



TURIN,  
October  
25<sup>th</sup>-27<sup>th</sup>  
2018  
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GIORNATE  
CARDIOLOGICHE  
TORINESI



# Patient(s) with advanced HF and severe Mitral Regurgitation

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Scienza  
Turin

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# GIORNATE CARDIOLOGICHE TORINESI



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2018

# GIORNATE CARDIOLOGICHE

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## Predictors of clinical outcomes after edge-to-edge percutaneous mitral valve repair

Davide Capodanno, MD, PhD, <sup>a,c</sup> Marianna Maria Luisa Laudisa, MD, <sup>d</sup> Stefano Cannata, Francesco Bedogni, MD, <sup>d</sup> Anna Sonia Petronio Carmelo Grasso, MD <sup>a</sup>, on behalf of the GRA

**Table IV.** Predictors of all-cause death or rehospitalization for heart failure

|                          | Univariate analysis |           |      | Multivariate analysis |           |       |
|--------------------------|---------------------|-----------|------|-----------------------|-----------|-------|
|                          | HR                  | 95% CI    | P    | HR                    | 95% CI    | P     |
| EuroSCORE >5%            | 2.17                | 1.38-3.41 | .001 | 1.06                  | 0.63-1.79 | .821  |
| Diabetes                 | 1.77                | 1.16-2.72 | .008 | 1.30                  | 0.79-2.14 | .294  |
| Prior MI                 | 1.74                | 1.14-2.66 | .011 |                       |           |       |
| Shock                    | 3.02                | 1.45-6.30 | .003 | 1.05                  | 0.34-3.23 | .938  |
| NYHA IV                  | 2.04                | 1.62-3.30 | .004 | 2.50                  | 1.45-4.31 | .001  |
| MR ischemic etiology     | 2.01                | 1.31-3.09 | .001 | 2.52                  | 1.55-4.11 | <.001 |
| LVEF <30%                | 1.55                | 1.01-2.40 | .048 |                       |           |       |
| LVEDV >160 mL            | 1.73                | 1.11-2.70 | .016 |                       |           |       |
| LVESV >110 mL            | 1.86                | 1.20-2.90 | .006 | 1.86                  | 1.15-2.99 | .011  |
| LAA >30 mm <sup>2</sup>  | 1.81                | 1.13-2.90 | .014 |                       |           |       |
| Acute procedural success | 0.30                | 0.14-0.66 | .003 | 0.24                  | 0.09-0.61 | .003  |
| Inhospital stay ≥15 d    | 1.07                | 1.03-1.11 | .001 | 1.37                  | 0.41-4.56 | .603  |

Abbreviations: MI, Myocardial infarction; NYHA, New York Heart Association; MR, mitral regurgitation; LVEF, Left ventricle ejection fraction; LVEDV, left ventricle end-diastolic volume; LVESV, left ventricle end-systolic volume; LAA, left atrium area.

eo, MD, <sup>b</sup>  
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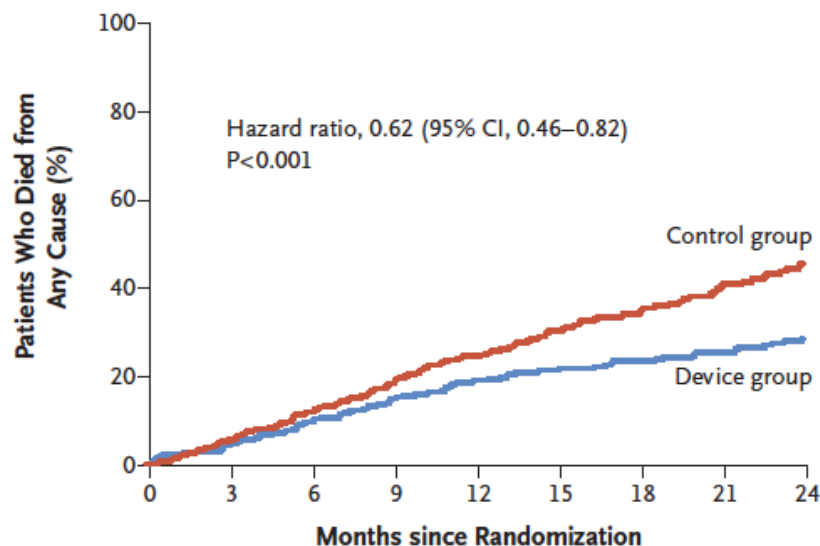
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## Transcatheter Mitral-Valve Repair in Patients with Heart Failure

G.W. Stone, J.A. Lindenfeld, W.T. Abraham, S. Kar, D.S. Lim, J.M. Mishell, B. Whisenant, P.A. Grayburn, M. Rinaldi, S.R. Kapadia, V. Rajagopal, I.J. Sarembock, A. Brieke, S.O. Marx, D.J. Cohen, N.J. Weissman, and M.J. Mack, for the COAPT Investigators\*

### Death from Any Cause

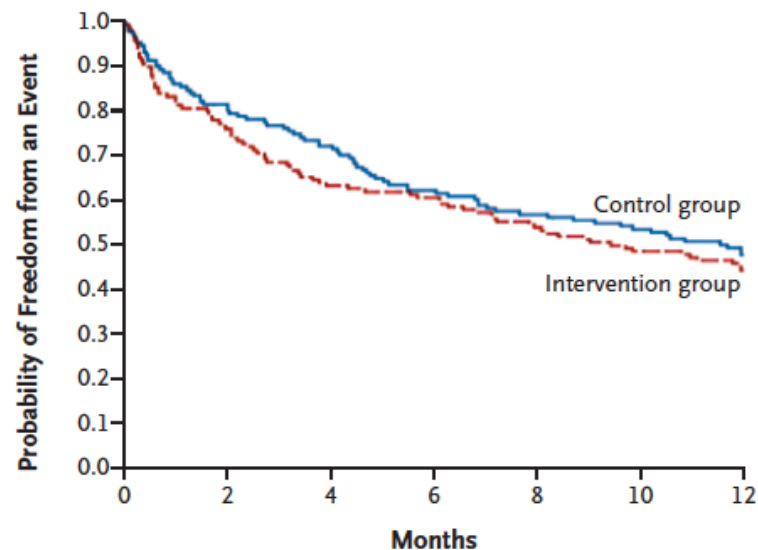


### No. at Risk

|               |     |     |     |     |     |     |     |     |     |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Control group | 312 | 294 | 271 | 245 | 219 | 176 | 145 | 121 | 88  |
| Device group  | 302 | 286 | 269 | 253 | 236 | 191 | 178 | 161 | 124 |

## Percutaneous Repair or Medical Treatment for Secondary Mitral Regurgitation

J.-F. Obadia, D. Messika-Zeitoun, G. Leurent, B. Iung, G. Bonnet, N. Piriou, T. Lefèvre, C. Piot, F. Rouleau, D. Carrié, M. Nejari, P. Ohlmann, F. Leclercq, C. Saint Etienne, E. Teiger, L. Leroux, N. Karam, N. Michel, M. Gilard, E. Donal, J.-N. Trochu, B. Cormier, X. Armoiry, F. Boutitie, D. Maucort-Boulch, C. Banel, G. Samson, P. Guerin, A. Vahanian, and N. Mewton, for the MITRA-FR Investigators\*



### No. at Risk

|                    |     |     |     |    |    |    |    |
|--------------------|-----|-----|-----|----|----|----|----|
| Control group      | 152 | 123 | 109 | 94 | 86 | 80 | 73 |
| Intervention group | 151 | 114 | 95  | 91 | 81 | 73 | 67 |

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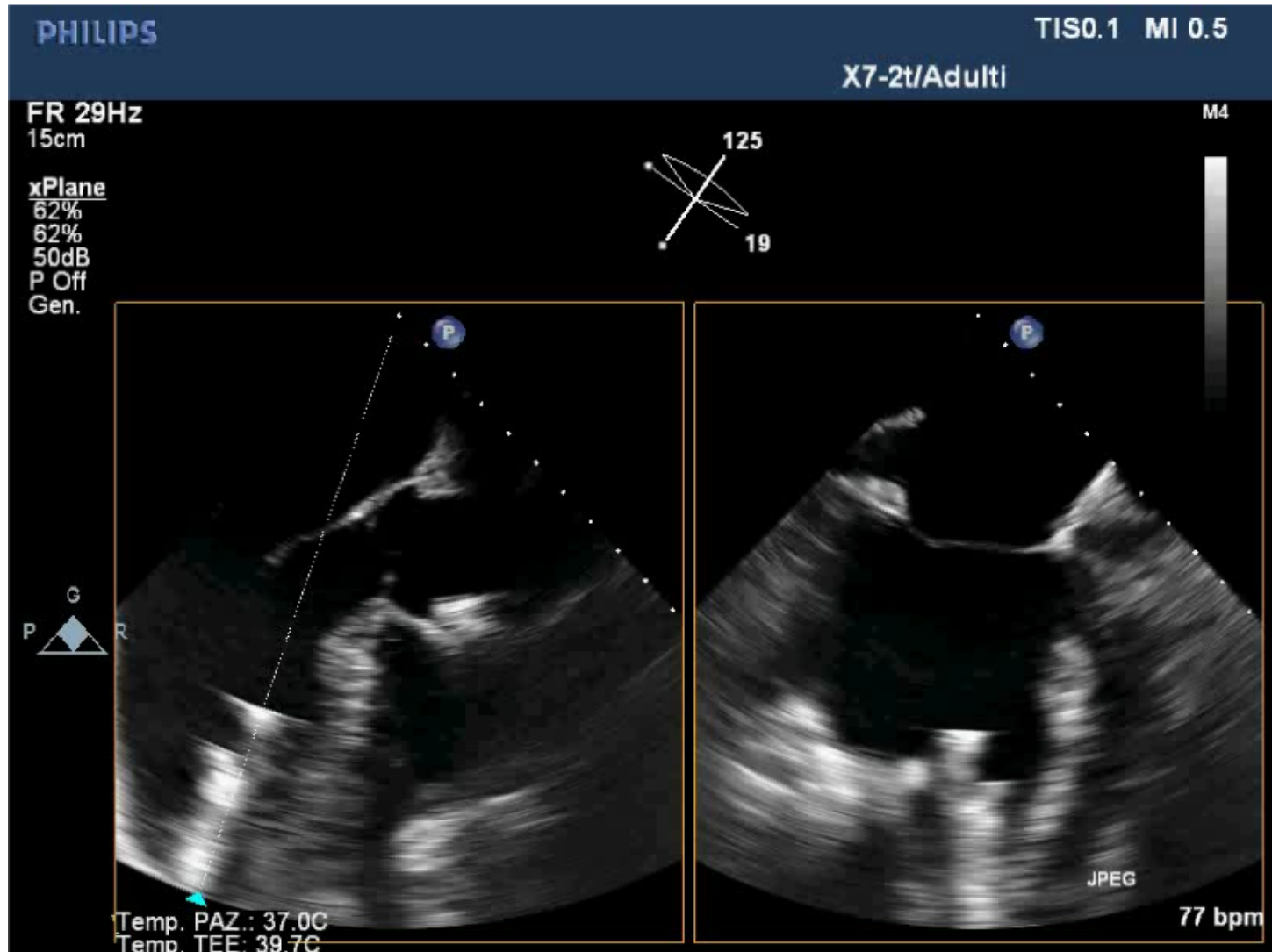
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(J Am Coll Cardiol 2015;66:1747-61)

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ORIGINAL INVESTIGATIONS

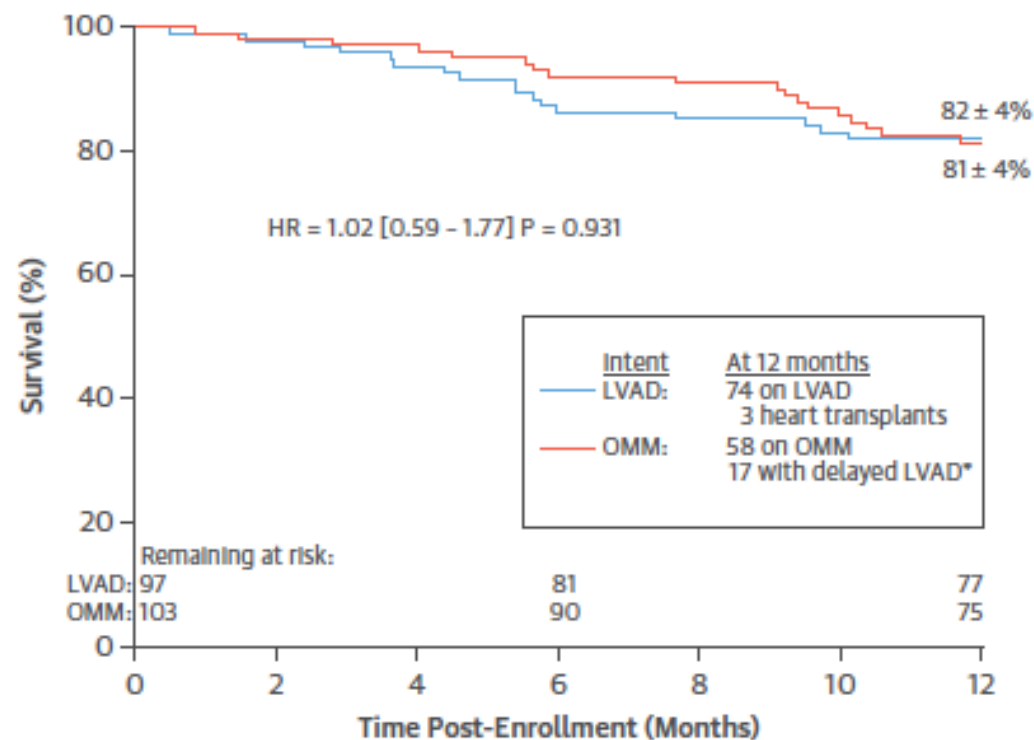
(J Am Coll Cardiol 2015;66:1747-61)

## Risk Assessment and Comparative Effectiveness of Left Ventricular Assist Device and Medical Management in Ambulatory Heart Failure Patients

Results From the ROADMAP Study

Jerry D. Estep, MD,\* Randall C. Starling, MD, MPH,† Douglas A. Horstmannshof, MD,‡ Carmelo Craig H. Selzman, MD,|| Keyur B. Shah, MD,¶ Matthias Loebe, MD, PhD,\* Nader Moazami, M James W. Long, MD, PhD,‡ Josef Stehlik, MD, MPH,|| Vigneshwar Kasirajan, MD,¶ Donald C. John B. O'Connell, MD,\*\* Andrew J. Boyle, MD,†† David J. Farrar, PhD,\*\* Joseph G. Rogers, † for the ROADMAP Study Investigators

**FIGURE 3** Intention-to-Treat Survival



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|                             |                        |      |
|-----------------------------|------------------------|------|
| Back                        | Seattle Heart Failu... | Info |
| Lymphocytes?                | 28 %                   | >    |
| Uric Acid:                  | 6 mg/dL                | >    |
| Results                     |                        |      |
| Anticipated 1-Year Survival |                        |      |
| 30.7 %                      |                        |      |
| Anticipated 5-Year Survival |                        |      |
| 0.3 %                       |                        |      |

A.N.

74 years

ischemic HF

2015 Advanced CHF (3 hospital.)

AFib, ablation

hemodynamic limitation to ACE-I

12/2015 AHF SBP 90 mmHg, INTERMACS 3

lab: crea 1.65, bil 1.6, Na 130

D.P.

70 years

ischemic HF

AFib, ablation

2018 Advanced CHF (1 hospital.)

no hemodynamic limitation to ACE-I

7/2015 AHF SBP 100 mmHg, INTERMACS 4

lab: crea 1.1, bil 2.2, Na 130

|                             |                      |   |   |
|-----------------------------|----------------------|---|---|
| <                           | Seattle Heart Fai... | ☆ | i |
| Results                     |                      |   |   |
| Anticipated 1-Year Survival |                      |   |   |
| 65.3 %                      |                      |   |   |
| Anticipated 5-Year Survival |                      |   |   |
| 11.8 %                      |                      |   |   |



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A.N.

echo:

LV EDD 67 mm EDV 195 ml

EF 24%, MR 4+/4+ EROA 0.8 cm<sup>2</sup>

RV TAPSE 18 mm

RV gradient 46 mmHg

D.P.

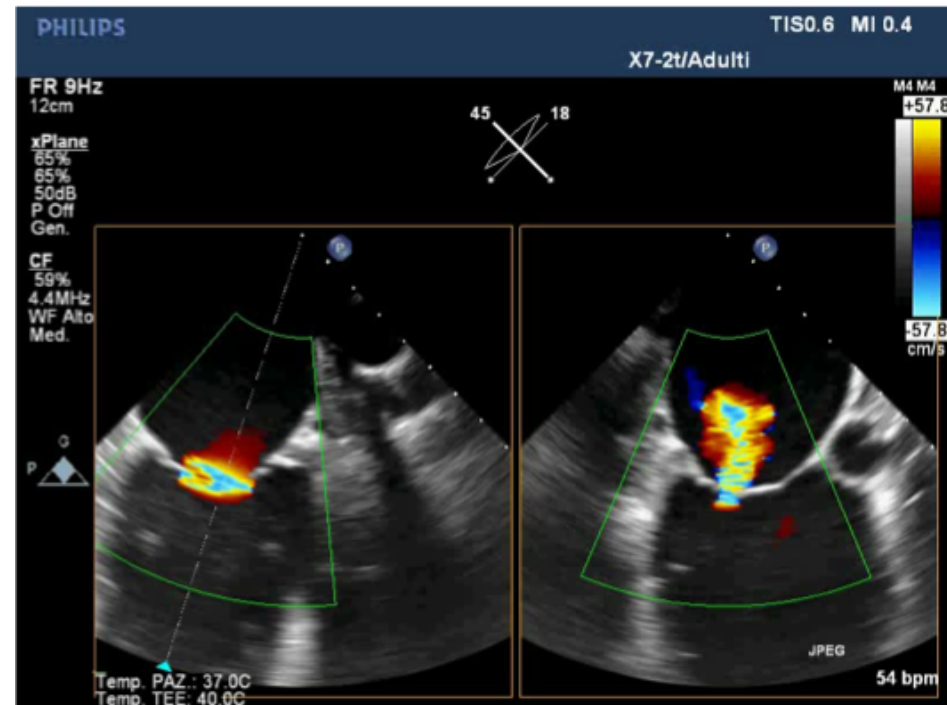
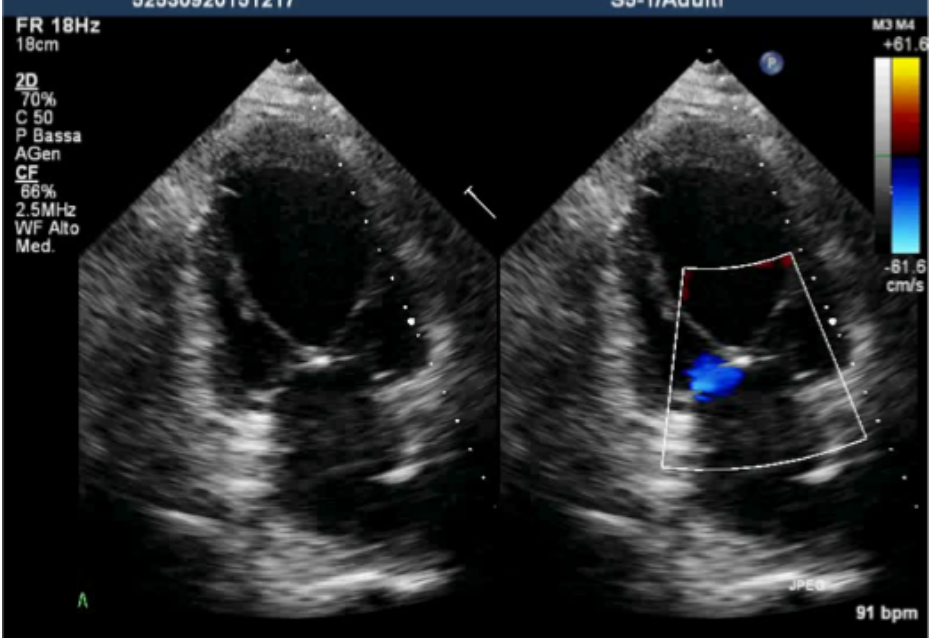
echo:

LV EDD 56 mm EDV 131 ml

EF 20%, MR 4+/4+ EROA 0.4 cm<sup>2</sup>

RV TAPSE 12 mm

RV gradient 47 mmHg



52530920151217

S5-1/Adulti

FR 129Hz  
13cm2D  
71%  
C 50  
P Bassa  
AGenP R  
1.7 3.4

M3

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88 bpm

52530920151217 Cardiologia I Prof. Gaita S5-1/Adulti

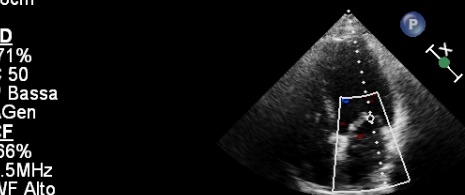
FR 20Hz  
18cm2D  
71%  
C 50  
P Bassa  
AGen  
CF  
66%  
2.5MHz  
WF Alto  
Med.CW  
70%  
1.8MHz  
WF 225Hz

M3 M4

+90.9

-30.3

cm/s



|           |                      |
|-----------|----------------------|
| + MR VTI  |                      |
| V max     | 283 cm/s             |
| V media   | 133 cm/s             |
| PG max    | 32 mmHg              |
| PG medio  | 10 mmHg              |
| VTI       | 50.5 cm              |
| MR ERO    | 0.81 cm <sup>2</sup> |
| Volume MR | 41 ml                |

75mm/s

87bpm

A.N.

|          | P.sist. | P.dias. | PTD | P.media | A | V  |
|----------|---------|---------|-----|---------|---|----|
| Cap-polm |         |         |     | 11      | 9 | 11 |
| A-polm   | 26      | 14      |     | 19      |   |    |
| Vdx      | 28      | 1       | 3   |         |   |    |
| Adx M    |         |         |     | 2       | 1 | 1  |

Indice cardiaco: 1,79 (l/min)m2      levosimendan 72 h pre + dobu 5y

D.P.

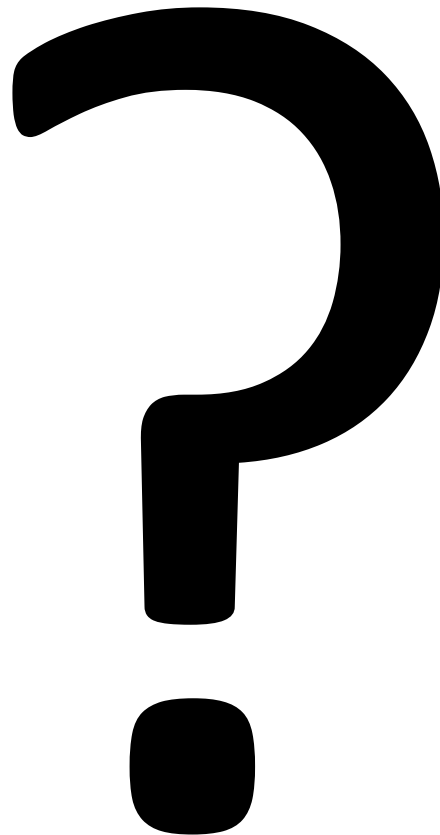
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A.N.

da 12/2015 nessun ulteriore ricovero

NYHA II,

ripreso ACE-I e poi sostituito con ARNI

D.P.

dopo 3 mesi da MitraClip INTERMACS 3

|                             |                        |      |
|-----------------------------|------------------------|------|
| Back                        | Seattle Heart Failu... | Info |
| Hemoglobin:                 | 13,8 g/L               | >    |
| Lymphocytes?                | 25 %                   | >    |
| Uric Acid:                  | 8 mg/dL                | >    |
| Results                     |                        |      |
| Anticipated 1-Year Survival |                        |      |
| 58.0 %                      |                        |      |
| Anticipated 5-Year Survival |                        |      |
| 6.5 %                       |                        |      |

|                             |                      |   |   |
|-----------------------------|----------------------|---|---|
| <                           | Seattle Heart Fai... | ☆ | i |
| Results                     |                      |   |   |
| Anticipated 1-Year Survival |                      |   |   |
| 5.2 %                       |                      |   |   |
| Anticipated 5-Year Survival |                      |   |   |
| 0 %                         |                      |   |   |

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D.P.



FC: 80 b/min Ritmo: ARITMIA ATRIALE

|          | P.sist. | P.dias. | PTD | P.media | A  | V  |
|----------|---------|---------|-----|---------|----|----|
| Ao       | 100     | 60      |     | 75      |    |    |
| Vsx      | 100     | 12      | 17  |         |    |    |
| Cap-polm |         |         |     | 21      | 27 | 18 |
| A-polm   | 39      | 21      |     | 28      |    |    |
| Vdx      | 39      | 2       | 5   |         |    |    |
| Adx M    |         |         |     | 5       | 6  | 7  |

Portata

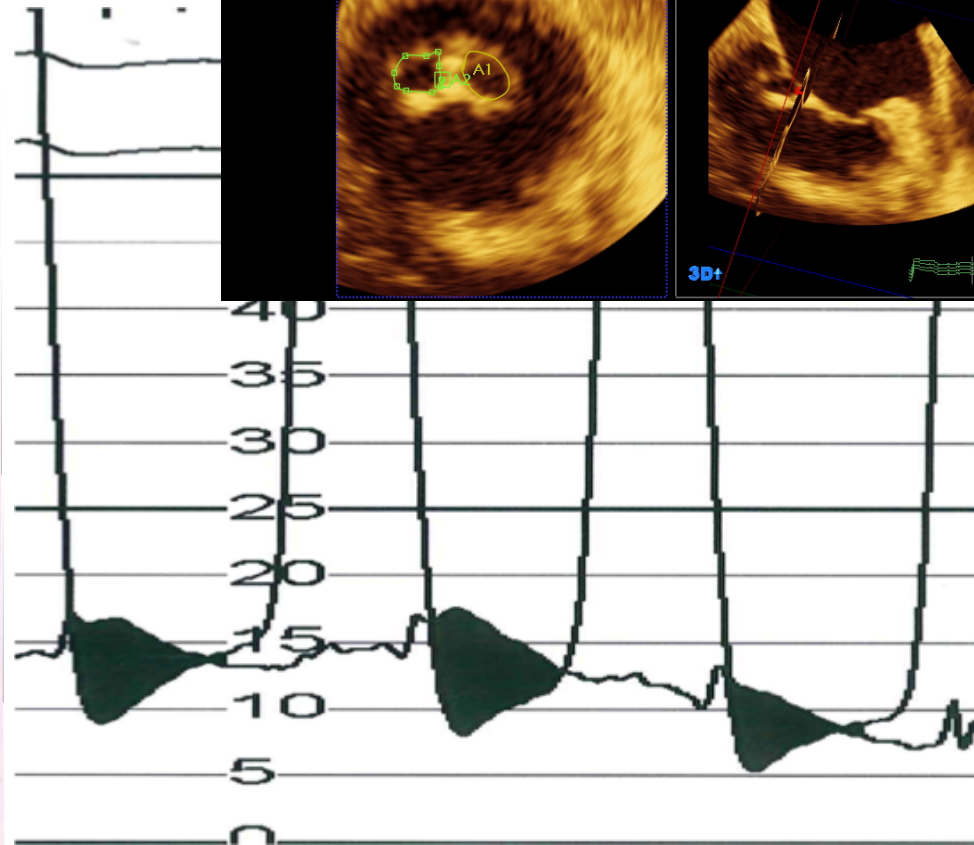
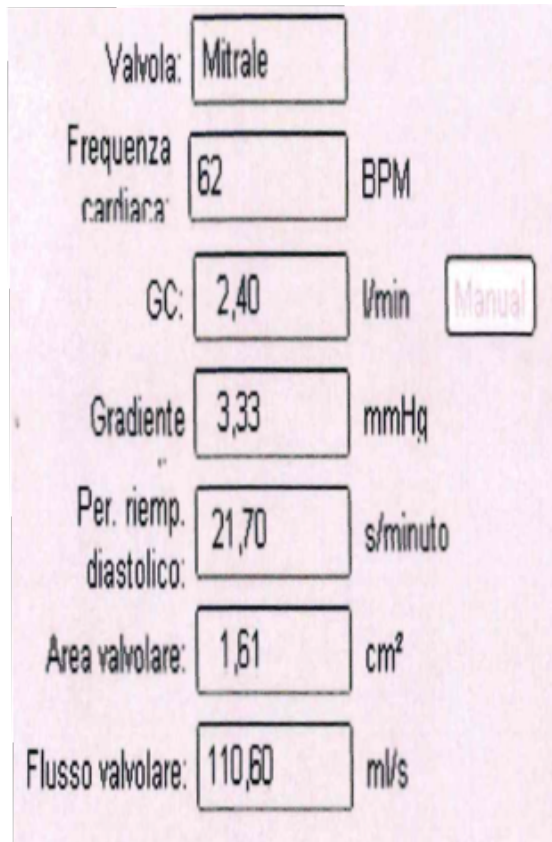
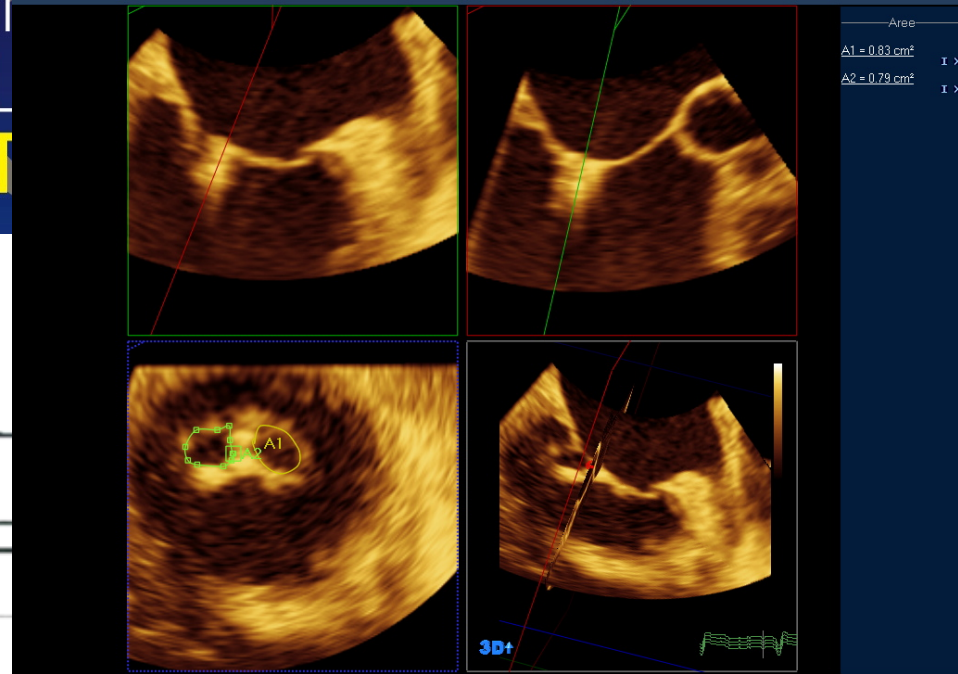
Fick: 2,3 l/min TermD: 2 l/min  
Indice cardiaco: 1,26 (l/min)m<sup>2</sup>

dobu 5y + NTP 1.5 y

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CARDIOLOGIA  
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PHILIPS



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D.P.

17/10/2018 LVAD



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