

**MODEL INFORMED CONSENT FORM**  
**VERSION LOG**

| <b>Version</b> | <b>Date</b> | <b>Reason for Change</b>  |
|----------------|-------------|---|
| 1.0            | 01 Jun 2016 | Not applicable  |
| 2.0            | 23 Jun 2016 | Addition of side effects from pre-clinical tests  |
| 3.0            | 07 Oct 2016 | Addition of information on restrictions during the study and on adverse effects observed in a non-clinical study. |
| 4.0            | 29 Dec 2016 | Addition of information selected dose for food effect study and elderly cohorts                                   |
| 5.0            | 15 Feb 2017 | Removing of food effect sections according to protocol update   |

*This page should be deleted in all country/site-specific ICFs.*

## CONSENT TO PARTICIPATE IN A CLINICAL STUDY

**Title of Study:** A First-in-Human, Randomized, Double-blind, Dose Escalation Study to Assess the Safety, Tolerability, Pharmacokinetics, and Pharmacodynamics Following Single and Multiple Oral Doses of KM-819 in Healthy Young Adult and Elderly Subjects

**Protocol Number:** KMCP-819-K101

**Sponsor:** Kainos Medicine, Inc.

**Investigator:** Kyoung Soo Lim, MD, PhD

**Study Center:**

### 1. WHY HAVE I BEEN GIVEN THIS FORM?

You are being invited to take part in this clinical study because you are a healthy volunteer. This study involves the use of an investigational drug called KM-819. “Investigational new drug” means a drug that has not been approved as a marketed product (i.e., available to be prescribed or sold) by any regulatory authorities. **This is the first time KM-819 will be given to humans.** This clinical study is being sponsored by Kainos Medicine, Inc. (hereafter referred to as the Sponsor), and the investigational new drug KM-819 is called the study medication.

Before you decide if you want to participate in this study, it is important for you to understand why the study is being done, how your information will be used, what the study will involve, and the possible benefits, risks and discomforts. Please take time to read the following information carefully. Some terms may be unfamiliar to you. If there is anything you do not understand or if you would like more information, please ask the study doctor or study staff. You may also discuss the study with family members and friends, if you wish. If you decide that you want to take part in this study, you will be asked to sign the consent statement at the end of this informed consent form (you will be given a copy of this to take home with you). No study procedures will be done until you have read and signed this form. You will be free to withdraw from the study at any time without having to give any reason. A decision not to take part in this study, or to withdraw at any time, will not affect your health care.

### 2. WHAT IS THE BACKGROUND AND PURPOSE OF THE STUDY?

Before a new medicine can be approved for use in humans, it is necessary to confirm that it is safe and effective. This is done by carrying out clinical studies such as this one. KM-819 is being developed for the possible treatment of Parkinson’s disease (PD). PD is a degenerative disorder of the central nervous system mainly affecting the motor system. KM-819 is an innovative new drug that protects neuron cells from death.

The purpose of this study is to look at the safety, tolerability, pharmacokinetics and pharmacodynamics of KM-819 in healthy volunteers. This safety and tolerability means that we are looking for the effects of the study medication (if it causes changes to your body and to look at side effects of the study medication). This study will investigate how

your body takes the medication into the blood, delivers the medication throughout the body, breaks down or processes the medication, and removes the medication, which is called pharmacokinetics. The study will also measure how the medication takes effect on your body, which is called pharmacodynamics.

In this study, you will receive KM-819 or placebo. A placebo is a “dummy treatment” that looks like the study medication but contains no active ingredients.

**This study is divided into 2 parts, Part A and Part B. You will only be enrolled into one part of the study; for example, if you are enrolled in Part A of this study, you will not be able to take part in Part B.**

### ***2.1. Part A***

The purpose of this part of the study is to look at the safety, tolerability, pharmacokinetics and pharmacodynamics of KM-819 when single dose given to healthy volunteers.

### ***2.2. Part B***

The purpose of this part of the study is to look at the safety and tolerability of multiple doses KM-819 when given to healthy male and female volunteers.

## **3. WHAT IS THE STUDY ABOUT?**

### ***3.1. Part A***

Part A will involve 40 healthy young adult male volunteers and 8 healthy elderly male or post-menopausal female volunteers. If you are a healthy young adult male volunteer, you will be recruited to participate in one of following dose cohorts of the study depending on the progression of the study:

- Single dose of 10 mg KM-819
- Single dose of 30 mg KM-819
- Single dose of 100 mg KM-819
- Single dose of 200 mg KM-819
- Single dose of 400 mg KM-819

If you are a healthy elderly male or post-menopausal female volunteer, you will have an opportunity to take part in one separate dose cohort special for elderly subjects, the dosage level will be 200 mg.

Part A is expected to last up to 6 weeks (the possible amount of time from the Screening Visit through to the Follow-up Visit [last visit]).

You will be randomized (this means purely by chance, like tossing a coin) in the morning of Day 1 to receive either KM-819 or placebo.

You will receive study medication on Day 1 and remain at the study site for a minimum 3-day/2-night in-house stay.

You will be allowed to leave the site on Day 3 if the study doctor considers that you are in good health. You will then return on Day 4, Day 7, and Day 14 for further assessments.

### **3.2. Part B**

Part B will involve 32 healthy young adult male volunteers and 8 healthy elderly male or post-menopausal female volunteers.

If you are a healthy young adult male volunteer, you will be recruited to participate in one of following dose cohorts of the study depending on the progression of the study:

- Multiple doses of 30 mg KM-819
- Multiple doses of 100 mg KM-819
- Multiple doses of 200 mg KM-819
- Multiple doses of 400 mg KM-819

Please note that Part B will not start until completion of all cohorts of young adult male volunteers in Part A.

If you are a healthy elderly male or post-menopausal female volunteer, you will have an opportunity to take part in one separate dose cohort special for elderly subjects, the dose level will be 200 mg.

Part B is expected to last up to 6 weeks (the possible amount of time from the Screening Visit through to the Follow-up Visit [last visit]).

You will be randomized (this means purely by chance, like tossing a coin) in the morning of Day 1 to receive either KM-819 or placebo.

You will be given study medications once daily for 7 days, and you will remain at the study site for a minimum 8-day/7-night in-house stay.

You will be allowed to leave the site on Day 8 if the study doctor considers that you are in good health. You will then return on Day 14 for Follow-up Visit.

### **3.3. For Both Parts**

You will only be able to take part in one of the above cohorts, which means you will not be allowed to enter other cohorts if you have already taken part in one cohort.

If you decide to participate, you will have a Screening Visit to see if you qualify. If you qualify and wish to continue with the study, you will be asked to return to the study site within 27 days. You will need to return to the study site on Study Day -1 (1 day before receiving study medication) and stay overnight at the study site.

In the morning of Day 1, you will be randomized to receive either KM-819 or placebo.

The process of deciding who gets KM-819 and who gets placebo is called randomization, which will be performed by a computer. You, the study doctor, and the clinical staff will not know what treatment you are receiving because the study is double-blinded. However, the study doctor will be able to find out this information, if needed for a valid reason.

The study doctor may decide not to admit you into the study or may discontinue your participation in the study at any time (for example, if the study doctor feels your health may be at risk, if the Sponsor decides to discontinue the study for any reason, or if you do not follow the instructions given by the study doctor).

#### **4. DO I HAVE TO TAKE PART?**

It is up to you to decide whether or not to take part. You are free to refuse to participate. Even if you refuse to participate in this study, you will not be disadvantaged in any way, including medical treatment and care you are entitled to receive. If you decide to participate, you may change your mind and decide to withdraw from the study at any time and for any reason. You are not required to explain your reasons for withdrawing. If you withdraw, you will not suffer any penalty or loss of benefits regarding your future care.

The study doctor can withdraw you from the study at any time if he or she feels it is in your best interest or if you cannot comply with study requirements.

In addition, your participation in the study may be stopped by the Sponsor or by the regulatory authorities or by an independent ethics committee (e.g., Institutional Review Board [IRB]/Institutional Ethics Committee [IEC]; these committees review study safety and ethics to ensure that subjects' rights are not violated) at any time without your consent, after the reason(s) for doing so (e.g., your own safety, study medication safety, Sponsor decision) have been explained to you, and after you have been given advice about continued care for your condition, if this is appropriate. Also, the Sponsor has the right to stop the study for medical or business reasons. If this happens, all subjects participating in the study will be withdrawn.

If you withdraw (or are withdrawn) from the study, you will be asked to go through study withdrawal procedures detailed in Section 5.3 and information about you will be collected as detailed in Section 12.

#### **5. WHAT WILL HAPPEN TO ME DURING THE STUDY?**

##### ***5.1. Study Medication***

You will be given tablets containing study medication. The tablets will be either KM-819 or placebo. The KM-819 tablets and placebo tablets look the same.

You will take the tablets by mouth at the study site only.

##### ***5.2. Study Visits***

###### ***5.2.1. Part A***

If you qualify for the study, you will be randomized to receive KM-819 or placebo.

After an 8-hour overnight fast (no food or drink except water), you will be given KM-819 or placebo on Day 1 with approximately 240 mL (around 16 tablespoons) of water. Your mouth and hands will be checked to make sure you have taken KM-819 or placebo as instructed. You will keep fasting for 4 hours after receiving study medication. In addition, you will not be allowed to take water or any liquid 1 hour before and after the study medication administration.

The doses are planned to range from 10 mg to 400 mg KM-819.

Each cohort will start with dosing of 2 subjects; one will receive KM-819 and one will receive placebo. If after 24 hours, these subjects have shown no significant side effects, the remaining 6 subjects will be dosed with KM-819 or placebo. The remaining 6 subjects will have a 5 out of 6 chance of receiving KM-819 and a 1 out of 6 chance of receiving placebo.

Each dose cohort will be conducted in sequence, starting from 10 mg cohort. After all the 8 subjects in a dose cohort have been given study medication and observed to Day 4, their study results will be reviewed and a decision will be made whether or not to proceed with dose escalation and if enrollment of the next dose cohort should occur.

Within the planned dose range, a dose lower than the next planned dose level may be tested in a future cohort, based on the data from previous cohort(s).

If you are over 60 years old, you will be enrolled when the previous 5 cohorts have been finalized. The dose level in your cohort will be 200 mg.

If you agree to take part in this study, you will have the tests and procedures described below.

The study doctor will talk to you about the things you must do and things you must not do during participation.

#### *5.2.1.1. Screening (Visit 1)*

To determine if you meet the conditions for participation in the study, the study doctor will perform a screening evaluation. Before you start the screening evaluation, an 8-hour overnight fast is required. Then the following study procedures will be performed:

- **Informed Consent:** You will read and review this Informed Consent Form, and the study doctor will also explain the study to you, and if you agree to take part in the study, you will be asked to sign the form.
- **Medical History:** You will be asked about your medical history, including all medications, over-the-counter and herbal medications that you have and are currently taking. You will also be asked about your alcohol and smoking history.
- **Adverse events:** You will be asked about how you are feeling (whether you feel okay, different from normal or unwell).
- **Physical Examination:** You will have a physical examination, and your general health condition will be measured.
- **Height and Weight:** Your height and weight will be measured.
- **Vital Signs:** Your vital signs including blood pressure, pulse rate, and body temperature will be measured. Your blood pressure and pulse rate will be measured 3 times, after you have been resting for at least 5 minutes.
- **Electrocardiograms (ECG):** You will have an ECG (recording of your heart's electrical activity) which will be performed 3 times after you have been resting for at least 5 minutes.
- **Columbia-Suicide Severity Rating Scale (C-SSRS):** You will be asked questions on whether you ever have considered committing suicide or whether you have ever tried to harm yourself or if you have ever attempted suicide.
- **Blood and urine samples for routine lab tests:** Blood and urine samples for routine lab tests will be collected from you; the main aim of these tests is examine your health status.
  - Some of your blood will be tested for human immunodeficiency virus (HIV) and hepatitis A, B and C. If any of these test results are positive, you will be informed of this. The results from these tests are confidential and results will not be shared outside of this study except as required by national law.

- Your urine will also be tested for drugs of abuse (including amphetamines, barbiturates, benzodiazepines, cannabinoids, cocaine, and opiates).
- **Alcohol breath test:** The amount of alcohol in your breath will be tested by blowing into a device.

When all results are available the study doctor will review the entry criteria to find out whether or not you qualify to be in this study.

Even if you meet all qualifications for participation in the study, you may be excluded if the study doctor determines that you have any condition that might make the study harmful to you or may interfere with the study results.

A known intolerance, allergic reaction, sensitivity, etc., to any components of the medication formulations used in this study will also exclude you from the study. You will not be allowed to enter the study if you must take medications not allowed by the study, if you have taken alcohol, drugs of abuse or certain medications in a time period considered unacceptable by the study doctor or if you have a history of alcohol or drug abuse within a certain time period.

If you qualify and wish to continue with the study, the following study procedures will take place.

#### *5.2.1.2. Confinement Visit (Visit 2)*

The start day of Visit 2 (Day -1) will take place within 28 days after Visit 1, and you will be required to attend in the study site after an 8-hour overnight fast on Day -1.

**On Day -1**, the procedures: adverse events, physical exam, vital signs, ECG, alcohol breath test, blood and urine samples for routine lab tests (except the blood tests for HIV and hepatitis A, B and C) will be done the same as you have on Visit 1. You will also have the following tests:

- **Concomitant medications:** You will be asked about what medications you are currently taking.
- **Scales:** The following 3 tests will take you around 20 to 30 minutes to complete.
  - Bond and Lader Visual Analogue Scale (VAS): You will be asked to rate your feelings and your emotions in a 10 cm line in the scale.
  - Profile of Mood States (POMS): A questionnaire containing 65 words/statements will be provided to you, and you will need to record your feelings.
  - Korean Wechsler Adult Intelligence Scale-IV (K-WAIS-IV): This test contains 10 unique subtests; and you will be asked to complete only the Coding subtest.

If you qualify for the study, you will be required to stay at the study site for the following 3 nights (from the evening of Day -1 to Day 3).

#### **In-House Stay Day 1 to Day 3:**

During these 3 days at the study site, the following procedures will be performed:

- **Randomization:** you will be randomized to receive either KM-819 or placebo. This procedure will only be done once on Day 1.

On Day 1, randomization will be performed before the study medication is administered. One dose of study medication will be administered between 8:00 and 10:00. The study medication will **only be administered once** on Day 1 during the admission to the study site (Day -1 to Day 3).

The following procedures will be performed at specific time points during these 3 days:

- **Vital signs:** This will be the same as during Visit 1. On Day 1, your vital signs will be measured before you take the study medication, and 4 times within the 4 hours after you had the study medication. Vital signs will be done once per day on Day 2 and Day 3.
- **ECG:** This will be the same as during Visit 1. On Day 1, ECGs will be recorded before and 1 hour after you take study medication. An ECG will also be recorded on Day 2. All ECGs will be recorded 3 times.
- **Blood sampling for pharmacokinetics:** This will be done within 30 minutes before you take the study medication on Day 1, and 6 mL (less than half tablespoon) of blood will be taken from you. The same volume of blood will be collected at 8 time points within the 12 hours after receiving study medication. On Day 2 and Day 3, the blood samples will only be collected once per day in the morning (24 and 48 hours after receiving study medication).
- **Urine sampling for KM-819 analysis:** A urine sample will be collected from you within 1 hour before receiving study medication on Day 1, and urine will be continued to be collected from you until the morning of Day 2 (24 hours after receiving the study medication).
- **Scales:** This will be the same as on Day -1. On Day 1, this will be done once before receiving study medication, and at 3 times within the 12 hours after receiving study medication. On Day 2 and Day 3, the scales will be done once per day in the morning (24 and 48 hours after receiving study medication).

Other routine procedures are listed below for Day 1 to Day 3:

- **Adverse events:** This will be the same as during Visit 1, and adverse events be checked frequently during your hospitalization.
- **Concomitant medications:** This will be the same as on Day -1 (Visit 2), and will be checked frequently during your hospitalization.
- **Blood and urine samples for routine lab tests:** These will be the same as on Day -1, and will only be done once on Day 2. The routine lab test will require you to fasting for a minimum of 8 hours before.
- **C-SSRS and Physical exam:** These will be the same as Visit 1, and will only be done once on Day 3.

#### *5.2.1.3. Outpatient Visits (Visit 3 and Visit 4)*

You will need to return to the study site on Day 4 (Visit 3), and Day 7 (Visit 4).

The following procedures will be performed:

- **Adverse events and Vital signs:** These will be the same as during Visit 1 and will be done once at each visit.
- **Concomitant medications:** This will be the same as during Visit 1, and will be checked and recorded when necessary at each visit.



- **Blood sampling for pharmacokinetics and Scales:** These will only be done in the morning of Visit 3 (72 hours after receiving study medication).
- **Blood and urine samples for routine lab tests, and ECG:** These will be the same as during Visit 1, and only be done at Visit 4.

#### *5.2.1.4. Follow-up Visit (Visit 5)*

Visit 5 will take place on Day 14. On the day of Visit 5, you will have the following procedures performed the same as Visit 1: adverse events, concomitant medications, vital signs, physical examination, blood and urine samples for routine lab tests, and ECG.

#### *5.2.2. Part B*

If you qualify for the study, you will be randomized to receive KM-819 or placebo for 7 Days, once per day.

After an 8-hour overnight fast (no food or drink except water), you will be given KM-819 or placebo on Day 1 to Day 7 with approximately 240 mL (around 16 tablespoons) of water. Your mouth and hands will be checked to make sure you have taken KM-819 or placebo as instructed. On Day 1 and Day 7, you will keep fasting for 4 hours after receiving study medication, and you will not be allowed to take water or any liquid 1 hour before and after the study medication administration; On Day 2 to Day 6, you will keep fasting for 2 hours after receiving study medication, and you will not be allowed to take water or any liquid 1 hour before and 2 hours after the study medication administration.

The doses are planned to range from 30 mg to a high dose of 400 mg KM-819.

Each dose cohort will be conducted in sequence, starting from 30 mg cohort. After all the 8 subjects in a dose cohort have been dosed and observed to Day 8, and their study results have been reviewed; a decision will be made whether or not to proceed with dose escalation and whether enrollment of the next dose cohort should occur.

The doses are planned; however, the dose level may be lowered for a cohort based on the data from previous cohort(s).

If you are over 60-years-old, you will be enrolled once the previous 4 cohorts have finished. The dose level in your cohort is 200 mg.

If you agree to take part in this study, you will have the tests and procedures described below.

The study doctor will talk to you about the things you must do and things you must not do during participation.

#### *5.2.2.1. Screening (Visit 1)*

The procedures to be performed at Part B, Visit 1 are exactly the same as Part A, Visit 1, please see Section 5.2.1.1. If you are being screened for healthy elderly male and post-menopausal cohorts, you will have an additional spine X-ray assessment.

#### *5.2.2.2. Confinement Visit (Visit 2)*

The start day of Visit 2 (Day -1) will take place within 28 days after Visit 1, and you will be required to attend the study site after an 8-hour overnight fast on Day -1.

**On Day -1**, the procedures: adverse events, physical exam, vital signs, ECG, alcohol breath test, blood and urine samples for routine lab tests (except the blood tests for HIV

and hepatitis A, B, and C) will be done the same as you have on Visit 1. You will also have the following tests:

- **Concomitant medications:** You will be asked about what medications you are currently taking.
- **Scales:** The following 3 tests will take you around 20 to 30 minutes to complete.
  - Bond and Lader Visual Analogue Scale (VAS): You will be asked to rate your feelings and your emotions in a 10 cm line in the scale.
  - Profile of Mood States (POMS): A questionnaire containing 30 words/statements will be provided to you, and you will need to record your feelings.
  - Korean Wechsler Adult Intelligence Scale-IV (K-WAIS-IV): This test contains 10 unique subtests; and you will be asked to complete only Coding subtest.

If you are qualified for the study, you will be required to stay in study site for the following 8 nights (from the evening of Day -1 to Day 7).

#### **In-House Stay Day 1 to Day 7:**

During these 8 days in the study site, the following procedures will be performed:

- **Randomization:** you will be randomized to receive either KM-819 or placebo. This procedure will only be done once on Day 1.
- **Cerebrospinal fluid (CSF) Sampling for Pharmacokinetics and Pharmacodynamics:** You will also undergo a lumbar spinal tap to obtain samples of CSF, the fluid surrounding your brain and spinal cord. A local anesthetic will be administered to temporarily numb a small area of skin on the back. A catheter (a small plastic tube) will be inserted into the spinal fluid sac. Approximately 3.5 mL (more than half teaspoon) of CSF will be taken from you. This sampling is for observing pharmacokinetic and pharmacodynamic changes in your body. Pharmacodynamics investigates how the study medication affects your body. This will be done within 2 hours prior to dosing on Day 1.
- **Plasma Pharmacodynamic Sampling:** You will provide approximately 3 mL blood, taken from venipuncture or cannulation of a forearm vein. This sample is also for looking at pharmacodynamics in your body. This will be done within 30 minutes prior to dosing on Day 1.
- **Blood and urine samples for routine lab tests:** These will be the same as on Day -1, and will only be done within 1 hour before receiving study medication on Day 2 and Day 4 respectively. This test will require you to keep fasting for a minimum of 8 hours before.

On Day 1, the randomization and vital signs assessment will be performed before the administration of study medication. One dose of study medication will be administered between 8:00 to 10:00. The study medication will **administered once daily** from Day 1 to Day 7.

The following procedures will be performed at specific time points during these 7 days:

- **Vital signs:** This will be the same as Visit 1. On Day 1 and Day 4, your vital signs will be measured before you have study medication, and 1 hour after you had the

study medication. On Day 2, Day 3, Day 5, Day 6, and Day 7, vital signs will be done once per day before you take study medication. The schedule of this test might be shifted and/or added based on the need.

- **ECG:** This will be the same as Visit 1. On Day 1 and Day 4, ECG will be done before and 1 hour after you take study medication. All ECGs will be recorded 3 times.
- **Blood sampling for pharmacokinetics:** This will be done within 30 minutes before you take the study medication on Day 1, and 6 mL (less than half tablespoon) of blood will be taken from you. The same volume of blood will be collected at 8 time points within the 12 hours after receiving study medication. On Day 2 to Day 6, the blood samples will be collected once per day in the morning (30 minutes before receiving study medication).
- **Scales:** This will be the same as Day -1. On Day 1 and Day 7, this will be done once before receiving study medication, and at 3, 6, 12, and 24 hours after receiving study medication (thus 1 scales test will be done in the morning of Day 8).

Other routine procedures are listed below for Day 1 to Day 7:

- **Adverse events, Concomitant medications:** These will be the same as Visit 1, and will be checked frequently during your hospitalization.
- **C-SSRS:** These will be the same as Visit 1 and will only be done once on Day 3.
- **CSF Sampling for Pharmacokinetics and Pharmacodynamics and Plasma Pharmacodynamics Sampling:** These will be the same as on Day 1. These samples will only be taken once on Day 7.

#### **Day 8:**

Before you leave the study site in the morning of Day 8, you will have the following procedures to be performed:

- **Adverse events, Concomitant medications, Vital signs, Physical Examination, ECG, Blood and urine samples for routine lab tests, and C-SSRS:** These will be the same as Visit 1.
- **Blood sampling for pharmacokinetics and Scales:** These will be the same as on Day 1 of Visit 2.

#### *5.2.2.3. Follow-up Visit (Visit 3)*

Visit 3 will take place about 7 days after discharge from the study site during Visit 2. On the day of Visit 3, you will have the following procedures performed the same as during Visit 1: adverse events, concomitant medications, vital signs, ECG, physical examination, and blood and urine samples for routine laboratory tests.

#### **5.3. Withdrawal**

If you withdraw voluntarily or are withdrawn involuntarily, you will be asked to have the tests, examinations, and follow-up questions described above in Follow-up Visit. You have the right to refuse these tests and examinations.

#### ***5.4. Blood Tests, Urinalysis and CSF Sampling***

Blood, urine and CSF samples will be taken from you for laboratory tests. The tests that will be done will include standard tests of your general health and a test of how much study medication is in your blood, urine and CSF. All your test results are confidential and will be disclosed only as required by law. If you agree, your primary and back-up samples will be stored up to 3 years after the study has finished, and may be used in other studies not related with this study; another informed consent form will be provided to you to ask for your consent for storage of your sample(s). If you do not agree, your sample(s) will be destroyed after the study has completed. Your decision will not affect your participation in this study, and all your blood, urine and CSF samples will be destroyed in an appropriate way.

#### **6. WHAT WILL I HAVE TO DO DURING THE STUDY?**

First, you will be asked to sign this consent form if you agree to be included in this study. If you take part in this study, you should follow the study procedures and attend all the study visits. You should report any side effects to the study doctor. You will have an 8-hour overnight fast on some of the study days, and you may avoid any food and drink after receiving the study medication (except water) as requested by the study doctor. You will also be requested to control your total daily food intake and you are not allowed to have any alcohol, coffee, grapefruit, Seville oranges, star fruit, or other products mentioned by the study doctor. You will not be allowed to do any strenuous exercise. In addition, blood donation, any use of concomitant medications (prescribed/non-prescribed drugs) and vitamins will not be allowed throughout the duration of the study, with the exception of acetaminophen (up to 2000 mg/day). You will receive a subject identification card clarifying that you are participating in a clinical study with a new study medication. The address of the clinical study institute and an emergency telephone number are given in this card. Please carry this card with you during the entire duration of the clinical study.

#### **7. WHAT ARE THE POSSIBLE RISKS?**

In a multiple dose study in Beagle dogs, one male dog receiving daily doses of 2000 mg/kg showed liver damage-related adverse effects including liver enzyme [alanine aminotransferase (ALT), alkaline phosphatase (ALP), and gamma-glutamyltransferase ( $\gamma$ -GT), etc] levels higher than control group and hypertrophy of hepatic bile duct. This was at a very high dose level far above the levels that will be tested in this study. Because the study was performed with a small number of animals, it was repeated up to doses of 1000 mg/kg; no effects were observed in this second study.

As with all clinical studies, the study medication and study procedures may involve unknown risks. Any medication can have temporary and permanent side effects and can cause unforeseen adverse reactions.

##### **Pregnancy**

The study medication may have unknown risks to the baby. If you are a sexually-active man, you and your female spouse/partner must use at least 2 forms of birth control

throughout the whole study, and until 90 days after your final study medication administration. The study doctor will discuss effective methods of birth control with you if needed. If your partner becomes pregnant or thinks she may be pregnant during the study, contact the study doctor's office immediately.

The study doctor must follow up and document the course and the outcome of all pregnancies, even if you withdraw from the study or if the study has finished. If your partner becomes pregnant during the study, the study doctor will ask to contact your partner and your partner's physician for information about the pregnancy and the child until 3 months after the birth.

### **Blood samples**

Blood samples will be taken from a vein in your arm during the study. The insertion of the cannula (small plastic tube) or the drawing of blood may be associated with some pain. The taking of a blood sample may cause some discomfort and bruising, and there is a potential for infection. Other risks, although rare, include dizziness and fainting.

For Part A, a total of 123 mL blood (more than 1/4 of what you would give as a blood donor; or around 8 tablespoons) will be taken from you for all the tests.

For Part B, a total of 201 mL blood (half of what you would give as a blood donor; or around 13 tablespoons) and 7 mL CSF (less than half tablespoon) will be taken from you for all the tests.

### **Blood pressure and heart rate**

An inflatable cuff will be placed on your arm and a machine will measure your blood pressure and heart rate, after you have been rested in supine position for 5 minutes. You may experience mild discomfort in your arm while the cuff is inflated.

### **ECG**

Small sticky pads will be stuck to your chest and a machine will measure the electrical activity of your heart. The study staff may need to clip small patches of your hair in these areas. These sticky pads may cause some local irritation and may be uncomfortable to remove.

### **X-ray**

You will be exposed to a low level of radiation. The risks associated with a lumbar X-ray (radiation) are considered to be minimal. The radiation resulting from the X-rays in the study is similar to the amount of natural radiation from living at a moderately high altitude for six months.

### **CSF sampling**

The risks associated with CSF sampling are similar to those associated with a lumbar spinal tap. You may experience headache and/or backache. If a headache occurs, it is generally relieved by drinking fluids and lying down. If necessary, you may receive pain medication. Headaches can recur for several days, although on rare occasions headaches can last longer. If you experience a persistent headache, it is possible that a blood-patch will be performed. This involves the injection of a sample of your own blood into the region of the tap. The blood-patch has been effective in relieving headache in up to about 95% of cases. Should you experience a headache during the period after the lumbar spinal tap, you must notify the study doctor or the nurse.

Most people experience only the minor discomfort of a needle prick when local anesthetic is administered. Others experience a few moments of mild to moderate pain similar to that experienced when an injection is received. A hypersensitivity or allergic reaction to the local anesthetic may occur. The collection of CSF is usually painless.

Another discomfort that can occur during and following a lumbar spinal tap is a brief pain or tingling sensation in either leg. This is caused by a brief stimulation of a nerve and ends quickly with no further complications. On rare occasions, a temporary weakness of the eye muscle that moves the eye from side to side may develop, producing double vision. This complication has been reported to be temporary, and normal vision was restored. Other complications are very rare and include nerve root damage, epidural (the area outside the covering of the spine) or subdural (spinal) bleeding, infection, and in very exceptional cases paralysis, or death.

## 8. WHAT ARE THE POSSIBLE BENEFITS?

This study is for research purposes only and as a healthy subject, you will receive no direct medical benefit from taking part in this study. However, the information that we get from this study may be helpful in treating patients with PD in the future.

## 9. WILL I INCUR ANY EXPENSES OR RECEIVE ANY PAYMENTS?

There will be no cost to you or your insurance company for the study medication or the study-related procedures and examinations.

If you have failed the screening, you will not get receive any payment from this study.

You will be compensated for taking part in the study.

The compensations (before tax) are listed below for completion of the study:

|               | Healthy young male subjects | Healthy elderly subjects (over 60-year old) |
|---------------|-----------------------------|---|
| <b>Part A</b> | 800,000 KRW                 | 900,000 KRW                                 |
| <b>Part B</b> | 1,800,000 KRW               | 2,000,000 KRW                               |

You may be chosen as a waiting subject in case you passed the screening procedures (You will be asked to come on Day -1 and wait at the study site overnight). If you are not enrolled to this study finally, you will be paid 100,000 KRW.

## 10. WHAT IF I AM INJURED DURING THE STUDY?

If you experience any unexpected symptoms or injury, and if emergency medical treatment is required, please report it immediately to your study doctor or his/her staff described in Section 13.

If you have a physical injury or illness directly related to the study medication or study procedure which was properly performed in accordance with the protocol (referred to as a study-related injury), medical treatment will be provided to you. You will not be charged for this treatment. The Sponsor will cover the cost of reasonable and necessary medical treatment for a study-related injury and has insurance to cover the study-related injury. Study-related injuries do not include injuries that result from your own fault or intention.

Additionally, payment for such things as lost wages, expenses other than medical care, or pain and suffering is not available.

## **11. WHAT WILL HAPPEN IF THERE IS ANY NEW INFORMATION?**

If any new information about the study medication becomes available which may influence your decision to continue in the study, you will be told in a timely manner.

## **12. WILL INFORMATION ABOUT ME BE KEPT CONFIDENTIAL?**

By signing this form you consent to the study doctor and his or her staff collecting and using your personal data for the study. This includes: your age, your sex, your ethnic origin and information on your physical or mental health or condition.

The information shared with the Sponsor is protected by the use of a code, which is a number specifically assigned to you. The study doctor is in control of the code needed to connect your data to you.

All medical records and research materials that identify you by name will be held confidential (confidential data) so far as permitted by law. However the study doctor, the Sponsor and its representatives, the study monitor (who checks how the study is going and makes sure that the information is being collected properly) and, under certain circumstances, the regulatory authorities and ethics committees will be able to inspect confidential data that identify you by name.

All personal data from this study will be treated in accordance with national data protection laws.

By signing this consent form, you grant permission for medical information about you obtained during this study (your study data) to be made available to authorized representatives of the regulatory authorities and other government agencies. You also grant permission for your study data to be made available to the Sponsor, the study monitor, other study personnel, and ethics committees. The study doctor, the regulatory authorities, and the Sponsor may keep the study data indefinitely.

You have the right to request information about your study data held by the study doctor and the Sponsor. You also have the right to request that any inaccuracies in such data be corrected. If you wish to make a request, then please contact the study doctor, who can help you contact the Sponsor if necessary.

Your consent for the use of your study data as described above does not have an expiration date. If you withdraw your consent for participating in this study, your study data that were collected before you withdrew your consent may still be used as described above. Once you have withdrawn your consent for participating in the study, no further data will be collected about you for the purposes of this study unless you agree otherwise, for example, you agree to have further tests and examinations. If you do agree to have further data collected after you have withdrawn your consent, these study data may also be used as described above.

The results of this study may be published in a medical journal and shown at medical meetings. You will not be identified (by name or any other means, e.g., photo) in any of these publications.

By signing this consent form, you authorize the study doctor and his/her staff to use this information in conducting the study and to disclose and provide access to or copies of this information to the following:

1. Sponsor Kainos Medicine, Inc.,
2. PAREXEL International (contract research organization conducting the study on the Sponsor's behalf) and other organizations working with the Sponsor to monitor the progress of the study or analyze the study data,
3. The Ministry of Food and Drug Safety (MFDS) or similar, foreign, regulatory authorities,
4. **[Insert IRB Name]** (Institutional Review Board) to ensure that a subject's safety and rights are protected.

Access to this information is necessary to ensure that the study is being done correctly, and to collect and analyze data about the safety and effectiveness of the study medication.

The Sponsor and those working with the Sponsor on this study will only use and disclose your information as described in this consent form. If reports or articles are written about the study, your name will not appear on any report or publication.

You agree that, while the study is still in progress, you may not be given access to health information about you that is related to the study. This may include, for example, information about whether you are receiving study medication or placebo, or any other information that is "blinded" (that is, kept secret during the study to prevent bias). While a request for access to health information can be denied, the study doctor and staff will consider whether it is medically appropriate under the circumstances to allow access. Your agreement that you may be denied access to your study-related health information during the study will not be used to deny you access to that information after the study is completed and study results are analyzed.

You can only participate in the study if you authorize the use and disclosure of the information as described above. If you decide not to sign this consent form, you will not be enrolled in the study. If you sign this consent form and decide later to withdraw your consent, you will not be permitted to continue your participation in the study. Information collected up to the time that you withdraw your consent may continue to be used and disclosed as described above, but only as necessary to protect the integrity of the study.

This authorization to use or disclose the information as described above is not time limited (that is, will not automatically expire).

You may decide not to sign this consent form, or you may revoke (withdraw) this authorization at any time. You can do this by giving written notice to your study doctor, informing him or her that you are revoking your consent to use and disclose your health information. The contact information for your study doctor is provided below.



### 13. WHAT IF I HAVE QUESTIONS?

If you have questions about the study, or have a problem related to the study, you may contact the study doctor or his/her staff at the telephone number below.

Name: \_\_\_\_\_ Telephone: (\_\_\_\_) \_\_\_\_\_

If you are calling after hours or on a weekend, you may contact.

Name: \_\_\_\_\_ Telephone: (\_\_\_\_) \_\_\_\_\_

If you have questions about your rights as a research participant, you should contact the  
[Insert IRB Name].

Telephone: \_\_\_\_\_

Address: \_\_\_\_\_

#### 14. CONSENT STATEMENT OF SUBJECT

**I agree to take part in:**

- ☐ **Single dose cohort of 10 mg KM-819**
- ☐ **Single dose cohort of 30 mg KM-819**
- ☐ **Single dose cohort of 100 mg KM-819**
- ☐ **Single dose cohort of 200 mg KM-819**
- ☐ **Single dose cohort of 400 mg KM-819**
- ☐ **Single dose cohort of 200 mg KM-819 for Elderly male or post-menopausal female subjects**
- ☐ **Multiple doses cohort of 30 mg KM-819**
- ☐ **Multiple doses cohort of 100 mg KM-819**
- ☐ **Multiple doses cohort of 200 mg KM-819**
- ☐ **Multiple doses cohort of 400 mg KM-819**
- ☐ **Multiple doses cohort of 200 mg KM-819 for Elderly male or post-menopausal female subjects**

I have received verbal information on the above study and have read the attached written information. I have been given the chance to discuss the study and ask questions.

I voluntarily consent to participate in this study, including all assessments, lifestyle restrictions, contraception requirements, and taking of blood, urine and CSF samples.

I understand that I am free to withdraw at any time. I understand that if I choose to not participate or to withdraw, my current medical care will not be affected by this decision.

I agree that my personal data, including data relating to my physical or mental health or condition, and ethnic origin, may be used as described in this consent form.

I understand that I will receive and may keep a copy of this signed and dated consent form.

By signing and dating this consent form, I have not waived any of the legal rights that I would have if I were not a participant in a medical research study.

|                      |                      |       |       |                         |
|----------------------|----------------------|-------|-------|-------------------------|
| _____                | _____                | _____ | AM/PM | _____                   |
| Signature of Subject | Date<br>(mm/dd/yyyy) | Time  |       | Printed Name of Subject |
| _____                | _____                | _____ |       | _____                   |

## 15. STATEMENT OF PERSON CONDUCTING INFORMED CONSENT DISCUSSION

I, the undersigned, certify that to the best of my knowledge, the subject signing this consent form had the study fully and carefully explained and clearly understands the nature, risks, and benefits of participation in this research study.

|  |                      |       |       |   |
|--|----------------------|-------|-------|---|
| _____                                    | _____                | _____ | AM/PM | _____                                       |
| Signature of Person Obtaining<br>Consent | Date<br>(mm/dd/yyyy) | Time  |       | Printed Name of Person<br>Obtaining Consent |