Supplemental Table S1. Inclusion and Exclusion Criteria

Inclusion criteria
1) Patients with type 2 diabetes mellitus
2) Adults who are at least 19 years old
3) Patients who have been treated with a combination therapy of dapagliflozin 10 mg/day+metformin ≥1,000 mg/day (The treatment with a fixed dose combination of dapagliflozin 10 mg+metformin ≥1,000 mg is also allowed.) at stable doses for ≥8 weeks prior to visit 1 (screening)
4) Patients whose HbA1c and FPG levels at visit 1 (screening) are applicable to the following criteria: a. Patients with 7%≤ HbA1c ≤11%, FPG ≤270 mg/dL at visit 1 (screening) in case patients have not been treated with hypoglycemic agents other than dapagliflozin and metformin within 8 weeks prior to visit 1 (screening). b. Patients with 6.5%≤ HbA1c ≤10.5%, FPG ≤270 mg/dL at visit 1 (screening) in case patients have been treated with other oral hypoglycemic agents added on to dapagliflozin and metformin within 8 weeks prior to visit 1 (screening).
5) Patients who or whose legally authorized representatives have signed an informed consent form after receiving explanation about the objectives, methods, effects, etc. of the clinical study.
6) Patients who can participate in the clinical study during its entire period and carry out all of the scheduled procedures and visits for it.
7) Patients who are applicable to one of the following 3 criteria. a. Surgically infertile patients. b. Postmenopausal female patients of ≥45 years of age for whom ≥2 years elapsed since their last menstruation. c. Premenopausal fertile female patients or surgically non-infertile male patients who have agreed to use at least 2 kinds of contraceptive measures (certainly including one of the barrier methods) to avoid pregnancy until 14 days after the last treatment with the investigational product. - Barrier methods: condom, diaphragm, cervical cap (Pessary), spermicide - Hormonal methods: oral contraceptive (Pill), injection (Depot), skin patch, hormonal implant (Implanon), vaginal ring. - Intrauterine devices (IUDs): cooper IUD (Loop), hormonal IUD (Mirena). - Natural methods: basic body temperature, ovulation period, coitus interruptus, abstinence.
For patients participating in the Washout period, they had to satisfy the following inclusion criteria at visit 1-1 (screening).
8) Patients with 7%≤ HbA1c ≤11%, FPG ≤270 mg/dL whose HbA1c and FPG levels at visit 1-1 (screening)
Exclusion criteria
1) Patients with type 1 diabetes mellitus, metabolic acidosis such as diabetic ketoacidosis or lactic acidosis, diabetic coma, and precoma
2) Patients with gestational diabetes or secondary diabetes
3) Patients with NYHA class II–IV congestive heart failure, acute and unstable heart failure, or arrhythmia requiring treatment
4) Patients whose thyroid stimulating hormone (TSH) level is out of its normal range and who have thyroidal dysfunction requiring drug therapy (However, those who had been taking thyroid hormone at a certain dose since previous 4 weeks prior to visit 1 [screening] and whose TSH level was within the normal range at visit 1 [screening] or within 4 weeks prior to visit 1 [screening] could participate in the study.)
5) Patients with severe infection or severe traumatism
6) Patients with pituitary insufficiency or adrenal insufficiency
7) Patients with pulmonary infarction, severe pulmonary dysfunction, or who are susceptible to be accompanied by hypoxemia
8) Patients with gastrointestinal disturbance including dehydration, diarrhea, and vomiting
9) Patients with genetic problems such as galactose intolerance, Lapp lactase deficiency, or glucose-galactose malabsorption
10) Female patients who are pregnant or lactating
11) Patients with BMI >40 kg/m^2 measured at visit 1 (screening)
12) Patients whose serology tests including HBsAg, HCV Ab, HIV Ab (tests for hepatitis B, hepatitis C, and HIV) carried out by a local laboratory at visit 1 (screening) or within 4 weeks prior to visit 1 (screening) have turned out to be positive
13) Patients with moderate (stage 3B) or severe renal impairment, end-stage renal disease (ESRD) or patients on dialysis, patients with eGFR <45 mL/min/1.73 m^2 calculated by using their serum creatinine (utilizing the MDRD formula) at visit 1 (screening) or visit 1-1 (screening, applicable only if carried out)

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Supplemental Table S1. Continued

14) Patients with hepatic impairment or who are applicable to the following criteria for the laboratory tests conducted by a local laboratory at visit 1 (screening) or within 4 weeks prior to visit 1 (screening). a. Total bilirubin >1.5×upper limit of normal (ULN) b. AST or ALT >2.5×ULN
15) Patients who have been treated with the following drugs for ≥2 weeks at visit 1 (screening) or who are required to be treated with them continuously/repeatedly during the clinical study. -Cyclosporin, sirolimus, tacrolimus, systemic glucocorticoids, isotretinoin, nicotinic acid (≥1,000 mg/day) -Strong CYP3A4 inducers: rifampicin (Rifampin), phenytoin, carbamazepine, rifabutin, phenobarbital, etc. -Cimetidine -Organic cation transporters (OCT) inhibitors/inducers: OCT1 inhibitors/inducers, OCT2 inhibitors -Warfarin, dicoumarin, digoxin
16) Patients who were treated with anti-obesity drugs within 12 weeks prior to visit 1 (screening).
17) Patients who were treated with insulin and GLP-1 receptor agonists within 8 weeks prior to visit 1 (screening).
18) Patients with a history of malignant tumors within 5 years prior to visit 1 (screening) (However, those with basal cell or squamous cell carcinoma treated properly could participate in the study).
19) Patients with a history of alcoholism or drug addiction within 1 year prior to visit 1 (screening).
20) Patients who had bariatric surgery within 1 year prior to visit 1 (screening) or who are scheduled to have it during the clinical study.
21) Patients to whom coronary artery disease such as myocardial infarction and angina pectoris or cerebrovascular disease newly occurred within 3 months prior to visit 1 (screening).
22) Patients who had a surgical operation within 4 weeks prior to visit 1 (screening) (excluding minor surgeries without restriction on food and fluid intake) or who are scheduled to have it during the clinical study.
23) Patients who underwent any examination using iodinated contrast (e.g., intravenous urography, intravenous cholangiography, angiography, contrast computed tomography [CT]) within 48 hours prior to visit 1 (screening) or who are scheduled to undergo it during the clinical study.
24) Patients with a history of hypersensitivity reactions to the drugs belonging to DPP-4 inhibitors or yellow no. 5.
25) Patients with a history of hypersensitivity reactions to the drugs belonging to biguanides.
26) Patients with a history of hypersensitivity reactions to the drugs belonging to SGLT2 inhibitors.
27) Patients with an experience of participation in another clinical study within 12 weeks prior to visit 1 (screening).
28) Patients who are otherwise considered to be ineligible for this study on investigators' judgment.

HbA1c, hemoglobin A1c; FPG, fasting plasma glucose; NYHA, New York Heart Association; BMI, body mass index; HBsAg, hepatitis b surface antigen; HCV, hepatitis C virus; Ab, antibody; HIV, human immunodeficient virus; eGFR, estimated glomerular filtration rate; MDRD, modification of diet in renal disease; AST, aspartate transaminase; ALT, alanine transaminase; CYP3A4, cytochrome P450 3A4; GLP-1, glucagon-like peptide-1; DPP-4, dipeptidyl peptidase-4; SGLT2, sodium glucose cotransporter 2.