

# Low Free Testosterone and Frailty Predict Overall Survival in Surgical Patients

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# Methods

- **Population:** Prospectively enrolled 136 male patients undergoing major surgery at Emory University Hospital
- **Exclusion Criteria:** patients receiving treatments affecting testosterone
- **Data Collection:**  
Total and free testosterone collected preoperatively  
Frailty assessment: Fried score  $\geq 2$  as frail
- **Analysis:**  
4 level composite score combining frailty and testosterone level  
Primary outcome: overall survival

# Overall Survival

- Composite score: only significant predictor of overall survival
- Frail + low free T patients: highest risk

