

YOU HEAR A MURMUR

NOW WHAT?

ECHO

- WHAT DOES ALL THIS STUFF ON THE REPORT MEAN?
- WHAT DO YOU DO ABOUT IT?
- WHEN DO YOU REFER TO A CARDIOLOGIST?

MILD DISEASE

SEE PATIENT YEARLY; REPEAT ECHO IN 2 YEARS

NO NEED TO REFER UNLESS MURMUR OR PATIENT
STATUS CHANGES

MODERATE TO SEVERE DISEASE

SUPPOSE THIS WERE POTASSIUM :

LOW, MEDIUM OR HIGH

DEFINITIONS FOR VHD SEVERITY ARE IMPRECISE

ALMOST ALL PATIENTS SHOULD BE REFERRED UNLESS
CIRCUMSTANCES ARE SUCH THAT THEY ARE NOT
CANDIDATES FOR FURTHER Dx OR Rx

WHY IS THIS IMPORTANT?

- SEVERE DISEASE IS DEADLY; MODERATE DISEASE NOT SO MUCH
- MOST PATIENTS WITH SEVERE VHD WILL DIE OR HAVE A SERIOUS COMPLICATION FROM THEIR DISEASE FROM BETWEEN 1 MONTH AND 5 YEARS

REFERRAL

- INITIALLY WILL BE SEEN IN VALVE CLINIC OR CARDIOLOGIST OF CHOICE
- HEART TEAM: MEETS WEEKLY TO DISCUSS VALVE PATIENTS
- IMAGER
- STRUCTURALIST
- HEART SURGEON
- ANESTHESIOLOGIST
- PATIENT

RSFH Heart Team



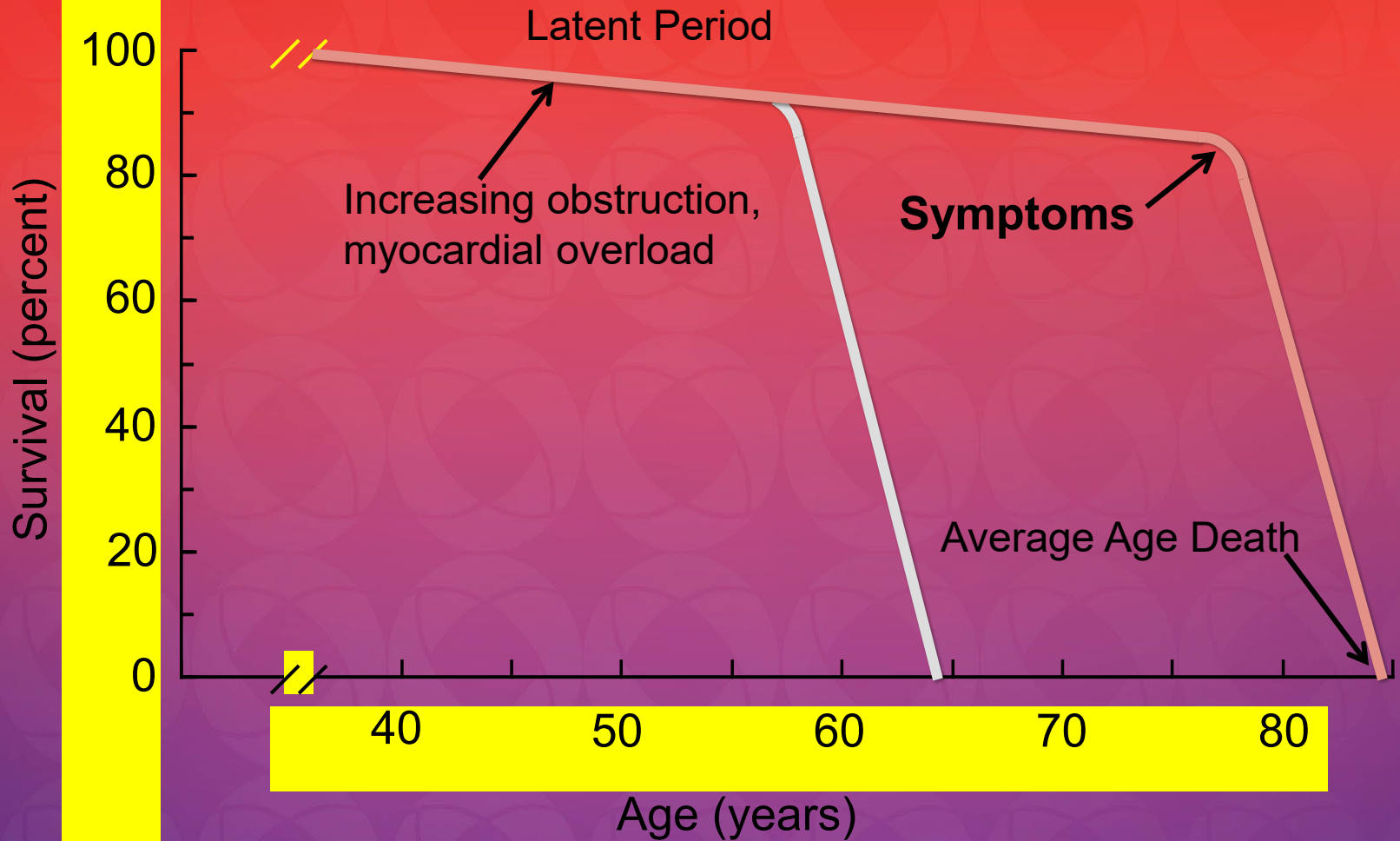
Missing a few...

VALVULAR HEART DISEASE

WHAT THE PRACTITIONER NEEDS TO KNOW about AS and
MR

AORTIC STENOSIS

- SEM PEAKS PROGRESSIVELY LATER IN SYSTOLE
- DELAYED CAROTID UPSTROKE
- FORCEFUL APICAL BEAT



SYMPTOMS DUE TO AS

- MORTALITY : 2%/ MONTH

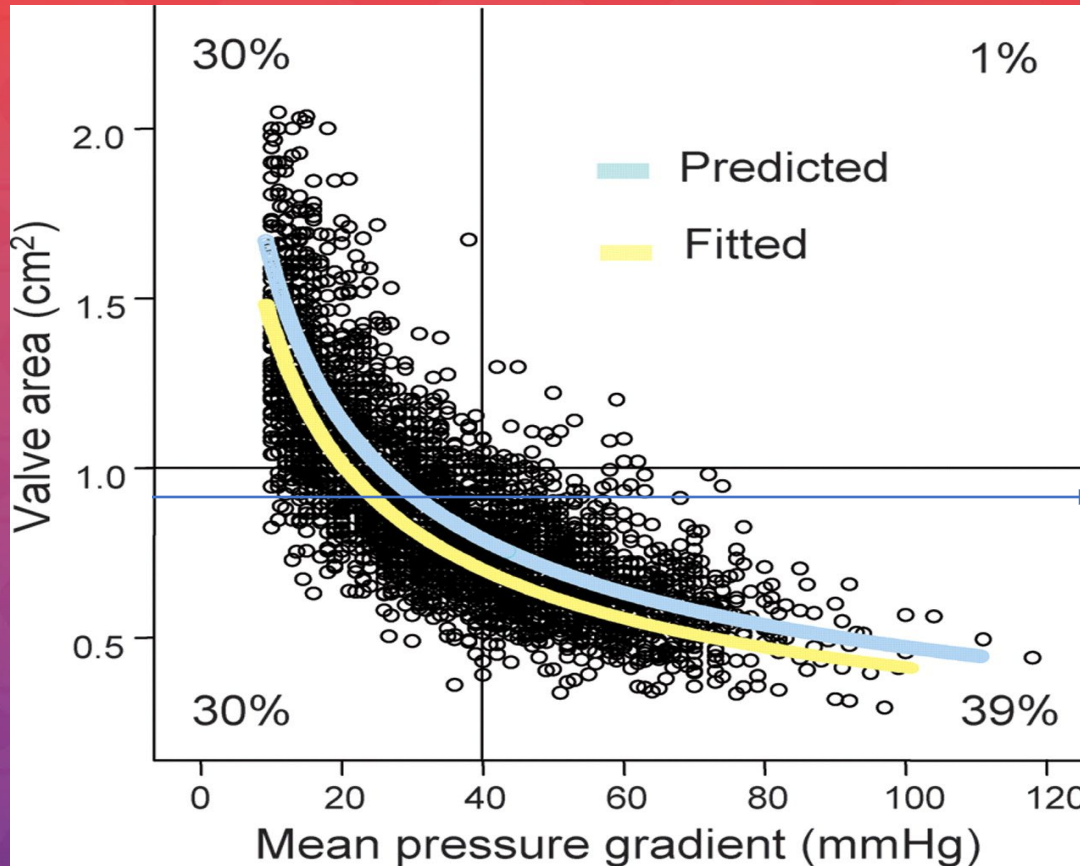
DEFINITION OF “SEVERE”

MANMADE AND FRAUGHT

SEVERE AS

1/4/40/0.6

Valve area vs. mean pressure gradient of 3483 echocardiographic studies in patients with aortic valve stenosis and normal left ventricular function.

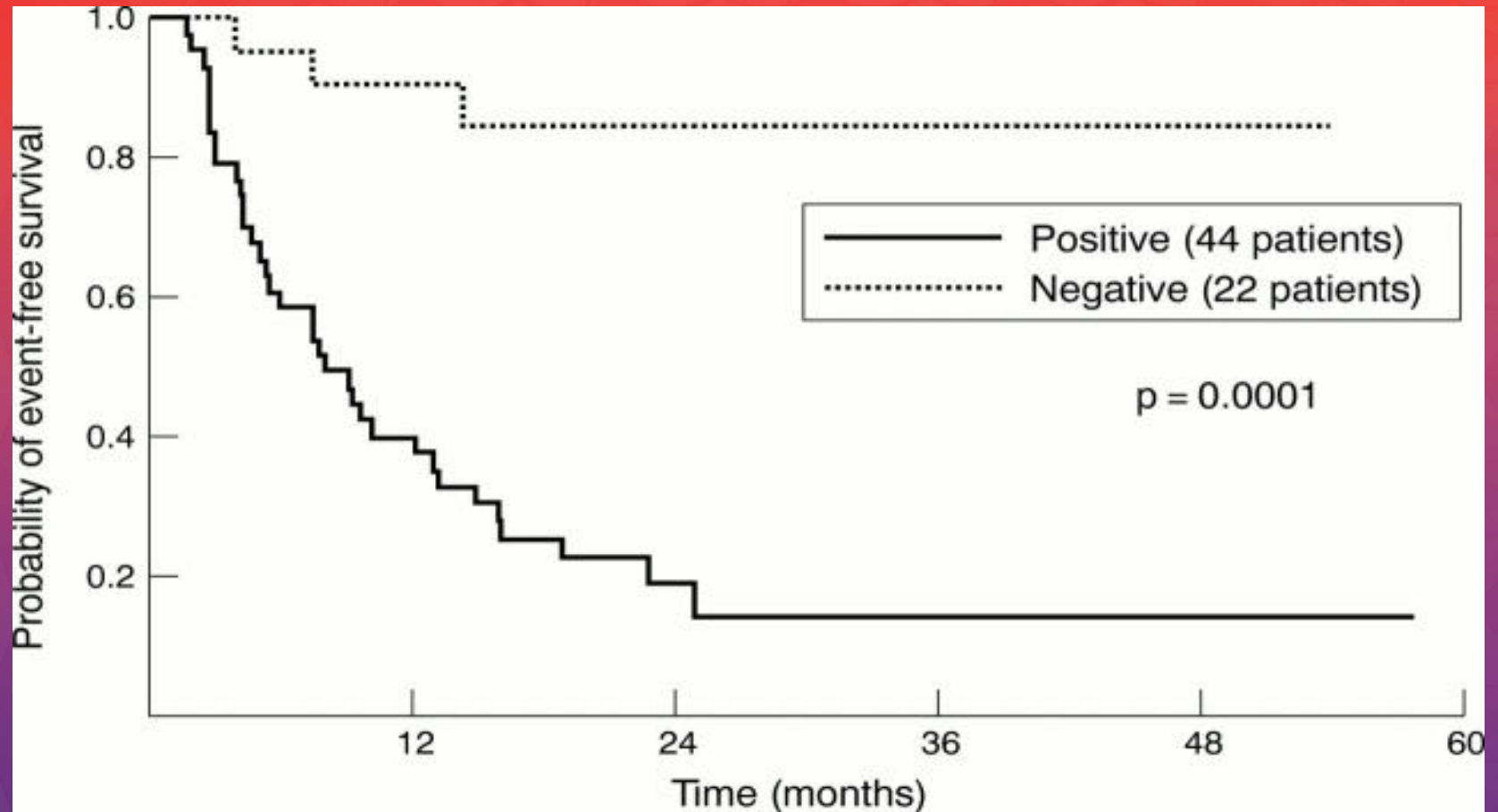


Minners J et al. Eur Heart J 2008;29:1043-1048

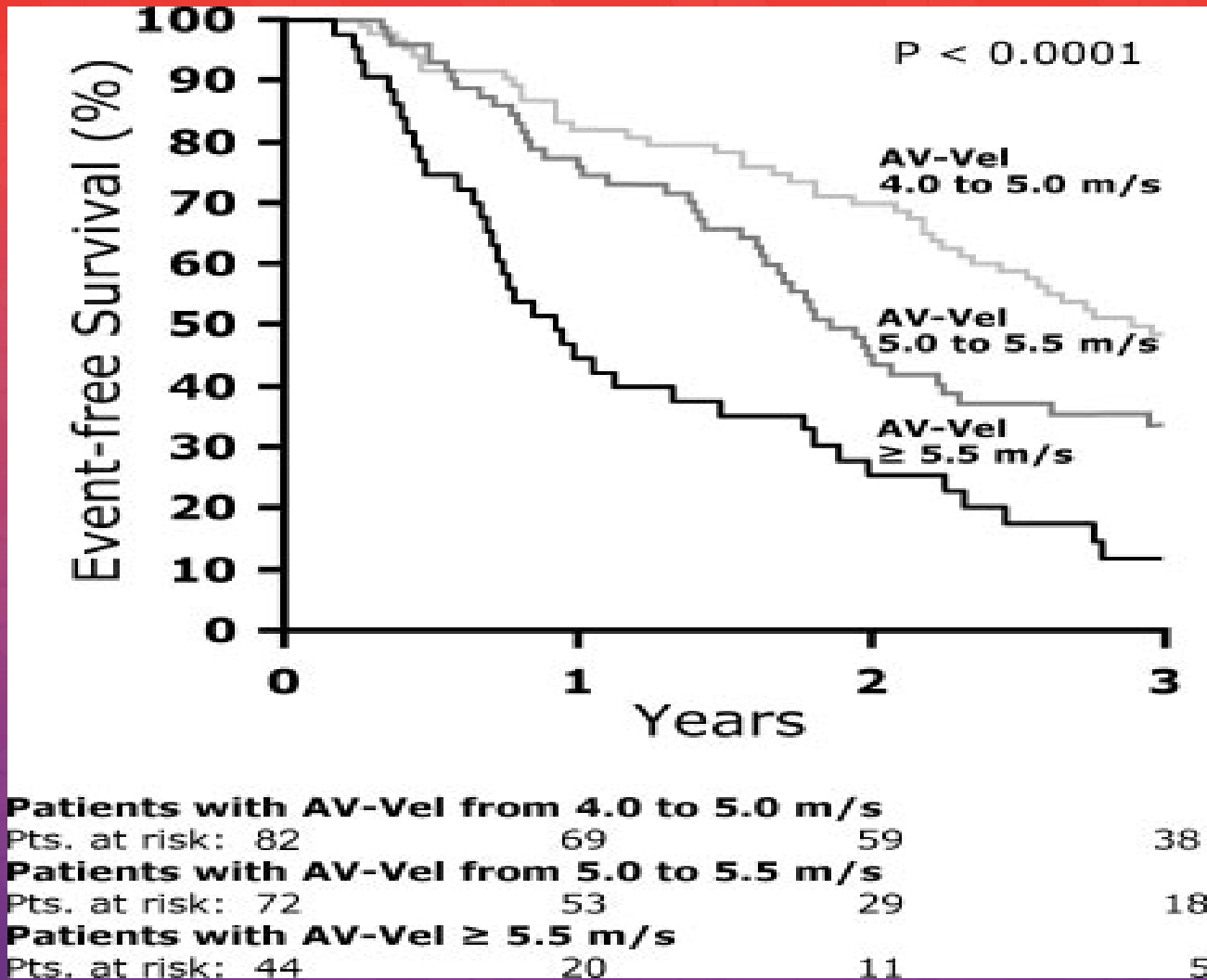
CLASS I INDICATIONS FOR AVR

- SYMPTOMS ATTRIBUTAL TO AS
- ASYMPTOMATIC LV DYSFUNCTION

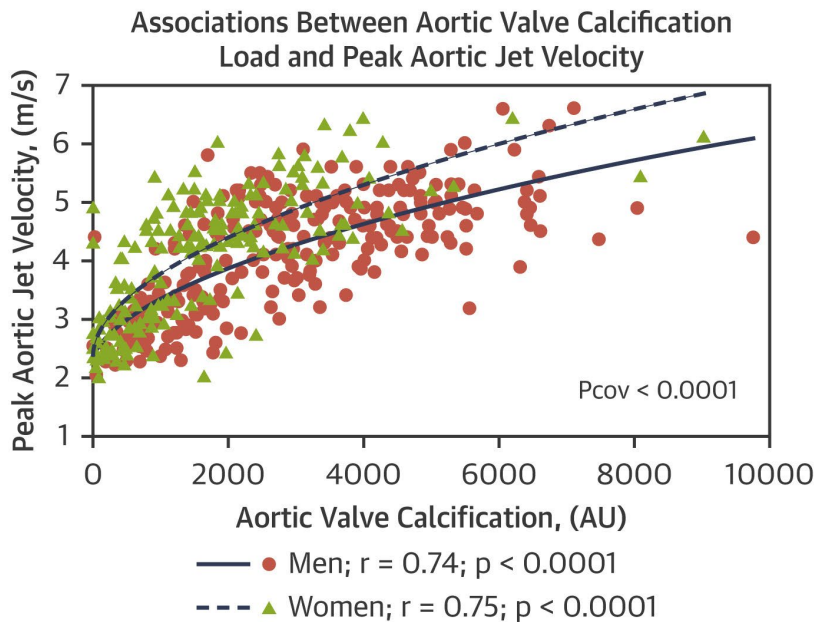
ADDITIONAL HELP



AMATO et al HEART, 86:381; 2001



A



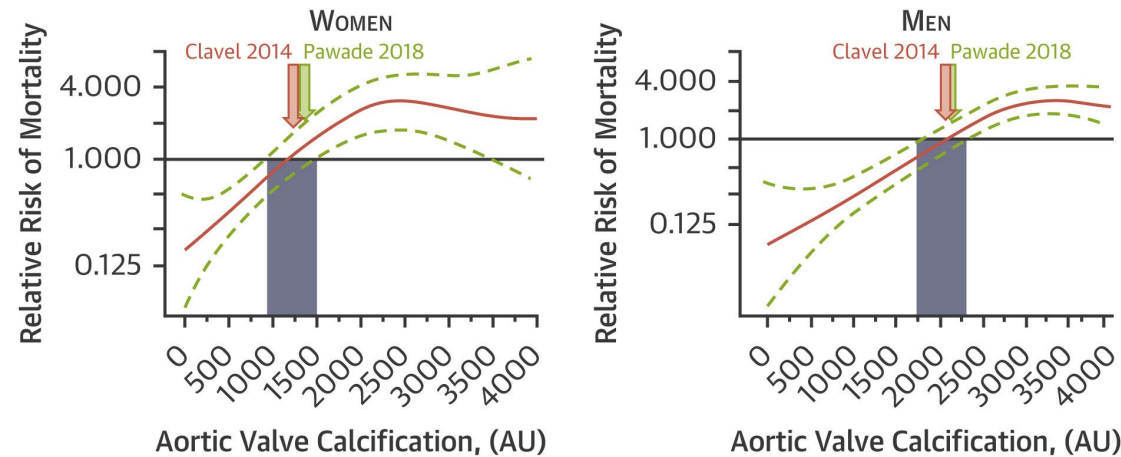
B

Thresholds Identifying Severe Aortic Stenosis in Women and Men

Sex	AUC	AVC Thresholds	Reference
Women	0.91	1,274 AU	Clavel 2014
	0.92	1,377 AU	Pawade 2018
	-	1,200 AU	ESC/EACTS Guidelines
Men	0.90	2,065 AU	Clavel 2014
	0.89	2,062 AU	Pawade 2018
	-	2,000 AU	ESC/EACTS Guidelines

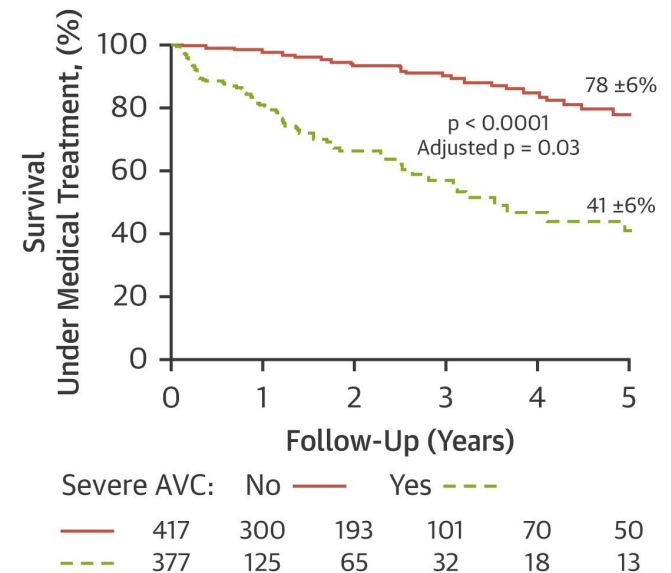
C

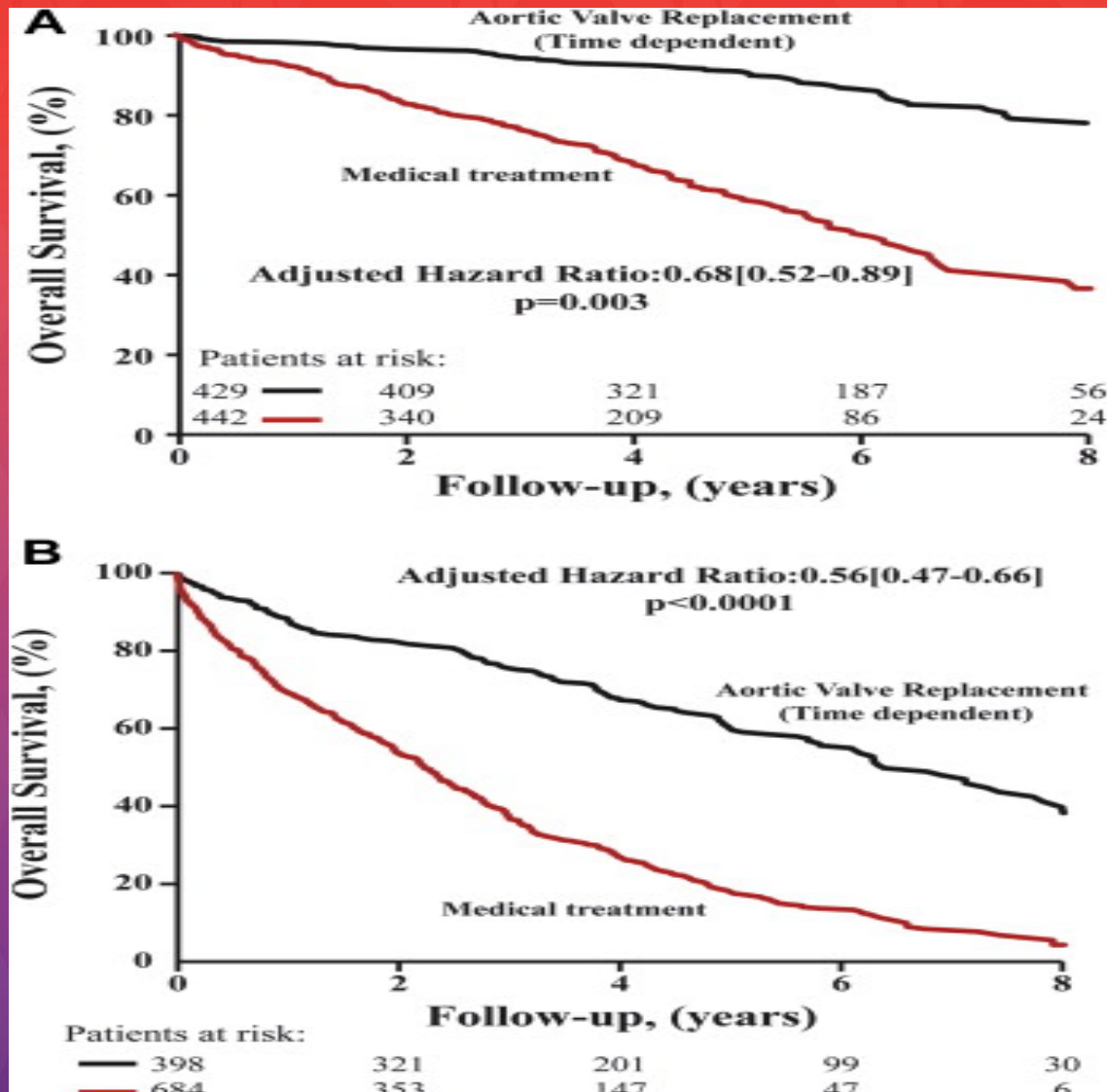
Impact of AVC Burden on Mortality in Patients with AS, by Sex



D

Effects of AVC Burden on Survival in Patients with AS Under Medical Treatment





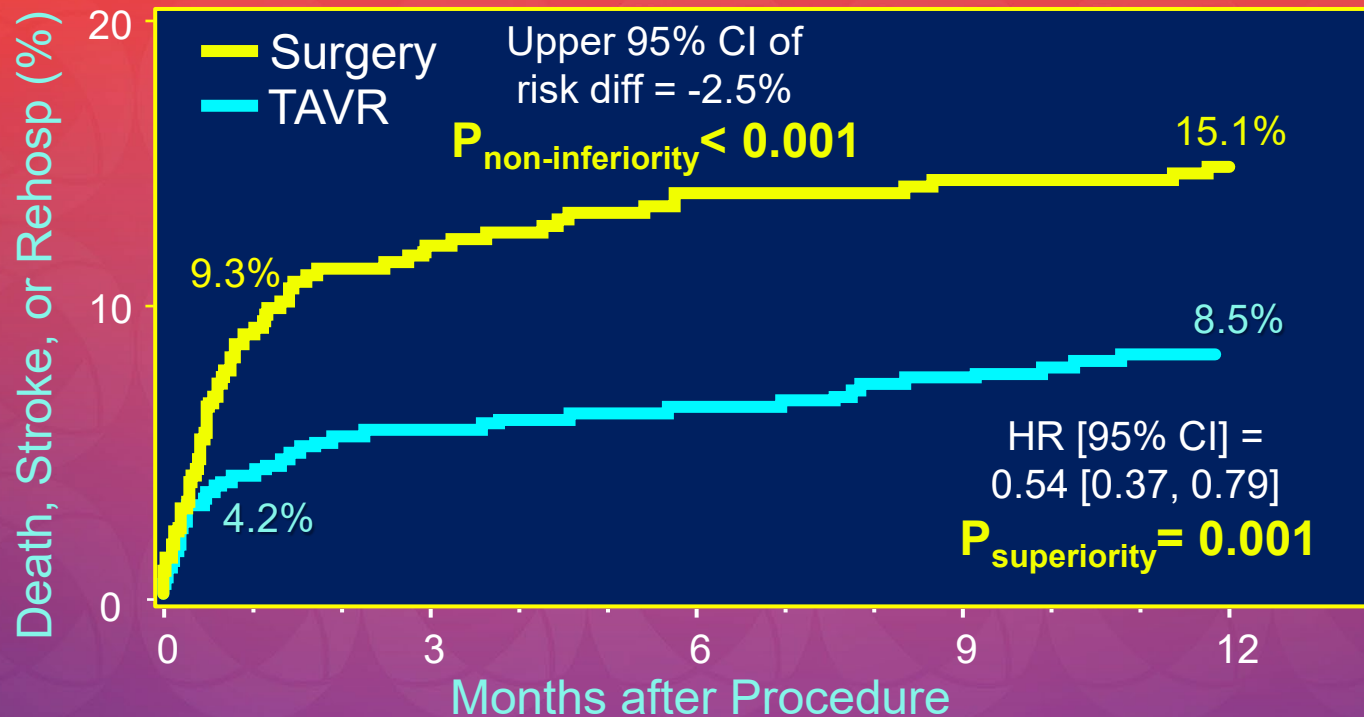
CLASS IIa INDICATIONS FOR AVR

- VERY SEVERE AS (JET 5 m/sec)
- + EX TEST
- RAPID PROGRESSION
- HIGH BNP

TAVR

- EQUAL OR SUPERIOR TO SAVR IN INOPERABLE, HIGH RISK AND INTERMEDIATE RISK SEVERE AS

Primary Endpoint



Number at risk:

Surgery	454	408	390	381	377	374
TAVR	496	475	467	462	456	451

MACK M et al NEJM 2019

SAVR

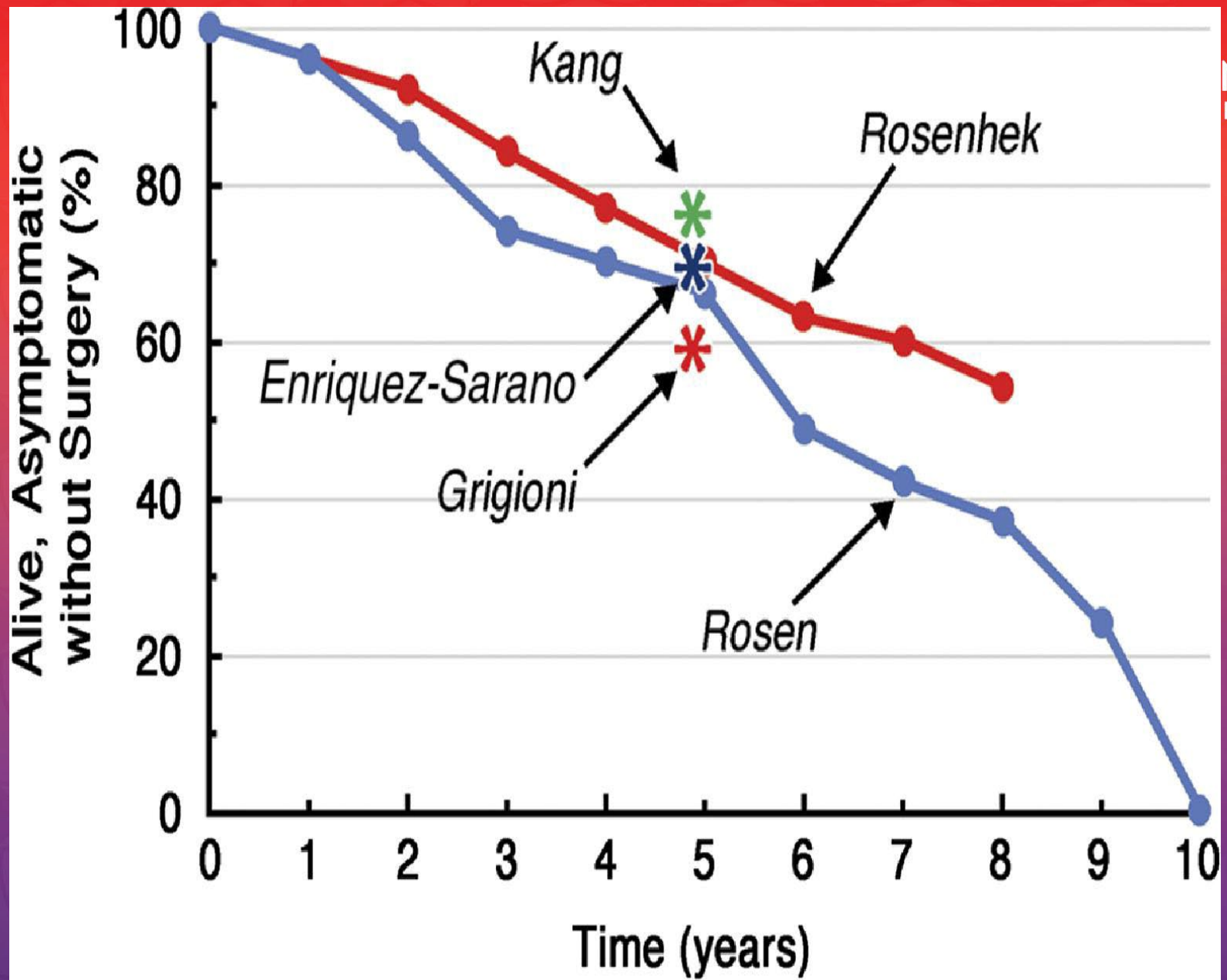
- YOUNG Pts (< 65)
- OTHER CARDIAC DISEASE

PRIMARY MR

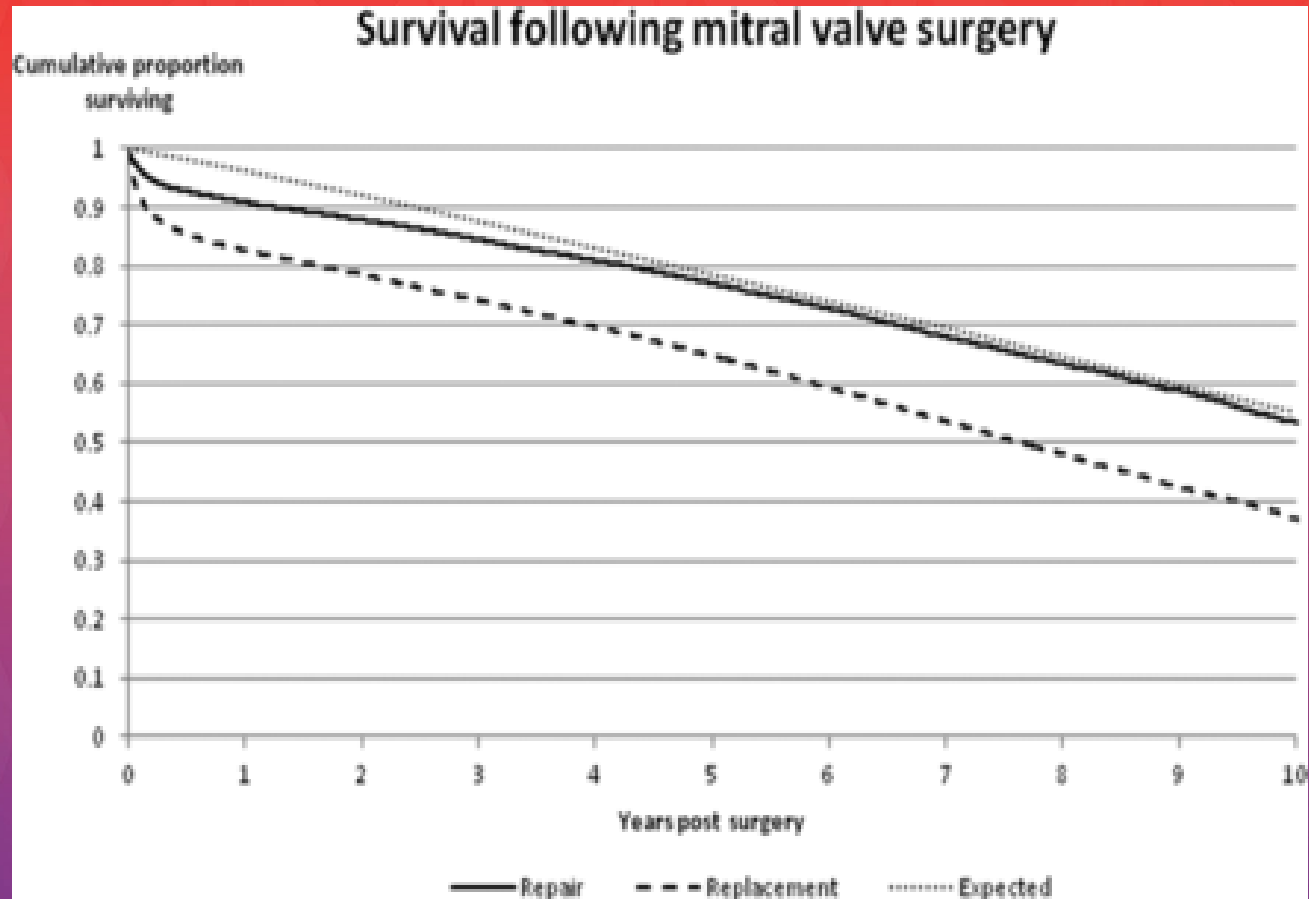
- HOLOSYSTOLIC APICAL MURMUR
- DISPLACED APICAL BEAT
- S3

PRIMARY MR

- IT'S THE VALVE THAT MAKES THE HEART SICK



DURABLE REPAIR



VASSILEVA et al CIRC: 2013

SURGERY 2a

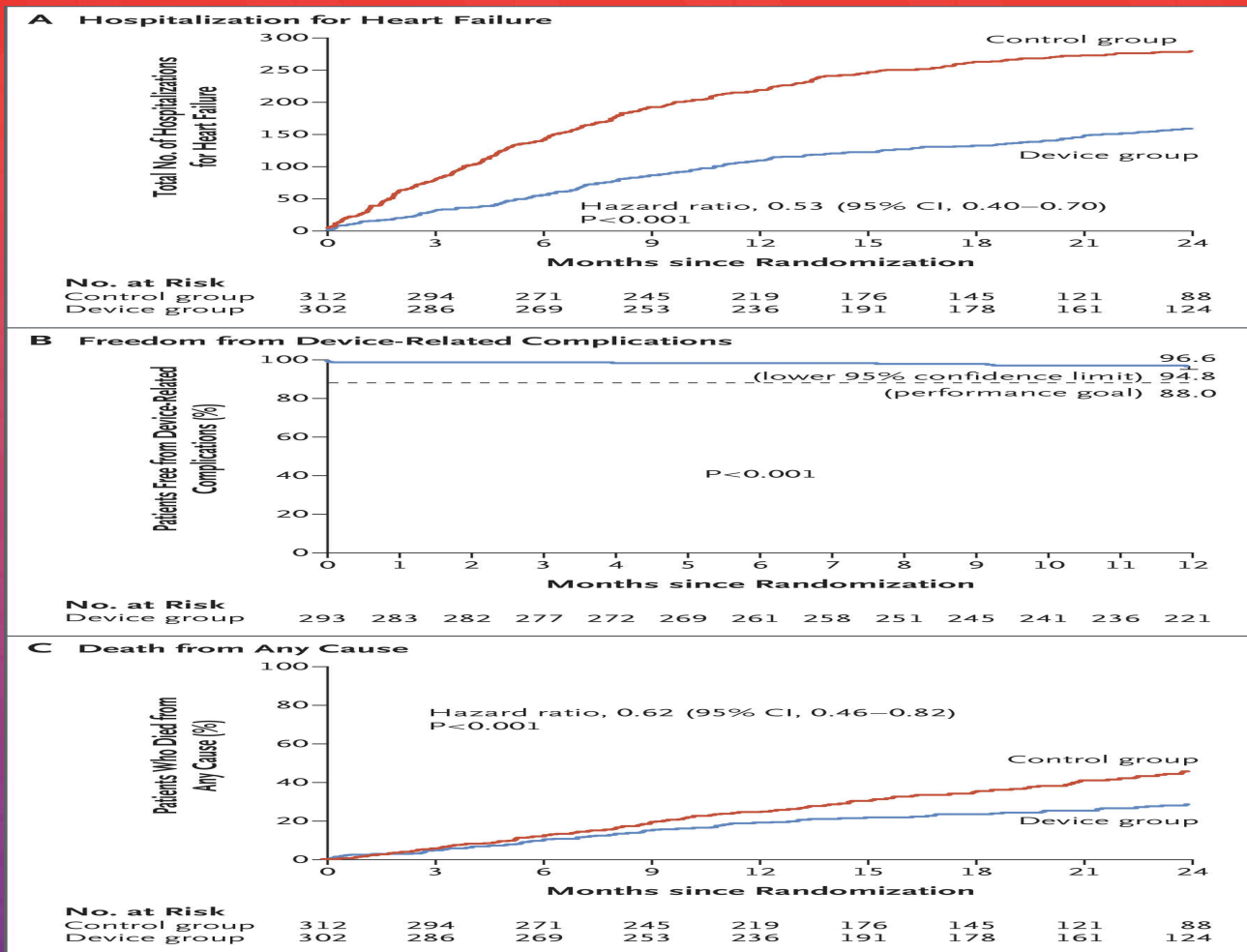
- NO Sxs; NL LV FUNCTION (EF $>.60$,
- ESD $< 40\text{mm}$) WHEN REPAIR LIKELY (95%)

75 Y/O MAN

- S/P 3 MIs
- CLASS III HF
- EF 0.22
- SEVERE MR

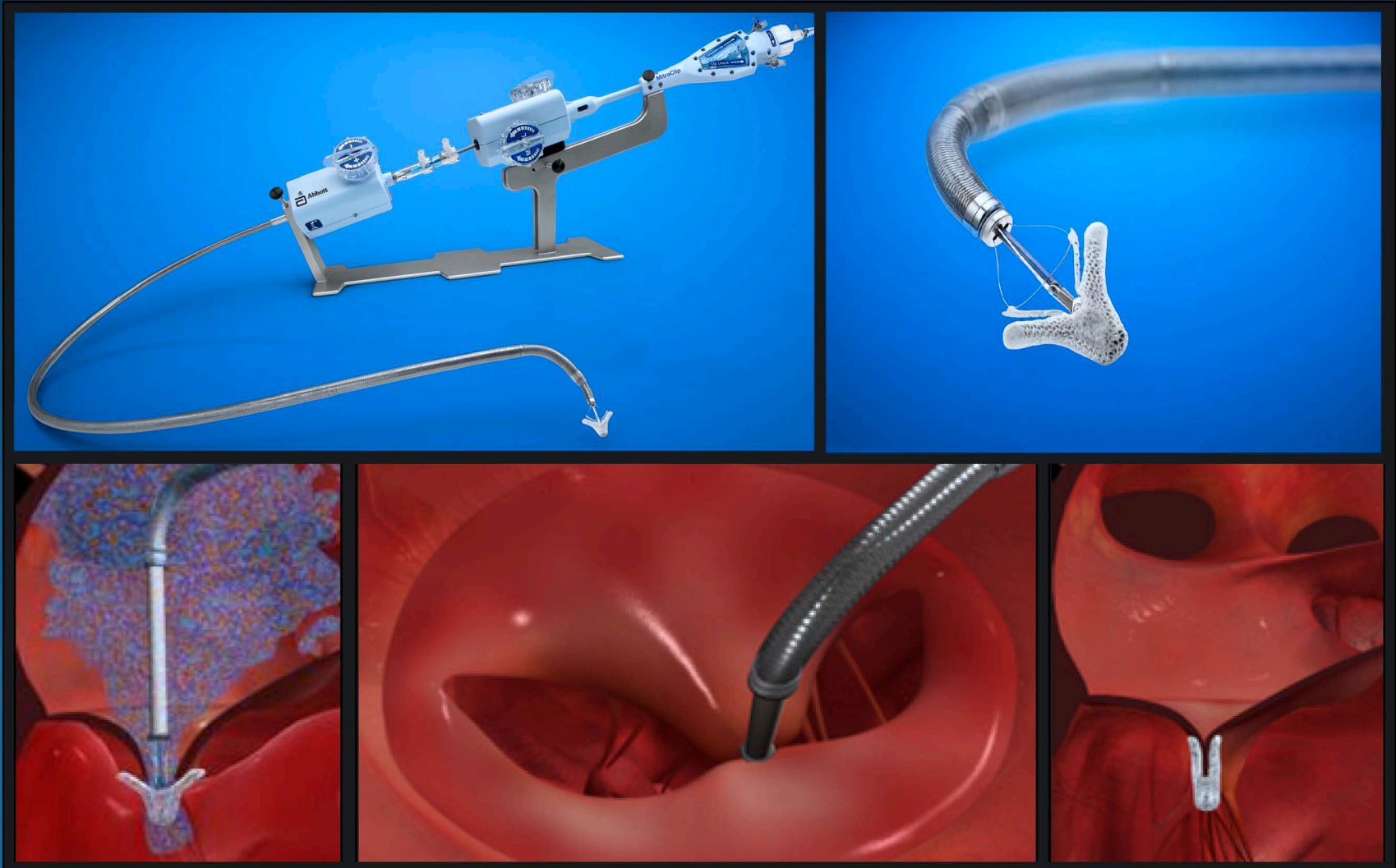
FAR-ADVANCED SECONDARY MR

IT'S THE HEART THAT MAKES THE VALVE SICK



STONE et al NEJM 2019

Percutaneous Mitral Valve Repair MitraClip® System



TAKE HOME

- SYMPTOMS ARE ALWAYS BAD
- ALMOST ALL PATIENTS WITH MODERATE OR SEVERE VHD SHOULD BE REFERRED
- MY CELL: 252 481 7832
- OR: VALVE CONSULT OPTION IN EPIC