

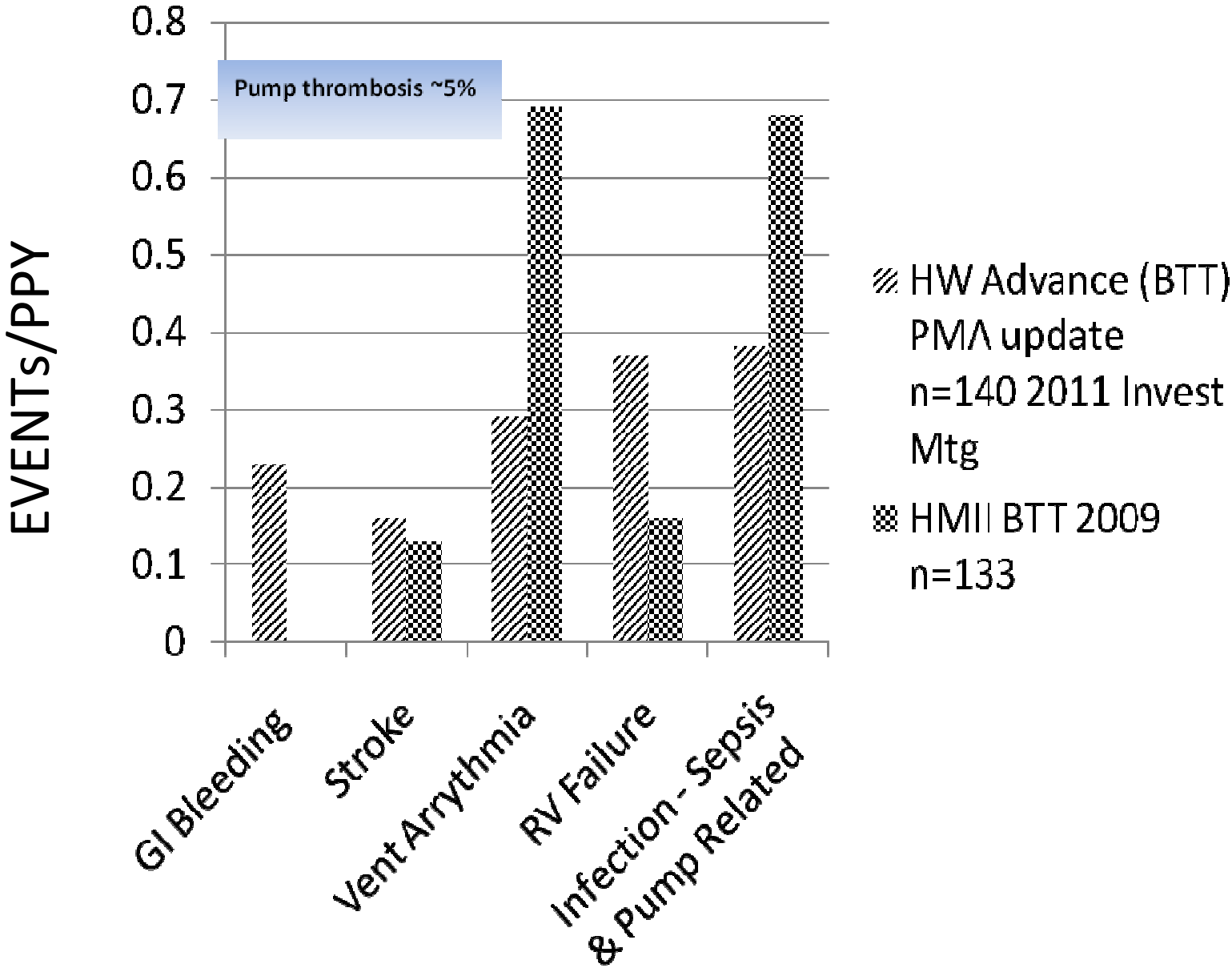
Contemporary VAD Outcomes

Bridge to Transplant			
	Report Year	6 mos	One yr
HeartMate II	2010 Starling, JACC	91%	85%
HeartWare	2011 Aaronson, Investigators Mtg	98%*	92%*

Destination Therapy			
	Report Year	One yr	Two yrs
HeartMate II	2010 Park, AHA	74%*	64%*
HeartWare	Actively accruing IDE pts	N/A	N/A

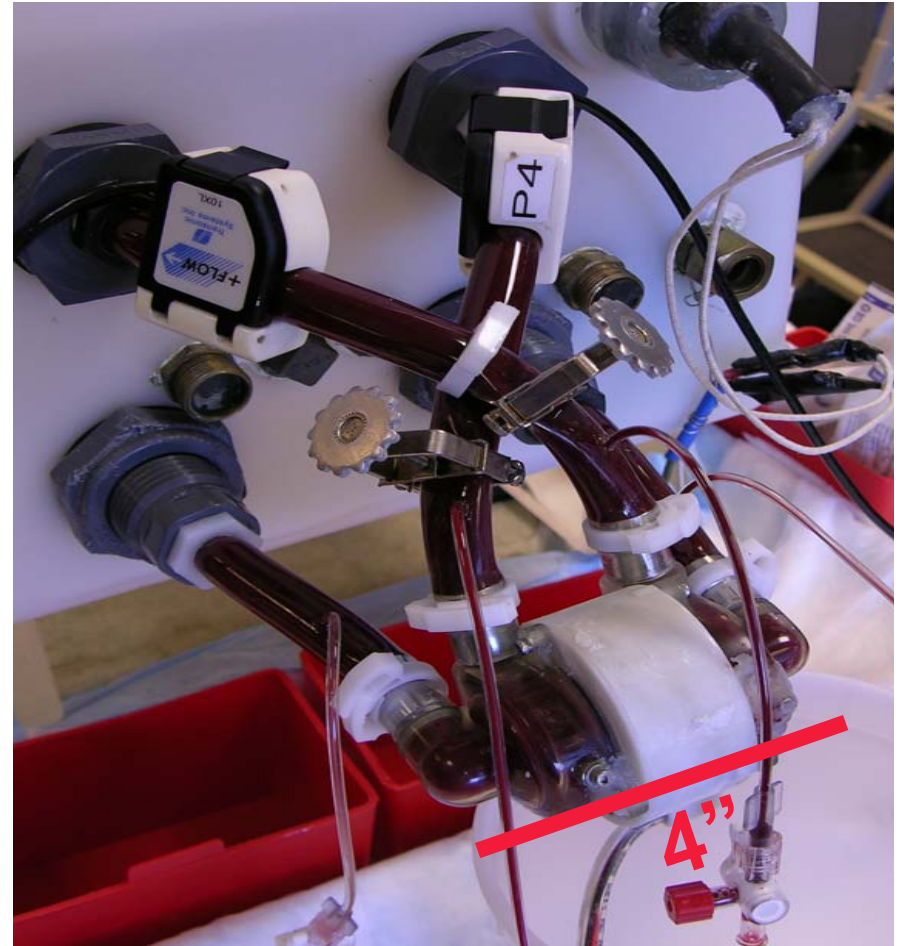
*CAP cohorts

VAD BIO-INCOMPATIBILITY Drives AEs



CF TAH

Golding, HL096619



Key Research Gaps

#1 Bio-incompatibility of CF VADs

- Engineer for Design breakthrough to reduce shear effect on plasma and cells of the blood
- Consider Hypo-Thrombogenic surfaces
- Consider novel Percutaneous Drive Lines/ TETS
- Optimized protocols of Patient & ? Device Specific Anticoagulation

#2 Right Ventricular Failure

- Development Program for small CF TAH
- Consider evaluation of improved Clinical predictor of Moderate un-resolving right ventricular failure