# **Biomime Experience**

National Heart Hospital, Sofia, Bulgaria

# Preliminary data

- Experience with Biomime since 04.2012 until now

- 85 patients

- 103 stents implanted until 07.01.16

- 31/85 (**36.5%**) patients with angiographic follow up

# Baseline demographics characteristics

| Characteristics | N = 85 Patients |
| --- | --- |
| Age (mean ± SD, yrs) | 62.8 ± 9.2 |
| Male, n (%) | 57 (67.1) |
| Diabetes Mellitus, n (%) | 44 (51.8) |
| Weight (mean ± SD, Kg) | 82.7 ± 16.4 |
| Height (mean ± SD, cm) | 171.0 ± 8.9 |
| BMI (mean ± SD, kg/m2) | 28.1 ± 5.1 |
| Hypertension, n (%) | 78 (91.8) |
| Smoker, n (%) | 28 (32.9) |
| Hypercholesterolemia, n (%) | 83 (97.6) |
| Family History of CAD, n (%) | 11 (12.9) |
| Previous MI, n (%) | 36 (42.4) |
| Previous CABG, n (%) | 5 (5.9) |
| Peripheral Artery Disease, n (%) | 9 (10.6) |
| Cerebrovascular Disease, n (%) | 16 (18.8) |
| Renal Failure, n (%) | 14 (16.5) |

# Characteristics

| Characteristics | N = 85 Patients |
|---|---|
| STEMI, n (%) | 15 (17.6) |
| NSTEMI, n (%) | 5 (5.9) |
| Stable Angina, n (%) | 9 (10.6) |
| Unstable Angina, n (%) | 58 (68.2) |
| Bifurcation stenting, n (%) | 14 (16.5) |
| True bifurcations | 13/14 (93) |

# Procedural and Lesion characteristics

| Total no. of Stent (n) | N = 103 Stent |
|---|---|
| No. of stent per patient, (mean ± SD, mm) | 1.21 ± 0.5 |
| No. of stent per lesion, (mean ± SD, mm) | 1.16 ± 3.7 |
| Average stent length, (mean ± SD, mm) | 26.4 ± 10.0 |
| Average stent diameter, (mean ± SD, mm) | 3.2 ± 0.4 |
| Maximum Balloon pressure, (mean ± SD, atm) | 13.8 ± 2.3 (8-18 atm range) |

# Procedural and Lesion characteristics

| Characteristics | N = 89 Lesion |
|---|---|
| **Target Coronary Artery** | |
| Left Main, n (%) | 2 (2.2) |
| Left anterior descending artery, n (%) | 36 (40.4) |
| Left circumflex artery, n (%) | 15 (16.9) |
| Right coronary artery, n (%) | 34 (38.3) |
| Saphenous vein Graft, n (%) | 2 (2.2) |
| Lesion Type C - intervened, n (%) | 22 (25.6) |
| Medina classification, n (%) | |
| 0,1,1 | 1 (1.1) |
| 1,0,1 | 3 (3.4) |
| 1,1,0 | 3 (3.4) |
| 1,1,1 | 6 (6.7) |
| 0,0,1 | 1 (1.1) |

Vessels affected

**Type stenosis**

# Distribution in arteries
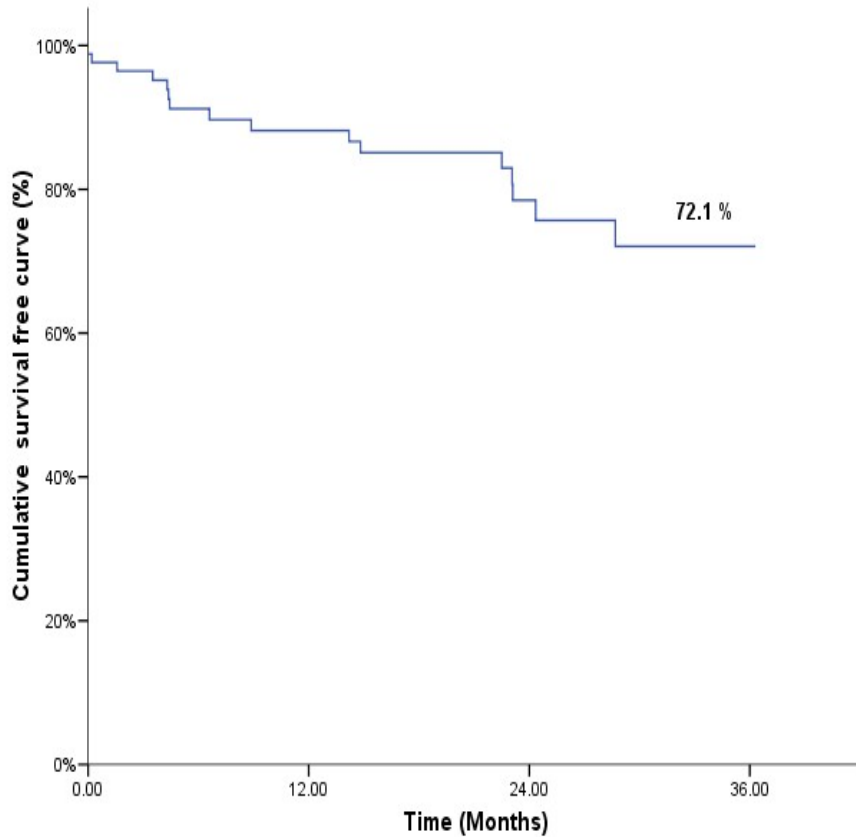
# Stent size distribution

**Table 3**: Cumulative Clinical Outcomes at 30 days, 6 months, 12months, 24months, 36months follow - up

| | 30 days | 6 months | 12 months | 24 months | 36 months |
|---|---|---|---|---|---|
| No of Patient fup | 85 | 62 | 58 | 28 | 2 |
| Cardiac death | 0 (0%) | 0 (0.0 %) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) |
| Non Cardiac death | | 2 (2.4%) | 3 (3.6%) | 4 (4.8%) | 4 (4.8%) |
| MI | | | | 1 (1.2%) | 1 (1.2%) |
| TLR | | 2 (2.4%) | 2 (2.4%) | 4 (4.7%) | 4 (4.7%) |
| TVR but no TLR | | 2 (2.4%) | 3 (3.5%) | 6 (7.1%) | 6 (7.1%) |
| Stent thrombosis | | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) |
| Cardiac death/MI or TLR | | | | 5 (5.9%) | |
| Cardiac death/MI or TVR | | | | 11(12.9%) | |

Value expressed at number (%), TVR = Target Vessel Revascularization, TLR = Target

Lesion Revascularization; Stent thrombosis according to the ARC (Academic Research

# KAPLAN MEIER GRAPH



| N | Valid | 85 |
|---|---|---|
| | Missing | 0 |
| Mean | | 18.8000 |
| Median | | 21.4543 |
| Std. Deviation | | 11.48840 |
| Minimum | | .03 |
| Maximum | | 36.30 |
| Percentiles | 25 | 5.4046 |
| | 75 | 28.1731 |

| Srno | Pt No. | TIME LIVE (days from index to 07.01.2016) | EVENT | Comments |
|---|---|---|---|---|
| 1 | 34 | 873 | TVR | |
| 2 | 6 | 741 | NON CARDIAC DEATH | died in 2014 from renal failure |
| 3 | 15 | 703 | MI | instent restenosis in other DES in the same vessel, with MI |
| 4 | 14 | 702 | TLR | |
| 5 | 8 | 685 | TLR | |
| 6 | 33 | 451 | TVR | |
| 7 | 44 | 432 | TVR | |
| 8 | 51 | 270 | NON CARDIAC DEATH | Died from pneumonia |
| 9 | 53 | 201 | TVR | |
| 10 | 57 | 135 | TVR | |
| 11 | 1 | 133 | TLR | |
| 12 | 52 | 131 | NON CARDIAC DEATH | Died from intracranial haemorrhage |
| 13 | 4 | 107 | TLR | |
| 14 | 29 | 48 | TVR | CABG at 50 day due to restenois in other stents implanted in LM-LAD adnd LCx |
| 15 | 71 | 6 | CARDIAC DEATH | died from stroke at 6 th postprocedural day |
| 16 | 81 | 1 | CARDIAC DEATH | Died during procedure of STEMI |

**16/85 = 18.8%**