E&HR

Remnant Blood Quantification: *Informing the Definition of Minimal Risk in Clinical Research*

ADAM L. GOTTULA, SARA CONSTAND, SANDRA CABRERA, UWE STOLZ, ANN SALVATOR, MICHAEL GOODMAN, AND JASON MCMULLAN

Appendix A.
Patient-Inclusion Criteria

All patients included originated in the emergency department, and patients who were direct inpatient admissions were not included. All patients included were at least 18 years old. Patients meeting institutional trauma team-activation criteria were eligible as trauma patients. Patients admitted to the inpatient medical service and medical ICU from the emergency department were eligible. Patients discharged from the emergency department after evaluation were eligible as discharged patients. If patients had multiple eligible emergency department visits, data from the first visit was used, and the second encounter was excluded. The collected data was completed on the first 25 consecutive patients for each disposition group who met each individual admission-disposition criteria following the start date.

Appendix B.
Determination of Remnant Blood Volume

Blood tubes in the clinical laboratory were tracked using the electronic hospital tube tracking system to account for all tubes drawn, ordered and unordered tubes. Each blood sample was weighed to determine the remnant blood volume following the use of a blood tube by a laboratory staff member. The remnant blood volume was calculated by subtracting the mean weight of the empty container from that of the container filled with blood and dividing by the specific gravity of blood (1.050 g/ml). The weights of empty blood collection containers were determined by weighing 10 empty collection containers using a scale measuring in .001-g increments. Blood lost on gauze pads, syringes, bedding, and intravenous tubing was not included. The remnant blood for each patient was calculated by adding the remnant blood volume from each tube associated with the subject ID number. Blood tubes were weighed every 24 hours by a research associate, who did not participate in the drawing of the tubes or care of the patient. Measurement of all tubes occurred in the clinical laboratory so that the chain of custody regarding patient samples was not interrupted.