

Form sGnRH_a/OvaRH-W: Worksheet for Designing Clinical Field Trials under sGnRH_a INAD 012-186

INSTRUCTIONS

- Investigator must fill out Form sGnRH_a/OvaRH-W for each trial conducted under this INAD **before** actual use of salmon Gonadotropin Releasing Hormone analog. The Investigator is responsible that Form sGnRH_a/OvaRH-W is completed accurately.
- Investigator should keep the original on file, and send a copy to the Study Monitor for review.
- After review, the Study Monitor will send a copy to the AADAP Office for assignment of the Study Number. The AADAP Office will review the worksheet, and then send the assigned trial Study Number to both the Investigator and Study Monitor, at which time the trial may be initiated.
- Note:** Both Investigator and Study Monitor should sign and date Form sGnRH_a/OvaRH-W.

SITE INFORMATION

| | | | |
|--|--|-----|--|
| Facility | | | |
| Address | | | |
| | | | |
| Investigator | | | |
| Reporting Individual (if not Investigator) | | | |
| Phone | | Fax | |

FISH CULTURE AND DRUG TREATMENT INFORMATION

| | | | | | | |
|--|------------------------------|--|-------|---|--------------------------|------------------|
| Fish species to be treated | | | | | | |
| Average fish size (in) | | | | Average fish weight (gm) | | |
| Number of treated males | | | | Number of treated females | | |
| Number of control males | | | | Number of control females | | |
| Anticipated date of treatment | | | | Estimated total amount of drug for proposed treatments (mg) | | |
| Intended sGnRH _a dosage (ug/kg) | Females | | Males | | Method of administration | Injection |
| Number of injections | Females | | Males | | Injection interval (hrs) | |
| Drug manufacturer | Western Chemical Inc. | | | Drug lot number | | |

Worksheet for Designing Clinical Field Trials - Version 1

STUDY DESIGN: Describe in detail the purpose of the clinical trial. For example you might compare dosage, or treated fish compared to untreated fish. Study design must be carefully focused and lend itself to rigorous evaluation. If more space is required to describe study details, title additional page(s) "Study Design" and attach them to this Worksheet.

Study designed by _____

DISPOSITION OF TREATED FISH (Human Food Safety Considerations):

All fish treated with sGnRH α (OvaRH[®]) must be maintained in culture facilities for at least 14 days following treatment before they may be released or allowed to enter the food chain. If fish are treated (injected) more than once, this requirement will be based on the date/time of final treatment. Investigator should initial here to indicate awareness that fish disposition must be in compliance with the FDA-mandated withdrawal time as described in Section XV of the Study Protocol.

WORKER SAFETY CONSIDERATIONS:

Investigator should initial here to indicate that all personnel handling drug have read the Material Safety Data Sheet for salmon gonadotropin releasing hormone analog (OvaRH[®]) and have been provided protective equipment, in good working condition, as described in the MSDS.

Date Prepared: _____ Investigator: _____

Date Reviewed: _____ Study Monitor: _____

Form sGnRHa/OvaRH-1: Report on Receipt of Drug - Guide for Reporting Investigational New Animal Drug Shipments for Poikilothermic Food Animals

INSTRUCTIONS

1. Investigator must fill out Form sGnRHa/OvaRH-1 **immediately** upon receipt of OvaRH.
2. Investigator should keep the original on file, and send one copy to the Study Monitor for review.
3. Within 10 days of receipt, the Study Monitor should send a copy to the AADAP Office.
4. **Note:** Both Investigator and Study Monitor should sign and date Form sGnRHa/OvaRH-1.

The sponsor, U.S. Fish and Wildlife Service, submits a notice of claimed investigational exemption for the shipment or delivery of a new animal drug under the provisions of Section 512 of the Federal Food, Drug, and Cosmetics Act. The following information is submitted in triplicate:

| | | | |
|--|---|--|---------|
| Name of Drug | sGnRHa (OvaRH®) | INAD Number | 012-186 |
| Proposed Use of Drug | To induce gamete maturation in freshwater and marine finfish. | | |
| Date of CVM Authorization Letter | 10/24/12 | | |
| Source of Drug | Western Chemical Inc. | | |
| Date of Drug Receipt | | Amount of Drug Received | |
| Drug Lot Number | | Study Worksheet Number | |
| Name of Investigator | | | |
| Address of Investigator | | | |
| Location of Trial | | | |
| Pivotal Study (yes/no) | Yes | Non-pivotal Study (yes/no) | ----- |
| Approximate Number of Treated Animals | | Approximate Number of Control Animals | |
| Number of Animals Used Previously¹ | | | |
| Study Protocol Number | 012-186 | | |
| Approximate dates of trial (start/end) | | | |
| Species, Size, and Type of Animals | | | |
| Maximum daily dose and duration | 50 ug/Kg body weight | | |
| Methods of Administration | Injection | | |
| Withdrawal Period | 14 days | | |

¹ To be filled out by the AADAP Office

Date Prepared: _____ **Investigator:** _____

Date Reviewed: _____ **Study Monitor:** _____

Date Reviewed: _____ **Sponsor:** _____

Form sGnRH_a/OvaRH-3: Results Report Form

For Use in sGnRH_a (OvaRH[®]) Clinical Field Trials Conducted under sGnRH_a INAD 012-186

INSTRUCTIONS

- Investigator must fill out Form sGnRH_a/OvaRH-3 no later than 10 days after completion of the study period. Study Number must be recorded on all pages of Form sGnRH_a/OvaRH-3. Attach lab reports and other information.
- If sGnRH_a was not used under the assigned Study Number, fill out only the Site Information portion on this page, and skip to the end of page 3 and fill out only the "Negative Report" section.
- Investigator should keep the original on file, and send a copy to the Study Monitor. Within 10 days of receipt, the Study Monitor should send a copy to the AADAP Office for inclusion in the permanent file.
- Note:** Both Investigator and Study Monitor should sign and date Form sGnRH_a/OvaRH-3.

SITE INFORMATION

| | |
|----------------------|--|
| Facility | |
| Reporting Individual | |

FISH CULTURE AND DRUG TREATMENT INFORMATION

| | | | |
|---|--|---|--|
| Drug lot number | | Total amount drug used (mg) | |
| Fish species treated | | Water temperature (°F) | |
| Drug dosage - males (ug/kg body wt) | | Drug dosage - females (ug/kg body wt) | |
| Average fish weight (gm) | | Average fish length (in) | |
| Number of treated females | | Number of treated males | |
| Number of control females | | Number of control males | |
| Treatment date(s) | | Injection method (IP or IM) | |
| Number of injections/female and injection interval (hrs) | | Number of injections/male and injection interval (hrs) | |
| Females - Ratio of priming dose to resolving dose (e.g. priming dose 10% and resolving dose 90% of total dose = 10/90) | | Males - Ratio of priming dose to resolving dose (e.g. priming dose 10% and resolving dose 90% of total dose = 10/90) | |
| Spawning/evaluation date(s) | | Spawning/evaluation interval (time from treatment until spawning) | |

sGnRH_a/OvaRH[®] Results Record - Females

INSTRUCTIONS

1. "Ripe" females are those fish that have ovulated or released their eggs. "None-ripe" fish are the converse.
2. Use additional copies of Results Record for additional fish treated.

Be sure the facility name is written here: _____

| | | sGnRH _a TREATED FISH - Females | | | | | CONTROL FISH - Females | | | | |
|--------|-----------------|---|------|----------|----------|---------|------------------------|------|----------|-----------|----------|
| Fish # | Date(s) Treated | Date Evaluated | Ripe | Non-ripe | % Eye-up | % Hatch | Date Evaluated | Ripe | Non-ripe | % Eye-up* | % Hatch* |
| 1 | | | | | | | | | | | |
| 2 | | | | | | | | | | | |
| 3 | | | | | | | | | | | |
| 4 | | | | | | | | | | | |
| 5 | | | | | | | | | | | |
| 6 | | | | | | | | | | | |
| 7 | | | | | | | | | | | |
| 8 | | | | | | | | | | | |
| 9 | | | | | | | | | | | |
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| 18 | | | | | | | | | | | |
| 19 | | | | | | | | | | | |
| 20 | | | | | | | | | | | |

* If eggs from multiple females have been combined during incubation, indicate data from combined egg lots with a vertical line "connecting" all females contributing to a single egg lot

sGnRH_a/OvaRH[®] Results Record - Males

INSTRUCTIONS

1. "Ripe" males are those fish that are actively spermiating. "None-ripe" males are the converse.
2. Use additional copies of Results Record for additional fish treated.

Be sure the facility name is written here: _____

| | | sGnRH _a TREATED FISH - Males | | | | | CONTROL FISH - Males | | | | |
|--------|-----------------|---|------|----------|----------------|----------------|----------------------|------|----------|----------------|----------------|
| Fish # | Date(s) Treated | Date Evaluated | Ripe | Non-ripe | Milt/fish (ml) | Motility Score | Date Evaluated | Ripe | Non-ripe | Milt/fish (ml) | Motility Score |
| 1 | | | | | | | | | | | |
| 2 | | | | | | | | | | | |
| 3 | | | | | | | | | | | |
| 4 | | | | | | | | | | | |
| 5 | | | | | | | | | | | |
| 6 | | | | | | | | | | | |
| 7 | | | | | | | | | | | |
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| 9 | | | | | | | | | | | |
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| 19 | | | | | | | | | | | |
| 20 | | | | | | | | | | | |

RESULTS: Describe in detail treatment results. In your opinion, and based in part on historical spawning data, was treatment successful? If treatment did not appear to be successful, explain why not? Were there any mitigating environmental conditions that may have impacted treatment results? Were there any deviations from the Study Protocol? Attach pathology reports; Both Pre-and Post-Treatment.

Toxicity observations: Report any apparent drug toxicity including a description of unusual fish behavior.

OBSERVED WITHDRAWAL PERIOD OF TREATED FISH:

Observed withdrawal period :

All fish treated with sGnRH_a (OvaRH[®]) must be maintained in culture facilities for at least 14 days following treatment before they may be released or allowed to enter the food chain. If fish are treated (injected) more than once, this requirement will be based on the date/time of final treatment. Investigator should initial here to indicate compliance with disposition requirements of sGnRH_a (OvaRH[®]) treated fish.

_____ **NEGATIVE REPORT** Salmon gonadotropin releasing hormone analog (OvaRH[®]) was not used at this facility under this Study Number during the reporting period. (Investigator should initial for negative reports as soon as the Study Number is known to be no longer needed or valid.)

Date Prepared: _____ **Investigator:** _____

Date Reviewed: _____ **Study Monitor:** _____