TABLE 6F

MEAN TOTAL DOSE TO SKELETON IN RADS. COMPUTED BY THREE EXPONENTIALS

LISTED BY LATEST RADIOLOGICAL OR CLINICAL DIAGNOSIS AND BY INCREASING VALUES 48 YEARS AFTER CESSATION OF INGESTION

PT. NO.	N	ELAPSED TIME SINCE CESSATION OF INGESTION							
		1 DAY	1 YR	5 YR	10 YR	20 YR	30 YR	40 YR	48 YR
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.									
3-482	1	.1	.1	.3	.4	.7	.8	.9	1.0
3-443	1	.2	.2	.4	.6	.9	1.1	1.2	1.3
3-411	1	.3	.4	.5	.7	1.0	1.2	1.3	1.3
3-566	1	.4	.4	.6	.8	1.1	1.3	1.5	1.5
3-600	1	.6	.6	.8	1.0	1.2	1.4	1.5	1.5
3-598	1	.1	.2	.4	.7	1.1	1.4	1.6	1.7
3-485	1	.3	.3	.6	.8	1.2	1.5	1.6	1.7
3-436	1	.4	.5	.7	.9	1.2	1.4	1.6	1.7
3-575	1	.1	.1	.4	.7	1.2	1.5	1.7	1.8
3-476	1	.0	.2	.5	.9	1.4	1.8	2.0	2.1
3-595	1	.1	.2	.5	.9	1.5	1.8	2.1	2.2
3-570	1	.1	.2	.6	1.0	1.6	2.1	2.3	2.4
3-574	1	.6	.7	1.0	1.3	1.8	2.1	2.3	2.4
3-464	1	.1	.2	.6	1.0	1.7	2.1	2.4	2.5
3-480	1	.1	.2	.6	1.0	1.7	2.1	2.4	2.5
3-495	1	.1	.2	.6	1.1	1.7	2.2	2.5	2.6
3-475	1	.1	.2	.7	1.1	1.8	2.2	2.5	2.6
3-801	1	.1	.2	.8	1.3	2.2	2.7	3.1	3.3
3-628	1	.1	.3	.8	1.4	2.3	2.9	3.2	3.4
3-836	1	.1	.3	.9	1.5	2.5	3.1	3.5	3.8
3-492	1	.6	.8	1.3	1.9	2.8	3.4	3.8	4.0
3-465	1	.1	.3	1.1	1.9	3.1	3.9	4.4	4.7
3-447	1	.1	.3	1.1	1.9	3.2	4.0	4.5	4.8
3-457	1	1.1	1.3	2.0	2.7	3.8	4.5	5.0	5.2
3-496	1	.1	.4	1.2	2.1	3.5	4.4	5.0	5.3
3-580	1	.1	.4	1.2	2.2	3.6	4.5	5.1	5.4
3-534	1	.3	.6	1.7	3.0	4.8	6.1	6.9	7.3
3-605	1	.6	.9	2.1	3.5	5.5	6.8	7.7	8.1
3-494	1	.4	.8	2.3	3.9	6.4	8.0	9.0	9.6
3-435	1	.7	1.1	2.5	4.1	6.5	8.1	9.1	9.6
3-403	1	1.8	2.2	3.5	4.9	6.9	8.3	9.1	9.6
3-466	1	.2	.7	2.3	4.0	6.5	8.2	9.3	9.9
3-518	1	2.2	2.6	4.1	5.6	8.0	9.5	10.5	11.0
3-527	1	.9	1.3	3.0	4.9	7.7	9.5	10.7	11.3
3-418	1	2.8	3.2	4.6	6.2	8.5	10.0	10.9	11.4
3-458	1	3.0	3.4	4.8	6.4	8.7	10.1	11.1	11.6
3-478	1	.3	.9	2.8	5.0	8.2	10.3	11.7	12.4
3-640	1	.7	1.2	3.2	5.4	8.7	10.9	12.3	13.0
3-544	1	.5	1.1	3.3	5.7	9.4	11.8	13.4	14.2
3-621	1	1.5	2.1	4.2	6.4	9.8	12.0	13.4	14.2
3-556	1	1.0	1.5	3.7	6.1	9.7	12.0	13.6	14.4
3-501	1	.3	1.1	3.3	5.8	9.6	12.1	13.8	14.6
3-562	1	2.5	3.1	5.3	7.6	11.0	13>2	14.7	15.4

3-461	1	.3	1.2	3.7	6.5	10.7	13.5	15.3	16.3
3-434	2	1.3	1.9	4.5	7.2	11.3	14.1	15.9	16.8
3-576	1	.7	1.4	4.1	7.0	11.4	14.4	16.3	17.3
3-525	1	8.3	8.7	10.4	12.2	14.7	16.4	17.4	17.9
3-481	1	3.7	4.4	6.8	9.4	13.2	15.7	17.3	18.1
3-620	1	2.0	2.7	5.5	8.4	12.8	15.7	17.6	18.6
3-406	1	3.9	4.5	7.0	9.7	13.7	16.3	17.9	18.8
3-415	1	5.7	6.3	8.6	11.0	14.6	16.9	18.4	19.1
3-493	1	2.1	2.8	5.7	8.8	13.5	16.5	18.5	19.6
3-506	1	4.4	5.1	7.8	10.7	15.0	17.8	19.6	20.6
3-613	1	.9	1.8	4.9	8.4	13.7	17.2	19.4	20.7
3-555	1	1.5	2.5	5.9	9.6	15.2	18.9	21.3	22.6
3-674	1	.9	2.0	5.6	9.6	15.6	19.5	22.1	23.5
3-469	1	.9	1.9	5.6	9.6	15.6	19.6	22.2	23.6
3-521	1	.9	1.9	5.6	9.7	15.9	20.0	22.6	24.0
3-477	1	.6	1.8	5.7	10.0	16.5	20.7	23.5	25.0
3-596	1	.6	1.9	5.9	10.3	17.0	21.5	24.3	25.9
3-599	1	.9	2.1	6.1	10.6	17.3	21.7	24.6	26.1
3-512	1	.7	2.0	6.0	10.5	17.3	21.8	24.7	26.3
3-515	1	.9	2.1	6.2	10.7	17.5	21.9	24.9	26.4
3-508	1	.6	1.9	6.1	10.6	17.5	22.0	25.0	26.6
3-564	1	.4	1.9	6.2	10.8	17.8	22.5	25.5	27.2
3-467	1	5.1	6.2	10.0	14.1	20.2	24.2	26.7	28.1
3-471	1	1.8	2.9	7.3	11.9	19.0	23.6	26.7	28.3
3-456	1	5.2	6.2	10.1	14.2	20.3	24.3	26.9	28.3
3-565	1	7.8	8.8	12.4	16.2	21.9	25.6	27.9	29.1
3-460	1	1.0	2.4	7.2	12.4	20.4	25.6	29.0	30.9
3-442	1	.8	2.3	7.1	12.4	20.4	25.7	29.1	31.0
3-507	1	.6	2.3	7.3	12.7	21.0	26.5	30.0	31.9
3-618	1	1.4	2.8	7.7	13.1	21.3	26.7	30.2	32.1
3-587	1	1.1	2.6	7.5	13.0	21.3	26.7	30.3	32.2
9- 46	1	2.4	3.8	9.2	15.0	23.7	29.5	33.2	35.2
3-581	1	.9	2.7	8.5	14.9	24.4	30.8	34.9	37.2
3-533	1	1.4	3.1	9.1	15.7	25.6	32.2	36.5	38.8
3-563	1	.9	2.9	8.9	15.5	25.5	32.1	36.4	38.8
3-539	1	1.5	3.3	9.7	16.6	27.2	34.2	38.7	41.2
3-578	1	1.6	3.4	9.9	17.1	27.8	35.0	39.6	42.1
3-516	1	1.4	3.4	10.1	17.4	28.5	35.8	40.6	43.2
3-420	1	4.1	5.9	12.3	19.3	29.7	36.6	41.0	43.4
3-474	1	1.0	3.3	10.2	17.8	29.3	36.9	41.9	44.5
3-550	1	3.1	4.9	11.6	19.0	30.1	37.4	42.1	44.7
3-559	1	1.6	3.8	11.2	19.4	31.8	40.0	45.3	48.2
3-593	1	1.1	3.6	11.2	19.5	32.1	40.5	45.9	48.9
3-450	1	1.5	3.7	11.3	19.7	32.3	40.6	46.1	49.0
3-547	1	3.5	5.4	12.9	20.9	33.1	41.1	46.3	49.1
9- 1	1	2.1	4.2	11.8	20.1	32.6	40.9	46.4	49.3
3-444	2	1.1	3.7	11.6	20.3	33.4	42.1	47.7	50.8
9- 29	1	1.6	4.4	13.6	23.7	39.0	49.1	55.7	59.3
3-523	1	2.3	4.9	14.2	24.4	39.7	49.9	56.5	60.1
3-422	1	2.8	5.6	15.7	26.8	43.5	54.6	61.8	65.7
3-553	1	1.8	5.0	15.4	26.8	44.0	55.5	62.9	66.9
3-573	1	2.9	5.9	16.5	28.2	45.9	57.6	65.2	69.3
3-542	1	2.3	6.3	19.5	33.9	55.7	70.2	79.6	84.7
3-536	1	1.8	6.2	19.5	34.1	56.2	70.9	80.4	85.5
3-579	1	2.3	6.4	19.7	34.3	56.4	71.0	80.5	85.6

3-531	1	13.0	16.3	28.5	41.5	60.9	73.7	81.9	86.3
3-452	2	3.1	6.9	20.3	34.9	57.1	71.7	81.3	86.4
3-427	2	3.5	7.3	20.9	35.9	58.6	73.6	83.3	88.5
3-468	1	4.8	7.3	16.9	27.3	43.0	53.3	60.0	63.5
3-686	1	8.5	12.0	25.5	40.0	61.7	76.0	85.3	90.3
3-509	1	37.2	39.8	49.5	59.6	74.4	83.9	89.9	93.0
3-432	1	7.2	11.5	27.5	44.8	70.9	88.2	99.4	105.4
3-567	1	8.4	13.3	31.8	51.9	82.1	102.0	115.0	121.9
3-679	1	2.9	9.3	28.8	50.3	82.8	104.3	118.3	125.9
3-441	1	5.1	10.6	30.2	51.7	84.2	105.7	119.7	127.2
3-687	1	5.4	11.2	32.0	54.9	89.3	112.1	127.0	134.9
3-645	1	7.5	13.3	34.9	58.5	94.0	117.5	132.8	141.0
3-491	1	1.7	10.0	32.0	56.2	92.8	117.1	132.9	141.4
3-410	1	10.0	15.8	37.8	61.7	97.6	121.3	136.7	145.0
3-549	1	5.7	12.1	35.2	60.4	98.6	123.9	140.3	149.1
3-561	1	3.9	12.7	39.5	69.1	113.8	143.4	162.7	173.1
3-690	1	11.4	18.7	45.9	75.5	120.0	149.5	168.6	178.9
3-479	1	6.4	14.3	42.0	72.4	118.3	148.7	168.4	179.1
3-437	1	5.7	10.7	29.0	49.1	79.4	99.4	112.4	199.4
9- 72	1	13.1	21.2	51.7	84.8	134.7	167.6	189.0	200.5
3-589	1	6.7	15.9	47.4	82.0	134.3	168.9	191.5	203.6
3-532	1	21.1	29.3	59.9	93.0	142.5	175.1	196.3	207.6
3-778	1	15.7	24.9	59.6	97.2	153.8	191.2	215.5	228.1
3-546	1	6.1	17.2	52.9	92.0	151.3	190.6	216.1	229.9
9- 74	1	14.1	23.9	60.6	100.6	160.9	200.8	226.7	240.6
3-519	1	5.5	18.2	56.8	99.3	163.5	206.0	233.7	248.6
3-489	1	15.0	25.8	66.1	110.1	176.4	220.2	248.7	264.0
3-446	3	30.4	42.7	88.3	137.7	211.7	260.4	292.0	308.9
3-513	3	11.6	26.0	76.4	131.8	215.4	270.8	306.9	326.2
3-503	1	24.2	37.8	88.6	143.8	226.8	281.6	317.1	336.2
3-585	3	45.0	58.7	109.7	164.4	246.4	300.1	334.9	353.4
3-590	3	12.6	28.3	83.2	143.3	234.3	294.5	333.7	354.8
3-689	1	28.3	42.8	96.9	155.5	243.6	301.7	339.4	359.6
3-408	1	20.9	36.0	92.2	153.5	245.9	306.9	346.6	367.9
3-569	1	37.5	52.5	108.8	169.6	260.7	320.6	359.5	380.3
3-597	1	15.4	32.0	91.3	156.4	254.6	319.6	361.9	384.7
3-520	3	13.7	30.8	90.6	156.2	255.3	320.9	363.6	386.6
3-552	1	27.8	44.6	107.5	175.8	278.8	346.7	390.8	414.5
3-426	1	29.7	50.6	128.2	212.7	340.1	424.3	479.0	508.4
3-522	3	24.4	45.8	124.5	210.5	340.3	426.1	481.9	511.9
3-685	4	28.2	50.2	131.5	220.3	354.2	442.7	500.2	531.1
3-592	3	16.0	41.3	124.9	217.0	356.2	448.3	508.3	540.6
3-548	1	16.3	41.6	125.9	218.4	358.4	451.0	511.4	543.9
3-607	1	21.7	46.7	135.1	232.1	378.7	475.6	538.8	572.7
3-697	1	27.0	56.0	160.1	274.1	446.3	560.3	634.5	674.4
3-535	3	27.5	65.2	194.4	336.3	550.8	692.8	785.3	834.9
3-486	2	33.2	74.4	218.6	376.7	615.8	773.9	876.9	932.4
3-612	2	182.7	243.1	468.7	711.2	1074.1	1312.6	1466.8	1549.2

MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION.

3-526	1	.1	.2	.6	1.0	1.6	2.0	2.3	2.4
3-483	1	.3	.4	.8	1.2	1.8	2.3	2.5	2.7
3-500	1	.1	.2	.6	1.1	1.8	2.3	2.6	2.8
3-591	1	15.7	16.4	19.0	21.6	25.5	28.0	29.6	30.3
3-604	1	6.0	7.2	11.6	16.4	23.4	28.0	31.0	32.6
3-490	1	6.5	9.1	18.8	29.2	44.9	55.3	62.0	65.6
3-615	1	4.4	7.0	16.5	26.9	42.5	52.9	59.6	63.2
3-504	1	2.3	4.9	14.3	24.5	40.0	50.3	57.0	60.6
9- 2	1	3.3	7.8	23.2	40.1	65.7	82.7	93.7	99.6
9- 7	1	8.1	12.8	30.7	50.0	79.2	98.4	110.9	117.6
3-524	1	5.7	12.9	37.8	65.2	106.5	133.9	151.7	161.3
3-572	1	8.0	17.3	50.0	85.9	140.1	176.0	199.3	211.9
3-577	1	15.9	25.3	60.5	98.7	156.3	194.3	218.9	232.1
3-568	1	31.2	43.8	90.7	141.3	217.2	267.2	299.6	316.9
3-614	1	18.2	33.5	89.9	151.6	244.5	306.0	346.0	367.4
3-488	1	16.3	36.7	108.0	186.2	304.4	382.6	433.5	460.9
3-505	3	24.9	46.8	127.0	214.8	347.2	434.7	491.7	522.3
3-412	4	59.9	89.8	202.1	323.6	506.3	626.7	704.9	746.8
3-727	2	64.1	97.5	222.6	358.4	562.4	696.9	784.2	831.1
3-424	1	69.4	104.0	233.5	373.9	584.8	723.8	814.0	862.4
9- 31	1	180.2	221.1	373.6	536.3	778.8	937.5	1039.7	1094.0
3-419	4	91.9	169.0	453.5	764.2	1232.9	1542.8	1744.4	1852.8

MILD CHANGES TYPICAL OF RADIUM DEPOSITION

3-594	1	5.5	10.4	28.2	47.6	77.0	96.4	109.0	115.8
3-529	3	33.9	52.0	119.9	193.5	304.2	377.3	424.7	450.1
3-502	1	47.2	68.4	148.0	233.9	363.0	448.0	503.1	532.7
3-588	3	99.6	141.9	300.1	471.0	727.4	896.4	1005.8	1064.4
3-462	4	107.9	152.9	321.2	502.9	775.6	955.1	1071.5	1133.7
3-530	3	99.2	162.7	399.9	657.9	1046.6	1303.2	1469.9	1559.4
3-428	3	67.2	139.2	397.7	680.9	1108.7	1391.8	1576.1	1675.2
3-510	3	123.4	215.8	559.2	933.6	1498.1	1871.2	2113.7	2244.1
3-433	3	211.4	346.6	852.0	1401.8	2229.8	2776.6	3131.8	3322.5
3-445	5	429.3	614.9	1310.1	2061.1	3188.4	3930.8	4412.1	4669.7

MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION

3-558	1	8.3	23.3	71.6	124.7	205.0	258.2	292.8	311.4
3-499	2	33.6	61.7	165.6	279.0	450.2	563.3	636.9	676.5
3-423	4	132.9	200.6	454.2	729.1	1142.3	1414.8	1591.6	1686.4
3-405	4	110.4	179.1	435.9	715.0	1135.4	1413.0	1593.3	1690.1
9- 4	1	394.9	474.6	770.1	1085.0	1553.3	1859.4	2056.2	2160.6
3-459	4	125.3	245.7	684.4	1164.3	1889.0	2368.3	2680.2	2848.0
3-586	5	170.4	301.5	757.1	1253.1	2000.4	2494.1	2814.9	2987.2
3-416	5	209.4	371.9	974.9	1632.6	2624.6	3280.3	3706.6	3935.7
3-484	3	459.0	665.3	1438.2	2273.9	3528.5	4355.1	4891.0	5178.1

ADVANCED, NON-MALIGNANT CHANGES TYPICAL OF RADIUM DEPOSITION

3-726	1	228.3	318.3	655.1	1018.4	1563.2	1921.7	2153.9	2278.2
3-404	5	208.8	310.6	692.1	1105.1	1725.6	2134.7	2400.1	2542.3
3-571	5	106.5	238.9	701.5	1209.1	1976.1	2483.8	2814.4	2992.2
3-473	2	273.0	411.9	932.4	1406.3	2343.9	2902.9	3265.7	3460.1
3-551	5	369.5	517.7	1072.8	1671.7	2569.9	3161.0	3544.0	3748.9
3-449	2	369.2	522.8	1098.4	1719.8	2652.1	3265.9	3663.7	3877.1
3-431	3	352.8	511.4	1105.6	1747.9	2712.4	3347.9	3759.8	3980.4
3-528	1	425.9	593.8	1222.5	1900.6	2917.4	3586.5	4020.0	4251.8
3-554	1	302.0	528.3	1369.2	2286.1	3668.7	4582.3	5176.3	5495.5
3-540	4	490.3	740.1	1676.0	2690.2	4214.7	5219.9	5872.3	6222.0

MALIGNANT CHANGES ATTRIBUTABLE TO RADIUM DEPOSITION

3-417	5	103.0	185.9	492.8	827.9	1333.3	1667.4	1884.7	2001.4
3-455	1	106.5	195.7	524.9	884.6	1427.2	1785.9	2019.2	2144.7
3-649	1	120.1	213.6	559.3	936.8	1506.1	1882.3	2127.0	2258.5
3-407	1	266.1	398.7	895.6	1433.9	2242.8	2776.2	3122.2	3307.7
3-402	1	267.2	403.3	913.4	1466.1	2297.0	2844.9	3200.4	3391.0
3-619	1	188.9	392.3	1121.6	1920.7	3127.7	3926.3	4446.1	4725.8
3-429	6	439.8	669.1	1528.2	2459.5	3859.7	4783.2	5382.4	5703.8
3-401	1	392.1	636.2	1548.8	2541.0	4035.0	5021.4	5662.1	5987.1
3-671	1	171.0	561.7	1751.4	3060.2	5040.2	6351.5	7205.7	7665.7
3-657	1	1605.8	2249.9	4662.1	7264.4	11167.5	13736.6	15400.8	16196.7
3-648	1	1522.8	2211.0	4781.5	7562.5	11738.4	14489.7	16273.4	17228.9

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