APPENDIX F: CASE REPORT FORM

NATIONAL CARDIOVASCULAR DISEASE DATABASE (PCI REGISTRY) NOTIFICATION FORM

For NCVD Use only:
Centre: ____
ID: ____

Instruction: Complete this form to notify all PCI admissions at your centre to NCVD PCI Registry. Where check boxes ☐ are provided, please check (√) one or more boxes. Where radio buttons ◉ are provided, check (√) only one option.

A. Date of Admission (dd/mm/yy): ☐☐☐☐☐☐ **B. Time of Admission (hh:mm):** ☐☐ : ☐☐ *(in 24hr clock)*

SECTION 1: DEMOGRAPHICS

1. Patient Name: *(as per MyKad / Other Document ID)*		**2. Hospital RN :**	
3. Identification Card Number:	**MyKad:** ☐☐☐☐☐☐ - ☐☐ - ☐☐☐☐	**Old IC No.**	
	Other ID Document No. →	***Specify type :*** (eg. passport, armed force ID)	
4. Gender:	◉ Male ◉ Female	**5. Nationality:**	◉ Malaysian ◉ Non Malaysian
6a. Date of Birth:	☐☐☐☐☐☐ (write DOB as 01/01/yy if age is known)	**6b. Age on admission:**	☐☐ *(auto calculate)*
7. Ethnic Group:	◉ Malay ◉ Punjabi ◉ Melanau ◉ Bidayuh ◉ Foreigner, specify country of origin: ……..…… ◉ Chinese ◉ Orang Asli ◉ Murut ◉ Iban ◉ Indian ◉ Kadazan Dusun ◉ Bajau ◉ Other Malaysian, specify: ……..		
8. Contact Number:	*(1):*	*(2):*	

SECTION 2 : STATUS BEFORE EVENT

1. Smoking status: ◉ Never ◉ Former (quit >30 days) ◉ Current (any tobacco use within last 30 days) ◉ Not Available

2. Medical history:

a) Dyslipidaemia ◉ Yes ◉ No ◉ Not known

b) Hypertension ◉ Yes ◉ No ◉ Not known

c) Diabetes ◉ Yes ◉ No ◉ Not known
- ☐ OHA ☐ Insulin ☐ Non pharmacology therapy/diet therapy

d) Family history of premature cardiovascular disease ◉ Yes ◉ No ◉ Not known
(1st degree relative with either MI or stroke; <55 y/old if Male & <65 y/old if Female)

e) Myocardial infarction history ◉ Yes ◉ No ◉ Not known

f) Documented Significant CAD ◉ Yes ◉ No ◉ Not known
(Presence of >50 % stenosis on CTA, angiogram, ischaemia on functional cardiac imaging such as nuclear, MRI, echo or positive treadmill test. High calcium score alone is not sufficient)

g) New onset angina (<2 weeks) ◉ Yes ◉ No ◉ Not known

h) History of heart failure ◉ Yes ◉ No ◉ Not known

i) Cerebrovascular disease ◉ Yes ◉ No ◉ Not known

j) Peripheral vascular disease ◉ Yes ◉ No ◉ Not known

k) Chronic renal failure ◉ Yes ◉ No ◉ Not known
(>200 µmol/L serum creatinine)
- On dialysis? ◉ Yes ◉ No

SECTION 3 : CLINICAL EXAMINATION and BASELINE INVESTIGATION

1. Anthropometric:	**a. Height:** ☐.☐☐ (m) ☐ Not Available	**b. Weight:** ☐☐☐.☐ (kg) ☐ Not Available	**c. BMI:** ☐☐☐☐ *(auto calculate)*
2. Heart rate (at start of PCI):	☐☐☐ beats/min	**3. Blood pressure (at start of PCI):**	**a. Systolic:** (mmHg) **b. Diastolic:** (mmHg)
4. Fasting Blood Glucose:	☐☐☐.☐ mmol/L ☐ Not Available	**5. Hb A1c:**	☐☐☐.☐ % ☐ Not Available
6a. Total cholesterol:	☐☐☐.☐ mmol/L ☐ Not Available	**6b. LDL Levels:**	☐☐☐.☐ mmol/L ☐ Not Available
7. Baseline creatinine:	☐☐☐.☐ µmol/L ☐ Not Available	**8. Baseline ECG:**	☐ Sinus rhythm ☐ 2nd/3rd AVB ☐ RBBB ☐ Atrial Fibrillation ☐ LBBB ☐ ST Deviation *(for GRACE Score)*
9. Non Invasive Test:	i) ◉ Done → ☐ Stress/ Exercise Test ☐ Nuclear ☐ MRI ☐ Stress Echo ☐ DSE ☐ CT Scan ◉ Not Done	ii) Functional Ischaemia ◉ Positive ◉ Negative ◉ Equivocal	
10. Glomerular Filtration Rate (GFR):	**a. MDRD:** ☐☐☐.☐ mL/min/1.73m² *(auto calculate)*	**b. Cockcroft-Gault:** ☐☐☐.☐ mL/min *(auto calculate)*	

Formula: GFR (Modification of Diet in Renal Disease (MDRD) : 186 x (serum creatinine [micromol/L] / 88.4) $^{-1.154}$ x (age) $^{-0.203}$ x (0.742 if female)
GFR (Cockcroft-Gault formula) : Male : 1.23 x (140 - Age) x Weight (kg) / serum Creatinine (micromol/L)
Female : 1.04 x (140 - Age) x Weight (kg) / serum Creatinine (micromol/L)

SECTION 4 : PREVIOUS INTERVENTIONS

1. Previous PCI: ◉ Yes ◉ No
- Date of most recent PCI (dd/mm/yy): ☐☐ / ☐☐ / ☐☐
- ☐ Not Available

2. Previous CABG: ◉ Yes ◉ No
- Date of most recent CABG (dd/mm/yy): ☐☐ / ☐☐ / ☐☐
- ☐ Not Available

a. Patient Name:		b. MyKad/Other ID No.:		c. Date of Procedure:	

SECTION 5 : CARDIAC STATUS AT PCI PROCEDURE

1. Angina type: ○ None ○ Atypical ○ Typical

2. Canadian Cardiovascular Score (CCS): ○ Asymptomatic ○ CCS 1 ○ CCS 2 ○ CCS 3 ○ CCS 4

3. NYHA: ○ NYHA I ○ NYHA II ○ NYHA III ○ NYHA IV

4. Killip Class (STEMI & NSTEMI)
○ I No clinical signs of HF ○ II Left Heart Failure (LHF) ○ III Acute Pulmonary Oedema (APO) ○ IV Cardiogenic Shock ○ Not Applicable / Not Available

5. Coronary Artery Disease (CAD) Presentation:
○ STEMI ○ NSTEMI ○ UA ○ Chronic Stable Angina
→ ☐ Anterior ☐ Lateral ☐ Inferior ☐ Others, specify: _____
☐ Posterior ☐ Right sided ☐ Left Main Stem

6. STEMI Event: (Please complete if <24 hrs since onset of STEMI symptoms)

a) STEMI onset:	i. Date: ☐☐ / ☐☐ / ☐☐ (dd/mm/yy) ☐ Not Applicable	ii. Time: ☐☐ : ☐☐ (in 24hr clock)
b) Arrival at first hospital (non PCI hospital):	i. Date: ☐☐ / ☐☐ / ☐☐ (dd/mm/yy) ☐ Not Applicable	ii. Time: ☐☐ : ☐☐ (in 24hr clock)
c) Arrival at PCI hospital:	i. Date: ☐☐ / ☐☐ / ☐☐ (dd/mm/yy) ☐ Not Applicable	ii. Time: ☐☐ : ☐☐ (in 24hr clock)
d) First device (balloon inflation/ stent/ aspiration):	i. Date: ☐☐ / ☐☐ / ☐☐ (dd/mm/yy) ☐ Not Applicable	ii. Time: ☐☐ : ☐☐ (in 24hr clock)
e) In hospital STEMI:	i. Date: ☐☐ / ☐☐ / ☐☐ (dd/mm/yy) ☐ Not Applicable	ii. Time: ☐☐ : ☐☐ (in 24hr clock)

7. EF Status (at time of PCI procedure): ☐☐☐ % (Do not use '>' or '<' symbol) ☐ Not Available

8. Cardiac Arrest: ○ Out of hospital ○ At admission (for GRACE score)

9. GRACE Score: (only for STEMI & NSTEMI) (*auto calculate*)

SECTION 6 : CATH LAB VISIT

1. a) Date of procedure: ☐☐ / ☐☐ / ☐☐ (dd/mm/yy) **1. b) Time of procedure:** ☐☐ : ☐☐ (*in 24hr clock*)

2. PCI status
○ Elective → ○ Staged PCI ○ Ad hoc
○ NSTEMI/UA → ○ Urgent (within 24hrs) ○ In hospital(> 24hrs) ○ PCI within 30days post event
○ STEMI → ○ Primary ○ Delayed Routine PCI ○ Rescue ○ Delayed Selective PCI ○ Pharmacoinvasive

3. Medication:

a) Thrombolytics	○ Yes → i) Time duration: ○ <3hrs ○ 3-6hrs ○ 6-12hrs ○ 12-24hrs ○ >24hrs ii) Types: ○ Streptokinase ○ tPA ○ Tenecteplase ○ Others, specify:_____			
b) IIb / IIIa Blockade	○ Yes → ○ Prior ○ During ○ After	○ No		
c) Heparin	○ Yes ○ No		d) LMWH	○ Yes ○ No
e) Ticlopidine	○ Yes ○ No		f) Fondaparinux	○ Yes ○ No
g) Bivalirudin	○ Yes ○ No		h) Aspirin	○ Yes ○ No
i) Prasugrel	○ Yes ○ No		k) Clopidogrel	○ Yes ○ No → First/ Load dose: ○ 75mg ○ 300mg ○ 600mg ○ ≥1200mg
j) Ticagrelor	○ Yes ○ No			
l) Others	○ Yes, specify:	○ No		

4. Planned duration of DAPT: ○ 1 month ○ 3 months ○ 6 months ○ 12 months ○ >12 months ○ Not Available

5. Percutaneous entry: ☐ Brachial ☐ Femoral ☐ Radial ☐ Ulnar

6. Closure device: ○ No ○ Seal ○ Suture ○ Other, specify: _____ ○ Exoseal

7. Coronary disease >50% stenosis: ☐ LAD ☐ LCx ☐ RCA ☐ Graft ☐ LMS

8. Fluoroscopy time: ☐☐☐ . ☐ minutes ☐ Not Available

9. Total dose: ☐☐☐☐☐ mGy ☐ Not Available

10. Contrast volume: ☐☐☐ ml ☐ Not Available

a. Patient Name:		b. MyKad/Other ID No.:		c. Date of Procedure:	

Instructions: 1. For skip lesion, please document as different lesions. Please check one lesion code per page (i.e. : for 2 lesions, please use 2 separate Section 7).
2. Documented Ramus Intermediate Lesions as lesion code 15.
3. For long lesion, please document as one single lesion.
4. Please document intervention involves side branch as a second lesion.

SECTION 7 : PCI PROCEDURE DETAILS *(Complete for ALL interventions. Please use one form per lesion treated)*

1. Total No. of lesion treated: *(Please use one form for one lesion treated)*

2. Dominance: ○ Left ○ Right ○ Co-dominance

3. Lesion code (1-25): ☐☐ to ☐☐ *(if applicable)*

4. Coronary lesion:
- ○ De novo ○ Restenosis *(no prior stent)*
- ○ Stent thrombosis → ○ Acute ○ Late ○ Sub Acute ○ Very Late
- ○ In stent restenosis
  - i. Duration: ☐☐ Year(s) ☐☐ Month(s) *(*Duration from the known previous procedure)* ○ Not available
  - ii. Prior stent type: ○ DES ○ BMS ○ BVS ○ Mg ○ Others, specify:……..
  - iii. Classification:
    - ○ Class I *(Focal ISR)*
    - ○ Class II *('Diffuse intrastent' ISR)*
    - ○ Class III *('Diffuse proliferative' ISR)*
    - ○ Class IV *(ISR with 'total occlusion')*

5. Lesion type: ○ A ○ B1 ○ B2 ○ C

6. Location in graft: (complete for graft PCI only)
○ Ostial ○ Native ○ Body ○ Anastomosis

7. Lesion description: *[if intervention involved bifurcation lesion, please record information of side branch (SB) using a separate form_ Section 7.1 A or B]*
- ☐ Ostial ☐ CTO>3mo ☐ Calcified lesion
- ☐ LMS ☐ Thrombus ☐ Not Applicable
- ☐ Bifurcation → a) ○ SB Treated ○ SB Not treated *(only if SB ≥ 2.0mm)*
- b) Medina Classification: i) MB prox.: ○0 ○1 ii) MB dist.: ○0 ○1; iii) SB1: ○0 ○1 iv) SB2: ○0 ○1

8. Pre PCI % of stenosis: ☐☐☐ % TIMI Flow (pre): ○TIMI-0 ○TIMI-1 ○TIMI-2 ○TIMI-3

9. Post PCI % of stenosis: ☐☐☐ % TIMI Flow (post): ○TIMI-0 ○TIMI-1 ○TIMI-2 ○TIMI-3

10. Estimated Lesion Length: ☐☐☐ mm

11. Perforation: ○ Yes ○ No
- i) Classification
  - ○ Type I *(extraluminal crater without extravasation)*
  - ○ Type II *(pericardial or myocardial blushing)*
  - ○ Type III *(perforation ≥1mm diameter with contrast streaming)*
  - ○ Cavity spilling

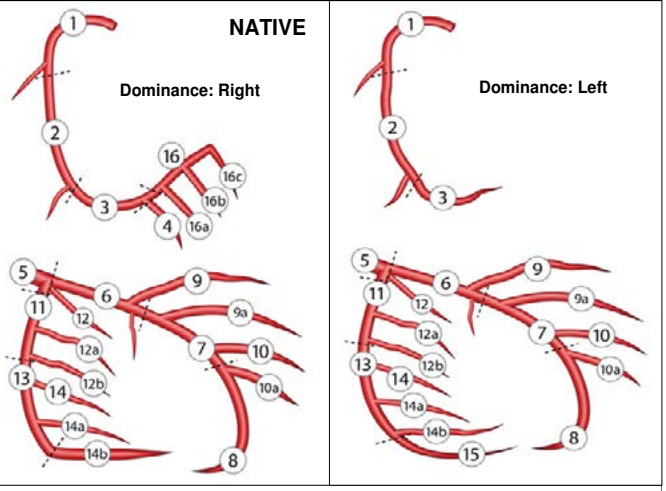
12. French Size: (i) ○ Guiding catheter (ii) ○ Guiding sheath
(ii) ○4 ○5 ○6 ○7 ○8 ○ Other, specify: …..
(iii) Types of guiding catheter: ……

13. Was lesion treated? ○ Yes ○ No

14. Lesion result: ○ Successful ○ Unsuccessful

15. Dissection: *(Post procedure)* ○ Yes → ○ Flow limiting ○ Non flow limiting ○ No

16. Slow Flow/ No reflow: ○ Yes → ○ Transient ○ Persistent ○ No



GRAFT
Graft PCI lesion codes 18-25. Also record grafted native coronary vessel

Graft	Target vessel	Graft	Target vessel	Graft	Target vessel
☐ 18 LIMA	☐☐	☐ 21 SVG2	☐☐	☐ 24 RAD2	☐☐
☐ 19 RIMA	☐☐	☐ 22 SVG3	☐☐	☐ 25 RAD3	☐☐
☐ 20 SVG1	☐☐	☐ 23 RAD1	☐☐		

17. Stent / DEB details per lesion: *(please refer instruction sheet for stent codes)*

	a. Stent code	Others, specify:	b. Diameter (mm)	c. Length (mm)
#1	☐☐☐	_____	☐.☐☐	☐☐
#2	☐☐☐	_____	☐.☐☐	☐☐
#3	☐☐☐	_____	☐.☐☐	☐☐
#4	☐☐☐	_____	☐.☐☐	☐☐
#5	☐☐☐	_____	☐.☐☐	☐☐
#6	☐☐☐	_____	☐.☐☐	☐☐

18. Maximum balloon:
- a) Predilatation: i) Size: ☐.☐☐ mm ii) Types: ☐ Regular ☐ NC ☐ Cutting ☐ Scoring
- b) Postdilatation: i) Size: ☐.☐☐ mm ii) Pressure: ☐☐ atm

19. Intracoronary devices used:
- ☐ IVUS ☐ OCT ☐ FFR ☐ Aspiration catheter ☐ POBA ☐ Micro catheter
- ☐ Angiojet ☐ Rotablator ☐ Extension catheter ☐ Coil ☐ Double Lumen micro catheter ☐ Others,specify: _____
- ☐ Embolic Protection → ○ Filter ○ Proximal

20. Other adjunctive procedure: ○ Yes → ☐ Ventilator ☐ Temporary Cardiac Pacing Wire ○ No

21. Circulatory support: ○ Yes → ☐IABP ☐Impella ☐ECMO ☐PCPS ○ No

22. Direct stenting: ○ Yes ○ No

a. Patient Name:		b. MyKad/Other ID No.:		c. Date of Procedure:	

SECTION 8 : PROCEDURAL COMPLICATION

1. Outcome:

a. Significant Periprocedural MI
- ○ Yes ○ No ○ Not Available
  - ☐ Rise in CK/CKMB > x3 URL ☐ Rise in Troponin > x5 URL
  - ☐ ECG changes

b. Emergency Reintervention / PCI
- ○ Yes ○ No ○ Not Available

i) Stent thrombosis	○ Yes ○ No	iv) Coronary perforation	○ Yes ○ No
ii) Dissection	○ Yes ○ No	v) New ischaemia	○ Yes ○ No
iii) Cardiac perforation	○ Yes ○ No	vi) Cardiac tamponade	○ Yes ○ No

c. Bail-out CABG	○ Yes ○ No
d. Cardiogenic shock	○ Yes ○ No
e. Arrhythmia (VT/VF/Brady)	○ Yes ○ No
f. TIA / Stroke	○ Yes ○ No
g. Tamponade	○ Yes ○ No
h. Contrast reaction	○ Yes ○ No
i. New onset / worsened heart failure	○ Yes ○ No
j. Worsening renal impairment *(rise of post procedural creatinine >25% from baseline)*	○ Yes ○ No

2. Vascular complications:

a. Bleeding	○ Yes ○ No ○ Minimal *(non-CNS bleeding, non-overt bleeding, < 3g/dL Hb)* ○ Minor *(non-CNS bleeding with 3-5g/dL Hb drop)* ○ Major *(any intracranial bleed or other bleeding ≥ 5g/dL Hb drop)* Bleeding site: ○ Retroperitoneal ○ Percutaneous entry site ○ Others, specify: ……
b. RBC/ Whole Blood Transfusion	○ Yes ○ No
c. Access site occlusion	○ Yes ○ No
d. Loss of radial pulse	○ Yes ○ No
e. Dissection	○ Yes ○ No
f. Pseudoaneurysm	○ Yes ○ No ○ Ultrasound compression ○ Surgery ○ Others, specify: ……
g. Perforation	○ Yes ○ No

SECTION 9 : IN-HOSPITAL OUTCOME

1. Outcome:

○ Alive →
- a) Date of Discharge (dd/mm/yy): ☐☐ / ☐☐ / ☐☐
- b) Medication:

	Yes	No		Yes	No
Aspirin	○	○	Statin	○	○
Clopidogrel	○	○	Beta Blocker	○	○
Ticlopidine	○	○	ACE inhibitor	○	○
Warfarin	○	○	ARB	○	○
Prasugrel	○	○	Other antiplatelet, specify:……..	○	○
Ticagrelor	○	○	Others, specify: ……..	○	○
NOAC	○	○			

○ Death →
- a) Date of Death (dd/mm/yy): ☐☐ / ☐☐ / ☐☐
- b) Primary cause of death: ○ Cardiac ○ Renal ○ Others, specify: …….. ○ Infection ○ Neurological ○ Vascular ○ Pulmonary
- c) Location of death: ○ In Lab ○ Out of Lab

○ Transferred to other hospital →
- a) Date of Transfer (dd/mm/yy): ☐☐ / ☐☐ / ☐☐
- b) Name of hospital: ……

a. Patient Name:		b. MyKad/Other ID No.:		c. Date of Procedure:	

SECTION 7.1 A: ADVANCED PCI PROCEDURE DETAILS (NON LMS BIFURCATION LESION FOR SIDE BRANCH)

Instructions: 1. **Please fill up this section for when non LMS Bifurcation Side Branch treated.**
2. **If non LMS bifurcation side branch is <u>not treated</u>, please <u>fill up no. 1, 2, 3, 5, 7, 8, 9 and 10.</u>**

1. Lesion code (1-25): ☐☐ to ☐☐ *(if applicable)*

2. Coronary lesion:
- ○ De novo
- ○ Restenosis *(no prior stent)*
- ○ Stent thrombosis → ○ Acute ○ Late ○ Sub Acute ○ Very Late
- ○ In stent restenosis
  - i. Duration: ☐☐ Year(s) ☐☐ Month(s)
    - ○ Not available
    - *(*Duration from the known previous procedure)*
  - ii. Prior stent type:
    - ○ DES ○ BMS ○ BVS ○ Mg
    - ○ Others, specify:……..
  - iii. Classification:
    - ○ Class I *(Focal ISR)*
    - ○ Class II *('Diffuse intrastent' ISR)*
    - ○ Class III *('Diffuse proliferative' ISR)*
    - ○ Class IV *(ISR with 'total occlusion')*

3. Lesion description:
- ☐ CTO>3mo
- ☐ Calcified lesion
- ☐ Thrombus
- ☐ Not Applicable

4. Size SB (mm): ○ 2.0 - 2.5 ○ >2.5

5. Estimated lesion length: ☐☐☐ mm

6. Pre PCI % of stenosis: ☐☐☐ % TIMI Flow (pre): ○ TIMI-0 ○ TIMI-1 ○ TIMI-2 ○ TIMI-3

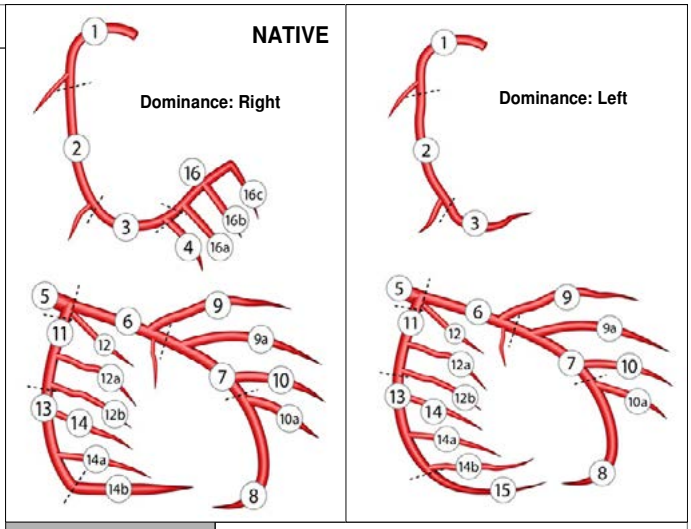
7. Post PCI % of stenosis: ☐☐☐ % TIMI Flow (post): ○ TIMI-0 ○ TIMI-1 ○ TIMI-2 ○ TIMI-3

8. Protect with wire: ○ Yes ○ No

9. Bifurcation techniques:

○ 1 stent →
- ○ Simple cross over
- ○ Ostial Stenting
- ○ Simple cross over with kissing balloon
- ○ Simple cross over with drug eluting balloon side branch
- ☐ Proximal optimisation technique (POT)

○ 2 stents →
- a. ○ Planned ○ Provisional
- b. ○ Cullote ○ Double kiss crush ○ Crush ○ Reverse crush ○ Mini crush ○ T ○ Double barrel Y ○ Small protrusion (TAP) ○ Dedicated bifurcation stent ○ V
- ☐ Proximal optimisation technique (POT)
- ○ Others, specify: _____



10. Perforation: ○ Yes ○ No
- i) Classification
  - ○ Type I *(extraluminal crater without extravasation)*
  - ○ Type II *(pericardial or myocardial blushing)*
  - ○ Type III *(perforation ≥1mm diameter with contrast streaming)*
  - ○ Cavity spilling

11. Lesion result: ○ Successful ○ Unsuccessful

12. Dissection: (Post Procedure): ○ Yes → ○ Flow limiting ○ Non flow limiting ○ No

13. Slow Flow/ No reflow: ○ Yes → ○ Transient ○ Persistent ○ No

14. Final Kissing: ○ Yes ○ No ○ Failed

15. Stent / DEB details per lesion: *(please refer instruction sheet for stent codes)*

	a. Stent code	Others, specify:	b. Diameter (mm)	c. Length (mm)
#1	☐☐☐	_____	☐☐.☐☐	☐☐
#2	☐☐☐	_____	☐☐.☐☐	☐☐
#3	☐☐☐	_____	☐☐.☐☐	☐☐

16. Maximum balloon:
- a) Predilatation:
  - i) Size: ☐.☐☐ mm
  - ii) Types: ☐ Regular ☐ NC ☐ Cutting ☐ Scoring
- b) Postdilatation:
  - i) Size: ☐.☐☐ mm
  - ii) Pressure: ☐☐ atm

17. Intracoronary devices used:
- ☐ IVUS
- ☐ OCT
- ☐ FFR
- ☐ Aspiration catheter
- ☐ POBA
- ☐ Micro catheter
- ☐ Angiojet
- ☐ Rotablator
- ☐ Extension catheter
- ☐ Coil
- ☐ Double Lumen micro catheter
- ☐ Others,specify: _____

a. Patient Name:		b. MyKad/Other ID No.:		c. Date of Procedure:	

SECTION 7.1 B: ADVANCED PCI PROCEDURE DETAILS (FOR LEFT MAIN STEM)

1. LMS intervention:	◯ Unprotected ◯ Protected	**2. Location:**	☐ Ostial ☐ Mid ☐ Distal & Bifurcation
3. IVUS guided:	◯ Yes ◯ No	**4. OCT guided:**	◯ Yes ◯ No
5. CSA intervention:	**a. Pre:** ☐☐.☐ mm^2	**b. Post:**	☐☐.☐ mm^2
6. Side branch wire protected:	◯ Yes ◯ No	**7. Final kissing:**	◯ Yes ◯ No ◯ Failed

8. Techniques:

◯ 1 stent
- ◯ Simple cross over
- ◯ Ostial Stenting
- ◯ Simple cross over with kissing balloon
- ◯ Simple cross over with drug eluting balloon SB

◯ 2 stents
- a. ◯ Planned ◯ Provisional
- b. ◯ Cullote ◯ Crush ◯ Mini crush ◯ Double barrel Y ◯ Dedicated bifurcation stent ◯ Others, specify: _____
  ◯ Double kiss crush ◯ Reverse crush ◯ Small protrusion (TAP) ◯ T ◯ V

Instructions: **1. Please fill up this section for Distal & Bifurcation.**
2. If not treated, please fill up no. 1, 2, 3, 5, 7, 8, 9 and 10.

1. Lesion code (1-25): ☐☐ to ☐☐ *(if applicable)*

2. Coronary lesion:
- ◯ De novo
- ◯ Restenosis *(no prior stent)*
- ◯ Stent thrombosis → ◯ Acute ◯ Late ◯ Sub Acute ◯ Very Late
- ◯ In stent restenosis
  - i. Duration: ☐ Year(s) ☐ Month(s) *(*Duration from the known previous procedure)* ◯ Not available
  - ii. Prior stent type: ◯ DES ◯ BMS ◯ BVS ◯ Mg ◯ Others, specify:……..
  - iii. Classification:
    - ◯ Class I *(Focal ISR)*
    - ◯ Class II *('Diffuse intrastent' ISR)*
    - ◯ Class III *('Diffuse proliferative' ISR)*
    - ◯ Class IV *(ISR with 'total occlusion')*

3. Lesion description: ☐ CTO>3mo ☐ Calcified lesion ☐ Thrombus ☐ Not Applicable

4. Size SB (mm): ◯ 2.0 - 2.5 ◯ >2.5

5. Estimated lesion length: ☐☐☐ mm

6. Pre PCI % of stenosis: ☐☐☐ % TIMI Flow (pre): ◯ TIMI-0 ◯ TIMI-1 ◯ TIMI-2 ◯ TIMI-3

7. Post PCI % of stenosis: ☐☐☐ % TIMI Flow (post): ◯ TIMI-0 ◯ TIMI-1 ◯ TIMI-2 ◯ TIMI-3

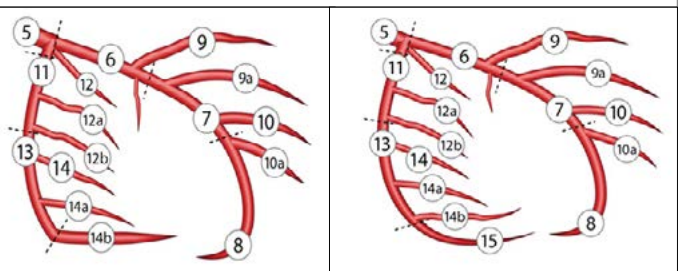
8. Protect with wire: ◯ Yes ◯ No

9. Bifurcation techniques:

◯ 1 stent →
- ◯ Simple cross over
- ◯ Ostial Stenting
- ◯ Simple cross over with kissing balloon
- ◯ Simple cross over with drug eluting balloon side branch
- ☐ Proximal optimisation technique (POT)

◯ 2 stents →
- a. ◯ Planned ◯ Provisional
- b. ◯ Cullote ◯ Crush ◯ Mini crush ◯ Double barrel Y ◯ Dedicated bifurcation stent ◯ V ◯ Double kiss crush ◯ Reverse crush ◯ T ◯ Small protrusion (TAP)
  ☐ Proximal optimisation technique (POT)
  ◯ Others, specify: _____

Dominance: Right **NATIVE** **Dominance: Left**



10. Perforation: ◯ Yes ◯ No
- i) Classification
  - ◯ Type I *(extraluminal crater without extravasation)*
  - ◯ Type II *(pericardial or myocardial blushing)*
  - ◯ Type III *(perforation ≥1mm diameter with contrast streaming)*
  - ◯ Cavity spilling

11. Lesion result: ◯ Successful ◯ Unsuccessful

12. Dissection: (Post Procedure): ◯ Yes → ◯ Flow limiting ◯ Non flow limiting ◯ No

13. Slow Flow/ No Reflow: ◯ Yes → ◯ Transient ◯ Persistent ◯ No

14. Final Kissing: ◯ Yes ◯ No ◯ Failed

15. Stent / DEB details for lesion: *(please refer instruction sheet for stent codes)*

	a. Stent code	Others, specify:	b. Diameter (mm)	c. Length (mm)
#1	☐☐☐	_____	☐.☐☐	☐☐
#2	☐☐☐	_____	☐.☐☐	☐☐
#3	☐☐☐	_____	☐.☐☐	☐☐

16. Maximum balloon:
- a) Predilatation: i) Size: ☐.☐☐ mm; ii) Types: ☐ Regular ☐ NC ☐ Cutting ☐ Scoring
- b) Postdilatation: i) Size: ☐.☐☐ mm; ii) Pressure: ☐☐ atm

17. Intracoronary devices used:
- ☐ IVUS
- ☐ OCT
- ☐ FFR
- ☐ Aspiration catheter
- ☐ POBA
- ☐ Micro catheter
- ☐ Angiojet
- ☐ Rotablator
- ☐ Extension catheter
- ☐ Coil
- ☐ Double Lumen micro catheter
- ☐ Others,specify: _____

a. Patient Name:		b. MyKad/Other ID No.:		c. Date of Procedure:	

SECTION 7.1 C: ADVANCED PCI PROCEDURE DETAILS (FOR CTO >3 months)

1. CTO characteristics:	**i. Estimated length of CTO (mm):**	○ < 20 ○ ≥ 20		
	ii. Side branches *(within 3mm of entry)*:	○ Yes ○ No		
	iii. Entry site:	○ Blunt ○ Tapered		
	iv. Calcification:	○ Yes ○ No		
	v. Bridging collaterals:	○ Yes ○ No		
	vi. Tortuosity/ Bend > 45°:	○ Yes ○ No		
	vii. Re-attempt lesion:	○ Yes ○ No		
	viii. JCTO Score:	[ ] *(autocalculated)*		
	ix. Duration of CTO:	[ ] ○ Months or ○ Years ○ Not Available		
2. Guide size:	○ 5F ○ 6F ○ 7F ○ 8F		**3. Contralateral injections:**	○ Yes ○ No
4. IVUS guided:	○ Yes ○ No		**5. CTA guided:**	○ Yes ○ No
6. Approach	☐ Antegrade:	☐ Single wire ☐ Parallel wire ☐ Anchor wire ☐ Anchor balloon ☐ STAR ☐ Others, specify: _____	☐ Retrograde:	☐ CART ☐ Reverse CART ☐ Knuckle wire ☐ Kissing wire technique ☐ Others, specify:_____
7. Name of wires: *(please follow the sequence)*	1) _____ 5) _____ 2) _____ 6) _____ 3) _____ 7) _____ 4) _____ 8) _____			
8. Name of wire that crossed:				
9. Other devices:	☐ Over the wire balloon ☐ Rapid exchange balloon ☐ Microcatheter ☐ Extension catheter	☐ Cosair ☐ Tornus ☐ Rotablator ☐ CrossBoss	☐ Re-entry devices: → ○ Stingray ○ Double lumen micro catheter ☐ Others, specify:	
10. Result:	○ Failed attempt ○ Lesion crossed → ○ Only wire crossed ○ Successful PCI			
11. Complication:	**i. Perforation:**	○ Yes → ☐ Wire ☐ Balloon ☐ Stent ☐ Guiding catheter ○ No		

a. Patient Name:		b. MyKad/Other ID No.:		c. Date of Procedure:	

SECTION 7.1 D: ADVANCED PCI PROCEDURE DETAILS (FOR CALCIFIED LESION)

1. Angiography severity:

- ◯ None *(no radiopacity)*
- ◯ Mild *(densities noted only after contrast injection)*
- ◯ Moderate *(radiopacities noted only during the cardiac cycle before contrast injection)*
- ◯ Severe *(radiopacities noted without cardiac motion before contrast injection)*

2. IVUS assessment:

- ◯ Yes → Findings:
  - i) Arc of calcium (degree): ◯ <90 ◯ 91— 180 ◯ 181— 270 ◯ 271— 360
  - ii) Length of calcium (mm): ◯ ≤ 5 ◯ 6— 10 ◯ ≥ 11
  - iii) Location of calcium: ◯ Superficial only ◯ Deep only ◯ Superficial + Deep
- ◯ No

3. Predilatation:

- ☐ Compliant Balloon
- ☐ Cutting Balloon
- ☐ Tornus
- ☐ Others, specify: ……..
- ☐ Non Compliant Balloon
- ☐ Scoring Balloon
- ☐ Rotablator →
  - a) No of Burr: ☐
  - b) Burr size: i) ☐ . ☐☐ mm
  - ii) ☐ . ☐☐ mm
  - iii) ☐ . ☐☐ mm

NATIONAL CARDIOVASCULAR DISEASE DATABASE (PCI REGISTRY) FOLLOW UP FORM

For NCVD Use only:
Centre: ☐☐☐
ID: ☐☐☐☐☐☐

Instruction: This form is to be completed at patient follow up *after* 30 days, 6 months or 12 months of 1st admission. Where check boxes ☐ are provided, please check (√) one or more boxes. Where radio buttons ◯ are provided, check (√) only one option.

A. Reporting Centre			
B. Patient Name:			
C. Identification Card Number:	MyKad: ☐☐☐☐☐☐ - ☐☐ - ☐☐☐☐	Old IC No.	
	Other ID Document No. →	*Specify type :* (eg. passport, armed force ID)	
D. Type of Follow Up:	◯ 30 days ◯ 6 months ◯ 12 months	**E. Date of Follow Up:** (dd/mm/yy)	☐☐ / ☐☐ / ☐☐

SECTION 1: OUTCOME

1. Outcome:

◯ Alive →

a) Medication:

	Yes	No		Yes	No		Yes	No
Aspirin	◯	◯	ACE inhibitor	◯	◯	NOAC	◯	◯
Clopidogrel	◯	◯	ARB	◯	◯	Other antiplatelet, specify: ……	◯	◯
Ticlopidine	◯	◯	Warfarin	◯	◯			
Statin	◯	◯	Prasugrel	◯	◯	Others, specify ……	◯	◯
Beta blocker	◯	◯	Ticagrelor	◯	◯			

◯ Death →
a) Date of Death (dd/mm/yy): ☐☐ / ☐☐ / ☐☐
b) Cause of death: ◯ Cardiac ◯ Non cardiac ◯ Others, specify: ……

◯ Transferred to other hospital →
a) Date of Transfer (dd/mm/yy): ☐☐ / ☐☐ / ☐☐
b) Name of hospital: ……

◯ Lost to follow up →
a) Date of last follow up (dd/mm/yy): ☐☐ / ☐☐ / ☐☐

2. Has patient stopped smoking? ◯ Yes (quit >30 days) ◯ No ◯ Not Applicable

SECTION 2: READMISSION (within the follow up duration)

1. Has patient been readmitted to hospital? ◯ Yes ◯ No ◯ No information available

	Readmission reason:	CCS:	Angiography:
1. Date of readmission: ☐☐ / ☐☐ / ☐☐ (dd/mm/yy) **Readmission location:**	◯ Non cardiac ◯ CHF ◯ Recurrent angina ◯ Arrhythmia ◯ ACS → ◯ STEMI ◯ NSTEMI ◯ UA ◯ Staged revascularization → ◯ PCI ◯ CABG	◯ Asymptomatic ◯ CCS 1 ◯ CCS 2 ◯ CCS 3 ◯ CCS 4 ◯ Not Available	◯ Yes ◯ No ◯ Not Applicable
2. Date of readmission: ☐☐ / ☐☐ / ☐☐ (dd/mm/yy) **Readmission location:**	◯ Non cardiac ◯ CHF ◯ Recurrent angina ◯ Arrhythmia ◯ ACS → ◯ STEMI ◯ NSTEMI ◯ UA ◯ Staged revascularization → ◯ PCI ◯ CABG	◯ Asymptomatic ◯ CCS 1 ◯ CCS 2 ◯ CCS 3 ◯ CCS 4 ◯ Not Available	◯ Yes ◯ No ◯ Not Applicable
3. Date of readmission: ☐☐ / ☐☐ / ☐☐ (dd/mm/yy) **Readmission location:**	◯ Non cardiac ◯ CHF ◯ Recurrent angina ◯ Arrhythmia ◯ ACS → ◯ STEMI ◯ NSTEMI ◯ UA ◯ Staged revascularization → ◯ PCI ◯ CABG	◯ Asymptomatic ◯ CCS 1 ◯ CCS 2 ◯ CCS 3 ◯ CCS 4 ◯ Not Available	◯ Yes ◯ No ◯ Not Applicable