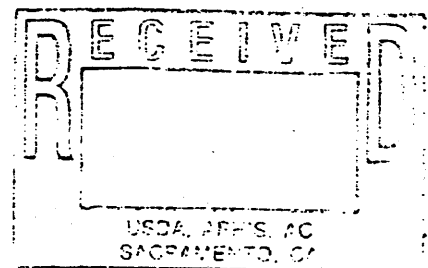


93R0353

**Category E Justification Statement
For
1998-99 USDA Annual Report**

Thirty-three (33) animals were included in the "E" category because these animals were on studies involving induction of Parkinson's disease and we presume that there is some psychological distress associated with the temporary impairment of motor function experienced by these animals. In humans, Parkinson's disease causes increasing motor impairment and a portion of our research into the nature and possible treatment of this disorder involves induction of the disorder in living animals. In particular, non-human primates represent the only animal model in which the behavioral, neurochemical, and neuropathological features of parkinsonism are fully expressed and thus they are the best model for studies on Parkinson's disease. Based on the experience in humans, this disorder is not known to cause physical pain; however, we presume the animals experience some distress during the time they have diminished motor function. We have strong reason to believe that this statement is correct, since we have cared for a number of humans with a form of parkinsonism which is identical to that experienced by these animals, and none had pain. The impairment in our experimental studies cannot be alleviated since it is necessary to the objectives of our studies. Use of sedatives or tranquilizers is also not justified because the effects of these agents would interfere with the results of our investigations. Nor is it justified on purely medical grounds, since pain, psychosis, or agitation, are not a part of this syndrome based on our experience in humans.



UNITED STATES DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO.

12-93-R-0354

FORM APPROVED
OMB NO. 0579-0036

MS

ANNUAL REPORT OF RESEARCH FACILITY
(TYPE OR PRINT)

2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, include Zip Code)

CENTAU PHARMACEUTICALS, INC.
484 OAKHEAD PARKWAY
SUNNYVALE, CA 94086

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, teaching, or experimentation, or held for these purposes. Attach additional sheets if necessary.)

FACILITY LOCATIONS (Sites)

484 OAKHEAD PARKWAY

SUNNYVALE, CA 94086

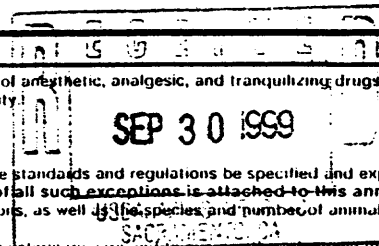
REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY (Attach additional sheets if necessary or use APHIS FORM 7023A)

A. Animals Covered By The Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain- relieving drugs.	D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	E. Number of animals upon which teaching, experiments, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used must be attached to this report).	F. TOTAL NO. OF ANIMALS (Cols. C + D + E)
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters					
8. Rabbits					
9. Non-human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					

NO REGULATED ANIMALS USED

ASSURANCE STATEMENTS

- 1) Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.
- 2) Each principal investigator has considered alternatives to painful procedures.
- 3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all such exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.
- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.



CERTIFICATION BY HEADQUARTES RESEARCH FACILITY OFFICIAL.

(Chief Executive Officer or Legally Responsible Institutional Official)

I certify that the above is true, correct, and complete (7 USC Section 2143)

SIGNATURE OF

ONAL OFFICIAL

NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)

DATE SIGNED

9/29/99

(b)(6), (b)(7)(C)