SCREENING	**SCR**
Screening number [___|___] - [___|___|___]	Initials: [__|__|__|__|__|__]

GENERAL INFORMATION

1. Gender: ○ Male ○ Female
2. Occupation *(Select one option)*: Managerial, professional, technical ○
   Clerical support, service or sales ○
   Housework ○
   Manual worker ○
   Student ○
   Other ○ Details: [_____]
3. Date of admission to HTD: [___|___]/[___|___]/[___|___] time: [___|___]:[___|___]
4. Chief complaint for hospitalisation: [_____]
5. Patients' date of birth: [___|___]/[___|___]/[___|___]
6. Patient's age: [___|___] years [___|___] months *
7. Date of enrolment: [___|___]/[___|___]/[___|___] time: [___|___]:[___|___]
8. Date fever onset: [___|___]/[___|___]/[___|___] time: [___|___]:[___|___]
9. Day of illness at enrolment: [___]
10. Anthropological parameters:

a. Weight: [___|___|___].[___] Kg	b. BMI: [___|___].[___] Kg/m^2
c. Height: [___|___|___] cm	d. Ideal Body Weight: [__|__|__].[__] Kg
e. Arm circumference: [__|__|__] cm	f. Waist circumference: [__|__|__] cm

* *Completed months and years of age*

SCREEENING TEST

1. NS1 rapid test: ○ Positive ○ Negative
2. Pregnancy test (urine dipstick for βHCG hormone): ○ Positive ○ Negative ○ NA
3. Baseline lactate level: [___|___].[___] mmol/L
4. Baseline glucose level: [___|___|___] mg/dL
5. Baseline AST (SGOT): [___|___|___|___] U/L
6. Baseline ALT (SGPT): [___|___|___|___] U/L
7. Baseline Serum creatinin: [___|___|___] umol/L
8. Baseline eGFR: [___|___|___].[___] ml/minute (calculated using the formula below)

In MALE patients	In FEMALE patients
$\text{CrCl} = \frac{(140-\text{age})\text{x Body weight (Kg)x } 1.23}{72 \text{ x Creatinine } \left(\frac{\mu\text{mol}}{\text{L}}\right)}$	$\text{CrCl} = \frac{(140-\text{age})\text{x Body weight (Kg)x } 1.23}{72 \text{ x Creatinine } \left(\frac{\mu\text{mol}}{\text{L}}\right)} \text{ x } 0.85$

SCREENING	**SCR**
Screening number [___|___] - [___|___|___]	Initials: [__|__|__|__|__|__]

ENTRY TO THE MAIN STUDY	
Check Inclusion criteria ***(if any question is answered "No" the patient is NOT eligible)***	
1. ≥ 10 years to ≤ 30 years of age.	○ Yes ○ No
2. Clinical diagnosis of dengue (based on VNMoH 2019 and WHO 2009 guidelines on Dengue diagnosis and management)	○ Yes ○ No
3. Positive NS1 rapid test	○ Yes ○ No
4. ≤ 3 days (≤ 72 hours) of fever	○ Yes ○ No
5. BMI > 25 Kg/m^2 (or BMI-for-age > 1 SD);	○ Yes ○ No
6. Written informed consent or assent to participate in the study	○ Yes ○ No
7. Agree to come back for follow up visit around day 21-28 of illness (maximum 1 month)	○ Yes ○ No
Check Exclusion criteria ***(if any question is answered "Yes" the patient is NOT eligible)***	
1. Pregnancy (either clinically confirmed or by urine dipstick for human chorionic gonadotrophin hormone).	○ Yes ○ No ○ NA
2. Localizing features suggesting an alternative diagnosis, e.g. pneumonia, otitis etc.	○ Yes ○ No
3. History of hypersensitivity to metformin	○ Yes ○ No
4. Severe infections (including (1) severe dengue – dengue shock, severe organ dysfunctions, severe haemorrhage, (2) central nervous system infection, or (3) septicaemia, etc.)	○ Yes ○ No
5. Baseline lactate level > 2.0 mmol/L	○ Yes ○ No
6. Baseline glucose level < 3.9 mmol/L OR < 70 mg/dL	○ Yes ○ No
7. Already taking metformin or any other regular hypoglycaemic agents, eg. insulin	○ Yes ○ No
8. Significant diarrhoea and/or vomiting (> 3 episodes in 24 hours)	○ Yes ○ No
9. Have any acute or chronic renal impairment (baseline GFR < 30ml/min)	○ Yes ○ No

SCREENING	**SCR**
Screening number [___|___] - [___|___|___]	Initials: [__|__|__|__|__|__]

10. Liver impairment (baseline AST and ALT > 250 U/L)	○ Yes ○ No
11. Being treated for heart failure or have had a recent heart attack (in the last year)	○ Yes ○ No
12. Taking any drug with significant interactions with metformin (*)	○ Yes ○ No
13. The study physician judges that the patient is unlikely to attend follow up visit at around 3-4 weeks after fever onset - e.g. due to long travelling distance from the clinic.	○ Yes ○ No
Check Enrolment:	
1. Were all inclusion criteria met? *-> Please check with all relevant clinical and lab results.* 2. Were no exclusion criteria met? *-> Please check with all relevant clinical and lab results.* 3. Is participant now enrolled into the trial? *If yes, patient's study number:* **56DX-[_0_|_0_|_3_]-[___|___|___]** *Please start collecting information and complete the remaining sections of this CRF*	○ Yes ○ No ○ Yes ○ No ○ Yes ○ No
Principal Investigator/Co-Investigator/Study doctor: My signature on this page certifies that I have reviewed all data relevant to this participant up to the date of enrolment indicated above. My signature also certifies that all statements and findings are accurate and complete to the best of my knowledge. **Signature: [_____] [___|___|___|___] Date: [___|___]/[___|___]/[___|___]**	

(*) Drugs affecting the concentration and clearance of metformin: Furosemide, nifedipine, ranolazine, vandetanib, dolutegravir, cimetidine, thiazides and other diuretics, corticosteroids, phenothiazines, thyroid products, estrogens, oral contraceptives, phenytoin, nicotinic acid, sympathomimetics, calcium channel blocking drugs, and isoniazid; carbonic anhydrase inhibitors (eg. topiramate, zonisamide, acetazolamide or dichlorphenamide), alcohol.

DEMOGRAPHIC	**DEMO**
Study code **56DX** - [_0_|_0_|_3_] - [___|___|___]	Initials: [__|__|__|__|__|__]

DEMOGRAPHIC INFORMATION *

1. Hospital Reference Number: [__|__]/[__|__|__|__|__|__]
2. Health number: [_____]
3. Address: District: [_____] Province (City): [_____]
4. Where is the patient living now: ○ Same as above ○ Other: [_____]
5. Tel number:[_____][_____]

Signature: [_____] [___|___|___|___] Date: [___|___]/[___|___]/[___|___]

** This information will not be recorded in the database*

PAST HISTORY	**PAST_HIST**
Study code **56DX** - [_0_|_0_|_3_] - [___|___|___]	Initials [__|__|__|__|__|__]

PAST MEDICAL HISTORY

.

	○ Yes			No
	How many years	Drug used	Note	
Diabetes	[__|__]	[_____]	[_____]	○
Hypertension	[__|__]	[_____]	Highest BP: [__|__|__]/[__|__|__] mmHg	○
Heart diseases	[__|__]	[_____]	[_____]	○
Lipid disorder	[__|__]	[_____ _____ _____ _____]	○ Elevated cholesterol ○ Elevated triglyceride ○ Both	○
Other	[_____ _____ _____ _____ _____]			○

.

Signature: [_____][___|___|___|___] **Date: [___|___]/[___|___]/[___|___]**

EXAMINATION	**EXAM**
Study code **56DX** - [_0_|_0_|_3_] - [___|___|___]	Initials [__|__|__|__|__|__]

CURRENT HISTORY (at enrolment)

1. Date of fever onset: [__|__]/[__|__]/[__|__] time: [__|__]:[__|__]
2. Chills/rigors: ○ Yes ○ No
3. Anorexia: ○ Yes ○ No
4. Nausea: ○ Yes ○ No
5. Vomiting: ○ Yes ○ No If Yes, severity: + / ++ / +++
6. Diarrhoea: ○ Yes ○ No If Yes, number of episodes/24hrs: [__|__]
7. Abdominal pain: ○ Yes ○ No If Yes, severity: + / ++ / +++
8. Muscle and/or Joint/bone pain: ○ Yes ○ No
9. Headache: ○ Yes ○ No
10. Retro-orbital pain: ○ Yes ○ No
11. Sore throat: ○ Yes ○ No
12. Cough: ○ Yes ○ No
13. Skin bleeding: ○ Yes ○ No
14. Mucosal bleeding: ○ Yes ○ No

    If yes, bleeding site: ☐ nose ☐ gum ☐ GI tract
    ☐ unrinary tract ☐ vaginal ☐ other: [_____]
15. Feeling dizzy/faint: ○ Yes ○ No
16. Other symptoms: [_____]

Treatment:

17. Did the patient present at a private office / hospital for this illness? ○Yes ○No
18. If "Yes", presenting date: [__|__]/[__|__]/[__|__]
19. If "Yes", describe briefly the diagnosis and treatment: [_____]
    [_____]
20. Was the patient admitted to a hospital before being transferred to HTD? ○Yes ○No
21. If "Yes", date of admission to this hospital: [__|__]/[__|__]/[__|__]
22. If "Yes", describe briefly the diagnosis and treatment: [_____]
    [_____]

Signature: [_____] [___|___|___|___] Date: [___|___]/[___|___]/[___|___]

	Vomiting	**Pain**
+ = mild	≤ 2 vomits in 24 hrs	Presents but not interfering with daily activities
++ = moderate	3 - 5 vomits separated by 15 mins in 24 hrs	Interferes with daily activities, relieve or improve with simple anagesia
+++ = severe	≥ 6 vomits in 24 hrs	Significantly impacts on daily activities, only relieve with strong analgesia (e.g. opiate-based medication)

EXAMINATION	**EXAM**
Study code **56DX** - [_0_|_0_|_3_] - [___|___|___]	Initials [__|__|__|__|__|__]

EXAMINATION / CLINICAL ASSESSMENT (at enrolment)

Date and time of examination: [___|___]/[___|___]/[___|___] Time: [___|___]:[___|___]

1. Temperature: [__|__].[__] ^{o}C
2. Pulse: [__|__|__]/minute
3. BP: [__|__|__]/ [__|__|__] mmHg
4. Respiratory rate: [__|__]/minute

General:

5. Skin rash: O Yes O No a. Describe: O Macular O Maculopapular O Vesicular O Recovery O Other [_____]
6. Skin flush: O Yes O No
7. Lymphadenopathy: O Yes O No
8. Conjunctival injection: O Yes O No
9. Pharyngeal injection: O Yes O No
10. Rhinitis: O Yes O No
11. Jaundice: O Yes O No

Bleeding:

12. Bruising: O Yes O No
13. Petechiae: O Yes O No
14. Gum bleeding: O Yes O No
15. Nose bleeding: O Yes O No
16. Hematemesis: O Yes O No
17. Melaena: O Yes O No
18. Hematuria: O Yes O No
19. Vaginal bleeding: O Yes O No O NA
20. Other bleeding: O Yes O No
    a. Site: [_____]

Circulatory / respiratory systems:

21. Heart sounds: O Normal O Abnormal
    a. If abnormal, describe: [_____]
22. Oedema: O Yes O No Where: □ Feet □ Hands □ Face *(Check all relevant)*
23. Respiratory distress: O Yes O No
24. Pleural effusion: O Yes O No
25. Rales/crackles: O Yes O No

Abdomen:

26. Tenderness: O Yes O No
27. Ascites: O Yes O No
28. Liver palpable* O Yes O No [__|__] cm
29. Spleen palpable:* O Yes O No [__|__]cm

CNS:

30. Lethargy: ** O Yes O No
31. Restlessness:*** O Yes O No
32. Neurology: O Normal O Abnormal
    a. If abnormal, describe: [_____]
33. **Other notes**: [_____]

Signature: [_____] [___|___|___|___] **Date: [___|___]/[___|___]/[___|___]**

* If palpable, enter size in cm below the costal margin in the mid-clavicular line
** Lethargy = feeling so tired it is difficult to get out of bed to go to the toilet
*** Restlessness = increased psychomotor activity (an observed clinical sign