

Asleh R et al. Intravenous Bevacizumab as a Novel Treatment for Refractory Left Ventricular Assist Device-Related Gastrointestinal Bleeding. *J Heart Lung Transplant.* 2020

STUDY HIGHLIGHTS

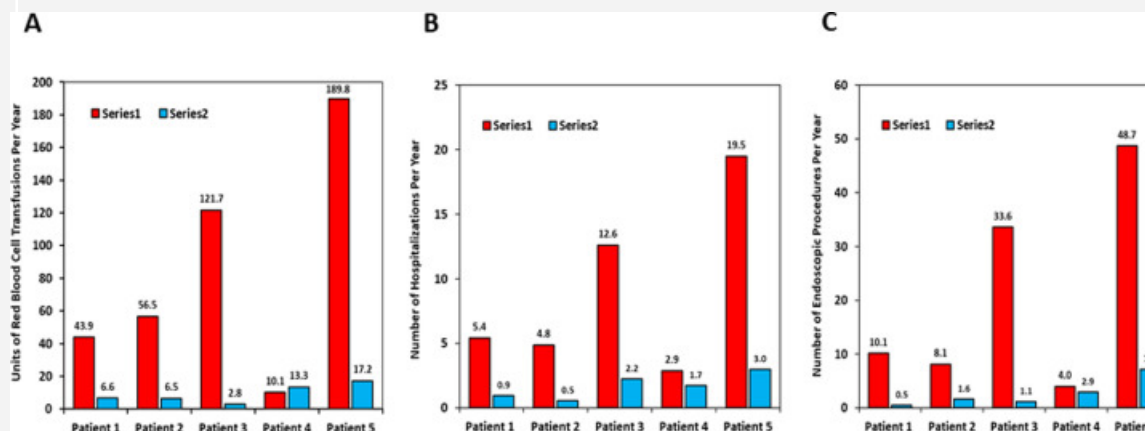
Hypothesis: Bevacizumab (monoclonal antibody against VEGF) effective and safe in refractory GI bleeding due to GI angiodysplasia in LVAD patients

Design: Single center retrospective pilot study for off label use of bevacizumab

Patients: 5 male patients with HMII as DT

Results: Significant ↓↓ in blood transfusions, hospitalizations and endoscopies, improvement in iron deficiency!

CENTRAL FIGURE



Changes pre (red) and post (blue) bevacizumab

- A: Blood transfusion requirements (RBC/year)
- B: Hospitalizations per year
- C: Number of endoscopies per year

Safety: In two patients with epistaxis pre infusion, had additional epistaxis post infusion requiring blood and cauterization

REVIEWER'S COMMENTS

- Impressive results in a difficult to manage population
- Limited safety outcome reporting due to small patient size
- **Provocative question:** Will this be covered by insurances moving forward?

Limitations:

- Very small pilot study
- HM2 patients only, none with newer devices
- Several infusions required, no guidance on when to repeat dosing

Carballo et al: Clinical Outcomes After Left Ventricular Assist Device Implantation in Older Adults - An INTERMACS Analysis
 J Am Coll Cardiol HF. 2019 Dec, 7 (12) 1069-1078.

STUDY HIGHLIGHTS

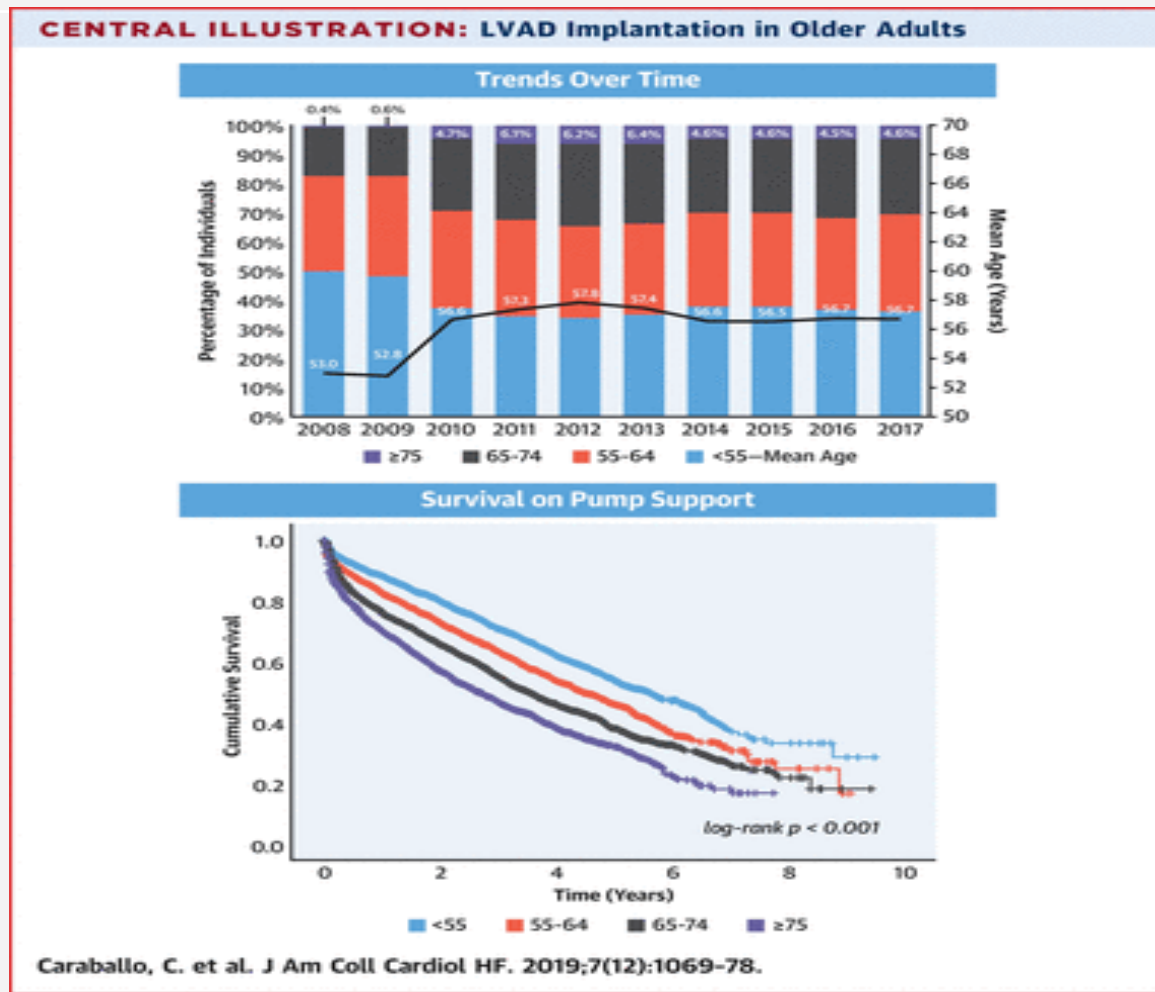
Hypothesis: There is paucity of data regarding outcomes following LVAD implantation in older adults (≥ 75 years)

Design: Retrospective review of INTERMACS database

Inclusion: Adult patients in INTERMACS database who received durable continuous-flow MCS - 2008 through 2017.

Patients stratified by 4 age groups: <55 years of age, 55 to 64 years of age, and >75 years of age.

CENTRAL FIGURE



REVIEWER'S COMMENTS

- 4.9% of LVAD patients were 75yrs or older
- Older adults had significantly **worse survival**
- Older adults had significantly **higher hazards of GI bleeding**
- Device thrombosis hazards were **lower** in the older adults
- Study provides useful information on the clinical characteristics and outcomes of older adult LVAD patients
- Limitations:**
- Retrospective design
- Authors did not report on outcomes such as stroke, infections, arrhythmia etc.