Objective
Trauma induced coagulopathies (TIC) are a frequent cause of preventable death in those suffering severe traumatic injury. This multi-center study seeks to develop a comprehensive understanding of molecular and physiological processes to anticipate bleeding and clotting complications following trauma.

Methods
Clinical data and blood samples will be collected from 400 patients with severe trauma at 4 different trauma centers. Serial blood samples are used to perform assays studying coagulation, inflammatory mediators, protein structure and function, and gene function.

Results
During the pilot phase of this study, we found that challenges of acute care and resuscitation precluded informed consent in the emergency department, with only 3/23 patients agreeing to participate. We therefore amended the protocol, and due to the minimal risk of collecting blood samples from hospitalized patients, we obtained a wavier of informed consent for initial blood acquisition. Blood samples are now collected at the time of emergency department presentation, with a waiver of informed consent. Additional time points >24 hours from trauma require consent of the patient or assent from a surrogate. To date, of 15 patients screened, 4 were enrolled and informed consent was obtained from all subjects. Blood was spun and the plasma frozen at -80C for analysis.

Conclusions
Waiver of initial consent from trauma patient has increased the feasibility of studying coagulation abnormalities in this population, without putting the patient at increased risk.