

**Event:** AI#0047: Determination of Five Blood Parameters Using Fe-59

**Event Primary Information**

**Event Key Classification:** Other Research

AIR1.941130.074a

**Full Title:** AI#0047: Determination of Five Blood Parameters Using Fe-59

**Start Date (mm/dd/yy):** 11/ 67

**End Date (mm/dd/yy):** 01/ 69

**Abstract:** *Summary: Radioisotopic ferrokinetic iron turnover study. Establishes a simplified methodology for iron turnover studies. Abstract: A simplified method for determining the clearance of iron from plasma, the uptake of iron by newly formed red cells, the direct measurement of plasma volume, and the indirect measurement of volume and red cell mass. was achieved by modification and synthesis of existing methods. Typical values obtained were: plasma iron clearance (T-1/2), 100 minutes, red cell iron incorporation, 80% to 85% within 3 days; <sup>59</sup>Fe plasma volume, 11.5 ml/kg; <sup>59</sup>Fe blood volume, 72.4 ml/kg; and <sup>59</sup>Fe red cell volume, 32.7 ml/kg. The values obtained were within the limits of values previously reported as obtained by other methods. These measurements, combined with values calculated for other iron metabolic factors, provide the basis for reliable estimates of ferrokinetics and iron metabolism under normal and abnormal conditions. (Internal Medicine Branch, Armstrong Laboratory)*

**Point of Contact Information**

Last Name	First Name	Telephone
Brown	LTC Dan	202-767-5078

**Investigators Information**

Last Name	First Name	P/A*
GREEN	JAMES F.	
LOGSDON	DONALD F.	

Notes:

\* P-Principal, A-Associate

**Facility where Event took place information**

**Facility:** Internal Medicine Branch, Brooks Air Force Base, San Antonio, TX

**Address:** Brooks Air Force Base, Internal Medicine Branch

**City:** San Antonio

**State:** TX

**ZIP:**

D... # 415