

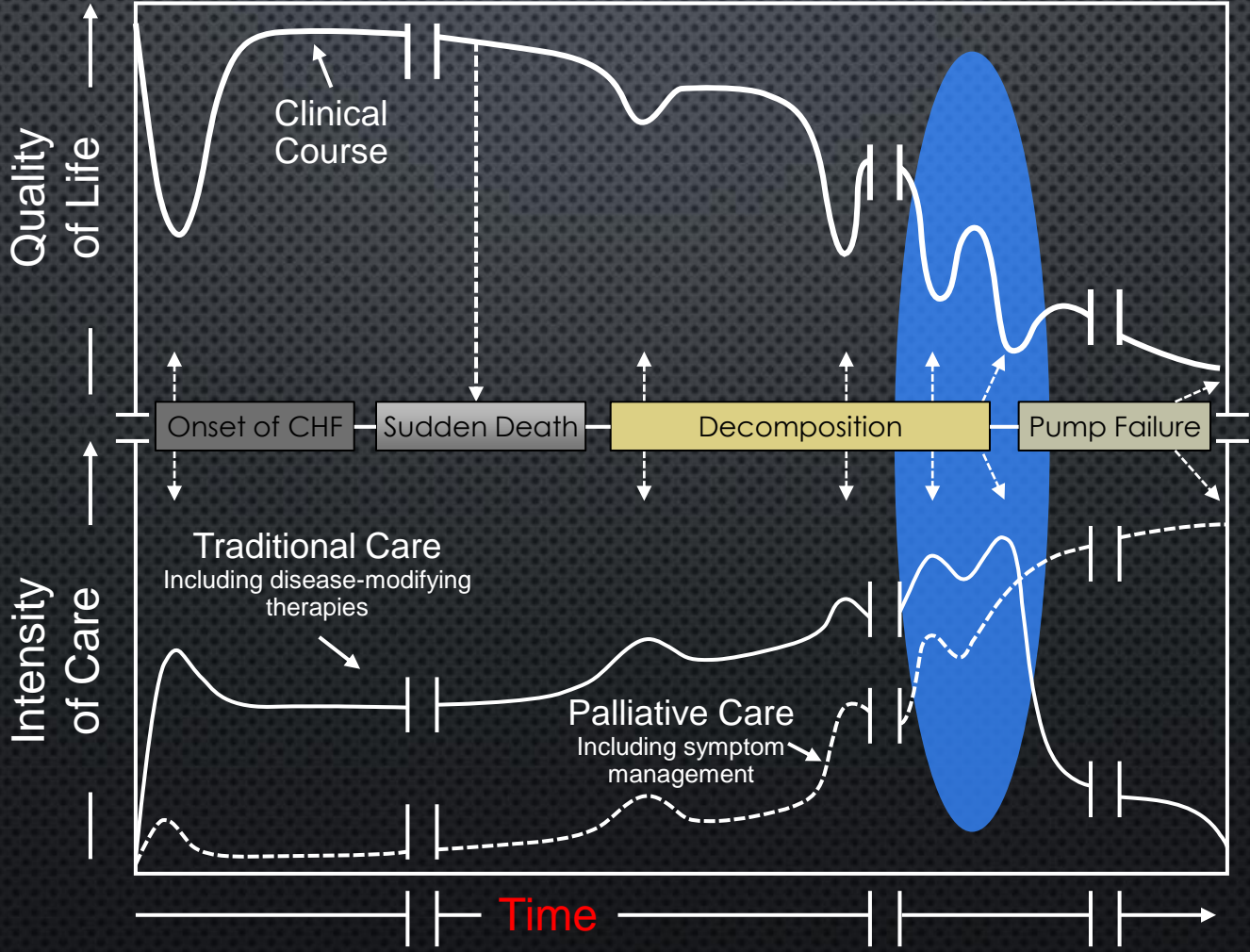
LONG TERM SURVIVAL OF
ONE HUNDRED LEFT
VENTRICULAR ASSIST DEVICE
RECIPIENTS IN HONG KONG

DR. KL WONG

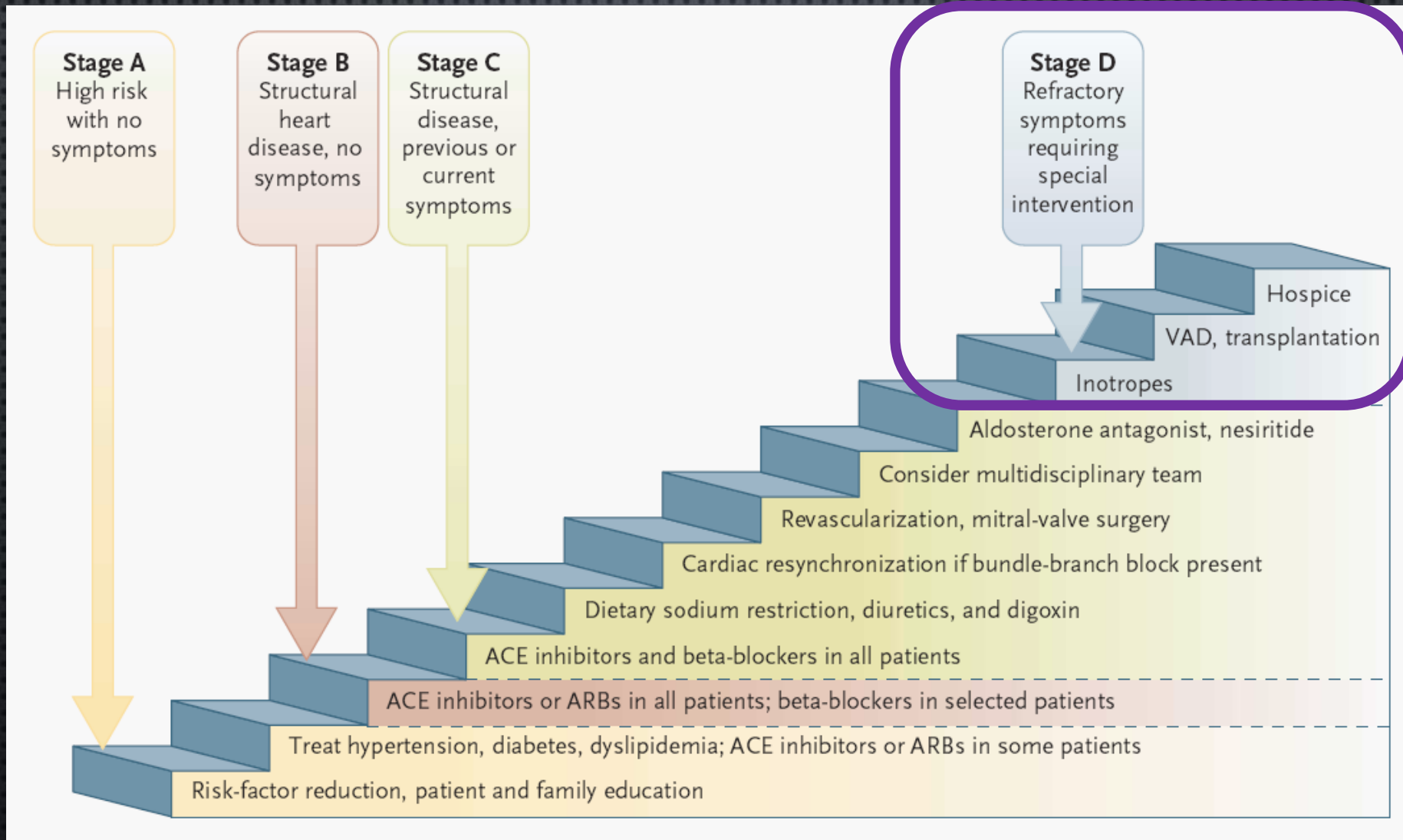
ASSOCIATE CONSULTANT

GRANTHAM HOSPITAL

NATURAL COURSE OF HEART FAILURE



THE TRADITIONAL HF TREATMENT MODEL

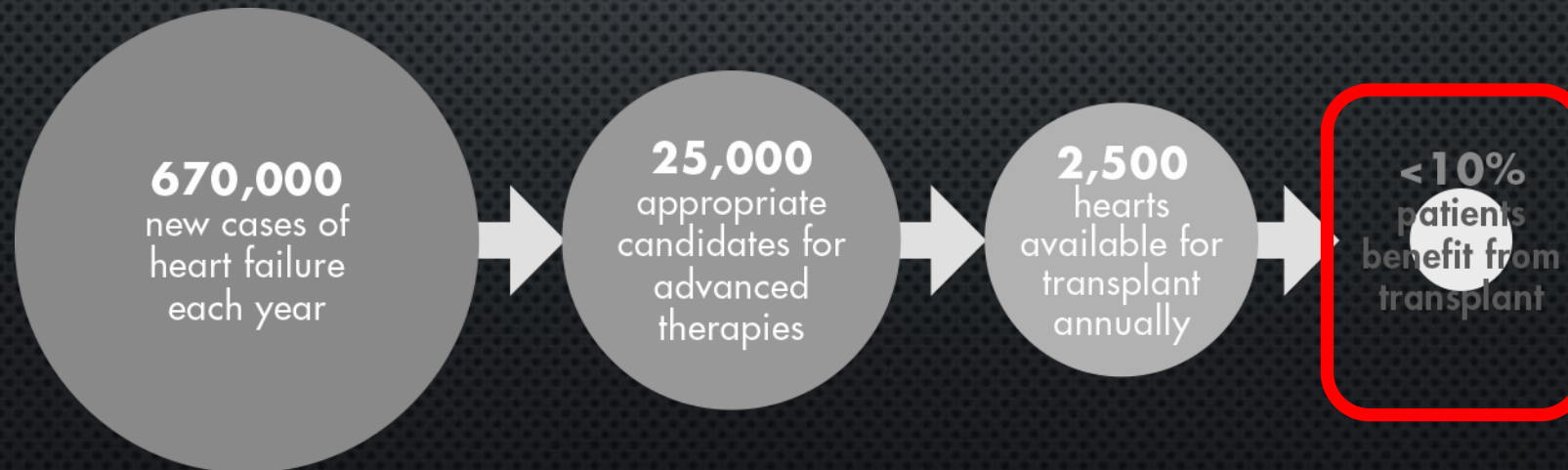
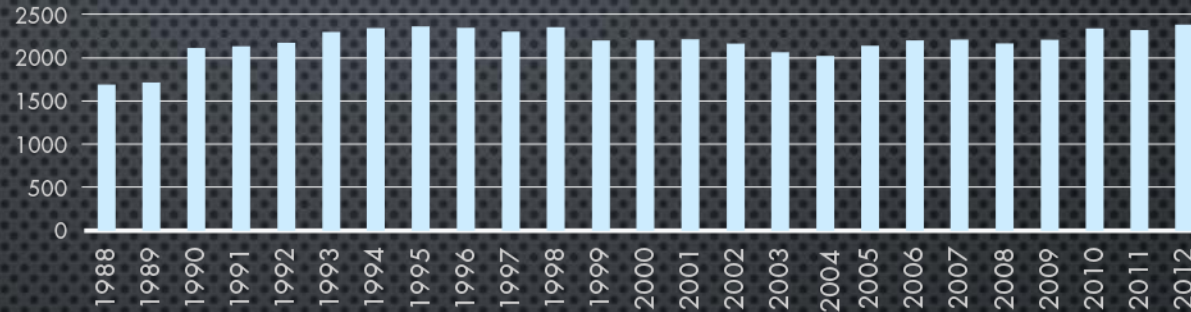


Transplants are considered the 'gold standard,' but the supply of donor hearts is limited

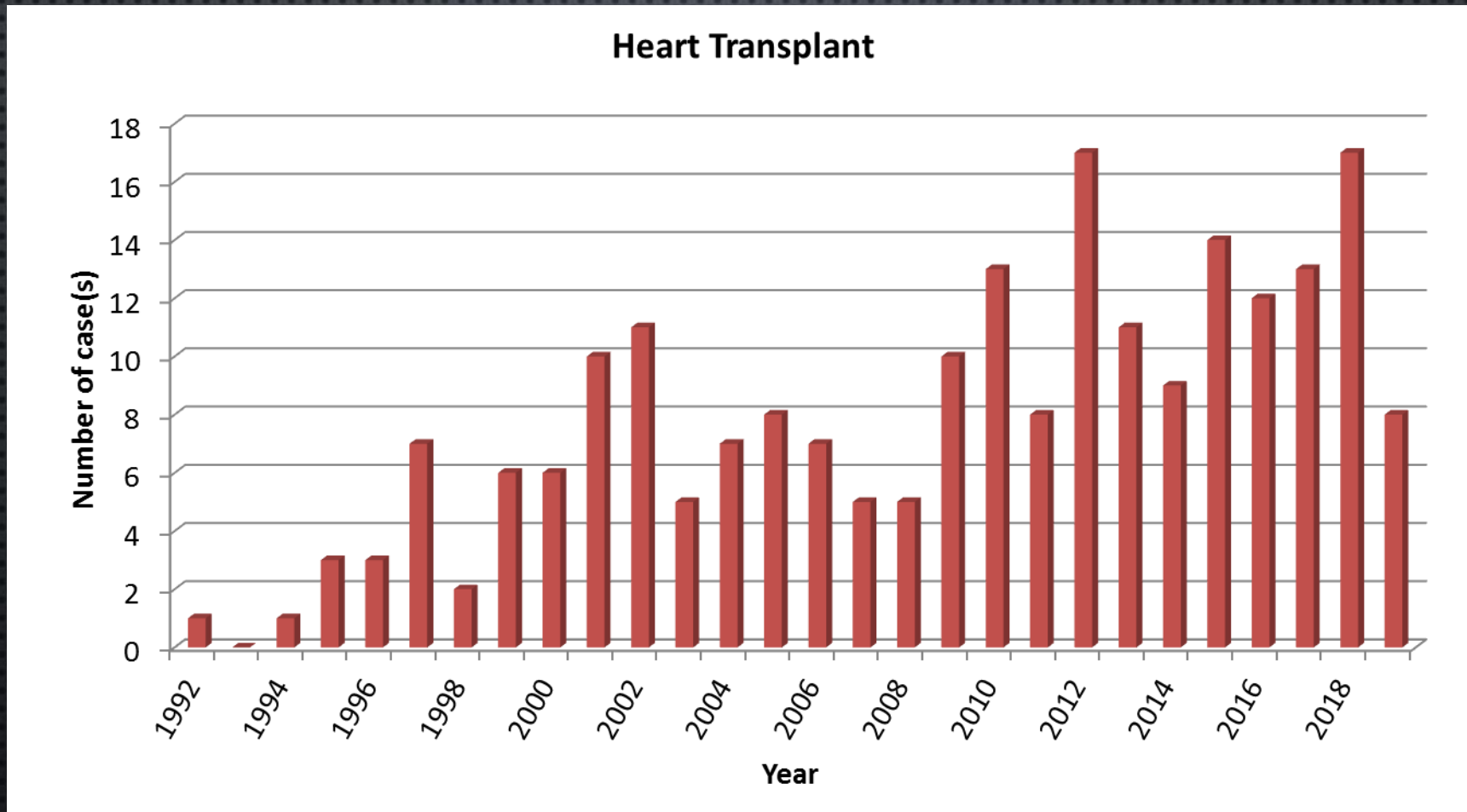
"Proposing heart transplantation to cure heart failure is analogous to proposing the lottery to cure poverty."

– LW Stevenson

Number of Heart Transplants Reported by Year

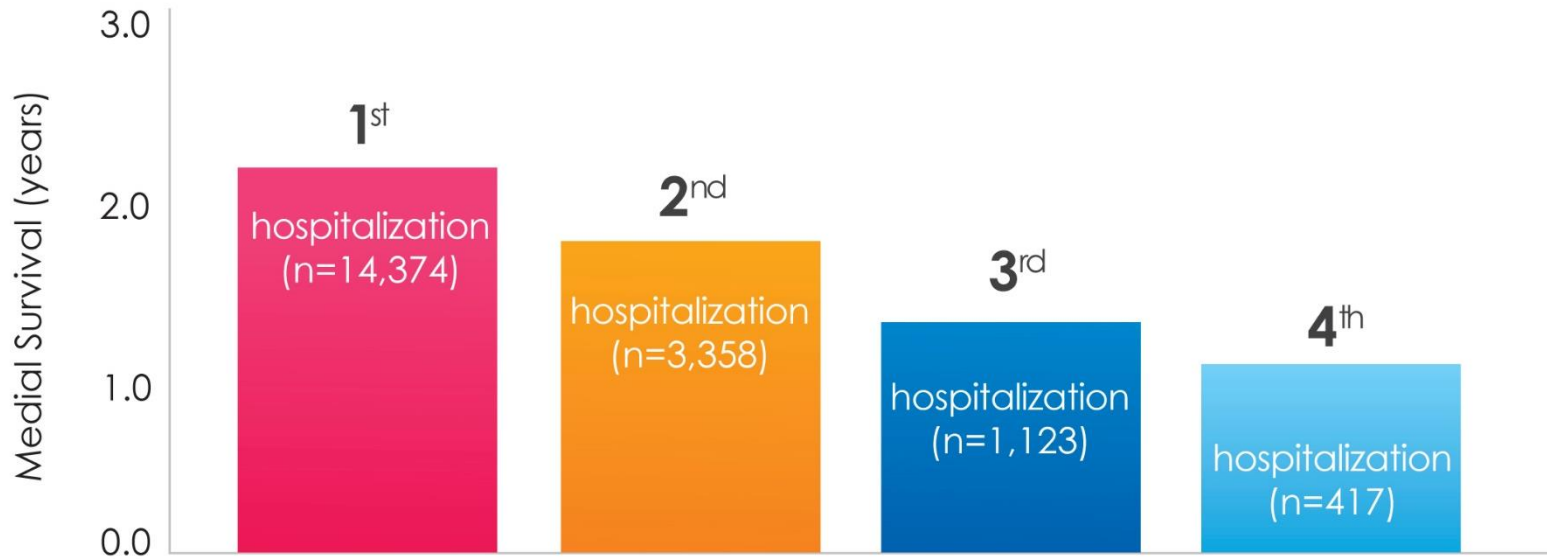


HEART TRANSPLANT PER YEAR



HOSPITALIZATION AND SURVIVAL

Median Survival Decreases After Each Heart Failure Related Hospitalization⁵



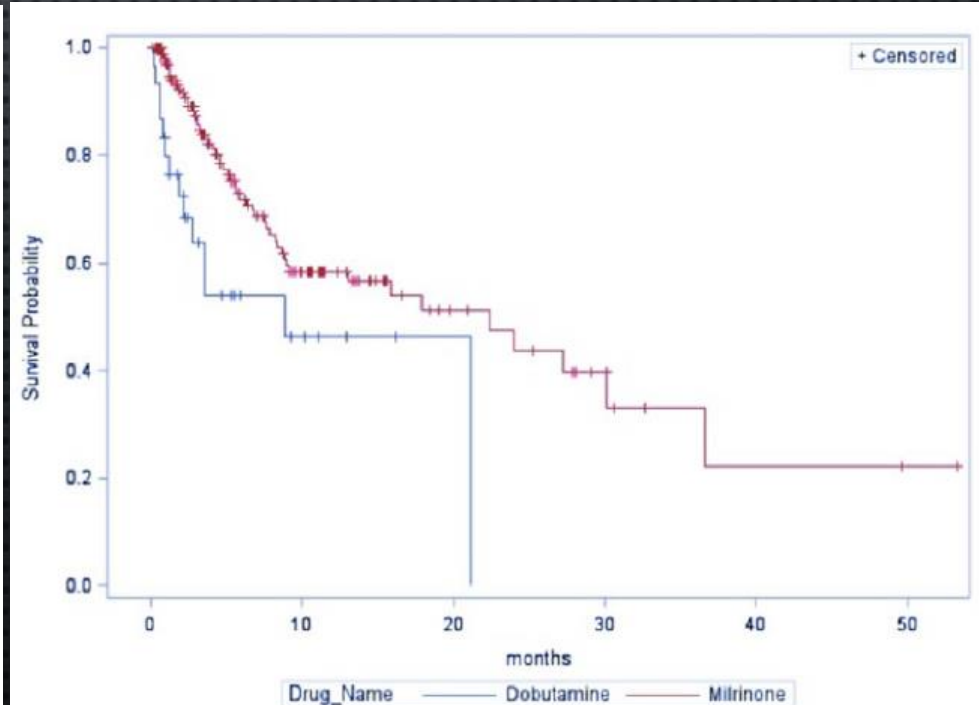
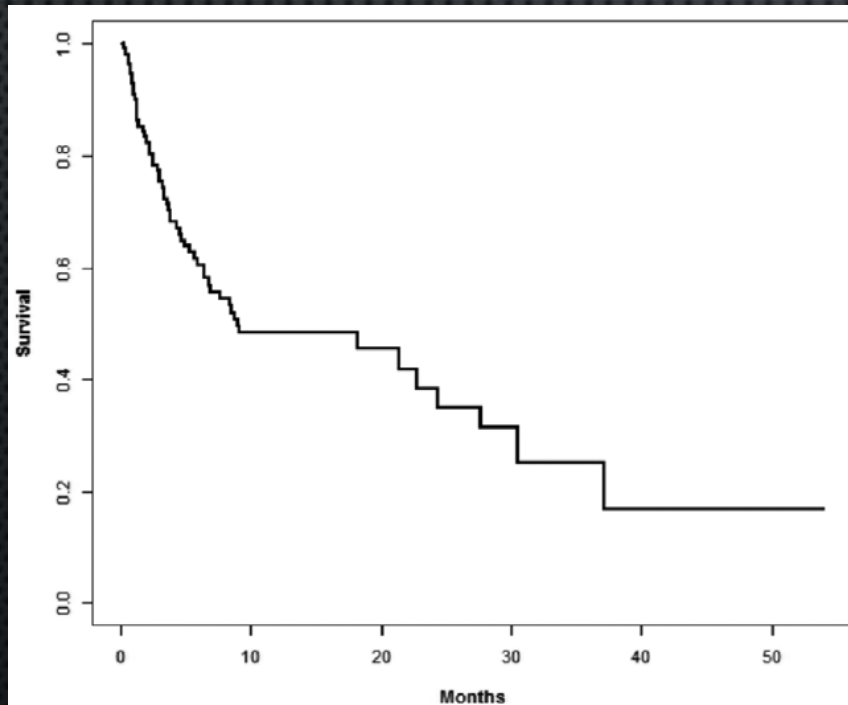
Average age of heart failure hospitalization in community =74.77 years

⁵ Miller L, Guglin M. Patient selection for ventricular assist devices: A moving target. J Am Coll Cardiol. 2013;61:1209-21.

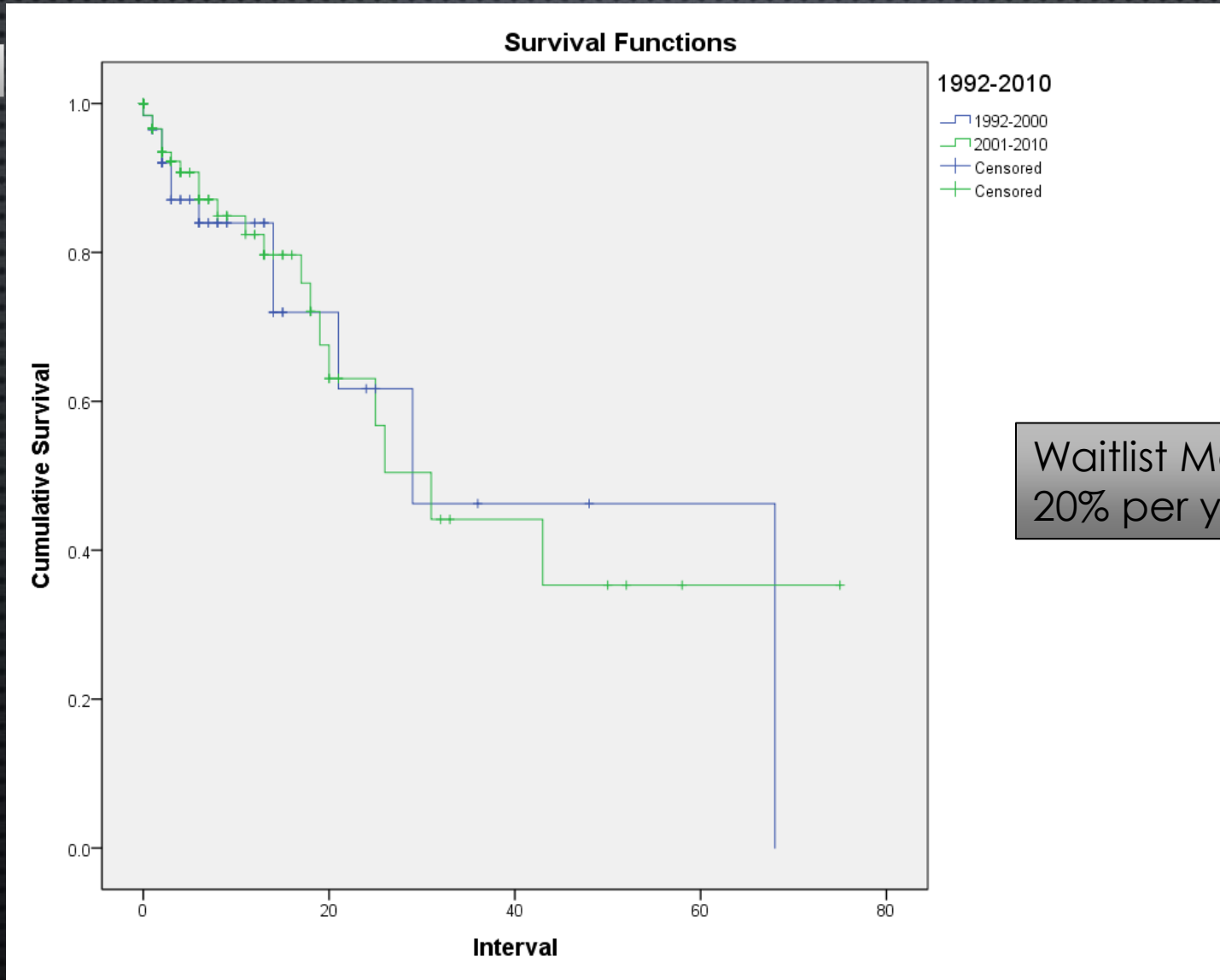
Original Article

Clinical Characteristics and Outcomes of Intravenous Inotropic Therapy in Advanced Heart Failure

Taimoor Hashim, MD; Kumar Sanam, MD; Marina Revilla-Martinez, MD;
Charity J. Morgan, PhD; Jose A. Tallaj, MD; Salpy V. Pamboukian, MD, MSPH;
Renzo Y. Loyaga-Rendon, MD, PhD; James F. George, PhD; Deepak Acharya, MD, MSPH

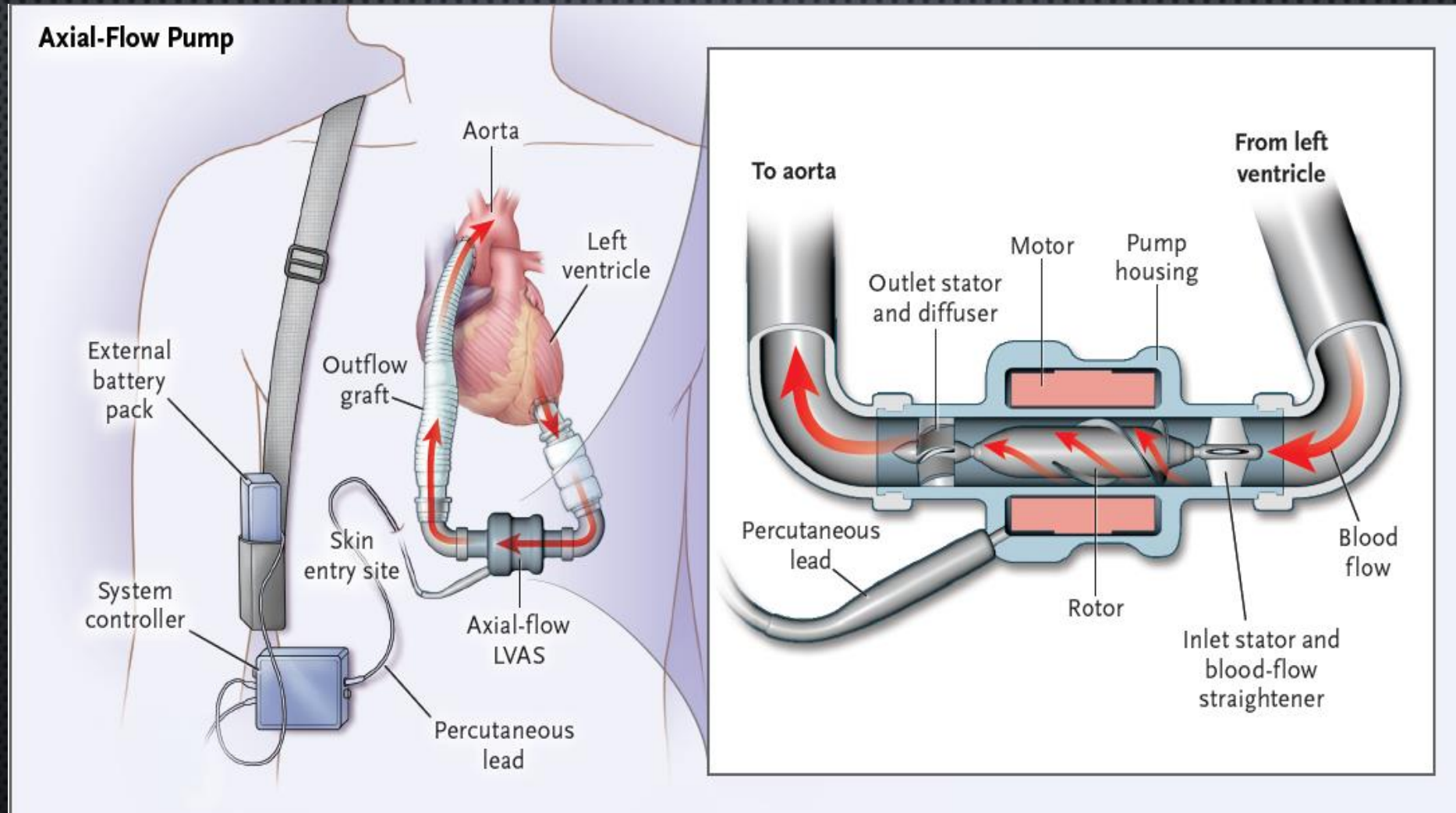


WAITI

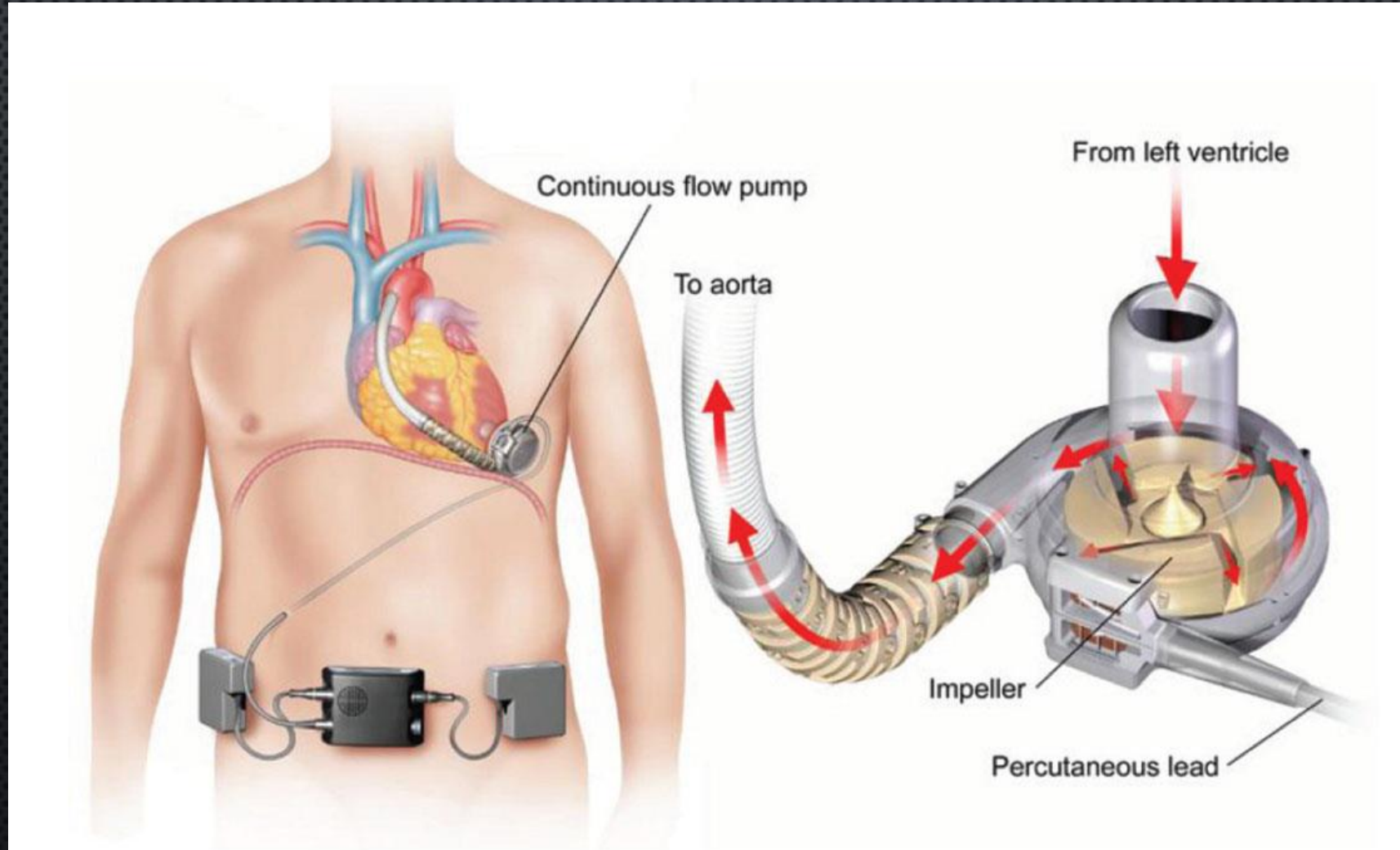


Waitlist Mortality ~
20% per year

AXIAL FLOW LVAD

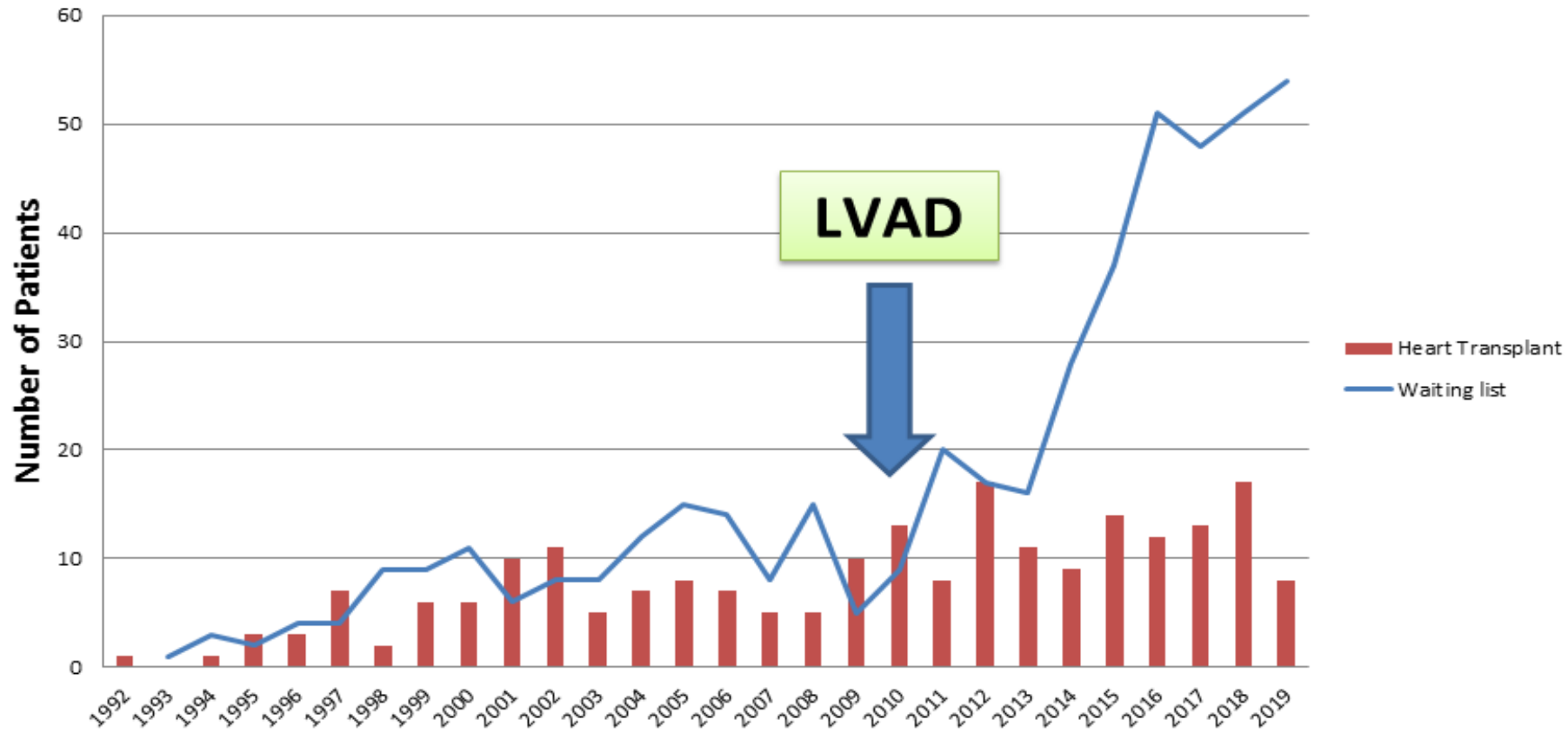


CENTRIFUGAL FLOW LVAD



LVAD SERVICE SINCE 2010

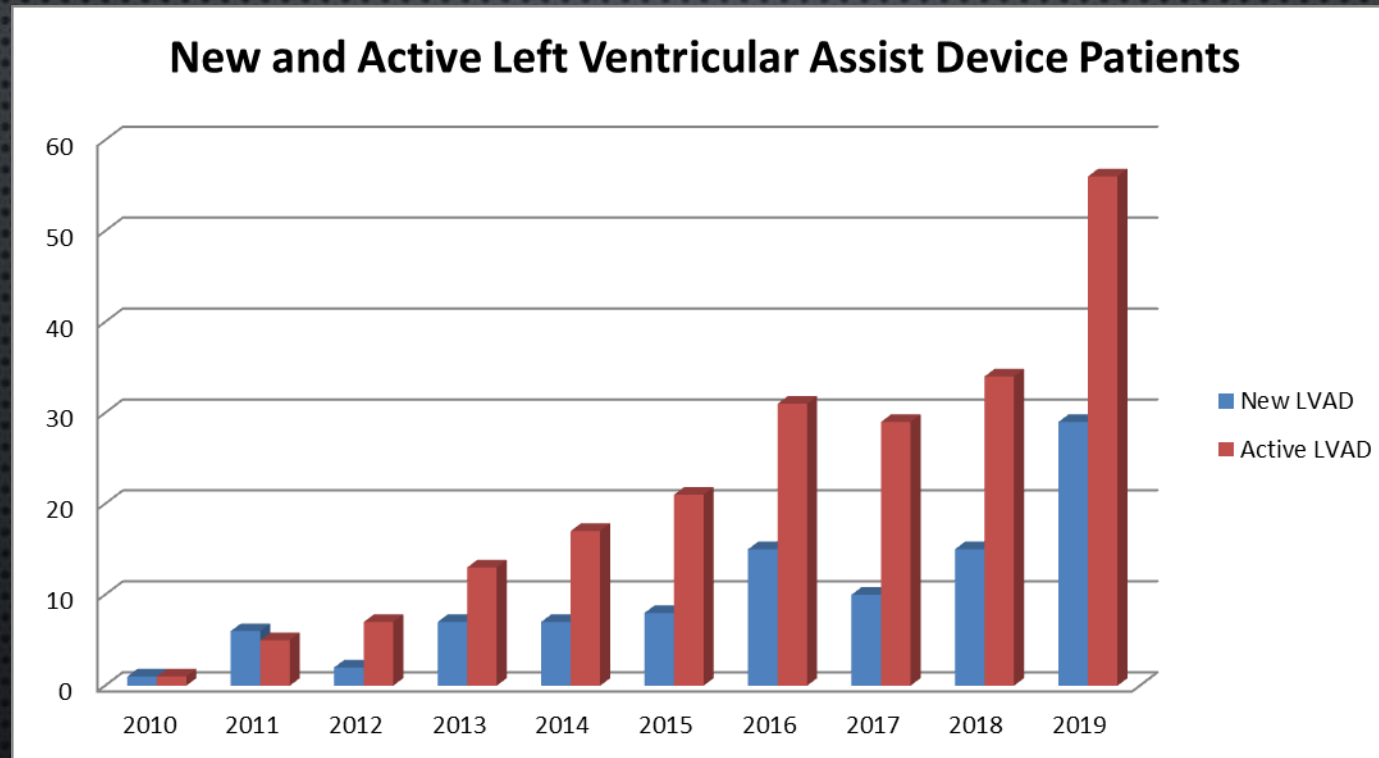
Number of patients active on waiting list at the end of each year and number of heart transplantation done per year



LVAD SERVICE IN HK SINCE 2010

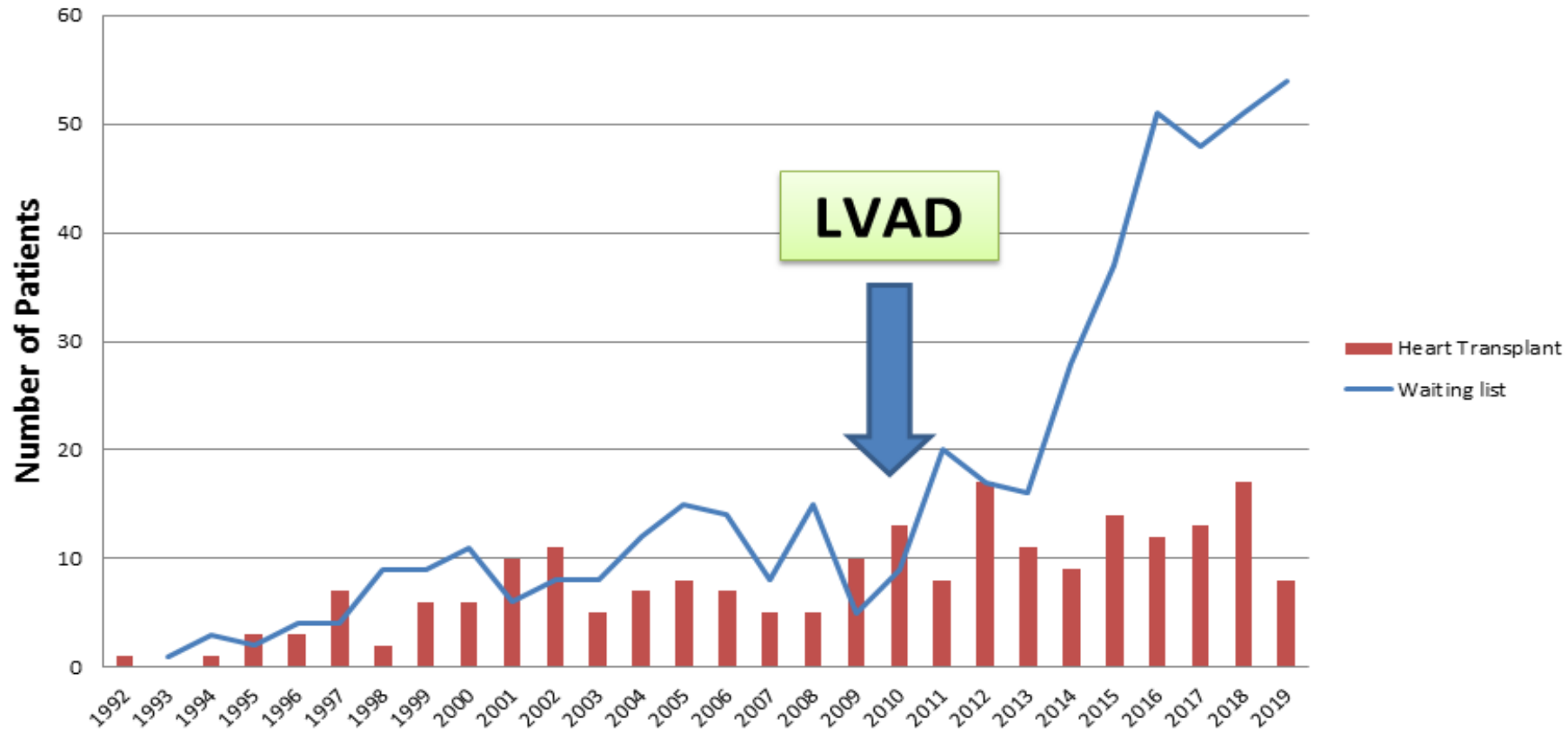
- 100 PATIENTS
 - 88 BTT/BTC 12 DT AS INITIAL STRATEGY
- INTERMACS
 - 1 → 19
 - 2 → 39
 - 3 → 34
 - 4-6 → 8
- 17 WITH VA-ECMO AS BRIDGE TO BRIDGE

LVAD NUMBER PER YEAR

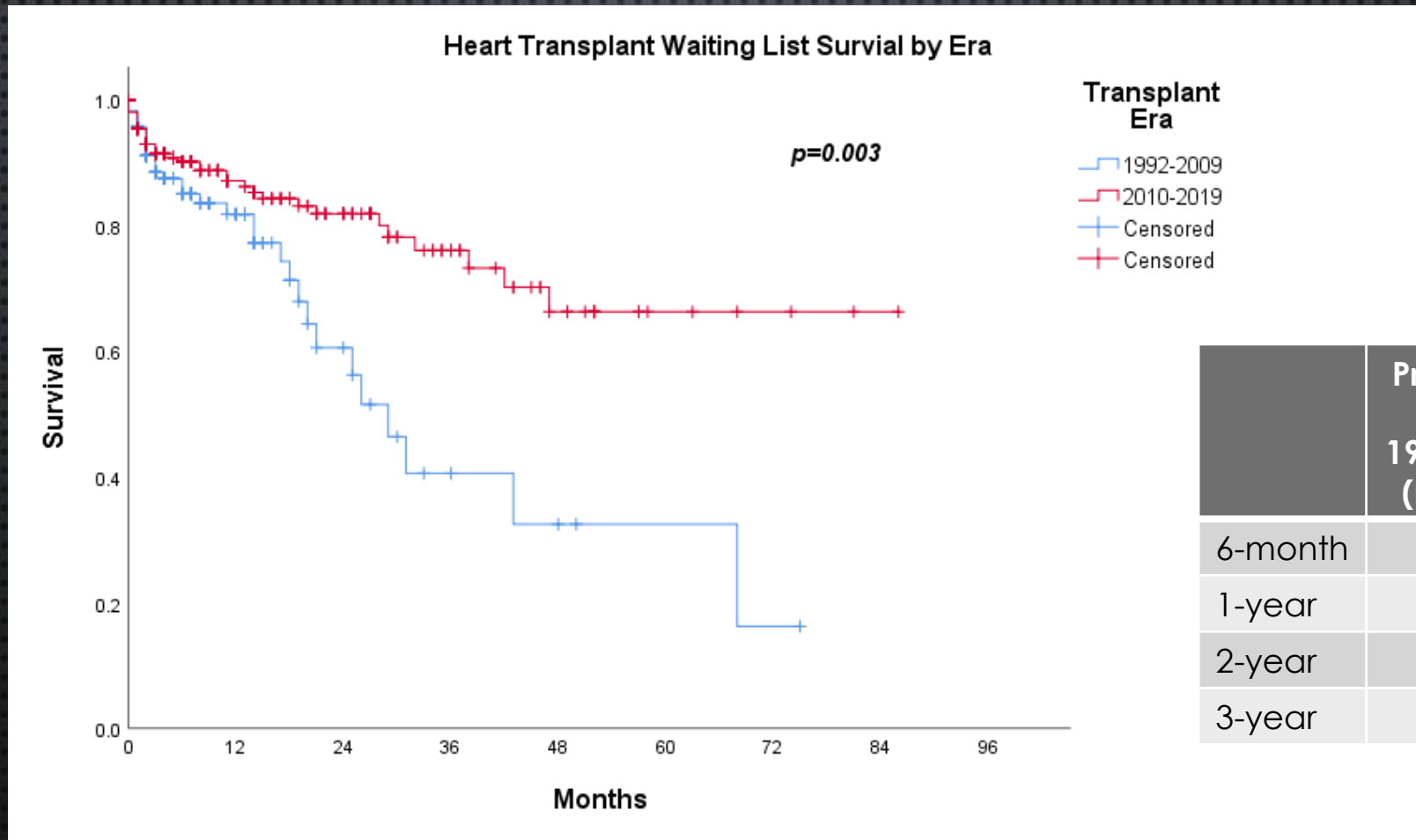


LVAD SERVICE SINCE 2010

Number of patients active on waiting list at the end of each year and number of heart transplantation done per year

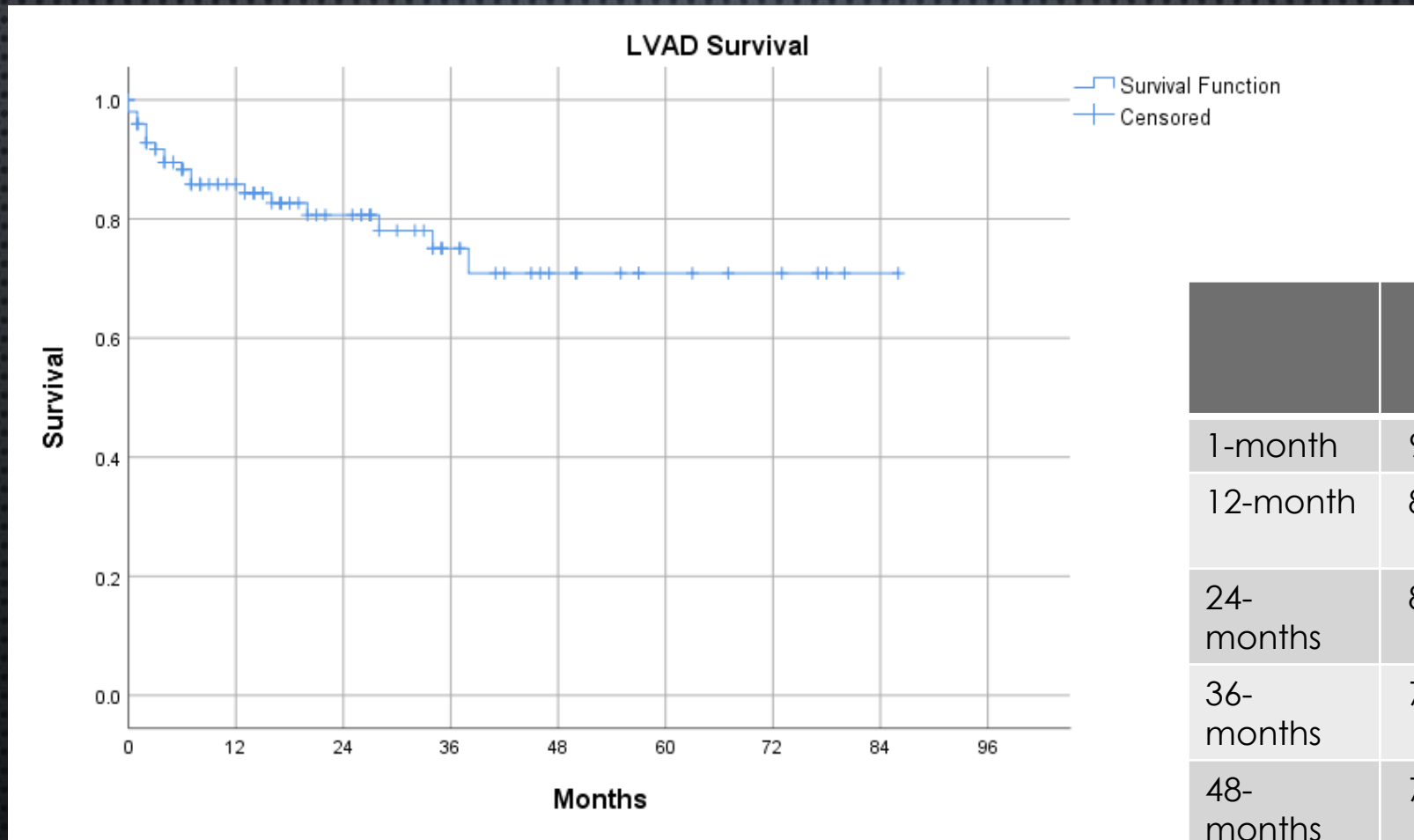


SURVIVAL ON HEART TRANSPLANT WAITING LIST BY ERA



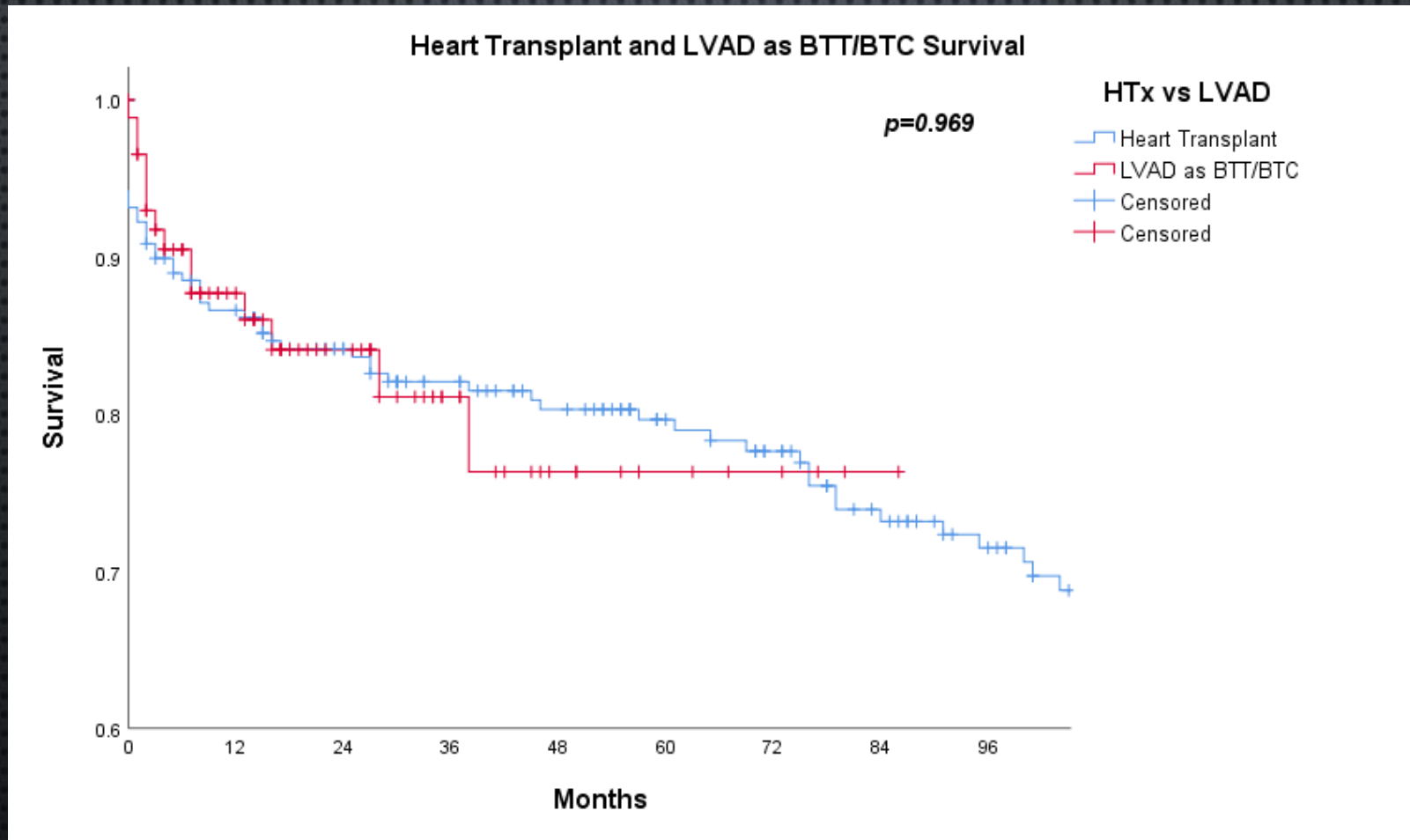
	Pre-LVAD Era 1992-2009 (n= 175)	Post-LVAD Era 2010-2019 (n=257)
6-month	85%	90.2%
1-year	81.8%	87.1%
2-year	60.6%	81.9%
3-year	40.6%	76.1%

OVERALL LVAD SURVIVAL

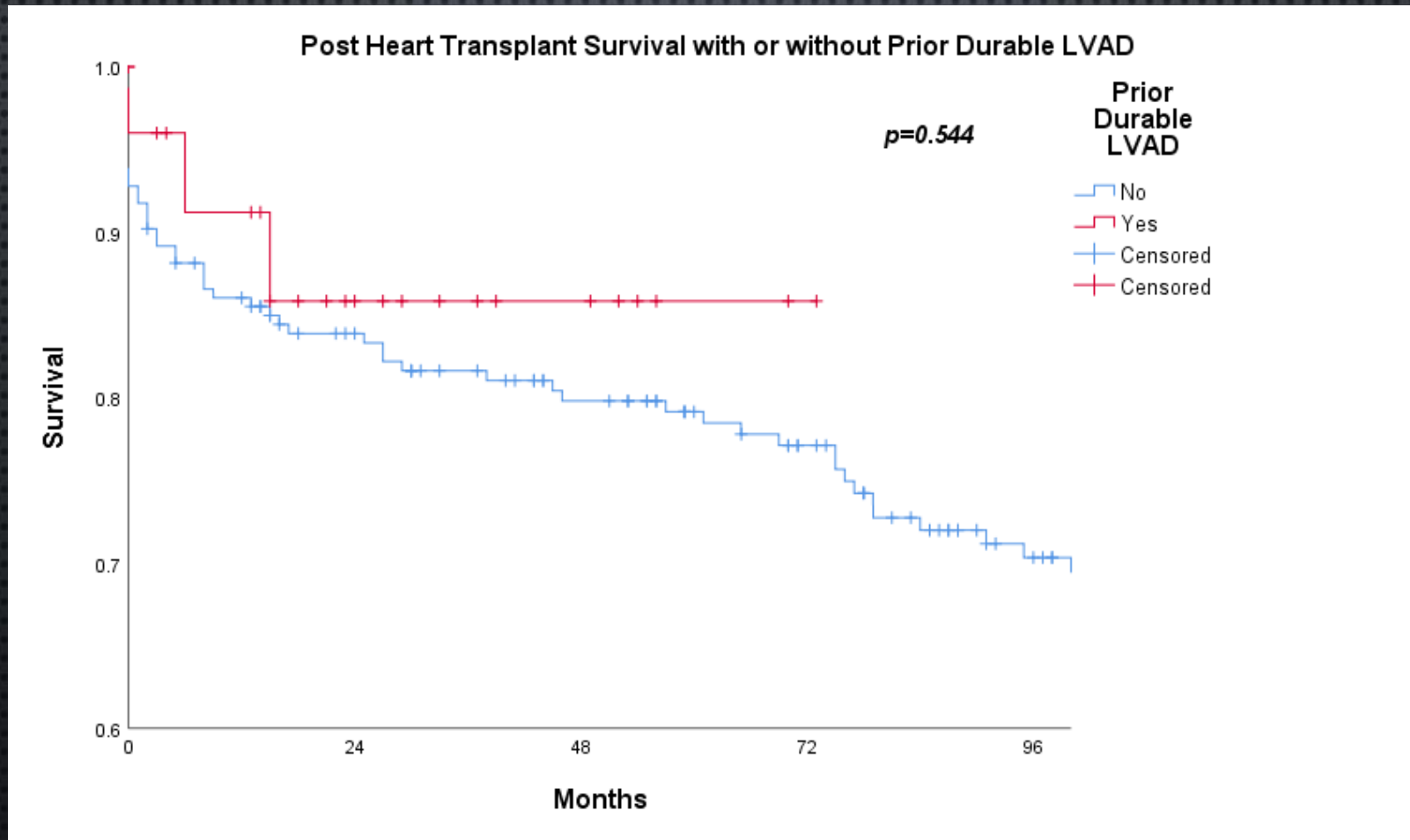


	HK	8 th INTERMAC S
1-month	96%	95%
12-month	85.8%	81%
24-months	80.7%	70%
36-months	75.1%	59%
48-months	70.9%	49%

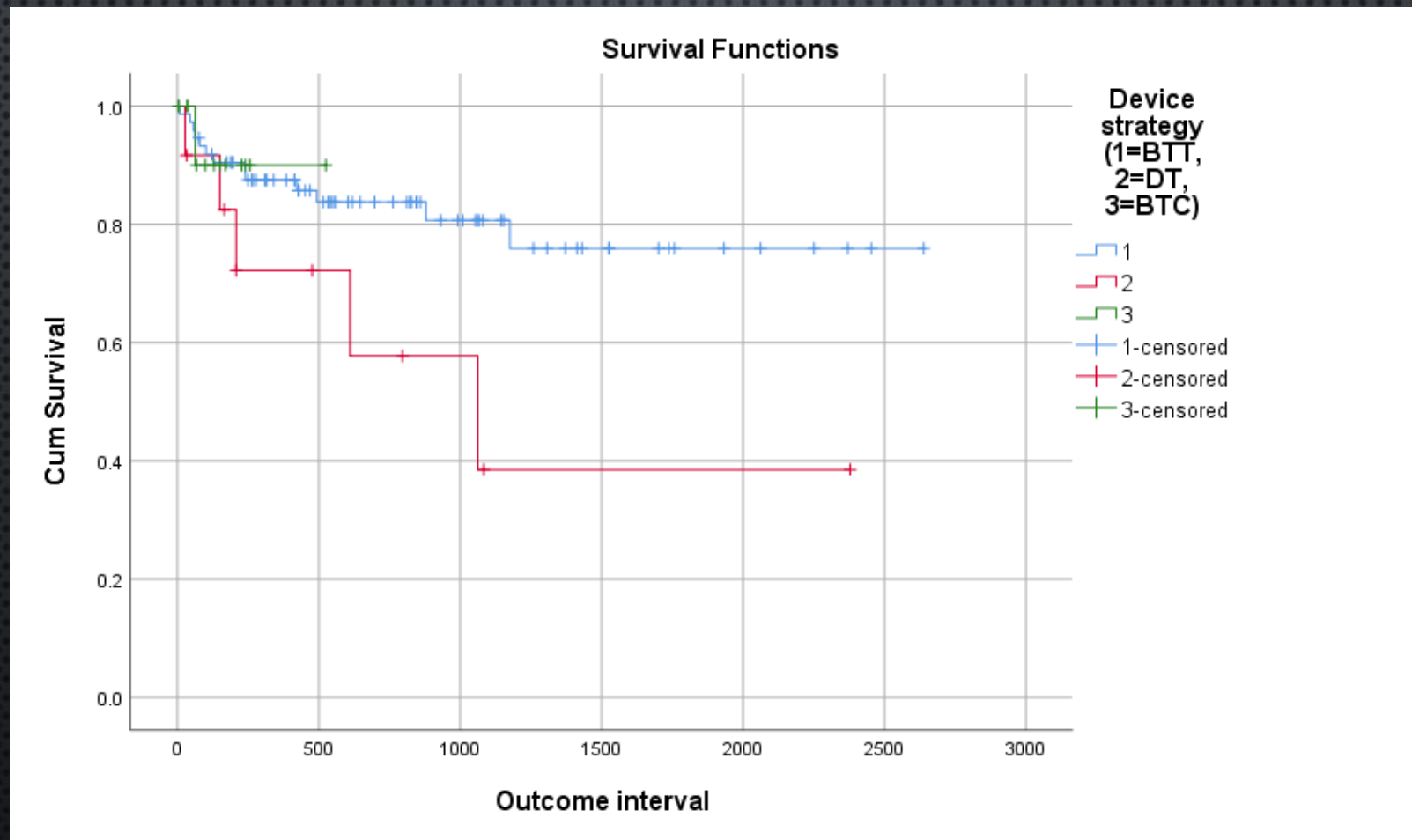
HEART TRANSPLANT AND BTT/BTC LVAD SURVIVAL



POST HEART TRANSPLANT SURVIVAL WITH OR WITHOUT PRIOR DURABLE LVAD AS BTT



LVAD SURVIVAL BY STRATEGIES



CONCLUSIONS

- SINCE INTRODUCTION OF LVAD SERVICE SINCE 2010
 - INCREASING ACCUMULATION OF PATIENTS ON WAITING LIST
 - OVERALL WAITING LIST SURVIVAL IS BETTER DUE TO GOOD POST LVAD OUTCOME
- OVERALL BTT/BTC LVAD SURVIVAL IS COMPARABLE WITH HEART TRANSPLANT SURVIVAL
- POST HEART TRANSPLANT SURVIVAL AFTER LVAD THERAPY IS COMPARABLE WITH THOSE WITHOUT PRIOR LVAD SUPPORT.
- LVAD IS A WELL-ESTABLISHED TREATMENT FOR PATIENTS WITH ADVANCED HEART FAILURE WITH GOOD OUTCOMES

THANK YOU!