

# Baseline Demographics and Co-morbidities

	N=10
Age (mean)	67,6
Gender, males	8
NYHA III-IV	2
CCS	1 (class II)
Previous HF hosp. < 6 months	7
History of CAD	8
Previous STEMI	5
Previous cardiovascular surgery	4 (only CABGs)
Previous stroke	1
Hypertension	7
Diabetes mellitus	5
Dyslipedmia	10
COPD	3
Moderate-severe renal failure (GFR $\leq$ 59)	7
Previous cancer	1

Mitral regurgitation  
etiology was  
**FUNCTIONAL** in ALL  
patients

# Baseline echocardiografic parameters

	N=10
Ejection fraction % (mean)	26,8%
LVES volume (ml, mean)	171
LVED volume (ml, mean)	237
LA volume (ml, mean)	129
Mitral regurgitation severity	
3+/4+	1 pt
4+/4+	9 pts
PISA radium (mm, mean)	9
EROA (cm <sup>2</sup> , mean)	0,56
Mitral valve anulus (mm, mean)	43
Mitral valve area (cm <sup>2</sup> , mean)	5,3
Coaptation depth ETE (mm ,mean)	10,7
Coaptation lenght ETE (mm, mean)	3,35
PAPs exstimated (mmHg, mean)	49
PAPs exstimated $\geq$ 55 mmHg (nr.)	5

# Baseline EKG characteristics

N=10

Synus rythm	5
P wave duration	81 msec
Complete LBBB	2
QRS duration (mean)	134 msec
Signs of LVH	4
Pathological Q waves	2

## **ATRIAL FIBRILLATION**

**Paroxysmal n=4**

**Persistent n=1**

**Permanent n=3**

# Implantable devices

Pace maker only	1 pt
ICD only	5 pts
CRT-D	3 pts

# Risk stratification

Logistic EuroSCORE (mean) 26,88  
(4 patients < 20)

Addictive EuroSCORE (mean) 10,6

EuroSCORE II (mean) 14,52

STS Score (mean) 18,23

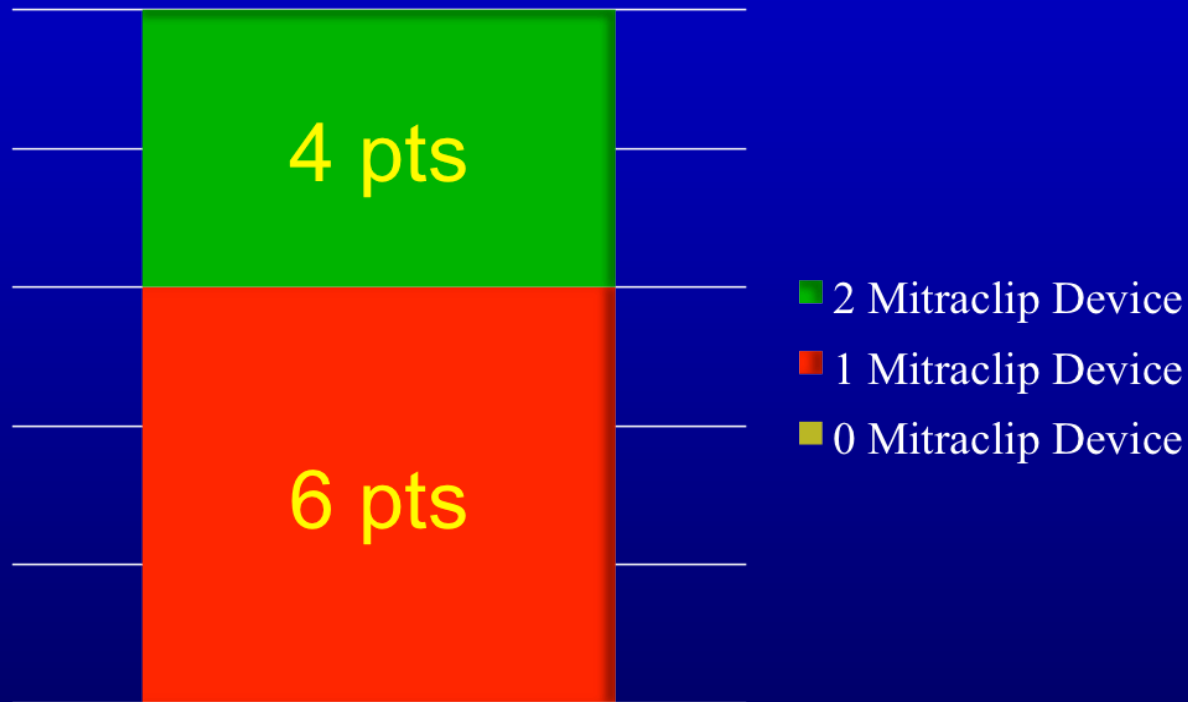
# Procedure-related datas

N=10

Vein puncture–Interatrial Septum (IAS) puncture time (mean)	42.2 min
Vein puncture– 1 st clip opening time	114.5 min
IAS puncture– 1 st clip opening time	71.3 min
1 st clip opening - 1 st clip release time	42.9 min
Mean procedural time	3 h 21 min
1 clip positioning	3 h 9 min
2 clips positioning	3 h 40 min
DAP fluoroscopy	215,58 Gy*cm <sup>2</sup>
DAP fluorography	2,67 Gy*cm <sup>2</sup>
DAP total	218,26 Gy*cm <sup>2</sup>

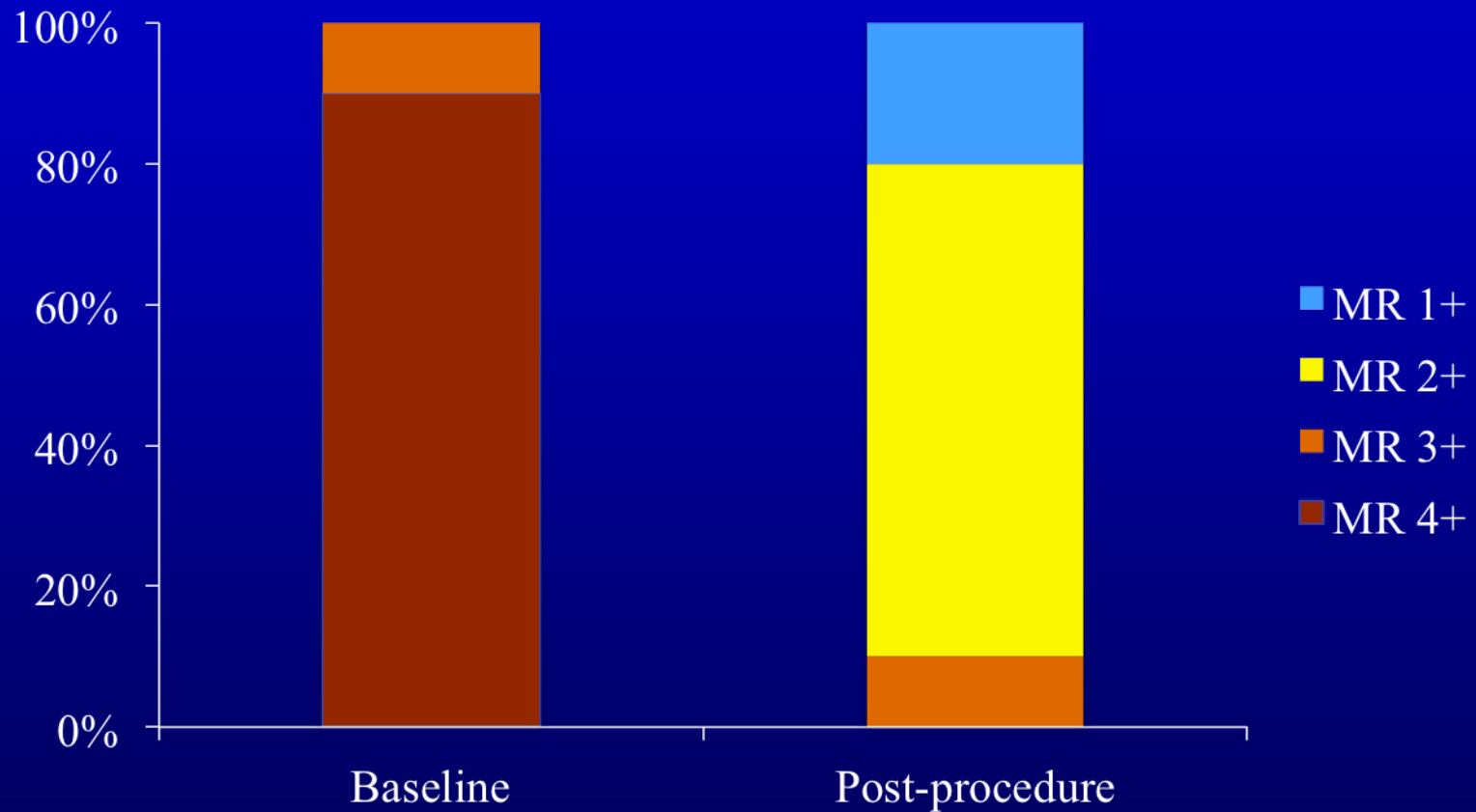
# Mitraclip success implant rate

At least 1 clip was successfully implanted in all 10 patients



In one case a chordal rupture with consequent massive mitral regurgitation occurred during device positioning, solved with clip implantation (mild MR left).

# Periprocedure mitral regurgitation grade



Mean transvalvular anterograde gradient after device implantation was 3,05 mmHg



# In-hospital complications

N=10

Death	0
Stroke/TIA	0
Reoperation of mitral valve	0
CV surgery	0
Myocardial infarction	0
Inotropes post-operation	6
Reintubation	0

Bleeding/transfusions	1
Ventricular tachycardia	1
Acute renal injury	1
Angina	1
Paroxysmal atrial fibrillation (peri-procedure)	2
Pneumonia	1

# Hospitalization datas

	N=9
ICU stay (days, mean)	6,9
Post-operative period (days, mean)	7,9
Total hospitalization (days, mean)	15,3

3 patients were discharged at home, 6 was transferred for a cardiological rehabilitation period.

# Events at follow-up

*1 month follow-up for 9 patients*

*6 months follow-up for 4 patients*

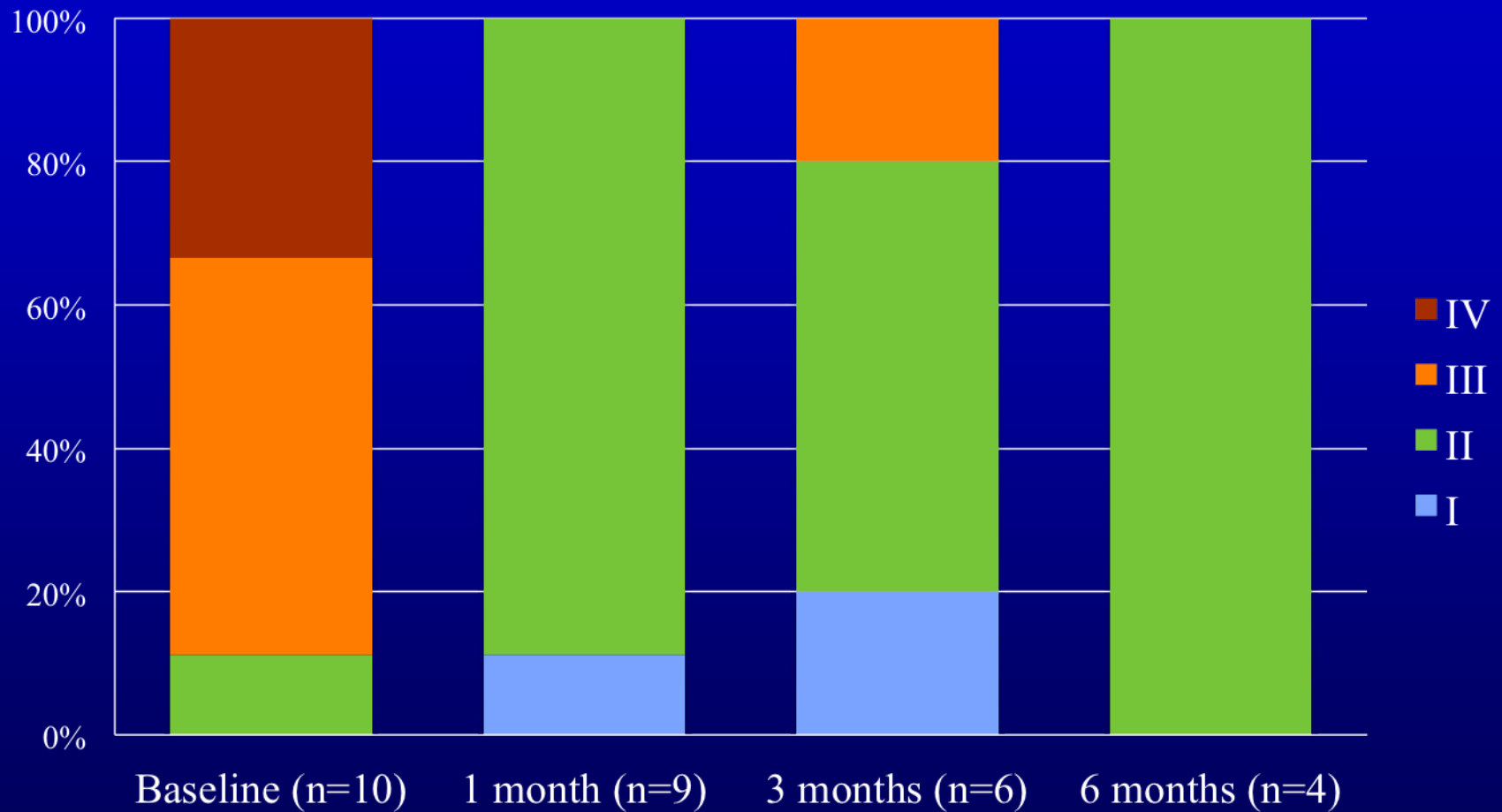
2 patients died

- 1 during an hospitalization for heart failure 74 days after clip implantation
- 1 because of road accident (not clearly known cause) 71 days after intervention

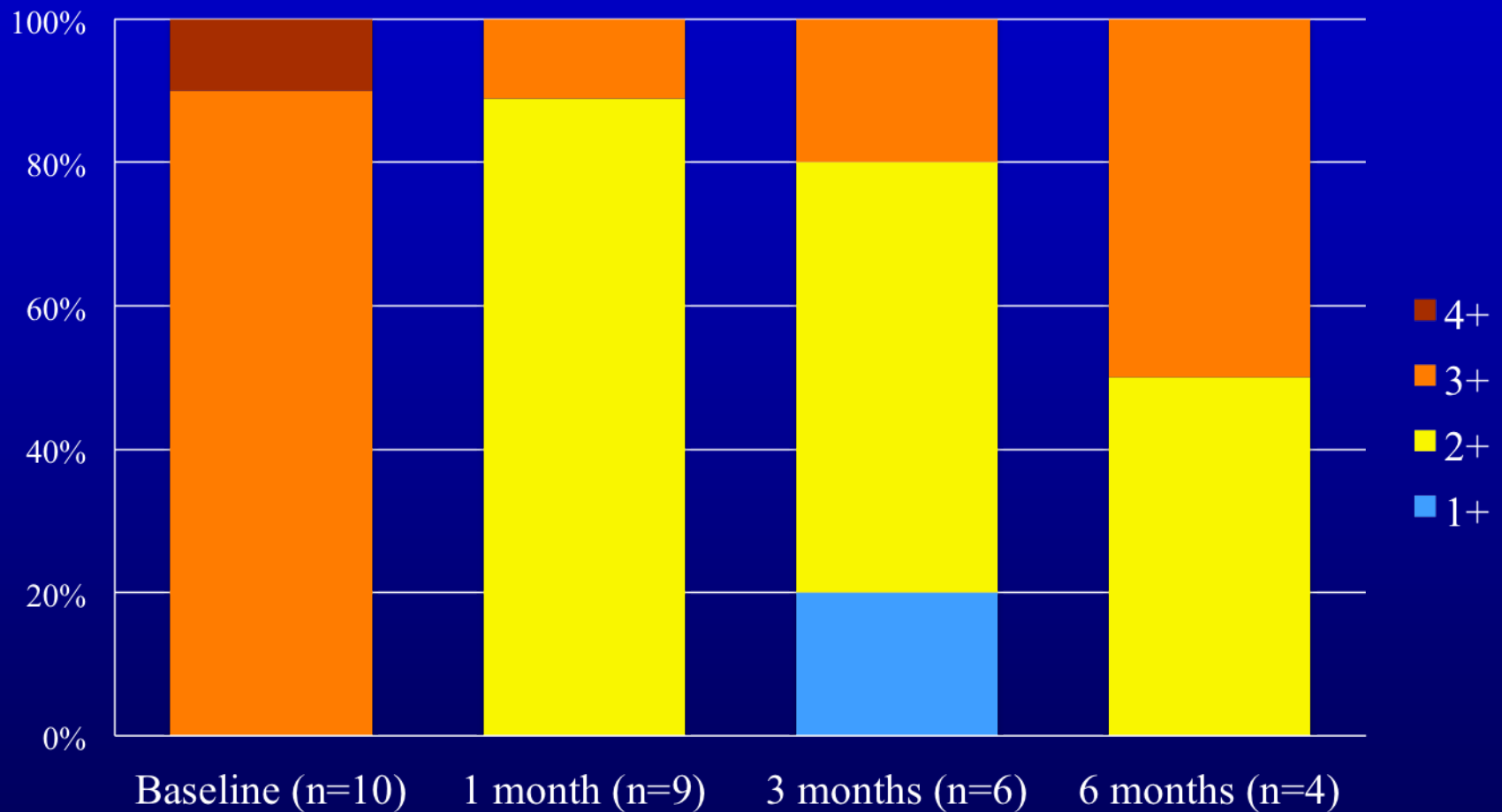
We registered 1 cardiac hospitalization for worsening heart failure (at two months)

1 non cardiac hospitalization (acute colecistitis)

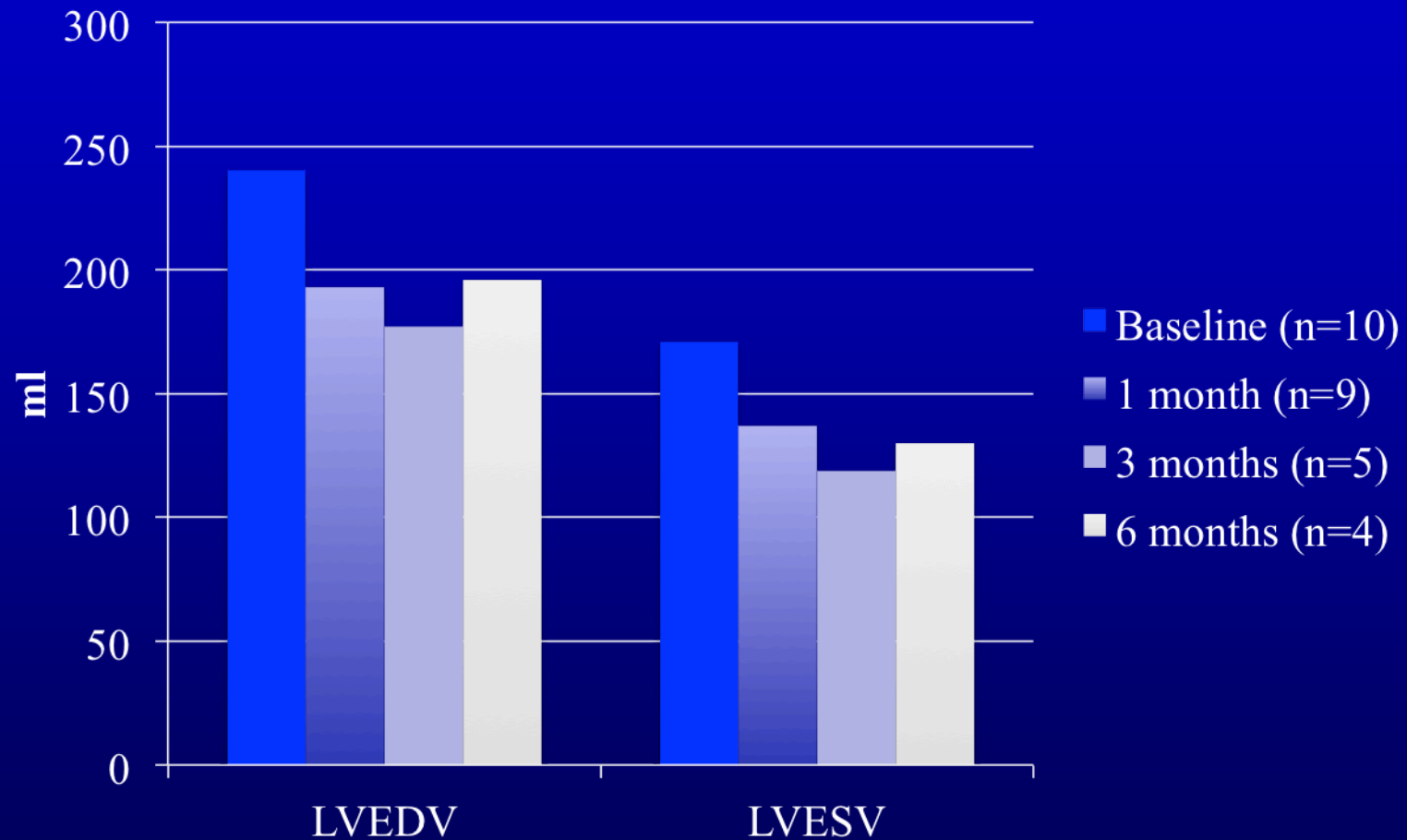
# NYHA functional class – follow up



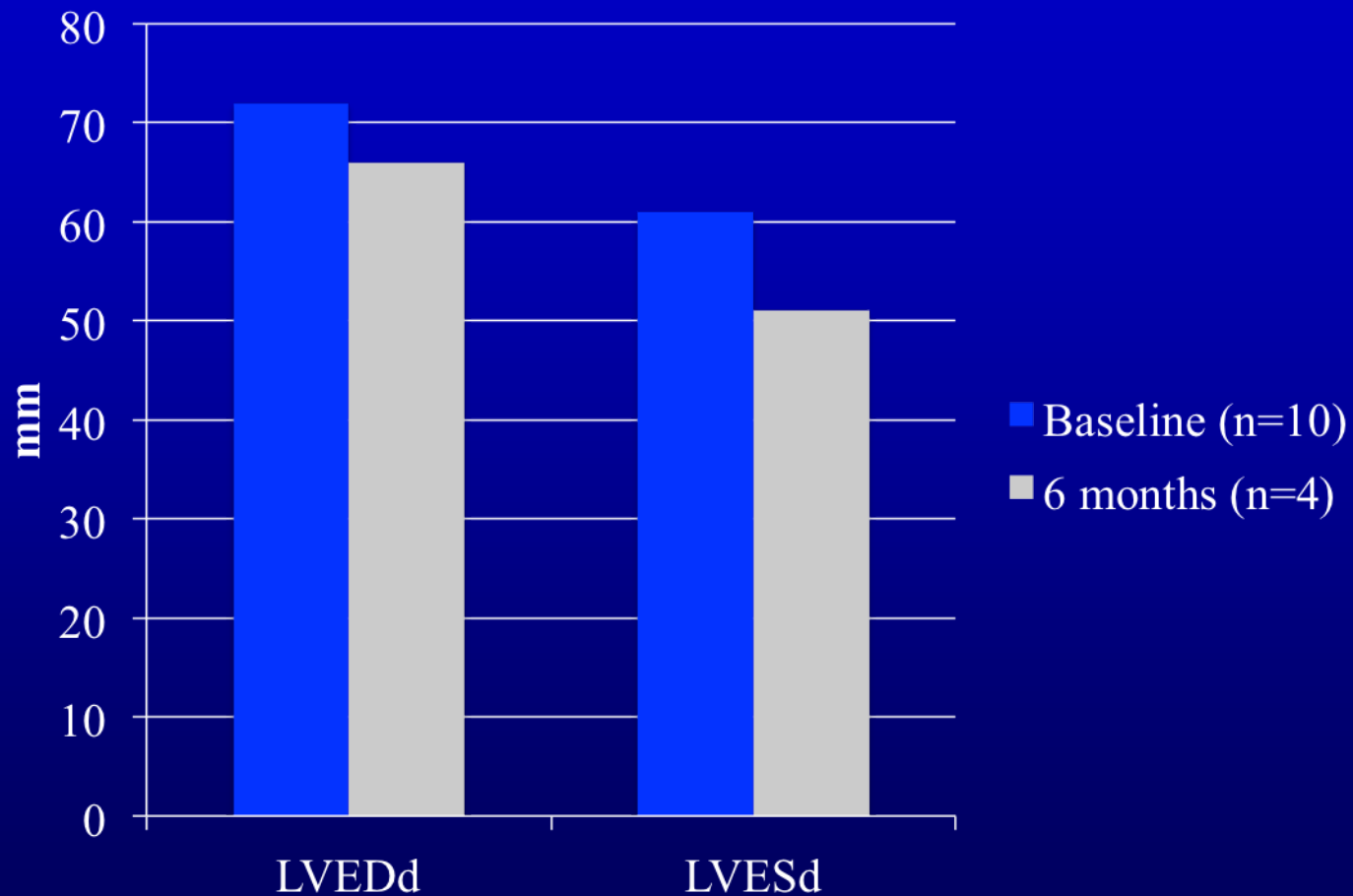
# Mitral regurgitation grade – follow up



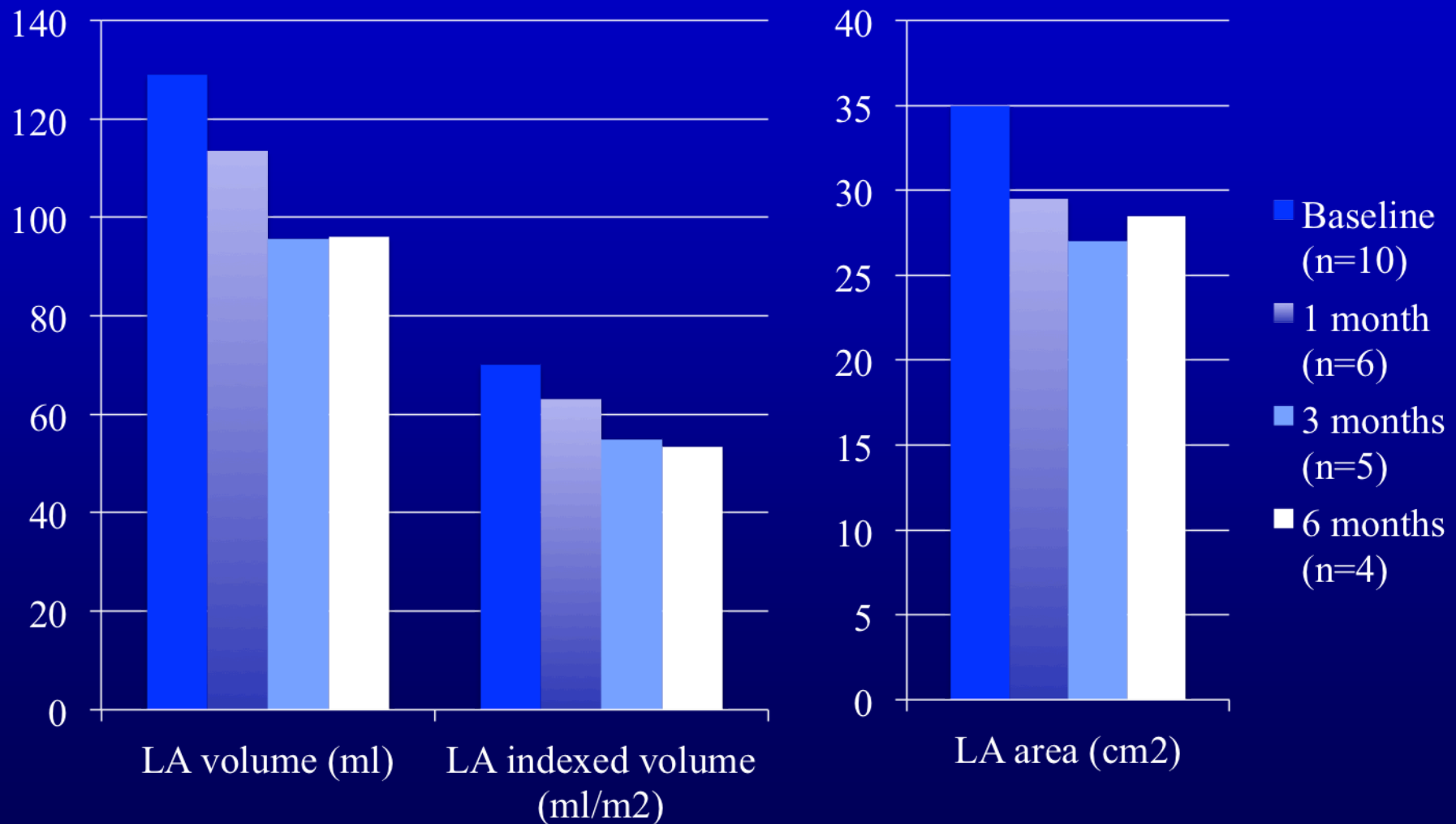
# LVED and LVES volumes – follow up



# LVED and LVES diameters – follow up

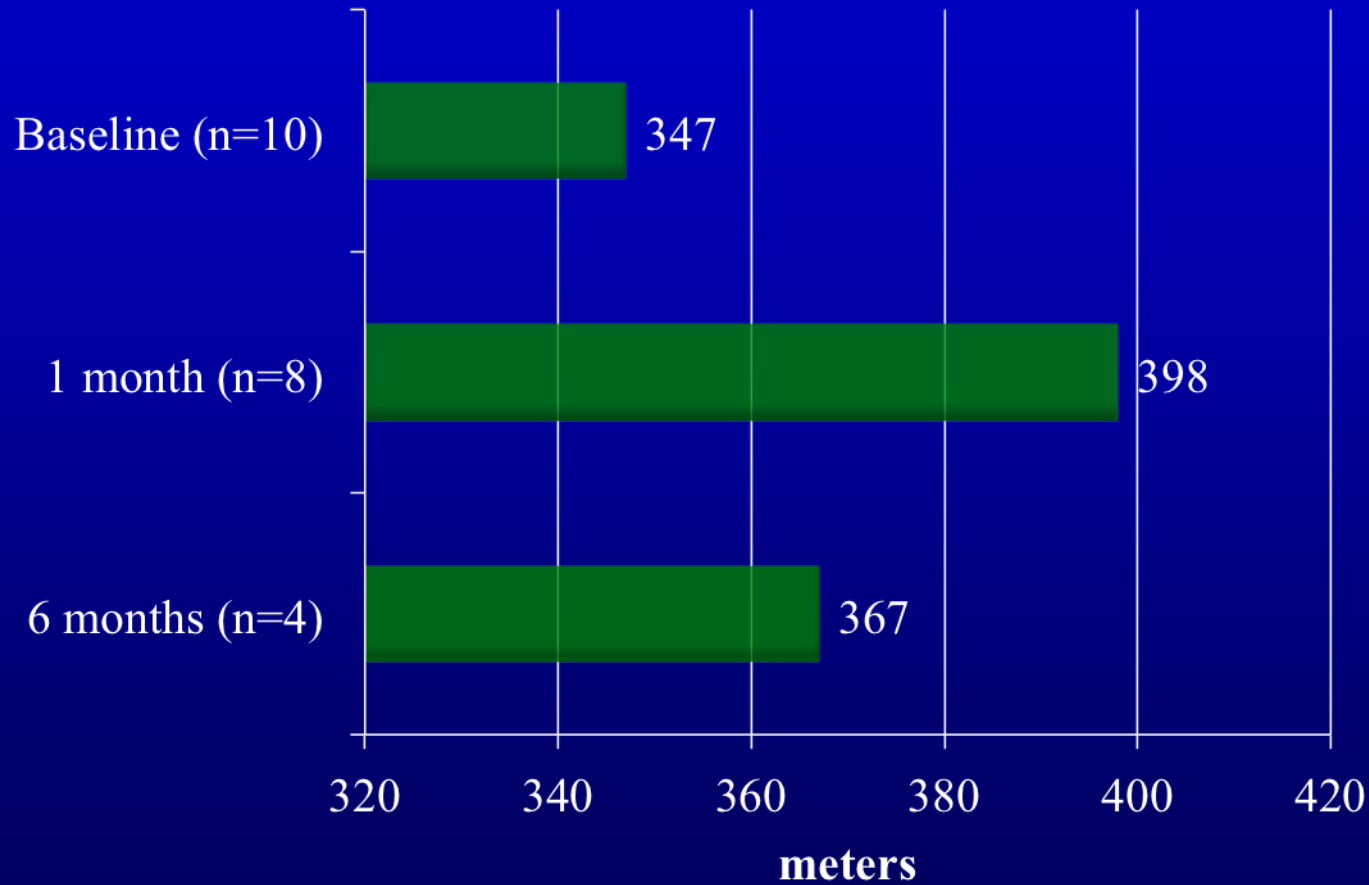


# Left atrium dimensions – follow up



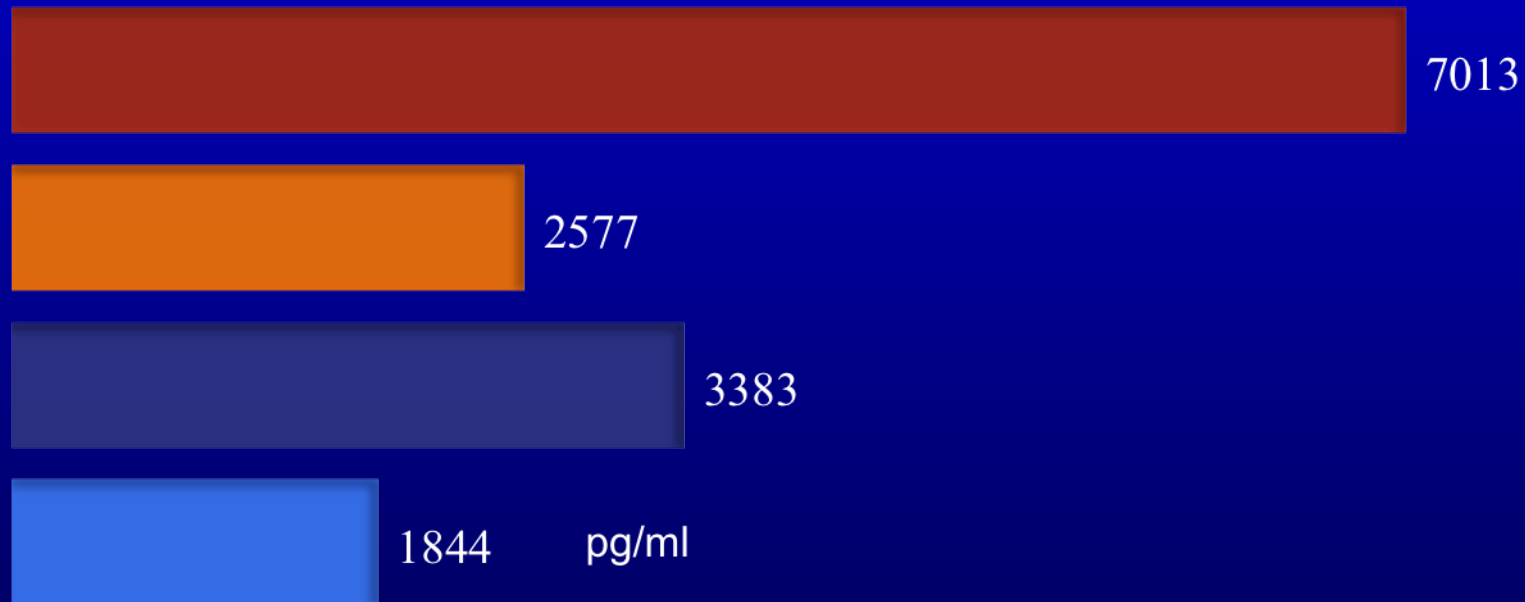


# Six-minute walk test



# NTproBNP levels

■ Baseline (n=10) ■ 1 month (n=5) ■ 3 months (n=5) ■ 6 months (n=3)



# Medical therapy – diuretic dose at follow up

