PORTLAND, Ore. — Oregon Health & Science University is participating in a multi-center clinical trial to determine whether two drugs commonly used to stabilize the heart during cardiac arrest actually improve survival rates and neurological function among cardiac arrest victims.

The study called ALPS (Amiodarone, Lidocaine or Placebo) is part of the National Institutes of Health-funded Resuscitation Outcomes Consortium, or ROC, a group of 10 regional health centers across the United States and Canada conducting clinical trials outside the hospital to improve outcomes in severe trauma and cardiac arrest patients.

ROC-ALPS will determine whether standard heart rhythm drugs, amiodarone or lidocaine, or neither drug (normal saline placebo), improves survival for participants with shock-resistant ventricular fibrillation, a condition in which the heart beats chaotically, resulting in the complete loss of its ability to pump blood.

Ventricular fibrillation is present in about 25 percent of cardiac arrests. When shock treatment with a defibrillator fails to restore normal heart rhythm, medications such as amiodarone or lidocaine are often given to enhance the success of the defibrillation attempts, but their effectiveness in improving survival is unknown.

“During cardiac arrest, the heart stops functioning, and unless restarted within minutes, the patient typically dies. Treatments applied by paramedics and first responders at the scene are based on what’s been successful in non-human models of resuscitation, hospital-based therapies and expert opinion. The only way to turn our ‘best guess’ treatments into a scientific approach is to study resuscitation treatments directly on individuals at the scene of the incident,” explained Mohamud Daya, M.D., principal investigator and associate professor of emergency medicine at Oregon Health & Science University.

“There is little scientific data to help guide best practices outside the hospital. Our hope is that these ROC trials will help us identify which resuscitation techniques are most effective for cardiac arrest,” said Daya.

Because patients eligible for this study will be unconscious and therefore unable to provide consent in advance of treatment, the study will be conducted under FDA regulations that allow research in certain life-threatening situations without giving consent. The federal regulations
that allow this exception from informed consent require community consultation and notification to ensure the public is aware of the studies. If an individual does not want to be enrolled in the study, he/she can decline participation by “opting out” or wearing a “NO STUDY” bracelet. To request a bracelet, call 503-494-8083 or email roc@ohsu.edu.

To conduct this research, OHSU will partner with local emergency medical services agencies and receiving hospitals in three specific counties.

-- Clark County:
EMS: Camas Fire, Clark County AMR, Clark County Fire District #6, North Country EMS, Vancouver Fire
Hospitals: Legacy Salmon Creek Medical Center, and Peace Health Southwest Medical Center (PHSMC)

-- Clackamas County:
EMS: Clackamas County AMR, Clackamas County Fire District #1, Lake Oswego Fire
Hospitals: Kaiser Permanente Sunnyside Medical Center, Legacy Meridian Park Hospital, Providence Milwaukie Hospital, and Providence Willamette Falls Medical Center.

-- Washington County:
EMS: Hillsboro Fire, Metro West Ambulance, Tualatin Valley Fire & Rescue (covers both Washington and Clackamas counties)
Hospitals: Providence St. Vincent’s Medical Center, and Tuallity Community Hospital.

The ALPS trial will enroll up to 3,000 participants at nine locations across the U.S. and Canada. Participating centers include:

- Alabama Resuscitation Center, University of Alabama at Birmingham
- University of California, San Diego Center for Resuscitation Science
- Portland Resuscitation Outcomes Consortium, Oregon Health and Science University
- Dallas-Fort Worth Center for Resuscitation Research, University of Texas Southwestern Medical Center
- Seattle-King County Center for Resuscitation Research, University of Washington
- Milwaukee Resuscitation Network, Medical College of Wisconsin
- University of Ottawa Collaborative Regional Coordinating Centre, Ottawa Hospital Research Institute, Canada
- University of British Columbia Collaborative Regional Coordinating Centre, St. Paul's Hospital, Canada
- Rescu, Keenan Research Centre, Li Ka Shing Knowledge Institute, St. Michael’s Hospital, University of Toronto, Canada
The trial is coordinated by the University of Washington in Seattle. The National Heart Lung and Blood Institute and the U.S. Army Medical Research and Materiel Command are co-sponsoring these studies. The Canadian Institutes of Health Research, the Heart and Stroke Foundation of Canada, the Defense Research and Development Canada, and the American Heart Association provided additional funding.

Click [here](mailto:) to find out more about ROC-ALPS. If you would like to speak with someone about the study, please call our local ROC office at 503-494-8083 or email us at roc@ohsu.edu.