

# Short Term Outcome of Primary Percutaneous Coronary Interventions; Ten years registry

*Thesis Submitted by*

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In Partial Fulfillment of  
MD Degree in Critical Care

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2009

## **Abstract**

The efficiency & safety of primary PCI in managing pts with acute MI is well established. Critical care department of Cairo University encompasses a well equipped catheter lab & well trained staff; readily available 24 hrs all through the 7 days of the week. Fourhanded & twenty pts presented with acute MI were managed with primary PCI, over almost 10 years with success rate 93.52% & outcome similar to that of international centers. Six months outcome of 207 pts was similar to that of international centers.

**Key Word:** PCI, Primary PCI, Registry, Acute MI

## ***Acknowledgement***

Thanks to ***Prof. Dr. Sherif Mokhtar***, our Master mind, I always owe him much. He offered us not only the idea to complete this work but also the spirit of being eager to gain more experience and skills. Through his meticulous review of all details we learned a lot. Words are not sufficient to express my deep gratitude for him.

I would like to express my deepest gratitude and highest appreciation to ***Prof. Dr. Alia Abdel-Fattah***, for her continuous support and direct supervision to achieve progress in this thesis. I would specially thank her for active contribution in the nuclear part of this work. I owe her much.

Special thanks must be given to ***Prof. Dr. Faheem Ragab***, for his encouragement and support during the practical and theoretical work. Being the director of critical care centre, this work can not be conducted without his great help. I owe him much.

Many thanks to ***Dr. Ahmed Abdel-Aziz***, for his guidance, continuous support and contribution in the interventional part of this work. He was always helpful and supportive and taught me the systematic way of thinking.

I would like to express my deepest gratitude to ***Dr. Mahmoud Al-Badry***, who supervised this work with great interest. He was generous in devoting enough time and effort for revision and constructive criticism.

e has a great contribution in the interventional & follow up parts of this work.

A special acknowledgement for ***Prof. Dr Hassan Khalid***, head of critical care department for his support and encouragement. I owe him much.

I would like to express my thanks & my great gratefulness to my colleagues in critical care department; ***Dr. Mohammed Fawzy, Dr. Essam Nassar, Dr. Akram Abdel-Bary & Dr. Mahmoud Khalid*** for their support and great help.

I am very grateful to critical care department staff, cath. lab team & nuclear lab team; they are the real owner of this work.

# ***Contents***

|   |            |
|---|------------|
| <b>Introduction</b> .....                             | <b>1</b>   |
| <b>Aim of The Work</b> .....                          | <b>6</b>   |
| <b>Review of Literature</b> .....                     | <b>7</b>   |
| <b>Chapter I:</b> Reperfusion therapy in acute STEMI  | <b>7</b>   |
| <b>Chapter II:</b> Optimal and suboptimal reperfusion | <b>51</b>  |
| <b>Chapter III:</b> Assessment of outcome post-MI     | <b>85</b>  |
| <b>Patients &amp; Methods</b> .....                   | <b>109</b> |
| <b>Results</b> .....                                  | <b>127</b> |
| <b>Discussion</b> .....                               | <b>170</b> |
| <b>Summary</b> .....                                  | <b>188</b> |
| <b>Conclusion</b> .....                               | <b>194</b> |
| <b>References</b> .....                               | <b>196</b> |
| <b>Arabic Summary</b> .....                           | <b>5-1</b> |

## ***List of Abbreviations***

|             |   |  |
|-------------|---|--|
| <b>%DS</b>  | : | Percent Diameter Stenosis              |
| <b>ACC</b>  | : | American Collage of Cardiology         |
| <b>ACCP</b> | : | American College of Chest Physicians   |
| <b>ACE</b>  | : | Angiotensin Converting Enzyme          |
| <b>ACS</b>  | : | Acute Coronary Syndrome                |
| <b>ACT</b>  | : | Activated Clotting Time                |
| <b>AHA</b>  | : | American Heart Association             |
| <b>AIVR</b> | : | Accelerated Idio-Ventricular Rhythm    |
| <b>ASNC</b> | : | American Society of Nuclear Cardiology |
| <b>BMS</b>  | : | Bare Metal Stents                      |
| <b>CABG</b> | : | Coronary Artery Bypass Grafting        |
| <b>CAD</b>  | : | Coronary Artery Disease                |
| <b>CCTA</b> | : | Coronary CT Angiography                |
| <b>CHB</b>  | : | Complete heart block                   |
| <b>CK</b>   | : | Creatine Kinase                        |
| <b>CMRI</b> | : | Cardiac Magnetic Resonance Imaging     |
| <b>CT</b>   | : | Computed Tomography                    |
| <b>cTnI</b> | : | cardiac Troponin I                     |
| <b>cTnT</b> | : | cardiac Troponin T                     |
| <b>CVS</b>  | : | CerebroVascular Stroke                 |
| <b>DES</b>  | : | Drug-Eluting Stents                    |
| <b>DM</b>   | : | Diabetes Mellitus                      |
| <b>DBP</b>  | : | Diastolic Blood Pressure               |
| <b>DTBT</b> | : | Door-To-Balloon Time                   |
| <b>EBCT</b> | : | Electron Beam Computed Tomography      |

|                   |   |  |
|-------------------|---|--|
| <b>ECG</b>        | : | Electrocardiography                          |
| <b>EDP</b>        | : | End-Diastolic Pressure                       |
| <b>ESC</b>        | : | European Society of Cardiology               |
| <b>FPA</b>        | : | Fibrino-Peptide A                            |
| <b>GPIIb/IIIa</b> | : | Platelet Glyco-Protein IIb/IIIa Receptors    |
| <b>HF</b>         | : | Heart Failure                                |
| <b>HTN</b>        | : | Hypertension                                 |
| <b>IABP</b>       | : | Intra-Aortic Balloon Pump                    |
| <b>IRA</b>        | : | Infarct Related Artery                       |
| <b>IV</b>         | : | Intra-Venous                                 |
| <b>IVUS</b>       | : | Intra-Vascular Ultra-Sound                   |
| <b>JCIA</b>       | : | Joint Commission International Accreditation |
| <b>LAD</b>        | : | Left Anterior Descending artery              |
| <b>LBBB</b>       | : | Left Bundle Branch Block                     |
| <b>LCX</b>        | : | Left Circumflex Artery                       |
| <b>LV</b>         | : | Left Ventricle                               |
| <b>LVEF</b>       | : | Left Ventricular Ejection Fraction           |
| <b>MACE</b>       | : | Major Adverse Cardiac Events                 |
| <b>MDCT</b>       |   | Multi-Detector CT                            |
| <b>MI</b>         | : | Myocardial Infarction                        |
| <b>MLD</b>        | : | Minimal Luminal Diameter                     |
| <b>MPI</b>        | : | Myocardial Perfusion Imaging                 |
| <b>MRI</b>        | : | Magnetic Resonance Imaging                   |
| <b>MSCT</b>       | : | Multi-Slice CT                               |
| <b>nPA</b>        | : | Lanoteplase                                  |
| <b>NSTEMI</b>     | : | Non ST Elevation Myocardial Infarction       |
| <b>PAI-1</b>      | : | Plasminogen Activator Inhibitor 1            |
| <b>PCI</b>        | : | Percutaneous Coronary Intervention           |

|                 |   |   |
|-----------------|---|---|
| <b>PES</b>      | : | Paclitaxel-Eluting Stents                       |
| <b>PET scan</b> | : | Positron Emission Tomography scanning           |
| <b>PTCA</b>     | : | Percutaneous Trans-luminal Coronary Angioplasty |
| <b>QCA</b>      | : | Quantitative Coronary Angiography               |
| <b>RCA</b>      | : | Right Coronary Artery                           |
| <b>RNA</b>      | : | Radio-Nuclide Angiography                       |
| <b>rPA</b>      | : | recombinant Plasminogen Activator               |
| <b>RV</b>       | : | Right Ventricle                                 |
| <b>RVD</b>      | : | Reference Vessel Diameter                       |
| <b>SDS</b>      | : | Summed Difference Score                         |
| <b>SK</b>       | : | StreptoKinase                                   |
| <b>SL</b>       | : | Sub- Lingual                                    |
| <b>SDS</b>      | : | Summed Difference Score                         |
| <b>SES</b>      | : | Sirolimus-Eluting Stents                        |
| <b>SPECT</b>    | : | Single Photon Emission Computed Tomography      |
| <b>SRS</b>      | : | Summed Rest Score                               |
| <b>SSS</b>      | : | Summed Stress Score                             |
| <b>STEMI</b>    | : | ST-segment Elevation Myocardial Infarction      |
| <b>SVT</b>      | : | Supra-Ventricular Tachycardia                   |
| <b>Tc-99m</b>   | : | Technetium 99m                                  |
| <b>TIMI</b>     | : | Thrombolysis In Myocardial Infarction           |
| <b>TMP</b>      | : | TIMI Myocardial Perfusion                       |
| <b>TNK-tPA</b>  | : | <a href="#">Tenecteplase</a>                    |
| <b>tPA</b>      | : | tissue-type Plasminogen Activator               |
| <b>TVR</b>      | : | Target Vessel Revascularization                 |
| <b>VF</b>       | : | Ventricular Fibrillation                        |
| <b>VT</b>       | : | Ventricular Tachycardia                         |



## ***List of Abbreviations of clinical trial***

|                          |   |  |
|--------------------------|---|--|
| <b>ACC-<br/>NCDR</b>     | : | The American Collage of Cardiology (ACC) National Cardiovascular Data Registry   |
| <b>AIR PAMI</b>          | : | AIR Primary Angioplasty in Myocardial Infarction trial   |
| <b>AKUH</b>              | : | Aga Khan University Hospital   |
| <b>AMI-SK</b>            | : | Acute Myocardial Infarction- StreptoKinase trial   |
| <b>APEX-AMI</b>          | : | Assessment of PEXelizumab in Acute Myocardial Infarction trial   |
| <b>ASSENT</b>            | : | ASsessment of the Safety and Efficacy of New Thrombolytic regimens trial   |
| <b>CAPTIM</b>            | : | Comparison of Angioplasty and Prehospital Thrombolysis In acute Myocardial infarction trial  |
| <b>CADILLAC</b>          | : | The Controlled Abciximab and Device Investigation to Lower Late Angioplasty Complications trial  |
| <b>CLARITY</b>           | : | CLopidogrel as Adjunctive ReperfusIon TherapY  |
| <b>COMMIT</b>            | : | ClOpidogrel & Metoprolol in Myocardial Infarction Trial  |
| <b>DANAMI</b>            | : | DANish trial in Acute Myocardial Infarction  |
| <b>FAME</b>              | : | Fractional flow reserve versus Angiography for Multi-vessel Evaluation   |
| <b>FINESSE<br/>trial</b> | : | Facilitated INtervention with Enhanced reperfusion Speed to Stop Events trial  |
| <b>GRACIA</b>            | : | Grupo de Análisis de la Cardiopatía Isquémica Aguda (Randomized trial comparing stenting within 24 hours of thrombolysis versus ischemia-guided approach to thrombolysed acute myocardial infarction with ST |

|                     |   |   |
|---------------------|---|---|
|                     |   | elevation)  |
| <b>GUSTO trial</b>  | : | Global Utilization of Streptokinase and Tissue plasminogen activator for Occluded coronary arteries   |
| <b>INJECT trial</b> | : | INternational Joint Efficacy Comparison of Thromolytics   |
| <b>InTIME trial</b> | : | Intravenous nPA for the Treatment of Infarcting Myocardium Early  |
| <b>NRMI</b>         | : | National Registry of Myocardial Infarction  |
| <b>PACT</b>         | : | Pravastatin in Acute Coronary Treatment   |
| <b>PAMI</b>         | : | Primary Angioplasty in Myocardial Infarction study  |
| <b>PRAGUE</b>       | : | PRimary Angioplasty in patients transferred from General community hospitals to specialized PTCA Units with or without Emergency thrombolysis |
| <b>RAPID trial</b>  | : | Reduced Anti-platelet therapy with PImecrolimus Drug-eluting stent trial  |
| <b>SHOCK trial</b>  | : | SHould we emergently revascularize Occluded coronaries for Cardiogenic Shock  |
| <b>SIRIUS</b>       | : | SIRollmus-eluting versus Uncoated Stents  |
| <b>SPEED</b>        | : | Strategies for Patency Enhancement in the Emergency Department  |
| <b>STENT PAMI</b>   | : | STENT Primary Angioplasty in Myocardial Infarction  |
| <b>TAXUS IV</b>     | : | pacliTAXel-eluting versus Uncoated Stents in percutaneous coronary intervention   |
| <b>TIMI</b>         | : | Thrombolysis In Myocardial Infarction   |
| <b>TRITON</b>       | : | TRials to assess Improvement in Therapeutic Outcomes by optimizing platelet iNhibition with prasugrel   |
| <b>TYPHOON</b>      |   | Trial to assess the use of the cYPHer stent in acute myocardial infarction treated with balloON angioplasty                                   |

# ***List of Tables***

| <b>Table</b>   | <b>Page</b> |
|--|-------------|
| <b>Table (1):</b> ACC/AHA guidelines: Chest pain duration and selecting reperfusion strategy               | <b>4</b>    |
| <b>Table (2):</b> Preferred thrombolytic regimens for acute STEMI  | <b>8</b>    |
| <b>Table (3):</b> ACC/AHA/SCAI guidelines for selecting PCI for reperfusion therapy in patients with STEMI | <b>21</b>   |
| <b>Table (4):</b> ACC/AHA guidelines: Indications of IABP in acute MI                                      | <b>48</b>   |
| <b>Table (5):</b> ACC/AHA guideline Summary: Indications of CABG in patients with STEMI                    | <b>50</b>   |
| <b>Table (6):</b> Differentiation between hibernation and stunning   | <b>82</b>   |
| <b>Table (7):</b> Zwolle risk index for 30-day mortality after primary PCI                                 | <b>87</b>   |
| <b>Table (8):</b> Efficacy of the different methods of stress testing in specific clinical settings        | <b>96</b>   |
| <b>Table (9):</b> Number of patients per year  | <b>128</b>  |
| <b>Table (10):</b> ECG diagnosis of the site of infarction   | <b>130</b>  |
| <b>Table (11):</b> Clinical condition and basic rhythm among the studied patients prior to PCI             | <b>131</b>  |
| <b>Table (12):</b> Number of diseased vessels among the studied patients                                   | <b>133</b>  |
| <b>Table (13):</b> Infarct-related artery that was subjected to intervention                               | <b>134</b>  |
| <b>Table (14):</b> The site of lesion subjected to PCI   | <b>135</b>  |
| <b>Table (15):</b> Baseline QCA parameters in the studied pts  | <b>136</b>  |
| <b>Table (16):</b> TIMI flow in IRA in the studied pts   | <b>137</b>  |
| <b>Table (17):</b> Causes of failure of angioplasty  | <b>138</b>  |
| <b>Table (18):</b> Different modalities of coronary intervention   | <b>140</b>  |
| <b>Table (19):</b> Conjoint use of thrombolytic therapy  | <b>141</b>  |
| <b>Table (20):</b> Devices used during the procedure   | <b>141</b>  |
| <b>Table (21):</b> Balloon data  | <b>144</b>  |

|   |            |
|---|------------|
| <b>Table (22):</b> Stent data   | <b>144</b> |
| <b>Table (23):</b> Stent type   | <b>145</b> |
| <b>Table (24):</b> Post PCI QCA parameters among the studied pts                                  | <b>146</b> |
| <b>Table (25):</b> Post PCI TIMI flow in IRA among the studied pts                                | <b>146</b> |
| <b>Table (26):</b> Markers of reperfusion following PCI   | <b>150</b> |
| <b>Table (27):</b> In-hospital MACE following primary PCI   | <b>152</b> |
| <b>Table (28):</b> Zwolle risk index and in-hospital mortality                                    | <b>153</b> |
| <b>Table (29):</b> Association between risk factors for CAD & MACE                                | <b>154</b> |
| <b>Table (30):</b> Association between time to PCI & MACE   | <b>155</b> |
| <b>Table (31):</b> Association between cardiogenic shock & MACE                                   | <b>156</b> |
| <b>Table (32):</b> Association between IRA & MACE   | <b>157</b> |
| <b>Table (33):</b> Association between site of lesion & MACE                                      | <b>158</b> |
| <b>Table (34):</b> Association between intra-coronary thrombi & MACE                              | <b>159</b> |
| <b>Table (35):</b> Association between type of intervention & MACE                                | <b>160</b> |
| <b>Table (36):</b> Association between the use of thrombolytics & MACE                            | <b>161</b> |
| <b>Table (37):</b> Six months MACE after PCI  | <b>162</b> |
| <b>Table (38):</b> Six months scintigraphic follow up   | <b>164</b> |
| <b>Table (39):</b> Severity of ischemia in patients with positive MPI                             | <b>165</b> |
| <b>Table (40):</b> Predictors of six months MACE  | <b>166</b> |
| <b>Table (41):</b> Association between DM & Scintigraphic follow up                               | <b>167</b> |
| <b>Table (42):</b> Post PCI QCA parameters among the studied pts                                  | <b>168</b> |
| <b>Table (43):</b> Association between DM & angiographic re-stenosis                              | <b>169</b> |
| <b>Table (44):</b> Baseline demographic and clinical characteristics; compared with other studies | <b>174</b> |
| <b>Table (45):</b> Comparison of angiographic and procedural details                              | <b>176</b> |
| <b>Table (46):</b> Overall success rate of different studies                                      | <b>178</b> |
| <b>Table (47):</b> Mortality in major trials and registries of primary PCI                        | <b>180</b> |
| <b>Table (48):</b> The Incidence of re-infarction in different studies                            | <b>181</b> |

|   |            |
|---|------------|
| <b>Table (49):</b> Incidence of MACE in patients with cardiogenic shock complicating MI | <b>182</b> |
| <b>Table (50):</b> In-hospital mortality in current study and in Zwolle study           | <b>183</b> |

# ***List of Figures***

| <b>Figure</b>  | <b>Page</b> |
|--|-------------|
| <b>Figure (1):</b> ACC/AHA Algorithm for initial management of patients with acute ST elevation myocardial infarction        | <b>2</b>    |
| <b>Figure (2):</b> Time to thrombolysis and 35-day mortality   | <b>24</b>   |
| <b>Figure (3):</b> Clopidogrel timing and benefit before stenting  | <b>45</b>   |
| <b>Figure (4):</b> Factors potentially influencing TIMI grade flow   | <b>52</b>   |
| <b>Figure (5):</b> Infarct size measured by sestamibi predicts mortality   | <b>66</b>   |
| <b>Figure (6):</b> Coronary artery dissection after angioplasty  | <b>70</b>   |
| <b>Figure (7):</b> Edge detection on quantitative coronary angiography   | <b>78</b>   |
| <b>Figure (8):</b> Flow-function relationship in hibernating and stunned myocardium  | <b>81</b>   |
| <b>Figure (9):</b> LVEF as a predictor of one-year mortality after STEMI   | <b>92</b>   |
| <b>Figure (10):</b> Choice of exercise testing modality in different clinical settings                                       | <b>95</b>   |
| <b>Figure (11):</b> Acolysis device & probe tip  | <b>115</b>  |
| <b>Figure (12):</b> X-SIZER catheter system: drive unit, catheter shaft, aspiration tubing, inline filter, and vacuum bottle | <b>117</b>  |
| <b>Figure (13):</b> Twenty segment scoring system  | <b>122</b>  |
| <b>Figure (14):</b> Calculation of tests of performance  | <b>126</b>  |
| <b>Figure (15):</b> Number of patients per year  | <b>128</b>  |
| <b>Figure (16):</b> Gender of the studied patients   | <b>129</b>  |
| <b>Figure (17):</b> Risk factors of CAD among the studied patients   | <b>129</b>  |
| <b>Figure (18):</b> ECG diagnosis of the site of infarction  | <b>130</b>  |
| <b>Figure (19):</b> Clinical condition and basic rhythm among the studied patients prior to PCI                              | <b>132</b>  |
| <b>Figure (20):</b> Number of diseased vessels among the studied patients  | <b>133</b>  |
| <b>Figure (21):</b> Infarct-related artery that was subjected to intervention  | <b>134</b>  |

|  |            |
|--|------------|
| <b>Figure (22):</b> The site of lesion subjected to PCI  | <b>135</b> |
| <b>Figure (23):</b> Degree of coronary obstruction among the studied pts                                 | <b>136</b> |
| <b>Figure (24):</b> TIMI flow in IRA in the studied pts  | <b>137</b> |
| <b>Figure (25):</b> Success rate of angioplasty  | <b>138</b> |
| <b>Figure (26):</b> Incidence of failure of PCI per year   | <b>139</b> |
| <b>Figure (27):</b> Different modalities of coronary intervention  | <b>140</b> |
| <b>Figure (28):</b> IUT, primary PTCA and stenting for total LCx occlusion                               | <b>142</b> |
| <b>Figure (29):</b> Stent types used in treated lesions  | <b>145</b> |
| <b>Figure (30):</b> Incidence of procedural complications  | <b>147</b> |
| <b>Figure (31):</b> Primary PCI to LAD total occlusion with complete restoration of normal TIMI III flow | <b>148</b> |
| <b>Figure (32):</b> Primary PCI to LCx total occlusion with complete restoration of normal TIMI III flow | <b>149</b> |
| <b>Figure (33):</b> CK level before and after PCI  | <b>150</b> |
| <b>Figure (34):</b> CK-MB level before and after PCI   | <b>151</b> |
| <b>Figure (35):</b> ST segment elevation before and after PCI  | <b>151</b> |
| <b>Figure (36):</b> In-hospital MACE following primary PCI   | <b>152</b> |
| <b>Figure (37):</b> Association between risk factors for CAD & MACE                                      | <b>154</b> |
| <b>Figure (38):</b> Association between time to PCI & MACE   | <b>155</b> |
| <b>Figure (39):</b> Association between cardiogenic shock & MACE   | <b>156</b> |
| <b>Figure (40):</b> Association between IRA & MACE   | <b>157</b> |
| <b>Figure (41):</b> Association between site of lesion & MACE  | <b>158</b> |
| <b>Figure (42): Association between intra-coronary thrombi &amp; MACE</b>                                | <b>159</b> |
| <b>Figure (43): Association between type of intervention &amp; MACE</b>                                  | <b>160</b> |
| <b>Figure (44): Association between the use of thrombolytics &amp; MACE</b>                              | <b>161</b> |
| <b>Figure (45):</b> Six months MACE after PCI  | <b>163</b> |
| <b>Figure (46):</b> Six months Scintigraphic follow up   | <b>165</b> |
| <b>Figure (47):</b> Association between DM & Scintigraphic follow up                                     | <b>167</b> |