AWARD NUMBER: W81XWH-12-2-0094

TITLE: Prazosin Augmentation of Outpatient Treatment of Alcohol Use Disorders in Active Duty Soldiers with and without PTSD

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CONTRACTING ORGANIZATION: Seattle Institute for Biomedical and Clinical Research Seattle, WA 98108

REPORT DATE: October 2015

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

The views, opinions and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy or decision unless so designated by other documentation.
This project is a 12-week randomized controlled trial (RCT) of prazosin for AUD in 200 OIF/OEF soldiers both with and without comorbid PTSD enrolled in the Alcohol and Substance Abuse Program (ASAP) at Madigan Health Care System/Joint Base Lewis McChord. The aims of this trial are 1) to determine prazosin’s efficacy for AUD in OIF/OEF soldiers participating in outpatient AUD treatment and 2) to determine if the presence of PTSD affects prazosin efficacy for AUD. In the first year of the study, the protocol was extensively review and recently approved by the VA Puget Sound IRB. This approval was necessary before the Madigan IRB would review the protocol. Madigan IRB has now accepted the study’s application and we anticipate their approval by end of November 2013; this would allow an early December 2013 start of participant randomization.
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1. INTRODUCTION:
Alcohol use disorder (AUD) is a common debilitating problem in active duty Service Members and is a frequent comorbidity of posttraumatic stress disorder (PTSD). Our pilot placebo-controlled trial of prazosin in alcohol dependent civilian men seeking abstinence demonstrated significant prazosin efficacy for reducing alcohol drinking.1

This project is a 12-week randomized controlled trial (RCT) of prazosin for AUD in active duty soldiers both with and without comorbid PTSD enrolled in the Alcohol and Substance Abuse Program (ASAP) at Madigan HCS/Joint Base Lewis McChord. The aims of this trial are 1) to determine prazosin’s efficacy for AUD in OIF/OEF soldiers participating in outpatient AUD treatment and 2) to determine if the presence of PTSD affects prazosin efficacy for AUD. Primary outcome measures will be the Timeline Followback (TLFB) and the Penn Alcohol Craving Scale (PACS) scores. Soldiers completing the 12-week double-blind placebo controlled prazosin RCT will then enter an open label prazosin phase for an additional 12 weeks to allow those randomized to placebo in the RCT phase the opportunity to receive active prazosin treatment. It also will provide observational data regarding the long term durability of prazosin effect on AUD in those randomized to prazosin in the RCT.

2. KEYWORDS:
   alcohol use disorder, prazosin, Service Member, PTSD, treatment, randomized controlled trial

3. OVERALL PROJECT SUMMARY:
Complete regulatory approval was finally received on January 15, 2015, at which time participant recruitment commenced. Enrollment in the study has been robust. As of October 5, 2015, 50 Service Members provided initial consent. Of these, 32 (approximately 1 Service Member/week) have been randomized to prazosin or placebo. The other 18 Service Members are awaiting the screening visit evaluation for meeting inclusion/exclusion criteria (n=10) or are awaiting randomization (n=1).

Although recruitment rate has been very good, the long regulatory approval delay (resulting from needing in series IRB approvals first from the VA and subsequently from a Madigan IRB slowed by the Congressional Sequestration) has shortened our time period for completing the study within the current award window. Therefore, we will strive to further increase recruitment by opening the study to Service Members who are enrolled in ASAP but have not been deployed to combat operations. When the study was first conceived (during our successful RCT of prazosin for combat PTSD in active duty Service Members) the majority of Service Members in garrison at JBLM as well as the majority of those in ASAP for AUD treatment had returned from deployments to Afghanistan and/or Iraq. With the end of OEF deployments, now 2/3 of Service Members in Madigan ASAP have not been deployed and therefore currently are excluded from study participation.

Given this reality, we are seeking approval to eliminate prior combat area deployment as an inclusion criterion. Although this will likely reduce the number of participants with PTSD comorbid with their AUD, we believe it is a necessary change to achieve adequate participant numbers to address the primary objective of determining prazosin efficacy for AUD in active duty Service Members.
4. KEY RESEARCH ACCOMPLISHMENTS:
   1. Completed regulatory approval (3 IRBs).
   2. Robust recruitment and randomization is underway.

5. CONCLUSION:
   Nothing to report.

6. PUBLICATIONS, ABSTRACTS, AND PRESENTATIONS:

   Raskind, MA. Prazosin Augmentation of Outpatient Treatment of AUD in Active Duty Soldiers with and without PTSD. Presented at Joint Army/NIH Substance Abuse IP – September 29-October 1, 2015, Fort Detrick, MD

   Presented at National Institute of Alcohol Abuse and Alcoholism Special Symposium at American Psychiatric Association Annual meeting, Toronto, May, 2015

7. INVENTIONS, PATENTS AND LICENSES:
   Nothing to report.

8. REPORTABLE OUTCOMES:

   Developed administrative and VA/DoD collaborative methodology to perform this first ever randomized controlled trial of a pharmacologic treatment for alcohol use disorder in active duty Service Members.

9. OTHER ACHIEVEMENTS:
   Nothing to report.

10. REFERENCES:

11. APPENDICES:
    None

QUAD CHART: Please see attached.
Prazosin Augmentation of Outpatient Treatment of Alcohol Use Disorders in Active Duty Soldiers with and without PTSD

**11048011; W81XWH-12-2-0094; Funding Source: DHP**

**PI:** Murray Raskind, MD, VAPSHCS  **Org:** Seattle Institute for Biomedical and Clinical Research  **Award Amount:** $1,400,000

### Aims / Approach

We will conduct a 12-week RCT of prazosin for alcohol use disorders AUD in soldiers with and without comorbid PTSD to determine prazosin’s efficacy for AUD in OIF/OEF soldiers participating in outpatient AUD treatment and to determine if the presence of PTSD affects prazosin efficacy for AUD. Soldiers completing the 12 week double blind placebo controlled prazosin RCT will then enter an open label prazosin phase for an additional 12 weeks to allow those randomized to placebo in the RCT phase to receive active prazosin treatment. This also will provide observational data regarding the long term durability of prazosin effect on AUD in those randomized to prazosin in the RCT, and the response to initiation in soldiers originally randomized to placebo. Primary outcome measures will be the Timeline Followback (TLFB) and the Penn Alcohol Craving Scale (PACS) scores.

### Preliminary Data

Preliminary Data: Prazosin reduces alcohol consumption in non-PTSD alcohol dependent persons (n=41) seeking abstinence (ongoing NIAAA funded trial at VA Puget Sound).

### Timeline and Cost

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| Estimated Budget ($K)                   | $351   | $352   | $354   | $343   |

### Goals/Milestones

- ✔️ ✔️ Regulatory Approvals and Preparatory Tasks
  - Completed / In progress
- ✔️ ☐ Recruitment and Retention Efforts
  - ✔️ ✔️ Recruit and Randomize 30 Subjects
  - ☐ ☐ Recruit and Randomize 100 Subjects
  - ☐ ☐ Recruit and Randomize 175 Subjects
  - ☐ ☐ Recruit and Randomize 200 Subjects
- ✔️ ☐ Enter and clean study data
- ☐ ☐ Analyses and Evaluation – Not yet initiated
- ☐ ☐ Publish Results – Not yet initiated

### Comments/Challenges/Issues/Concerns

- None at this time.

### Budget Expenditure to date

- Projected Expenditure: $1,050,000
- Actual Expenditure: $938,200

**Period of Performance:** 09/15/12-09/14/16 / Updated: 10/15/15