



**SAPIENZA**  
UNIVERSITÀ DI ROMA



UNIVERSITÀ DEGLI STUDI DI NAPOLI  
**FEDERICO II**

# One-Year Results From a Prospective Experience on CAS Using the Cguard Stent System: **THE IRONGUARD-2 STUDY**

*P. Sirignano<sup>1</sup>, E. Stabile<sup>2</sup>, W. Mansour<sup>1</sup>, L. Capoccia<sup>1</sup>, M. Taurino<sup>1</sup>, and F. Speziale<sup>1</sup>,  
on behalf of the IRONGUARD2 Study Group*

*<sup>1</sup> Sapienza University of Rome – <sup>2</sup> Federico II University of Naples*

# The Registry

The aim of the present study was to evaluate periprocedural (**24h**), post-procedural (up to **30-day**), and **12-month outcomes** in a large, prospective, multicenter series of patients submitted for protected CAS with CGuard EPS dual layer stent.

## 733 Patients

in 20 enrolling Italian Centers



# Pre-Operative Data

**131/733 patients (17.87%)  
were symptomatic**

**96 TIA (73.28%)**

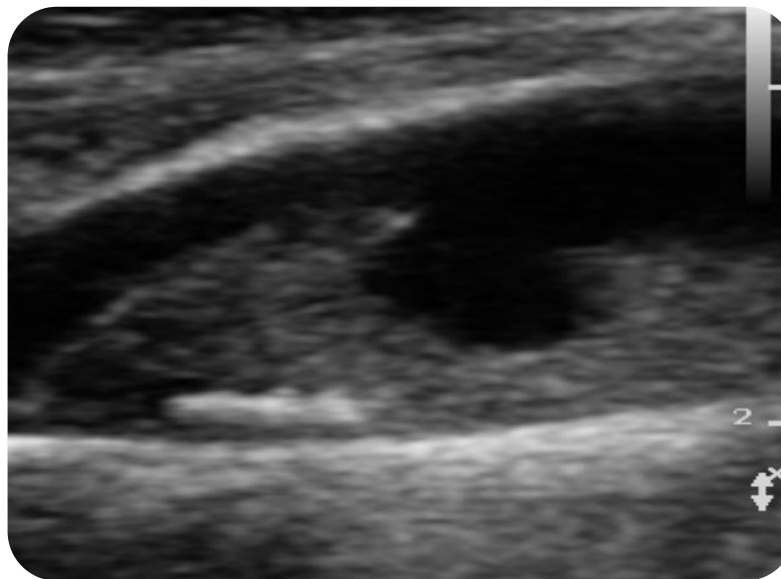
**23 Minor Stroke (17.55%)**

**12 Major Stroke (9.17%)**

Stenosis

**$84.97 \pm 6.51\%$**

(50-99)



**>50% presented an  
high-risk carotid plaque**

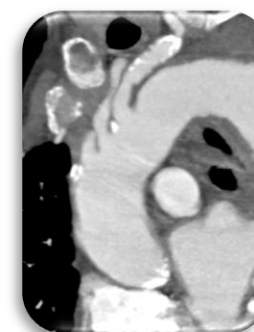
**All aortic arch  
morphologies were  
enrolled in the study**

Type I 369 (50.3%)

Type II 268 (36.6%)

Type III 39 (5.3%)

Bovine 57 (7.8%)



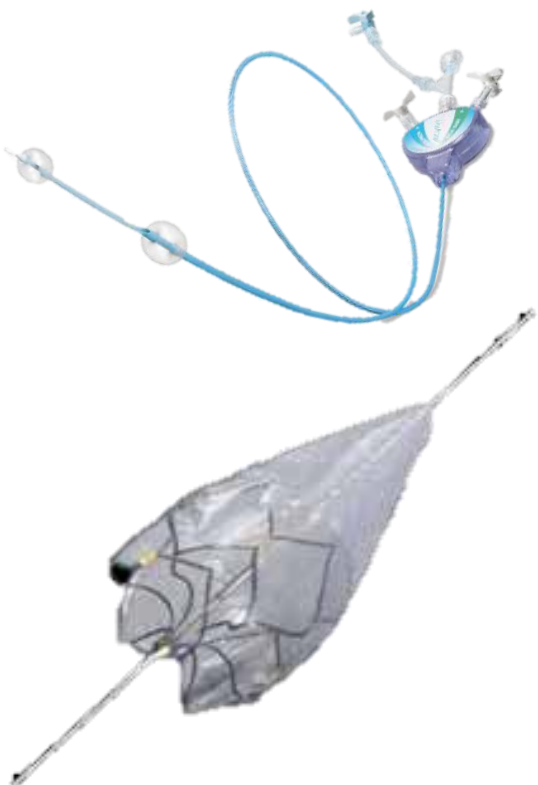
# Procedural Results

Transfemoral approach 97.27%, brachial 1.63%, and transcervical approaches 1.11%

Embolic Protection Device was adopted in 99.72% of patients (**Mo.Ma. in 14.62%**)

## Procedural success 100%

**Technical success** was obtained in all but one patient (**99.86%**) due to the impossibility to advance the CGuard EPS system: patient was consequently treated by Carotid WallStent



# Results

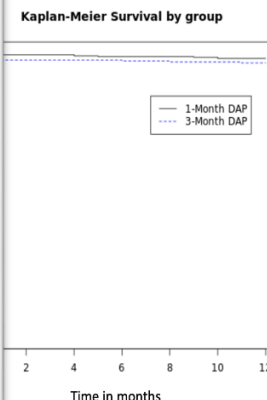
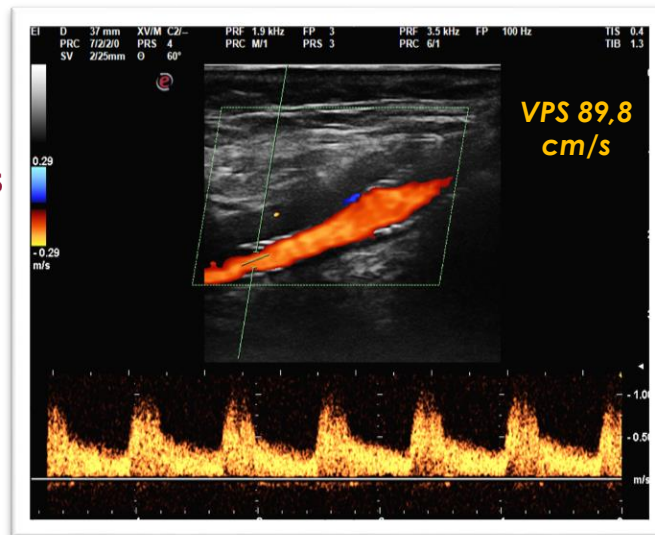
@24 hours

1 fatal haemorrhagic stroke

Stroke 3; 0.41%  
(urgent Patient treated for cTIA) 1; 0.13%

Stroke & Death 4; 0.54%  
2 Minor Strokes, 6 TIAs; 0.13%

1 AMI, No Death



@12 moths

1 Minor Strokes

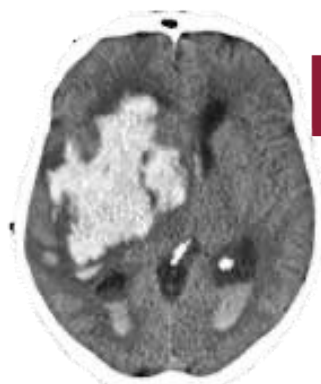
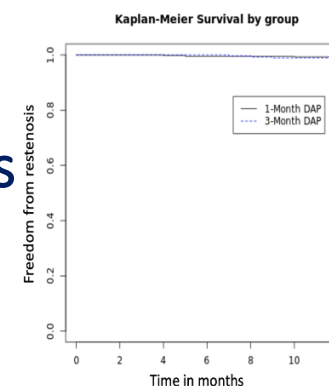
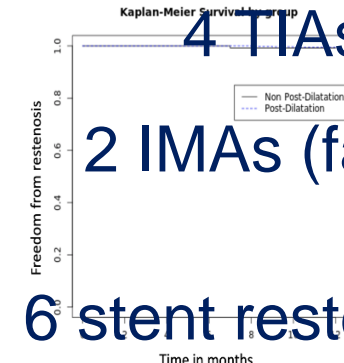
4 TIAs

2 IMAs (fatal)

6 stent restenosis

(2 stent-in-stent)

8 deaths



Stroke rate 0.68%  
@30 days  
1 Minor Stroke, 2 TIAs  
3 AMIs  
2 Strokes, 1 haemorrhagic

No Death

No stent thrombosis/occlusions



# Thanks to everyone

---

*IRONGUARD 2 Study Collaborator:*

*Francesco Speziale (PI), Pasqualino Sirignano, Eugenio Stabile, Wassim Mansour, Laura Capoccia, Federico Faccenna, Francesco Intrieri, Michelangelo Ferri, Salvatore Saccà, Massimo Sponza, Paolo Mortola, Sonia Ronchey, Barbara Praquin, Placido Grillo, Roberto Chiappa, Sergio Losa, Francesco Setacci, Stefano Pirrelli, Maurizio Taurino, Maria Antonella Ruffino, Marco Udini, Domenico Palombo, Arnaldo Ippoliti, Nunzio Montelione, Carlo Setacci, Gianmarco de Donato, Massimo Ruggeri*

