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(54) **RF THERAPEUTIC CANCER APPARATUS AND METHOD**

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(57) **ABSTRACT**

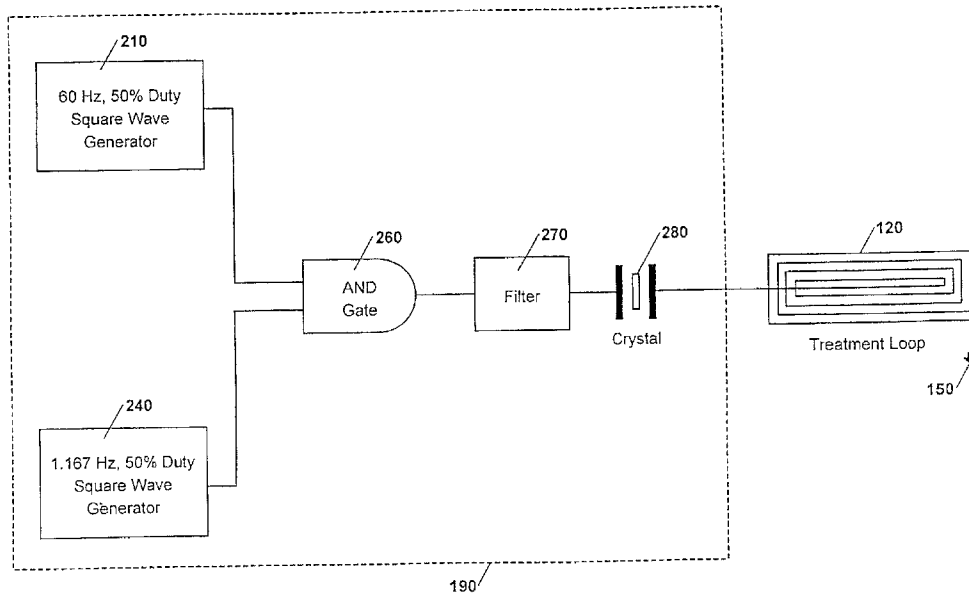
(21) Appl. No.: **09/804,949**

(22) Filed: **Mar. 13, 2001**

Related U.S. Application Data

(60) Division of application No. 09/141,691, filed on Aug. 28, 1998, which is a continuation of application No. PCT/US97/23845, filed on Aug. 28, 1998.

An apparatus and method for treating cancer and other illnesses in humans and animals are described. The treatment involves the low-power, pulsed application of radio frequency tuned with precision of at least one half part per million. Alternative embodiments are described for apparatus that generates the required RF signals and applies such signals therapeutically. Laboratory data is reported, showing the successful use of the disclosed apparatus and methods to suppress and eliminate cancerous tumors in mice.



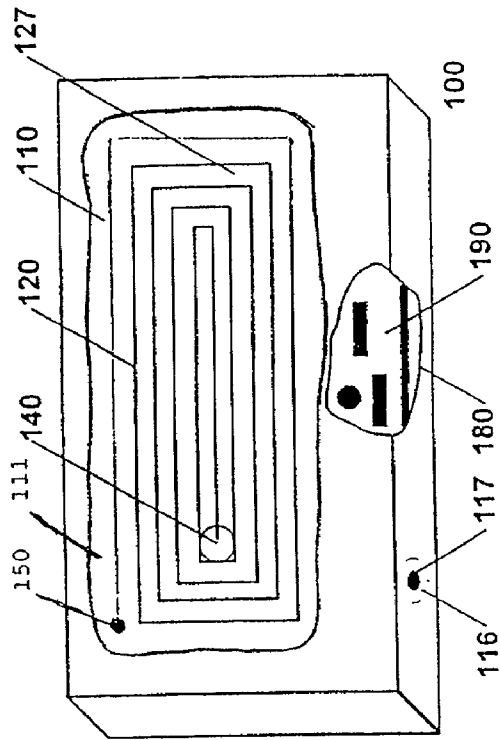


FIG. 1B

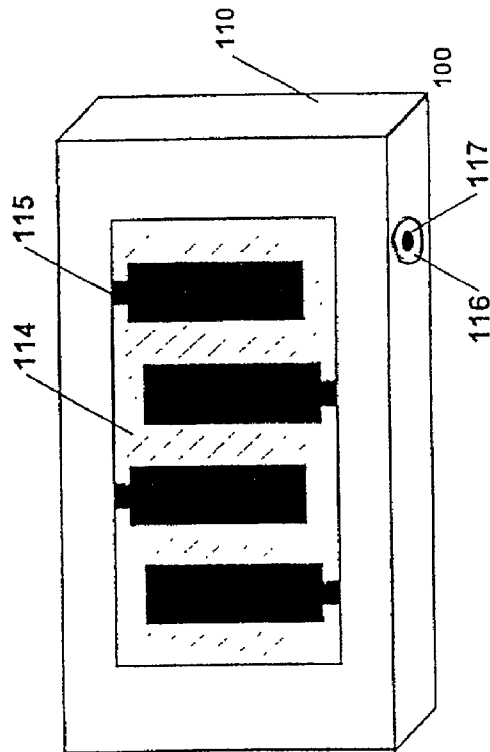


FIG. 1A

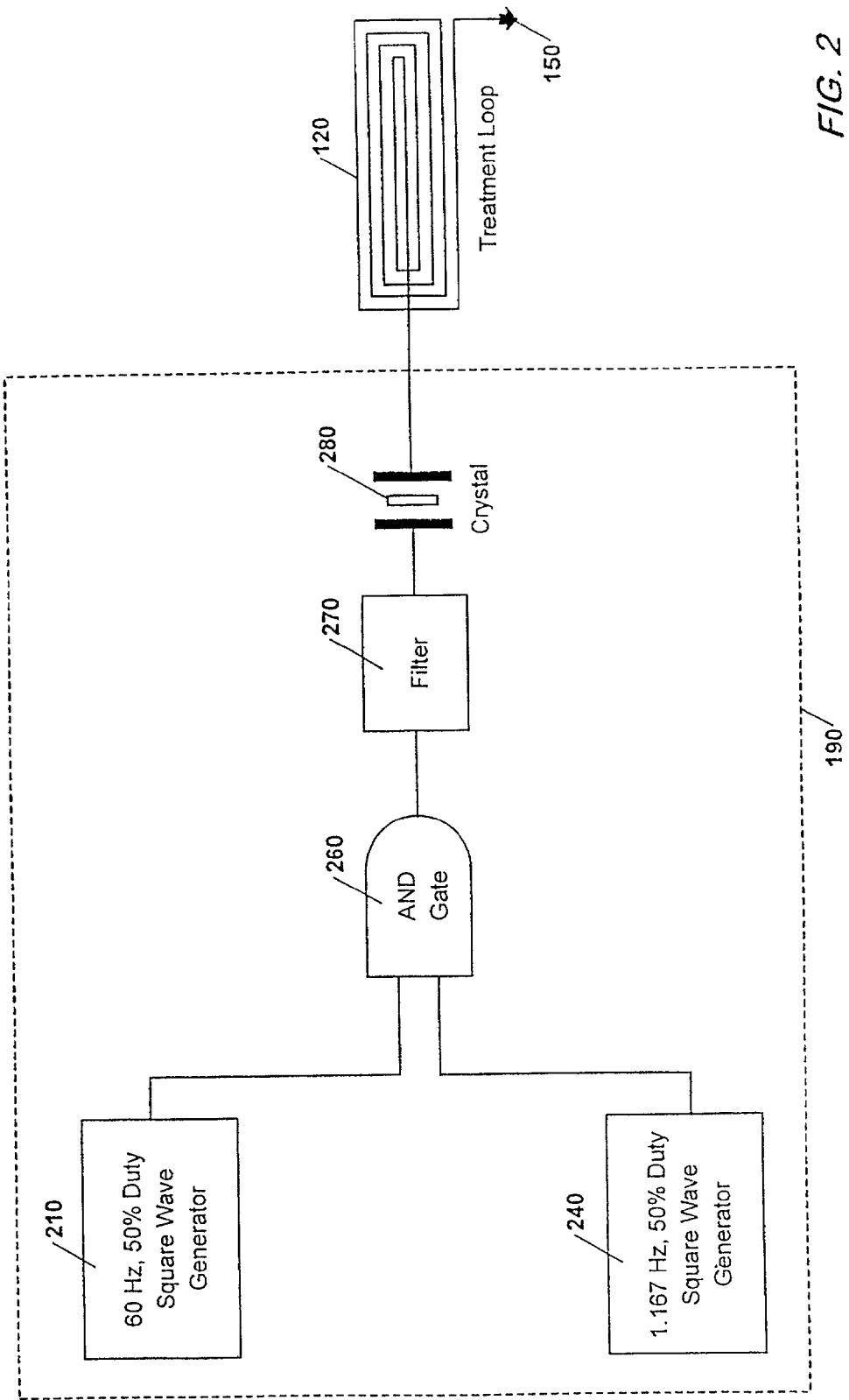


FIG. 2

FIG. 3

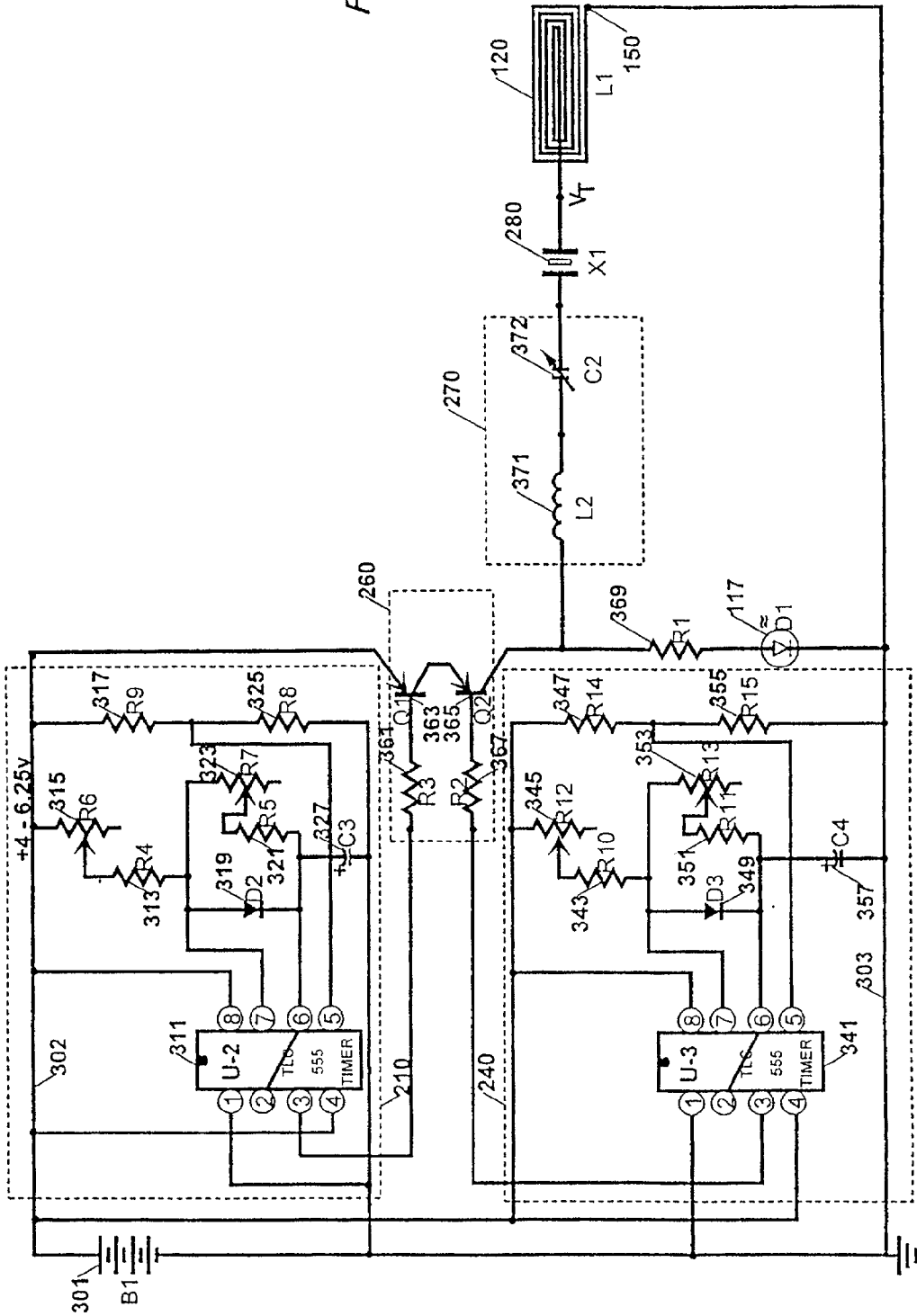


FIG. 4A



FIG. 4D

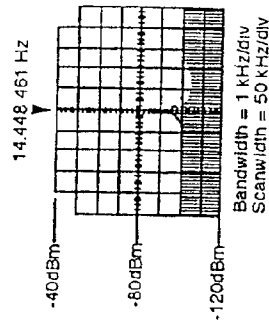


FIG. 4C

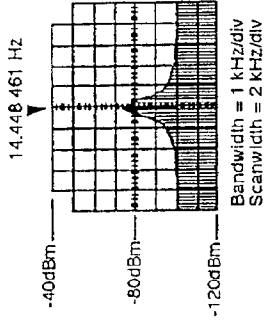


FIG. 4B

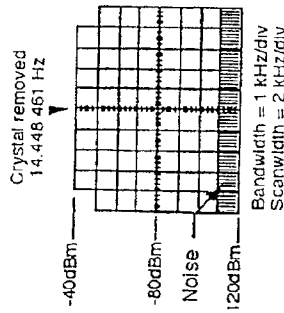


FIG. 4F

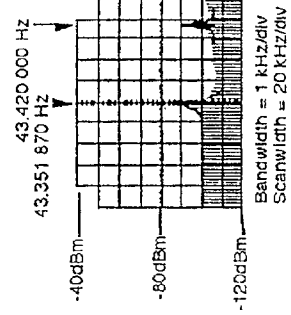
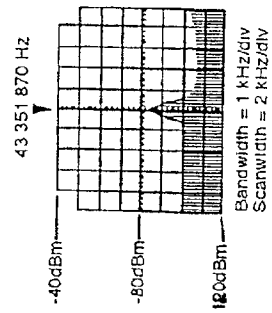


FIG. 4E



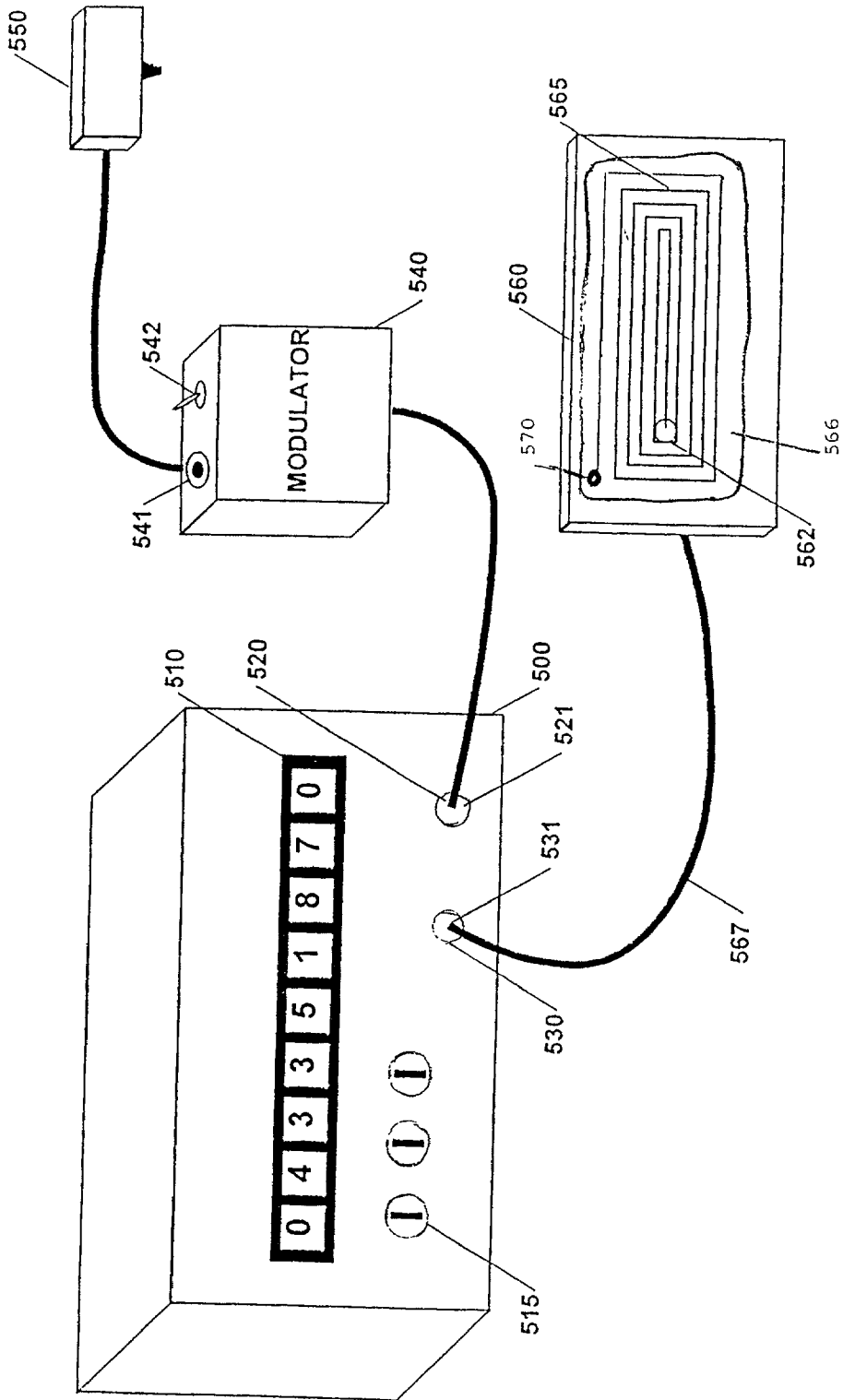


FIG. 5

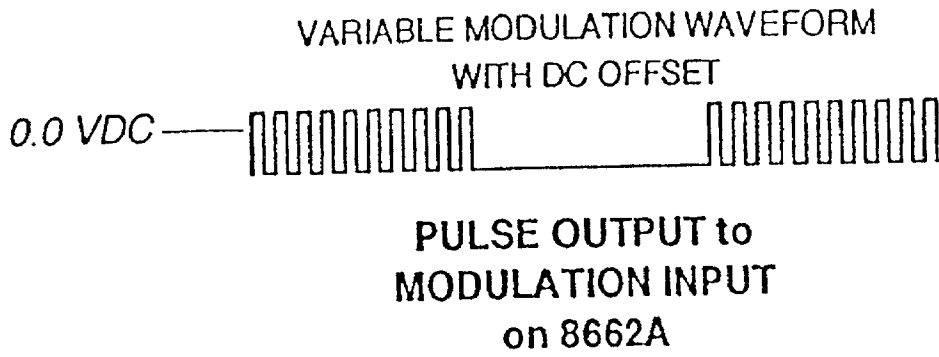


FIG. 7A

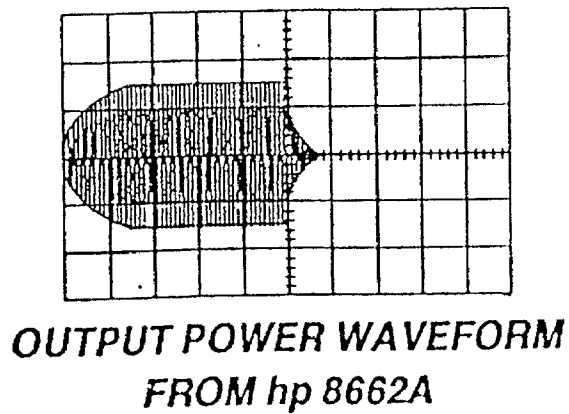


FIG. 7B

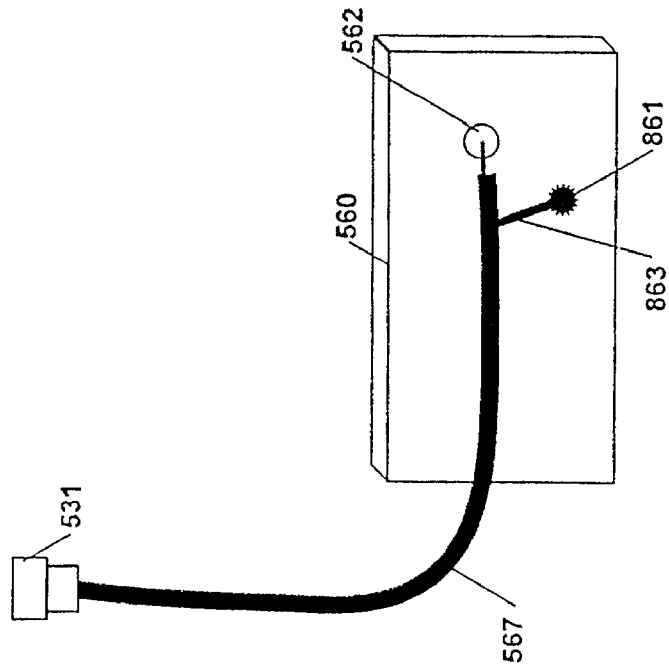


FIG. 8A

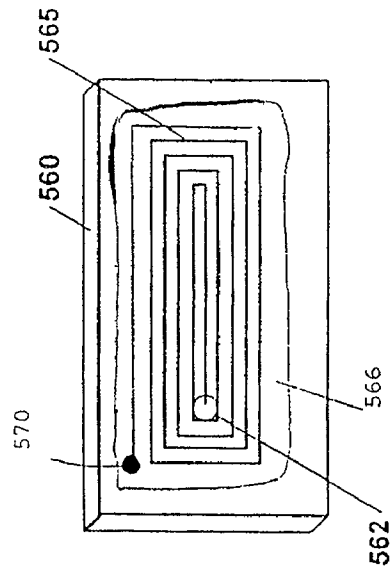


FIG. 8B

FIG. 9A-3

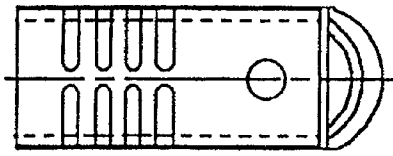


FIG. 9A

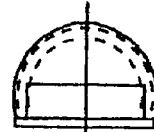


FIG. 9A-2

FIG. 9A-1

FIG. 9B-3

To Signal Source

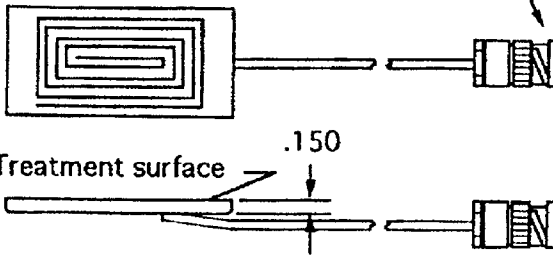


FIG. 9B-4

Ground

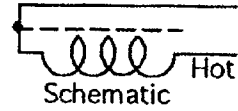


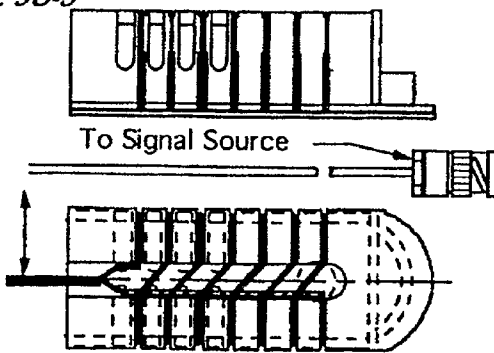
FIG. 9B

Side view
FIG. 9B-2

End view

FIG. 9B-1

FIG. 9C-3



9FIG. C-4



FIG. 9C

FIG. 9C-1

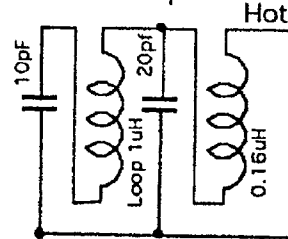


FIG. 9D-3

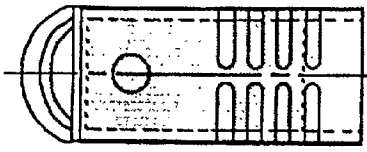


FIG. 9D-2

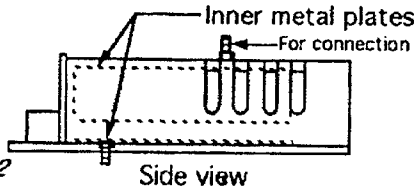


FIG. 9D-4

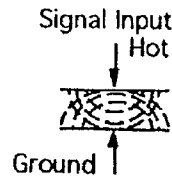


FIG. 9D-1

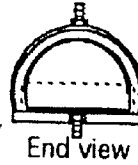


FIG. 9D

FIG. 9E-3

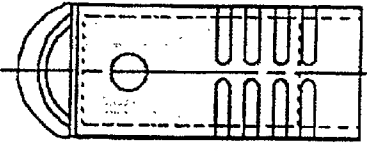


FIG. 9E-2

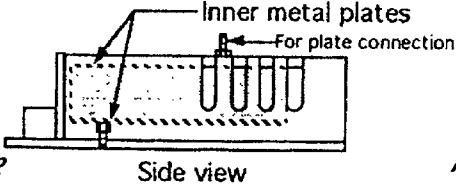


FIG. 9E-4

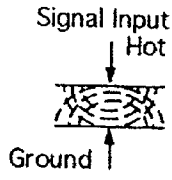


FIG. 9E-1

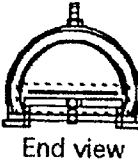


FIG. 9E

FIG. 9F-3



FIG. 9F-2

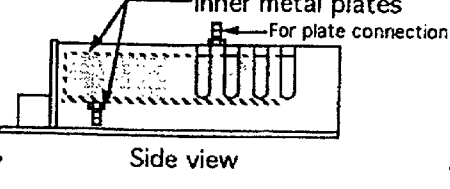


FIG. 9F-4

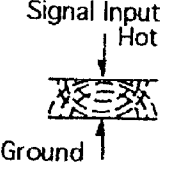


FIG. 9F-1

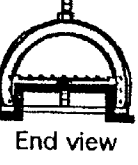


FIG. 9F

FIG. 9G-3

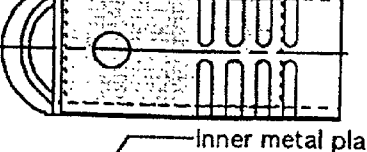


FIG. 9G-2

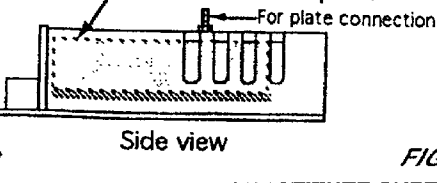


FIG. 9G-4

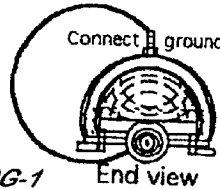
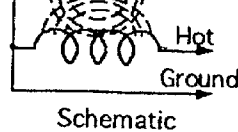


FIG. 9G

FIG. 9H-3

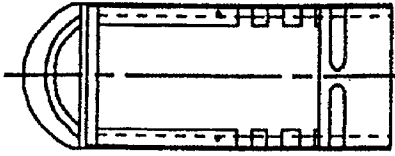
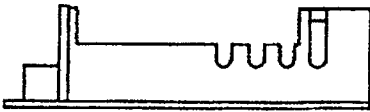


FIG. 9H-2



Side view

FIG. 9H-4

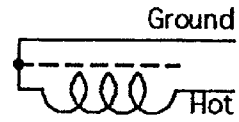
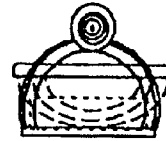


FIG. 9H-1



End view

FIG. 9H

FIG. 9I-3

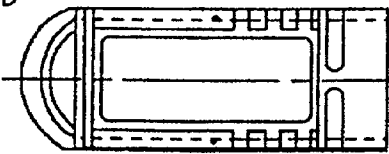
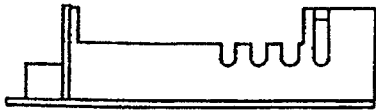


FIG. 9I-2



Side view

FIG. 9I-4

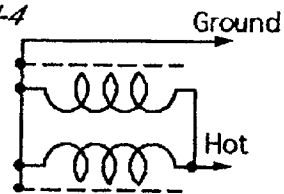


FIG. 9I-1

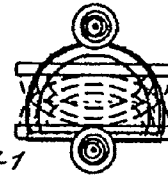


FIG. 9I

FIG. 9J-3

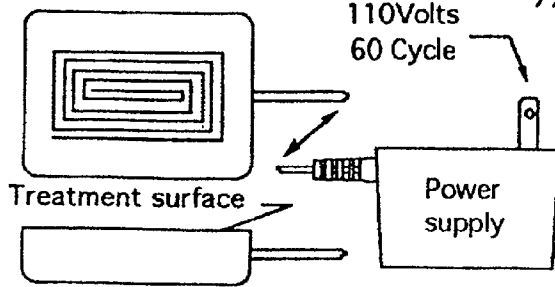


FIG. 9J-2

Side view

FIG. 9J-4

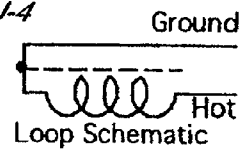


FIG. 9J-1



End view

FIG. 9J

OIJ-456
TREATED MOUSE

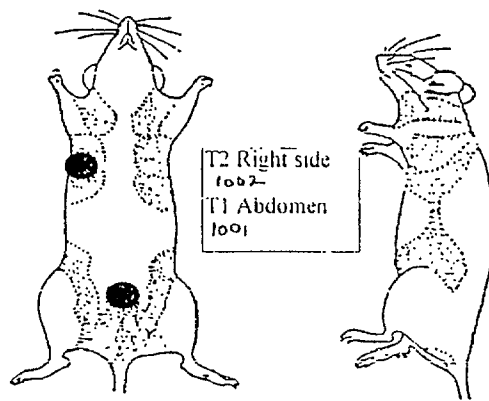


FIG. 10A

TOP GRAPH SHOWS TUMOR VOLUME IN cu inches vs TIME in DAYS

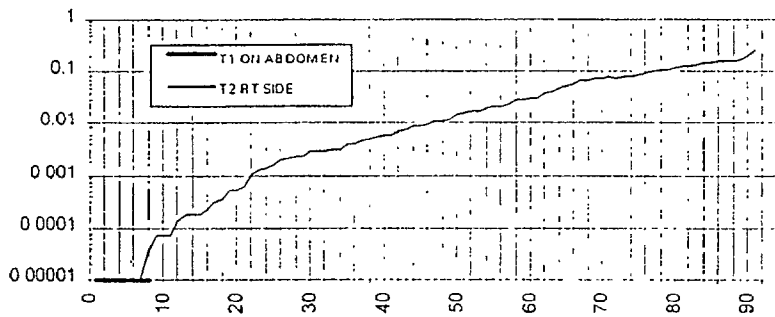


FIG. 10B

LOWER GRAPH SHOWS WEIGHT IN GRAMS & HEMATOCRIT % vs DAYS

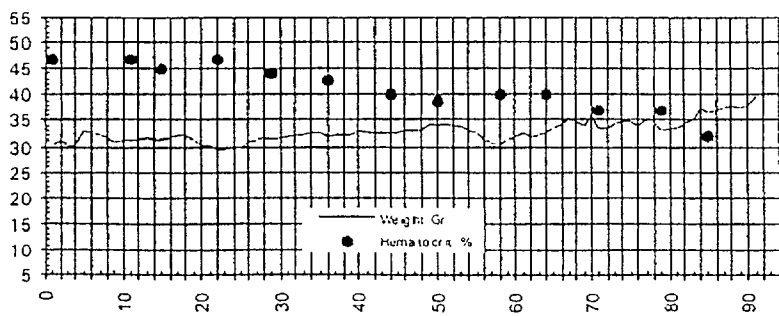


FIG. 10C

OIJ-470
TREATED MOUSE

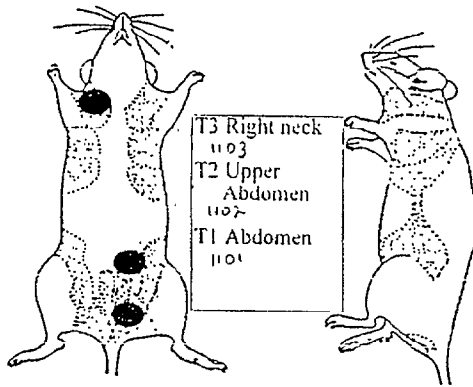


FIG. 11A

TOP GRAPH SHOWS TUMOR VOLUME IN cu inches vs TIME in DAYS

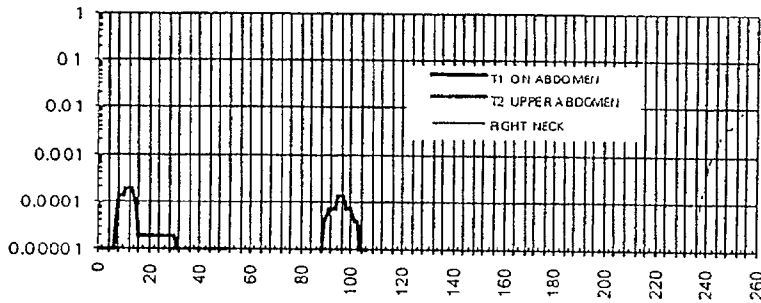


FIG. 11B

LOWER GRAPH SHOWS WEIGHT IN GRAMS & HEMATOCRIT % vs DAYS

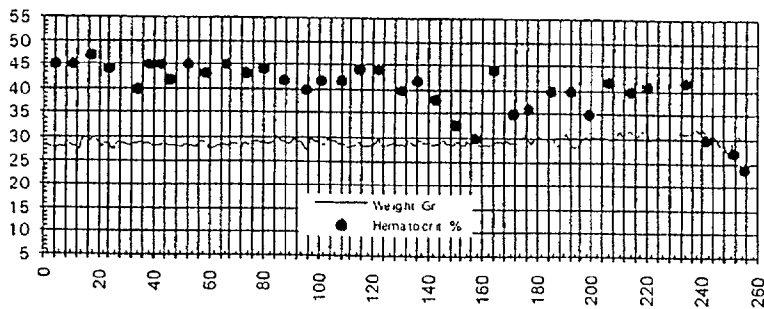


FIG. 11C

OUJ-471
TREATED MOUSE

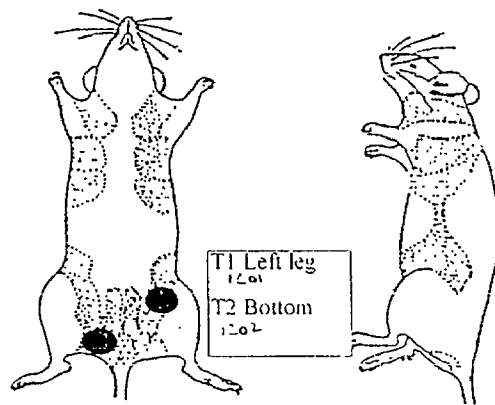


FIG. 12A

TOP GRAPH SHOWS TUMOR VOLUME IN cu inches vs TIME in DAYS

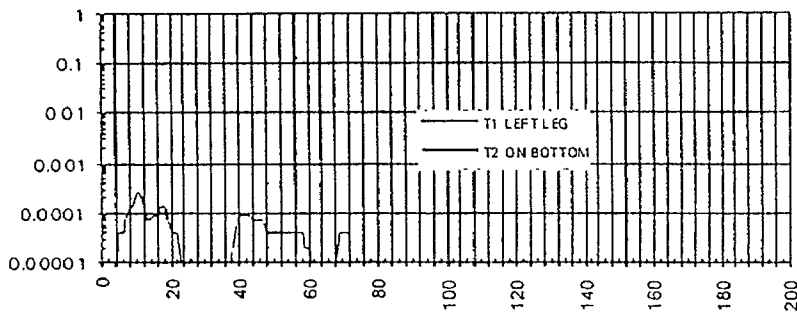


FIG. 12B

LOWER GRAPH SHOWS WEIGHT IN GRAMS & HEMATOCRIT % vs DAYS

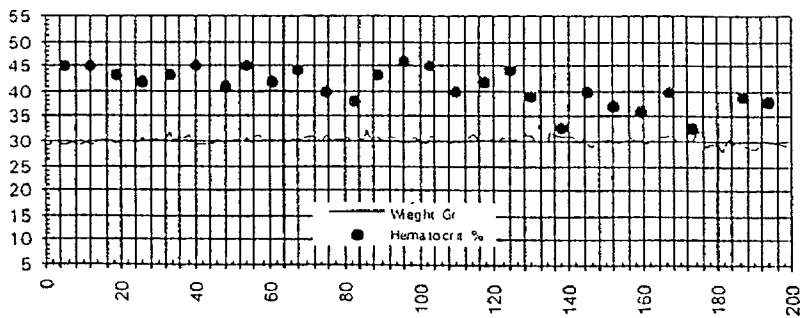


FIG. 12C

OUJ-473
TREATED MOUSE

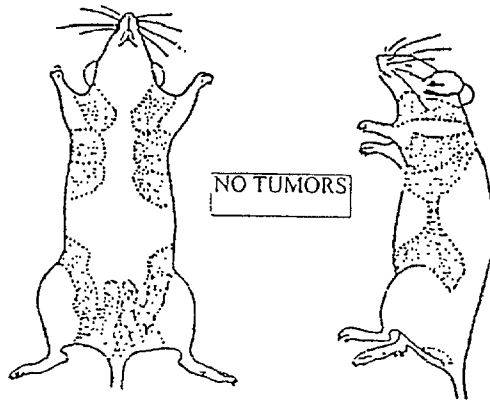


FIG. 13A

TOP GRAPH SHOWS TUMOR VOLUME IN cu inches vs TIME in DAYS

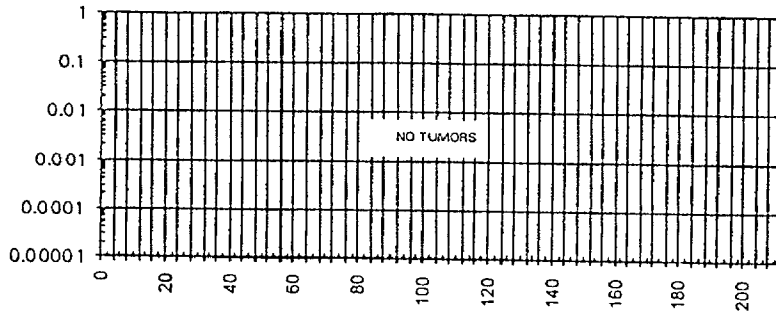


FIG. 13B

LOWER GRAPH SHOWS WEIGHT IN GRAMS & HEMATOCRIT % vs DAYS

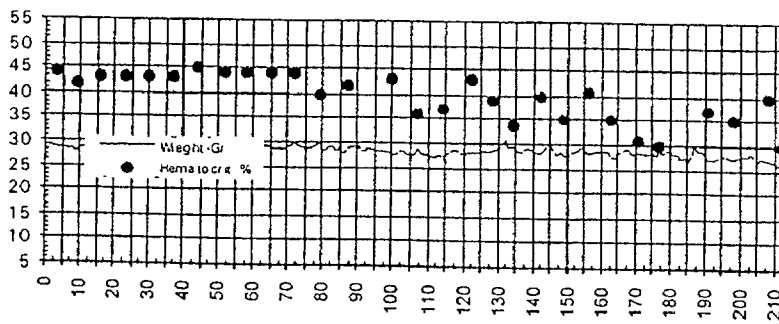


FIG. 13C

OUJ-475
TREATED MOUSE

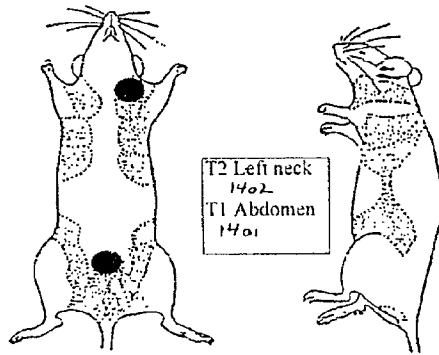


FIG. 14A

TOP GRAPH SHOWS TUMOR VOLUME IN cu inches vs TIME in DAYS

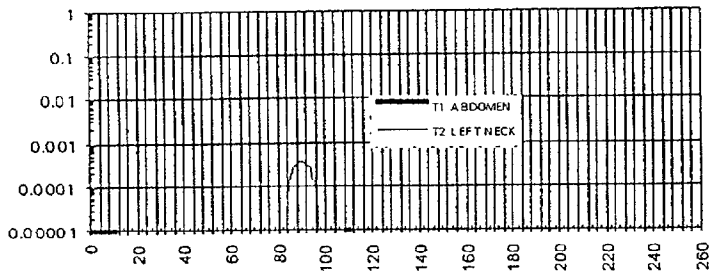


FIG. 14B

LOWER GRAPH SHOWS WEIGHT IN GRAMS & HEMATOCRIT % vs DAYS

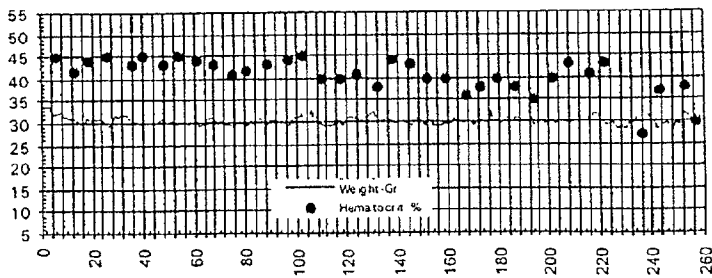


FIG. 14C

OIJ-496
TREATED MOUSE

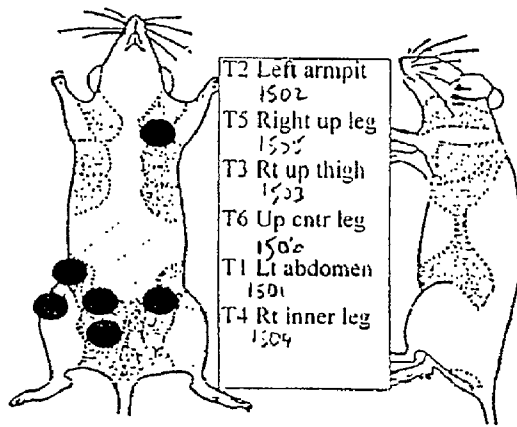


FIG. 15A

TOP GRAPH SHOWS TUMOR VOLUME IN cu inches vs TIME in DAYS

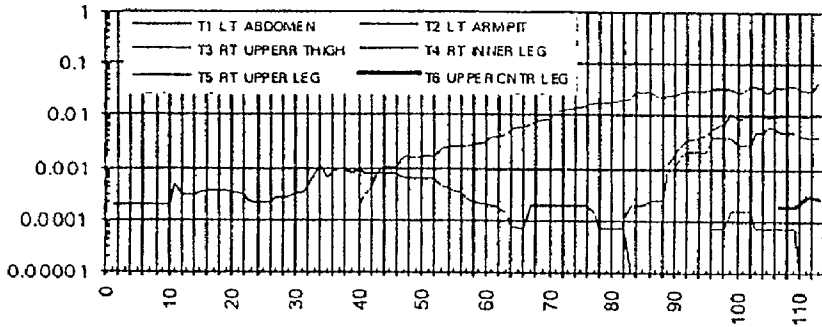


FIG. 15B

LOWER GRAPH SHOWS WEIGHT IN GRAMS & HEMATOCRIT % vs DAYS

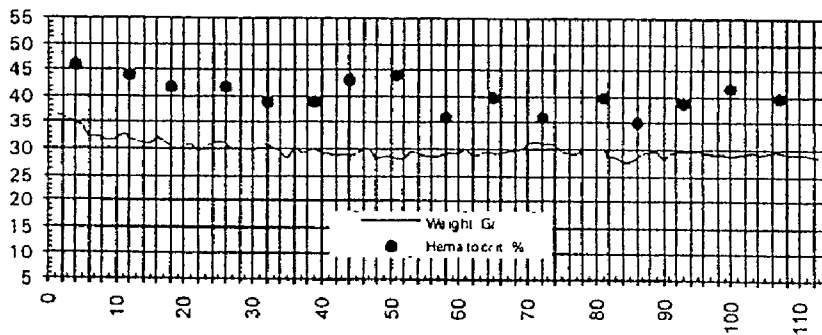


FIG. 15C

OIJ-506
TREATED MOUSE

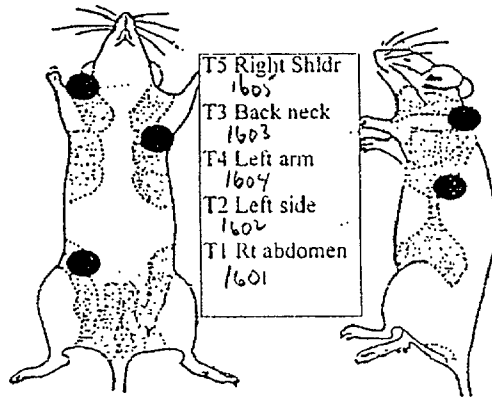


FIG. 16A

TOP GRAPH SHOWS TUMOR VOLUME IN cu inches vs TIME in DAYS

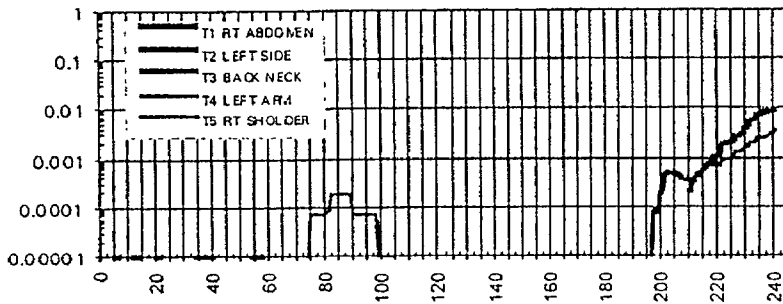


FIG. 16B

LOWER GRAPH SHOWS WEIGHT IN GRAMS & HEMATOCRIT % vs DAYS

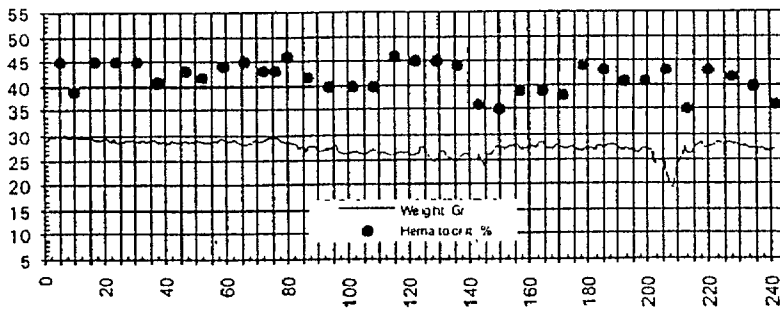


FIG. 16C

OIJ-516
TREATED MOUSE

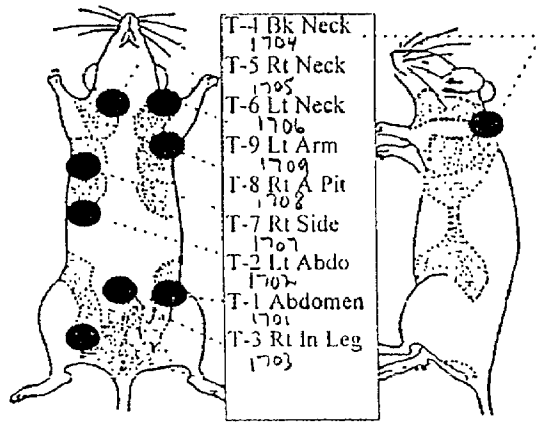


FIG. 17A

TOP GRAPH SHOWS TUMOR VOLUME IN cu inches vs TIME in DAYS

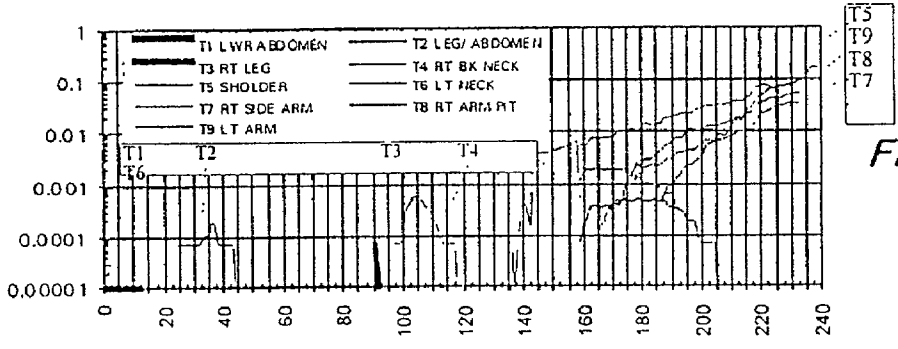


FIG. 17B

LOWER GRAPH SHOWS WEIGHT IN GRAMS & HEMATOCRIT % vs DAYS

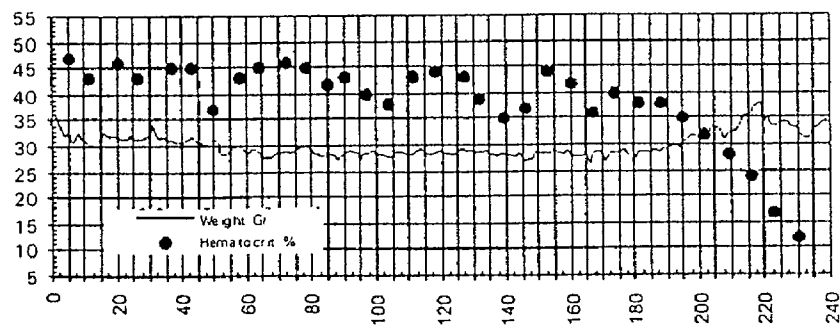


FIG. 17C

OIJ-526
TREATED MOUSE

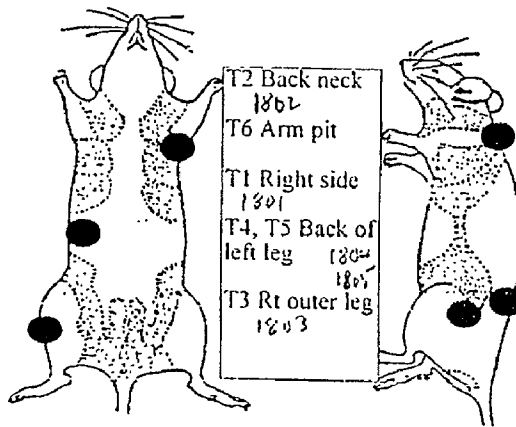


FIG. 18A

TOP GRAPH SHOWS TUMOR VOLUME IN cu inches vs TIME in DAYS

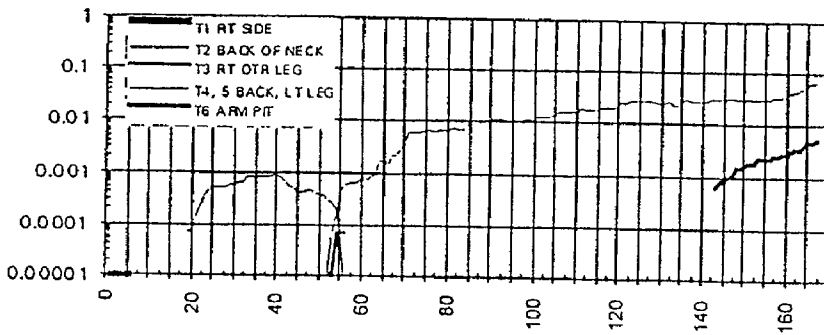


FIG. 18B

LOWER GRAPH SHOWS WEIGHT IN GRAMS & HEMATOCRIT % vs DAYS

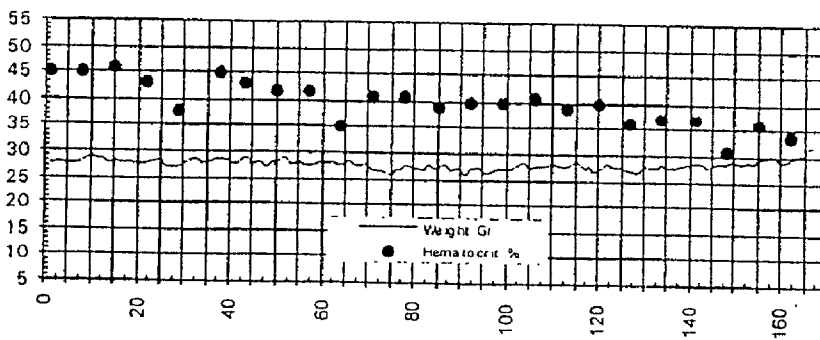


FIG. 18C

OIJ-650
TREATED MOUSE

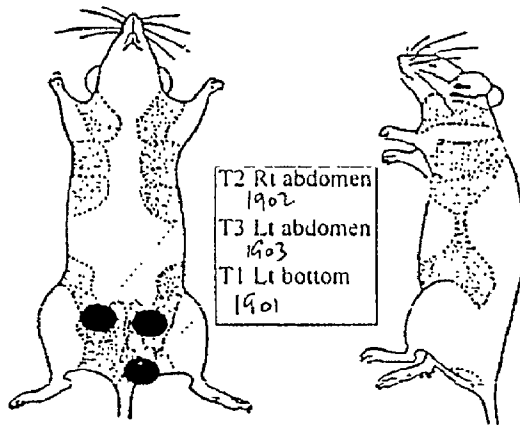


FIG. 19A

TOP GRAPH SHOWS TUMOR VOLUME IN cu inches vs TIME in DAYS

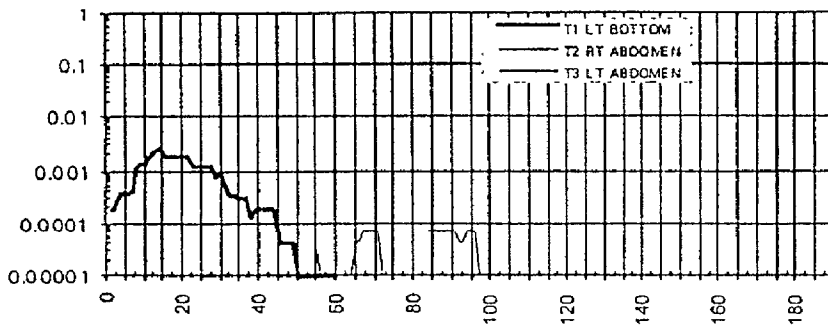


FIG. 19B

LOWER GRAPH SHOWS WEIGHT IN GRAMS & HEMATOCRIT % vs DAYS

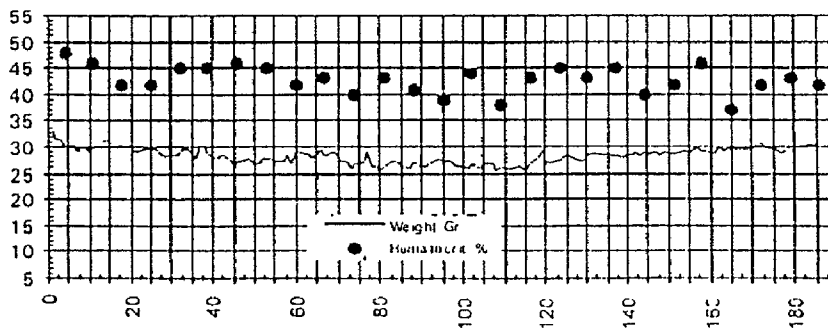


FIG. 19C

A-486
CONTROL MOUSE

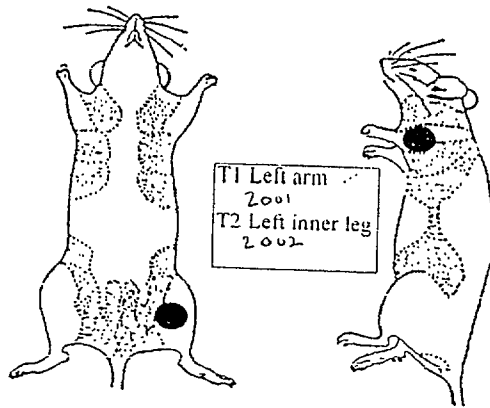


FIG. 20A

TOP GRAPH SHOWS TUMOR VOLUME IN cu inches vs TIME in DAYS

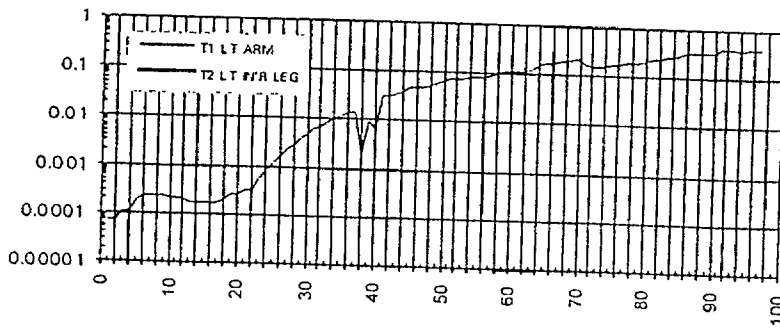


FIG. 20B

LOWER GRAPH SHOWS WEIGHT IN GRAMS & HEMATOCRIT % vs DAYS

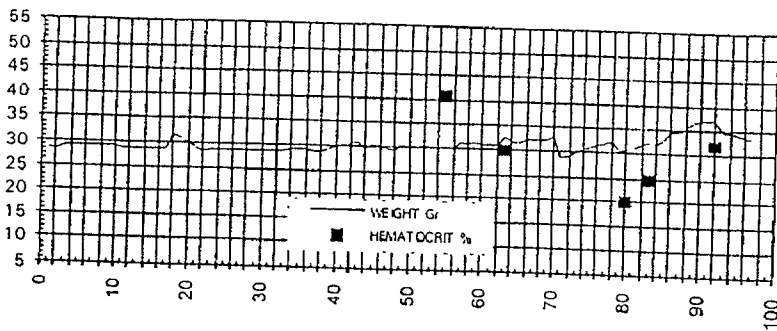


FIG. 20C

A-488
CONTROL MOUSE

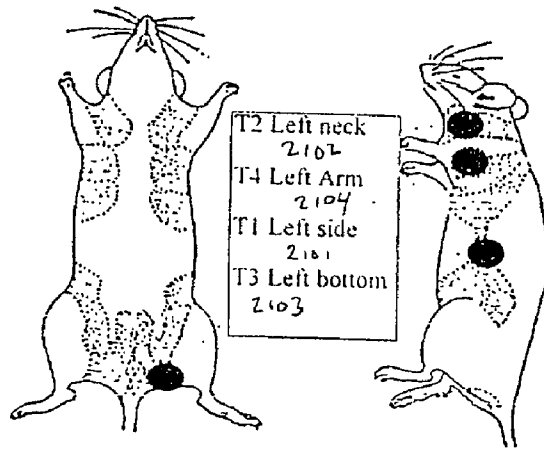


FIG. 21A

TOP GRAPH SHOWS TUMOR VOLUME IN cu inches vs TIME in DAYS

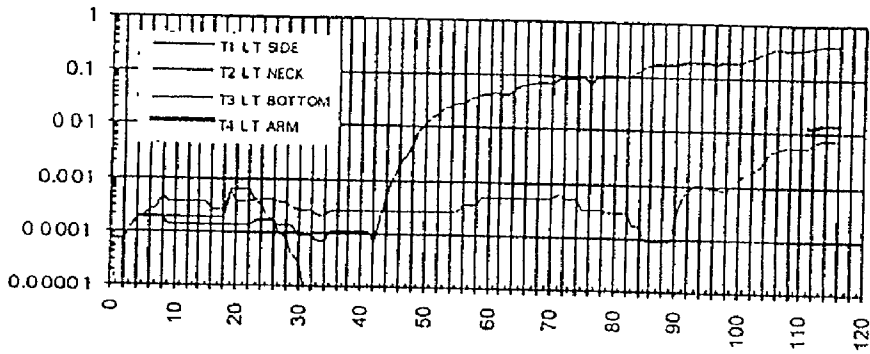


FIG. 21B

LOWER GRAPH SHOWS WEIGHT IN GRAMS & HEMATOCRIT % vs DAYS

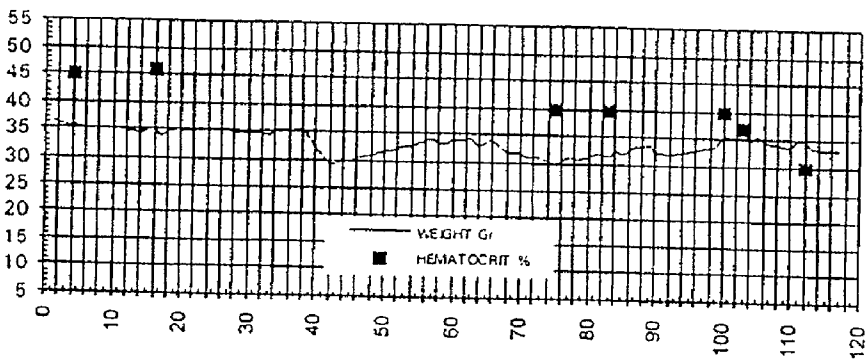


FIG. 21C

A-490
CONTROL MOUSE

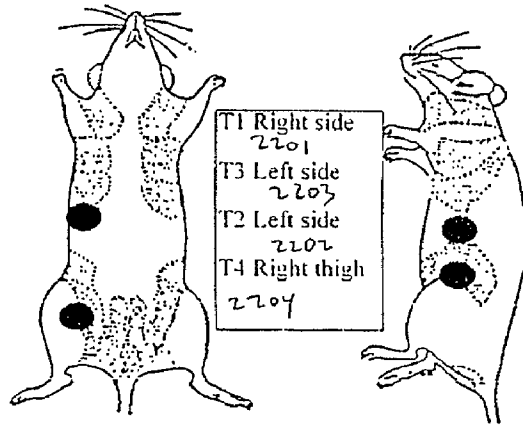


FIG. 22A

TOP GRAPH SHOWS TUMOR VOLUME IN cu inches vs TIME in DAYS

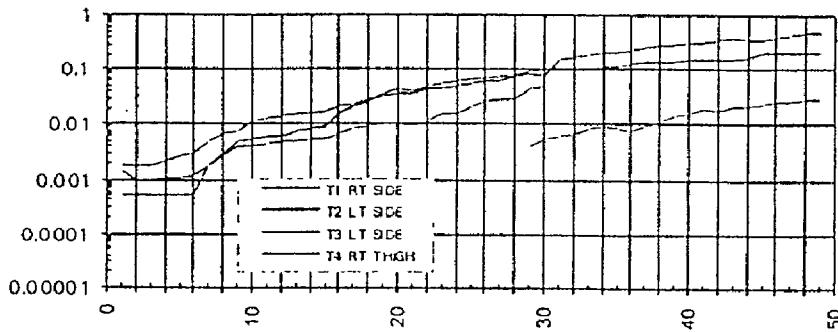


FIG. 22B

LOWER GRAPH SHOWS WEIGHT IN GRAMS & HEMATOCRIT % vs DAYS

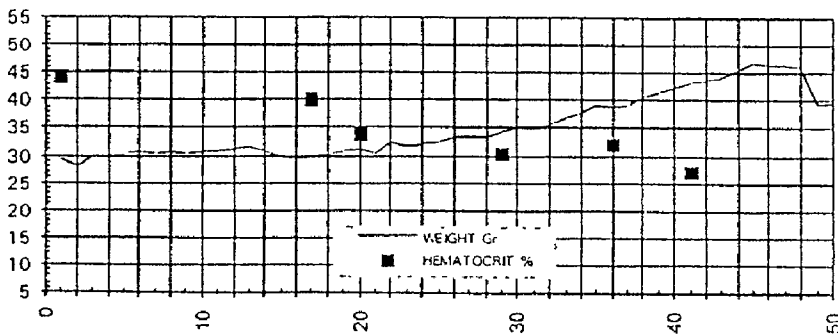


FIG. 22C

A-492
CONTROL MOUSE

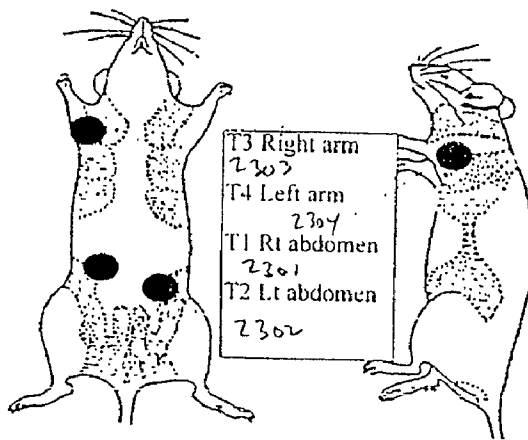


FIG. 23A

TOP GRAPH SHOWS TUMOR VOLUME IN cu inches vs TIME in DAYS

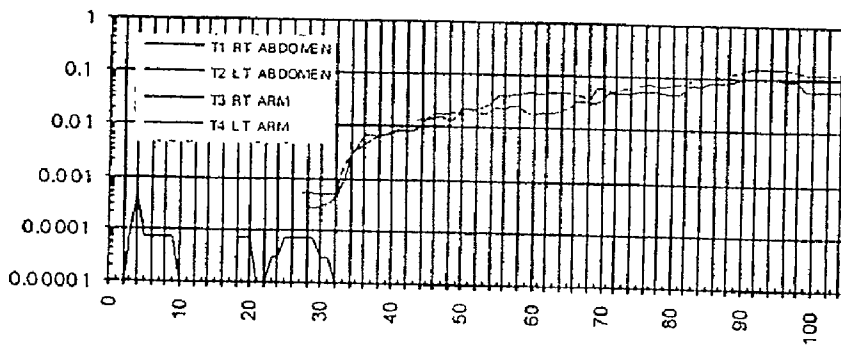


FIG. 23B

LOWER GRAPH SHOWS WEIGHT IN GRAMS & HEMATOCRIT % vs DAYS

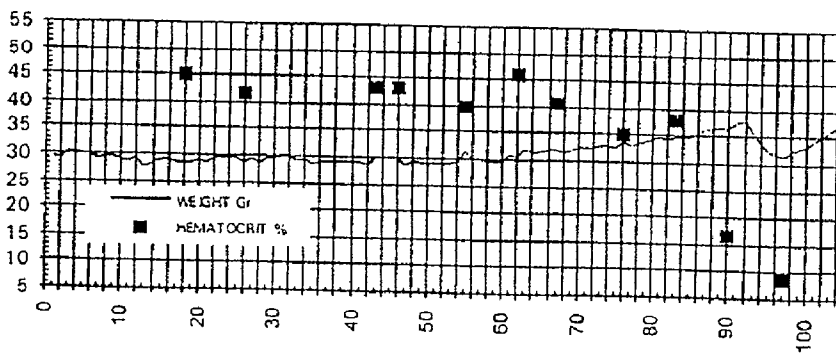


FIG. 23C

A-500
CONTROL MOUSE

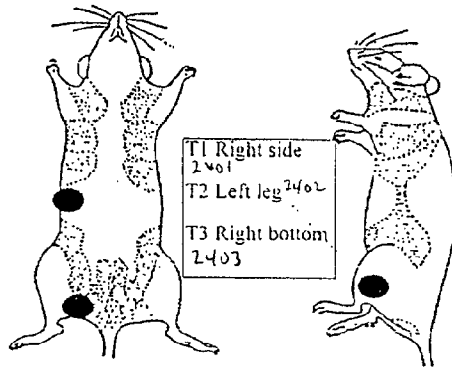


FIG. 24A

TOP GRAPH SHOWS TUMOR VOLUME IN cu inches vs TIME in DAYS

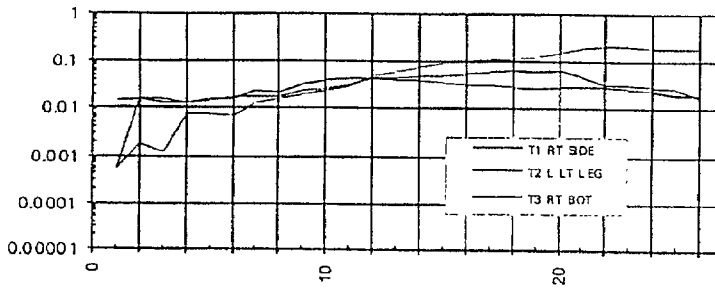


FIG. 24B

LOWER GRAPH SHOWS WEIGHT IN GRAMS & HEMATOCRIT % vs DAYS

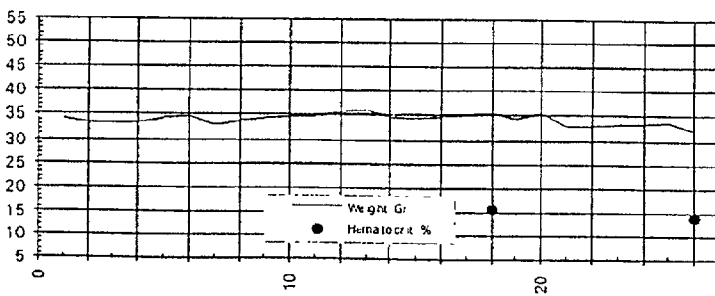


FIG. 24C

A-538
CONTROL MOUSE

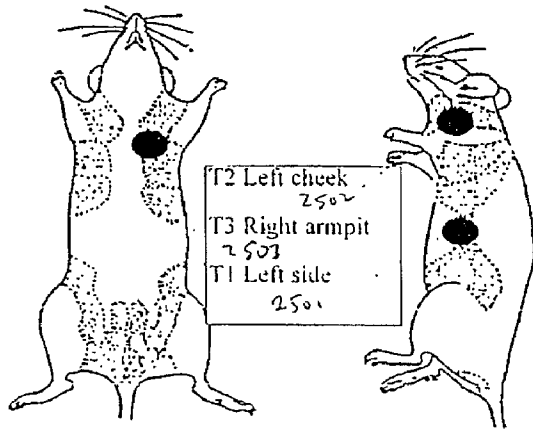


FIG. 25A

TOP GRAPH SHOWS TUMOR VOLUME IN cu inches vs TIME in DAYS

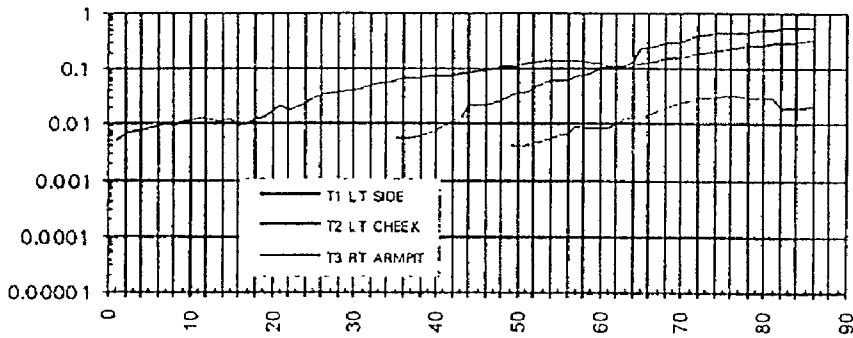


FIG. 25B

LOWER GRAPH SHOWS WEIGHT IN GRAMS & HEMATOCRIT % vs DAYS

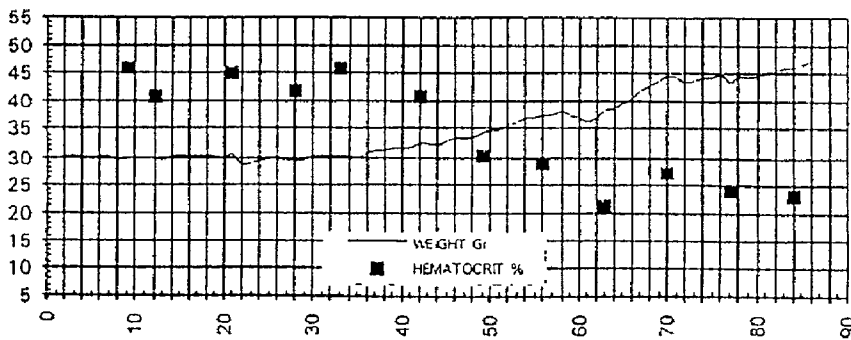


FIG. 25C

A-540
CONTROL MOUSE

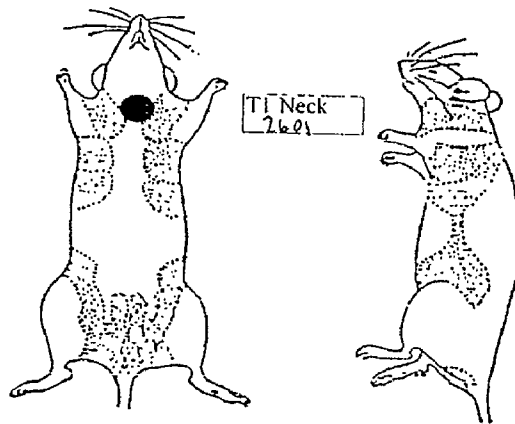


FIG. 26A

TOP GRAPH SHOWS TUMOR VOLUME IN cu inches vs TIME in DAYS

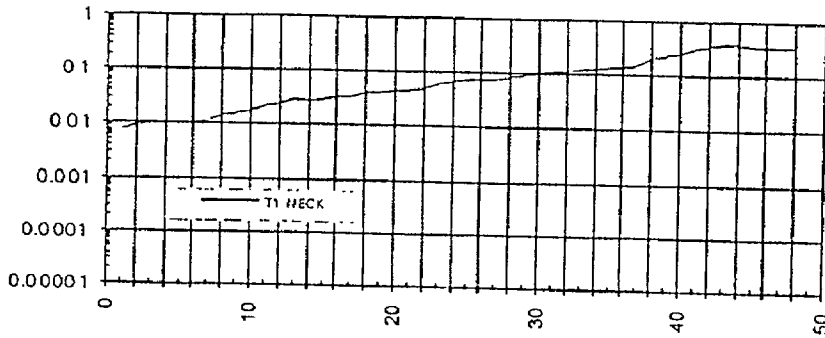


FIG. 26B

LOWER GRAPH SHOWS WEIGHT IN GRAMS & HEMATOCRIT % vs DAYS

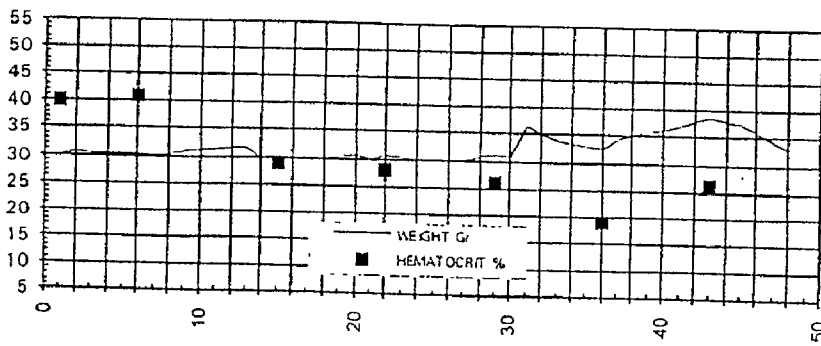


FIG. 26C

A-542
CONTROL MOUSE

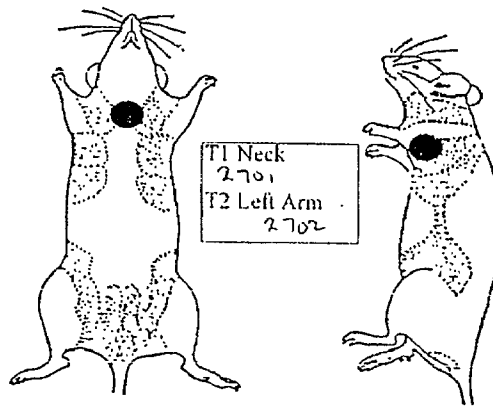


FIG. 27A

TOP GRAPH SHOWS TUMOR VOLUME IN cu inches vs TIME in DAYS

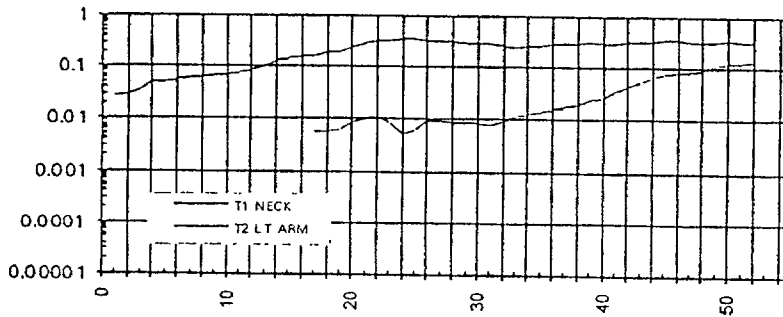


FIG. 27B

LOWER GRAPH SHOWS WEIGHT IN GRAMS & HEMATOCRIT % vs DAYS

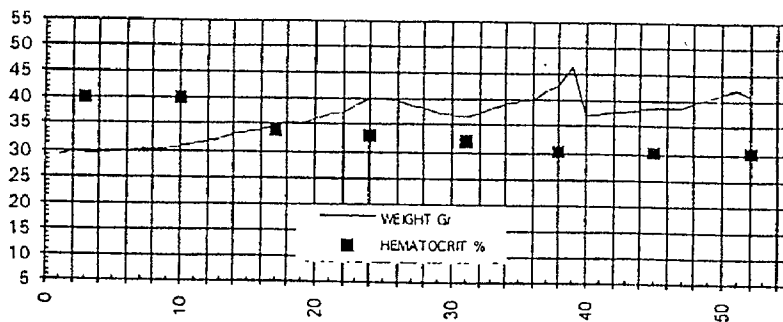


FIG. 27C

A-592
CONTROL MOUSE

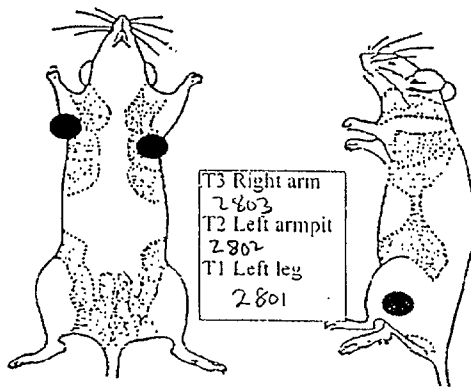


FIG. 28A

TOP GRAPH SHOWS TUMOR VOLUME IN cu inches vs TIME in DAYS

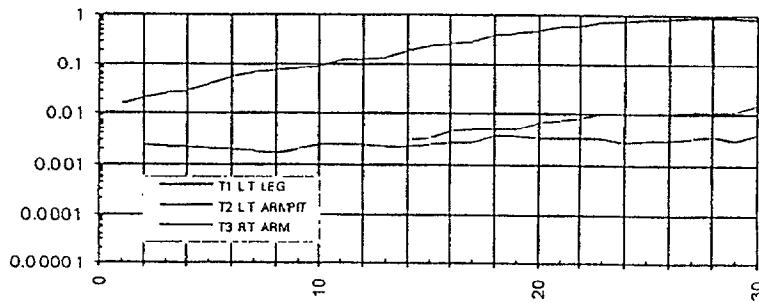


FIG. 28B

LOWER GRAPH SHOWS WEIGHT IN GRAMS & HEMATOCRIT % vs DAYS

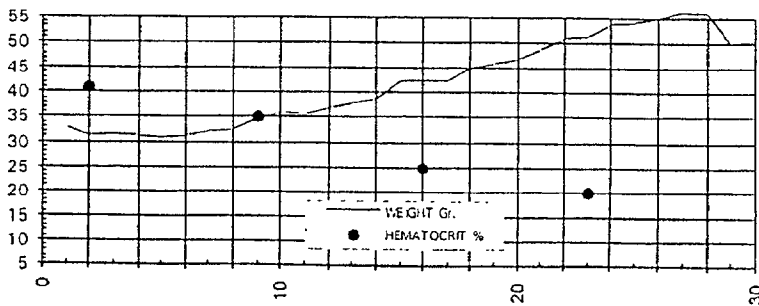


FIG. 28C

A-594
CONTROL MOUSE

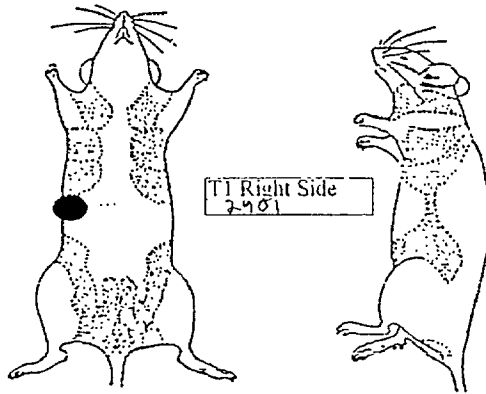


FIG. 29A

TOP GRAPH SHOWS TUMOR VOLUME IN cu inches vs TIME in DAYS

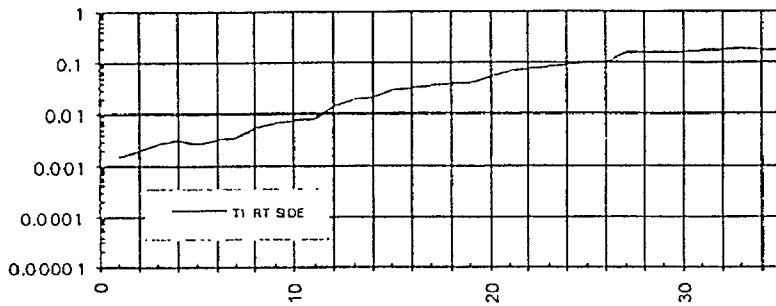


FIG. 29B

LOWER GRAPH SHOWS WEIGHT IN GRAMS & HEMATOCRIT % vs DAYS

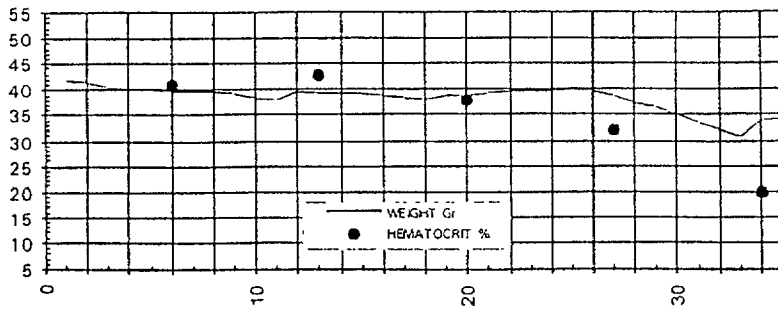
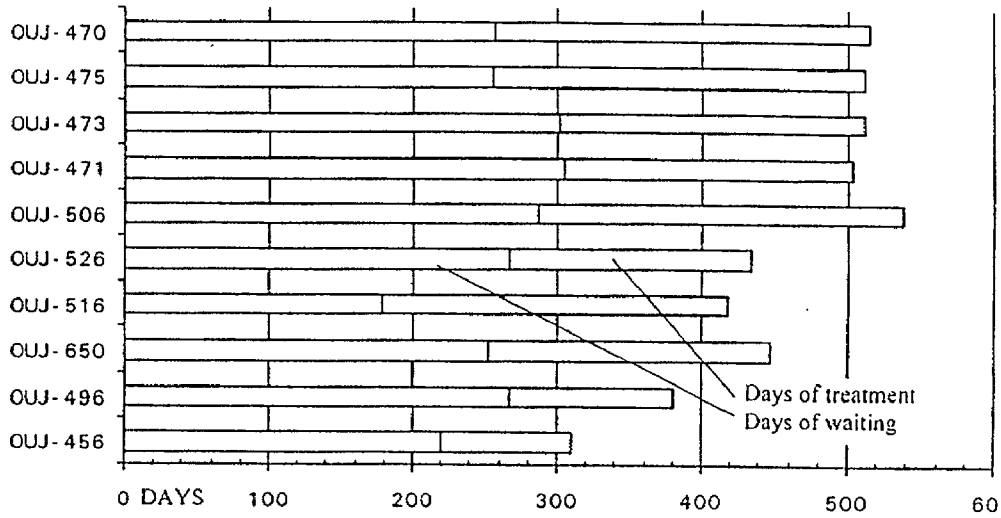


FIG. 29C

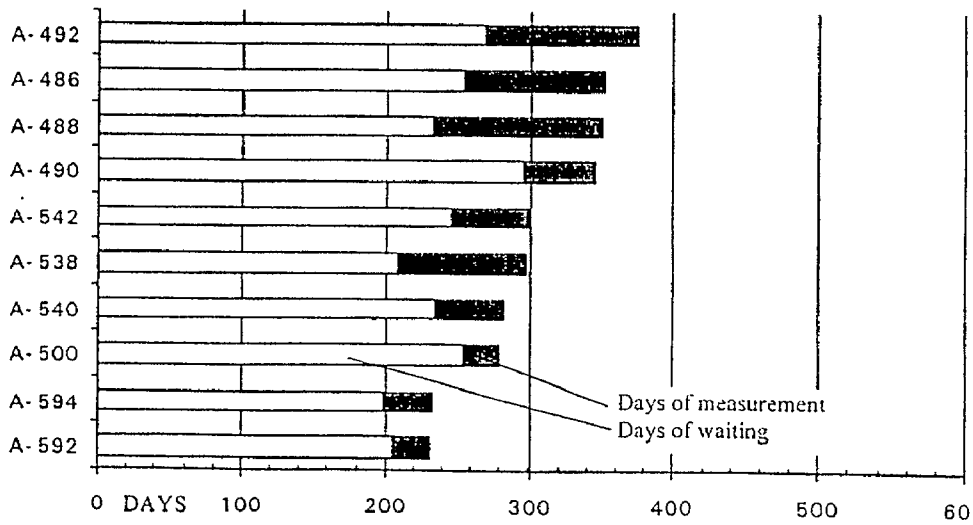
TREATED MICE: TOTAL DAYS OF LIFE

FIG. 30A



CONTROL MICE: TOTAL DAYS OF LIFE

FIG. 30B



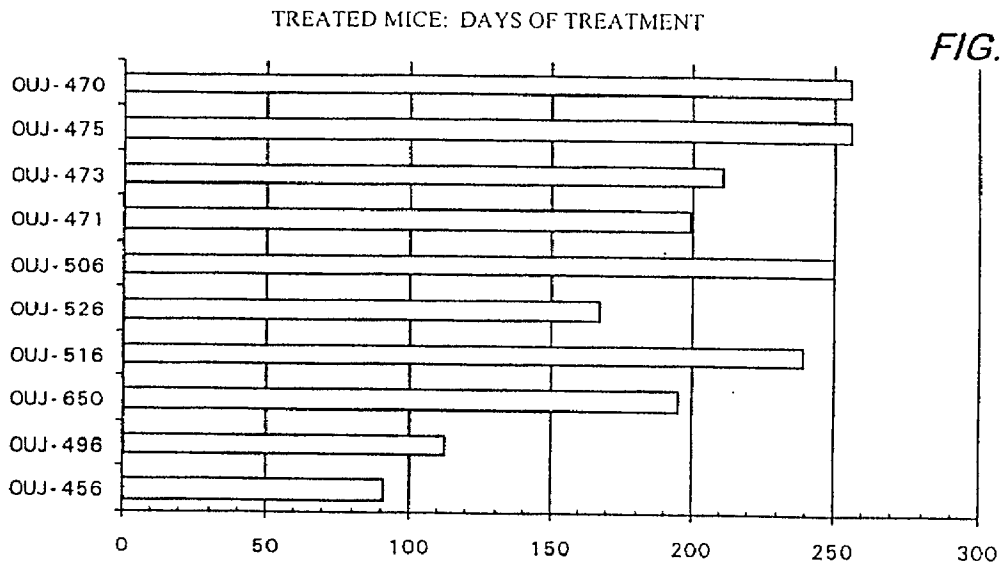


FIG. 31A

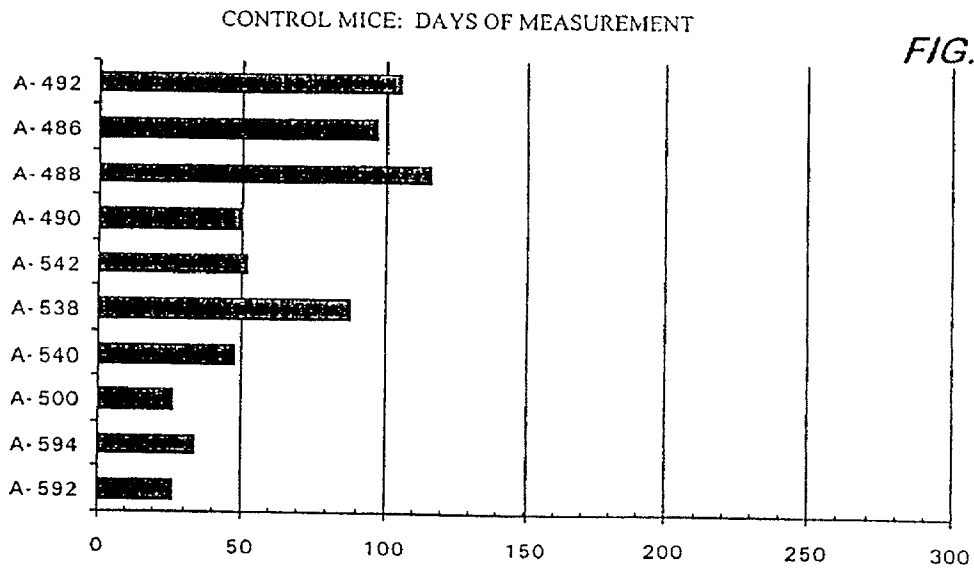
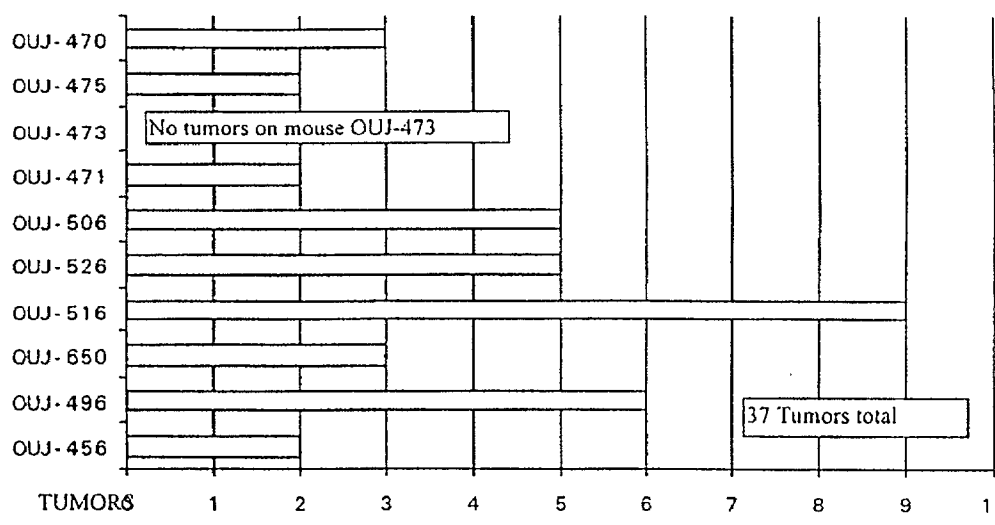


FIG. 31B

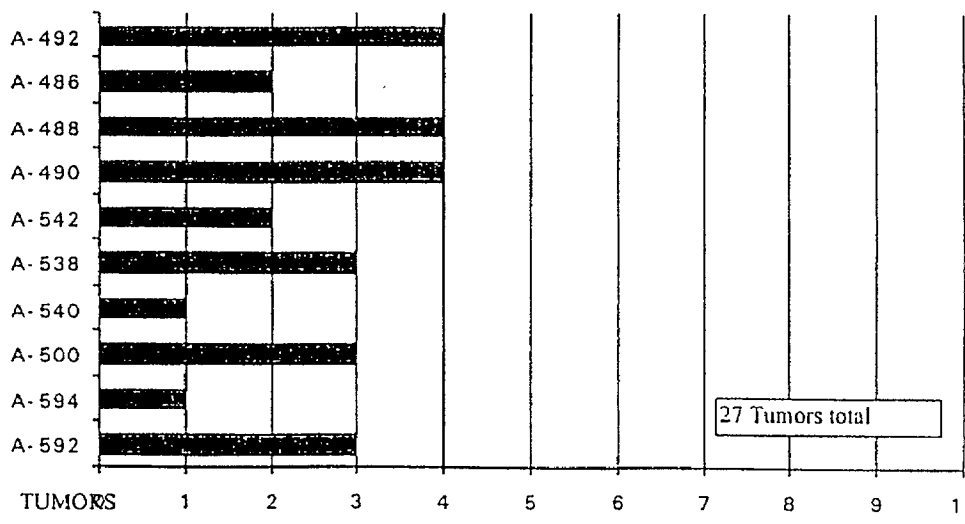
TREATED MICE: NUMBER OF TUMORS ON EACH MOUSE

FIG. 32A



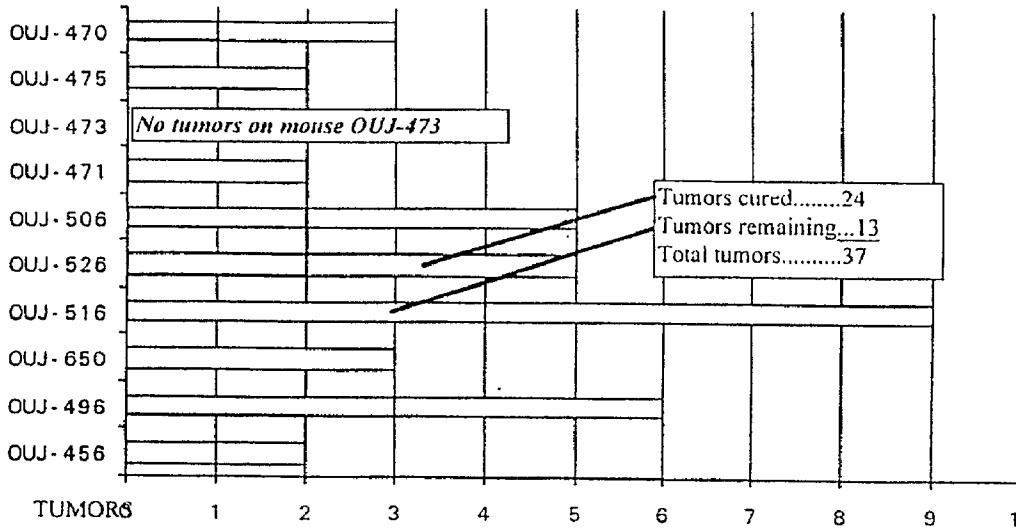
CONTROL MICE: NUMBER OF TUMORS ON EACH MOUSE

FIG. 32B



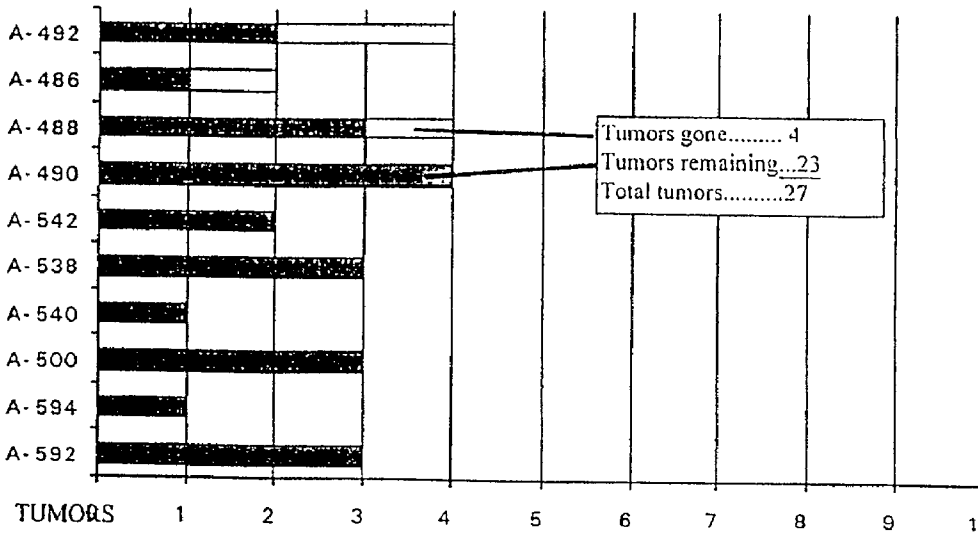
TREATED MICE: NUMBER OF TUMORS ON EACH MOUSE

FIG. 33A



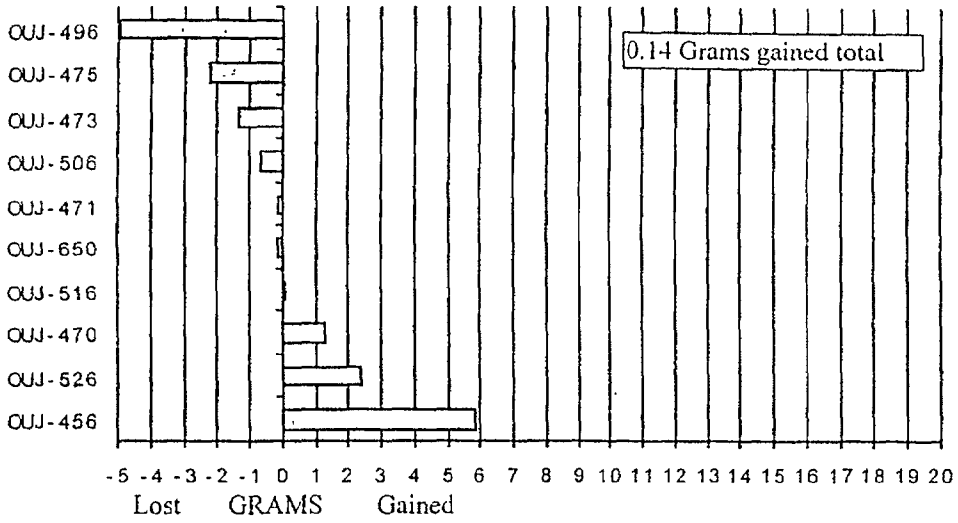
CONTROL MICE: NUMBER OF TUMORS ON EACH MOUSE

FIG. 33B



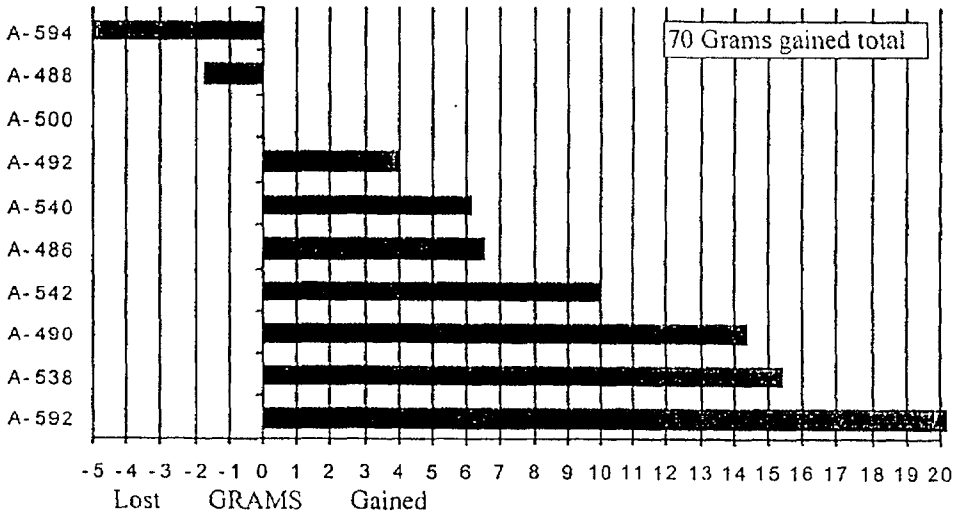
TREATED MICE: SHOWING INDIVIDUAL WEIGHT CHANGES IN GRAMS

FIG. 34A



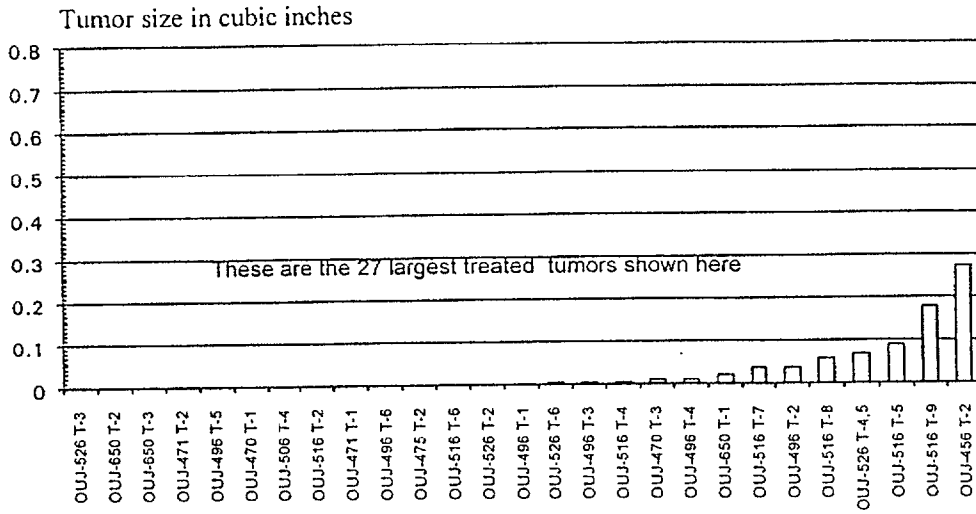
CONTROL MICE: SHOWING INDIVIDUAL WEIGHT CHANGES IN GRAMS

FIG. 34B



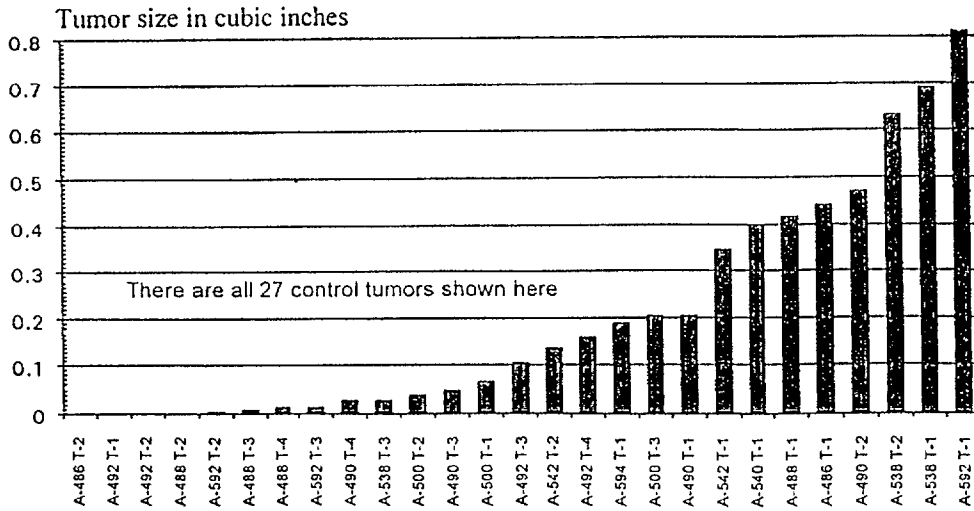
TREATED MICE: MAXIMUM SIZE OF EACH TUMOR

FIG. 35A



CONTROL MICE: MAXIMUM SIZE OF EACH TUMOR

FIG. 35B



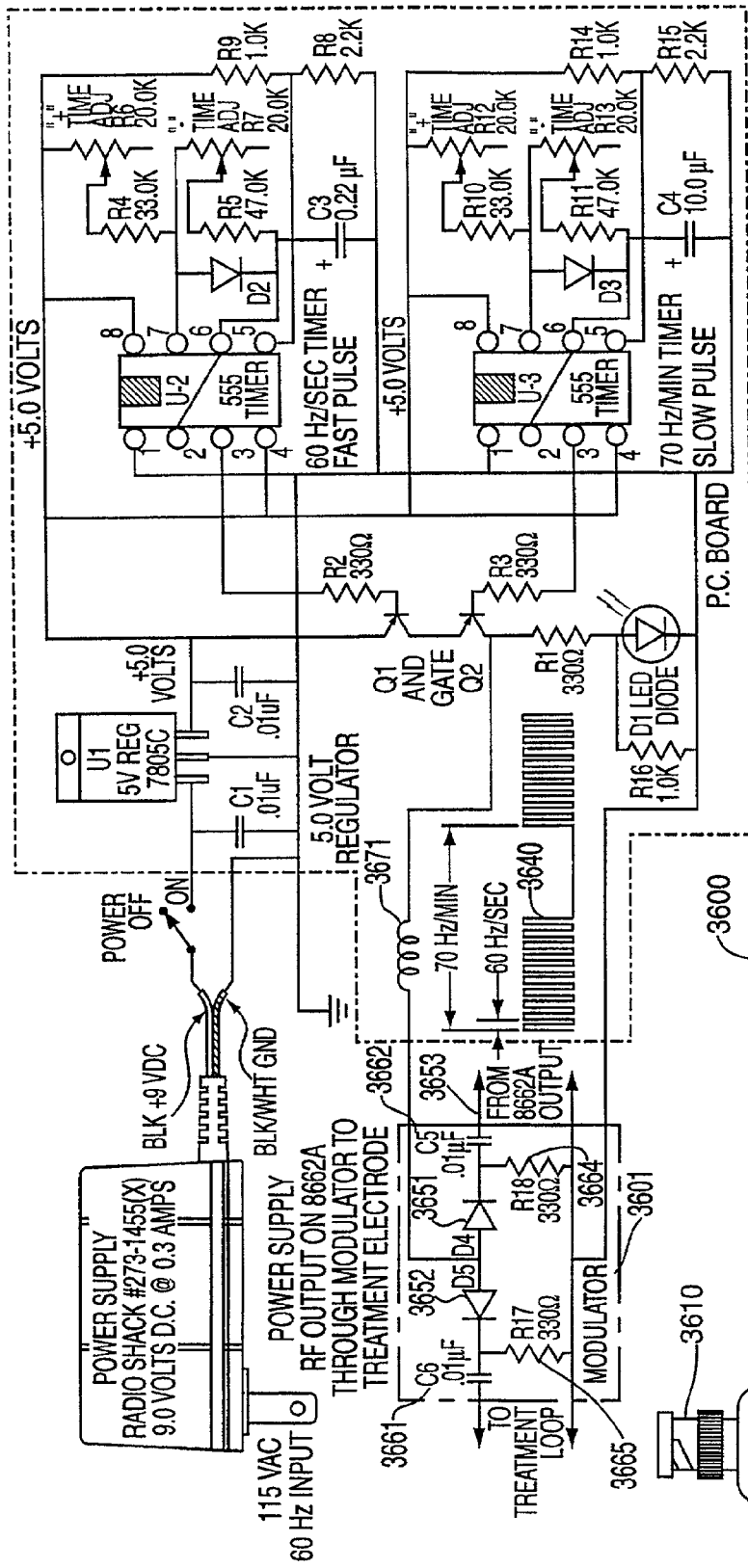


FIG. 36

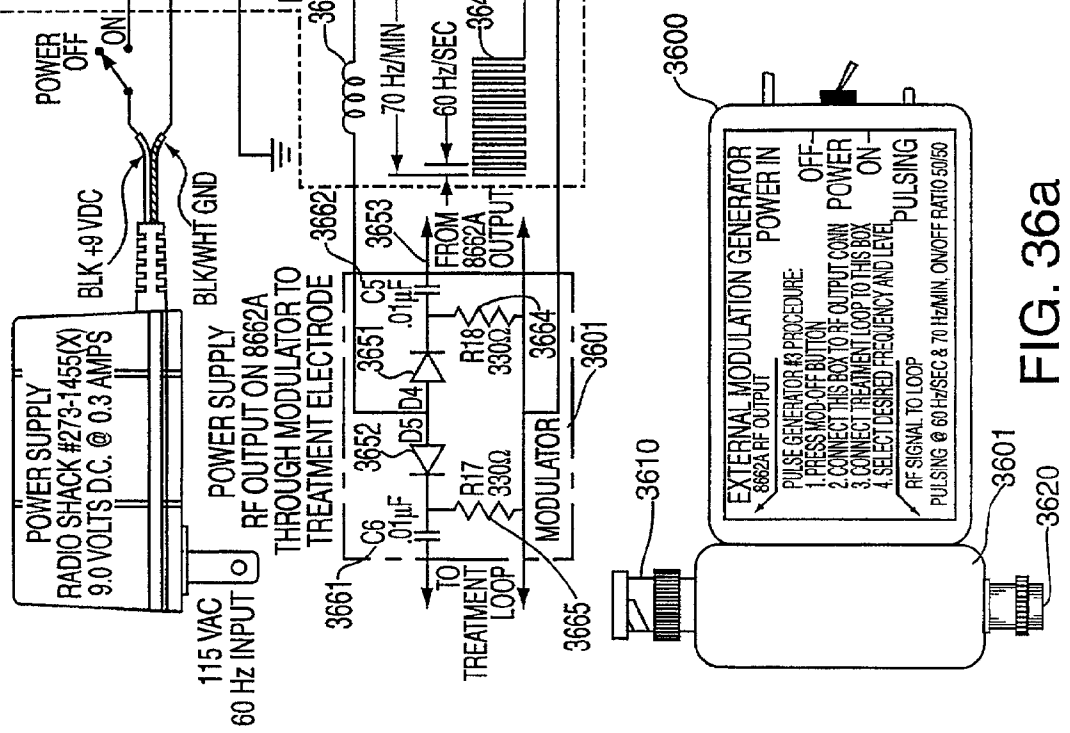


FIG. 36a

OIJ-738
TREATED MOUSE

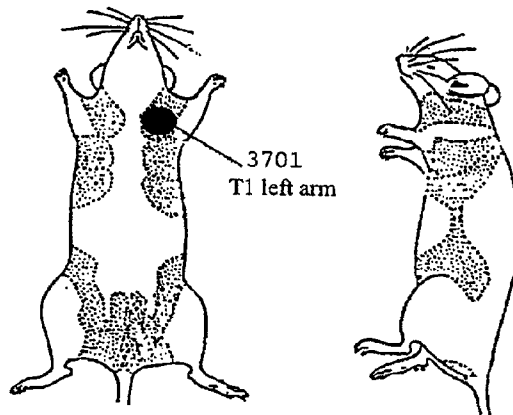


FIG. 37A

TOP GRAPH SHOWS TUMOR VOLUME in cu inches vs TIME in days

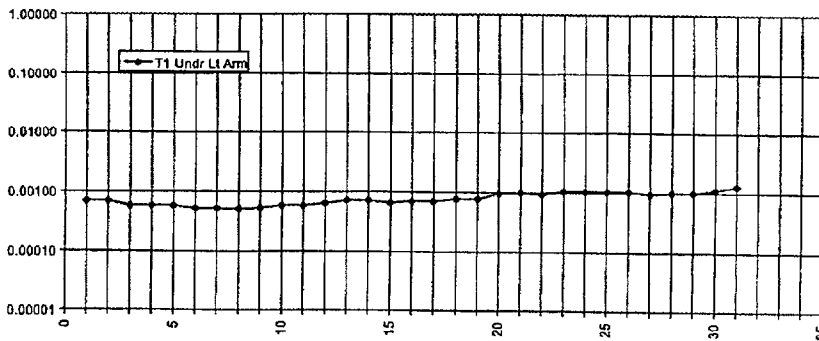


FIG. 37B

LOWER GRAPH SHOWS WEIGHT in grams & HEMATOCRIT % vs DAYS

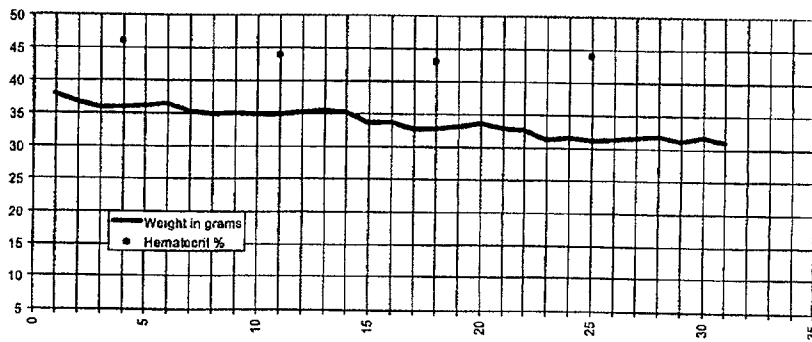


FIG. 37C

Formula for Tumor Volume in cubic inches = 1/2 length X 1/2 width X height X 2.094
 For more detailed information see OIJ-738-Data

RF THERAPEUTIC CANCER APPARATUS AND METHOD

FIELD OF INVENTION

[0001] This invention generally relates to apparatus and methods for treating cancer and other illness in humans and animals, and more particularly to a therapeutic apparatus and method based upon the administration of precisely regulated, low power, pulsed electromagnetic radiation (EMR).

BACKGROUND OF THE INVENTION

[0002] There is a considerable body of early literature regarding treatment of various illnesses with radio frequencies (RF) in the 43 MHz range. In U.S. Pat. No. 2,545,087, F. J. Hart disclosed an apparatus for treating a subject with a sequence of radio frequencies in the 43 MHz. range, applied in a step-wise fashion. These frequencies were each modulated sinusoidally at 60 Hz., and further pulsed by a second slow sinusoidal oscillator operating at 90 cycles per minute (1.5 Hz.). The RF frequencies employed by Hart were specified to three decimal places.

[0003] The instruments available to Hart and the other researchers of his day were based on tube amplifiers, which resulted in oscillators with considerable drift that could not be precisely tuned. Hart's means for applying the RF energy to a subject most often consisted of a metal plate acting as an antenna. As a result of such oscillator drift and imprecision, and the inefficiency of the available output devices, Hart and his contemporaries were not able to conduct scientific tests with precisely controlled frequencies, or to discover optimal treatment modalities.

[0004] Modern electronic technologies make it relatively simple to construct more precise and stable instruments than Hart had at his disposal. As a consequence, it has become possible to study systematically the potential therapeutic value of EMR. The present inventors have undertaken such studies over the course of many years, and as a result have perfected apparatus and methods which have proved effective in treating cancerous tumors in laboratory mice. The inventors believe that the same methods can be effectively adapted for human treatment.

[0005] The present inventors have constructed apparatus designed to overcome the limitations of Hart's approach. They have further sought to establish the utility of their invention through a program of animal testing, and have in turn used the results of such testing to refine the apparatus and the methods for effectively using such apparatus. The resulting apparatus and methods, and the experimental results of applying such apparatus and methods to treat cancerous tumors in mice, will be described below.

SUMMARY OF THE INVENTION

[0006] It is generally the object of the present invention to utilize electromagnetic radiation to provide effective treatments for cancer and other illnesses.

[0007] It is a further object of this invention to achieve reliable and reproducible therapeutic results from EMR treatment methods by achieving precise control over the treatment frequency.

[0008] It is also an object of the present invention to provide an efficient means of transmitting EMR from the generating means to the subject.

[0009] It is another object of the present invention to provide an EMR treatment that may be applied at very low power levels that can cause no harm.

[0010] These and other objects are achieved in accordance with the present invention through the use of an apparatus involving an oscillator that outputs, at a power of less than one mw, an RF frequency in the 43 MHz range, regulated and stabilized to the fifth or sixth decimal place, which is in turn modulated with a 60 Hz. 50% duty cycle square wave, which is in turn gated, again on a 50% duty cycle, at a rate of 1.167 Hz. (70 pulses per minute).

[0011] The RF frequency is chosen for a particular subject based on the believed effectiveness of the frequency in treating the illness in question, as summarized herein.

[0012] The modulated RF signal output by the apparatus of the present invention is applied to a flat loop of wire approximately 60 cm. long, grounded at one end and wound in five flat, concentric spiral-rectangular turns spaced about 3.175 mm. apart, the loop (herein referred to as a "treatment loop") being mounted on an insulating layer adhesively bonded to a metal plate.

[0013] In using this apparatus, the metal plate is placed, loop down, on the subject's body near the area to be treated. RF power is applied to the loop at one precise treatment RF frequency for at least one hour at a time. During treatment, the treatment loop is shielded from direct light and moving air currents.

[0014] There are alternative embodiments of the invention that differ somewhat in their circuit and construction details. The first, referred to as the "Battery SCPO," is a battery-powered "Single Crystal Pulsed Oscillator" in a metal housing with an internal quartz crystal, and an integral, externally mounted treatment loop. Each Battery SCPO is limited to a single frequency. A variation is shown (the "Mouse SCPO") in which an SCPO is powered by an external DC power module rather than batteries. An alternate embodiment, referred to as the "Generator Embodiment", derives its treatment signal from the modulated output of a Hewlett-Packard Model 8662A frequency generator, and supplies the signal to the treatment loop over a short coaxial cable. The frequency and power of the Generator Embodiment is easily adjusted with controls on the front panel of the 8662A frequency generator. Another alternative embodiment, also based on the HP 8662A Frequency Generator, modulates the RF signal entirely externally to the HP 8662A, and employs a specific type of coaxial cable to carry the signal from the modulator to the treatment loop. These alternative embodiments differ somewhat in their circuitry and construction details, as will be more fully described below.

[0015] In any of the alternative embodiments, treatment is non-restrictive and utilizes a low power believed to be completely safe for humans.

[0016] Other features and advantages of the present invention will become apparent from the following more detailed description, taken in conjunction with the accompanying drawings, which illustrate, by way of example, the principles of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0017] **FIGS. 1A and 1B** show top and bottom external views of the Battery SCPO.

[0018] FIG. 2 is a block diagram of the major functional units of the Battery SCPO.

[0019] FIG. 3 is a schematic diagram of the Battery SCPO.

[0020] FIG. 4A shows the modulation waveform of the Battery SCPO. FIGS. 4B through 4F show spectrum analyses of the output of the Battery SCPO.

[0021] FIG. 5 is an external view of the components of the Generator Embodiment.

[0022] FIG. 6 is a schematic diagram of the modulator circuit for the Generator Embodiment.

[0023] FIGS. 7A and 7B show, respectively, the modulation waveform and a portion of the output waveform of the Generator Embodiment.

[0024] FIGS. 8A and 8B show front and back views of the treatment loop used in connection with the Generator Embodiment.

[0025] FIGS. 9A1-9J4 show the treatment housings and treatment loops used for treating mice in the experiments described herein.

[0026] FIGS. 10 through 29 show, for each treated and control mouse involved in the inventors' experimental studies, A, the locations of the tumors (if any) that developed, B, plots (on a logarithmic scale) of the respective volumes of the various tumors as a function of time, and C, plots of the mouse's weight and hematocrit measurements as a function of time.

[0027] FIG. 30A and B shows bar graphs of the life spans of the treated and control mice, respectively.

[0028] FIG. 31A and B shows bar graphs of the life spans of the treated and control mice, respectively, after tumors were detected.

[0029] FIG. 32A and B shows bar graphs of the number of tumors in the treated and control mice, respectively.

[0030] FIG. 33A and B shows bar graphs of the outcome with respect to the tumors found in the treated and control mice, respectively.

[0031] FIG. 34A and B shows bar graphs of the weight changes observed in the treated and control mice, respectively.

[0032] FIG. 35A and B shows bar graphs of the maximum size of tumors observed in the treated and control mice, respectively.

[0033] FIG. 36 is a schematic diagram for an external modulator that attaches to the radio frequency output of an HP 8662A Frequency Generator and FIG. 36A is a top view of the exterior of the device.

[0034] FIG. 37 shows, for a mouse treated with a Generator Embodiment pulsed externally by the modulator shown in FIG. 36, A, the location of the tumor that developed, B, plots (on a logarithmic scale) of tumor volume as a function of time, and C, plots of the mouse's weight and hematocrit measurements as a function of time.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

1. DESIGN CONSIDERATIONS

[0035] According to experiments conducted by the present inventors, treatment with EMR is most effective under the following conditions:

[0036] a) The treatment frequency is selected with a precision extending to the fifth or sixth decimal point, or at least one half part per million.

[0037] b) The frequency is extremely stable over the course of the treatment.

[0038] c) The precise frequency chosen is held at that frequency and applied without variation for at least one hour.

[0039] d) RF power applied to the subject is held to less than one milliwatt (mW).

[0040] e) The EMR is applied through a coiled loop of wire, which, for treatments in the 43 MHz. Range, is approximately 60 cm. long.

[0041] The frequencies listed in Table 1 are believed to be effective for treating the indicated maladies:

TABLE 1

Treatment Frequencies	
Frequency	Malady
43,322,480	Sarcoma (generalized)
43,322,492	Sarcoma (intestines)
43,322,485	Sarcoma (breast)
43,346,000	Tuberculosis (general)
43,346,090	Tuberculosis (intestines)
43,346,000	Tuberculosis (breast)
43,346,050	Common cold
43,353,800	Carcinoma (general)
43,353,800	Carcinoma (intestines)
43,353,850	Carcinoma (breast)
43,353,800	Malignancy
43,296,000	Strep
43,351,830	Treats several diseases
43,351,850	Treats several diseases
43,351,855	Treats several diseases
43,351,870	Treats several diseases
43,352,000	Pneumonia
43,245,000	Staph

[0042] The foregoing list includes all of the frequencies studied by the present inventors and found to be effective. The inventors believe that different frequencies, even close to the above-stated frequencies are not effective. They have found that the effectiveness of the treatment depends critically on the precise frequency chosen, to the precision indicated herein. They have also found that steady treatment frequencies are more effective than swept or varied frequencies.

[0043] This invention is not intended to be limited to the frequencies stated in the above table. The inventors believe that there may be other frequencies in the 43 MHz. range that the present inventors have not as yet studied, that may also be effective. Similarly, the present inventors believe that there may be effective treatment frequencies in completely different ranges, for example, at much higher frequencies. The most important factor, in the view of the present inventors, is a precisely chosen frequency steadily applied for at least an hour at a time.

2. CONSTRUCTION OF ALTERNATIVE TREATMENT DEVICES

[0044] For twenty years we have been working to obtain the correct frequencies with which to treat the mice and also

the best possible instrument (method) with which to deliver the treatment to the mouse. Some of our experiments included using two plates (a hot and ground) rather than the treatment loop. All things considered, we feel the embodiments employing treatment loop electrodes have performed the best in our experiments on the mice.

[0045] Detailed descriptions of the alternate embodiments of the invention are set forth here to demonstrate that the principles taught in this invention are readily reducible to practice. It should be understood that these embodiments represent but a few of the possible configurations of the present invention, and that, utilizing the principles of the present invention as disclosed herein, analogous apparatus and methods may be readily devised for controlled therapeutic application of RF energy.

[0046] A. Battery SCPO

[0047] Top and bottom external views of the battery-operated embodiment of the treatment device are shown in FIGS. 1A and 1B. The device 100 is built in a small, self-contained rectangular metal package measuring about 7.37 cm. long, 5.46 cm. wide, and 1.78 cm. in thickness.

[0048] Housing 110 is preferably metal. It provides mechanical protection for the apparatus and serves as a electromagnetic shield. Housing 110 is soldered shut. In battery holder 114 (Caltronics BH-124) accessible from outside the package (and which may be recessed or attached to the exterior of housing 110), the housing accommodates four standard 1.5 volt "AA" alkaline batteries 115 of approximately 1.5 volts each, which provide the electrical power for the unit.

[0049] The underside of the device, shown in FIG. 1B, accommodates a surface mounted coil of wire 120 referred to as the "treatment loop." One end of treatment loop 120 enters the bottom housing surface through a wire feed hole 140 in the bottom of housing 110. The other end of treatment loop is grounded at solder point 150 to the outside of housing 110. The treatment loop itself consists of five concentric, spiraled, rectangular turns of 20 AWG solid copper wire embedded in a 2 mm. (0.080 inch) thick sheet of high impact styrene 111 adhesively fastened to the bottom surface of housing 110. (Alternatively, the treatment loop may be constructed on a printed circuit board.) The windings are spaced 3.175 mm. apart and the overall dimensions of the loop are 2.858x5.258 cm.

[0050] The treatment loop 120 has a broad radiating pattern off the coil. It is not a "focused" radiation but a spreading radiation. More signal is available from the front then off the back of treatment loop 120 (the back is shielded by a ground plane). Tests were run using a loop without the back shield but the results were not as good as with a back shield. The signal is strongest in the center since that is where the "hot" lead connects to treatment loop 120.

[0051] The circuitry that drives treatment loop 120 is contained on a printed circuit board 190 (shown in the cutaway 180 in FIG. 1B) within housing 110. The schematic for this circuit is shown in FIG. 3. The circuit comprises two timer circuits 210 and 240, which provide approximately a 60 Hz. approximately 50% duty cycle square wave, and an approximately 70 pulse per minute (1.167 Hz.) approximate 50% duty cycle square wave, respectively. These two square waves are combined in AND gate 260 in order to produce an

approximately 60 Hz. square wave pulsed at approximately 1.167 Hz., each of the 60 Hz. Square wave and the 1.167 Hz. pulse having an approximate 50% duty cycle. The waveform output by AND gate 260 is shown in FIG. 4A.

[0052] The output of AND gate 260 is then directed through filter 270, and then to quartz crystal X1 280. Although many frequencies could be chosen from, the Battery SCPOs built to date have used a crystal cut for a third harmonic frequency of 43.351830±20 Hz., 43.351850±20 Hz., 43.351855±20 Hz. and 43.351870±20 Hz. (corresponding to base frequencies in the 14.450 MHz range). These frequencies have been found most effective for treating a broad range of maladies. The output of crystal 280 is directed to treatment loop 120.

[0053] Viewed in further detail, the schematic diagram in FIG. 3 shows the power for the circuit derived from the four cell battery 301. This power supply feeds positive rail 302 and ground rail 303.

[0054] The approximately 60 Hz. timing circuit 210 is based on a low power TLC 555 timer U2 311, set up as an astable multivibrator by connecting pins 2 (Trigger) and 6 (Threshold) together. Pin 1 is connected to ground 303. Pins 4 and 8 are connected to the positive supply rail 302. Pin 5 is connected to the midpoint of a voltage divider comprised of 1K resistor R9 317 (this, and all other fixed resistors referred to herein being 5%, ¼ Watt, unless otherwise specified) from the positive supply and 2.2 K resistor R8 325 to ground 302. Pin 6 is in addition connected to 1N914, 75 PIV, switching diode D2 319 forward biased from pin; to 0.22 uF (50 volt) electrolytic capacitor C3 327 to ground 303; to 47K resistor R5 321 to the wiper of 20K, 15 turn, ¼ watt adjustable resistor R7 323, one end of which is open and the other end of which is connected to pin 7. Pin 7 in addition is connected to 33K resistor R4 313 to the wiper of 20K, 15 turn, ¼ watt adjustable resistor R6 315, one end of which is open and the other end of which is connected to the positive supply rail 302. Pin 3 is the output.

[0055] The square wave frequency and duty cycle produced by 555 Timer U2 215 are adjusted by 20K, 15 turn, ¼ watt adjustable resistors R6 315 and R7 323 in accordance with the following formulas:

$$[0056] \quad t1 \text{ (output high)} = 0.693 \times (R4 + R5 + R6 + R7) \times C3$$

$$[0057] \quad t2 \text{ (output low)} = 0.693 \times (R5 + R7) \times C3$$

$$[0058] \quad T \text{ (total period)} = t1 + t2$$

$$[0059] \quad f \text{ (frequency)} = 1/T$$

$$[0060] \quad D \text{ (duty cycle)} = (R5 + R7) / ((R4 + R6) + 2 \times (R5 + R7))$$

$$[0061] \quad \text{(Units: R-Ohms; C-Farads; t, T-Seconds, f-Hz.)}$$

[0062] The exact frequency and duty cycle of this square wave varies with the battery voltage and precise component values. The 60 Hz. and 50% duty cycle figures required for successful operation of the preferred embodiment are believed to be plus or minus 10%, based on the condition of the batteries, exact component characteristics and environmental factors such as ambient and operating temperature.

[0063] The 1.167 Hz (70 pulse per minute) timing circuit 240 is similar to that of circuit 210. The approximately 1.167

Hz. timer circuit **240** is based on a low power TLC 555 timer U3 **341**, set up as an astable multivibrator by connecting pins **2** (Trigger) and **6** (Threshold) together. Pin **1** is connected to ground **303**. Pins **4** and **8** are connected to the positive supply rail **302**. Pin **5** is connected to the midpoint of a voltage divider comprised of 1K resistor R14 **347** from the positive supply and 2.2 K resistor R15 **355** to ground **303**. Pin **6** is in addition connected to 1N914, 75 PIV, switching diode D3 **349** forward biased from pin **7**; to 10.0 uF (16 volt) electrolytic capacitor C4 **357** to ground **303**; to 47K resistor R11 **351** to the wiper of 20K, 15 turn, $\frac{3}{4}$ watt adjustable resistor R13 **353**, one end of which is open and the other end of which is connected to pin **7**. Pin **7** in addition is connected to 33K resistor R10 **343** to the wiper of 20K, 15 turn, $\frac{3}{4}$ watt adjustable resistor R12 **345**, one end of which is open and the other end of which is connected to the positive supply rail **302**. Pin **3** is the output.

[**0064**] The output voltage of both TLC 555 timer circuits **210** and **240** is approximately 4 volts, which varies with battery supply voltage.

[**0065**] The approximately 1.667 Hz. signal is combined with the approximately 60 Hz. signal in AND gate **260** which consists of 330 Ohm input resistors R2 **367** and R3 **367**, and MPS2907 PNP transistors Q1 **280** and Q2 **290**. FIG. 4A shows the waveform output from AND gate **260**.

[**0066**] From the output of the AND gate **260** is a 2.15K resistor R1 **369** in series with 2 ma red light emitting diode (LED) D1 **117** (Radio Shack 276-044 or equivalent) forward biased to ground **303**. The LED is visible on the outside of housing **110**, and is in the circuit merely to provide a visual indicator that the Battery SCPO is operating.

[**0067**] The remainder of the circuit consists of 8.2 mH inductor L2 **371** (Miller 8230-18), 5.5-18 pF trimmer capacitor C2 **372** (Sprague-Goodman GY A22000 or equivalent), quartz crystal X1 **280** and treatment loop L1 **120** to ground **303**.

[**0068**] Crystal X1 **280** is cut so as to have a base frequency in the 14.4 MHz. Range, and a third harmonic at one of the following frequencies: 43.351830 \pm 20 Hz., 43.351850 \pm 20 Hz., 43.351855 \pm 20 Hz and 43.351830 \pm 20 Hz. Quartz crystal **280** is obtained from International Crystal Manufactures, P.O. Box 26330, Oklahoma City, Okla. 73126, and selected with great care. Other sources for crystals that have been used include CTS Corporation, Knights Division, 400 East Reimann Ave., Sandwich Ill. 60548 (which is no longer in business) and NEL Frequency Controls, Inc. 357 Beloit Street, Burlington Wis.

[**0069**] Crystals are ordered approximately 25-50 at a time for each frequency, and are then individually tested on a Saunders Crystal Test System so as to allow selection of crystals with the desired frequency characteristics. For one representative crystal, driven with a reference frequency near the expected series resonance frequency, with a drive level of 2060 uWatts into 44 Ohms, with a 10 pF capacitive load, the results of this testing were as shown in Table 2.

TABLE 2

Exemplary Crystal Measurements		
Parameter	Description	Value
Fr(Hz.)	Series resonant frequency	43,351,870 Hz.
Co(pF)	Shunt capacity	4.0 pF
Rr(Ohms)	Motional Resistance	18.2 Ohms
Q(k)	Quality factor	161.0 K
C1(fF)	Motional capacity	1.3 femtoFarads
L(mH)	Motional Inductance	10.7 mH
Fl(Hz.)	Loaded resonant frequency	43,353,820 Hz.
Ts(ppm/pF)	Trim sensitivity	3.2 ppm/pF
PWR(uWatt)	Power level	2740.0 uWatts

[**0070**] No oven is used in this device. Instead, the unit is turned on for 10 minutes before use, and used in a room at an ambient temperature of approximately 72 degrees Fahrenheit.

[**0071**] The output portion of the Battery SCPO involves a series LC circuit, a series crystal, and the treatment loop, which is another inductor. The large Motional Inductance of the crystal, and its very small Motional Capacitance, dominate the output circuit. This is driven by the square wave train coming out of AND gate **260**. The modulation waveform output from AND gate **260**, measured at the collector of transistor Q2 **365**, as shown in FIG. 4A, has a rise time of 18 nS and fall time approximately 120 nS. To a reasonable approximation, each 60 Hz. cycle in the modulation waveform represents a 4 volt step input with the aforementioned rise and fall times, into a series LC circuit with low series resistance. The high frequency components of the steep rise and fall of this square wave stimulates a ringing of the crystal at its characteristic base frequency and harmonics.

[**0072**] The actual output of the Battery SCPO at the point of input to Treatment Loop 120 can be observed on an oscilloscope, and visibly contains RF frequencies. This was observed using an SCPO constructed with a 43.351870 Hz. Crystal. When the signal from the SCPO was input into a spectrum analyzer, a -75 dB peak is observed at the 14.448461 MHz. base crystal frequency, and a -85 dB peak is seen at the 43.351870 MHz. third harmonic frequency of the crystal. An additional, weaker RF signal is observed at 43.420000 MHz. These various spectrum analyzer scans are shown in FIGS. 4B through 4F.

[**0073**] In sum, rather than using a conventional crystal oscillator circuit, the battery SCPO uses a crystal series driven by audio range square wave input pulses, in order to generate low power, yet precisely tuned, pulsed RF energy.

[**0074**] The treatment device is used by applying it, treatment loop down, to the subject's body in the area desired to be treated. The unit is left in place for approximately one hour at a time.

[**0075**] As indicated above, battery SCPOs have been built with crystals tuned to 43.351830 \pm 20 Hz., 43.351850 \pm 20 Hz., 43.351855 \pm 20 Hz and 43.351870 \pm 20 Hz. These frequencies were chosen because they are each believed to be useful for treating a plurality of illnesses, and because a multipurpose device is advantageous by reason of the inconvenience of changing crystals. However, there is no reason why this embodiment, would not be effective at any of the frequencies identified above as being therapeutically useful,

as well as, with an appropriately tuned output element, if necessary, at any frequency found in the future to be therapeutically useful.

[0076] A parts list for the Battery SCPO is set forth in Table 3.

TABLE 3

Parts List for Battery SCPO		
Ref. No.	Description	Source
110	SCPO Housing	Fabricated-See text
114	Battery Holder	Caltronics BH-124
115	"AA" Battery 4ea	Wallgreens 1.5 V AA Ultra Alkaline or equiv.
117	DI Indicator Light-2 mA LED Diode	Radio Shack 276-044 or equiv.
120	Treatment Loop	Fabricated-See text
127	Backing for treatment loop	High Impact Styrene 0.080" thick
280	Quartz Crystal	ICM, CTS, or NEL-See text
311	U2-TLC 555 Timer	Radio Shack 276-1723 or equiv.
313	R4 33 K +/-5% 1/4 Watt Carbon Resistor	Radio Shack 271-1341 or equiv.
315	R6 20 K 15 Turn 3/4 Watt Adj. Resistor	Radio Shack 271-340 or equiv.
317	R9 1.0 K +/-5% 1/4 Watt Carbon Resistor	Radio Shack 271-1321 or equiv.
319	D2 1N914 Switching Diode 75 PIV	Radio Shack 276-1122 or equiv.
321	R5 47 K +/-5% 1/4 Watt Carbon Resistor	Radio Shack 271-1342 or equiv.
323	R7 20 K 15 Turn 3/4 Watt Adj. Resistor	Radio Shack 271-340 or equiv.
325	R8 2.2 K +/-5% 1/4 Watt Carbon Resistor	Radio Shack 271-1325 or equiv.
327	C3 0.22 uf Electrolytic Capacitor, 50 Volts	Radio Shack 272-1070 or equiv.
341	U3-TLC 555 Timer	Radio Shack 276-1723 or equiv.
343	R10 33 K +/-5% 1/4 Watt Carbon Resistor	Radio Shack 271-1341 or equiv.
345	R12 20 K 15 Turn 3/4 Watt Adj. Resistor	Radio Shack 271-340 or equiv.
347	R14 1 K +/-5% 1/4 Watt Carbon Resistor	Radio Shack 271-1321 or equiv.
349	D3 1N914 Switching Diode 75 PIV	Radio Shack 276-1122 or equiv.
351	R11 47 K +/-5% 1/4 Watt Carbon Resistor	Radio Shack 271-1342 or equiv.
353	R13 20 K 15 Turn 3/4 Watt Adj. Resistor	Radio Shack 271-340 or equiv.
355	R15 2.2 K +/-5% 1/4 Watt Carbon Resistor	Radio Shack 271-1325 or equiv.
357	C4 10 uf Electrolytic Capacitor, 16 Volts	Radio Shack 272-1436 or equiv.
361	R2 330 Ohm +/-5% 1/4 Watt Carbon Resistor	Radio Shack 271-1315 or equiv.
363	Q1 MPS2907 PNP Transistor	Radio Shack 276-2023 or equiv.
365	Q2 MPS2907 PNP Transistor	Radio Shack 276-2023 or equiv.
367	R3 330 Ohm +/-5% 1/4 Watt Carbon Resistor	Radio Shack 271-1315 or equiv.
369	R1 2.2 K +/-5% 1/4 Watt Carbon Resistor	Radio Shack 271-1325 or equiv.
371	L2 8.2 uH Inductor	Miller 8230-18
372	C2 5.5-18 pF Trimmer Capacitor	Sprague-Goodman GYA22000 or equiv.

B. Generator Embodiment

[0077] The alternate embodiment of the treatment device is shown in FIG. 5. It employs a model 8662A frequency generator 500 manufactured by the Hewlett-Packard Company. Frequency generator 500 has a modulation input 520,

to which is connected modulator unit 540, which provides an approximate 60 Hz square wave with an approximate 50% duty cycle, which is in turn gated with an approximately 1.167 (70 pulse per minute) square wave, also with an approximately 50% duty cycle.

[0078] The circuitry of modulator unit 540, which is more fully described below, is similar to that of the Battery SCPO, up to the point of AND gate.

[0079] As shown in FIG. 6, power is provided by a plug-in DC power module 550, Radio Shack Cat. No. 273-1455C or equivalent, which is rated at 9 volts D.C. at 0.3 amperes. The positive lead from the module is switched through power switch SW1 542, and then directed to a 7805 5 volt voltage regulator U1 605. The negative lead of the supply is attached to the unit's ground rail 603. Both the input and output of voltage regulator U1 605 is bypassed to ground by a 0.01 uF, 500 volt disc ceramic capacitor, C1 606 and C2 607. The output, a regulated 5 volts, is applied to positive supply rail 602.

[0080] The circuitry associated with the TLC 555 timers 611 and 641 is shown in FIG. 6, and is identical with the corresponding circuitry described above in the context of the Battery SCPO. The reference numerals "611" through "657" in FIG. 6 correspond to the identical elements "311" through "357" in FIG. 3.

[0081] The AND gate of the modulator for the Generator Embodiment is configured identically here as in the Battery SCPO. R2, R3, Q1 and Q2 (661, 663, 665, and 667) have the same values as in the SCPO circuit (361, 363, 365 and 367).

[0082] The LED indicator circuit R1 669 and D1 541 differs from its counterpart in the Battery SCPO in that R1 669 is 330 Ohms rather than 2.15K. The resistor difference is for the purpose of obtaining the proper LED brightness in each circuit.

[0083] Adjustable resistor R17 677 provides a voltage divider between positive rail 602 and ground 603. The wiper of R17 677 provides a positively offset "ground" for purposes of output to the HP 8662A. The reason for this is that the HP 8662A expects an DC signal for purposes of modulation, so this adjustment is provided to offset the output around "zero volts" as referenced to the chassis of the HP 8662A.

[0084] The output of AND gate at the emitter of Q2 665 is connected to 8.2 uH inductor L2 671 (Miller 8230-18). The resultant signal is bypassed to ground by a relatively large electrolytic capacitor, 1.5 uF, rated at 35 volts C5 673, and then passed to the center lead of output BNC connector 521.

[0085] The approximate modulation waveform produced by modulator unit 540 is shown in FIG. 7A. The rounding of the rise and fall of the waveform is the result of capacitor C5 673. The modulated waveform of one of the 60 Hz. cycles output by the HP 8662A is shown in FIG. 7B (the RF component in this figure is not drawn to scale). The output power of the frequency generator is less than 1 mw.

[0086] The output of frequency generator 500 is directed through a second BNC connector 531 connected to the panel of that instrument, and through a 50 Ohm, double-shielded coaxial cable 567 (RG 174 cable, Mouser #515-156-12 or equivalent). The coaxial cable is directed to a treatment loop

565 mounted on 2.0 mm. (0.080 inch) thick styrene sheet **566** which is laminated on stainless steel plate **560**. The plate has dimensions of approximately 10.2 cm. by 6.35 cm. The treatment loop **565** is a 20 AWG solid copper wire approximately 60 cm. long, wound in a flat rectangular spiral comprising five turns, with a turn-to-turn spacing of approximately 3.175 mm. and overall dimensions of 2.858×5.258 cm. The center of the loop is soldered to the center lead of coaxial cable **567**. Shield **863** of coaxial cable **567** is soldered to the back of plate **560** at solder point **861**. The outer end of treatment loop **565** is grounded by being soldered at solder point **570** to the loop side of plate **560**. (Use A and B figures to show both sides of the plate.

[**0087**] The signal from the frequency generator based embodiment of the treatment device is stronger electromagnetically than that output by battery operated device **100**. It is also characterized by having only a single pure RF component at the desired frequency in the 43 MHz range. The treatment loop of generator embodiment is applied to the subject in the same manner as in the case of the battery powered embodiment.

[**0088**] A parts list for the Generator Embodiment is set forth in Table 4.

TABLE 4

Parts List for Generator Embodiment		
Ref. No.	Description	Source
500	Hewlett-Packard 8662A Frequency Generator	Hewlett-Packard Company
541	D1 Indicator Light-2 mA LED Diode	Radio Shack 276-044 or equiv.
542	SW1 Power Switch	Radio Shack 275-612 or equiv.
550	9VDC Plug-In Power Supply Module	Radio Shack 273-1455C or equiv.
560	Treatment Loop holder	Fabricated-See text
565	Treatment Loop	Fabricated-See text
567	Coaxial Cable, 50 ohm, Shielded	RG174 cable Mouser #515-1156-12
605	U 1 7805 5 Volt Voltage Regulator IC	Radio Shack 276-1770 or equiv.
606	0.01 uF Disc Ceramic Capacitor, 500 Volt	Radio Shack 272-131 or equiv.
607	0.01 uF Disc Ceramic Capacitor, 500 Volt	Radio Shack 272-131 or equiv.
611	U2-TLC 555 Timer	Radio Shack 276-1723 or equiv.
613	R4 33 K +/-5% 1/4 Watt Carbon Resistor	Radio Shack 271-1341 or equiv.
615	R6 20 K 15 Turn 3/4 Watt Adj. Resistor	Radio Shack 271-340 or equiv.
617	R9 1.0 K +/-5% 1/4 Watt Carbon Resistor	Radio Shack 271-1321 or equiv.
619	D2 1N914 Switching Diode 75 PIV	Radio Shack 276-1122 or equiv.
621	R5 47 K +/-5% 1/4 Watt Carbon Resistor	Radio Shack 271-1342 or equiv.
623	R7 20 K 15 Turn 3/4 Watt Adj. Resistor	Radio Shack 271-340 or equiv.
625	R8 2.2 K +/-5% 1/4 Watt Carbon Resistor	Radio Shack 271-1325 or equiv.
627	C3 0.22 uf Electrolytic Capacitor, 50 Volts	Radio Shack 272-1070 or equiv.
641	U3-TLC 555 Timer	Radio Shack 276-1723 or equiv.
643	R10 33 K +/-5% 1/4 Watt Carbon Resistor	Radio Shack 271-1341 or equiv.
645	R12 20 K 15 Turn 3/4 Watt Adj. Resistor	Radio Shack 271-340 or equiv.
647	R14 1 K +/-5% 1/4 Watt Carbon Resistor	Radio Shack 271-1321 or equiv.

TABLE 4-continued

Parts List for Generator Embodiment		
Ref. No.	Description	Source
649	D3 1N914 Switching Diode 75 PIV	Radio Shack 276-1122 or equiv.
651	R11 47 K +/-5% 1/4 Watt Carbon Resistor	Radio Shack 271-1342 or equiv.
653	R13 20 K 15 Turn 3/4 Watt Adj. Resistor	Radio Shack 271-340 or equiv.
655	R15 2.2 K +/-5% 1/4 Watt Carbon Resistor	Radio Shack 271-1325 or equiv.
657	C4 10uf Electrolytic Capacitor, 16 Volts	Radio Shack 272-1436 or equiv.
661	R2 330 Ohm +/-5% 1/4 Watt Carbon Resistor	Radio Shack 271-1315 or equiv.
663	Q1 MPS2907 PNP Transistor	Radio Shack 276-2023 or equiv.
665	Q2 MPS2907 PNF Transistor	Radio Shack 276-2023 or equiv.
667	R3 330 Ohm +/-5% 1/4 Watt Carbon Resistor	Radio Shack 271-1315 or equiv.
669	R1 330 Ohm +/-5% 1/4 Watt Carbon Resistor	Radio Shack 271-1315 or equiv.
671	L2 8.2 uH Inductor	Miller 8230-18
673	C5 1.47 uF Electrolytic Capacitor, 35 Volts	Radio Shack 272-1433 & 1434
677	R17 5 K Adj. 15 Turn 3/4 Watt Adj. Resistor	Radio Shack 271-340 or equiv.

C. Alternative “Mouse SCPO” for Mouse Studies

[**0089**] For purposes of the mouse studies described below, an alternative embodiment of the treatment device was developed, hereinafter referred to as the “Test Embodiment”. The Mouse SCPO consisted of an apparatus similar to the battery SCPO described above, but without a battery compartment, and powered by an external AC power adapter. The power adapter used was the same Radio Shack adapter **550** used with the modulator for the Generator Embodiment. The power supply circuit in the Mouse SCPO was identical to that used in the modulator for the Generator Embodiment, comprising the 7805 regulator U1 **605**, and the two 0.01 uF bypass capacitors C1 **606** and C2 **607**. In all other respects, the Mouse SCPO was as shown in FIGS. 1, 2 and 3, using the components listed in Table 4.

[**0090**] The feature lacked by the Mouse SCPO is the lack of restraint resulting from not being tethered by a wire. However, in the case of treating mice, this feature is irrelevant, since the mice must be immobilized for treatment in any event. On the other hand, the Test Embodiment had the advantage that it had no batteries to run low and to be checked and replaced.

D. Externally Pulsed Generator Embodiment

[**0091**] A further alternative embodiment of the treatment apparatus was developed, herein referred to as the “Externally Pulsed Generator.” The Externally Pulsed Modulator embodiment is identical to the apparatus shown in FIG. 5, except that (1) the modulator does not attach to the Modulator Input of the HP 8662A, but rather attaches directly via a BNC connector to the RF output of the HP 8662A, (2) the modulator externally modulates the RF signal and does not utilize the internal modulation circuitry provided by the HP 8662A; and (3) the cable used to connect the modulator to the Treatment Loop is a specific type of coaxial cable, i.e., a Hewlett-Packard 10501A, 50 Ohm coaxial cable approximately 1.1 meters long.

[0092] The modulator in the Externally Pulsed Generator embodiment contains a series solid state RF switch and associated connectors, which is pulsed by a pulsing circuit identical to that shown in FIG. 6, except that potentiometer R17 677 and capacitor C5 671 have been removed and the ground is taken from the main power supply ground rail 1303 (corresponding to rail 603 in FIG. 6). (Since there is no need to interface with the modulator input of the 8662A, there is no need for the floating ground used in the output circuit of FIG. 6.)

[0093] The schematic diagram in FIG. 36 shows the entire circuit of this external modulator. In FIG. 36A, which shows the exterior of the device, shielded box 3601 is attached to the end of modulator housing 3600. Male BNC connector 3610 attaches directly to the RF output of the 8662A. Female BNC connector 3620 attaches to the 10501 coax which in turn leads to the Treatment Loop. (Since this unit is a self-contained external modulator, it is necessary to turn off the modulation internal to the HP 8662A using the switch for that purpose on the control panel of the HP 8662A.)

[0094] In the RF switching circuit, the output of inductor L2 3671 is a 60 Hz/1.667 Hz. waveform 3640 (also as shown in FIG. 7A). This waveform shifts the bias on D4 3651 and D5 3652 so as to switch the RF applied to input 3653 in accordance with the pulses from L2 3671. In addition, inductor L2 3671 serves in this circuit as an RF choke keeping excessive RF from going back into the pulsing circuitry.

TABLE 4A

Additional Part for Externally Pulsed Generator Embodiment		
Ref. No.	Description	Source
500	C5 0.01 μ f capacitor	Radio Shack 272-131 or equiv.
541	C6 0.01 μ f capacitor	
542	R17 330 Ohm +/-5% 1/4 Watt Carbon Resistor	Radio Shack 275-1315 or equiv.
542	R18 330 Ohm +/-5% 1/4 Watt Carbon Resistor	Radio Shack 275-1315 or equiv.
550	D4 1N914 Switching Diode 75 PIV	Radio Shack 273-1122 or equiv.
560	Metal Box	Any suitable supplier
565	Male BNC connector	Any suitable supplier
567	Female BNC connector	Any suitable supplier

3. EXPERIMENTAL PROCEDURE AND RESULTS

[0095] A controlled set of experiments were conducted during 1995 and 1996, to Jun. 25, 1996, to test the utility of the present invention with respect to the suppression and elimination of cancerous tumors, cysts, lesions, and neoplasia. The experiments were performed upon mice, by the topical application of electromagnetic (EMR) radiation at specific frequencies and intensities on a regular schedule, using the apparatus of the present invention as adapted for applying EMR to mice. We also present some additional measurements taken in 1997 with respect to one mouse that was treated using the Externally Pulsed Generator Embodiment.

[0096] "Suppression and elimination" means that tumors, etc. that do develop are smaller in size, occur relatively

infrequently and are likely to disappear over time, as opposed to untreated tumors that are larger in size, occur more frequently and are unlikely to disappear before the death of the subject.

Use of JAX Mice as Experimental Subjects

[0097] The Jackson Laboratory at Bar Harbor, Me., 04609 supplies mice for scientific research. These special mice are "JAX Mice," of a special inbred breed identified as C3H HeOuJ. These mice are highly abnormal, in that they are inherently very susceptible to adenocarcinoma of the mammary gland, due to the contributing factors of inherited genes, excessive hormonal stimulation, and the mouse mammary tumor virus, which is passed to the young through the mother's milk. The adenocarcinomas develop spontaneously in these mice, and the breed is characterized by a high incidence of mammary tumors by eight months of age. Our project has used "JAX Mice" type C3H HeOuJ throughout all of its research for treatment of mouse tumors, including all of the treated and control mice referred to herein.

[0098] The JAX C3H HeOuJ mice were selected in order to provide a sensitive animal model for testing anticancer treatments. The effectiveness of various treatments for such tumors is measured by determining improvements in lifespan or other physical characteristics, such as gross appearance, health status, and other related data, of groups that have received the treatment, as against untreated controls. This manner of testing using JAX mice is accepted as a valid animal model for determining the prospective utility of cancer treatments in humans.

[0099] In a memorandum dated Mar. 18, 1997, The Jackson Laboratory notified users of C3H/HeOuJ that it had observed an alteration over time of the development and incidence of tumors in this strain. Our experiments were primarily conducted in a much earlier time frame than that concerned in this memorandum, and we do not believe any of our experimental results were affected thereby.

Summary of Experimental Procedures and Results

[0100] "Control" and "treated" selections of JAX mice (10 mice per group) were observed over the duration of their lives. Control mice were not exposed to the treatment procedure at all. The treated mice were exposed to EMR at the skin layer.

[0101] The treatment given was exposure to electromagnetic radiation applied to the skin of the mouse, with the radiation held at a given frequency throughout the treatment. The duration of treatment was usually one-half to one hour, and during the treatment, the treating electrode was shielded from undue light and moving air currents.

[0102] The data from our experiments, discussed in detail below, show that:

- [0103] 1. Treated mice live much longer than controls.
- [0104] 2. The life spans of treated mice compare favorably with life spans of normal (i.e., non-JAX) mice.
- [0105] 3. Treated mice have good health throughout their life.

[0106] 4. Prior treatment has prevented abdominal tumor development.

[0107] 5. When an abdominal tumor has been treated directly on the electrode it is caused to disappear.

[0108] 6. By contrast:

[0109] a) Tumors on control mice grow rapidly until death of the mouse,

[0110] b) And as tumors grow, a control mouse gains weight, its hematocrit decreases and its health fails rapidly until death.

[0111] Treatment of the particular mice herein discussed was by exposure of the JAX mice to radiation from an electrode which was energized by a low power source that was preset to provide frequencies of 43.351830 MHz, 43.351850 MHz and 43.351870 MHz. In some cases, an HP-8662A Signal Generator preset to these frequencies was used, equipped with a modulator (in all but the 1997 data, an internally coupled modulator), to provide approximately 1.667 and 60 Hz., approximately 50% duty cycle square wave pulse trains as previously described. In other cases, the same pulsed treatment frequencies were obtained with the "Mouse SCPO" embodiment described above, which contained its own modulator circuit, driving an internal quartz crystal.

[0112] The frequencies selected, as listed in the preceding paragraph, were based on prior experiments conducted over a period of many years, during which a large number of mice were treated under varying conditions and with various treatments. The three frequencies specified in the preceding paragraph are believed by the inventors to be among the most effective frequencies for treating a range of maladies. When using the Mouse SCPO embodiment, the treatment frequency used 69% of the time (659 hours out of a total of 950) was 43351870 Hz. When using the HP 8662A signal generator for treatment, many (35) different frequencies were used.

Treatment Procedures

[0113] One of the treated mice (OUJ-479) received treatments before a tumor appeared and lived and died tumor free.

[0114] Treatment of the remaining mice started as soon as a tumor reached 0.07" in length, width, and height, corresponding to an ellipsoid having a volume of 0.0295 cubic cm. (0.00018 cubic inches). The treatments for all these ten mice were every day except Sunday. The treatment frequencies are limited to a few specific frequencies within a narrow range, and the intensities are normally set to 0 dBm into a 50 ohm load.

[0115] Due to variations among individual mice (as in other species, including humans), a treatment configuration that is effective for one subject doesn't always work for another. Frequencies of 43.351850 MHz and 43.351870 MHz were used for standard treatment on almost all of the mice. These frequencies have demonstrated good results. Treating mice with 43.351850 MHz from a signal generator and/or pulsed crystal, appears to clear up their secondary infections, and treating with 43.351870 MHz seems to restore their general health. All of the treated mice appeared to be very lively and have a very healthy skin and hair

appearance. Of the mice listed below, all hematocrit values have stayed in the healthy range of 38% to 46%, and their weight basically stayed the same since they began treatment.

[0116] Hematocrits for both the treated and the control mice were measured in accordance with the following procedure. The hematocrit was taken once a week. The mouse was placed under a heat lamp for a few minutes to cause the veins in the tail to dilate, thus making it easier to extract the blood for the sample. The amount of blood taken was about one-half of the standard 75 mm long capillary tube. The capillary tubes containing the blood are spun in a Micro-Hematocrit Centrifuge, at its "number three" marking. The capillary tubes are removed and placed in the Micro-hematocrit Tube Reader, which gives the percent of red blood cells found in the sample.

[0117] We have observed that tumors that have reached 0.07" in length, 0.07" in width, 0.07" in height are definitely a malignant growth, and benign or cystic lesions can be ruled out. Neoplasia measured under the agreed size are questionable. Almost all of the neoplasia encountered measured 0.07", 0.07", 0.07" and above.

[0118] The treatments employed a variety of treatment electrodes and housings, as shown in FIG. 9. The preferred housing was the "E" housing shown in FIG. 9A, and the preferred electrodes were the "I" electrode associated with the Mouse SCPO, FIG. 9J, and the "F" electrode used with the Hewlett-Packard signal generator, FIG. 9B.

[0119] Tumors treated directly on the treatment electrode slowly regressed until they were gone. Tumors that were not on, or only partially on, the electrode showed a decrease in growth rate, but the tumor would steadily grow and not regress back. The electrode was re-designed so that any tumor could be treated. The tumor must be directly on the electrode to receive the maximum treatment needed for complete regression of growth. Mice with lesions on their abdomen had direct contact with the electrode, and all completely regressed back to zero. We've had similar success with some mice with lesions on the neck, left leg, right neck, right side, etc.

[0120] Since mammary tumors occur spontaneously in these mice, some mice were also treated before any tumors appeared in the hope of preventing the inevitable fate of the cancerous C3H strain, which have an almost 100% occurrence rate. At present one of the mice lived out its life span tumor free and died of old age.

Treated Mice

[0121] The following describes our experimental results with respect to each individual treated mouse. For each mouse, there is a corresponding drawing showing where on the mouse tumors appeared, and in which the tumors are identified by a "tumor number" T-X, as well as a drawing reference numeral; a graph showing tumor volume in cubic inches vs. time in days; a graph showing mouse weight in grams and hematocrit readings vs. time in days; and an Appendix setting forth all experimental measurements taken with respect to the mouse.

[0122] Each tumor growth graph (FIGS. 10B, 11B, etc.) shows the size of each tumor, in cubic inches, on the mouse in question as a logarithmic function of days after the appearance of the subject's first tumor. Tumor volume, in

cubic inches, was calculated based on the assumption that the tumor was approximately an ellipsoid, and had a volume equal to $\frac{1}{2}$ length $\times\frac{1}{2}$ width \times height $\times 2.094$.

[0123] Each weight and hematocrit graph (FIGS. 10C, 11C, etc.) shows, in two separate plots, (a) the weight of the mouse, in grams, and (b) the subject's hematocrit values (percentage of red blood cells) as a linear function of days after the appearance of the subject's first tumor.

[0124] The detailed data collected with respect to each treated mouse is shown in tabular form in Appendices A-1, A-2, etc. attached hereto, and the data collected with respect to each control mouse is shown in tabular form in Appendices, B-1, B-2, etc. attached hereto. The data with respect to one mouse tested in 1997 is shown in tabular form in Appendix C.

Example 1—Treated Mouse OUI456

[0125]

TABLE 5

Treatment Summary for OUI-456	
Date of Birth	09/08/94
Date Died	08/04/95
Lived	310 days
Treated	91 days
Tumor measurements started	05/05/95
Tumor measurements taken for	91 days

[0126] This mouse lived 219 days before any tumor appeared. Notice (in FIG. 10B) that T-2 1002, which was hard to reach with our electrodes, grew, but at a slower rate than a typical control mouse. As will be seen from this and the other examples herein, treated mice live three times longer than controls after a tumor appears.

Example 2—Treated Mouse OUI-470

[0127]

TABLE 6

Treatment Summary for OUI-470	
Date of Birth	03/03/94
Date Died	07/30/95
Lived	515 days
Treated	257 days
Tumor measurements started	11/16/94
Tumor measurements taken for	257 days

[0128] This mouse lived 258 days before any tumor appeared. Notice (in FIG. 11B) that T-1 1101 appeared and went away at two different times. T-2 1102 appeared for a short period. T-3 1103 appeared when this mouse was 496 days old. This is one of the longest-lived mice in our experiments.

Example 3—Treated Mouse OUI-471

[0129]

TABLE 7

Treatment Summary for OUI-471	
Date of Birth	03/03/94
Date Died	07/20/95
Lived	504 days
Treated	199 days
Tumor measurements started	01/02/94
Tumor measurements taken for	199 days

[0130] This mouse lived 305 days before any tumor appeared. Notice that T-1 1201 and T-2 1202 appeared for a short period. Notice (in FIG. 12C) the steady weight at 30 grams and constant high hematocrit percentage readings. This was also one of our longest-lived mice.

Example 4—Treated Mouse OUI-473

[0131]

TABLE 8

Treatment Summary for OUI-473	
Date of Birth	03/03/94
Date Died	07/28/95
Lived	514 days
Treated	211 days
Tumor measurements started	12/29/94
Tumor measurements taken for	211 days

[0132] As an experiment, we treated this mouse before any tumors appeared. This mouse never developed any tumors (FIG. 13B). She lived 303 days before we started treatments. Notice (in FIG. 13C) the steady weight at 28 grams. This was also one of our longest-lived mice.

Example 5—Treated Mouse OUI-475

[0133]

TABLE 9

Treatment Summary for OUI-475	
Date of Birth	03/03/94
Date Died	07/28/95
Lived	514 days
Treated	256 days
Tumor measurements started	11/14/94
Tumor measurements taken for	256 days

[0134] This mouse lived 258 days before any tumor appeared. Notice (FIG. 14B) that T-1 1401 and T-2 1402 appeared for a short period. Notice (FIG. 13C) the steady weight at 30 grams and quite-constant high hematocrit percentage readings. This was also one of our longest-lived mice.

Example 6—Treated Mouse OIJ-496

[0135]

TABLE 10

Treatment Summary for OIJ-496	
Date of Birth:	12/21/94
Date Died:	01/05/96
Lived:	380 days
Treated:	113 days
Tumor measurements started:	09/15/95
Tumor measurements taken for:	113 days

[0136] This mouse lived 267 days before any tumor appeared. Notice (FIG. 15B) that T-1 1501 and T-5 1505 appeared and left. Notice (FIG. 15C) the steady weight at 30 grams and high hematocrit percentage readings. Even with all these tumors, this mouse stayed healthy until the end and lived a long time.

Example 7—Treated Mouse OIJ-506

[0137]

TABLE 11

Treatment Summary for OIJ-506	
Date of Birth:	01/05/95
Still living:	06/25/96
Lived:	537 days
Treated (and/or took data):	250 days
Tumor measurements started:	10/19/95
Tumor measurements taken for:	250 days

[0138] This mouse lived 287 days before any tumor appeared. Notice (FIG. 16B) that T-1 1601, T-2 1602, and T-3 1603 appeared for a short period. After 170 days, T-2 1602 reappeared. Notice (FIG. 16C) the constant high hematocrit percentage readings. This was our longest-lived mouse, and it had a long healthy life.

Example 8—Treated Mouse OIJ-516

[0139]

TABLE 12

Treatment Summary for OIJ-516	
Date of Birth:	02/02/95
Date Died:	03/26/96
Lived:	418 days
Treated:	240 days
Tumor measurements started:	07/31/95
Tumor measurements taken for:	240 days

[0140] This mouse had a record number of tumors, many of which were not on the abdomen (FIG. 17A). After treatment all tumors disappeared except T5 1705, T7 1707, T8 1708, and T9 1709 (FIG. 17B). In spite of the large number of tumors, she lived 418 days.

Example 9 - Treated Mouse OIJ-526

[0141]

TABLE 13

Treatment Summary for OIJ-526	
Date of Birth:	02/02/95
Date Died:	04/12/96
Lived:	435 days
Treated:	168 days
Tumor measurements started:	10/28/95
Tumor measurements taken for:	168 days

[0142] This mouse had three tumors which disappeared and never returned (FIG. 18B). She lived 267 days before any tumor appeared. T4 1804 and T5 1805 grew together as one tumor. Hematocrit percent (FIG. 18C) stayed quite high throughout her life.

Example 10—Treated Mouse OIJ-650

[0143]

TABLE 14

Treatment Summary for OIJ-650	
Date of Birth:	04/04/95
Still living:	06/25/96
Lived:	448 days
Treated:	195 days
Tumor measurements started:	12/13/95
Tumor measurements taken for:	195 days

[0144] This mouse had three tumors, all of which disappeared and never re-appeared (FIG. 19B). Her hematocrit percent and remained high and her weight stayed constant throughout the measurement period (FIG. 19C).

Control Mice

[0145] The controls listed below all had spontaneous occurrences of multiple tumors that arose in various areas of the mammary gland region, and also had a very short survival time once the tumors appeared, usually around a two-month period.

[0146] None of the control mice in this study received EMR treatments or any other type of intervention methods. Daily weight and tumor measurements and observations were noted, as well as hematocrits to indicate the mouse's present health status at the time. These non-treated mice appeared to be in excellent health and appearance when the tumor remained small and didn't metastasize, but as the malignancy progressed and spread to other tissues, the effects on the mouse were readily seen.

[0147] The tumor measurements showed a rapid increase in tumor size that continuously rose almost every day, accompanied with a steady gain in weight, especially, with the arrival of new neoplasms. The hematocrit steadily lowers with the increase in tumor measurements. Other side-effects were also observed in the controls, such as, the

coat began to show a rougher appearance, the back bone protruded out, they appeared to be malnourished, and the normal curiosity and physical activity seen in healthy mice were absent. The neoplasms' appearance also changed once the tumor reached a certain size, usually around 1.5 cm. in diameter and up. They usually would start to appear red and puffy, which would deepen in color showing areas of purple and black sores, which eventually ulcerated with severe bleeding. Some of the mice also appeared to get secondary infections once the tumor ulcerated, accompanied by the draining of clear fluid and WBC present in the wound. When the tumor reached a diameter of 1.8 cm., and the hematocrit value was 25% or lower, the mouse usually died within a couple of days.

[0148] As will be illustrated by the experimental data that follows, the characteristics of all control mice observed in the lab included the following: a rapid growth rate of tumors shown in the increasing size measurements and weight gain; metastasis; and continual decrease in hematocrit with the increasing tumor measurements. All the above symptoms affect the mouse's gross appearance, tumor appearance and shortened survival span once the tumors appear. This is reflected in the data that follows in the controls' rate of growth, and their decrease in hematocrit and length of survival period.

Example 11—Control Mouse A-486

[0149]

TABLE 15

Summary for A-486

Date of Birth:	04/04/95
Date died:	06/25/96
Lived:	448 days
Treated:	Not treated
Tumor measurements started:	08/09/95
Tumor measurements taken for:	97 days

[0150] This mouse had one tumor which grew very rapidly to a large size (FIG. 20B). She had another tumor which appeared for 8 days. Her weight started to increase near the end, and the low hematocrit readings indicated a poor general health (FIG. 20C).

Example 12—Control Mouse A-488

[0151]

TABLE 16

Summary for A-488

Date of Birth:	11/28/94
Date died:	11/13/95
Lived:	350 days
Treated:	Not treated
Tumor measurements started:	07/20/95
Tumor measurements taken for:	116 days

[0152] This mouse had one tumor (T1 2101) which didn't change much for forty days then grew rapidly (FIG. 21B).

T-2 2102 came in and left after 32 days. T-3 2103 stayed constant in size for about 90 days, then grew rapidly.

Example 13—Control Mouse A-490

[0153]

TABLE 17

Summary for A-490

Date of Birth:	12/19/94
Date died:	11/29/95
Lived:	345 days
Treated:	Not treated
Tumor measurements started:	10/11/95
Tumor measurements taken for:	50 days

[0154] This mouse had four rapidly growing tumors and lived only fifty days after the first tumor appeared (FIG. 22B). After 20 days her weight increased and hematocrit reading steadily dropped (FIG. 22C).

Example 14—Control Mouse A-492

[0155]

TABLE 18

Summary for A-492

Date of Birth:	12/19/94
Date died:	12/29/95
Lived:	375 days
Treated:	Not treated
Tumor measurements started:	09/15/95
Tumor measurements taken for:	105 days

[0156] At 375 days, this is the longest lived control mouse. (Nine of our ten treated mice lived longer.) She had two tumors that left (FIG. 23B). But, after thirty days, T3 2303 and T4 2304 appeared and started to grow very rapidly. Her hematocrits dropped rapidly after 70 days of measurements (FIG. 23C).

Example 15—Control Mouse A-500

[0157]

TABLE 19

Summary for A-500

Date of Birth:	01/04/95
Date died:	10/11/95
Lived:	280 days
Treated:	Not heated
Tumor measurements started:	09/15/95
Tumor measurements taken for:	26 days

[0158] This mouse did not live very long and was observed only twenty-six days then she died. Tumors grew rapidly (FIG. 24B) and hematocrits were quite low (FIG. 24C).

Example 16—Control Mouse A-538

[0159]

TABLE 20

Summary for A-538	
Date of Birth:	03/24/95
Date died:	01/15/96
Lived:	297 days
Treated:	Not treated
Tumor measurements started:	10/19/95
Tumor measurements taken for:	88 days

[0160] This mouse had three large tumors (**FIG. 25B**) and rapid weight increase and very low hematocrit percent readings (**FIG. 25C**). This mouse also did not live very long and was quite unhealthy.

Example 17—Control Mouse A-540

[0161]

TABLE 21

Summary for A-540	
Date of Birth:	03/25/95
Date died:	01/02/96
Lived:	283 days
Treated:	Not treated
Tumor measurements started:	11/15/95
Tumor measurements taken for:	48 days

[0162] This mouse had one tumor that grew to a large size and grew fast (**FIG. 26B**). Low hematocrits caused this mouse to die in a short period (**FIG. 26C**).

Example 18—Control Mouse A-542

[0163]

TABLE 22

Summary for A-542	
Date of Birth:	03/25/95
Date died:	01/18/96
Lived:	299 days
Treated:	Not treated
Tumor measurements started:	11/27/95
Tumor measurements taken for:	52 days

[0164] This mouse had two tumors that grew to a large size and grew fast (**FIG. 27B**). Weight continued to increase as the tumors grew (**FIG. 27C**). A tumor size of 0.1 to 0.5 cubic inches on a mouse this small is quite a burden for the mouse. They do not survive for long with tumors that size.

Example 19—Control Mouse A-592

[0165]

TABLE 23

Summary for A-592	
Date of Birth:	06/27/95
Date died:	02/14/96
Lived:	232 days
Treated:	Not heated
Tumor measurements started:	01/19/96
Tumor measurements taken for:	26 days

[0166] This mouse had one tumor that grew to a one cubic inch in size and grew fast (**FIG. 28B**). Rapid decline in hematocrits caused this mouse to die in a short period (**FIG. 28C**). Notice the rapid increase in weight: the mouse nearly doubled in weight in twenty days. This was a very short-lived mouse.

Example 20—Control Mouse A-594

[0167]

TABLE 24

Summary for A-594	
Date of Birth:	06/27/95
Date died:	02/15/96
Lived:	233 days
Treated:	Not treated
Tumor measurements started:	01/12/96
Tumor measurements taken for:	34 days

[0168] This mouse also had one tumor that grew to a large size and grew fast (**FIG. 29B**). Rapidly declining hematocrits caused this mouse to die in a short period (**FIG. 29C**). This is one of the shortest-lived control mice of the group.

Experimental Conclusions

[0169] Our principal conclusion, based on the experiments described above, is that the cancer-prone JAX mice benefited considerably from the therapeutic apparatus and method of the present invention. The subsidiary experimental conclusions that support this assertion are as follows:

1. Total Days of Life: Treated Mice Live 50% Longer

[0170] The bar-graphs in **FIG. 30** show that the treated mice lived approximately 50% longer on average than the controls. Each bar indicates: Days of Waiting **3001**, Days of Treatment (or Measurement) **3002**, **3003**, and Total Days Of Life **3004**.

[0171] The data underlying **FIG. 30** (as well as **FIGS. 31** and **32**, discussed below) is presented below in tabular form.

TABLE 25

Days of Life, Measurement, and Number of Tumors				
SUBJECT	NON MEASURED DAYS	MEASURED DAYS	QTY OF TUMORS	TOTAL LIFE
OUI-456	219	91	2	310
OUI-496	268	112	6	380
OUI-650	253	195	3	392
OUI-516	179	239	9	418
OUI-526	268	167	5	435
OUI-506	287	250	5	481
OUI-471	305	199	2	504
OUI-473	301	211	0	512
OUI-475	256	256	2	512
OUI-470	258	256	3	514
Totals:	2594	1976	37	4,458
A-592	206	26	3	232
A-594	199	34	1	233
A-500	254	26	3	280
A-540	235	48	1	283
A-538	209	88	3	297
A-542	247	52	2	299
A-490	296	49	4	345
A-488	234	116	4	350
A-486	255	97	2	352
A-492	270	105	4	375
Totals:	2405	641	27	3,046

2. Starting Treatment After First Tumor Appears:
Treated Mice Live More than 300% Longer

[0172] FIG. 31 shows that after the first tumor appeared, the treated mice lived longer than the control mice. The bars in these graphs represent Days of Treatment for treated mice or Days of Measurement for control mice. The data underlying FIG. 31 is set forth in Table 25 above.

3. The Treated Mice Had More Tumors (by 37%),
But They Lived Longer

[0173] FIG. 32 shows the number of tumors that developed in each mouse. It must be noted that even though there were 37% more tumors in the treated mice, they lived longer than the controls. The data underlying FIG. 32 is set forth in Table 25 above.

4. Tumors that Appeared were Five Times More
Likely to Disappear in the Treated Mice than in the
Controls

[0174] FIG. 33 shows the total number of tumors in each mouse, and those tumors that disappeared or were cured and the remaining tumors at the death of each mouse. (Note: OUI-506 and OUI-650 were still living as of Jun. 25, 1996, when this data was compiled.)

[0175] The data underlying FIG. 33 is set forth in Table 26 below.

TABLE 26

Tumors That Disappeared					
SUBJECT	MEASURED DAYS	REMAINING TUMORS	CURED/GONE TUMORS	TOTAL LIFE	NON MEASURED DAYS
OUI-456	91	1	1	310	219
OUI-496	112	3	3	380	268
OUI-650	195	0	3	448	253
OUI-516	239	4	5	418	179
OUI-526	167	2	3	435	268
OUI-506	250	2	3	537	287
OUI-471	199	0	2	504	305
OUI-473	211	0	0	512	301
OUI-475	256	0	2	512	256
OUI-470	256	1	2	514	258
Totals:	1976	13	24	4,570	2594
A-592	26	3	0	232	206
A-594	34	1	0	233	199
A-500	26	3	0	280	254
A-540	48	1	0	283	235
A-538	88	3	0	297	209
A-542	52	2	0	299	247
A-490	49	4	0	345	296
A-488	116	3	1	350	234
A-486	97	1	1	352	255
A-492	105	2	2	375	270
Totals:	641	23	4	3,046	2405

5. The Weight of the Treated Mice Remained
Stable, Whereas the Control Mice Markedly Gained
Weight

[0176] FIG. 34 shows that the treated mice maintain their weight on average, while the control mice gain considerable weight due to tumor growth. (Note: The weight change shown is the last 10 day weight average minus the first 10 day weight average of each mouse.)

[0177] The data underlying FIG. 34 is set forth in Table 27 below.

TABLE 27

Comparative Weight Changes	
Treated Mouse	Weight Change
OUI-456	5.85
OUI-526	2.37
OUI-470	1.31
OUI-471	-0.15
OUI-473	-1.36
OUI-475	-2.22
OUI-506	-0.66
OUI-650	-0.15
OUI-516	0.07
OUI-496	-4.92
Totals: Control Mouse	0.14
A-592	20.31
A-538	15.42
A-490	14.32
A-542	9.97
A-486	6.54

TABLE 27-continued

Comparative Weight Changes	
	Weight Change
A-540	6.15
A-492	3.98
A-500	0.02
A-488	-1.73
A-594	-4.92
Totals:	70.06

6. The Control Mice Had More Large Tumors

[0178] FIG. 35 shows the maximum sizes of each tumor on the twenty different mice. Some of these tumors disappeared. The vertical scale is tumor size in cubic inches. There were 37 treated and 27 control tumors but this graph shows the 27 largest treated tumors and all 27 control tumors.

[0179] The data underlying FIG. 35 is set forth in Tables 28A and B below.

TABLE 28A

Comparison of Maximum Tumor Size (in cubic inches)									
Treated Subject	Tumor 1	Tumor 2	Tumor 3	Tumor 4	Tumor 5	Tumor 6	Tumor 7	Tumor 8	Tumor 9
OUI-456	0.00001413	0.27320000							
OUI-470	0.00017960	0.00001413	0.00954900						
OUI-471	0.00026180	0.00009161							
OUI-473									
OUI-475	0.00001413	0.00036650							
OUI-496	0.00117800	0.03799000	0.00633200	0.01099000	0.00015390	0.00029680			
OUI-506	0.00001413	0.01866000	0.00001413	0.00017960	0.01682000				
OUI-516	0.00001413	0.00017960	0.00006544	0.00653300	0.08179000	0.00048370	0.03624000	0.05560000	0.17990000
OUI-526	0.00001413	0.00082920	0.00006544	0.06579000	0.00533600				
OUI-650	0.00241900	0.00006544	0.00006544						
Total	0.00410800	0.33140000	0.01609000	0.08349000	0.10410000	0.00078050	0.03624000	0.05560000	0.17990000
Average	0.00045650	0.03682000	0.00268200	0.02087000	0.02603000	0.00039030	0.03624000	0.05560000	0.17990000

[0180]

TABLE 28B

Comparison of Maximum Tumor Size (in cubic inches)				
Control Subject	Tumor 1	Tumor 2	Tumor 3	Tumor 4
A-486	0.43920000	0.00001413		
A-488	0.41790000	0.00619300	0.00762200	0.01493000
A-490	0.20800000	0.47080000	0.04913000	0.02954000
A-492	0.00052350	0.00006544	0.10690000	0.16280000
A-500	0.06478000	0.04252000	0.20560000	
A-538	0.56350000	0.32310000	0.03216000	
A-540	0.39520000			
A-542	0.36820000	0.13700000		
A-592	0.81920000	0.00419200	0.01504000	
A-594	0.19090000			
Total	3.46700000	0.98380000	0.41640000	0.20730000
Average	0.34670000	0.12300000	0.06940000	0.06910000

Test of Externally Pulsed Generator

[0181] FIG. 37 shows the results of treating mouse OUI-738 in 1997 with the Externally Pulsed Generator embodiment. Treatment was with the HP 8662A frequency generator externally modulated with the modulator shown in FIG. 36, coupled to a treatment loop as shown in FIGS. 8A and 8B deployed in the "E" housing shown in FIG. 9A. The corresponding experimental data is shown in Appendix C.

[0182] FIG. 37A shows that a single tumor T1 3701 developed on this mouse in the left arm position. This position is difficult to treat because it is out of the way and as a consequence it is difficult to position the treatment electrode close to the tumor. Nevertheless, the results with this mouse were extremely good for the period of testing. As shown in FIG. 37B, the tumor stayed small for the entire period, and as shown in FIG. 37C, the weight was stable and the hematocrits remained high. The data extends up to a few days prior to the filing of this application, and at the end of this period the mouse was alive and healthy.

[0183] In addition, data were compiled in 1997 with respect to tumors that disappeared after treatment with the generator embodiment. This data, which otherwise appears in the Figures hereto, is as follows:

TABLE 29

Disappearance of Tumors on Mice Treated with HP 8662A Frequency Generator Embodiment						
Treated Mouse #	Tumor 1	Tumor 2	Tumor 3	Tumor 4	Tumor 5	Tumor 6
OUI-650	Yes	Yes	Yes			
OUI-526	Yes	Yes	Yes			
OUI-516	Yes	Yes	Yes	Yes		Yes
OUI-506	Yes	Yes	Yes	Yes		
OUI-496	Yes				Yes	
OUI-471	Yes	Yes				
OUI-470	Yes	Yes				
OUI-456	Yes					

[0184] It is apparent from the foregoing that a new treatment has been developed which has shown great effectiveness in treating cancer and other illnesses in laboratory mice and is believed to be a promising treatment for humans.

While only presently preferred embodiments have been described in detail, it will be apparent to those skilled in the art that certain changes and modifications can be made without departing from the scope of the invention, as defined in the following claims.

APPENDICES A1-A10

TREATED MOUSE DATA

[0185]

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Appendix	Subject	Pages
A1	OUJ 456	48-49
A2	OUJ 470	50-55

-continued

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Appendix	Subject	Pages
A3	OUJ 471	56-59
A4	OUJ 473	60-63
A5	OUJ 475	64-69
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A10	OUJ 650	92-93

[0186]

OU-456 Barn 9/28/94 First tumor appeared on 05/05/96.

Special Study...Treatment started when tumor appeared!

DAY	DATE	On Abdomen T-1			Vol T-1	On Rt Side T-2			Vol T-2	WEIGHT Gr	HEMATO-CRIT-%	TREATMENT PARAMETERS										
		Ln	Wd	Ht		Ln	Wd	Ht				DEVICE	FREQ MHz	POWER	TIME	FREQ MHz	POWER	TIME	DEVICE			
1	5-May	0.030	0.030	0.030	00001				00000	30.30	47	8662A	43.351.853	0 DBm	2.0 Hr							1 Loop
2	5-May	0.030	0.030	0.030	00001				00000	30.93		8662A	43.351.853	0 DBm	2.0 Hr							1 Loop
3	7-May	0.030	0.030	0.030	00001				00000	30.45		8662A	43.351.853	0 DBm	2.0 Hr							1 Loop
4	8-May	0.030	0.030	0.030	00001				00000	30.10		8662A	43.351.853	0 DBm	2.0 Hr							1 Loop
5	9-May	0.030	0.030	0.030	00001				00000	32.78		8662A	43.351.853	0 DBm	2.0 Hr							1 Loop
6	15-May	0.030	0.030	0.030	00001	0.030	0.030	0.030	00001	32.33		8662A	43.351.853	0 DBm	2.0 Hr							1 Loop
7	11-May	0.030	0.030	0.030	00001	0.030	0.030	0.030	00001	32.15		8662A	43.351.853	0 DBm	2.0 Hr							1 Loop
8	12-May	0.030	0.030	0.030	00001	0.050	0.050	0.050	00004	31.73		8662A	43.351.853	0 DBm	2.0 Hr							1 Loop
9	13-May				00000	0.050	0.050	0.050	00007	30.79		8662A	43.351.853	0 DBm	2.0 Hr							1 Loop
10	14-May				00000	0.050	0.050	0.050	00007	30.96		8662A	43.351.830	0 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				1 Loop
11	15-May				00000	0.050	0.050	0.050	00007	31.08	47	8662A	43.351.830	0 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				1 Loop
12	16-May				00000	0.070	0.070	0.070	00018	31.39		8662A	43.351.853	0 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				1 Loop
13	17-May				00000	0.070	0.070	0.070	00018	31.04		8662A	43.351.830	0 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				1 Loop
14	18-May				00000	0.070	0.070	0.070	00018	31.25		8662A	43.351.830	0 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				1 Loop
15	19-May				00000	0.070	0.070	0.070	00018	31.25	45	8662A	43.351.830	0 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				1 Loop
16	20-May				00000	0.080	0.080	0.070	00023	31.60		8662A	43.351.830	0 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				1 Loop
17	21-May				00000	0.090	0.090	0.070	00030	31.90		8662A	43.351.830	0 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				1 Loop
18	22-May				00000	0.100	0.100	0.070	00037	32.14		8662A	43.351.830	0 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				1 Loop
19	23-May				00000	0.120	0.120	0.070	00053	31.17		8662A	43.351.830	0 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				1 Loop
20	24-May				00000	0.120	0.120	0.070	00053	30.24		8662A	43.351.830	0 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				1 Loop
21	25-May				00000	0.120	0.120	0.080	00060	30.10		8662A	43.351.830	0 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				1 Loop
22	26-May				00000	0.140	0.140	0.100	00103	29.37	47	8662A	43.351.830	0 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-1
23	27-May				00000	0.150	0.150	0.110	00130	29.42		8662A	43.351.830	0 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-1
24	28-May				00000	0.160	0.160	0.110	00147	29.62		8662A	43.351.830	0 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-1
25	29-May				00000	0.170	0.170	0.110	00165	29.78		8662A	43.351.830	0 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-1
26	30-May				00000	0.180	0.180	0.120	00204	30.63		8662A	43.351.830	0 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-1
27	31-May				00000	0.190	0.190	0.120	00227	31.34		8662A	43.351.830	0 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-2
28	1-Jun				00000	0.200	0.200	0.120	00251	31.38		8662A	43.351.830	0 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-2
29	2-Jun				00000	0.200	0.200	0.120	00251	31.07	44	8662A	43.351.830	0 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-2
30	3-Jun				00000	0.220	0.220	0.120	00304	31.37		8662A	43.351.830	0 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-2
31	4-Jun				00000	0.220	0.220	0.120	00304	31.70		8662A	43.351.830	0 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-2
32	5-Jun				00000	0.220	0.220	0.120	00304	32.09		8662A	43.351.830	0 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-2
33	6-Jun				00000	0.220	0.220	0.120	00318	32.03		8662A	43.351.830	0 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-2
34	7-Jun				00000	0.220	0.220	0.120	00318	32.27		8662A	43.351.830	0 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-2
35	8-Jun				00000	0.220	0.250	0.140	00405	32.50		8662A	43.351.870	3 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-2
36	9-Jun				00000	0.250	0.250	0.140	00421	31.39	43	8662A	43.351.850	10 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-2
37	10-Jun				00000	0.250	0.260	0.140	00476	31.81		8662A	43.351.850	10 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-2
38	11-Jun				00000	0.250	0.270	0.145	00512	31.85		8662A	43.351.850	10 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-2
39	12-Jun				00000	0.250	0.280	0.160	00550	32.08		8662A	43.351.830	10 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-2
40	13-Jun				00000	0.250	0.290	0.160	00607	32.81		8662A	43.351.830	10 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-2
41	14-Jun				00000	0.250	0.290	0.160	00607	32.60		8662A	43.351.850	10 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-2
42	15-Jun				00000	0.240	0.320	0.180	00724	32.33		8662A	43.351.830	10 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-2
43	16-Jun				00000	0.240	0.340	0.180	00769	32.60		8662A	43.351.830	10 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-2
44	17-Jun				00000	0.240	0.360	0.190	00859	32.59	40	8662A	43.351.849	10 DBm	1.0 Hr	43.351.849	0 DBm	1.0 Hr				Holder Mod-2
45	18-Jun				00000	0.245	0.375	0.190	00914	32.65		8662A	43.351.849	10 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-2
46	19-Jun				00000	0.250	0.380	0.190	00970	32.71		8662A	43.351.849	10 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-2
47	20-Jun				00000	0.260	0.410	0.200	01116	32.97		8662A	43.351.850	10 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-2
48	21-Jun				00000	0.260	0.410	0.200	01116	32.74		8662A	43.351.850	10 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-2
49	22-Jun				00000	0.280	0.430	0.200	01171	34.39		8662A	43.351.850	10 DBm	1.0 Hr	43.351.850	0 DBm	1.0 Hr				Holder Mod-2
50	23-Jun				00000	0.290	0.460	0.220	01536	33.87	39	8662A	43.351.830	10 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-2
51	24-Jun				00000	0.300	0.460	0.220	01658	34.26		8662A	43.351.830	10 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-2
52	25-Jun				00000	0.300	0.500	0.220	01729	34.02		8662A	43.351.830	10 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-2
53	26-Jun				00000	0.300	0.520	0.220	01797	33.70		8662A	43.351.830	10 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Holder Mod-2
54	27-Jun				00000	0.320	0.550	0.230	02119	33.08		8662A	43.351.830	10 DBm	1.0 Hr	43.351.870	0 DBm	1.0 Hr				Loop-Bv Hand

48	2-Jan	.0000	0.030	0.030	0.030	.0001	25.25		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
49	3-Jan	.0000	0.030	0.030	0.030	.0001	26.34		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
50	4-Jan	.0000	0.030	0.030	0.030	.0001	27.78		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
51	5-Jan	.0000				.0000	28.56		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
52	6-Jan	.0000				.0000	26.26	45	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
53	7-Jan	.0000				.0000	28.16		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
54	8-Jan	.0000				.0000	27.98		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
55	9-Jan	.0000				.0000	27.82		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
56	10-Jan	.0000				.0000	28.50		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
57	11-Jan	.0000				.0000	28.96		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
58	12-Jan	.0000				.0000	28.91		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
59	13-Jan	.0000				.0000	28.35	43	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
60	14-Jan	.0000				.0000	27.28		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
61	15-Jan	.0000				.0000	27.58		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
62	16-Jan	.0000				.0000	27.82		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
63	17-Jan	.0000				.0000	28.05		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
64	18-Jan	.0000				.0000	28.07		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
65	18-Jan	.0000				.0000	28.38		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
66	20-Jan	.0000				.0000	28.32	45	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
67	21-Jan	.0000				.0000	28.26		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
68	22-Jan	.0000				.0000	28.36		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
69	23-Jan	.0000				.0000	28.46		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
70	24-Jan	.0000				.0000	28.62		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
71	25-Jan	.0000				.0000	28.03		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
72	26-Jan	.0000				.0000	27.70		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
73	27-Jan	.0000				.0000	29.19	43	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
74	28-Jan	.0000				.0000	28.01		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
75	28-Jan	.0000				.0000	28.55		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
76	30-Jan	.0000				.0000	29.19		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
77	31-Jan	.0000				.0000	28.90		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
78	1-Feb	.0000				.0000	28.95		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
79	2-Feb	.0000				.0000	28.58	44	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
80	3-Feb	.0000				.0000	29.76		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
81	4-Feb	.0000				.0000	28.54		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
82	5-Feb	.0000				.0000	28.75		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
83	5-Feb	.0000				.0000	29.09		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
84	7-Feb	.0000				.0000	29.00		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
85	8-Feb	.0000				.0000	30.31		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
86	9-Feb	.0000				.0000	28.96		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
87	10-Feb	.0000				.0000	28.95	42	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
88	11-Feb	0.030	0.030	0.030		.0001	28.85		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
89	12-Feb	0.050	0.050	0.030		.0004	28.65		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
90	13-Feb	0.050	0.050	0.040		.0005	28.48		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
91	14-Feb	0.050	0.050	0.050		.0007	30.18		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
92	15-Feb	0.050	0.050	0.050		.0007	28.86		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
93	16-Feb	0.050	0.050	0.050		.0007	28.03		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
94	17-Feb	0.070	0.070	0.050		.0013	28.92		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
95	18-Feb	0.070	0.070	0.050		.0013	27.31	40	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
96	18-Feb	0.070	0.070	0.050		.0013	28.00		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
97	20-Feb	0.070	0.070	0.050		.0013	29.65		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
98	21-Feb	0.050	0.050	0.050		.0007	29.45		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr

150	14-Apr	.00000	.00000	28.86	33	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
151	15-Apr	00000	00000	28.92		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
152	16-Apr	00000	.00000	28.45		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
153	17-Apr	00000	00000	28.00		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
154	18-Apr	00000	00000	29.63		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
155	19-Apr	00000	00000	28.78		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
156	20-Apr	00000	.00000	28.42		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
157	21-Apr	00000	00000	29.12	30	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
158	22-Apr	00000	00000	28.35		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
159	23-Apr	00000	.00000	28.18		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
160	24-Apr	00000	00000	28.64		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
161	25-Apr	00000	00000	28.35		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
162	26-Apr	.00000	00000	28.29		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
163	27-Apr	00000	00000	28.42		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
164	28-Apr	00000	00000	28.47	44	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
165	29-Apr	00000	00000	29.18		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
166	30-Apr	00000	.00000	29.22		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
167	1-May	00000	00000	29.25		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
168	2-May	00000	.00000	28.37		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
169	3-May	00000	00000	29.72		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
170	4-May	00000	00000	28.78		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
171	5-May	00000	00000	29.28	35	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
172	6-May	00000	00000	28.65		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
173	7-May	00000	00000	29.02		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
174	8-May	00000	00000	29.30		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
175	9-May	00000	00000	31.02		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
176	10-May	00000	00000	29.54		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
177	11-May	00000	00000	29.44	36	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
178	12-May	00000	00000	28.71		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
179	13-May	00000	00000	29.95		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
180	14-May	00000	00000	30.25		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
181	15-May	00000	.00000	30.45		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
182	16-May	00000	00000	29.50		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
183	17-May	.00000	.00000	29.85		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
184	18-May	00000	00000	28.89	40	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
185	19-May	00000	00000	29.49		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
186	20-May	00000	00000	29.95		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
187	21-May	00000	00000	28.65		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
188	22-May	00000	00000	28.33		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
189	23-May	00000	00000	29.16		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
190	24-May	00000	00000	29.71		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
191	25-May	00000	00000	31.30		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
192	26-May	00000	00000	29.09	40	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
193	27-May	00000	00000	28.22		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
194	28-May	00000	00000	28.18		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
195	29-May	.00000	00000	28.14		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
196	30-May	00000	00000	29.17		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
197	31-May	00000	00000	30.44		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
198	1-Jun	00000	00000	30.69		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
199	2-Jun	00000	00000	29.74	35	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
200	3-Jun	00000	00000	30.41		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr

201	4-Jun	.0000	.0000	30.32	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
202	5-Jun	.0000	.0000	30.22	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
203	6-Jun	.0000	.0000	30.44	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
204	7-Jun	.0000	.0000	30.41	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
205	8-Jun	.0000	.0000	29.87	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
206	9-Jun	.0000	.0000	29.83	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
207	10-Jun	.0000	.0000	29.69	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
208	11-Jun	.0000	.0000	29.90	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
209	12-Jun	.0000	.0000	30.31	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
210	13-Jun	.0000	.0000	31.66	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
211	14-Jun	.0000	.0000	30.47	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
212	15-Jun	.0000	.0000	31.06	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
213	16-Jun	.0000	.0000	31.19	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
214	17-Jun	.0000	.0000	31.94	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
215	18-Jun	.0000	.0000	31.00	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
216	19-Jun	.0000	.0000	30.34	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
217	20-Jun	.0000	.0000	30.54	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
218	21-Jun	.0000	.0000	31.40	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
219	22-Jun	.0000	.0000	31.89	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
220	23-Jun	.0000	.0000	32.33	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
221	24-Jun	.0000	.0000	29.58	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
222	25-Jun	.0000	.0000	29.85	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
223	26-Jun	.0000	.0000	30.47	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
224	27-Jun	.0000	.0000	30.49	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
225	28-Jun	.0000	.0000	30.63	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
226	29-Jun	.0000	.0000	28.84	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
227	30-Jun	.0000	.0000	30.35	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
228	1-Jul	.0000	.0000	29.91	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
229	2-Jul	.0000	.0000	30.20	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
230	3-Jul	.0000	.0000	30.48	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
231	4-Jul	.0000	.0000	30.42	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
232	5-Jul	.0000	.0000	31.78	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
233	6-Jul	.0000	.0000	30.77	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
234	7-Jul	.0000	.0000	31.49	SCPO#6	43,351,850	1 Hr	SCPO#3	43,351,870	1 Hr
235	8-Jul	.0000		30.67	SCPO#1	43,351,830	1 Hr	SCPO#1	43,351,830	1 Hr
236	9-Jul	.0000		31.34	SCPO#1	43,351,830	1 Hr	SCPO#1	43,351,830	1 Hr
237	10-Jul	.0000		31.81	SCPO#1	43,351,830	1 Hr	SCPO#1	43,351,830	1 Hr
238	11-Jul	.0000		32.32	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
239	12-Jul	.0000		31.18	SCPO#1	43,351,830	1 Hr	SCPO#6	43,351,850	1 Hr
240	13-Jul	.0000		32.32	SCPO#1	43,351,830	1 Hr	SCPO#6	43,351,850	1 Hr
241	14-Jul	.0000		31.54	SCPO#1	43,351,830	1 Hr	SCPO#6	43,351,850	1 Hr
242	15-Jul	.0000		30.75	SCPO#1	43,351,830	1 Hr	SCPO#6	43,351,850	1 Hr
243	16-Jul	.0000		31.15	8662A		2hr	Home's Elect		
244	17-Jul	.0000		31.65	8662A		2hr	Home's Elect		
245	18-Jul	.0000		29.83	8662A		2hr	Home's Elect		
246	19-Jul	.0000		26.79	8662A		2hr	Home's Elect		
247	20-Jul	.0000		29.07	8662A		2hr	Home's Elect		
248	21-Jul	.0000		29.41	8662A		2hr	Home's Elect		
249	22-Jul	.0000		26.25	8662A		2hr	Home's Elect		
250	23-Jul	.0000		26.05	8662A		2hr	Home's Elect		
251	24-Jul	.0000		29.84	8662A		2hr	Home's Elect		

113	24-Apr	00000	00000	30 50	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
114	25-Apr	00000	00000	31 27	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
115	26-Apr	00000	00000	31 18	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
116	27-Apr	00000	00000	30 17	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
117	28-Apr	00000	00000	30 40	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
118	29-Apr	00000	00000	29 91	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
119	30-Apr	00000	00000	30 25	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
120	1-May	00000	00000	30 43	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
121	2-May	00000	00000	30 03	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
122	3-May	00000	00000	30 92	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
123	4-May	00000	00000	30 62	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
124	5-May	00000	00000	30 95	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
125	6-May	00000	00000	30 34	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
126	7-May	00000	00000	30 84	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
127	8-May	00000	00000	30 92	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
128	9-May	00000	00000	32 04	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
129	10-May	00000	00000	30 92	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
130	11-May	00000	00000	31 21	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
131	12-May	00000	00000	30 20	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
132	13-May	00000	00000	30 02	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
133	14-May	00000	00000	30 00	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
134	15-May	00000	00000	30 00	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
135	16-May	00000	00000	32 05	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
136	17-May	00000	00000	31 31	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
137	18-May	00000	00000	30 99	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
138	19-May	00000	00000	30 71	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
139	20-May	00000	00000	30 75	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
140	21-May	00000	00000	30 79	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
141	22-May	00000	00000	30 82	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
142	23-May	00000	00000	30 64	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
143	24-May	00000	00000	29 85	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
144	25-May	00000	00000	31 46	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
145	26-May	00000	00000	29 44	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
146	27-May	00000	00000	29 78	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
147	28-May	00000	00000	29 40	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
148	29-May	00000	00000	30 07	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
149	30-May	00000	00000	30 01	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
150	31-May	00000	00000	30 67	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
151	1-Jun	00000	00000	30 83	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
152	2-Jun	00000	00000	30 04	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
153	3-Jun	00000	00000	29 70	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
154	4-Jun	00000	00000	29 85	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
155	5-Jun	00000	00000	30 01	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
156	6-Jun	00000	00000	30 52	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
157	7-Jun	00000	00000	30 71	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
158	8-Jun	00000	00000	30 01	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
159	9-Jun	00000	00000	30 67	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
160	10-Jun	00000	00000	29 53	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
161	11-Jun	00000	00000	29 70	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
162	12-Jun	00000	00000	29 84	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
163	13-Jun	00000	00000	30 41	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
164	14-Jun	00000	00000	30 78	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
165	15-Jun	00000	00000	30 76	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
166	16-Jun	00000	00000	31 16	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
167	17-Jun	00000	00000	31 41	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
168	18-Jun	00000	00000	30 77	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
169	19-Jun	00000	00000	30 17	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
170	20-Jun	00000	00000	30 15	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops

171	21-Jun	00000	00000	29 96	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops	
172	22-Jun	00000	00000	30 38	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops	
173	23-Jun	00000	00000	30 14	33	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
174	24-Jun	00000	00000	31 66	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops	
175	25-Jun	00000	00000	31 76	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops	
176	26-Jun	00000	00000	31 91	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops	
177	27-Jun	00000	00000	28 70	8662A	43 351 850	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops	
178	28-Jun	00000	00000	29 69	8662A	43 351 850	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops	
179	29-Jun	00000	00000	29 04	8662A	43 351 850	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops	
180	30-Jun	00000	00000	29 57	8662A	43 351 850	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops	
181	1-Jul	00000	00000	27 72	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops	
182	2-Jul	00000	00000	28 24	8662A	43 351 850	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops	
183	3-Jul	00000	00000	30 76	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops	
184	4-Jul	00000	00000	28 14	8662A	43 351 850	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops	
185	5-Jul	00000	00000	29 91	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops	
186	6-Jul	00000	00000	29 69	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops	
187	7-Jul	00000	00000	23 29	39	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
188	8-Jul	00000	00000	28 66	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops	
189	9-Jul	00000	00000	28 40	8662A	43 351 850	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops	
190	10-Jul	00000	00000	28 13	8662A	43 351 850	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops	
191	11-Jul	00000	00000	28 13	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops	
192	12-Jul	00000	00000	29 80	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops	
193	13-Jul	00000	00000	29 84	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops	
194	14-Jul	00000	00000	29 81	38	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops
195	15-Jul	00000	00000	29 55	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops	
196	16-Jul	00000	00000	29 56	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops	
197	17-Jul	00000	00000	29 60	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops	
198	18-Jul	00000	00000	28 83	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops	
199	19-Jul	00000	00000	28 95	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops	
200	20-Jul	Diad 72095	#VALUE!	Diad 72095	#VALUE!	8662A	43 351 830	-10DBm	1 Hr	43 351 870	-10DBm	1 Hr	1 Loops

QUL473 Born 07/94 THIS MOUSE NEVER DEVELOPED A TUMOR
 Special Study. Treatment started before any tumors appeared.

DAY	DATE	T-1			Vol T-1	T-2			Vol T-2	WEIGHT G	HEMATO-CRIT-%	DEVICE	FREQ MHz	POWER	TREATMENT PARAMETERS						
		Ln	Wd	Hr		Ln	Wd	Hr							TIME	DEVICE	FREQ MHz	POWER	TIME	DEVICE	
1	29-Dec				00000				00000	29.07		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
2	30-Dec				00000				00000	28.90		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
3	31-Dec				00000				00000	28.54	44	8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
4	1-Jan				00000				00000	28.56		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
5	2-Jan				00000				00000	28.56		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
6	3-Jan				00000				00000	28.53		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
7	4-Jan				00000				00000	28.31		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
8	5-Jan				00000				00000	28.37		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
9	6-Jan				00000				00000	27.72	42	8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
10	7-Jan				00000				00000	28.51		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
11	8-Jan				00000				00000	28.78		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
12	9-Jan				00000				00000	28.10		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
13	10-Jan				00000				00000	28.47		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
14	11-Jan				00000				00000	28.74		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
15	12-Jan				00000				00000	28.58		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
16	13-Jan				00000				00000	28.12	43	8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
17	14-Jan				00000				00000	30.02		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
18	15-Jan				00000				00000	30.03		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
19	16-Jan				00000				00000	30.04		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
20	17-Jan				00000				00000	29.92		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
21	18-Jan				00000				00000	28.16		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
22	19-Jan				00000				00000	28.54		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
23	20-Jan				00000				00000	28.40	43	8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
24	21-Jan				00000				00000	28.71		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
25	22-Jan				00000				00000	28.82		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
26	23-Jan				00000				00000	28.53		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
27	24-Jan				00000				00000	28.80		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
28	25-Jan				00000				00000	28.88		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
29	26-Jan				00000				00000	28.34		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
30	27-Jan				00000				00000	28.60	43	8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
31	28-Jan				00000				00000	28.73		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
32	29-Jan				00000				00000	29.00		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
33	30-Jan				00000				00000	29.33		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
34	31-Jan				00000				00000	29.18		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
35	1-Feb				00000				00000	29.11		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
36	2-Feb				00000				00000	28.83		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
37	3-Feb				00000				00000	29.44	43	8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
38	4-Feb				00000				00000	29.59		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
39	5-Feb				00000				00000	29.54		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
40	6-Feb				00000				00000	29.57		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
41	7-Feb				00000				00000	28.82		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
42	8-Feb				00000				00000	28.90		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
43	9-Feb				00000				00000	28.50		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
44	10-Feb				00000				00000	27.96	45	8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
45	11-Feb				00000				00000	29.44		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
46	12-Feb				00000				00000	29.55		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
47	13-Feb				00000				00000	29.68		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
48	14-Feb				00000				00000	29.83		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
49	15-Feb				00000				00000	28.72		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
50	16-Feb				00000				00000	28.46		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
51	17-Feb				00000				00000	28.57		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
52	18-Feb				00000				00000	27.91	44	8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
53	19-Feb				00000				00000	28.30		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
54	20-Feb				00000				00000	28.57		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
55	21-Feb				00000				00000	28.23		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
56	22-Feb				00000				00000	28.57		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	
57	23-Feb				00000				00000	28.51		8662A	43.351.830	0.0Bm	1Hr	8662A	43.351.870	0.0Bm	1Hr	1.00P	

58	24-Feb	00000	00000	29 05	44	8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
59	25-Feb	00000	00000	28 17		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
60	26-Feb	00000	00000	28 82		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
61	27-Feb	00000	00000	29 47		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
62	28-Feb	00000	00000	28 10		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
63	1-Mar	00000	00000	29 04		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
64	2-Mar	00000	00000	29 01		8662A	43 251 850	0 DBm	1 Hr	8662A	43 251 850	0 DBm	1 Hr	1 LOOP
65	3-Mar	00000	00000	29 03		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
66	4-Mar	00000	00000	28 77	44	8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
67	5-Mar	00000	00000	28 89		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
68	6-Mar	00000	00000	28 82		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
69	7-Mar	00000	00000	28 61		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
70	8-Mar	00000	00000	29 06		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
71	9-Mar	00000	00000	29 22		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
72	10-Mar	00000	00000	30 10	44	8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
73	11-Mar	00000	00000	29 14		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
74	12-Mar	00000	00000	28 96		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
75	13-Mar	00000	00000	28 75		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
76	14-Mar	00000	00000	28 66		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
77	15-Mar	00000	00000	28 95		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
78	16-Mar	00000	00000	29 08		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
79	17-Mar	00000	00000	29 79	40	8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
80	18-Mar	00000	00000	27 69		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
81	19-Mar	00000	00000	28 50		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
82	20-Mar	00000	00000	29 18		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
83	21-Mar	00000	00000	28 92		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
84	22-Mar	00000	00000	28 32		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
85	23-Mar	00000	00000	29 21		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
86	24-Mar	00000	00000	27 78		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
87	25-Mar	00000	00000	28 61	42	8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
88	26-Mar	00000	00000	28 85		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
89	27-Mar	00000	00000	28 82		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
90	28-Mar	00000	00000	28 41		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
91	29-Mar	00000	00000	28 46		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
92	30-Mar	00000	00000	28 26		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
93	31-Mar	00000	00000	28 84		8662A	43 251 830	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
94	1-Apr	00000	00000	28 74		8662A	43 251 850	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
95	2-Apr	00000	00000	28 51		8662A	43 251 850	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
96	3-Apr	00000	00000	28 30		8662A	43 251 850	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
97	4-Apr	00000	00000	28 78		8662A	43 251 850	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
98	5-Apr	00000	00000	28 13		8662A	43 251 850	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
99	6-Apr	00000	00000	28 04		8662A	43 251 850	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
100	7-Apr	00000	00000	27 85	43	8662A	43 251 850	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
101	8-Apr	00000	00000	27 47		8662A	43 251 850	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
102	9-Apr	00000	00000	28 02		8662A	43 251 850	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
103	10-Apr	00000	00000	27 55		8662A	43 251 850	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
104	11-Apr	00000	00000	27 86		8662A	43 251 850	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
105	12-Apr	00000	00000	27 46		8662A	43 251 850	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
106	13-Apr	00000	00000	27 70		8662A	43 251 850	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
107	14-Apr	00000	00000	27 11	36	8662A	43 251 850	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
108	15-Apr	00000	00000	27 81		8662A	43 251 850	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
109	16-Apr	00000	00000	27 69		8662A	43 251 850	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
110	17-Apr	00000	00000	27 64		8662A	43 251 850	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
111	18-Apr	00000	00000	27 25		8662A	43 251 850	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
112	19-Apr	00000	00000	27 05		8662A	43 251 850	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
113	20-Apr	00000	00000	27 81		8662A	43 251 850	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
114	21-Apr	00000	00000	27 37	37	8662A	43 251 850	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
115	22-Apr	00000	00000	27 50		8662A	43 251 850	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
116	23-Apr	00000	00000	28 11		8662A	43 251 850	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
117	24-Apr	00000	00000	28 62		8662A	43 251 850	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP
118	25-Apr	00000	00000	28 55		8662A	43 251 850	0 DBm	1 Hr	8662A	43 251 870	0 DBm	1 Hr	1 LOOP

119	26-Apr	00000	00000	26 31	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
120	27-Apr	00000	00000	27 35	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
121	28-Apr	00000	00000	27 67	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
122	26-Apr	00000	00000	27 82	43	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP
123	30-Apr	00000	00000	28 00	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
124	1-May	00000	00000	28 07	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
125	2-May	00000	00000	27 96	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
126	3-May	00000	00000	26 66	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
127	4-May	00000	00000	26 29	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
128	5-May	00000	00000	26 38	39	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP
129	6-May	00000	00000	26 74	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
130	7-May	00000	00000	25 15	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
131	8-May	00000	00000	29 64	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
132	5-May	00000	00000	30 89	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
133	10-May	00000	00000	29 13	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
134	11-May	00000	00000	29 73	34	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP
135	12-May	00000	00000	29 07	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
136	13-May	00000	00000	29 17	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
137	14-May	00000	00000	28 67	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
138	15-May	00000	00000	29 18	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
139	16-May	00000	00000	29 11	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
140	17-May	00000	00000	28 64	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
141	18-May	00000	00000	28 24	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
142	15-May	00000	00000	28 16	40	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP
143	20-May	00000	00000	28 70	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
144	21-May	00000	00000	29 25	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
145	22-May	00000	00000	29 92	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
146	23-May	00000	00000	26 49	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
147	24-May	00000	00000	27 55	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
148	25-May	00000	00000	28 67	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
149	26-May	00000	00000	27 86	35	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP
150	27-May	00000	00000	27 54	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
151	28-May	00000	00000	28 05	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
152	29-May	00000	00000	28 62	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
153	30-May	00000	00000	28 88	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
154	31-May	00000	00000	29 67	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
155	1-Jun	00000	00000	29 01	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
156	2-Jun	00000	00000	28 15	41	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP
157	3-Jun	00000	00000	27 92	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
158	4-Jun	00000	00000	26 25	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
159	5-Jun	00000	00000	26 72	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
160	6-Jun	00000	00000	26 77	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
161	7-Jun	00000	00000	26 46	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
162	8-Jun	00000	00000	28 63	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
163	9-Jun	00000	00000	27 59	35	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP
164	10-Jun	00000	00000	27 25	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
165	11-Jun	00000	00000	27 85	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
166	12-Jun	00000	00000	28 65	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
167	13-Jun	00000	00000	29 02	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
168	14-Jun	00000	00000	29 04	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
169	15-Jun	00000	00000	28 21	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
170	16-Jun	00000	00000	26 34	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
171	17-Jun	00000	00000	28 39	31	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP
172	18-Jun	00000	00000	28 22	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
173	19-Jun	00000	00000	28 07	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
174	20-Jun	00000	00000	28 04	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
175	21-Jun	00000	00000	28 62	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
176	22-Jun	00000	00000	27 85	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
177	23-Jun	00000	00000	28 87	30	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP
178	24-Jun	00000	00000	26 34	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	
179	25-Jun	00000	00000	28 75	8662A	43 351 850	O DBm	1 Hr	8662A	43 351 870	O DBm	1 Hr	1 LOOP	

180	26-Jun	00000	00000	29 06	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
181	27-Jun	00000	00000	28 14	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
182	28-Jun	00000	00000	28 09	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
183	29-Jun	00000	00000	27 27	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
184	30-Jun	00000	00000	27 58	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
185	1-Jul	00000	00000	26 70	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
186	2-Jul	00000	00000	26 24	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
187	3-Jul	00000	00000	29 77	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
188	4-Jul	00000	00000	29 79	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
189	5-Jul	00000	00000	28 06	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
190	6-Jul	00000	00000	27 97	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
191	7-Jul	00000	00000	27 26	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
192	8-Jul	00000	00000	27 10	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
193	9-Jul	00000	00000	27 30	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
194	10-Jul	00000	00000	27 50	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
195	11-Jul	00000	00000	28 05	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
196	12-Jul	00000	00000	27 58	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
197	13-Jul	00000	00000	27 74	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
198	14-Jul	00000	00000	27 20	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
199	15-Jul	00000	00000	27 46	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
200	16-Jul	00000	00000	27 62	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
201	17-Jul	00000	00000	28 18	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
202	18-Jul	00000	00000	27 61	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
203	19-Jul	00000	00000	28 67	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
204	20-Jul	00000	00000	27 46	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
205	21-Jul	00000	00000	26 57	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
206	22-Jul	00000	00000	27 70	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
207	23-Jul	00000	00000	27 39	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
208	24-Jul	00000	00000	27 07	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
209	25-Jul	00000	00000	26 88	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
210	26-Jul	00000	0 030 0 030 0 030	26 60	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
211	27-Jul	00000	0 030 0 030 0 030	26 90	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP			
212	28-Jul	Died 7/28/95	#VALUE!	Died 7/28/95	#VALUE!	27 26	30	8662A	43 351 850	0 DBm	1 Hr	8662A	43 351 870	0 DBm	1 Hr	1 LOOP

OUJ-475 Born 3/1/94 First tumor appeared on 11/14/94.

Conventional SCPO Treatment. Treated at first appearance of tumor located on abdomen.

DAY	DATE	T1 On Abdomen			Vol T-1	T-2			Vol T-2	WEIGHT Gr	HEMATO- CRIT-%	TREATMENT PARAMETERS					
		Ln	Wd	Ht		Ln	Wd	Ht				DEVICE	FREQ MHz	TIME	DEVICE	FREQ MHz	TIME
1	11/14/94	0.030	0.030	0.030	0.0001				0.0000	33.16		SCPO#1	43,351,830	.5 Hr	SCPO#3	43,351,870	.5 Hr
2	11/15/94	0.030	0.030	0.030	0.0001				0.0000	33.85		SCPO#1	43,351,830	.5 Hr	SCPO#3	43,351,870	.5 Hr
3	11/16/94	0.030	0.030	0.030	0.0001				0.0000	33.57		SCPO#1	43,351,830	.5 Hr	SCPO#3	43,351,870	.5 Hr
4	11/17/94	0.030	0.030	0.030	0.0001				0.0000	32.58		SCPO#1	43,351,830	.5 Hr	SCPO#3	43,351,870	.5 Hr
5	11/18/94	0.030	0.030	0.030	0.0001				0.0000	31.86		SCPO#1	43,351,830	.5 Hr	SCPO#3	43,351,870	.5 Hr
6	11/19/94	0.030	0.030	0.030	0.0001				0.0000	32.12	45	SCPO#1	43,351,830	.5 Hr	SCPO#3	43,351,870	.5 Hr
7	11/20/94	0.030	0.030	0.030	0.0001				0.0000	32.29		SCPO#1	43,351,830	.5 Hr	SCPO#3	43,351,870	.5 Hr
8	11/21/94	0.030	0.030	0.030	0.0001				0.0000	31.55		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
9	11/22/94	0.030	0.030	0.030	0.0001				0.0000	31.27		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
10	11/23/94	0.030	0.030	0.030	0.0001				0.0000	31.00		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
11	11/24/94	0.030	0.030	0.030	0.0001				0.0000	30.71		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
12	11/25/94				0.0000				0.0000	30.93	42	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
13	11/26/94				0.0000				0.0000	30.62		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
14	11/27/94				0.0000				0.0000	30.31		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
15	11/28/94				0.0000				0.0000	29.36		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
16	11/29/94				0.0000				0.0000	29.93		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
17	11/30/94				0.0000				0.0000	31.21		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
18	12/1/94				0.0000				0.0000	30.53	44	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
19	12/2/94				0.0000				0.0000	30.75		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
20	12/3/94				0.0000				0.0000	30.71		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
21	12/4/94				0.0000				0.0000	30.67		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
22	12/5/94				0.0000				0.0000	30.79		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
23	12/6/94				0.0000				0.0000	31.04		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
24	12/7/94				0.0000				0.0000	30.21		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
25	12/8/94				0.0000				0.0000	29.71	45	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
26	12/9/94				0.0000				0.0000	29.14		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
27	12/10/94				0.0000				0.0000	30.40		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
28	12/11/94				0.0000				0.0000	31.72		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
29	12/12/94				0.0000				0.0000	31.13		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
30	12/13/94				0.0000				0.0000	31.73		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
31	12/14/94				0.0000				0.0000	31.40		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
32	12/15/94				0.0000				0.0000	31.93		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
33	12/16/94				0.0000				0.0000	31.30		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
34	12/17/94				0.0000				0.0000	30.60		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
35	12/18/94				0.0000				0.0000	29.92	43	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
36	12/19/94				0.0000				0.0000	30.25		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
37	12/20/94				0.0000				0.0000	30.16		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
38	12/21/94				0.0000				0.0000	29.75		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
39	12/22/94				0.0000				0.0000	29.45	45	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
40	12/23/94				0.0000				0.0000	30.03		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
41	12/24/94				0.0000				0.0000	30.09		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
42	12/25/94				0.0000				0.0000	30.14		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
43	12/26/94				0.0000				0.0000	29.48		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
44	12/27/94				0.0000				0.0000	30.00		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
45	12/28/94				0.0000				0.0000	30.06		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
46	12/29/94				0.0000				0.0000	30.71		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
47	12/30/94				0.0000				0.0000			SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr

48	12/31/94	00000		00000	30 35	43	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
49	1/1/95	00000		00000	30 12		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
50	1/2/95	00000		00000	29 69		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
51	1/3/95	00000		00000	30 46		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
52	1/4/95	00000		00000	30 58		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
53	1/5/95	00000		00000	29 73		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
54	1/6/95	00000		00000	29 78	45	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
55	1/7/95	00000		00000	29 84		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
56	1/8/95	00000		00000	30 01		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
57	1/9/95	00000		00000	30 19		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
58	1/10/95	00000		00000	29 66		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
59	1/11/95	00000		00000	30 07		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
60	1/12/95	00000		00000	30 06		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
61	1/13/95	00000		00000	30 41	44	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
62	1/14/95	00000		00000	28 93		SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
63	1/15/95	00000		00000	28 31							
64	1/16/95	00000		00000	28 70							
65	1/17/95	00000		00000	30 82							
66	1/18/95	00000		00000	30 76							
67	1/19/95	00000		00000	31 17							
68	1/20/95	00000		00000	31 14	43						
69	1/21/95	00000		00000	29 55							
70	1/22/95	00000		00000	30 06							
71	1/23/95	00000		00000	30 68							
72	1/24/95	00000		00000	28 67							
73	1/25/95	00000		00000	29 54							
74	1/26/95	00000		00000	29 31							
75	1/27/95	00000		00000	28 94	41						
76	1/28/95	00000		00000	29 40							
77	1/29/95	00000		00000	28 65							
78	1/30/95	00000		00000	29 97							
79	1/31/95	00000		00000	28 31		SCPO#1	43,351,830	1 Hr	SCPO#1	43,351,830	1 Hr
80	2/1/95	00000		00000	29 77		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
81	2/2/95	00000		00000	29 27	42	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
82	2/3/95	00000	0 030	0 030	0 030	00001	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
83	2/4/95	00000	0 030	0 030	0 030	00001	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
84	2/5/95	00000	0 050	0 050	0 040	00005	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
85	2/6/95	00000	0 070	0 070	0 050	00013	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
86	2/7/95	00000	0 090	0 090	0 070	00030	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
87	2/8/95	00000	0 090	0 090	0 070	00030	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
88	2/9/95	00000	0 100	0 100	0 070	00037	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
89	2/10/95	00000	0 100	0 100	0 070	00037	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
90	2/11/95	00000	0 100	0 100	0 070	00037	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
91	2/12/95	00000	0 100	0 100	0 070	00037	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
92	2/13/95	00000	0 090	0 090	0 070	00030	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
93	2/14/95	00000	0 090	0 090	0 070	00030	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
94	2/15/95	00000	0 070	0 070	0 050	00013	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
95	2/16/95	00000	0 070	0 070	0 050	00013	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
96	2/17/95	00000	0 050	0 050	0 050	00007	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
97	2/18/95	00000	0 030	0 030	0 030	00001	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
98	2/19/95	00000	0 030	0 030	0 030	00001	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr

All treatment stopped 1/14/95 for now...

99	2/20/95	00000	0.030	0.030	0.030	00001	30.73	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
100	2/21/95	.00000				00000	30.84	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
101	2/22/95	00000				00000	30.74	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
102	2/23/95	.00000				00000	31.66	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
103	2/24/95	00000				00000	30.90	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
104	2/25/95	.00000				00000	30.69	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
105	2/26/95	00000				00000	31.65	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
106	2/27/95	.00000				00000	32.64	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
107	2/28/95	00000				00000	30.66	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
108	3/1/95	.00000				00000	31.18	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
109	3/2/95	00000				00000	29.44	SCPO#1	43,351,830	1 Hr	SCPO#3	43,351,870	1 Hr
110	3/3/95	.00000				00000	29.54	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
111	3/4/95	00000				00000	29.25	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
112	3/5/95	.00000				00000	29.09	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
113	3/6/95	.00000				00000	28.88	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
114	3/7/95	00000				00000	28.93	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
115	3/8/95	.00000				00000	29.42	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
116	3/9/95	00000				00000	28.63	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
117	3/10/95	.00000				00000	30.33	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
118	3/11/95	00000				00000	29.13	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
119	3/12/95	.00000				00000	29.89	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
120	3/13/95	00000				00000	30.83	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
121	3/14/95	.00000				00000	30.78	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
122	3/15/95	00000				00000	30.77	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
123	3/16/95	.00000				00000	30.39	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
124	3/17/95	00000				00000	31.50	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
125	3/18/95	.00000				00000	29.97	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
126	3/19/95	00000				00000	30.45	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
127	3/20/95	.00000				00000	30.85	SCPO#3	43,351,870	1 Hr	SCPO#6	43,351,850	1 Hr
128	3/21/95	00000				00000	30.86	SCPO#3	43,351,870	1 Hr	SCPO#6	43,351,850	1 Hr
129	3/22/95	.00000				00000	31.64	SCPO#3	43,351,870	1 Hr	SCPO#6	43,351,850	1 Hr
130	3/23/95	00000				00000	32.41	SCPO#3	43,351,870	1 Hr	SCPO#6	43,351,850	1 Hr
131	3/24/95	.00000				00000	31.01	SCPO#3	43,351,870	1 Hr	SCPO#6	43,351,850	1 Hr
132	3/25/95	00000				00000	31.13	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
133	3/26/95	.00000				00000	30.64	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
134	3/27/95	00000				00000	30.14	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
135	3/28/95	.00000				00000	30.90	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
136	3/29/95	00000				00000	30.47	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
137	3/30/95	.00000				00000	30.37	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
138	3/31/95	00000				00000	30.57	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
139	4/1/95	.00000				00000	29.73	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
140	4/2/95	00000				00000	29.91	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
141	4/3/95	.00000				00000	30.08	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
142	4/4/95	00000				00000	30.29	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
143	4/5/95	.00000				00000	30.03	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
144	4/6/95	00000				00000	29.66	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
145	4/7/95	.00000				00000	28.87	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
146	4/8/95	00000				00000	29.88	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
147	4/9/95	.00000				00000	30.25	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
148	4/10/95	00000				00000	30.95	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
149	4/11/95	.00000				00000	29.98	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr

150	4/12/95	.00000	.00000	30.17		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
151	4/13/95	00000	00000	28.04		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
152	4/14/95	00000	00000	30.28	40	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
153	4/15/95	00000	00000	30.04		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
154	4/16/95	00000	00000	29.18		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
155	4/17/95	00000	00000	29.18		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
156	4/18/95	00000	00000	29.15		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
157	4/19/95	00000	.00000	28.85		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
158	4/20/95	00000	00000	29.54		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
159	4/21/95	00000	00000	28.56	40	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
160	4/22/95	00000	00000	29.36		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
161	4/23/95	00000	00000	29.71		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
162	4/24/95	00000	.00000	31.07		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
163	4/25/95	.00000	00000	30.13		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
164	4/26/95	00000	.00000	30.25		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
165	4/27/95	00000	00000	28.78		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
166	4/28/95	00000	00000	29.64		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
167	4/29/95	00000	.00000	29.84	36	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
168	4/30/95	00000	00000	29.94		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
169	5/1/95	00000	00000	30.04		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
170	5/2/95	00000	00000	29.22		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
171	5/3/95	00000	00000	30.07		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
172	5/4/95	00000	00000	30.01		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
173	5/5/95	00000	00000	30.27	38	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
174	5/6/95	00000	00000	30.00		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
175	5/7/95	00000	00000	29.75		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
176	5/8/95	.00000	00000	28.52		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
177	5/9/95	00000	00000	32.35		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
178	5/10/95	00000	00000	30.17		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
179	5/11/95	00000	.00000	30.33	40	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
180	5/12/95	00000	00000	29.62		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
181	5/13/95	00000	00000	29.71		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
182	5/14/95	00000	00000	30.35		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
183	5/15/95	00000	00000	30.87		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
184	5/16/95	00000	00000	30.33		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
185	5/17/95	00000	00000	30.12		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
186	5/18/95	00000	00000	29.90		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
187	5/19/95	00000	00000	30.74	38	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
188	5/20/95	00000	00000	30.50		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
189	5/21/95	00000	00000	30.25		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
190	5/22/95	00000	00000	30.02		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
191	5/23/95	00000	00000	30.26		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
192	5/24/95	00000	00000	29.92		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
193	5/25/95	00000	00000	30.81		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
194	5/26/95	00000	00000	29.99	36	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
195	5/27/95	00000	00000	29.71		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
196	5/28/95	00000	00000	30.15		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
197	5/29/95	00000	00000	30.60		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
198	5/30/95	.00000	00000	28.67		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
199	5/31/95	00000	00000	28.70		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
200	6/1/95	00000	00000	30.13		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr

201	6/2/95	00000	.00000	29.92	40	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
202	6/3/95	00000	.00000	29.56		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
203	6/4/95	00000	.00000	29.70		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
204	6/5/95	00000	.00000	29.84		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
205	6/6/95	00000	.00000	29.86		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
206	6/7/95	00000	.00000	29.93		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
207	6/8/95	00000	.00000	29.66		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
208	6/9/95	00000	.00000	29.51	43	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
209	6/10/95	00000	.00000	29.30		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
210	6/11/95	00000	.00000	29.90		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
211	6/12/95	00000	.00000	30.72		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
212	6/13/95	00000	.00000	30.82		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
213	6/14/95	00000	.00000	30.65		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
214	6/15/95	00000	.00000	31.14		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
215	6/16/95	00000	.00000	31.16		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
216	6/17/95	00000	.00000	30.23	41	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
217	6/18/95	00000	.00000	30.88		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
218	6/19/95	00000	.00000	31.96		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
219	6/20/95	00000	.00000	31.23		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
220	6/21/95	00000	.00000	30.55		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
221	6/22/95	00000	.00000	29.94		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
222	6/23/95	00000	.00000	29.66	43	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
223	6/24/95	00000	.00000	28.99		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
224	6/25/95	00000	.00000	29.41		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
225	6/26/95	00000	.00000	29.81		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
226	6/27/95	00000	.00000	29.01		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
227	6/28/95	00000	.00000	28.32		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
228	6/29/95	00000	.00000	29.36		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
229	6/30/95	00000	.00000	28.54		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
230	7/1/95	00000	.00000	29.01		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
231	7/2/95	00000	.00000	29.12		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
232	7/3/95	00000	.00000	30.22		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
233	7/4/95	00000	.00000	29.73		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
234	7/5/95	00000	.00000	30.67		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
235	7/6/95	00000	.00000	29.58		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
236	7/7/95	00000	.00000	29.96	27	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
237	7/8/95	00000	.00000	30.24		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
238	7/9/95	00000	.00000	30.77		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
239	7/10/95	00000	.00000	31.29		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
240	7/11/95	00000	.00000	30.59		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
241	7/12/95	00000	.00000	29.39		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
242	7/13/95	00000	.00000	28.33		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
243	7/14/95	00000	.00000	26.74	37	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
244	7/15/95	00000	.00000	25.29		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
245	7/16/95	00000	.00000	29.36		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
246	7/17/95	00000	.00000	29.43		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
247	7/18/95	00000	.00000	26.95		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
248	7/19/95	00000	.00000	26.28		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
249	7/20/95	00000	.00000	30.11		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
250	7/21/95	00000	.00000	29.15		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
251	7/22/95	00000	.00000	30.95		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr

252	7/23/95	.00000		.00000	31.18		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
253	7/24/95	00000		.00000	32.01	38	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
254	7/25/95	00000		00000	30.94		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
255	7/26/95	00000		00000	29.86		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
256	7/27/95	00000		00000	31.70		SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr
257	7/28/95	Died 7/28/95	#VALUE!	Died 7/28/95	#VALUE!	30	SCPO#3	43,351,870	1 Hr	SCPO#3	43,351,870	1 Hr

OUJ-526 Born 2/2/95 First tumor appeared on 10/28/95

DAY	DATE	T-1 Right Side			Vol T-1	T-2 Back of Neck			Vol T-2	T-3 R Outer Leg			Vol T-3	T-5 L1 Outer Leg T-4 Back Side			Vol T-4,5	T-6 L Arm Pit		
		Ln	Wd	Ht		Ln	Wd	Ht		Ln	Wd	Ht		Ln	Wd	Ht		Ln	Wd	Ht
1	28-Oct	0.030	0.030	0.030	00001				00000				.00000				00000			
2	29-Oct	0.030	0.030	0.030	00001				00000				.00000				00000			
3	30-Oct	0.030	0.030	0.030	00001				00000				.00000				00000			
4	31-Oct	0.030	0.030	0.030	00001				.00000				.00000				00000			
5	1-Nov	0.030	0.030	0.030	00001				00000				.00000				00000			
6	2-Nov	0.030	0.030	0.030	00001				00000				.00000				00000			
7	3-Nov				00000				00000				.00000				00000			
8	4-Nov				00000				00000				.00000				00000			
9	5-Nov				00000				00000				.00000				00000			
10	6-Nov				.00000				00000				.00000				.00000			
11	7-Nov				00000				00000				.00000				00000			
12	8-Nov				00000				00000				.00000				00000			
13	9-Nov				.00000				00000				.00000				00000			
14	10-Nov				00000				00000				.00000				00000			
15	11-Nov				00000				00000				.00000				00000			
16	12-Nov				00000				00000				.00000				00000			
17	13-Nov				00000				00000				.00000				00000			
18	14-Nov				00000				00000				.00000				00000			
19	15-Nov				00000	0.050	0.050	0.050	00007				.00000				00000			
20	16-Nov				.00000	0.050	0.050	0.050	00007				.00000				00000			
21	17-Nov				.00000	0.070	0.070	0.050	00013				.00000				00000			
22	18-Nov				00000	0.090	0.090	0.050	00021				.00000				00000			
23	19-Nov				00000	0.100	0.100	0.070	00037				.00000				00000			
24	20-Nov				00000	0.110	0.100	0.080	00046				.00000				00000			
25	21-Nov				00000	0.110	0.110	0.080	00051				.00000				00000			
26	22-Nov				00000	0.110	0.110	0.080	00051				.00000				00000			
27	23-Nov				00000	0.110	0.110	0.080	00051				.00000				00000			
28	24-Nov				.00000	0.110	0.110	0.080	00051				.00000				00000			
29	25-Nov				00000	0.110	0.110	0.090	00057				.00000				00000			
30	26-Nov				00000	0.110	0.110	0.090	00057				.00000				00000			
31	27-Nov				00000	0.110	0.110	0.100	00063				.00000				00000			
32	28-Nov				00000	0.110	0.110	0.100	00063				.00000				00000			
33	29-Nov				00000	0.110	0.120	0.110	00076				.00000				00000			
34	30-Nov				00000	0.110	0.120	0.110	00076				.00000				00000			
35	1-Dec				00000	0.110	0.120	0.110	00076				.00000				00000			
36	2-Dec				.00000	0.110	0.120	0.110	00076				.00000				00000			
37	3-Dec				00000	0.110	0.120	0.110	00076				.00000				00000			
38	4-Dec				00000	0.110	0.120	0.110	00076				.00000				00000			
39	5-Dec				00000	0.120	0.120	0.110	00083				.00000				00000			
40	6-Dec				00000	0.120	0.120	0.110	00083				.00000				00000			
41	7-Dec				00000	0.110	0.120	0.110	00076				.00000				00000			
42	8-Dec				00000	0.110	0.110	0.100	00063				.00000				00000			
43	9-Dec				00000	0.100	0.100	0.100	00052				.00000				00000			
44	10-Dec				00000	0.100	0.100	0.100	00052				.00000				00000			
45	11-Dec				00000	0.090	0.100	0.090	00042				.00000				00000			
46	12-Dec				00000	0.090	0.100	0.090	00042				.00000				00000			

DAY	DATE	T-1 Right Side			Vol T-1	T-2 Back of Neck			Vol T-2	T-3 R Outer Leg			Vol T-3	T-4 Back Side			Vol T-4.5	T-5 L Arm Pit		
		Ln	Wd	Ht		Ln	Wd	Ht		Ln	Wd	Ht		Ln	Wd	Ht		Ln	Wd	Ht
47	13-Dec				00000	0 100	0 100	0 060	00047				00000				00000			
48	14-Dec				00000	0 100	0 100	0 090	00047				00000				00000			
49	15-Dec				00000	0 100	0 100	0 080	00042				00000				00000			
50	16-Dec				00000	0 100	0 100	0 070	00037				00000				00000			
51	17-Dec				00000	0 100	0 100	0 070	00037				00000				00000			
52	18-Dec				00000	0 090	0 090	0 070	00030				00000	0 030	0 030	0 030	00001			
53	19-Dec				00000	0 090	0 080	0 070	00026	0 030	0 030	0 030	00001	0 050	0 050	0 050	00007			
54	20-Dec				00000	0 070	0 070	0 070	00018	0 050	0 050	0 050	00007	0 070	0 070	0 070	00018			
55	21-Dec				00000	0 050	0 050	0 060	00008	0 050	0 050	0 050	00007	0 090	0 090	0 100	00042			
56	22-Dec				00000	0 030	0 030	0 030	00001	0 050	0 050	0 050	00007	0 110	0 110	0 085	00054			
57	23-Dec				00000	0 030	0 030	0 030	00001				00000	0 130	0 130	0 070	00062			
58	24-Dec				00000				00000				00000	0 130	0 130	0 070	00062			
59	25-Dec				00000				00000				00000	0 130	0 130	0 070	00062			
60	26-Dec				00000				00000				00000	0 140	0 150	0 070	00077			
61	27-Dec				00000				00000				00000	0 140	0 140	0 070	00072			
62	28-Dec				00000				00000				00000	0 150	0 160	0 070	00088			
63	29-Dec				00000				00000				00000	0 150	0 160	0 070	00088			
64	30-Dec				00000				00000				00000	0 170	0 180	0 100	00100			
65	31-Dec				00000				00000				00000	0 170	0 180	0 100	00100			
66	1-Jan				00000				00000				00000	0 180	0 180	0 080	00153			
67	2-Jan				00000				00000				00000	0 220	0 190	0 090	00197			
68	3-Jan				00000				00000				00000	0 210	0 220	0 090	00218			
69	4-Jan				00000				00000				00000	0 230	0 220	0 110	00291			
70	5-Jan				00000				00000				00000	0 250	0 250	0 120	00408			
71	6-Jan				00000				00000				00000	0 280	0 270	0 150	00594			
72	7-Jan				00000				00000				00000	0 290	0 270	0 150	00594			
73	8-Jan				00000				00000				00000	0 300	0 270	0 150	00536			
74	9-Jan				00000				00000				00000	0 300	0 270	0 150	00536			
75	10-Jan				00000				00000				00000	0 320	0 270	0 150	00676			
76	11-Jan				00000				00000				00000	0 310	0 270	0 150	00657			
77	12-Jan				00000				00000				00000	0 290	0 270	0 150	00615			
78	13-Jan				00000				00000				00000	0 340	0 260	0 150	00694			
79	14-Jan				00000				00000				00000	0 340	0 260	0 150	00694			
80	15-Jan				00000				00000				00000	0 330	0 260	0 150	00674			
81	16-Jan				00000				00000				00000	0 320	0 250	0 180	00754			
82	17-Jan				00000				00000				00000	0 330	0 260	0 170	00764			
83	18-Jan				00000				00000				00000	0 320	0 250	0 170	00712			
84	19-Jan				00000				00000				00000	0 330	0 250	0 170	00764			
85	20-Jan				00000				00000				00000	0 340	0 260	0 200	01032			
86	21-Jan				00000				00000				00000	0 340	0 290	0 200	01032			
87	22-Jan				00000				00000				00000	0 350	0 290	0 190	01010			
88	23-Jan				00000				00000				00000	0 350	0 270	0 180	00890			
89	24-Jan				00000				00000				00000	0 370	0 280	0 190	01030			
90	25-Jan				00000				00000				00000	0 360	0 280	0 200	01114			
91	26-Jan				00000				00000				00000	0 390	0 290	0 200	01184			
92	27-Jan				00000				00000				00000	0 390	0 290	0 200	01184			
93	28-Jan				00000				00000				00000	0 390	0 290	0 200	01184			
94	29-Jan				00000				00000				00000	0 380	0 290	0 190	01096			

DAY	DATE	T-1 Right Side			Vol T-1	T-2 Back of Neck			Vol T-2	T-3 R Outer Leg			Vol T-3	T-4 Back Side			Vol T-4.5	T-5 L Arm Fit		
		Ln	Wd	Ht		Ln	Wd	Ht		Ln	Wd	Ht		Ln	Wd	Ht		Ln	Wd	Ht
95	30-Jan*				00000				00000				00000	0.390	0.290	0.190				01125
96	31-Jan				00000				00000				00000	0.390	0.290	0.190				01095
97	1-Feb				00000				00000				00000	0.380	0.290	0.190				01095
98	2-Feb				00000				00000				00000	0.400	0.290	0.190				01154
99	3-Feb				00000				00000				00000	0.420	0.280	0.190				01170
100	4-Feb				00000				00000				00000	0.420	0.280	0.190				01170
101	5-Feb				00000				00000				00000	0.420	0.280	0.200				01231
102	6-Feb				00000				00000				00000	0.410	0.300	0.200				01288
103	7-Feb				00000				00000				00000	0.430	0.300	0.200				01351
104	8-Feb				00000				00000				00000	0.450	0.290	0.190				01298
105	9-Feb				00000				00000				00000	0.450	0.300	0.200				01413
106	10-Feb				00000				00000				00000	0.480	0.320	0.200				01608
107	11-Feb				00000				00000				00000	0.490	0.330	0.200				01693
108	12-Feb				00000				00000				00000	0.490	0.330	0.200				01693
109	13-Feb				00000				00000				00000	0.480	0.330	0.200				01658
110	14-Feb				00000				00000				00000	0.490	0.330	0.200				01593
111	15-Feb				00000				00000				00000	0.510	0.340	0.210				01906
112	16-Feb				00000				00000				00000	0.500	0.340	0.210				01859
113	17-Feb				00000				00000				00000	0.500	0.340	0.210				01859
114	18-Feb				00000				00000				00000	0.500	0.340	0.210				01859
115	19-Feb				00000				00000				00000	0.490	0.350	0.210				01885
116	20-Feb				00000				00000				00000	0.500	0.360	0.220				02073
117	21-Feb				00000				00000				00000	0.500	0.350	0.210				01924
118	22-Feb				00000				00000				00000	0.500	0.360	0.210				01979
119	23-Feb				00000				00000				00000	0.510	0.350	0.220				02058
120	24-Feb				00000				00000				00000	0.540	0.360	0.240				02442
121	25-Feb				00000				00000				00000	0.550	0.360	0.240				02488
122	26-Feb				00000				00000				00000	0.550	0.360	0.240				02488
123	27-Feb				00000				00000				00000	0.560	0.370	0.260				02820
124	28-Feb				00000				00000				00000	0.560	0.380	0.260				02895
125	29-Feb				00000				00000				00000	0.560	0.370	0.260				02820
126	1-Mar				00000				00000				00000	0.540	0.380	0.260				02793
127	2-Mar				00000				00000				00000	0.550	0.370	0.260				02770
128	3-Mar				00000				00000				00000	0.560	0.360	0.250				02638
129	4-Mar				00000				00000				00000	0.570	0.350	0.230				02402
130	5-Mar				00000				00000				00000	0.580	0.350	0.230				02444
131	6-Mar				00000				00000				00000	0.580	0.350	0.230				02444
132	7-Mar				00000				00000				00000	0.590	0.390	0.260				02891
133	8-Mar				00000				00000				00000	0.600	0.350	0.210				02309
134	9-Mar				00000				00000				00000	0.600	0.360	0.220				02488
135	10-Mar				00000				00000				00000	0.610	0.360	0.240				02759
136	11-Mar				00000				00000				00000	0.620	0.370	0.250				03002
137	12-Mar				00000				00000				00000	0.620	0.360	0.250				02921
138	13-Mar				00000				00000				00000	0.620	0.360	0.250				02921
139	14-Mar				00000				00000				00000	0.620	0.350	0.240				02726
140	15-Mar				00000				00000				00000	0.620	0.350	0.240				02726
141	16-Mar				00000				00000				00000	0.630	0.350	0.250				02886
142	17-Mar				00000				00000				00000	0.640	0.350	0.250				02932

DAY	DATE	T-1 Right Side			Vol T-1	T-2 Back of Neck			Vol T-2	T-3 R Outer Leg			Vol T-3	T-4 Back Side			Vol T-4,5	T-6 L Arm Pit		
		Ln	Wd	Ht		Ln	Wd	Ht		Ln	Wd	Ht		Ln	Wd	Ht		Ln	Wd	Ht
143	18-Mar				.00000				.00000				00000	0 650	0 380	0 250	03185	0 110	0 150	0 070
144	19-Mar				.00000				.00000				00000	0 650	0 350	0 250	02977	0 150	0 150	0 070
145	20-Mar				.00000				.00000				00000	0 660	0 340	0 250	02837	0 150	0 160	0 070
146	21-Mar				.00000				.00000				00000	0 680	0 350	0 250	03299	0 160	0 170	0 070
147	22-Mar				.00000				.00000				00000	0 670	0 350	0 250	03283	0 180	0 170	0 070
148	23-Mar				.00000				.00000				00000	0 680	0 350	0 250	03239	0 190	0 190	0 080
149	24-Mar				.00000				.00000				00000	0 680	0 350	0 250	03115	0 190	0 190	0 080
150	25-Mar				.00000				.00000				00000	0 680	0 350	0 250	03115	0 190	0 200	0 080
151	26-Mar				.00000				.00000				00000	0 670	0 350	0 250	03069	0 210	0 210	0 080
152	27-Mar				.00000				.00000				00000	0 680	0 360	0 240	03076	0 210	0 220	0 080
153	28-Mar				.00000				.00000				00000	0 690	0 350	0 240	03034	0 210	0 230	0 090
154	29-Mar				.00000				.00000				00000	0 700	0 350	0 240	03078	0 210	0 220	0 090
155	30-Mar				.00000				.00000				00000	0 700	0 350	0 240	03076	0 210	0 220	0 090
156	31-Mar				.00000				.00000				00000	0 710	0 350	0 240	03122	0 210	0 220	0 090
157	1-Apr				.00000				.00000				00000	0 720	0 350	0 250	03298	0 210	0 220	0 100
158	2-Apr				.00000				.00000				00000	0 730	0 350	0 250	03344	0 230	0 220	0 100
159	3-Apr				.00000				.00000				00000	0 740	0 360	0 260	03626	0 240	0 220	0 100
160	4-Apr				.00000				.00000				00000	0 740	0 370	0 280	04013	0 240	0 230	0 100
161	5-Apr				.00000				.00000				00000	0 740	0 370	0 280	04157	0 240	0 240	0 110
162	6-Apr				.00000				.00000				00000	0 750	0 390	0 280	04267	0 240	0 230	0 120
163	7-Apr				.00000				.00000				00000	0 770	0 400	0 300	04837	0 240	0 230	0 120
164	8-Apr				.00000				.00000				00000	0 790	0 420	0 310	05386	0 270	0 250	0 120
165	9-Apr				.00000				.00000				00000	0 820	0 430	0 320	05907	0 280	0 260	0 130
166	10-Apr				.00000				.00000				00000	0 840	0 440	0 340	06579	0 270	0 280	0 130
167	11-Apr				.00000				.00000				00000	0 850	0 440	0 330	06461	0 280	0 280	0 130
168	12-Apr	Died 4/12/96			#VALUE!	Died 4/12/96			#VALUE!	Died 4/12/96			#VALUE!	Died 4/12/96			#VALUE!	Died 4/12/96		Died 4/12/96

OUJ-526 Bom 2/2/95

DAY	DATE	Vol T-6	WEIGHT Gr	HEMATO- CRIT-%	DEVICE	FREQ MHz	TIME	TREATMENT PARAMETERS				POWER	DEVICE
								FREQ MHz	TIME	FREQ MHz	TIME		
1	28-Oct	00000	27 63	45				NO TREATMENT		NO TREATMENT			
2	29-Oct	00000	27 75					NO TREATMENT		NO TREATMENT			
3	30-Oct	00000	27 92					NO TREATMENT		NO TREATMENT			
4	31-Oct	00000	27 47					NO TREATMENT		NO TREATMENT			
5	1-Nov	00000	27 58					NO TREATMENT		NO TREATMENT			
6	2-Nov	00000	27 44					NO TREATMENT		NO TREATMENT			
7	3-Nov	00000	27 57					NO TREATMENT		NO TREATMENT			
8	4-Nov	00000	28 07	45				NO TREATMENT		NO TREATMENT			
9	5-Nov	00000	28 50					NO TREATMENT		NO TREATMENT			
10	6-Nov	00000	28 92					NO TREATMENT		NO TREATMENT			
11	7-Nov	00000	28 71					NO TREATMENT		NO TREATMENT			
12	8-Nov	00000	28 76					NO TREATMENT		NO TREATMENT			
13	9-Nov	00000	28 63					NO TREATMENT		NO TREATMENT			
14	10-Nov	00000	27 82					NO TREATMENT		NO TREATMENT			
15	11-Nov	00000	28 16	46				NO TREATMENT		NO TREATMENT			
16	12-Nov	00000	27 90					NO TREATMENT		NO TREATMENT			
17	13-Nov	00000	27 73					NO TREATMENT		NO TREATMENT			
18	14-Nov	00000	27 88					NO TREATMENT		NO TREATMENT			
19	15-Nov	00000	27 51					NO TREATMENT		NO TREATMENT			
20	16-Nov	00000	27 55					NO TREATMENT		NO TREATMENT			
21	17-Nov	00000	27 71					NO TREATMENT		NO TREATMENT			
22	18-Nov	00000	27 56	43				NO TREATMENT		NO TREATMENT			
23	19-Nov	00000	27 90					NO TREATMENT		NO TREATMENT			
24	20-Nov	00000	26 25					NO TREATMENT		NO TREATMENT			
25	21-Nov	00000	28 37					NO TREATMENT		NO TREATMENT			
26	22-Nov	00000	27 35					NO TREATMENT		NO TREATMENT			
27	23-Nov	00000	27 30					NO TREATMENT		NO TREATMENT			
28	24-Nov	00000	27 24		8662A	43322485 0	1 Hr			43351871 0	1 Hr	0 0 dBm	Type "P"
29	25-Nov	00000	27 09	38	8662A	43322485 0	1 Hr			43351871 0	1 Hr	0 0 dBm	Type "P"
30	26-Nov	00000	27 58										
31	27-Nov	00000	28 08		8662A			43351853 0	1 Hr	43351871 0	1 Hr	0 0 dBm	Type "P"
32	28-Nov	00000	28 43		8662A			43351853 0	1 Hr	43351871 0	1 Hr	0 0 dBm	Type "P"
33	29-Nov	00000	28 80		8662A	43346000 0	2 Hr					0 0 dBm	Type "P"
34	30-Nov	00000	27 60		8662A			43353850 0	2 Hr			0 0 dBm	Type "P"
35	1-Dec	00000	27 94		8662A	43346000 0	1 Hr	43353850 0	1Hr			0 0 dBm	Type "P"
36	2-Dec	00000	28 20		8662A	43346000 0	1 Hr	43353850 0	1Hr			0 0 dBm	Type "P"
37	3-Dec	00000	28 40										
38	4-Dec	00000	28 60	45	8662A	43351830 0	2 Hr					0 0 dBm	Type "P"
39	5-Dec	00000	28 36		8662A	43351830 0	2 Hr					0 0 dBm	Type "P"
40	6-Dec	00000	28 05		8662A	43351830 0	2 Hr					0 0 dBm	Type "P"
41	7-Dec	00000	27 81		8662A	43351830 0	2 Hr					0 0 dBm	Type "P"
42	8-Dec	00000	26 17		8662A	43351830 0	2 Hr					0 0 dBm	Type "P"
43	9-Dec	00000	28 90	43	8662A	43351830 0	2 Hr					0 0 dBm	Type "P"
44	10-Dec	00000	28 40										
45	11-Dec	00000	27 86		8652A	43351830 0	2 Hr					0 0 dBm	Type "P"
46	12-Dec	00000	27 91		8662A	43351830 0	2 Hr					0 0 dBm	Type "P"

DAY	DATE	Vol T-6	WEIGHT Gr	HEMATO- CRIT-%	DEVICE	FREQ MHz	TIME	TREATMENT PARAMETERS				POWER	DEVICE
								FREQ MHz	TIME	FREQ MHz	TIME		
47	13-Dec	00000	28.19		8662A	43351830.0	2 Hr					0.0 dBm	Type "P"
48	14-Dec	00000	27.21		8662A	43351830.0	2 Hr					0.0 dBm	Type "P"
49	15-Dec	00000	28.02		8662A	43351830.0	1 Hr					0.0 dBm	Type "P"
50	16-Dec	00000	28.03	42	8662A	43351830.0	1 Hr			43351870.0	1 Hr	0.0 dBm	Type "P"
51	17-Dec	00000	28.40										
52	18-Dec	00000	28.01		8662A	43351830.0	1 Hr			43351870.0	1 Hr	0.0 dBm	Type "P"
53	19-Dec	00000	28.30		8662A	43351830.0	1 Hr			43351870.0	1 Hr	0.0 dBm	Type "P"
54	20-Dec	00000	27.77		8662A			43351853.0	1 Hr	43351871.0	1 Hr	0.0 dBm	Type "P"
55	21-Dec	00000	26.43		8662A			43351853.0	1 Hr	43351871.0	1 Hr	0.0 dBm	Type "P"
56	22-Dec	00000	27.45		8662A			43353800.0	1 Hr	43351853.0	1 Hr	0.0 dBm	Type "P"
57	23-Dec	00000	27.59	42	8662A	43346000.0	1 Hr	43353800.0	1 Hr			0.0 dBm	Type "P"
58	24-Dec	00000	27.80										
59	25-Dec	00000	28.00										
60	26-Dec	00000	28.25		8662A	43348000.0	1 Hr	43353800.0	1 Hr			0.0 dBm	Type "P"
61	27-Dec	00000	27.99		8662A			43353800.0	2 Hr			0.0 dBm	Type "Q"
62	28-Dec	00000	28.11		8662A	43322485.0	2 Hr					0.0 dBm	Type "Q"
63	29-Dec	00000	27.88		8662A	43346000.0	2 Hr					0.0 dBm	Type "Q"
64	30-Dec	00000	27.51	35	8662A	43351830.0	1 Hr			43351871.3	1 Hr	0.0 dBm	Type "Q"
65	31-Dec	00000	27.95										
66	1-Jan	00000	28.40		8662A	43351830.0	1 Hr			43351871.3	1 Hr	0.0 dBm	Type "Q"
67	2-Jan	00000	27.85		8662A	43322485.0	1 Hr	43353850.0	1 Hr			0.0 dBm	Type "Q"
68	3-Jan	00000	27.71		8662A	43351830.0	1 Hr	43351871.3	1 Hr			0.0 dBm	Type "Q"
69	4-Jan	00000	27.54		8662A	43346000.0	1 Hr	43353850.0	1 Hr			0.0 dBm	Type "Q"
70	5-Jan	00000	28.00		8662A	43346000.0	1 Hr	43353850.0	1 Hr			0.0 dBm	Type "R"
71	6-Jan	00000	26.74	41	8662A	43346000.0	1 Hr	43353850.0	1 Hr			0.0 dBm	Type "R"
72	7-Jan	00000	26.80										
73	8-Jan	00000	26.88		8662A			43351850.0	1 Hr	43351870.0	1 Hr	0.0 dBm	Type "R"
74	9-Jan	00000	26.23		8662A			43351850.0	2 Hr			0.0 dBm	Type "R"
75	10-Jan	00000	25.84		8662A			43351850.0	2 Hr			0.0 dBm	Type "R"
76	11-Jan	00000	26.99		8662A					43351870.0	2 Hr	0.0 dBm	Type "R"
77	12-Jan	00000	25.54		8662A					43351870.0	2 Hr	0.0 dBm	Type "R"
78	13-Jan	00000	27.81	41	8662A			43351850.0	2 Hr			0.0 dBm	Type "R"
79	14-Jan	00000	27.60										
80	15-Jan	00000	27.33		8662A					43351870.0	2 Hr	0.0 dBm	Type "R"
81	16-Jan	00000	27.32		8662A			43351850.0	2 Hr			0.0 dBm	Type "R"
82	17-Jan	00000	26.47		8662A			43351850.0	2 Hr			0.0 dBm	Type "R"
83	18-Jan	00000	27.88		8662A					43351870.0	2 Hr	0.0 dBm	Type "R"
84	19-Jan	00000	27.39		8662A			43351850.0	2 Hr			0.0 dBm	Type "R"
85	20-Jan	00000	27.22	39	8662A					43351870.0	2 Hr	0.0 dBm	Type "S"
86	21-Jan	00000	27.50										
87	22-Jan	00000	26.09		8662A			43351850.0	2 Hr			0.0 dBm	Type "S"
88	23-Jan	00000	26.89		8662A	43351830.0	2 Hr					0.0 dBm	Type "S"
89	24-Jan	00000	26.96		8662A					43351870.0	2 Hr	0.0 dBm	Type "S"
90	25-Jan	00000	27.15		8662A			43351850.0	2 Hr			0.0 dBm	Type "S"
91	26-Jan	00000	25.75		8662A	43351830.0	2 Hr					0.0 dBm	Type "S"
92	27-Jan	00000	26.98	40	8662A	43351830.0	2 Hr					0.0 dBm	Type "S"
93	28-Jan	00000	27.15										
94	29-Jan	00000	27.43		8662A	43351830.0	2 Hr					3.0 dBm	Type "S"

DAY	DATE	Vol T-5	WEIGHT Gr	HEMATO- CRIT-%	DEVICE	FREQ MHz	TIME	TREATMENT PARAMETERS				POWER	DEVICE
								FREQ MHz	TIME	FREQ MHz	TIME		
47	13-Dec	02000	28.19		8662A	43351830.0	2 Hr					0.0 dBm	Type "P"
48	14-Dec	02000	27.21		8662A	43351830.0	2 Hr					0.0 dBm	Type "P"
49	15-Dec	02000	28.02		8662A	43351830.0	1 Hr			43351870.0	1 Hr	0.0 dBm	Type "P"
50	16-Dec	02000	28.03	42	8662A	43351830.0	1 Hr			43351870.0	1 Hr	0.0 dBm	Type "P"
51	17-Dec	02000	28.40										
52	18-Dec	02000	29.01		8662A	43351830.0	1 Hr			43351870.0	1 Hr	0.0 dBm	Type "P"
53	19-Dec	02000	28.30		8662A	43351830.0	1 Hr			43351870.0	1 Hr	0.0 dBm	Type "P"
54	20-Dec	02000	27.77		8662A			43351853.0	1 Hr	43351871.0	1 Hr	0.0 dBm	Type "P"
55	21-Dec	02000	28.43		8662A			43351853.0	1 Hr	43351871.0	1 Hr	0.0 dBm	Type "P"
56	22-Dec	02000	27.45		8662A			43353800.0	1 Hr	43351853.0	1 Hr	0.0 dBm	Type "P"
57	23-Dec	02000	27.59	42	8662A	43346000.0	1 Hr	43353800.0	1 Hr			0.0 dBm	Type "P"
58	24-Dec	02000	27.80										
59	25-Dec	02000	28.00										
60	26-Dec	02000	28.25		8662A	43346000.0	1 Hr	43353600.0	1 Hr			0.0 dBm	Type "P"
61	27-Dec	02000	27.99		8662A			43353600.0	2 Hr			0.0 dBm	Type "Q"
62	28-Dec	02000	28.11		8662A	43322485.0	2 Hr					0.0 dBm	Type "Q"
63	29-Dec	02000	27.88		8662A	43346000.0	2 Hr					0.0 dBm	Type "Q"
64	30-Dec	02000	27.51	35	8662A	43351830.0	1 Hr			43351871.3	1 Hr	0.0 dBm	Type "Q"
65	31-Dec	02000	27.95										
66	1-Jan	02000	28.40		8662A	43351830.0	1 Hr			43351871.3	1 Hr	0.0 dBm	Type "Q"
67	2-Jan	02000	27.65		8662A	43322485.0	1 Hr	43353850.0	1 Hr			0.0 dBm	Type "Q"
68	3-Jan	02000	27.71		8662A	43351830.0	1 Hr	43351871.3	1 Hr			0.0 dBm	Type "Q"
69	4-Jan	02000	27.54		8662A	43346000.0	1 Hr	43353850.0	1 Hr			0.0 dBm	Type "Q"
70	5-Jan	02000	28.00		8662A	43346000.0	1 Hr	43353850.0	1 Hr			0.0 dBm	Type "R"
71	6-Jan	02000	26.74	41	8662A	43346000.0	1 Hr	43353850.0	1 Hr			0.0 dBm	Type "R"
72	7-Jan	02000	26.80										
73	8-Jan	02000	26.88		8662A			43351850.0	1 Hr	43351870.0	1 Hr	0.0 dBm	Type "R"
74	9-Jan	02000	26.23		8662A			43351850.0	2 Hr			0.0 dBm	Type "R"
75	10-Jan	02000	25.84		8662A			43351850.0	2 Hr			0.0 dBm	Type "R"
76	11-Jan	02000	26.98		8662A					43351870.0	2 Hr	0.0 dBm	Type "R"
77	12-Jan	02000	26.54		8662A					43351870.0	2 Hr	0.0 dBm	Type "R"
78	13-Jan	02000	27.81	41	8662A			43351850.0	2 Hr			0.0 dBm	Type "R"
79	14-Jan	02000	27.60										
80	15-Jan	02000	27.33		8662A					43351870.0	2 Hr	0.0 dBm	Type "R"
81	16-Jan	02000	27.32		8662A			43351850.0	2 Hr			0.0 dBm	Type "R"
82	17-Jan	02000	26.47		8662A			43351850.0	2 Hr			0.0 dBm	Type "R"
83	18-Jan	02000	27.88		8662A					43351870.0	2 Hr	0.0 dBm	Type "R"
84	19-Jan	02000	27.39		8662A			43351850.0	2 Hr			0.0 dBm	Type "R"
85	20-Jan	02000	27.22	39	8662A					43351870.0	2 Hr	0.0 dBm	Type "S"
86	21-Jan	02000	27.60										
87	22-Jan	02000	26.09		8662A			43351850.0	2 Hr			0.0 dBm	Type "S"
88	23-Jan	02000	26.89		8662A	43351830.0	2 Hr					0.0 dBm	Type "S"
89	24-Jan	02000	26.96		8662A					43351870.0	2 Hr	0.0 dBm	Type "S"
90	25-Jan	02000	27.15		8662A			43351850.0	2 Hr			0.0 dBm	Type "S"
91	26-Jan	02000	26.75		8662A	43351830.0	2 Hr					0.0 dBm	Type "S"
92	27-Jan	02000	26.98	40	8662A	43351830.0	2 Hr					0.0 dBm	Type "S"
93	28-Jan	02000	27.15										
94	29-Jan	02000	27.43		8662A	43351830.0	2 Hr					3.0 dBm	Type "S"

DAY	DATE	Vol T-6	WEIGHT Gr	HEMATO- CRIT-%	DEVICE	TREATMENT PARAMETERS						POWER	DEVICE	
						FREQ MHz	TIME	FREQ MHz	TIME	FREQ MHz	TIME			
95	30-Jan	00000	26 67		8662A					43351870 0	2 Hr	3 0 dBm	Type "S"	
96	31-Jan	00000	26 29		8662A					43351850 0	2 Hr	3 0 dBm	Type "S"	
97	1-Feb	00000	26 73		8662A	43351830 0	2 Hr			43351850 0	2 Hr	3 0 dBm	Type "S"	
98	2-Feb	00000	27 19		8662A					43351850 0	2 Hr	3 0 dBm	Type "S"	
99	3-Feb	00000	27 19		8662A	43351830 0	2 Hr					3 0 dBm	Type "S"	
100	4-Feb	00000	27 20		8662A									
101	5-Feb	.00000	27 21		8662A					43351870 0	2 Hr	3 0 dBm	Type "S"	
102	6-Feb	.00000	27 57		8662A	43351830 0	2 Hr					3 0 dBm	Type "S"	
103	7-Feb	00000	27 94		8662A	43351830 0	2 Hr					3 0 dBm	Type "S"	
104	8-Feb	00000	28 48		8662A					43351870 0	2 Hr	3 0 dBm	Type "S"	
105	9-Feb	00000	27 05		8662A					43351870 0	2 Hr	3 0 dBm	Type "S"	
106	10-Feb	00000	27 66	41	8662A				43351850 0	2 Hr		3 0 dBm	Type "S"	
107	11-Feb	00000	27 68		8662A									
108	12-Feb	00000	27 71		8662A				43351850 0	1 Hr	43351853 0	1 Hr	3 0 dBm	Type "S"
109	13-Feb	00000	27 95		8662A	43346000 0	1 Hr			43351850 0	1 Hr	3 0 dBm	Type "S"	
110	14-Feb	00000	28 32		8662A				43351871 0	2 Hr		3 0 dBm	Type "S"	
111	15-Feb	00000	28 29		8662A				43351850 0	1 Hr	43351853 0	1 Hr	3 0 dBm	Type "S"
112	16-Feb	00000	27 74		8662A				43351850 0	1 Hr	43351853 0	1 Hr	3 0 dBm	Type "S"
113	17-Feb	00000	27 53	39	8662A				43351850 0	2 Hr	43351853 0	1 Hr	3 0 dBm	Type "S"
114	18-Feb	00000	26 25		8662A									
115	19-Feb	00000	28 00		8662A				43351850 0	1 Hr	43351853 0	1 Hr	3 0 dBm	Type "T"
116	20-Feb	00000	28 07		8662A				43351853 0	2 Hr	43351871 0	1 Hr	3 0 dBm	Type "T"
117	21-Feb	00000	27 08		8662A				43351853 0	2 Hr	43351871 0	1 Hr	0 0 dBm	Type "T"
118	22-Feb	00000	27 96		8662A				43351853 0	1 Hr	43351871 0	2 Hr	0 0 dBm	Type "T"
119	23-Feb	00000	26 75		8662A					43351870 0	3 Hr	0 0 dBm	Type "T"	
120	24-Feb	00000	27 08	40	8662A					43351870 0	3 Hr	0 0 dBm	Type "T"	
121	25-Feb	00000	27 80		8662A									
122	26-Feb	00000	28 50		8662A				43351850 0	3 Hr		0 0 dBm	Type "T"	
123	27-Feb	.00000	27 61		8662A				43351853 0	1 Hr	43351871 0	2 Hr	0 0 dBm	Type "T"
124	28-Feb	00000	27 87		8662A	43322485 0	1 Hr		43346000 0	2 Hr		0 0 dBm	Type "T"	
125	29-Feb	00000	27 65		8662A	43322485 0	1 Hr		43346000 0	2 Hr		0 0 dBm	Type "T"	
126	1-Mar	00000	27 09		8662A	43322485 0	1 Hr		43346000 0	2 Hr		0 0 dBm	Type "T"	
127	2-Mar	00000	26 95	36	8662A	43322485 0	1 Hr			43353800 0	2 Hr	0 0 dBm	Type "T"	
128	3-Mar	00000	26 75		8662A									
129	4-Mar	00000	28 58		8662A	43322485 0	1 Hr			43353800 0	2 Hr	0 0 dBm	Type "T"	
130	5-Mar	00000	27 52		8662A	43322485 0	1 Hr		43346000 0	1 Hr	43353850 0	1 Hr	0 0 dBm	Type "U"
131	6-Mar	00000	27 44		8662A	43322485 0	1 Hr		43346000 0	1 Hr	43353850 0	1 Hr	0 0 dBm	Type "U"
132	7-Mar	00000	27 84		8662A				43351853 0	2 Hr	43351871 0	1 Hr	0 0 dBm	Type "U"
133	8-Mar	00000	27 46		8662A				43351853 0	2 Hr	43351871 0	1 Hr	0 0 dBm	Type "U"
134	9-Mar	00000	28 75	37	8662A	43322485 0	1 Hr		43346000 0	2 Hr		0 0 dBm	Type "V"	
135	10-Mar	00000	27 65		8662A									
136	11-Mar	00000	27 55		8662A	43322480 0	1 Hr		43322485 0	1 Hr	43353800 0	1 Hr	0 0 dBm	Type "V"
137	12-Mar	00000	27 82		8662A				43346000 0	3 Hr		0 0 dBm	Type "U"	
138	13-Mar	00000	28 27		8662A				43346000 0	3 Hr		0 0 dBm	Type "U"	
139	14-Mar	00000	28 33		8662A				43346000 0	3 Hr		0 0 dBm	Type "U"	
140	15-Mar	00000	28 58		8662A	43351830 0	1 Hr			43351853 0	2 Hr	0 0 dBm	Type "U"	
141	16-Mar	00000	28 35	37	8662A				43346000 0	3 Hr		0 0 dBm	Type "U"	
142	17-Mar	00000	28 36		8662A							0 0 dBm	Type "U"	

DAY	DATE	Vol T-G	WEIGHT Gr	HEMATO- CRIT-%	DEVICE	FREQ MHz	TIME	TREATMENT PARAMETERS				POWER	DEVICE
								FREQ MHz	TIME	FREQ MHz	TIME		
143	18-Mar	00060	28.38		8662A	43322480.0	1 Hr			43353800.0	2 Hr	0.0 dBm	Type "U"
144	19-Mar	00075	27.79		8662A	43322480.0	1 Hr	43346000.0	1 Hr	43353800.0	1 Hr	0.0 dBm	Type "U"
145	20-Mar	00088	27.98		8662A			43351853.0	2 Hr			0.0 dBm	Type "U"
146	21-Mar	00100	28.37		8662A			43351853.0	3 Hr			0.0 dBm	Type "U"
147	22-Mar	00112	28.41		8662A			43346000.0	3 Hr			0.0 dBm	Type "U"
148	23-Mar	00151	28.60	31	8662A			43322485.0	2 Hr	43353800.0	1 Hr	0.0 dBm	Type "U"
149	24-Mar	00151	28.90										
150	25-Mar	00159	29.12		8662A			43322485.0	2 Hr	43353800.0	1 Hr	0.0 dBm	Type "U"
151	26-Mar	00185	28.75		8662A			43351870.0	1 Hr	43351871.0	2 Hr	0.0 dBm	Type "U"
152	27-Mar	00193	28.58		8662A			43346000.0	1 Hr	43351871.0	2 Hr	0.0 dBm	Type "U"
153	28-Mar	00228	28.87		8662A			43346000.0	1 Hr	43351871.0	2 Hr	0.0 dBm	Type "U"
154	29-Mar	00218	28.79		8662A			43346000.0	3 Hr			0.0 dBm	Type "U"
155	30-Mar	00218	29.30	36	8662A			43346000.0	3 Hr			0.0 dBm	Type "U"
156	31-Mar	00218	29.60										
157	1-Apr	00242	29.85		8662A			43322485.0	2 Hr	43353800.0	1 Hr	0.0 dBm	Type "U"
158	2-Apr	00265	30.13		8662A					43351871.0	3 Hr	0.0 dBm	Type "U"
159	3-Apr	00276	30.03		8662A			43351853.0	3 Hr			0.0 dBm	Type "U"
160	4-Apr	00289	29.17		8662A	43322492.0	1 Hr	43346090.0	1 Hr			0.0 dBm	Type "U"
161	5-Apr	00332	29.08		8662A	43322492.0	1 Hr	43346090.0	1 Hr			0.0 dBm	Type "U"
162	6-Apr	00347	29.59	34	8662A	43322652.0	2 Hr					0.0 dBm	Type "U"
163	7-Apr	00347	30.00										
164	8-Apr	00424	30.45		8662A	43322492.0	1 Hr	43346090.0	1 Hr	43351853.0	1 Hr	0.0 dBm	Type "U"
165	9-Apr	00495	30.68		8662A	43322492.0	1 Hr	43346000.0	1 Hr	43351871.0	1 Hr	0.0 dBm	Type "U"
166	10-Apr	00514	31.59		8662A	43322492.0	1 Hr	43346090.0	2 Hr			0.0 dBm	Type "U"
167	11-Apr	00534	31.87		8662A							0.0 dBm	Type "U"
168	12-Apr	#VALUE!			8662A							0.0 dBm	Type "U"

0411-852 Form 44/95 First tumor appeared on 12/12/95

DAY	DATE	T-1 L Breast			Vol T-1	T-2 R Abdomen			Vol T-2	T-3 L Abdomen			Vol T-3	WEIGHT	HEMATO-CRIT %	DEVICE	FREQ MHz	TIME	TREATMENT PARAMETERS					POWER	DEVICE
		Ln	Wd	Hi		Ln	Wd	Hi		Ln	Wd	Hi							FREQ MHz	TIME	FREQ MHz	TIME	FREQ MHz		
1	13-Dec				00000				00000				23.42		8622A	4332485 0	1/2 Hr	4332485 0	1/2 Hr				0.0 dBm	Type "F"	
2	14-Dec	0.070	0.070	0.070	00000				00000				31.43		8622A	4332485 0	1/2 Hr	43346000 0	1/2 Hr				0.0 dBm	Type "F"	
3	15-Dec	0.080	0.090	0.080	00020				00000				31.40		8622A	43351850 0	1/2 Hr	43346000 0	1/2 Hr				0.0 dBm	Type "F"	
4	16-Dec	0.100	0.100	0.070	00000				00000				29.89		8622A	4332485 0	1/2 Hr	43346000 0	1/2 Hr				0.0 dBm	Type "F"	
5	17-Dec	0.100	0.100	0.070	00037				00000				30.10		8622A	43351850 0	1/2 Hr	43351850 0	1/2 Hr				0.0 dBm	Type "F"	
6	18-Dec	0.090	0.100	0.080	00024				00000				30.33		8622A	43300000 0	1 Hr	4332485 0	1 Hr	43323000 0	1 Hr		0.0 dBm	Type "F"	
7	19-Dec	0.100	0.090	0.090	00042				00000				29.29		8622A	4332485 0	1 Hr	43346000 0	1 Hr				0.0 dBm	Type "F"	
8	20-Dec	0.150	0.110	0.120	00184				00000				29.29		8622A	43346000 0	1 Hr	43351850 0	1 Hr				0.0 dBm	Type "F"	
9	21-Dec	0.160	0.140	0.110	00129				00000				29.83		8622A	43346000 0	1 Hr	43351850 0	1 Hr				0.0 dBm	Type "F"	
10	22-Dec	0.160	0.140	0.110	00129				00000				28.95		8622A	43346000 0	1 Hr	43351850 0	1 Hr				0.0 dBm	Type "F"	
11	23-Dec	0.170	0.160	0.110	00157				00000				29.67		8622A	43346000 0	1 Hr	43351850 0	1 Hr				0.0 dBm	Type "F"	
12	24-Dec	1.800	0.180	0.110	01869				00000				30.30		8622A	43351850 0	2 Hr	4332485 0	2 Hr				0.0 dBm	Type "F"	
13	25-Dec	0.200	0.190	0.110	00219				00000				30.80		8622A	4332485 0	2 Hr	4332485 0	2 Hr				0.0 dBm	Type "Q"	
14	26-Dec	0.210	0.200	0.110	00247				00000				31.51		8622A	4332485 0	2 Hr	43351850 0	2 Hr				0.0 dBm	Type "Q"	
15	27-Dec	0.200	0.190	0.110	00219				00000				30.56		8622A	4332485 0	2 Hr	43351850 0	2 Hr				0.0 dBm	Type "Q"	
16	28-Dec	0.190	0.170	0.110	00176				00000				30.89		8622A	4332485 0	2 Hr	43351850 0	2 Hr				0.0 dBm	Type "Q"	
17	29-Dec	0.190	0.110	0.110	00186				00000				30.22		8622A	43351850 0	2 Hr	43351850 0	2 Hr				0.0 dBm	Type "Q"	
18	30-Dec	0.190	0.170	0.110	00186				00000				29.80		8622A	43351850 0	1 Hr	43351871 0	1 Hr				0.0 dBm	Type "Q"	
19	31-Dec	0.180	0.170	0.110	00186				00000				30.10		8622A	43351830 0	1 Hr	43351871 0	1 Hr				0.0 dBm	Type "Q"	
20	1-Jan	0.160	0.110	0.110	00186				00000				28.40		8622A	43351830 0	1 Hr	43351871 0	1 Hr				0.0 dBm	Type "Q"	
21	2-Jan	0.160	0.170	0.110	00176				00000				29.83		8622A	43351830 0	1 Hr	43351871 0	1 Hr				0.0 dBm	Type "Q"	
22	3-Jan	0.170	0.170	0.110	00186				00000				29.26		8622A	43351830 0	1 Hr	43351871 0	1 Hr				0.0 dBm	Type "Q"	
23	4-Jan	0.150	0.140	0.110	00121				00000				29.31		8622A	43351830 0	1 Hr	43351871 0	1 Hr				0.0 dBm	Type "Q"	
24	5-Jan	0.150	0.140	0.110	00121				00000				29.53		8622A	43351830 0	1 Hr	43351871 0	1 Hr				0.0 dBm	Type "Q"	
25	6-Jan	0.140	0.140	0.110	00113				00000				29.52		8622A	43351830 0	1 Hr	43351871 0	1 Hr				0.0 dBm	Type "H"	
26	7-Jan	0.140	0.140	0.110	00113				00000				29.40		8622A	43351850 0	1 Hr	43351871 0	1 Hr				0.0 dBm	Type "H"	
27	8-Jan	0.140	0.140	0.110	00113				00000				29.14		8622A	43351850 0	1 Hr	43351871 0	1 Hr				0.0 dBm	Type "H"	
28	9-Jan	0.140	0.140	0.110	00113				00000				29.30		8622A	43351850 0	1 Hr	43351871 0	1 Hr				0.0 dBm	Type "H"	
29	10-Jan	0.120	0.120	0.100	00076				00000				22.26		8622A	43351850 0	1 Hr	43351871 0	1 Hr				0.0 dBm	Type "H"	
30	11-Jan	0.120	0.110	0.110	00090				00000				29.82		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
31	12-Jan	0.110	0.110	0.100	00063				00000				29.21		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
32	13-Jan	0.100	0.100	0.070	00027				00000				29.00		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
33	14-Jan	0.100	0.090	0.070	00023				00000				29.35		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
34	15-Jan	0.100	0.090	0.070	00023				00000				29.70		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
35	16-Jan	0.090	0.090	0.070	00030				00000				26.28		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
36	17-Jan	0.090	0.090	0.070	00030				00000				27.60		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
37	18-Jan	0.090	0.090	0.070	00030				00000				30.18		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
38	19-Jan	0.070	0.070	0.050	00013				00000				30.06		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
39	20-Jan	0.070	0.070	0.070	00018				00000				30.11		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
40	21-Jan	0.070	0.070	0.070	00018				00000				28.10		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
41	22-Jan	0.070	0.070	0.070	00018				00000				27.57		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
42	23-Jan	0.070	0.070	0.070	00018				00000				28.34		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
43	24-Jan	0.070	0.070	0.070	00018				00000				28.15		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
44	25-Jan	0.070	0.070	0.070	00018				00000				27.65		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
45	26-Jan	0.050	0.050	0.050	00007				00000				26.35		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
46	27-Jan	0.050	0.050	0.050	00004				00000				27.06		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
47	28-Jan	0.050	0.050	0.050	00004				00000				27.35		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
48	29-Jan	0.050	0.050	0.050	00004				00000				27.07		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
49	30-Jan	0.050	0.050	0.050	00004				00000				26.73		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
50	31-Jan	0.030	0.030	0.030	00001				00000				29.81		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
51	1-Feb	0.030	0.030	0.030	00001				00000				27.43		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
52	2-Feb	0.030	0.030	0.030	00001				00000				26.86		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
53	3-Feb	0.030	0.030	0.030	00001				00000				27.87		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
54	4-Feb	0.030	0.030	0.030	00001				00000				27.45		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
55	5-Feb	0.030	0.030	0.030	00001				00000				27.25		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
56	6-Feb	0.030	0.030	0.030	00001				00000				27.40		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
57	7-Feb	0.030	0.030	0.030	00001				00000				27.73		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
58	8-Feb	0.030	0.030	0.030	00001				00000				26.77		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
59	9-Feb	0.030	0.030	0.030	00001				00000				26.86		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
60	10-Feb				00000				00000				26.62		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
61	11-Feb				00000				00000				29.08		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
62	12-Feb				00000				00000				28.56		8622A	43351850 0	2 Hr	43351871 0	2 Hr				0.0 dBm	Type "H"	
63	13-Feb				00000																				

DAY	DATE	T-1 L Bottom			T-2 R Abdomen			T-3 L Abdomen			WEIGHT	HEMATO-CRIT-%	DEVICE	FREQ MHz	TIME	TREATMENT PARAMETERS			POWER	DEVICE	
		Ln	Wd	Ht	Vol	Ln	Wd	Ht	Vol	Ln						Wd	Ht	FREQ MHz			TIME
67	17-Feb				00000	0 050	0 050	0 050	00007	00000	21 21	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
68	18-Feb				00000	0 050	0 050	0 050	00007	00000	21 20	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
69	19-Feb				00000	0 050	0 050	0 050	00007	00000	21 21	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
70	20-Feb				00000	0 050	0 050	0 050	00007	00000	21 20	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
71	21-Feb				00000	0 050	0 050	0 050	00007	00000	21 12	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
72	22-Feb				00000	0 030	0 030	0 030	00001	00000	21 01	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
73	23-Feb				00000	0 030	0 030	0 030	00001	00000	20 83	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
74	24-Feb				00000	0 030	0 030	0 030	00001	00000	20 48	862A			40	43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
75	25-Feb				00000	0 030	0 030	0 030	00001	00000	20 70	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
76	26-Feb				00000	0 030	0 030	0 030	00001	00000	20 85	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
77	27-Feb				00000				00000	00000	20 86	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
78	28-Feb				00000				00000	00000	20 37	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
79	29-Feb				00000				00000	00000	20 32	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
80	1-Mar				00000				00000	00000	20 44	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
81	2-Mar				00000				00000	00000	20 04	862A			40	43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
82	3-Mar				00000				00000	00000	20 60	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
83	4-Mar				00000				00000	00000	21 21	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
84	5-Mar				00000	0 050	0 050	0 050	00007	00000	21 40	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
85	6-Mar				00000	0 050	0 050	0 050	00007	00000	20 10	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
86	7-Mar				00000	0 050	0 050	0 050	00007	00000	20 40	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
87	8-Mar				00000	0 050	0 050	0 050	00007	00000	20 97	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
88	9-Mar				00000	0 050	0 050	0 050	00007	00000	21 00	862A			41	43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
89	10-Mar				00000	0 050	0 050	0 050	00007	00000	20 60	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
90	11-Mar				00000	0 050	0 050	0 050	00007	00000	20 13	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
91	12-Mar				00000	0 050	0 050	0 050	00007	00000	20 36	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
92	13-Mar				00000	0 030	0 030	0 030	00001	00000	20 71	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
93	14-Mar				00000	0 030	0 030	0 030	00001	00000	21 27	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
94	15-Mar				00000	0 050	0 050	0 050	00007	00000	21 53	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
95	16-Mar				00000	0 050	0 050	0 050	00007	00000	21 18	862A			33	43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
96	17-Mar				00000	0 050	0 050	0 050	00007	00000	21 10	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
97	18-Mar				00000	0 050	0 050	0 050	00007	00000	21 00	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
98	19-Mar				00000	0 050	0 050	0 050	00007	00000	20 02	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
99	20-Mar				00000	0 050	0 050	0 050	00007	00000	20 27	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
100	21-Mar				00000	0 050	0 050	0 050	00007	00000	20 42	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
101	22-Mar				00000	0 050	0 050	0 050	00007	00000	20 78	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
102	23-Mar				00000	0 050	0 050	0 050	00007	00000	20 88	862A			44	43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
103	24-Mar				00000				00000	00000	20 40	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
104	25-Mar				00000				00000	00000	20 84	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
105	26-Mar				00000				00000	00000	20 66	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
106	27-Mar				00000				00000	00000	20 57	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
107	28-Mar				00000				00000	00000	20 32	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
108	29-Mar				00000				00000	00000	20 41	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
109	30-Mar				00000				00000	00000	20 20	862A			38	43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
110	31-Mar				00000				00000	00000	20 98	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"
111	1-Apr				00000				00000	00000	20 74	862A				43351830 0	1 Hr	43351870 0	2 Hr	0 0 dBm	Type "T"

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CONTROL MOUSE DATA

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DOB Nov. 27, 1994		A-486 LT ARM T-1			A-486 LT INR LEG T-2				WEIGHT	HEMA-	
DAY	DATE	X	Y	Z	EVOL	X	Y	Z	EVOL	GRAMS	TOCRIT
1	9-Aug	0.050	0.050	0.050	.00007				.00000	28.78	
2	10-Aug	0.050	0.050	0.050	.00007				.00000	28.31	
3	11-Aug	0.060	0.060	0.060	.00011				.00000	29.08	
4	12-Aug	0.060	0.060	0.060	.00011				.00000	29.08	
5	13-Aug	0.070	0.070	0.070	.00018				.00000	28.99	
6	14-Aug	0.080	0.080	0.070	.00023				.00000	28.89	
7	15-Aug	0.080	0.080	0.070	.00023				.00000	28.68	
8	16-Aug	0.080	0.080	0.070	.00023				.00000	28.86	
9	17-Aug	0.080	0.080	0.070	.00023				.00000	28.85	
10	18-Aug	0.080	0.080	0.060	.00020				.00000	28.83	
11	19-Aug	0.080	0.080	0.060	.00020				.00000	28.82	
12	20-Aug	0.080	0.080	0.060	.00020				.00000	28.80	
13	21-Aug	0.080	0.080	0.050	.00017				.00000	28.79	
14	22-Aug	0.080	0.080	0.050	.00017				.00000	28.59	
15	23-Aug	0.080	0.080	0.050	.00017				.00000	28.65	
16	24-Aug	0.080	0.080	0.050	.00017				.00000	28.75	
17	25-Aug	0.080	0.080	0.050	.00017				.00000	28.76	
18	26-Aug	0.090	0.090	0.050	.00021				.00000	31.66	
19	27-Aug	0.100	0.100	0.050	.00026				.00000	30.83	
20	28-Aug	0.100	0.100	0.050	.00026				.00000	29.99	
21	29-Aug	0.110	0.110	0.050	.00032				.00000	29.16	
22	30-Aug	0.110	0.110	0.050	.00032				.00000	28.32	
23	31-Aug	0.124	0.126	0.055	.00053				.00000	28.36	
24	1-Sep	0.139	0.141	0.080	.00082				.00000	28.41	
25	2-Sep	0.153	0.157	0.095	.00119				.00000	28.45	
26	3-Sep	0.167	0.173	0.110	.00166				.00000	28.50	
27	4-Sep	0.181	0.189	0.125	.00224				.00000	28.54	
28	5-Sep	0.196	0.204	0.140	.00293				.00000	28.59	
29	6-Sep	0.210	0.220	0.155	.00375				.00000	26.63	
30	7-Sep	0.224	0.236	0.170	.00470				.00000	28.68	
31	8-Sep	0.239	0.251	0.185	.00581				.00000	28.72	
32	9-Sep	0.253	0.267	0.200	.00707				.00000	28.76	
33	10-Sep	0.267	0.283	0.215	.00850				.00000	28.81	
34	11-Sep	0.281	0.299	0.230	.01012				.00000	28.85	
35	12-Sep	0.296	0.314	0.245	.01192				.00000	28.90	
36	13-Sep	0.310	0.330	0.260	.01392				.00000	28.94	
37	14-Sep	0.300	0.360	0.270	.01527				.00000	28.66	
38	15-Sep	0.200	0.200	0.100	.00209				.00000	28.78	
39	16-Sep	0.280	0.400	0.160	.00938				.00000	28.98	
40	17-Sep	0.220	0.250	0.230	.00662				.00000	29.86	
41	18-Sep	0.390	0.500	0.290	.02960				.00000	29.83	
42	19-Sep	0.400	0.510	0.290	.03097				.00000	30.41	
43	20-Sep	0.430	0.450	0.340	.03444				.00000	30.78	
44	21-Sep	0.460	0.450	0.350	.03793				.00000	29.51	
45	22-Sep	0.460	0.470	0.400	.04527				.00000	30.27	
46	23-Sep	0.460	0.480	0.430	.04970				.00000	30.12	
47	24-Sep	0.460	0.480	0.430	.04970				.00000	29.59	
48	25-Sep	0.470	0.480	0.430	.05078				.00000	29.21	
49	26-Sep	0.470	0.500	0.470	.05782				.00000	30.47	

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50	27-Sep	0.490	0.540	0.480	.06649				.00000	30.21		
51	28-Sep	0.490	0.570	0.530	.07749				.00000	29.77		
52	29-Sep	0.500	0.570	0.500	.07460				.00000	30.29		
53	30-Sep	0.510	0.570	0.500	.07609				.00000	30.23		
54	1-Oct	0.530	0.580	0.500	.08046				.00000	30.15		
55	2-Oct	0.540	0.580	0.500	.08198				.00000	30.09	41	
56	3-Oct	0.560	0.570	0.480	.08021				.00000	29.98		
57	4-Oct	0.560	0.580	0.520	.08842				.00000	31.33		
58	5-Oct	0.580	0.630	0.520	.09947	0.030	0.030	0.030	.00001	30.97		
59	6-Oct	0.590	0.640	0.550	.10872	0.030	0.030	0.030	.00001	31.42		
60	7-Oct	0.600	0.640	0.560	.11257	0.030	0.030	0.030	.00001	31.15		
61	8-Oct	0.600	0.640	0.560	.11257	0.030	0.030	0.030	.00001	30.95		
62	9-Oct	0.610	0.640	0.570	.11649	0.030	0.030	0.030	.00001	30.71		
63	10-Oct	0.680	0.660	0.570	.12292	0.030	0.030	0.030	.00001	32.67	30	
64	11-Oct	0.700	0.690	0.610	.15424	0.030	0.030	0.030	.00001	31.88		
65	12-Oct	0.730	0.720	0.640	.17610	0.010	0.010	0.010	.00000	31.52		
66	13-Oct	0.680	0.760	0.670	.18127	0.010	0.010	0.010	.00000	32.26		
67	14-Oct	0.700	0.780	0.670	.19151				.00000	32.28		
68	15-Oct	0.720	0.800	0.670	.20203				.00000	32.30		
69	16-Oct	0.730	0.620	0.670	.20996				.00000	32.31		
70	17-Oct	0.780	0.820	0.660	.22099				.00000	33.40		
71	18-Oct	0.800	0.780	0.530	.17313				.00000	28.67		
72	19-Oct	0.740	0.740	0.540	.15480				.00000	28.94		
73	20-Oct	0.750	0.760	0.530	.15815				.00000	29.96		
74	21-Oct	0.750	0.760	0.530	.15815				.00000	29.96		
75	22-Oct	0.790	0.770	0.550	.17514				.00000	30.90		
76	23-Oct	0.800	0.790	0.560	.18528				.00000	31.45		
77	24-Oct	0.800	0.810	0.560	.18997				.00000	31.85		
78	25-Oct	0.810	0.820	0.560	.19472				.00000	32.22		
79	26-Oct	0.800	0.610	0.600	.20354				.00000	30.64		
80	27-Oct	0.820	0.840	0.630	.22717				.00000	30.44	20	
81	28-Oct	0.860	0.840	0.630	.23825				.00000	31.15		
82	29-Oct	0.900	0.850	0.630	.25230				.00000	31.81		
83	30-Oct	0.960	0.850	0.630	.26912				.00000	32.23	25	
84	31-Oct	0.940	0.880	0.650	.28148				.00000	32.04		
85	1-Nov	0.940	0.870	0.680	.29112				.00000	33.04		
86	2-Nov	0.960	0.930	0.700	.32717				.00000	34.56		
87	3-Nov	0.950	0.960	0.680	.32465				.00000	34.58		
88	4-Nov	0.960	0.980	0.680	.33491				.00000	35.50		
89	5-Nov	0.970	1.000	0.680	.34530				.00000	36.50		
90	6-Nov	0.980	1.020	0.680	.35584				.00000	37.17		
91	7-Nov	0.980	1.090	0.720	.40263				.00000	36.89		
92	8-Nov	0.980	1.060	0.780	.42417				.00000	37.18	32	
93	9-Nov	0.980	1.070	0.800	.43915				.00000	34.57		
94	10-Nov	1.030	1.070	0.660	.38079				.00000	34.95		
95	11-Nov	1.040	1.090	0.670	.39760				.00000	34.36		
96	12-Nov	1.050	1.110	0.670	.40879				.00000	33.78		
97	13-Nov	1.060	1.130	0.680	.42639				.00000	33.19	25	
98	14-Nov	Died Nov. 14 1995 #VALUE!				Died Nov. 14 1995 #VALUE!						
99		T-1 AVERAGE GROWTH				T-2 AVERAGE GROWTH						
100		0.486	0.505	0.380	0.112	0.026	0.026	0.026	0.000			

[0189]

DAY DATE	X	Y	Z	X	Y	Z	X	Y	Z	EVOL			
DOB 11/26/94	A-488	LT	SIDE T-1	EVOL	A-488	LT	NECK T-2	EVOL	A-488	LT	BOTTOM T-3	EVOL	
1	7/20/95	0.050	0.050	0.050	.00007			.00000				.00000	
2	7/21/95	0.050	0.050	0.050	.00007	0.050	0.050	0.050	.00007			.00000	
3	7/22/95	0.060	0.060	0.060	.00011	0.060	0.060	0.060	.00011			.00000	
4	7/23/95	0.070	0.070	0.070	.00018	0.070	0.070	0.070	.00018			.00000	
5	7/24/95	0.070	0.070	0.070	.00018	0.070	0.070	0.070	.00018			.00000	
6	7/26/95	0.070	0.070	0.070	.00018	0.080	0.080	0.080	.00027			.00000	
7	7/26/95	0.070	0.070	0.070	.00018	0.080	0.080	0.080	.00027			.00000	
8	7/27/95	0.070	0.070	0.070	.00018	0.100	0.100	0.100	.00052	0.070	0.070	0.070	.00018
9	7/28/95	0.070	0.070	0.050	.00013	0.100	0.100	0.070	.00037	0.070	0.070	0.070	.00018
10	7/29/95	0.070	0.070	0.050	.00013	0.100	0.100	0.070	.00037	0.070	0.070	0.070	.00018
11	7/30/95	0.070	0.070	0.050	.00013	0.100	0.100	0.070	.00037	0.070	0.070	0.070	.00018
12	7/31/95	0.070	0.070	0.050	.00013	0.100	0.100	0.070	.00037	0.070	0.070	0.070	.00018
13	8/1/95	0.070	0.070	0.050	.00013	0.100	0.100	0.070	.00037	0.070	0.070	0.070	.00018

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91	10/18/95	0.880	0.750	0.570	.19694	.0000	0.140	0.110	0.080	.00064
92	10/19/95	0.880	0.760	0.570	.19957	.0000	0.140	0.120	0.090	.00079
93	10/20/95	0.860	0.750	0.580	.19584	.0000	0.170	0.130	0.090	.00104
94	10/21/95	0.850	0.740	0.590	.19426	.0000	0.170	0.130	0.090	.00104
95	10/22/95	0.840	0.720	0.600	.18997	.0000	0.160	0.120	0.090	.00090
96	10/23/95	0.820	0.700	0.610	.18330	.0000	0.160	0.120	0.090	.00090
97	10/24/95	0.820	0.705	0.615	.18612	.0000	0.150	0.120	0.090	.00085
98	10/25/95	0.820	0.710	0.620	.18896	.0000	0.140	0.120	0.090	.00079
99	10/26/95	0.830	0.720	0.620	.19396	.0000	0.160	0.130	0.100	.00109
100	10/27/95	0.850	0.740	0.610	.20086	.0000	0.190	0.140	0.100	.00139
101	10/28/95	0.890	0.750	0.640	.22364	.00000	0.190	0.150	0.110	.00164
102	10/29/95	0.930	0.750	0.680	.24830	.00000	0.190	0.150	0.120	.00179
103	10/30/95	0.970	0.760	0.710	.27401	.00000	0.190	0.160	0.130	.00207
104	11/31/95	0.970	0.750	0.780	.29706	.00000	0.230	0.190	0.140	.00320
105	11/1/95	0.970	0.780	0.820	.32479	.00000	0.230	0.250	0.140	.00421
106	11/2/95	0.970	0.830	0.850	.35825	.00000	0.230	0.250	0.160	.00482
107	11/3/95	0.970	0.860	0.790	.34500	.00000	0.240	0.250	0.170	.00534
108	11/4/95	0.970	0.880	0.770	.34408	.00000	0.240	0.250	0.170	.00534
109	11/5/95	0.960	0.910	0.760	.34757	.00000	0.240	0.250	0.170	.00534
110	11/6/95	0.960	0.930	0.740	.34586	.00000	0.240	0.250	0.170	.00534
111	11/7/95	0.960	0.940	0.760	.35903	.00000	0.240	0.250	0.170	.00534
112	11/8/95	1.020	0.900	0.790	.37965	.00000	0.260	0.250	0.200	.00661
113	11/9/95	1.050	0.940	0.800	.41336	.00000	0.260	0.280	0.200	.00762
114	11/10/95	1.080	0.960	0.770	.41793	.00000	0.250	0.280	0.200	.00733
115	11/11/95	1.080	0.960	0.770	.41793	.00000	0.250	0.280	0.200	.00733
116	11/12/95	1.080	0.960	0.770	.41793	.00000	0.250	0.280	0.200	.00733
117	11/13/95	DIED 11/13/95	#VAL-UE!			DIED 11/13/95	#VAL-UE!		DIED 11/13/95	

	DAY DATE	X	Y	Z					
	DOB 11/26/94	A-488	LT ARM T-4	EVOL	WEIGHT GRAMS	HEMOTOCRIT			
	1	7/20/95		.00000	36.58				
	2	7/21/95		.00000	35.98				
	3	7/22/95		.00000	35.26				
	4	7/23/95		.00000	35.73	45			
	5	7/24/95		.00000	35.56				
	6	7/26/95		.00000	35.39				
	7	7/26/95		.00000	35.22				
	8	7/27/95		.00000	35.05				
	9	7/28/95		.00000	35.38				
	10	7/29/95		.00000	35.18				
	11	7/30/95		.00000	34.98				
	12	7/31/95		.00000	34.79				
	13	8/1/95		.00000	34.56				
	14	8/2/95		.00000	34.38				
	15	8/2/95		.00000	35.18				
	16	8/4/95		.00000	35.31	46			
	17	8/5/95		.00000	32.00				
	18	8/6/95		.00000	34.70				
	19	8/7/95		.00000	35.35				
	20	8/8/95		.00000	35.27				
	21	8/9/95		.00000	34.54				
	22	8/10/95		.00000	35.11				
	23	8/11/95		.00000	35.40				
	24	8/12/95		.00000	35.30				
	25	8/13/95		.00003	25.20				
	26	8/14/95		.00000	35.10				
	27	8/15/95		.00000	25.00				
	28	8/16/95		.00000	34.60				
	29	8/17/95		.00000	34.80				
	30	8/18/95		.00000	24.70				
	31	8/19/95		.00000	34.60				
	32	8/20/95		.00000	34.50				
	33	8/21/95		.00000	34.44				
	34	8/22/95		.00000	36.30				
	35	8/23/95		.00000	35.11				
	36	8/24/95		.00000	25.20				
	37	8/25/95		.00000	35.41				
	38	8/26/95		.00000	35.48				
	39	8/27/95		.00000	32.02				
	40	8/28/95		.00000	32.36				
	41	8/29/95		.00000	30.80				
	42	8/30/95		.00000	20.24				
	43	8/31/95		.00000	20.56				
	44	9/1/95		.00000	29.87				
	45	9/2/95		.00000	30.19				

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46	9/3/95				.00000	30.51	
47	9/4/95				.00000	30.82	
48	9/5/95				.00000	31.14	
49	9/6/95				.00000	21.45	
50	9/7/95				.00000	31.77	
51	9/8/95				.00000	32.09	
52	9/9/95				.00000	32.48	
53	9/10/95				.00000	32.72	
54	9/11/95				.00000	33.04	
55	9/12/95				.00000	33.35	
56	9/13/95				.00000	33.67	
57	9/14/95				.00000	34.14	
58	9/15/95				.00000	33.44	
59	9/16/95				.00000	33.44	
60	9/17/95				.00000	34.25	
61	9/18/95				.00000	33.88	
62	9/19/95				.00000	34.26	
63	9/20/95				.00000	34.20	
64	9/21/95				.00000	32.84	
65	9/22/95				.00000	33.55	
66	9/23/95				.00000	34.15	
67	9/24/95				.00000	33.03	
68	9/25/95				.00000	31.90	
69	9/26/95				.00000	31.81	
70	9/27/95				.00000	31.85	
71	9/28/95				.00000	31.12	
72	9/29/95				.00000	31.58	
73	9/30/95				.00000	31.06	
74	10/1/95				.00000	30.55	
75	10/2/95				.00000	30.03	40
76	10/3/95				.00000	30.51	
77	10/4/95				.00000	31.19	
78	10/5/95				.00000	30.82	
79	10/6/95				.00000	30.83	
80	10/7/95				.00000	31.25	
81	10/8/95				.00000	31.67	
82	10/9/95				.00000	32.09	
83	10/10/95				.00000	31.69	40
84	10/11/95				.00000	32.70	
85	10/12/95				.00000	32.08	
86	10/13/95				.00000	32.84	
87	10/14/95				.00000	33.15	
88	10/15/95				.00000	33.45	
89	10/16/95				.00000	33.77	
90	10/17/95				.00000	32.41	
91	10/18/95				.00000	32.50	
92	10/19/95				.00000	31.93	
93	10/20/95				.00000	32.32	
94	10/21/95				.00000	32.50	
95	10/22/95				.00000	32.70	
96	10/23/95				.00000	32.95	
97	10/24/95				.00000	33.15	
98	10/25/95				.00000	33.26	
99	10/26/95				.00000	33.63	
100	10/27/95				.00000	35.44	40
101	10/28/95				.00000	35.84	
102	10/29/95				.00000	35.23	
103	10/30/95				.00000	36.63	37
104	11/31/95				.00000	34.66	
105	11/1/95				.00000	35.78	
106	11/2/95				.00000	34.56	
107	11/3/95				.00000	34.43	
108	11/4/95				.00000	34.14	
109	11/5/95				.00000	33.85	
110	11/6/95				.00000	33.56	
111	11/7/95	0.380	0.310	0.200	.01233	35.30	
112	11/8/95	0.400	0.320	0.200	.01340	34.68	30
113	11/9/95	0.400	0.330	0.210	.01451	33.71	
114	11/10/95	0.400	0.310	0.230	.01493	33.49	
115	11/11/95	0.400	0.310	0.230	.01493	33.39	
116	11/12/95	0.400	0.310	0.230	.01493	33.29	
117	11/13/95			DIED 11/13/95	#VAL- UE!	33 19	

[0190]

DAY	DATE	X	Y	Z	EVOL	X	Y	Z	EVOL	X	Y	Z	EVOL	X	Y	Z
DOB 12/19/94	A-490 RT SIDE T-1				A-490 LT SIDE T-2				A-490 LT SIDE T-3				A-490 RT THIGH T-4			
1	10/11/95	0.150	0.150	0.120	.00141	0.150	0.150	0.100	.00177	0.100	0.100	0.100	.00100	.00052		
2	10/12/95	0.150	0.100	0.120	.00094	0.150	0.150	0.100	.00177	0.100	0.100	0.100	.00052			
3	10/13/95	0.150	0.100	0.120	.00094	0.150	0.150	0.100	.00177	0.100	0.100	0.100	.00052			
4	10/14/95	0.150	0.110	0.120	.00104	0.170	0.170	0.150	.00227	0.100	0.100	0.100	.00052			
5	10/15/95	0.160	0.110	0.120	.00111	0.190	0.180	0.150	.00269	0.100	0.100	0.100	.00052			
6	10/16/95	0.160	0.120	0.120	.00121	0.200	0.200	0.150	.00314	0.100	0.100	0.100	.00052			
7	10/17/95	0.180	0.160	0.120	.00181	0.200	0.250	0.200	.00524	0.150	0.150	0.150	.00052			
8	10/18/95	0.230	0.200	0.130	.00313	0.240	0.270	0.210	.000712	0.180	0.180	0.160	.00271			
9	10/19/95	0.260	0.240	0.150	.00490	0.270	0.270	0.210	.00801	0.220	0.220	0.160	.00405			
10	10/20/95	0.300	0.250	0.150	.00589	0.300	0.310	0.230	.01120	0.230	0.220	0.160	.00424			
11	10/21/95	0.310	0.260	0.150	.00633	0.320	0.330	0.230	.01271	0.230	0.230	0.160	.00443			
12	10/22/95	0.320	0.260	0.150	.00653	0.330	0.350	0.230	.01391	0.240	0.240	0.160	.00482			
13	10/23/95	0.330	0.270	0.160	.00746	0.340	0.370	0.230	.01515	0.240	0.250	0.160	.00503			
14	10/24/95	0.350	0.285	0.160	.00836	0.350	0.385	0.230	.01622	0.260	0.250	0.160	.00544			
15	10/25/95	0.360	0.300	0.160	.00905	0.360	0.400	0.230	.01734	0.270	0.250	0.160	.00565			
16	10/26/95	0.410	0.340	0.220	.01605	0.400	0.410	0.250	.02146	0.270	0.250	0.200	.00707			
17	10/27/95	0.460	0.360	0.240	.02081	0.440	0.410	0.250	.02361	0.270	0.270	0.220	.00840			
18	10/28/95	0.490	0.400	0.260	.02668	0.465	0.430	0.270	.02826	0.280	0.290	0.220	.00935			
19	10/29/95	0.520	0.460	0.280	.03506	0.490	0.450	0.280	.03232	0.290	0.310	0.220	.01035			
20	10/30/95	0.540	0.540	0.300	.04580	0.510	0.460	0.300	.03684	0.300	0.330	0.210	.01088			
21	10/31/95	0.530	0.390	0.360	.03895	0.500	0.480	0.300	.03769	0.280	0.320	0.200	.00938			
22	11/1/95	0.510	0.450	0.400	.04806	0.480	0.480	0.370	.04463	0.280	0.280	0.200	.01173			
23	11/2/95	0.560	0.470	0.410	.05649	0.520	0.470	0.340	.04350	0.320	0.420	0.220	.01548			
24	11/3/95	0.520	0.500	0.440	.05989	0.540	0.460	0.380	.04941	0.330	0.380	0.240	.01576			

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25	11/4/95	0.560	0.510	0.430	.06429	0.560	0.470	0.390	.05374 ;;00.350 0.400 0.300 .02199
26	11/5/95	0.620	0.510	0.420	.06952	0.580	0.480	0.400	.05830 ;;00.370 0.420 0.340 .02766
27	11/6/95	0.680	0.520	0.410	.07589	0.600	0.490	0.410	.06310 ;;00.380 0.430 0.360 .03079
28	11/7/95	0.680	0.530	0.400	.07547	0.660	0.520	0.410	.07366 ;;00.380 0.460 0.330 .03020
29	11/8/95	0.680	0.580	0.440	.09085	0.540	0.670	0.440	.08334 ;;00.430 0.500 0.360 .04277 0.190 ;;00.240 0.180
30	11/9/95	0.700	0.610	0.440	.09836	0.550	0.670	;;00.380	.07331 0.460 0.510 0.400 ;;0.04913 0.200 0.270 0.200
31	11/10/95	0.730	0.630	0.430	.10353	1.070	0.640	0.410	.14698 .00000 ;;00.220 0.260 0.200
32	11/11/95	0.730	0.640	0.430	.10517	1.040	0.660	0.490	.17607 .00000 0.250 ;;00.250 0.220
33	11/12/95	0.740	0.640	0.430	.10661	0.990	0.680	;;00.550	.19383 .00000 0.290 0.240 ;;00.240
34	11/13/95	0.740	0.650	0.430	.10828	0.950	0.690	0.620	;;0.21276 .00000 0.330 0.220 0.260
35	11/14/95	0.740	0.680	0.450	.11854	1.000	0.720	0.570	.21484 .00000 ;;00.300 0.220 0.240
36	11/15/95	0.760	0.700	0.470	.13090	1.000	0.740	0.630	.24408 .00000 0.300 ;;00.200 0.240
37	11/16/95	0.780	0.690	0.470	.13242	1.000	0.760	;;00.630	.25065 .00000 0.310 0.240 ;;00.230
38	11/17/95	0.800	0.720	0.470	.14172	1.060	0.790	0.630	;;0.27618 .00000 0.350 0.280 0.230
39	11/18/95	0.830	0.720	0.460	.14391	1.070	0.810	0.640	.29038 .00000 ;;00.380 0.300 0.240
40	11/19/95	0.860	0.720	0.460	.14911	1.080	0.830	0.650	.30502 .00000 0.410 ;;00.310 0.240
41	11/20/95	0.890	0.720	0.450	.15096	1.090	0.850	;;00.660	.32012 .00000 0.450 0.320 ;;00.250
42	11/21/95	0.860	0.700	0.480	.15127	1.090	0.900	0.690	;;0.35435 .00000 0.450 0.300 0.250
43	11/22/95	0.860	0.730	0.480	.15775	1.080	0.960	0.690	.37451 .00000 ;;00.470 0.320 0.270
44	11/23/95	0.850	0.780	0.510	.17701	1.080	0.950	0.690	.37061 .00000 0.485 ;;00.330 0.270
45	11/24/95	0.850	0.850	0.550	.20803	1.080	0.950	;;00.690	.37061 .00000 0.500 0.350 ;;00.270
46	11/25/95	0.850	0.850	0.550	.20803	1.080	0.980	0.710	;;0.39339 .00000 0.510 0.350 0.280
47	11/26/95	0.850	0.850	0.550	.20803	1.080	1.050	0.730	.43336 .00000 ;;00.510 0.350 0.290
48	11/27/95	0.850	0.850	0.550	.20803	1.090	1.090	0.750	.46648 .00000 0.520 ;;00.350 0.310
49	11/28/95	0.850	0.850	0.550	.20803	1.090	1.100	;;00.750	.47076 .00000 0.520 0.350 ;;00.310
50	11/29/95	Died 11/29/95	#VAL-UE!	Died 11/29/95	#VAL-UE!	Died 11/29/95	#VAL-UE!	Died 11/29/95	

-continued

		DOB 12/19/94		WEIGHT							
		DAY	DATE	EVOL	GRAMS						
		1	10/11/95	.00000	29.11	44					
		2	10/12/95	.00000	28.19						
		3	10/13/95	.00000	29.77						
		4	10/14/95	.00000	29.90						
		5	10/15/95	.00000	30.20						
		6	10/16/95	.00000	30.49						
		7	10/17/95	.00000	30.24						
		8	10/18/95	.00000	30.69						
		9	10/19/95	.00000	30.01						
		10	10/20/95	.00000	30.47						
		11	10/21/95	.00000	30.90						
		12	10/22/95	.00000	31.30						
		13	10/23/95	.00000	31.52						
		14	10/24/95	.00000	30.50						
		15	10/25/95	.00000	29.74						
		16	10/26/95	.00000	29.14						
		17	10/27/95	.00000	29.83	40					
		18	10/28/95	.00000	30.30						
		19	10/29/95	.00000	30.90						
		20	10/30/95	.00000	31.14	34					
		21	10/31/95	.00000	30.33						
		22	11/1/95	.00000	32.44						
		23	11/2/95	.00000	31.61						
		24	11/3/95	.00000	32.21						
		25	11/4/95	.00000	32.70						
		26	11/5/95	.00000	33.20						
		27	11/6/95	.00000	33.59						
		28	11/7/95	.00000	33.16						
		29	11/8/95	.00430	34.41	30					
		30	11/9/95	.00565	35.11						
		31	11/10/95	.00599	34.92						
		32	11/11/95	.00720	35.80						
		33	11/12/95	.00874	36.80						
		34	11/13/95	.00988	37.66						
		35	11/14/95	.00829	39.12						
		36	11/15/95	.00754	38.97	32					
		37	11/16/95	.00896	39.02						
		38	11/17/95	.01180	40.48						
		39	11/18/95	.01432	41.50						
		40	11/19/95	.01597	42.50						
		41	11/20/95	.01885	43.50	27					
		42	11/21/95	.01767	43.88						
		43	11/22/95	.02126	44.12						
		44	11/23/95	.02262	45.50						
		45	11/24/95	.02474	46.96						
		46	11/25/95	.02616	46.66						
		47	11/26/95	.02710	46.36						
		48	11/27/95	.02954	46.06						
		49	11/28/95	.02954	39.35						
		50	11/29/95	#VAL- UE!	39.88						
T-1 AVERAGE GROWTH		T-2 AVERAGE GROWTH			T-3 AVERAGE GROWTH						
0.560	0.491	0.340	0.078	0.644	0.560	0.413	0.137	0.254	0.276	0.202	0.011

[0191]

DAY DATE	X A-492 RT ABDO- MEN T-1	Y Z	Z EVOL	X A-492 LT ABDO MEN T-2	Y Z	Z EVOL	X A-492 RT ARM T-3	Y Z	Z EVOL	X A-492 LT ARM T-4	Y Z	Z EVOL
	1		15-Sep	0.030		0.030	0.030		.00001	;;0.00000		.00000
	2		16-Sep	0.030		0.030	0.030		.00001	;;0.00000		.00000

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3	17-Sep	0.050	0.050	0.050	.00007	::0.00000	.00000	
4	18-Sep	0.100	0.100	0.100	.00052	::0.00000	.00000	
5	19-Sep	0.050	0.050	0.050	.00007	::0.00000	.00000	
6	20-Sep	0.050	0.050	0.050	.00007	::0.00000	.00000	
7	21-Sep	0.050	0.050	0.050	.00007	::0.00000	.00000	
8	22-Sep	0.050	0.050	0.050	.00007	::0.00000	.00000	
9	23-Sep	0.050	0.050	0.050	.00007	::0.00000	.00000	
10	24-Sep	0.030	0.030	0.030	.00001	::0.00000	.00000	
11	25-Sep	0.030	0.030	0.030	.00001	::0.00000	.00000	
12	26-Sep	0.030	0.030	0.030	.00001	::0.00000	.00000	
13	27-Sep	0.030	0.030	0.030	.00001	::0.00000	.00000	
14	28-Sep	0.030	0.030	0.030	.00001	::0.00000	.00000	
15	29-Sep	0.030	0.030	0.030	.00001	::0.00000	.00000	
16	30-Sep	0.030	0.030	0.030	.00001	::0.00000	.00000	
17	1-Oct				.00000	.00000	.00000	
18	2-Oct				.00000	0.050	0.050 0.050 .00007	
19	3-Oct				.00000	0.050	.00000 ;:0.00000 0.050 0.050 ::0.00007 .00000	
20	4-Oct				.00000	0.050	.00000 0.050 0.050 .00007	
21	5-Oct				.00000	0.030	.00000 ;:0.00000 0.030 0.030 ::0.00001 .00000	
22	6-Oct				.00000	0.030	.00000 0.030 0.030 .00001	
23	7-Oct				.00000	0.040	.00000 ;:0.00000 0.040 0.040 ::0.00003 .00000	
24	8-Oct				.00000	0.040	.00000 0.040 0.040 .00003	
25	9-Oct				.00000	0.050	.00000 ;:0.00000 0.050 0.050 ::0.00007 .00000	
26	10-Oct				.00000	0.050	.00000 0.050 ;:0.050 .00007 .00000	
27	11-Oct				.00000	0.050	.00000 0.050 0.050 .00007 0.100 0.100 ::0.100 .00052	
28	12-Oct				.00000	0.050	.00000 0.050 ;:0.050 .00007 0.100 0.100 0.110 ;:0.00058 0.090 0.090 0.070 .00030	
29	13-Oct				.00000	0.050	0.050 0.050 .00007 0.100 ;:0.100 0.100 .00052 0.090 0.090 ;:0.060 .00025	
30	14-Oct				.00000	0.040	0.040 0.040 .00003 0.100 0.100 0.100 .00052 ;:0.090 0.090 0.070 .00030 0.040 0.040 .00003 0.100 0.100	
31	15-Oct				.00000	0.040	.00000 ;:0.100 .00052 0.090 0.090 0.080 ::0.00034 0.030 0.030 .00001 ::0.100 0.100 0.100 .00052 0.100 ::0.100 0.090 .00047	
32	16-Oct				.00000	0.030		

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33	17-Oct	.00000	0.030	0.030 ;:00.030 .00001 0.150 0.150 0.150 ;:0.00177 0.120 0.120 0.110
34	18-Oct	.00000	0.030	.00083 0.030 0.030 .00001 0.200 ;:0.180 0.150 .00263 0.180 0.180 ;:0.160 .00271
35	19-Oct	.00000	0.030	0.030 0.030 .00001 0.240 0.200 0.150 .00377 ;:0.210 0.200 0.160 .00352
36	20-Oct	.00000	0.030	0.030 0.030 .00001 0.270 0.240 ;:0.200 .00578 0.240 0.210 0.170 ;:0.00449
37	21-Oct	.00000	0.030	0.030 0.030 .00001 ;:0.270 0.240 0.200 .00678 0.260 ;:0.240 0.170 .00555
38	22-Oct	.00000	0.030	0.030 ;:00.030 .00001 0.270 0.240 0.200 ;:0.00678 0.280 0.270 0.170 .00673
39	23-Oct	.00000	0.030	0.030 0.030 .00001 0.270 ;:0.240 0.200 .00678 0.290 0.290 ;:0.170 .00748
40	24-Oct	.00000	.00000 0.280 ;:0.270	0.200 .00792 0.290 0.290 ;:0.170 .00748
41	25-Oct	.00000	.00000 0.300 ;:0.300	0.200 .00942 0.290 0.300 ;:0.180 .00820
42	26-Oct	.00000	.00000 0.350 ;:0.300	0.220 .01209 0.290 0.290 ;:0.190 .00837
43	27-Oct	.00000	.00000 0.340 ;:0.300	0.240 .01282 0.290 0.280 ;:0.200 .00850
44	28-Oct	.00000	.00000 0.350 ;:0.300	0.250 .01374 0.310 0.310 ;:0.230 .01157
45	29-Oct	.00000	.00000 0.350 ;:0.300	0.250 .01374 0.330 0.340 ;:0.250 .01468
46	30-Oct	.00000	.00000 0.360 ;:0.300	0.260 .01470 0.340 0.370 ;:0.280 .01844
47	31-Oct	.00000	.00000 0.340 ;:0.320	0.270 .01538 0.320 0.360 ;:0.270 .01719
48	1-Nov	.00000	.00000 0.350 ;:0.280	0.260 .01334 0.330 0.400 ;:0.270 .01866
49	2-Nov	.00000	.00000 0.360 ;:0.300	0.280 .01583 0.350 0.400 ;:0.270 .01979
50	3-Nov	.00000	.00000 0.400 ;:0.360	0.310 .02337 0.370 0.440 ;:0.260 .02216
51	4-Nov	.00000	.00000 0.420 ;:0.340	0.290 .02168 0.355 0.450 ;:0.270 .02258
52	5-Nov	.00000	.00000 0.440 ;:0.320	0.270 .01990 0.340 0.450 ;:0.290 .02323
53	6-Nov	.00000	.00000 0.450 ;:0.300	0.250 .01767 0.330 0.460 ;:0.300 .02384
54	7-Nov	.00000	.00000 0.410 ;:0.360	0.290 .02241 0.380 0.480 ;:0.320 .03056

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55	8-Nov	.00000	.00000	0.460	::00.350
			0.300	.02529	0.420
			0.530	::00.360	.04195
56	9-Nov	.00000	.00000	0.440	::00.340
			0.290	.02271	0.410
			0.450	::00.360	.03786
57	10-Nov	.00000	.00000	0.470	::00.350
			0.320	.02756	0.490
			0.500	::00.380	.04277
58	11-Nov	.00000	.00000	0.430	::00.340
			0.320	.02449	0.450
			0.490	::00.380	.04386
59	12-Nov	.00000	.00000	0.390	::00.320
			0.320	.02091	0.460
			0.490	::00.390	.04602
60	13-Nov	.00000	.00000	0.350	::00.310
			0.320	.01818	0.470
			0.480	::00.390	.04606
61	14-Nov	.00000	.00000	0.390	::00.310
			0.300	.01899	0.480
			0.500	::00.360	.04523
62	15-Nov	.00000	.00000	0.380	::00.340
			0.300	.02029	0.460
			0.540	::00.380	.04941
63	16-Nov	.00000	.00000	0.380	::00.340
			0.290	.01961	0.470
			0.510	::00.370	.04643
64	17-Nov	.00000	.00000	0.400	::00.350
			0.300	.02199	0.460
			0.530	::00.370	.04722
65	18-Nov	.00000	.00000	0.400	::00.380
			0.320	0.2546	0.480
			0.530	::00.350	.04661
66	19-Nov	.00000	.00000	0.410	::00.410
			0.340	.02992	0.490
			0.530	::00.330	.04486
67	20-Nov	.00000	.00000	0.410	::00.440
			0.360	.03400	0.500
			0.530	::00.310	.04301
68	21-Nov	.00000	.00000	0.430	::00.430
			0.330	.03194	0.500
			0.430	::00.320	.03602
69	22-Nov	.00000	.00000	0.420	::00.440
			0.330	.03193	0.520
			0.540	::00.420	.06174
70	23-Nov	.00000	.00000	0.440	::00.470
			0.370	.04006	0.520
			0.520	::00.410	.05804
71	24-Nov	.00000	.00000	0.450	::00.500
			0.400	.04712	0.520
			0.500	::00.400	.05444
72	25-Nov	.00000	.00000	0.470	::00.500
			0.390	.04798	0.530
			0.510	::00.390	.05519
73	26-Nov	.00000	.00000	0.500	::00.500
			0.380	.04973	0.540
			0.520	::00.390	.05733
74	27-Nov	.00000	.00000	0.520	::00.500
			0.370	.05036	0.550
			0.530	::00.380	.05799
75	28-Nov	.00000	.00000	0.550	::00.500
			0.370	.05327	0.600
			0.540	::00.380	.06445
76	29-Nov	.00000	.00000	0.570	::00.490
			0.370	.05410	0.640
			0.610	::00.380	.07766
77	30-Nov	.00000	.00000	0.570	::00.480
			0.370	.05299	0.640
			0.610	::00.380	.07766
78	1-Dec	.00000	.00000	0.560	::00.460
			0.390	.05259	0.500
			0.660	::00.370	.06392
79	2-Dec	.00000	.00000	0.540	::00.450
			0.390	.04961	0.520
			0.650	::00.390	.06901
80	3-Dec	.00000	.00000	0.520	::00.450
			0.390	.04777	0.530
			0.560	::00.410	.07280

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81	4-Dec	.00000	.00000	0.500	::00.450	0.390	.04594	0.540	
82	5-Dec	.00000	.00000	0.660	::00.470	0.630	::00.430	.07658	
83	6-Dec	.00000	.00000	0.680	::00.510	0.390	.06333	0.570	
84	7-Dec	.00000	.00000	0.590	::00.510	0.650	::00.430	.08340	
85	8-Dec	.00000	.00000	0.730	::00.540	0.410	.07444	0.600	
86	9-Dec	.00000	.00000	0.740	::00.540	0.650	::00.430	.08779	
87	10-Dec	.00000	.00000	0.740	::00.540	0.430	.06773	0.630	
88	11-Dec	.00000	.00000	0.750	::00.540	0.690	::00.430	.09785	
89	12-Dec	.00000	.00000	0.770	::00.550	0.400	.08255	0.660	
90	13-Dec	.00000	.00000	0.790	::00.560	0.720	::00.430	.10697	
91	14-Dec	.00000	.00000	0.800	::00.600	0.400	.06368	0.690	
92	15-Dec	.00000	.00000	0.810	::00.630	0.730	::00.430	.11339	
93	16-Dec	.00000	.00000	0.800	::00.650	0.400	.06481	0.750	
94	17-Dec	.00000	.00000	0.800	::00.670	0.750	::00.440	.12957	
95	18-Dec	.00000	.00000	0.790	::00.690	0.410	.09090	0.750	
96	19-Dec	.00000	.00000	0.810	::00.650	0.770	::00.440	.13302	
97	20-Dec	.00000	.00000	0.830	::00.610	0.420	.09727	0.750	
98	21-Dec	.00000	.00000	0.780	::00.610	0.790	::00.440	.13648	
99	22-Dec	.00000	.00000	0.590	::00.510	0.420	.10554	0.790	
100	23-Dec	.00000	.00000	0.590	::00.520	0.830	::00.440	.15103	
101	24-Dec	.00000	.00000	0.590	::00.530	0.400	.10686	0.800	
102	25-Dec	.00000	.00000	0.590	::00.540	0.810	::00.480	.16283	
103	26-Dec	.00000	.00000	0.590	::00.550	0.390	.10617	0.800	
104	27-Dec	.00000	.00000	0.580	::00.550	0.790	::00.490	.16212	
105	28-Dec	Died 12/29/95	#VAL-UE!	Died 12/29/95	#VAL-UE!	Died 12/29/95	#VAL-UE!	Died 12/29/95	VAL-UE!
WEIGHT									
DAY DATE GRAMS H'CRIT									
1 15-Sep 29.62									

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2	16-Sep	29.29	
3	17-Sep	30.45	
4	18-Sep	30.47	
5	19-Sep	30.09	
6	20-Sep	29.85	
7	21-Sep	28.88	
8	22-Sep	29.35	
9	23-Sep	29.62	
10	24-Sep	29.11	
11	25-Sep	28.61	
12	26-Sep	29.58	
13	27-Sep	27.84	
14	28-Sep	26.53	
15	29-Sep	28.91	
16	30-Sep	28.85	
17	1-Oct	28.60	
18	2-Oct	28.42	45
19	3-Oct	28.54	
20	4-Oct	29.13	
21	5-Oct	28.81	
22	6-Oct	29.33	
23	7-Oct	29.38	
24	8-Oct	29.42	
25	9-Oct	29.45	
26	10-Oct	28.60	42
27	11-Oct	29.43	
28	12-Oct	28.68	
29	13-Oct	29.43	
30	14-Oct	29.70	
31	15-Oct	29.90	
32	15-Oct	30.12	
33	17-Oct	29.26	
34	18-Oct	29.50	
35	19-Oct	28.78	
36	20-Oct	29.22	
37	21-Oct	29.23	
38	22-Oct	29.25	
39	23-Oct	29.27	
40	24-Oct	29.26	
41	25-Oct	29.26	
42	26-Oct	28.63	
43	27-Oct	29.84	43
44	28-Oct	29.92	
45	29-Oct	29.99	
46	30-Oct	30.05	43
47	31-Oct	28.61	
48	1-Nov	29.49	
49	2-Nov	28.96	
50	3-Nov	28.68	
51	4-Nov	29.00	
52	5-Nov	29.10	
53	6-Nov	29.24	
54	7-Nov	29.55	
55	8-Nov	31.49	40
56	9-Nov	30.03	
57	10-Nov	29.88	
58	11-Nov	29.76	
59	12-Nov	29.66	
60	13-Nov	29.46	
61	14-Nov	31.17	
62	15-Nov	30.31	46
63	16-Nov	32.11	
64	17-Nov	31.42	
65	18-Nov	31.60	
66	19-Nov	31.80	
67	20-Nov	32.05	41
68	21-Nov	31.57	
69	22-Nov	32.02	
70	23-Nov	32.20	
71	24-Nov	32.46	
72	25-Nov	32.55	
73	26-Nov	32.65	
74	27-Nov	32.78	
75	28-Nov	32.41	
76	29-Nov	33.63	35
77	30-Nov	32.70	

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78	1-Dec	33.26	
79	2-Dec	33.66	
80	3-Dec	34.10	
81	4-Dec	34.51	
82	5-Dec	34.29	
83	6-Dec	34.76	38
84	7-Dec	34.82	
85	8-Dec	34.87	
86	9-Dec	35.47	
87	10-Dec	36.00	
88	11-Dec	36.55	
89	12-Dec	36.65	
90	13-Dec	36.73	17
91	14-Dec	37.34	
92	15-Dec	37.92	
93	16-Dec	35.50	
94	17-Dec	34.00	
95	18-Dec	32.59	
96	19-Dec	31.90	
97	20-Dec	31.30	9
98	21-Dec	32.45	
99	22-Dec	32.70	
100	23-Dec	33.50	
101	24-Dec	34.30	
102	25-Dec	35.10	
103	26-Dec	35.90	
104	27-Dec	36.84	

T-1 AVERAGE GROWTH				T-2 AVERAGE GROWTH				T-3 AVERAGE GROWTH				T-4 AVERAGE GROWTH			
0.042	0.042	0.042	0.000	0.039	0.039	0.039	0.000	0.468	0.398	0.306	0.040	0.485	0.506	0.339	.06190

[0192]

DAY DATE	X	Y	Z	EVOL	X	Y	Z	EVOL	X	Y	Z	EVOL	WEIGHT GRAMS	H CRIT	
	A-500 RT SIDE T-1				A-500 LT LEG T-2				A-500 RT BOT T-3						
1	15-Sep	0.300	0.230	0.390	.0141	0.100	0.100	0.100	.0005	0.100	0.100	0.100	.0005	34.15	
2	16-Sep	0.310	0.240	0.390	.0152	0.310	0.340	0.300	.0166	0.150	0.150	0.150	.0018	33.60	
3	17-Sep	0.280	0.310	0.330	.0150	0.330	0.250	0.300	.0130	0.150	0.150	0.100	.0012	33.44	
4	18-Sep	0.330	0.310	0.250	.0134	0.390	0.310	0.200	.0127	0.200	0.370	0.190	.0074	33.46	
5	19-Sep	0.330	0.270	0.330	.0154	0.390	0.320	0.210	.0137	0.260	0.280	0.210	.0080	34.07	
6	20-Sep	0.320	0.300	0.310	.0156	0.410	0.340	0.250	.0182	0.250	0.260	0.200	.0068	34.54	
7	21-Sep	0.360	0.350	0.370	.0244	0.340	0.340	0.300	.0182	0.310	0.310	0.260	.0131	33.02	
8	22-Sep	0.360	0.340	0.350	.0224	0.350	0.370	0.270	.0183	0.300	0.320	0.300	.0151	33.94	
9	23-Sep	0.400	0.390	0.400	.0327	0.400	0.390	0.290	.0237	0.330	0.350	0.320	.0193	34.27	
10	24-Sep	0.445	0.410	0.405	.0387	0.405	0.400	0.320	.0271	0.340	0.375	0.360	.0240	34.57	
11	25-Sep	0.490	0.430	0.410	.0452	0.410	0.410	0.360	.0317	0.350	0.400	0.400	.0293	34.74	
12	26-Sep	0.480	0.450	0.380	.0430	0.470	0.480	0.360	.0425	0.500	0.470	0.400	.0492	35.72	
13	27-Sep	0.480	0.450	0.380	.0430	0.420	0.490	0.360	.0388	0.530	0.520	0.410	.0592	35.91	
14	28-Sep	0.490	0.450	0.430	.0496	0.420	0.500	0.360	.0396	0.600	0.580	0.400	.0729	34.90	
15	29-Sep	0.530	0.450	0.410	.0512	0.430	0.530	0.290	.0346	0.660	0.590	0.450	.0917	34.38	
16	30-Sep	0.540	0.470	0.430	.0571	0.425	0.540	0.280	.0336	0.670	0.620	0.470	.1022	34.88	
17	1-Oct	0.540	0.490	0.440	.0609	0.420	0.545	0.270	.0324	0.680	0.640	0.485	.1105	35.28	
18	2-Oct	0.550	0.500	0.450	.0648	0.410	0.550	0.250	.0295	0.690	0.650	0.500	.1174	35.71	16
19	3-Oct	0.560	0.490	0.430	.0618	0.390	0.560	0.240	.0274	0.700	0.710	0.500	.1301	34.24	
20	4-Oct	0.580	0.520	0.410	.0647	0.390	0.550	0.250	.0281	0.720	0.730	0.550	.1513	35.68	
21	5-Oct	0.530	0.450	0.390	.0487	0.390	0.530	0.280	.0303	0.600	0.840	0.540	.1900	32.73	
22	6-Oct	0.460	0.350	0.400	.0337	0.400	0.510	0.270	.0288	0.830	0.830	0.570	.2056	32.97	
23	7-Oct	0.440	0.370	0.370	.0315	0.390	0.505	0.260	.0268	0.820	0.820	0.570	.2005	33.30	
24	8-Oct	0.410	0.385	0.345	.0285	0.380	0.500	0.240	.0239	0.810	0.810	0.570	.1958	33.60	
25	9-Oct	0.390	0.400	0.320	.0261	0.370	0.490	0.210	.0199	0.800	0.800	0.570	.1910	33.80	
26	10-Oct	0.350	0.350	0.280	.0180	0.370	0.480	0.200	.0186	0.830	0.850	0.540	.1994	31.90	14
27	11-Oct	DIED 10/11/95			#VAL-UE!	DIED 10/11/95			#VAL-UE!	DIED 10/11/95			#VAL-UE!		

[0193]

DAY	DATE	X	Y	Z	EVOL	X	Y	Z	EVOL	X	Y	Z	EVOL	GRAMS
					A-538 LT CHEEK T-2			A-538 RT ARMPIT T-3			WEIGHT GRAMS			
1	19-Oct	0.200	0.300	0.160	.00503				.00000				.00000	29.67
2	20-Oct	0.200	0.340	0.190	.00676				.00000				.00000	30.24
3	21-Oct	0.220	0.340	0.190	.00744				.00000				.00000	30.10
4	22-Oct	0.240	0.330	0.190	.00788				.00000				.00000	30.00
5	23-Oct	0.260	0.330	0.190	.00853				.00000				.00000	29.93
6	24-Oct	0.250	0.350	0.200	.00916				.00000				.00000	30.12
7	25-Oct	0.250	0.380	0.220	.01094				.00000				.00000	30.20
8	26-Oct	0.260	0.300	0.240	.00980				.00000				.00000	29.30
9	27-Oct	0.260	0.340	0.240	.01111				.00000				.00000	29.69
10	28-Oct	0.280	0.340	0.240	.01196				.00000				.00000	29.80
11	29-Oct	0.290	0.340	0.240	.01239				.00000				.00000	29.87
12	30-Oct	0.300	0.340	0.240	.01262				.00000				.00000	29.93
13	31-Oct	0.300	0.320	0.240	.01206				.00000				.00000	29.51
14	1-Nov	0.310	0.300	0.230	.01120				.00000				.00000	30.26
15	2-Nov	0.350	0.290	0.250	.01328				.00000				.00000	30.34
16	3-Nov	0.340	0.210	0.250	.00934				.00000				.00000	30.39
17	4-Nov	0.360	0.240	0.240	.01086				.00000				.00000	30.20
18	5-Nov	0.380	0.270	0.240	.01289				.00000				.00000	30.10
19	6-Nov	0.390	0.300	0.220	.01347				.00000				.00000	30.02
20	7-Nov	0.390	0.330	0.260	.01752				.00000				.00000	29.94
21	8-Nov	0.400	0.340	0.290	.02065				.00000				.00000	30.67
22	9-Nov	0.400	0.300	0.280	.01759				.00000				.00000	28.55
23	10-Nov	0.410	0.340	0.280	.02043				.00000				.00000	28.86
24	11-Nov	0.430	0.360	0.300	.02431				.00000				.00000	29.20
25	12-Nov	0.470	0.370	0.320	.02913				.00000				.00000	29.60
26	13-Nov	0.500	0.380	0.330	.03262				.00000				.00000	29.88
27	14-Nov	0.520	0.400	0.320	.03484				.00000				.00000	29.16
28	15-Nov	0.540	0.420	0.320	.03799				.00000				.00000	29.41
29	16-Nov	0.570	0.410	0.320	.03915				.00000				.00000	29.33
30	17-Nov	0.600	0.410	0.320	.04121				.00000				.00000	30.45
31	18-Nov	0.620	0.420	0.330	.04499				.00000				.00000	30.41
32	19-Nov	0.640	0.440	0.330	.04865				.00000				.00000	30.38
33	20-Nov	0.660	0.450	0.340	.05286				.00000				.00000	30.33
34	21-Nov	0.650	0.490	0.340	.05669				.00000				.00000	30.07
35	22-Nov	0.670	0.490	0.350	.06015	0.220	0.240	0.200	.00553				.00000	29.97
36	23-Nov	0.685	0.510	0.360	.06584	0.220	0.240	0.200	.00553				.00000	30.50
37	24-Nov	0.700	0.530	0.360	.06992	0.220	0.240	0.200	.00678				.00000	31.23
38	25-Nov	0.700	0.520	0.370	.07050	0.240	0.240	0.200	.00603				.00000	31.30
39	26-Nov	0.700	0.510	0.380	.07102	0.270	0.240	0.200	.00678				.00000	31.40
40	27-Nov	0.700	0.500	0.390	.07146	0.290	0.250	0.200	.00759				.00000	31.56
41	28-Nov	0.700	0.500	0.390	.07146	0.300	0.270	0.220	.00933				.00000	31.66
42	29-Nov	0.700	0.550	0.390	.07860	0.340	0.300	0.220	.01175				.00000	32.41
43	30-Nov	0.780	0.530	0.390	.08440	0.360	0.320	0.220	.01327				.00000	32.39
44	1-Dec	0.760	0.520	0.400	.08275	0.350	0.440	0.260	.02096				.00000	32.12
45	2-Dec	0.780	0.540	0.400	.08820	0.350	0.450	0.260	.02144				.00000	32.80
46	3-Dec	0.800	0.560	0.400	.09381	0.360	0.460	0.260	.02254				.00000	33.20
47	4-Dec	0.820	0.570	0.400	.09767	0.370	0.470	0.260	.02367				.00000	33.54
48	5-Dec	0.860	0.560	0.450	.11345	0.400	0.470	0.260	.02559				.00000	33.48
49	6-Dec	0.860	0.560	0.450	.11345	0.420	0.490	0.300	.03232	0.200	0.200	0.200	.00419	34.32
50	7-Dec	0.870	0.580	0.450	.11887	0.450	0.500	0.300	.03534	0.210	0.200	0.180	.00396	34.86
51	8-Dec	0.870	0.590	0.450	.12092	0.440	0.500	0.330	.03801	0.210	0.200	0.180	.00396	34.83
52	9-Dec	0.890	0.600	0.470	.13139	0.500	0.540	0.330	.04664	0.210	0.210	0.190	.00439	35.50
53	10-Dec	0.900	0.600	0.480	.13569	0.550	0.570	0.330	.05416	0.220	0.220	0.200	.00507	36.20
54	11-Dec	0.910	0.610	0.490	.14239	0.590	0.590	0.330	.06014	0.230	0.230	0.200	.00554	36.97
55	12-Dec	0.930	0.620	0.470	.14187	0.590	0.590	0.330	.06014	0.240	0.240	0.200	.00603	37.20
56	13-Dec	0.950	0.630	0.460	.14412	0.590	0.590	0.330	.06014	0.250	0.250	0.210	.00687	37.43
57	14-Dec	0.940	0.630	0.460	.14261	0.660	0.640	0.330	.07297	0.290	0.280	0.210	.00893	37.65
58	15-Dec	0.930	0.620	0.460	.13885	0.660	0.640	0.340	.07518	0.290	0.270	0.210	.00851	38.15
59	16-Dec	0.910	0.610	0.450	.13077	0.700	0.680	0.350	.08722	0.290	0.270	0.210	.00861	37.60
60	17-Dec	0.880	0.610	0.440	.12365	0.750	0.710	0.350	.09757	0.290	0.270	0.210	.00861	36.90
61	18-Dec	0.850	0.600	0.430	.11480	0.800	0.740	0.360	.11157	0.290	0.270	0.210	.00861	36.24
62	19-Dec	0.870	0.590	0.430	.11555	0.780	0.740	0.360	.10878	0.310	0.300	0.220	.01071	37.20
63	20-Dec	0.890	0.590	0.430	.11820	0.750	0.740	0.360	.10460	0.330	0.330	0.220	.01254	38.26
64	21-Dec	0.930	0.620	0.470	.14187	0.760	0.780	0.360	.11172	0.330	0.330	0.230	.01311	38.65
65	22-Dec	0.980	0.790	0.570	.23102	0.780	0.780	0.390	.12421	0.330	0.330	0.230	.01311	39.82
66	23-Dec	1.000	0.820	0.570	.24468	0.800	0.800	0.390	.13067	0.350	0.330	0.240	.01451	40.80
67	24-Dec	1.050	0.840	0.560	.25857	0.810	0.810	0.390	.13395	0.380	0.340	0.250	.01691	41.90
68	25-Dec	1.100	0.860	0.560	.27733	0.820	0.820	0.440	.15488	0.410	0.340	0.260	.01897	42.80
69	26-Dec	1.130	0.890	0.550	.28957	0.830	0.830	0.440	.15868	0.440	0.350	0.260	.02096	43.80

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DAY DATE	X	Y	Z	EVOL	X	Y	Z	EVOL	X	Y	Z	EVOL	GRAMS		
	A-538 LT SIDE T-1				A-538 LT CHEEK T-2				A-538 RT ARMPIT T-3				WEIGHT GRAMS		
70	27-Dec	1.160	0.920	0.540	.30169	0.830	0.850	0.440	.16250	0.460	0.350	0.270	.02276	44.75	27
71	28-Dec	1.220	1.000	0.550	.35127	0.850	0.870	0.450	.17421	0.460	0.380	0.285	.02068	44.00	
72	29-Dec	1.280	1.040	0.560	.39025	0.870	0.890	0.460	.18646	0.460	0.400	0.300	.02890	43.38	
73	30-Dec	1.290	1.060	0.570	.40803	0.880	0.900	0.480	.19901	0.470	0.400	0.310	.03051	43.70	
74	31-Dec	1.290	1.070	0.580	.41910	0.880	0.920	0.490	.20767	0.470	0.400	0.310	.03051	44.00	
75	1-Jan	1.300	1.090	0.590	.43766	0.890	0.940	0.500	.21898	0.480	0.400	0.320	.03216	44.31	
76	2-Jan	1.300	1.100	0.610	.45665	0.890	0.960	0.500	.22364	0.480	0.400	0.320	.03216	45.18	
77	3-Jan	1.300	1.100	0.610	.45665	0.900	0.960	0.510	.23068	0.480	0.400	0.320	.03216	43.22	24
78	4-Jan	1.300	1.100	0.610	.45665	0.920	0.970	0.540	.25227	0.460	0.400	0.320	.03082	44.61	
79	5-Jan	1.300	1.110	0.610	.46080	0.920	0.970	0.560	.26162	0.480	0.400	0.300	.03015	44.33	
80	6-Jan	1.280	1.150	0.620	.47777	0.930	0.980	0.570	.27196	0.480	0.400	0.300	.03015	44.70	
81	7-Jan	1.260	1.200	0.640	.50658	0.940	0.990	0.580	.28256	0.490	0.400	0.300	.03078	45.00	
82	8-Jan	1.240	1.250	0.660	.53554	0.950	0.990	0.580	.28556	0.330	0.400	0.300	.01885	45.50	
83	9-Jan	1.210	1.280	0.670	.54323	0.960	1.000	0.590	.29561	0.300	0.400	0.300	.01885	45.80	
84	10-Jan	1.190	1.300	0.680	.55070	0.970	1.000	0.590	.29960	0.310	0.400	0.300	.01947	46.20	23
85	11-Jan	1.180	1.310	0.690	.55837	0.970	1.010	0.600	.30712	0.310	0.400	0.300	.01947	46.58	
86	12-Jan	1.200	1.300	0.690	.56350	0.970	1.010	0.630	.32311	0.330	0.400	0.300	.02073	47.33	
87	13-Jan				.00000				.00000				.00000		
88	14-Jan				.00000				.00000				.00000		
89	15-Jan	Died 1/15/96			#VAL-UE!	Died 1/15/96			#VAL-UE!	Died 1/15/96			#VAL-UE!		
	T-1 AVERAGE GROWTH				T-2 AVERAGE GROWTH				T-3 AVERAGE GROWTH						
	0.740	0.593	0.399	0.142	0.638	0.658	0.369	0.112	0.357	0.328	0.254	0.018			

[0194]

DOB 3/25/95	A-540 NECK T-1				A-540 T-2				WEIGHT	HE
DAY DATE	X	Y	Z	EVOL	X	Y	Z	EVOL	GRAMS	CT
1	15-Nov	0.280	0.260	0.210	.00800			.00000	29.97	40
2	16-Nov	0.290	0.280	0.230	.00978			.00000	30.89	
3	17-Nov	0.290	0.290	0.230	.01013			.00000	30.11	
4	18-Nov	0.290	0.290	0.230	.01013			.00000	30.11	
5	19-Nov	0.300	0.290	0.240	.01093			.00000	30.10	
6	20-Nov	0.300	0.290	0.240	.01093			.00000	30.10	41
7	21-Nov	0.320	0.290	0.240	.01186			.00000	29.92	
8	22-Nov	0.360	0.340	0.220	.01410			.00000	30.17	
9	23-Nov	0.380	0.360	0.220	.01576			.00000	30.50	
10	24-Nov	0.400	0.370	0.220	.01705			.00000	30.94	
11	25-Nov	0.420	0.390	0.240	.02058			.00000	31.30	
12	26-Nov	0.440	0.410	0.260	.02455			.00000	31.50	
13	27-Nov	0.450	0.430	0.280	.02836			.00000	31.64	
14	28-Nov	0.450	0.430	0.260	.02634			.00000	29.92	
15	29-Nov	0.470	0.440	0.260	.02815			.00000	30.29	29
16	20-Nov	0.530	0.450	0.260	.03246			.00000	29.83	
17	1-Dec	0.490	0.440	0.300	.03386			.00000	29.61	
18	2-Dec	0.510	0.450	0.320	.03845			.00000	29.90	
19	3-Dec	0.530	0.460	0.330	.04212			.00000	30.38	
20	4-Dec	0.550	0.470	0.340	.04601			.00000	30.78	
21	5-Dec	0.550	0.460	0.340	.04503			.00000	29.63	
22	6-Dec	0.550	0.500	0.340	.04895			.00000	30.60	28
23	7-Dec	0.570	0.530	0.370	.05852			.00000	30.06	
24	8-Dec	0.580	0.550	0.400	.06680			.00000	29.97	
25	9-Dec	0.600	0.570	0.400	.07161			.00000	29.94	
26	10-Dec	0.600	0.590	0.400	.07413			.00000	29.83	
27	11-Dec	0.610	0.610	0.400	.07792			.00000	29.91	
28	12-Dec	0.650	0.620	0.410	.08650			.00000	30.50	
29	13-Dec	0.680	0.630	0.410	.09195			.00000	31.26	26
30	14-Dec	0.700	0.650	0.430	.10242			.00000	30.47	
31	15-Dec	0.720	0.680	0.450	.11534			.00000	36.56	
32	16-Dec	0.740	0.680	0.440	.11591			.00000	35.20	
33	17-Dec	0.760	0.690	0.440	.12079			.00000	34.00	

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DOB 3/25/95		A-540 NECK T-1				A-540 T-2				WEIGHT	HE
DAY	DATE	X	Y	Z	EVOL	X	Y	Z	EVOL	GRAMS	CT
34	18-Dec	0.800	0.690	0.430	.12426				.00000	33.38	
35	19-Dec	0.820	0.710	0.440	.13410				.00000	33.00	
36	20-Dec	0.840	0.720	0.450	.14248				.00000	32.69	19
37	21-Dec	0.750	0.890	0.450	.15725				.00000	34.22	
38	22-Dec	0.810	0.790	0.650	.21774				.00000	35.08	
39	23-Dec	0.850	0.820	0.670	.24447				.00000	35.60	
40	24-Dec	0.890	0.850	0.690	.27326				.00000	36.20	
41	25-Dec	0.930	0.880	0.710	.30419				.00000	36.80	
42	26-Dec	1.000	0.910	0.730	.34776				.00000	37.90	
43	27-Dec	1.060	0.950	0.740	.39010				.00000	38.77	26
44	28-Dec	1.070	0.980	0.720	.39524				.00000	38.00	
45	29-Dec	1.090	0.910	0.700	.36348				.00000	37.47	
46	30-Dec	1.090	0.910	0.700	.36348				.00000	36.00	
47	31-Dec	1.100	0.910	0.700	.36682				.00000	34.50	
48	1-Jan	1.100	0.910	0.700	.36682				.00000	33.08	
49	2-Jan	Died 01/02/96			#VAL-					.00000	
50		T-1 AVERAGE GROWTH									
		0.637	0.584	0.413					0.119		

[0195]

DOB 03/25/95		A-542 NECK T-1				A-542 LT ARM T-2				WEIGHT	HE
DAY	DATE	X	Y	Z	EVOL	X	Y	Z	EVOL	GRAMS	CT
1	27-Nov	0.350	0.400	0.360	.02638				.00000	28.99	
2	28-Nov	0.370	0.410	0.370	.02938				.00000	29.65	
3	29-Nov	0.400	0.450	0.400	.03769				.00000	29.47	40
4	30-Nov	0.440	0.480	0.430	.04754				.00000	29.26	
5	1-Dec	0.470	0.500	0.400	.04921				.00000	29.68	
6	2-Dec	0.480	0.520	0.410	.05357				.00000	29.90	
7	3-Dec	0.490	0.540	0.430	.05956				.00000	30.20	
8	4-Dec	0.500	0.550	0.440	.06334				.00000	30.36	
9	5-Dec	0.510	0.550	0.440	.06461				.00000	30.19	
10	6-Dec	0.510	0.550	0.450	.06608				.00000	30.73	40
11	7-Dec	0.550	0.580	0.470	.07849				.00000	31.18	
12	8-Dec	0.550	0.620	0.480	.08569				.00000	31.69	
13	9-Dec	0.570	0.690	0.490	.10089				.00000	32.20	
14	10-Dec	0.590	0.760	0.510	.11972				.00000	32.90	
15	11-Dec	0.610	0.830	0.520	.13782				.00000	33.33	
16	12-Dec	0.650	0.845	0.530	.15239				.00000	33.90	
17	13-Dec	0.690	0.860	0.520	.16154	0.300	0.240	0.150	.00565	34.59	34
18	14-Dec	0.710	0.920	0.540	.18465	0.300	0.240	0.150	.00565	35.65	
19	15-Dec	0.720	0.890	0.550	.18450	0.280	0.270	0.150	.00594	35.39	
20	16-Dec	0.800	0.940	0.580	.22833	0.280	0.270	0.210	.00831	36.00	
21	17-Dec	0.890	0.980	0.600	.27396	0.270	0.270	0.260	.00992	36.80	
22	18-Dec	0.960	1.010	0.620	.31470	0.270	0.270	0.300	.01145	37.56	
23	19-Dec	0.920	1.050	0.650	.32871	0.250	0.260	0.250	.00851	38.75	
24	20-Dec	0.890	1.090	0.690	.35041	0.190	0.250	0.200	.00497	40.02	33
25	21-Dec	0.910	1.120	0.690	.36815	0.240	0.260	0.200	.00653	40.04	
26	22-Dec	0.960	1.010	0.610	.30953	0.230	0.380	0.200	.00915	39.57	
27	23-Dec	0.960	1.010	0.600	.30455	0.230	0.380	0.200	.00915	38.80	
28	24-Dec	0.960	1.010	0.600	.30455	0.220	0.380	0.200	.00875	38.20	
29	25-Dec	0.950	1.010	0.590	.29636	0.220	0.380	0.200	.00875	37.60	
30	26-Dec	0.950	1.010	0.590	.29636	0.210	0.380	0.200	.00836	37.00	
31	27-Dec	0.940	1.010	0.590	.29324	0.200	0.380	0.190	.00756	36.36	32
32	28-Dec	0.950	1.015	0.530	.26754	0.225	0.380	0.210	.00940	37.40	
33	29-Dec	0.960	1.020	0.450	.23068	0.250	0.390	0.220	.01123	38.52	
34	30-Dec	0.970	1.040	0.470	.24821	0.270	0.400	0.220	.01244	39.10	
35	31-Dec	0.980	1.070	0.480	.26349	0.290	0.410	0.230	.01432	39.70	
36	1-Jan	0.980	1.090	0.490	.27401	0.320	0.410	0.230	.01580	40.20	
37	2-Jan	0.980	1.110	0.520	.29612	0.320	0.430	0.240	.01729	41.92	
38	3-Jan	0.960	1.140	0.510	.29219	0.340	0.470	0.240	.02008	43.00	30
39	4-Jan	0.930	1.260	0.520	.31899	0.360	0.470	0.260	.02303	46.30	
40	5-Jan	0.960	1.110	0.520	.29008	0.400	0.470	0.270	.02657	37.13	
41	6-Jan	0.960	1.110	0.540	.30123	0.440	0.490	0.310	.03499	37.40	

-continued

DOB 03/25/95		A-542 NECK T-1				A-542 LT ARM T-2				WEIGHT	HE
DAY	DATE	X	Y	Z	EVOL	X	Y	Z	EVOL	GRAMS	CT
42	7-Jan	0.960	1.110	0.560	.31239	0.480	0.510	0.350	.04485	37.80	
43	8-Jan	0.960	1.100	0.580	.32063	0.530	0.530	0.390	.05735	38.10	
44	9-Jan	0.960	1.100	0.600	.33169	0.570	0.540	0.410	.06606	38.40	
45	10-Jan	0.960	1.100	0.620	.34275	0.610	0.550	0.430	.07552	38.60	30
46	11-Jan	0.960	1.100	0.620	.34275	0.660	0.550	0.440	.08361	38.80	
47	12-Jan	0.950	1.000	0.630	.31331	0.650	0.570	0.430	.08340	38.84	
48	13-Jan	0.990	1.000	0.630	.32651	0.710	0.590	0.440	.09549	39.80	
49	14-Jan	1.020	1.010	0.620	.33437	0.780	0.600	0.450	.11025	40.70	
50	15-Jan	1.050	1.010	0.620	.34421	0.840	0.610	0.450	.12071	41.65	
51	16-Jan	1.040	0.970	0.620	.32743	0.830	0.640	0.460	.12792	42.40	
52	17-Jan	1.040	0.990	0.580	.31262	0.870	0.640	0.470	.13700	40.85	30
53	18-Jan	Died 1/18/96			#VAL-UE!	Died 1/18/96			#VAL-UE!		
54	19-Jan	T-1 AVERAGE GROWTH				T-2 AVERAGE GROWTH					
55	20-Jan	0.803	0.897	0.536	0.226	0.401	0.424	0.284	0.034		

[0196]

DOB 6/27/95		A-592 LT LEG T-1				A-592 LT ARMPIT T-2				A-592 RT ARM T-3				WEIGHT	HE
DAY	DATE	X	Y	Z	EVOL	X	Y	Z	EVOL	X	Y	Z	EVOL	GRAMS	CT
1	16-Jan	0.480	0.380	0.170	.0162				.0000				.0000	32.86	
2	17-Jan	0.530	0.380	0.200	.0211	0.210	0.200	0.110	.0024				.0000	31.03	41
3	18-Jan	0.550	0.430	0.220	.0272	0.200	0.200	0.100	.0021				.0000	31.64	
4	19-Jan	0.560	0.440	0.220	.0284	0.200	0.200	0.100	.0021				.0000	30.94	
5	20-Jan	0.620	0.480	0.250	.0389	0.200	0.190	0.100	.0020				.0000	30.60	
6	21-Jan	0.680	0.530	0.280	.0528	0.200	0.190	0.100	.0020				.0000	31.20	
7	22-Jan	0.740	0.570	0.300	.0662	0.200	0.180	0.100	.0019				.0000	31.98	
8	23-Jan	0.800	0.610	0.300	.0766	0.190	0.170	0.100	.0017				.0000	32.51	
9	24-Jan	0.810	0.670	0.300	.0852	0.200	0.180	0.110	.0021				.0000	34.80	35
10	25-Jan	0.830	0.680	0.310	.0916	0.200	0.210	0.110	.0024				.0000	36.02	
11	26-Jan	0.920	0.750	0.340	.1228	0.200	0.210	0.110	.0024				.0000	35.83	
12	27-Jan	0.950	0.750	0.350	.1305	0.200	0.210	0.110	.0024				.0000	36.80	
13	28-Jan	0.890	0.750	0.350	.1360	0.190	0.200	0.110	.0022				.0000	37.80	
14	29-Jan	1.030	0.750	0.460	.1860	0.190	0.200	0.110	.0022	0.260	0.270	.0080	.0029	38.59	
15	30-Jan	1.110	0.810	0.490	.2306	0.210	0.200	0.110	.0024	0.260	0.280	0.090	.0034	42.38	
16	31-Jan	1.150	0.850	0.500	.2559	0.240	0.200	0.110	.0028	0.260	0.290	0.120	.0047	42.30	25
17	1-Feb	1.170	0.840	0.540	.2778	0.230	0.200	0.110	.0026	0.280	0.300	0.120	.0053	42.44	
18	2-Feb	1.220	1.000	0.590	.3768	0.250	0.260	0.110	.0037	0.270	0.290	0.120	.0049	44.98	
19	3-Feb	1.340	1.070	0.610	.4579	0.250	0.260	0.110	.0037	0.290	0.290	0.120	.0053	45.97	
20	4-Feb	1.360	1.100	0.650	.5091	0.230	0.250	0.110	.0033	0.310	0.300	0.140	.0068	46.80	
21	5-Feb	1.480	1.140	0.690	.6094	0.220	0.240	0.120	.0033	0.330	0.300	0.150	.0078	48.63	
22	6-Feb	1.430	1.150	0.710	.6112	0.220	0.240	0.120	.0033	0.340	0.310	0.150	.0083	50.98	
23	7-Feb	1.500	1.200	0.760	.7161	0.220	0.240	0.120	.0033	0.360	0.340	0.160	.0103	51.25	20
24	8-Feb	1.520	1.240	0.760	.7499	0.200	0.210	0.120	.0026	0.360	0.340	0.160	.0103	53.65	
25	9-Feb	1.600	1.250	0.760	.7957	0.210	0.210	0.130	.0030	0.360	0.340	0.160	.0103	54.20	
26	10-Feb	1.640	1.270	0.760	.8287	0.220	0.210	0.130	.0031	0.360	0.350	0.160	.0106	54.80	
27	11-Feb	1.680	1.290	0.760	.8622	0.230	0.220	0.130	.0034	0.360	0.360	0.170	.0115	56.40	
28	12-Feb	1.750	1.300	0.760	.9051	0.240	0.220	0.140	.0039	0.360	0.370	0.170	.0119	56.06	
29	13-Feb	1.700	1.340	0.760	.9053	0.220	0.220	0.120	.0030	0.360	0.360	0.170	.0115	50.11	
30	14-Feb	1.680	1.350	0.690	.8192	0.220	0.260	0.140	.0042	0.380	0.360	0.210	.0150	50.57	
31	15-Feb	Died 2/15/96			#VAL-UE!	Died 2/15/96			#VAL-UE!	Died 2/15/96			#VAL-UE!		

[0197]

DOB 6/27/95		A-594 RT SIDE T-1				A-594 T-2				WEIGHT	HE
DAY	DATE	X	Y	Z	EVOL	X	Y	Z	EVOL	GRAMS	CT
1	12-Jan	0.160	0.200	0.090	.00151				.00000	41.92	
2	13-Jan	0.200	0.210	0.090	.00198				.00000	41.40	
3	14-Jan	0.240	0.220	0.100	.00276				.00000	40.80	
4	15-Jan	0.270	0.230	0.100	.00325				.00000	40.20	
5	16-Jan	0.270	0.220	0.090	.00283				.00000	39.95	
6	17-Jan	0.280	0.230	0.100	.00337				.00000	39.73	
7	18-Jan	0.260	0.240	0.110	.00359				.00000	39.49	
8	19-Jan	0.280	0.280	0.140	.00575				.00000	39.60	
9	20-Jan	0.300	0.280	0.150	.00660				.00000	39.10	
10	21-Jan	0.340	0.290	0.150	.00774				.00000	38.50	
11	22-Jan	0.360	0.290	0.160	.00874				.00000	38.06	
12	23-Jan	0.390	0.300	0.230	.01409				.00000	39.57	
13	24-Jan	0.450	0.340	0.240	.01922				.00000	39.28	43
14	25-Jan	0.400	0.360	0.260	.02254				.00000	39.32	
15	26-Jan	0.500	0.390	0.290	.02960				.00000	39.09	
16	27-Jan	0.520	0.420	0.290	.03316				.00000	38.80	
17	28-Jan	0.530	0.440	0.290	.03540				.00000	38.30	
18	29-Jan	0.550	0.470	0.290	.03924				.00000	37.97	
19	30-Jan	0.560	0.490	0.290	.04166				.00000	38.79	
20	31-Jan	0.590	0.530	0.340	.05566				.00000	38.82	38
21	1-Feb	0.640	0.570	0.340	.08493				.00000	39.08	
22	2-Feb	0.670	0.610	0.360	.07702				.00000	39.85	
23	3-Feb	0.700	0.640	0.370	.06678				.00000	39.65	
24	4-Feb	0.740	0.670	0.360	.09344				.00000	39.90	
25	5-Feb	0.790	0.700	0.360	.10422				.00000	40.20	
26	6-Feb	0.860	0.790	0.300	.10670				.00000	39.53	
27	7-Feb	0.920	0.940	0.340	.15393				.00000	38.66	32
28	8-Feb	1.020	1.010	0.290	.15640				.00000	37.37	
29	9-Feb	1.030	1.030	0.290	.15106				.00000	36.40	
30	10-Feb	1.050	1.050	0.280	.16160				.00000	35.00	
31	11-Feb	1.060	1.070	0.280	.16625				.00000	33.50	
32	12-Feb	1.070	1.080	0.280	.16939				.00000	31.95	
33	13-Feb	1.110	1.060	0.310	.19094				.00000	30.87	
34	14-Feb	1.110	1.100	0.270	.17258				.00000	33.88	20
35	15-Feb	1.170	1.090	0.270	.18026				.00000	34.31	
36	16-Feb	Died 2/16/96			#VAL-UE!				.00000		

APPENDIX C

TREATED MOUSE DATA (EXTERNAL MODULATOR EMBODIMENT)

[0198]

<u>Index (Pages numbered on back)</u>		
Appendix	Subject	Pages
C1	OUI-738	116

[0199]

DAY	DATE	T-1 Lt Underarm			Vol	WEIGHT	HEMATO-	TREATMENT PARAMETERS				
		Ln	Wd	Ht				T-1	Gr	CRIT-%	DEVICE	FREQ MHz
1	5-Mar	0.110	0.110	0.110	.00070	37.95		8662A	43351855.0			43353800.0
2	6-Mar	0.110	0.110	0.110	.00070	36.83		8662A	43351855.0			43353800.0
3	7-Mar	0.100	0.110	0.100	.00058	36.00		8662A	43351855.0			43353800.0
4	8-Mar	0.110	0.100	0.100	.00058	36.02	46	8662A	43351855.0			43353800.0

-continued

5	9-Mar	0.110	0.100	0.100	.00058	36.25			NO TREATMENT	NO TREATMENT
6	10-Mar	0.100	0.100	0.100	.00052	36.56		8662A	43351855.0	43353800.0
7	11-Mar	0.110	0.100	0.090	.00052	35.32		8662A	43351855.0	43353800.0
8	12-Mar	0.110	0.110	0.080	.00051	34.88		8662A	43346000.0	43353800.0
9	13-Mar	0.120	0.120	0.070	.00053	35.11		8662A	43351855.0	43346000.0
10	14-Mar	0.130	0.120	0.070	.00057	34.91		8662A	43351855.0	43353800.0
11	15-Mar	0.140	0.130	0.060	.00057	34.84	44	8662A	43351855.0	43353800.0
12	16-Mar	0.145	0.130	0.065	.00064	35.20			NO TREATMENT	NO TREATMENT
13	17-Mar	0.150	0.130	0.070	.00071	35.58		8662A	43351855.0	43353800.0
14	18-Mar	0.150	0.130	0.070	.00071	35.25		8662A	43351855.0	43353800.0
15	19-Mar	0.150	0.120	0.070	.00066	33.66		8662A	43351855.0	43353800.0
16	20-Mar	0.160	0.120	0.070	.00070	33.81		8662A	43351855.0	43353800.0
17	21-Mar	0.160	0.120	0.070	.00070	32.67		8662A	43351855.0	43353800.0
18	22-Mar	0.160	0.130	0.070	.00076	32.83	43	8662A	43351855.0	43353800.0
19	23-Mar	0.160	0.130	0.070	.00076	33.23			NO TREATMENT	NO TREATMENT
20	24-Mar	0.170	0.130	0.080	.00093	33.63		8662A	43351855.0	43353800.0
21	25-Mar	0.180	0.130	0.080	.00098	33.01		8662A	43351855.0	43353800.0
22	26-Mar	0.190	0.130	0.070	.00091	32.69		8662A	43351855.0	43353800.0
23	27-Mar	0.190	0.130	0.080	.00103	31.25		8662A	43351855.0	43353800.0
24	28-Mar	0.190	0.130	0.080	.00103	31.63		8662A	43351855.0	43353800.0
25	29-Mar	0.190	0.130	0.080	.00103	31.11	44	8662A	43351855.0	43353800.0
26	30-Mar	0.190	0.130	0.080	.00103	31.36			NO TREATMENT	NO TREATMENT
27	31-Mar	0.200	0.130	0.070	.00095	31.64		8662A	43351855.0	43353800.0
28	1-Apr	0.210	0.130	0.070	.00100	31.83		8662A	43351855.0	43353800.0
29	2-Apr	0.210	0.130	0.070	.00100	31.11		8662A	43351855.0	43353800.0
30	3-Apr	0.210	0.140	0.070	.00108	31.80		8662A	43351855.0	43353800.0
31	4-Apr	0.220	0.140	0.080	.00129	30.98		8662A	43351855.0	43353800.0
32	5-Apr				.00000				NO TREATMENT	NO TREATMENT
33	6-Apr				.00000					

						TREATMENT PARAMETERS		
	DAY	DATE	POWER	TIME	DEVICE			
	1	5-Mar	0.0 dBm	1, 1	SW & HP			
	2	6-Mar	0.0 dBm	1, 1	SW & HP			
	3	7-Mar	0.0 dBm	1, 1	SW & HP			
	4	8-Mar	0.0 dBm	1, 1	SW & HP			
	5	9-Mar						
	6	10-Mar	0.0 dBm	1, 1	SW & NP			
	7	11-Mar	0.0 dBm	1, 1	SW & NP			
	8	12-Mar	0.0 dBm	1, 1	SW & NP			
	9	13-Mar	0.0 dBm	1, 1	SW & NP			
	10	14-Mar	0.0 dBm	1, 1	SW & NP			
	11	15-Mar	0.0 dBm	1, 1	SW & HP			
	12	16-Mar						
	13	17-Mar	0.0 dBm	1, 1	SW & HP			
	14	18-Mar	0.0 dBm	1, 1	SW & HP			
	15	19-Mar	0.0 dBm	1, 1	SW & HP			
	16	20-Mar	0.0 dBm	1, 1	SW & HP			
	17	21-Mar	0.0 dBm	1, 1	SW & HP			
	18	22-Mar	0.0 dBm	1, 1	SW & HP			
	19	23-Mar						
	20	24-Mar	-40 dBm	1, 1	SW & HP			
	21	25-Mar	-50 dBm	1, 1	SW & HP			
	22	26-Mar	0.0 dBm	1, 1	SW & HP			
	23	27-Mar	0.0 dBm	1, 1	SW & HP			
	24	28-Mar	0.0 dBm	1, 1	SW & HP			
	25	29-Mar	0.0 dBm	1, 1	SW & HP			
	26	30-Mar						
	27	31-Mar	0.0 dBm	1, 1	SW & HP			
	28	1-Apr	0.0 dBm	1, 1	SW & HP			
	29	2-Apr	0.0 dBm	1, 1	SW & HP			
	30	3-Apr	0.0 dBm	1, 1	SW & HP			
	31	4-Apr	0.0 dBm	1, 1	SW & HP			
	32	5-Apr						
	33	6-Apr						

We claim:

1. Therapeutic apparatus, comprising
 - means for generating an approximately 60 Hz., 50% duty cycle square wave signal pulsed at a second 50% duty cycle at approximately 1.167 Hz.,
 - a quartz crystal with a resonant frequency in the radio frequency range, serially driven by said signal,
 - a wire loop, the input of which is serially driven by the output of said quartz crystal, and the other end of which is grounded with respect to said square wave generating means.
2. The apparatus of claim 1, wherein the frequency of the crystal is selected from the group of frequencies consisting of: 43,322,480 Hz., 43,322,492 Hz., 43,322,485 Hz., 43,346,000 Hz., 43,346,090 Hz., 43,346,000 Hz., 43,346,050 Hz., 43,353,800 Hz., 43,353,800 Hz., 43,353,850 Hz., 43,353,800 Hz., 43,296,000 Hz., 43,351,830 Hz., 43,351,850 Hz., 43,351,855 Hz., 43,351,870 Hz., 43,352,000 Hz., and 43,245,000 Hz., all ± 20 Hz.
3. The apparatus of claim 1, wherein the means for generating said approximately 60 Hz., 50% duty cycle square wave signal pulsed at a second 50% duty cycle at approximately 1.167 Hz. comprises
 - means for generating a first square wave of approximately 60 Hz., at a duty cycle of approximately 50%,
 - means for generating a second square wave of approximately 1.167 Hz., at a duty cycle of approximately 50%, and
 - means for ANDing said first square wave and said second square wave.
4. The apparatus of claim 3, wherein between said ANDing means and said crystal there is inserted a series LC filtering means comprising an inductor and a variable capacitor.
5. The apparatus of claim 4, wherein said wire loop is made from approximately five turns spaced approximately 3.175 mm. apart of a wire approximately 60 cm. long.
6. The apparatus of claim 5, wherein said wire loop is mounted on the housing of the apparatus.
7. The apparatus of claim 6, wherein the power supply for the apparatus comprises a battery housed within the apparatus so as to render the apparatus self-contained.
8. The apparatus of claim 6, wherein the power supply for the apparatus comprises an external, power line driven transformer.
9. Therapeutic apparatus, comprising,
 - a stable frequency generator means having a modulation input, a range of radio frequency outputs, the ability to provide output at a steady power of 1 mw or less, and the ability to provide radio frequency output tunable to at least one half a part per million,
 - a modulator, connected to said modulation input, providing an approximately 60 Hz., 50% duty cycle square wave signal pulsed at a second 50% duty cycle at approximately 1.167 Hz., and
 - a wire loop, one end of which is connected to the output of said frequency generator means, and the other end of which is grounded with respect to said frequency generator means.
10. The apparatus of claim 9, wherein said radio frequency output is selected from the group of frequencies consisting of: 43,322,480 Hz., 43,322,492 Hz., 43,322,485 Hz., 43,346,000 Hz., 43,346,090 Hz., 43,346,000 Hz., 43,346,050 Hz., 43,353,800 Hz., 43,353,800 Hz., 43,353,850 Hz., 43,353,800 Hz., 43,296,000 Hz., 43,351,830 Hz., 43,351,850 Hz., 43,351,855 Hz., 43,351,870 Hz., 43,352,000 Hz., and 43,245,000 Hz., all ± 20 Hz.
11. The apparatus of claim 9, wherein said modulator comprises
 - means for generating a first square wave of approximately 60 Hz. at a duty cycle of approximately 50%,
 - means for generating a second square wave of approximately 1.167 Hz. at a duty cycle of approximately 50%, and
 - means for ANDing said first square wave and said second square wave.
12. Therapeutic apparatus, comprising,
 - a stable frequency generator means having a range of radio frequency outputs, the ability to provide output at a steady power of 1 mw or less, and the ability to provide radio frequency output tunable to at least one half a part per million,
 - a modulator, connected in series to the radio frequency output of said modulation input, providing an approximately 60 Hz., 50% duty cycle square wave signal pulsed at a second 50% duty cycle at approximately 1.167 Hz., and
 - a wire loop, one end of which is connected to the output of said frequency generator means, and the other end of which is grounded with respect to said frequency generator means.
13. The apparatus of claim 12, wherein said radio frequency output is selected from the group of frequencies consisting of: 43,322,480 Hz., 43,322,492 Hz., 43,322,485 Hz., 43,346,000 Hz., 43,346,090 Hz., 43,346,000 Hz., 43,346,050 Hz., 43,353,800 Hz., 43,353,800 Hz., 43,353,850 Hz., 43,353,800 Hz., 43,296,000 Hz., 43,351,830 Hz., 43,351,850 Hz., 43,351,855 Hz., 43,351,870 Hz., 43,352,000 Hz., and 43,245,000 Hz., all ± 20 Hz.
14. The apparatus of claim 12, wherein said modulator comprises
 - means for generating a first square wave of approximately 60 Hz. at a duty cycle of approximately 50%,
 - means for generating a second square wave of approximately 1.167 Hz. at a duty cycle of approximately 50%,
 - means for ANDing said first square wave and said second square wave, and
 - means responsive to said ANDed first and second square wave for switching a series radio frequency signal.
15. The apparatus of claim 12 wherein, said wire loop is connected to the output of said frequency generator means by a Hewlett-Packard 10501A or equivalent shielded coaxial cable.
16. A method for treating cancer and other illnesses in a human or animal subject, comprising,
 - generating a radio frequency signal tuned to a treatment frequency that has been specified to a precision of at least one half of a part per million;

modulating said radio frequency with an approximately 60 Hz. square wave with an approximately 50% duty cycle which has been gated by an approximately 1.167 Hz. square wave with an approximately 50% duty cycle

applying said modulated radio frequency signal at a power of 1 mw or less to one end of a wire loop and grounding the other end of said loop,

placing said wire loop to which said modulated radio frequency signal has been applied on the surface of the subject's body for a period of at least one hour.

17. The method of claim 16, wherein said radio frequency is selected from the group of frequencies consisting of: 43,322,480 Hz., 43,322,492 Hz., 43,322,485 Hz., 43,346,000 Hz., 43,346,090 Hz., 43,346,000 Hz., 43,346,050 Hz., 43,353,800 Hz., 43,353,800 Hz., 43,353,850 Hz., 43,353,

800 Hz., 43,296,000 Hz., 43,351,830 Hz., 43,351,850 Hz., 43,351,855 Hz., 43,351,870 Hz., 43,352,000 Hz., and 43,245,000 Hz., all ± 20 Hz.

18. The method of claim 16, wherein said wire loop is made from approximately five turns spaced approximately 3.175 cm. apart of a wire approximately 60 cm. long

19. A low power, precisely tuned, stable RF generator comprising,

means for generating a sequence of audio frequency square waves, and

a quartz crystal tuned to an RF frequency, connected in series to said square wave generating means.

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