

## Supplementary Online Content

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**eAppendix 1.** SOLID-TIMI 52 trial - Trial Leadership & Investigators

**eAppendix 2.** Inclusion and Exclusion Criteria

**eAppendix 3.** Clinical Endpoint Definitions

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**eFigure 2.** Subgroups of Interest for the Secondary Composite Endpoint of CV Death, MI or Stroke

**eTable.** Summary of MI According to the Universal Classification of MI by Randomized Treatment Arm

**eReferences**

This supplementary material has been provided by the authors to give readers additional information about their work.

## **eAppendix 1. SOLID-TIMI 52 trial - Trial Leadership & Investigators**

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### **Hungary**

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### **India**

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### **Israel**

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### **Italy**

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### **Japan**

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### **Korea**

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### **Netherlands**

Bartels, Louis, Martini Ziekenhuis, Groningen (9); Basart, Dick, Vasculair Onderzoek Centrum Hoorn, Hoorn (14); De Nooijer, Cornelis, Maxima MC, Veldhoven (11); Dijkgraaf, René, St. Jansdal Ziekenhuis, Harderwijk (5); Graaf, Jacob J. de, Nij Smellinghe Ziekenhuis, Drachten (29); Groutars, Reginald, Visser, J. (FPI), St. Lucas Andreas Ziekenhuis, Amsterdam (11); Hamer, Barnabas J.B., Meander MC, Amersfoort (45); Hamraoui, Karim, Tweesteden Ziekenhuis, Tilburg (34); Heijmeriks, Jan, Huizenga, Aline (FPI), Ziekenhuis Dirksland, Dirksland (14); Herrman, Johannes P.R., Onze Lieve Vrouwe Gasthuis, Amsterdam (15); Knufman, Nicole M.J., Frederiks, Joost (FPI), Bronovo Ziekenhuis, DEN HAAG (6); Kuijper, Adrianus F.M., Spaarne Ziekenhuis, Hoofddorp (20); Lenderink, Timo, Atrium MC, Heerlen (27); Meer, Peter van der, 't Lange Land Ziekenhuis, Zoetermeer (4); Milhous, Gert-Jan, Beatrix ziekenhuis, Gorinchem (6); Nierop, Pieter, St. Franciscus Gasthuis, Rotterdam (19); Oude Ophuis, Anthonius J.M., Canisius Wilhemina Ziekenhuis, Nijmegen (32); Peerenboom, Patrick, Laurentius Ziekenhuis, Roermond (31); Peters, Rene, Tergooiziekenhuizen, Blaricum (18); Plomp, Jacobus, Tergooiziekenhuizen, locatie Hilversum, Hilversum (12); Prins, Paco, Elkerliek Ziekenhuis, Helmond (21); Schaap, Aart, Röpcke-Zweers Ziekenhuis, Hardenberg (4); Sluis, Aize van der, Deventer Ziekenhuis, Deventer (20); Smeele, Franciscus J.J., Hal, Johannes M.C. van (FPI), Slingeland Ziekenhuis, Doetinchem (6); Swart, Hendrik P., Antonius Ziekenhuis, Sneek (20); Tjeerdsma, Geert, Ziekenhuis De Tjongerschans, Heerenveen (15); Troquay, Roland, Vie-Curie MC, Venlo (39); Van Eck, Martijn, Jeroen Bosch Ziekenhuis, 's-Hertogenbosch (42); Viergever, Eric, Groene Hart Ziekenhuis, Gouda (16); Weerd, Gerardus J. de, Daele, Marcus van (FPI), Orbis Medisch Centrum, Sittard-Geleen (11); Winter, Robbert J. de, Academisch Medisch Centrum, Amsterdam (4); Zoet-Nugteren, Stijntje Kleisje, Ikazia Ziekenhuis, Rotterdam (20); Zwaan, Coenraad van der, Ziekenhuis Rivierenland, Tiel (20); Zwart, Peter, Bernhoven Ziekenhuis, Oss (22).

### **New Zealand**

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### **Philippines**

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### **Poland**

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### **Romania**

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### **Slovakia**

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Cardiovascular Consultants of Maine, Scarborough, Maine (9); Thomas, James, Medical University of South Carolina, Charleston, South Carolina (7); Thompson, Paul, Polk, Donna (FPI), Hartford Hospital, Hartford, Connecticut (6); Tilkian, Ara, Providence Holy Cross Medical Center, Mission Hills, California (4); Tinkel, Jodi, Pandya, Utpal (FPI), University of Toledo, Toledo, Ohio (11); Tobiansky, Joel, The Dayton Heart Center, Dayton, Ohio (8); Trippi, James, The Care Group, Avon, Indiana (2); Tuohy, Edward, Bridgeport Hospital, Bridgeport, Connecticut (7); Uretsky, Barry, Central Arkansas Veterans Healthcare System, Little Rock, Arkansas (5); Uusinarkaus, Kari, Colorado Springs Health Partners, Colorado Springs, Colorado (1); Varma, Shalendra, Boice-Willis Clinic, P.A., Rocky Mount, North Carolina (5); Velasquez, Enrique, The Heart Center, Huntsville, Alabama (30); Vogel, Craig, Cardiovascular Medical Specialists of the Palm Beaches, Jupiter, Florida (8); Voyce, Stephen, Advanced Cardiology Specialists, Scranton, Pennsylvania (18); Wainwright, William, Hancock, Holly (FPI), Baptist Heart Specialists, Jacksonville Beach, Florida (6); Walder, James, Black Hills Clinical Research Center, Rapid City, South Dakota (34); Wali, Andreas, Holy Spirit Hospital, Camp Hill, Pennsylvania (11); Watkins, Stanley, Alaska Heart Institute, Anchorage, Alaska (3); Weiss, Robert, Central Marine Heart and Vascular Institute, Lewiston, Maine (8); Wickemeyer, William, Iowa Heart Center, PC, West Des Moines, Iowa (18); Wilson, Dennis, Novant Health Heart and Vascular Institute, Salisbury, North Carolina (4); Wilson, Vance, Daytona Heart Group, Daytona Beach, Florida (22); Wiseman, Alan, Northeast Cardiology Associates, Bangor, Maine (33); Wright, Jr., William, Esse Health Cardiology Consultants, St.Louis, Missouri (6); Xenakis, Mark, Cardiovascular Associates of Virginia, Midlothian, Virginia (1); Zelenka, Jason, Clearwater Cardiovascular and Interventional Consultants, Safety Harbor, Florida (23); Zilz, Nathan, Amidon, Thomas (FPI), Hope Heart Institute, Bellevue, Washington (16).

**eAppendix 2. Inclusion and Exclusion Criteria**

**a) Inclusion criteria**

1. Signed written informed consent prior to beginning study-related procedures.
2. Male or female aged at least 18 years, inclusive, at randomization. Female subjects must be post-menopausal or using a highly effective method for avoidance of pregnancy.
3. Hospitalization for ACS (unstable angina, non-ST segment elevation MI, or ST segment elevation MI) $\leq 30$ days prior to randomization:
a. Unstable angina (UA) is defined as ischemic chest discomfort (or equivalent) that occurs at rest with at least 1 episode lasting $\geq 10$ minutes and is accompanied by new or presumably new ST segment deviation (transient [ $< 20$ minutes] elevation $\geq 0.1$ mV or dynamic horizontal/down-sloping depression $\geq 0.05$ mV) in at least 2 contiguous leads without diagnostic biochemical changes in cardiac enzymes (serum troponin I or T, or creatine kinase-MB).
b. Non-ST segment elevation MI (NSTEMI) is defined as ischemic chest discomfort (or equivalent) that occurs at rest with at least 1 episode lasting $\geq 10$ minutes and is accompanied by a diagnostic elevation in cardiac biomarkers of myocardial injury (serum troponin I or T, or creatine kinase-MB) above the upper limit of normal without persistent ST segment elevation.
c. ST segment elevation MI (STEMI) is defined as prolonged symptoms of ischemic chest discomfort (or equivalent) at rest (with at least 1 episode lasting $> 20$ min) and new or presumably new electrocardiographic changes (persistent ST segment elevation $\geq 0.1$ mV in $\geq 2$ contiguous precordial leads or $\geq 2$ adjacent limb leads or new LBBB) that are accompanied by a diagnostic elevation in cardiac biomarkers (serum troponin I or T, creatine kinase or creatine kinase-MB) above the upper limit of normal.
4. The subject must be clinically stable for 24 hours prior to randomization
5. For subjects in whom a percutaneous coronary intervention (PCI) is planned as part of management for the qualifying ACS event, the subjects should undergo PCI prior to randomization whenever possible.



**b) Additional predictors of cardiovascular risk**

<b>All subjects must also have at least one of the following high-risk predictors:</b>
a. age $\geq 60$ years at randomization.
b. history of documented MI prior to qualifying ACS event.
c. diabetes mellitus requiring pharmacotherapy.
d. significant renal dysfunction (defined as estimated glomerular filtration rate [eGFR] $\geq 30$ and $\leq 59$ mL/min/1.73 m <sup>2</sup> ), according to MDRD equation.
e. polyvascular disease manifested in this ACS population as coexistent clinically diagnosed arterial disease in at least 1 peripheral arterial territory, defined as: <ul style="list-style-type: none"><li>• cerebrovascular disease defined as carotid artery disease,<sup>1</sup> or as prior ischemic stroke<sup>2</sup> that occurred <math>&gt;3</math> months prior to randomization.</li></ul> OR <ul style="list-style-type: none"><li>• peripheral arterial disease (PAD)<sup>3</sup>.</li></ul>

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<sup>1</sup> Carotid disease is defined as unilateral or bilateral carotid stenosis  $>60\%$  OR history of carotid surgery or stenting.

<sup>2</sup> Prior ischemic stroke is defined as documented focal neurologic deficit thought to be of vascular origin, with signs or symptoms lasting  $>24$  hours. It is strongly recommended that neuroimaging, such as computed tomography (CT) scan or magnetic resonance imaging (MRI) be performed to confirm diagnosis. In the absence of neuroimaging, additional functional deficit must be documented by abnormalities in the modified Rankin Score.

<sup>3</sup> PAD is documented by one of the following: current intermittent claudication with objective evidence of vascular origin, history of peripheral arterial stenting or surgery (including amputation due to vascular causes), or ankle-brachial index  $<0.9$  in at least one ankle.

**c) Exclusion criteria**

<b>Subjects meeting any of the following criteria must not be enrolled in the study:</b>
1. Clinical or laboratory manifestations of ACS that is not believed to be thrombotic in origin or is believed to be secondary to other apparent illness.
2. Absence of obstructive coronary artery disease (i.e., at least one stenosis [ $>50\%$ ] in a major vessel, major branch or bypass graft) based on angiography, if performed, between the time of presentation with ACS and randomization.
3. Planned coronary artery bypass graft (CABG) surgery or CABG surgery performed following the qualifying event and prior to randomization.
4. Cirrhosis, known biliary abnormalities (with the exception of Gilbert's syndrome or asymptomatic gallstones), unstable liver disease, or evidence of abnormal liver function tests (total bilirubin or alkaline phosphatase $>1.5$ x upper limit of normal [ULN]; or ALT $>2.5$ x ULN) or other hepatic abnormalities that in the opinion of the investigator would preclude the subject from participation in the study.
5. Severe renal impairment (e.g., patients with an eGFR $<30$ mL/min/1.73 m <sup>2</sup> or receiving chronic dialysis) or history of nephrectomy or kidney transplant (regardless of renal function).
6. Current severe heart failure (New York Heart Association [NYHA] class III or IV).
7. Poorly controlled hypertension despite lifestyle modifications and pharmacotherapy.
8. Any life-threatening condition with life expectancy $<2$ years, other than vascular disease, that might prevent the subject from completing the study.
9. Severe asthma that is poorly controlled on pharmacotherapy.
10. Positive pregnancy test (all female subjects of childbearing potential must have a urine or serum $\beta$ -human chorionic gonadotropin pregnancy test performed within 7 days prior to randomization) or is known to be pregnant or lactating.
11. History of anaphylaxis, anaphylactoid (resembling anaphylaxis) reactions or severe allergic responses.
12. Alcohol or drug abuse within the past 6 months. Current mental condition (psychiatric disorder, senility or dementia), which may affect study compliance or prevent understanding of the aims, investigational procedures or possible consequences of the study.
13. Current or planned chronic administration of strong oral or injectable cytochrome P-450 isoenzyme 3A4 (CYP3A4) inhibitors.

14. Subjects with 2 known birth parents of at least 50% Japanese, Chinese, or Korean ancestry (or if unknown, a reasonable likelihood of such ancestry) must have a blood sample collected for assessment of Lp-PLA <sub>2</sub> activity by the central laboratory prior to randomization. Those with Lp-PLA <sub>2</sub> activity $\leq$ 20.0 nmol/min/mL will be excluded from participation in the study (online appendix). <sup>4</sup>
15. Previous exposure to darapladib (SB-480848).
16. Use of another investigational product within 30 days or 5 half-lives (whichever is the longer) preceding the first dose of darapladib or matching placebo.
17. Currently in a study of an investigational device.
18. Any other reason the investigator deems the subject to be unsuitable for the study.

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<sup>4</sup> Subjects homozygous for the 279F variant have no circulating levels of Lp-PLA<sub>2</sub> and would not expect to benefit from Lp-PLA<sub>2</sub> lowering therapy. This allele is most common in those of Japanese, Chinese, and Korean ancestry.

## **eAppendix 3.** Clinical End Point Definitions

### **3.1 Death**

Death will be defined as all-cause mortality. Cause of death will be classified as either cardiovascular or non-cardiovascular. All deaths that are unwitnessed will be assumed to be cardiovascular in nature unless a non-cardiovascular cause can be clearly provided.

#### *1) Cardiovascular*

Cardiovascular death is defined as death due to documented cardiovascular cause. Causes of cardiovascular deaths include but are not limited to deaths resulting from stroke, arrhythmia, sudden death (witnessed or unwitnessed), myocardial infarction, heart failure, pulmonary embolism, peripheral arterial disease, or complications of a cardiovascular procedure. Additionally, death not clearly attributable to non-cardiovascular causes will be considered CV death.

- a) Coronary heart disease (CHD) death is defined as fatal myocardial infarction, death caused by documented cardiac arrest (e.g., ventricular fibrillation or other lethal arrhythmia without known secondary causes), or death resulting from heart failure in a patient with known CHD, death from other forms of acute or chronic CHD, unwitnessed death of unknown origin or sudden death.

#### *2) Non-cardiovascular*

Non-cardiovascular deaths include deaths due to a clearly documented non-cardiovascular cause. Non-cardiovascular deaths will be further classified into the categories: hemorrhage, neoplasm/cancer, trauma, infection/sepsis, post non-cardiovascular surgery, pulmonary, suicide, and other causes of death (specify).

### **3.2 Myocardial Infarction**

Myocardial infarction is defined as adapted according to the Universal Definition of MI.<sup>1</sup>

**Myocardial Infarction:** evidence of myocardial necrosis in a clinical setting consistent with myocardial ischemia. Under these conditions any one of the following criteria meets the diagnosis for myocardial infarction.

**1) For a patient with no recent revascularization and in whom biomarkers are not elevated at baseline**, detection of rise and/or fall of cardiac biomarkers (CK-MB or troponin) with at least one value above the 99th percentile of a normal reference population (URL = upper reference limit) (*Note: The MI decision limit or ULN can be used if 99th percentile is unavailable*). In instances where both cardiac biomarkers (troponin and CK-MB) are available (drawn at similar time points) and are discordant, biomarker criteria will be applied using cardiac troponin. Biomarker changes must occur together with evidence of myocardial ischemia with *at least one* of the following:

- i) Symptoms of ischemia lasting  $\geq 10$  minutes;

ii) ECG changes indicative of new ischemia (new ST-T changes or new left bundle branch block) as described below:

- **ST elevation**

- New ST elevation at the J-point in two contiguous leads with the cut-off points:
  - $\geq 0.2$  mV in men or  $\geq 0.15$  mV in women in leads V2–V3

**AND/OR**

- $\geq 0.1$  mV in other leads

- **ST depression and T-wave changes**

- New or presumed new horizontal or down-sloping ST depression  $\geq 0.05$  mV in two contiguous leads;

**AND/OR**

- New or presumed new T inversion  $\geq 0.1$  mV in two contiguous leads with prominent R-wave or R/S ratio  $> 1$

iii) Development of pathological Q waves in ECG

Any Q-wave in leads V2–V3  $\geq 0.02$ s OR QS complex in leads V2 and V3. Q-wave  $\geq 0.03$ s and  $\geq 0.1$  mV deep OR QS complex in leads I, II, aVL, aVF, or V4–V6 in any two leads of a contiguous lead grouping (I, aVL, V6; V4–V6; II, III, and aVF). NOTE: The same criteria are used for supplemental leads V7–V9, and for the Cabrera frontal plane lead grouping: R-wave  $\geq 0.04$ s in V1–V2 and R/S  $\geq 1$  with a concordant positive T-wave in the absence of a conduction defect.

iv) Imaging evidence of *new* loss of viable myocardium or *new* regional wall motion abnormality.

**2) For a patient with no recent revascularization in whom biomarkers (troponin or CK-MB) from a recent MI remain elevated, the patient must meet the following criteria:**

- Cardiac biomarker (CK-MB or troponin) re-elevation defined as:
  - a) Documentation the biomarker was decreasing prior to the new suspected MI, **AND**
  - b) Increase by at least 50% of the previous value,

*In instances where both cardiac troponin and CK-MB are available (drawn at similar time points) and are discordant, biomarker criteria will be applied using cardiac troponin.*

**AND**, at least one of the following:

- i) Symptoms of ischemia lasting  $\geq 10$  minutes;

- ii) ECG changes indicative of new ischemia (new ST-T changes or new left bundle branch block) as described previously above;
- iii) Development of pathological Q waves in ECG, as described previously above;
- iv) Imaging evidence of new loss of viable myocardium or new regional wall motion abnormality.

**3) Sudden, unexpected cardiac death, involving cardiac arrest, often with symptoms suggestive of myocardial ischemia, and accompanied by presumably new ST elevation, or new left bundle branch block, and/or evidence of fresh thrombus by coronary angiography and/or autopsy, but death occurring before blood samples could be obtained, or at a time before the appearance of cardiac biomarkers in the blood.**

**4) Within 24 hours after PCI a patient must have EITHER:**

- 1) CK-MB  $\geq 3 \times$  ULN and, if the pre-PCI CK-MB was  $>ULN$ , both an increase by at least 50% over the previous value and documentation that CK-MB was decreasing prior to the suspected recurrent MI;

**OR**

- 2) Pathologic findings of an acute MI. *Note: symptoms are not required.*

*Note: If cardiac troponin measurements are the only cardiac biomarker data available, they may be used by the CEC, along with the ECG and clinical scenario, in the adjudication of suspected MI after the PCI*

**5) Within 72 hours after CABG a patient must have EITHER:**

- 1) CK-MB  $\geq 5 \times$  ULN and, if the pre-CABG CK-MB was  $>ULN$ , both an increase by at least 50% over the previous value and documentation that CK-MB was decreasing prior to the suspected recurrent MI;

**AND**

- 2) At least one of the following supportive criteria:
  - a) Development of new, abnormal Q waves, as described previously above.
  - b) Angiographically documented new graft or native coronary occlusion
  - c) Imaging evidence of new loss of viable myocardium
  - d) Documented new left bundle branch block (LBBB)

**OR**

- 3) Pathologic findings of an acute MI.

*Note: symptoms are not required.*

*Note: If cardiac troponin measurements are the only cardiac biomarker data available, they may be used by the CEC, along with the ECG and clinical scenario, in the adjudication of suspected MI after the CABG surgery.*

**6) Pathological findings of an acute MI.**

**7) Myocardial infarction diagnosed post-randomization:** Any one of the following criteria meets the diagnosis for a myocardial infarction which is noted post-randomization during the conduct of the trial (eg. Silent myocardial infarction discovered by electrocardiogram obtained at a routine visit when compared with electrocardiogram obtained at previous visit):

- Development of new pathological Q waves with or without symptoms as described below:
  - Any Q-wave in leads V2–V3  $\geq 0.02s$  **OR** QS complex in leads V2 and V3
  - Q-wave  $\geq 0.03s$  and  $\geq 0.1$  mV deep **OR** QS complex in leads I, II, aVL, aVF, or V4–V6 in any two leads of a contiguous lead grouping (I, aVL, V6; V4–V6; II, III, and aVF). NOTE: The same criteria are used for supplemental leads V7–V9, and for the Cabrera frontal plane lead grouping:
  - R-wave  $\geq 0.04s$  in V1–V2 and R/S  $\geq 1$  with a concordant positive T-wave in the absence of a conduction defect
- Imaging evidence of a region of loss of viable myocardium that is thinned and fails to contract, in the absence of a non-ischemic cause and can be demonstrated to have occurred post-randomization.
- Pathological findings of a healed or healing myocardial infarction that is believed to have occurred post-randomization.

**Additional sub classification of MI by etiology**

According to new Joint ESC/ACCF/AHA/WHF Task Force recommendations for the Redefinition of Myocardial Infarction<sup>1</sup> the following classifications for the type of MI will be further used. Events will only be sub classified into the following categories if they first meet the primary definition of myocardial infarction as defined above.

**Clinical classification of different types of myocardial infarction**

<b>MI type</b>	<b>Description</b>	<b>Note</b>
Type 1	Spontaneous myocardial infarction related to ischemia due to a primary coronary event such as a plaque erosion and/or rupture, fissuring, or dissection	Events classified as Type 1 should not meet criteria for other types below. Specifically, stent thrombosis should not be categorized as Type 1. Any non-periprocedural MI, that does not clearly have a secondary cause (Type 2), should be classified as Type 1
Type 2	Myocardial infarction secondary to ischemia due to either increased oxygen demand or decreased supply, e.g. coronary artery spasm, coronary embolism, anemia, arrhythmias, hypertension, or hypotension.	Event is presumed to be non-thrombotic in etiology
Type 3	Sudden unexpected cardiac death, including cardiac arrest, often with symptoms suggestive of myocardial ischemia, accompanied by presumably new ST elevation, or new LBBB, or evidence of fresh thrombus in a coronary artery by angiography and/or at autopsy, but death occurring before blood samples could be obtained, or at a time before the appearance of cardiac biomarkers in the blood.	Type 3, will be rare, these are cases where the subject died before biomarkers were obtained but had clear ECG or angiographic evidence of an acute MI
Type 4a	Myocardial infarction associated with PCI	As defined under the primary definition of MI as stated above
Type 4b	Myocardial infarction associated with stent thrombosis as documented by angiography or at autopsy	See definition of stent thrombosis below (ARC definite)
Type 5	Myocardial infarction associated with CABG	As defined under the primary definition of MI as stated above



### 3.3 Stroke

Stroke is defined as the presence of a **new focal neurologic deficit thought to be of vascular origin, with signs or symptoms lasting >24 hours, or results in death (in <24 hours)**. It is strongly recommended that neuroimaging, such as computed tomography (CT) scan or magnetic resonance imaging (MRI) is performed to confirm diagnosis. In the absence of neuroimaging, additional functional deficit must be documented by a change in the modified Rankin Score.

**If neurologic symptoms last <24 hours, new brain infarction has to be confirmed by diffusion weighted MRI showing the presence of a new brain infarct.** Alternate forms of neuroimaging will be accepted only if it can be demonstrated that a defect is new. In addition, location of a defect must be consistent with the observed neurological symptoms. Confirmed retinal arterial ischemic event (embolism, infarction) will be considered a stroke. Subarachnoid, epidural and subdural hemorrhage will not be considered a stroke under the endpoint definition.

**Stroke will be further classified as ischemic, hemorrhagic (intraparenchymal), ischemic stroke with hemorrhagic conversion or type uncertain, see below:**

- *Hemorrhagic:* A stroke with documentation of intracranial hemorrhage on imaging (eg, computed tomography (CT) scan or magnetic resonance imaging (MRI) scan) in the cerebral parenchyma. Subarachnoid, epidural and subdural hemorrhage will not be considered a stroke under the endpoint definition. Microhemorrhages incidentally discovered on brain imaging without associated symptoms will not be considered a stroke event.
- *Ischemic:* A stroke that results from a thrombus or embolus impairing central nervous system perfusion.
- *Cerebral infarction with blood felt to represent hemorrhagic conversion and not a primary hemorrhage.* Hemorrhagic conversion usually occurs on the cortical surface. Hemorrhagic conversion in the deeper brain requires evidence of non-hemorrhagic infarction in the same vascular territory. Microhemorrhages evident on brain imaging in the cortex or deep brain structures, are not considered to be consistent with a hemorrhagic conversion endpoint.
- *Uncertain/No imaging performed:* if the type of stroke could not be determined by imaging or other means (from lumbar puncture, neurosurgery, or autopsy).

### 3.4 Urgent coronary revascularization for Myocardial Ischemia

Urgent coronary revascularization for myocardial ischemia is defined as ischemic discomfort  $\geq 10$  minutes at rest that prompts coronary revascularization (PCI or CABG) during the same hospitalization or resulting in hospital transfer for the purpose of coronary revascularization. PCI is defined as any attempt at revascularization even if not successful (e.g., angioplasty, atherectomy or stenting).

Potential ischemic events meeting the criteria for myocardial infarction will not be adjudicated as urgent coronary revascularization for myocardial ischemia.

Ischemic discomfort is defined as chest pain or discomfort or equivalent (eg neck or jaw symptoms, dyspnea believed to represent an angina pectoris equivalent) believed due to impaired coronary flow secondary to atherosclerotic disease.

### 3.5 Hospitalization for Unstable Angina

Hospitalization for unstable angina is defined as one of the following but **not fulfilling the criteria for MI**:

- a) Ischemic discomfort at rest  $\geq 10$  minutes associated with ECG changes (as described below) leading to hospitalization OR
- b) Ischemic discomfort at rest  $\geq 10$  minutes regardless of ECG changes leading to hospitalization AND coronary revascularization (or attempted revascularization) during the same admission OR
- c) Ischemic discomfort at rest  $\geq 10$  minutes in hospital associated with ECG changes (as described below) OR
- d) Ischemic discomfort at rest  $\geq 10$  minutes in hospital without ECG changes resulting in coronary revascularization (or attempted revascularization) during the same admission.

Ischemic discomfort is defined as chest pain or discomfort or equivalent (eg neck or jaw symptoms, dyspnoea believed to represent an angina pectoris equivalent) believed due to impaired coronary flow secondary to atherosclerotic disease.

ECG changes are defined as: New or presumed new ischaemic ECG changes (transient ST elevation  $\geq 1$  mm (0.1 mV) or ST depression  $\geq 0.5$  mm (0.05 mV), or T wave inversion  $\geq 1$  mm (0.1 mV) in at least 2 contiguous leads).

The event will not be considered unstable angina if, after invasive/non-invasive testing or other diagnostic testing, the discomfort is found not to be caused by myocardial ischemia.

### 3.6 Hospitalization for Heart Failure

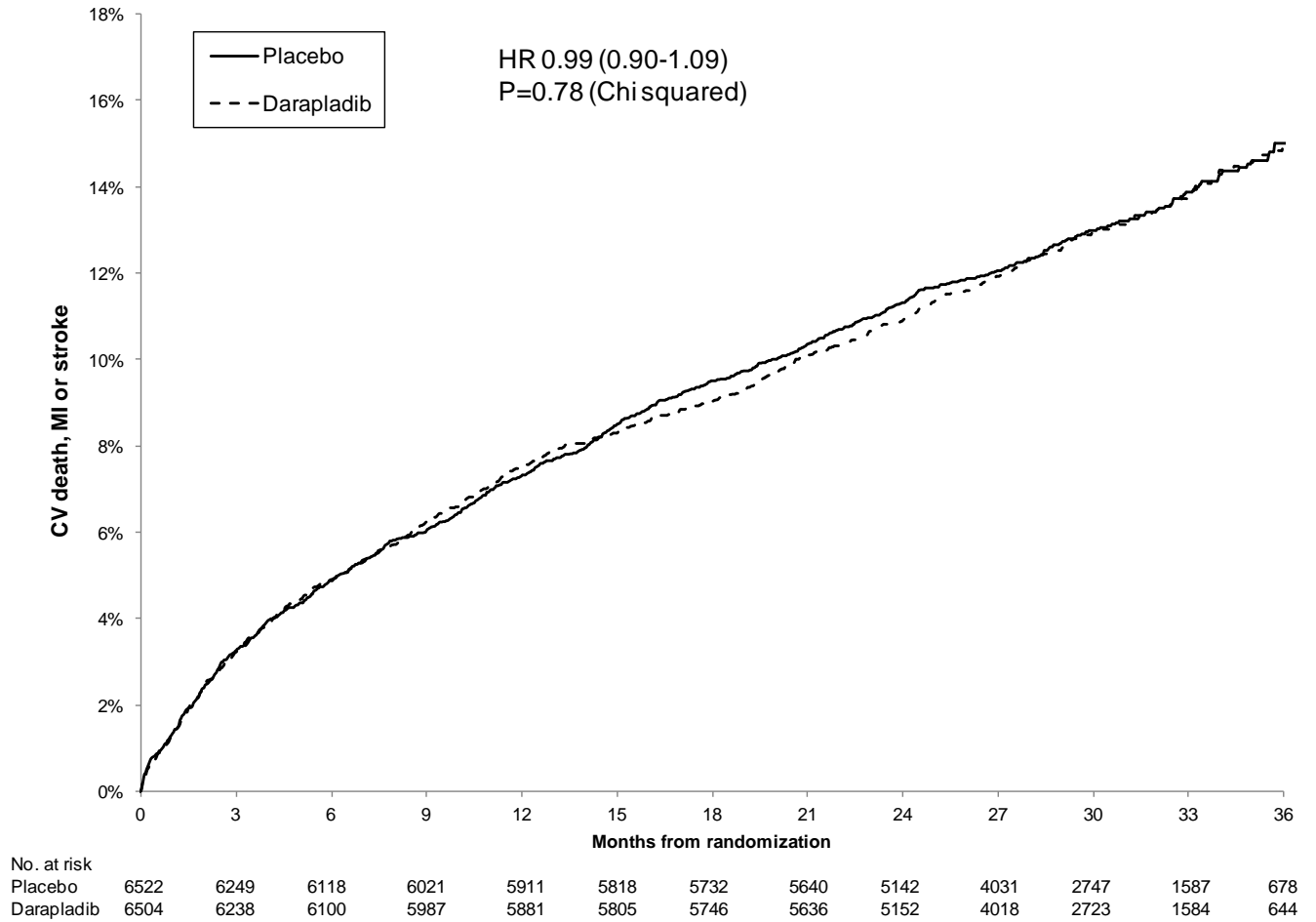
Heart failure requiring hospitalization is defined as admission to hospital or attendance at an acute health care facility for administration of intravenous diuretic treatment, escalation of diuretic doses, and/or inotropes. Confirmation of heart failure diagnosis is required by chest imaging demonstrating pulmonary congestion or edema, OR, in patients *without* available chest imaging, at least one of the following: Pulmonary edema, (i.e. rales  $>1/3$  up the lung fields thought to be of cardiac causes), pulmonary capillary wedge pressure  $>18$  mmHg or BNP  $>500$  pg/ml (or NT-terminal prohormone BNP  $>2500$  pg/ml).

### **3. Lp-PLA<sub>2</sub> Activity Assay Methodology**

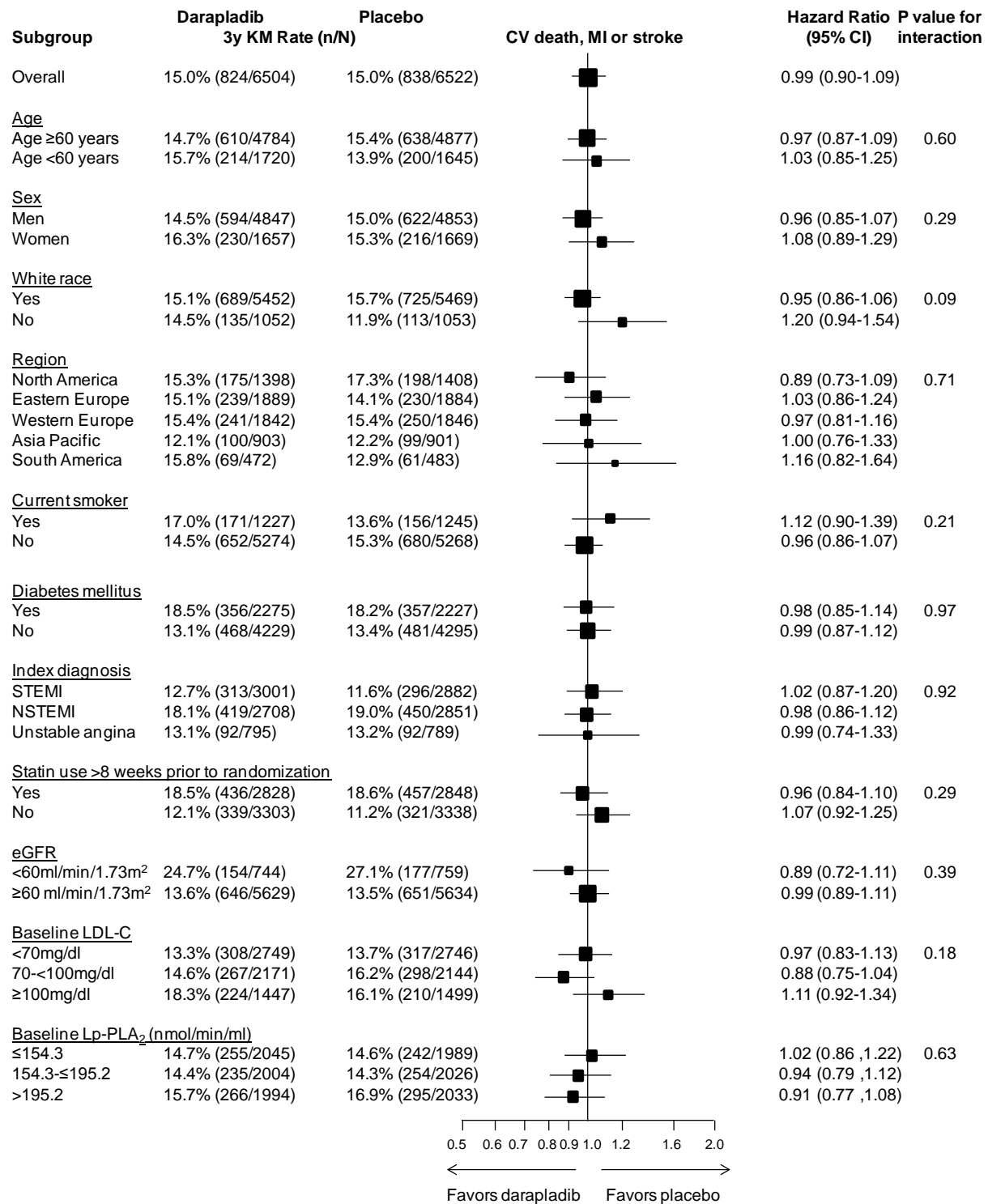
As part of the study protocol, a sample of venous blood was obtained in EDTA-treated tubes from the subjects at the time of enrollment for assessment of Lp-PLA<sub>2</sub> activity. The plasma component was frozen and shipped to a central laboratory where samples were stored at -70°C or colder. Lp-PLA<sub>2</sub> activity was measured using the PLAC<sup>™</sup> test for LpPLA<sub>2</sub> activity at diaDexus (South San Francisco, CA, USA). The assay uses [<sup>3</sup>H]-platelet activating factor (PAF) as the reaction substrate and enzyme activity is expressed as nanomoles of PAF hydrolyzed per minute per mL plasma samples (nmol/min/mL). The measuring range of the assay is 10 to 400 nmol/min/mL with the low end of the range based on the limit of quantitation (LOQ). Intra-assay and inter-assay variability were determined by testing four human serum samples and two controls with Lp-PLA<sub>2</sub> activities ranging from 95 to 345 nmol/min/mL. Total precision coefficients of variation were <3%.

## 4. Supplemental Figures and Tables

**eFigure 1.** Cumulative incidence curves for the secondary endpoint CV death, MI or stroke



**eFigure 2.** Subgroups of interest for the secondary composite endpoint of CV death, MI or stroke.



**eTable.** Summary of MI according to the Universal Classification of MI by randomized treatment arm<sup>1</sup>

<b>Types of MI</b>	<b>Placebo (n=6504)</b>	<b>Darapladib (n=6522)</b>
Type 1: Spontaneous MI	443	426
Type 2: MI secondary to oxygen supply:demand imbalance	83	56
Type 3: Sudden unexpected cardiac death	9	3
Type 4a: MI associated with PCI	10	16
Type 4b: MI associated with stent thrombosis	57	71
Type 5: MI associated with CABG surgery	0	2

Abbreviations: MI, myocardial infarction; PCI, percutaneous coronary intervention; CABG, coronary artery bypass graft

## 5. eReferences

1. Thygesen K, Alpert JS, White HD, on behalf of the Joint ESC-ACC-AHA-WHF Task Force for the Redefinition of Myocardial Infarction. *European heart journal* 2007;28:2525-38.
2. Cutlip DE, Windecker S, Mehran R, et al. Clinical end points in coronary stent trials: a case for standardized definitions. *Circulation* 2007;115:2344-51.