2. SYNOPSIS

TITLE: A Randomized, Double-Blinded, Placebo-Controlled, Single and Multiple Ascending Dose Study to Evaluate the Safety, Tolerability, and Pharmacokinetics of LB-102 Administered Orally to Healthy Subjects

INVESTIGATIONAL PRODUCT: LB-102 (*N*-methyl amisulpride)

INDICATION: LB-102 is indicated for the treatment of Schizophrenia

PHASE OF DEVELOPMENT: Phase 1

INVESTIGATIONAL SITES/LOCATIONS: Single US center

OBJECTIVES:
To evaluate the safety, tolerability, and pharmacokinetics (PK) of single (Part A - Single Ascending Dose (SAD)) and multiple (Part B - Multiple Ascending Doses (MAD)) oral doses of LB-102 compared to placebo.

PRIMARY OBJECTIVE:

Part A (SAD)

- To evaluate the safety and the tolerability of a single oral dose of LB-102 compared to placebo

Part B (MAD)

- To evaluate the safety and the tolerability of multiple oral doses of LB-102 compared to placebo

SECONDARY OBJECTIVE:

Part A (SAD)

- To evaluate the PK of a single dose of LB-102

Part B (MAD)

- To evaluate the PK of multiple oral doses of LB-102

STUDY DESIGN: This was a Phase 1, randomized double-blind, placebo-controlled study designed to evaluate the safety, tolerability, and PK of LB-102 in healthy subjects. The study consisted of two parts: Part A (SAD) and Part B (MAD). There were 5 cohorts in Part A and 3 cohorts in Part B. Each cohort consisted of 8 subjects (n = 6 assigned to LB-102 treatment, and n = 2 assigned to placebo treatment).

In Parts A and B, eligible subjects were randomized on Day 1 (pre-dose) to placebo (n=2) or LB-102 (n=6) treatment. Eligible subjects received 1 dose on Day 1 (Part A) or 13 doses on Days 1-7 (Part B) of placebo or LB-102. In Cohort 1 (Part A), dosing of the first 2 subjects (1 active and 1 placebo) commenced at least 24 hours prior to the remaining 6 subjects. Dosing of the remaining subjects in the cohort proceeded if no safety issues were identified for the first 2 subjects. Blood samples for PK and safety assessments were collected at nominal timepoints described below. Subjects were discharged on Day 3 (Part A) or Day 9 (Part B) and returned for a Follow-up Visit (Day 8 or Day 15, respectively) for safety review. For Cohort 5 (Part A), subjects returned for an additional Follow-up Visit.

The blinded available study results for a cohort were reviewed by a Safety Review Committee (SRC) and it was agreed whether the safety profile was sufficiently acceptable to support proceeding with the evaluation of the next higher dose level. The SRC was comprised of the Investigator, Medical Monitor, and a Sponsor Representative (voting members). Other non-voting consultants, including but not limited to, PK or medical expert, statistician, etc. may have supported the SRC on an as needed basis. Blinded data to be reviewed at the end of each cohort included but was not limited to adverse events (AEs), physical examinations, vital signs, 12-lead Electrocardiograms (ECGs), clinical laboratory safety tests, and concomitant medications/procedures. Blinded PK

analysis occurred at the end of each cohort (Cohorts 1-5) for the SAD study and after each cohort (Cohorts 6-8) for the MAD study.

Cohort	Part A Treatment
1 (n=8)[a]	LB-102 50 mg (n=6) or Matching Placebo (n=2) QD x 1 day
2 (n=8)[b]	LB-102 10 mg (n=6) or Matching Placebo (n=2) QD x 1 day
3 (n=8)[b]	LB-102 100 mg (n=6) or Matching Placebo (n=2) QD x 1 day
4 (n=8)[b]	LB-102 200 mg (n=6) or Matching Placebo (n=2) QD x 1 day
5 (n=8)[b]	LB-102 150 mg (n=6) or Matching Placebo (n=2) QD x 1 day
	Part B
6 (n=8)	LB-102 (n=6) 50 mg BID (100 mg/day) x 6 days (Days 1-6) and QD x 1 day (Day 7) or Matching Placebo (n=2) BID x 6 days (Days 1-6) and QD x 1 day (Day 7)
7 (n=8)	LB-102 (n=6) 100 mg BID (200 mg/day) x 6 days (Days 1-6) and QD x 1 day (Day 7) or Matching Placebo (n=2) BID x 6 days (Days 1-6) and QD x 1 day (Day 7)
8 (n=8)	LB-102 (n=6) 75 mg BID (150 mg/day) x 6 days (Days 1-6) and QD x 1 day (Day 7) or Matching Placebo (n=2) BID x 6 days (Days 1-6) and QD x 1 day (Day 7)

[a] For Cohort 1, the first 2 subjects were randomized to receive LB-102 (n=1) or placebo (n=1) at least 24 hours prior to the remaining 6 subjects.

[b] For Cohorts 2-5, the doses were allowed to be reduced based on the PK results of Cohort 1. Cohort 2 was reduced from 100 mg to 10 mg. Cohort 3 was reduced from 200 mg to 100 mg. Cohort 4 was reduced from 400 mg to 200 mg. Cohort 5 was reduced from 800 mg to 150 mg.

QD = Once daily; BID = Twice daily.

The doses do not increase in sequential order because the protocol allowed for dose adjustments. For example, dosage in Cohort 5 was reduced to 150 mg LB-102 QD after the SRC recommended to lower the planned dose following QTcF prolongation in Cohort 4 associated with 200 mg LB-102 QD. Dosage in Cohort 8 was reduced to 75 mg BID after the SRC recommended to lower the dose after 2 dystonia AEs occurred related to 100 mg LB-102 BID in Cohort 7.

NUMBER OF SUBJECTS (PLANNED AND ANALYZED): A total of 64 subjects were planned to be enrolled into the study with 8 subjects (6 active, 2 placebo) randomized for each of the 8 cohorts (exclusive of possible replacements). Subjects were considered enrolled when they were randomized to treatment.

DIAGNOSIS AND MAIN CRITERIA FOR INCLUSION:

Key Inclusion Criteria:

Eligible subjects fulfilled the following inclusion criteria:

1. Competent to provide informed consent.
2. Voluntarily provide informed consent and Health Insurance Portability and Accounting Act (HIPAA) Authorization in accordance with local regulations and governing Institutional Review Board (IRB) requirements prior to any procedures or evaluations performed specifically for the sole purpose of the study.
3. Healthy adult male and female subjects between 18 to 55 years of age inclusive at the screening visit.
4. Body Mass Index (BMI) ≥ 18 and ≤ 30 kg/m^2 at screening visit.
5. Subjects must be in good general health as determined by medical history and physical examination with no clinically significant medical findings and no history of significant medical disease (e.g., cardiovascular, pulmonary, renal, etc.) or acute condition with the past 30 days.
6. Have normal clinical laboratory test results and ECG, which are not considered to be clinically significant by the Investigator.
7. Females participating in the study:

a. Either must be of non-childbearing potential [surgically sterilized: hysterectomy, bilateral tubal ligation, salpingectomy, and/or bilateral oophorectomy at least 26 weeks before the Screening Visit] or postmenopausal. Menopause is defined as being amenorrhoeic for at least 2 years with plasma follicle-stimulating hormone (FSH) levels in the post-menopausal range at screening, based on the central laboratory's ranges; OR

b. Females of child-bearing potential must have a negative pregnancy test and be not breastfeeding at Screening and use either abstinence or an accepted contraception method during the treatment period and for an additional period of 30 days after the end of investigational treatment. For this study, accepted contraception methods include:

i. Condom plus spermicide

ii. Condom plus diaphragm

iii. Condom plus cervical cap or female condom

iv. Hormonal contraceptives

v. Intrauterine device

vi. Partner vasectomy and a use of barrier contraception methods

8. If male, subject must be surgically sterile or practicing at least 1 of the following methods of contraception, from initial study drug administration through 90 days after administration of the last dose of study drug:

a. Have had a vasectomy (at least 6 months earlier);

b. Use of a double-barrier contraception method, defined as male use of a condom and female use of a barrier method (e.g., contraceptive sponge, spermicidal jelly or cream with or without a diaphragm);

c. Partner use of hormonal contraceptives (oral, parenteral, vaginal, or transdermal) for at least 3 months prior to study drug administration;

d. Parter use of an intrauterine device;

e. Complete abstinence from sexual intercourse;

f. Male subjects not practicing complete abstinence must use a condom as a required form of birth control (in addition to at least 1 of the other methods listed above, if desired) in order to protect partners of male participants from exposure to study drug.

9. If male, subject must agree to abstain from sperm donation through 90 days after administration of the last dose of investigational drug.

Key Exclusion Criteria:

1. Are pregnant or lactating.
2. Have a history or presence of significant cardiovascular, respiratory, hepatic, renal, gastrointestinal, endocrine, or neurological disorders which, in the opinion of the Investigator, increases the risk of the study drug or may confound the interpretation of study measures.
3. Clinically significant abnormal findings on physical examination or vital signs.
4. History or presence of psychiatric or neurological disease or condition.
5. History of seizures.
6. Subject with any history or current evidence of suicidal behaviour.
7. Unwilling to complete any plan study assessments, including the Columbia-Suicide Severity Rating Scale (C-SSRS).
8. Recent history of alcohol or drug abuse (within the last two years).

9. Any use of tabacco or tobacco-containing products (cigarettes, pipes, etc.) within one month prior to Screening.
10. Have a history of blood donation in excess of 500 mL of blood within 30 days prior to Screening.
11. Have received treatment with an investigational drug or device within 60 days prior to Screening.
12. Use of any prescription or over the counter medication, herbal medications, vitamins, or supplements within 14 days prior to study drug administration.
13. Have a positive test for Human Immunodeficiency Virus (HIV) antibodies 1 and 2, Hepatitis B Surface Antigen (HBsAg) or Hepatitis C Virus (HCV) antibody.
14. Any subject who is known to be allergic to the drug drug or any components of the study drug.
15. The subject has a fasting blood glucose ≥ 126 mg/dL or hemoglobin A1c (HbA1c) ≥ 6.5% at Screening.
16. The subject has a history of QT prolongation or dysrhythmia or a family history of prolonged QT interval or sudden death.
17. Clinically significant abnormal finding on ECG and/or evidence of any of the following cardiac conduction abnormalities at Screening (ECG will be measured once in Part A for Cohorts 1-4. ECG will be measured in triplicate in Part A for Cohort 5 and Part B, mean values will be used for the following criteria):
    a. Heart rate < 40 bpm and > 100 bpm (based on the ECG reading)
    b. QTcF interval > 450 msec for males and females
    c. PR interval ≥ 200 msec
    d. Intraventricular conduction delay with QRS duration > 120 msec
    e. Evidence of second or third-degree atrioventricular block (AVB)
    f. Electrocardiographic evidence of complete left bundle branch block (LBBB)

TEST PRODUCT(S), DOSE AND MODE OF ADMINISTRATION: *N*-methyl amisulpride (LB-102) Powder in Capsule in dosage strengths of 10 mg, 25 mg, 50 mg, 75 mg, and 100 mg, Oral administration.

DURATION OF TREATMENT: Part A: 1 day; Part B: 7 days.

DISCONTINUATION FROM TREATMENT:
Reasons for permanent discontinuation included the following:

- Any serious adverse event (SAE) regardless of association to LB-102 or placebo.
- Any ≥ Grade 3 AE according to the appropriate toxicity grading scale. If a subject experienced an AE assessed as ≥ Grade 3, that subject did not receive any additional doses and the subject was followed until the AE resolved or stabilized.
- Any other event that was deemed by the Investigator or Sponsor to pose an unacceptable risk to the subject.
- An increase in QTcF to > 500 msec or > 60 msec over baseline.
- Subject requested to discontinue treatment.

CRITERIA FOR EVALUATION:

SAFETY:
The following were assessed at pre-specified timepoints for safety measurements:

- AEs
- Hematology, chemistry, urinalysis
- Prolactin

- ECG
- Physical examination
- Vital signs
- C-SSRS

PHARMACOKINETICS:

PK parameters of LB-102 and amisulpride include maximum plasma concentrations (C_{max}), time to reach C_{max} (T_{max}), area under the plasma concentration-time curve from 0 hours to a specified time (AUC_{0-t}), area under the plasma concentration time curve from 0 hours to 24 hours (AUC_{0-24}), area under the plasma concentration time curve from 0 hours to infinity (AUC_{0-inf}), area under the plasma concentration time curve extrapolated from specified time to infinity as a percentage of total AUC ($AUC_{\%extrap}$), apparent total clearance of the drug from plasma after oral administration (CL/F), terminal rate constant (λ_z), and elimination half-life ($t_{1/2}$).

Plasma PK samples were obtained at the following nominal time points:

- Part A
    - Day 1: pre-dose, 15, 30, and 45 minutes (±5 minutes), and 1, 1.5, 2, 3, 4, 6, 8, 12, and 16 hours (±15 minutes) post-dose.
    - Days 2-3: 24, 32, and 48 hours (±15 minutes) post Day 1 dose.
    - Days 8 and 15 (For Cohort 5, Part A only).
- Part B
    - For Cohorts 6-7:
        - Day 1: prior to the first dose, 15, 30, and 45 minutes (±5 minutes), and 1, 1.5, 2, 3, 4, 6, 8, 12, and 16 hours (±15 minutes) post-dose.
        - Days 2-6: prior to first dose.
        - Day 7: pre-dose, 15, 30, and 45 minutes (±5 minutes), and 1, 1.5, 2, 3, 4, 6, 8, 12, and 16 hours (±15 minutes) post-dose.
        - Days 8-9: 24, 32, and 48 hours (±15 minutes) post Day 7 dose.
    - For Cohort 8 only:
        - Day 1: prior to the first dose, 15, 30, and 45 minutes (±5 minutes), and 1,
        - 1.5, 2, 3, 4, 6, 8, 12, and 16 hours (±15 min) post first dose.
        - Days 2-5: prior to first dose.
        - Day 6: pre-dose, 15 and 30 minutes (±5 minutes), and 1, 2, 4, 8, 12, 12.25, 12.5, 13, 14, 16, 18, and 20 hours (±15 min) post dose.
        - Day 7: prior to first dose.
        - Days 8-9: 24, 32, and 48 hours (±15 min) post Day 7 dose.

STATISTICAL ANALYSIS:

SAFETY:

The statistical methods used were primarily descriptive and no formal statistical comparison of dose levels were made. The safety cateogorial variables were summarized using numbers and percentages. Continuous variables were summarized by total number (N), mean, standard deviation, median, minimum, and maximum. Each cohort was evaluated separately for safety. All placebo subjects from the different cohorts were combined into a single group for summary purposes.

A formal statistical analysis plan (SAP) was developed and finalized prior to unblinding the data. This plan defined populations for analysis, outlined all data handling conventions, and specified all statistical methods to be used for analysis of the data. A separate PK analysis plan was created.

Safety data, including vital signs, ECGs, laboratory test results, physical examinations, and AEs were summarized by dose and assessment time points, as appropriate. Change from baseline were included in the summary tables for laboratory, ECG, and vital sign parameters.

PHARMACOKINETICS:

Plasma concentrations of LB-102 and amisulpride were measured during the study and PK parameters derived using non-compartmental and/or compartmental methods as appropriate. No PK parameters were calculated for subjects with detectable concentrations for 2 or fewer time points.

Individual and mean plasma concentration time curves (both linear and log-linear) were included in the final report.

PK parameters of LB-102 and amisulpride were summarized by cohort using descriptive statistics (sample size, arithmetic means, geometric means, standard deviation, % coefficient of variation, minimum, median, and maximum). Figures were created to display mean and individual subject LB-102 and amisulpride concentration time curves in plasma on both a linear and logarithmic scale. Dose proportionality was assessed using a linear regression, or other acceptable approach.

SAFETY PARAMETERS:

Safety parameters include AEs, hematology, chemistry, urinalysis, prolactin, ECG, physical examination, vital signs, and C-SSRS.

PHARMACOKINETIC PARAMETERS:

For Part A (SAD), PK parameters of LB-102 and amisulpride include $AUC_{0\text{-}t}$, $AUC_{0\text{-}24}$, $AUC_{0\text{-}inf}$, $AUC_{\%/extrap}$, CL/F, C_{max}, T_{max}, λ_z, and $t_{1/2}$.

For Part B (MAD), the individual concentration data before the second dose on Day 1 were used for PK parameter calculation. PK parameters included $AUC_{0\text{-}12,\ D1}$, $AUC_{0\text{-}24,\ D1}$, $AUC_{0\text{-}inf,\ D1}$, $AUC_{\%/extrap,\ D1}$, $C_{max,\ D1}$, $T_{max,\ D1}$, $\lambda_{z,\ D1}$, and $t_{1/2,\ D1}$. PK parameters of LB-102 and amisulpride were also calculated using the individual concentration profiles on Day 7-9, or by comparing the PK parameters on Day 1 with Day 7. PK parameters included $AUC_{0\text{-}12,\ D7}$, $AUC_{0\text{-}inf,\ D7}$, $AUC_{extrap,\ D7}$, $C_{max,\ D7}$, $T_{max,\ D7}$, $\lambda_{z,\ D7}$, $t_{½,\ D7}$, R_{Cmax}, R_{AUC}, LI, CLss/F, and Tau.

SAFETY RESULTS:

LB-102 was generally well-tolerated with all TEAEs either mild (37) or moderate (6) severity. Out of the 64 subjects, 28 subjects (50 mg QD, N=4; 10 mg QD, N=2; 100 mg QD, N=3; 200 mg QD, N=3; 150 mg QD, N=1; 50 mg BID, N=2; 100 mg BID, N=3; 75 mg BID, N=5; Placebo, N=5) experienced at least one TEAE, with a total of 43 TEAEs. Out of the 43 TEAEs, 29 (50 mg QD, 3; 10 mg QD, 1; 100 mg QD, 3; 200 mg QD, 5; 150 mg QD, 1; 50 mg BID, 2; 100 mg BID, 5; 75 mg BID, 8; Placebo, 1) were considered possibly, probably, or definitely related to treatment.

Of the TEAEs definitely realted to study drug, there were 11 cases of elevated prolactin (≥100 µg/L;50 mg QD, N=3; 10 mg QD, N=1; 100 mg QD, N=1; 150 mg QD, N=1; 50 mg BID, N=2; 100 mg BID, N=1; 75 mg BID, N=2), 4 cases of moderate dystonia (200 mg QD, N=1; 100 mg BID, N=2; 75 mg BID, N=1), and 1 case of mild ECG QTcF prolongation (458 msec, 200 mg LB-102 QD) that were all resolved with either no course of action (prolactin increase and QTcF interval prolongation) or concomitant medications (dystonia). Due to 2 TEAEs in the same system organ class (acute dystonic reaction), treatment was halted in all subjects taking 100 mg LB-102 BID (Cohort 7) and the 2 subjects in Cohort 7 taking placebo. As a result, the SRC concluded to reduce the dose for Cohort 8 to 75 mg LB-102 BID. Additionally, because QTcF interval was fairly prolonged from pre-dose values (20-46 msec) in all subjects taking 200 mg LB-102 QD (Cohort 4), the dosage for Cohort 5 was reduced to 150 mg LB-102 QD. Of the TEAEs probably or possibly related to study drug, there were 4 cases of nausea (100 mg LB-102 QD, N=1; 200 mg LB-102, N=1; 100 mg LB-102 BID, N=1; 75 mg LB-102 BID, N=1) and 1 case of vomiting (100 mg LB-102 BID), urticaria (100 mg LB-102 QD), gastroesophageal disease (200 mg LB-102), insomnia (75 mg LB-102 BID), dizziness (75 mg LB-102 BID), and somnolence (75 mg LB-102 BID).

Vital signs and physical examination results were largely unchanged from baseline. Other than increases in prolactin, chemistry laboratory results were also relatively unchanged throughout study treatment. C-SSRS did not change during study treatment.

PHARMACOKINETICS RESULTS:

In Part A (SAD), LB-102 was rapidly absorbed and LB-102 concentration generally declined from peak in an apparent biphasic manner. The estimates of mean $t_{½}$ of LB-102 generally ranged from 11.993 to 14.146 hours; exposure (as measured by C_{max}, AUC_{0-t}, and AUC_{0-inf}) increased in a slightly greater than dose-proportional manner. Mean C_{max} ranged from 24.1 ng/mL at the lowest dose of 10 mg LB-102 to 975.667 ng/mL at the highest dose of 200 mg LB-102. Mean AUC_{0-t} ranged from 221.911 h•ng/mL at the lowest dose to 6709.821 h•ng/mL at the highest dose. Mean AUC_{0-inf} ranged from 252.637 h•ng/mL at the lowest dose to 7002.109 h•ng/mL at the highest dose. Apparent clearance (CL/F) appeared to decrease as dose increased (42.44 L/h to 28.89 L/h).

In Part A (SAD), amisulpride was formed quickly over time after a single dose of LB-102 (median T_{max} range = 2 to 3.5 hours) and generally declined with an approximate biphasic disposition of comparable shape to LB-102 but at approximately 2.5% of LB-102 abundance. The plasma concentrations of amisulpride at lower doses were within several fold of LLOQ making descriptive PK analysis tenuous. In fact, amisulpride was not detected in subjects taking 10 mg LB-102 QD (Cohort 2). Mean amisulpride $t_{½}$ ranged from approximately 8.921 to 14.614 hours. Mean C_{max} ranged from 4.167 ng/mL at the lowest detectable dose, 50 mg LB-102, to 27.747 ng/mL at the highest dose, 200 mg LB-102. Mean AUC_{0-t} ranged from 31.183 h•ng/mL at the lowest detectable dose, 50 mg LB-102, to 247.397 h•ng/mL at the highest dose, 200 mg LB-102. Mean AUC_{0-inf} ranged from 188.552 h•ng/mL at the lowest detectable dose, 100 mg LB-102, to 314.264 h•ng/mL at the highest dose, 200 mg LB-102.

In Part B (MAD), extensive PK sampling occurred on Day 6 rather than Day 7 and the last dose was given on Day 7. Thus, the PK profile for the second dose on Day 6 (including the pre-dose on Day 7) was used to calculate the PK parameter after multiple doses. For the calculation of $AUC_{0-12,\ D1}$, the actual time for the 12-hour sample was used in place of the nominal 12 hour since the concentration at 12 hours post-dose could not be predicted.

In Part B (MAD), trough concentrations of LB-102 and amisulpride plateaued before the morning dose on Day 4. After multiple doses, there was slight to moderate accumulation of LB-102 across dose levels with mean accumulation ratio based on C_{max} after the first dose and last dose (R_{Cmax}) values ranged from 1.121 to 1.798 and with mean R_{AUC} values ranged from 1.472 to 1.925. Amisulpride had a higher accumulation than LB-102 across dose levels with mean R_{Cmax} values ranged from 1.317 to 2.016 and with mean R_{AUC} values ranged from 1.801 to 2.232. Exposure (as measured by $C_{max,\ D7}$ and $AUC_{0-12,\ D7}$) to LB-102 increased in a dose proportional manner. Apparent clearance at steady state (CL_{ss}/F) to LB-102 appeared to be similar as dose increased.

SUMMARY – CONCLUSIONS:

LB-102 was well-tolerated with all TEAEs either mild or moderate severity. The most notable safety result was mildly elevated prolactin levels, which was expected to occur based on LB-102's mechanism of action as a dopamine antagonist and that it is a commonly reported AE for drugs of this class (Haddad and Wieck, 2004). At the highest dose (200 mg LB-102), QTcF prolongation was a concern as well as acute dystonic reaction in 200 mg LB-102 QD and 75-100 mg LB-102 BID. There were no significant TEAEs at the lower doses.

For PK results in Part A (SAD), LB-102 was rapidly absorbed and LB-102 concentration generally declined from peak in an apparent biphasic manner. Exposure increased in a slightly greater than dose-proportional manner. Apparent clearance appeared to decrease as dose increased. Amisulpride was formed quickly over time after a single dose of LB-102 and generally declined with an approximate biphasic disposition of comparable shape to LB-102 but at approximately 2.5% of LB-102 abundance. The plasma concentrations of amisulpride at lower doses were within several fold of LLOQ making descriptive PK analysis tenuous. In fact, amisulpride was not detected in subjects taking 10 mg LB-102 QD (Cohort 2). In vitro studies suggest equal pharmacological potency between LB-102 and amisulpride, but since amisulpride is present at 2.5% LB-102 concentration, it thus represents a minor active metabolite (defined as either less than 10% parent concentration or less than 10% of total pharmacological activity).

For PK results in Part B (MAD), trough concentrations of LB-102 and amisulpride plateaued before the morning dose on Day 4. After multiple doses, there was slight to moderate accumulation of LB-102 across dose levels.

Amisulpride had a higher accumulation than LB-102 across dose levels. Exposure to LB-102 increased in a dose proportional manner. Apparent clearance at steady state to LB-102 appeared to be similar as the dose increased.

LB-102 was designed to be an improved version of amisulpride by having increased permeability across the blood-brain-barrier, which would potentially decrease the plasma concentrations needed to achieve efficacy. This would thereby decrease the magnitude and frequency of AEs typically observed in schizophrenia patients treated with amisulpride. The maximum tolerated dose of LB-102 was identified as 150 mg per day as either 150 mg QD or 75 mg BID. LB-102-001 achieved its objectives of identifying the safety, tolerability, and PK of a single oral dose and multiple oral doses of LB-102 in healthy subjects.