Award Number:  W81XWH-11-1-0772

TITLE:  Translational Pharmacologic Efficacy Studies of Glial Growth Factor 2 (GGF2) in Spinal Cord Injury Models and in the Veterinary Clinical Setting

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REPORT DATE: October 2012

TYPE OF REPORT: Annual

PREPARED FOR:  U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland  21702-5012

DISTRIBUTION STATEMENT: Approved for Public Release;
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The purpose of the multi-institutional translational project is to identify the most appropriate dosing schedule and route of administration of glial growth factor 2 (GGF2) in the treatment of rodent spinal cord injury and then to translate this work to dogs with naturally occurring spinal cord injury. The tolerability and pharmacokinetics of GGF2 in dogs will be determined using the dosing regimen identified in the first phase of the work, and then the efficacy of GGF2 will be determined in dogs with intervertebral disc herniations causing acute onset of paralysis. According to the schedule of work, the initial 18 months of research are being performed at the other institutions involved in this multi-institutional project. Work is scheduled to start at North Carolina State University (NCSU) in 2013 and we have completed an IACUC proposal that is approved at the NCSU level and has been submitted to the DOD for review in readiness to start this work.
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Introduction
The objectives of this multi-institutional translational project are to determine the most appropriate route and dosing regimen for GGF2 in the treatment of acute spinal cord injury in rodents, to test the tolerability and the pharmacokinetics of GGF2 in dogs using the data established in the first phase of the work and then to test this dosing regimen for efficacy in a naturally occurring model of canine spinal cord injury.

Body
The canine work, to take place at North Carolina State University, is to begin 18 months after the start of the grant once the dosing data is available and we have therefore not yet completed any research at NCSU. In readiness for starting the tolerability and pharmacokinetic work early in 2013, we have been briefed on the progress of research performed by Dr. Jean Wrathall at Georgetown Medical Center, and have completed an IACUC proposal that has been approved by NCSU and that is currently being reviewed by the Department of Defense. We have also purchased the digital video equipment necessary to videotape dogs to collect data on outcome during the canine clinical trial work.

Key Research Accomplishments
Not applicable

Reportable Outcomes
Not applicable

Conclusion
Not applicable

References
Not applicable

Appendices
Not applicable