- **Protocol number: 316-13-217**
- **Document title: A Multicenter, 180-day Pragmatic Clinical Trial to Measure the Difference in All-cause Hospitalizations for Patients Who Are Using Abilify MyCite Versus Virtual Matched Controls in Adults With Schizophrenia, Bipolar 1 Disorder, and Major Depressive Disorder**
- **Version number: 3.0**
- **Date of the document: 11 October 2019**
- **NCT number: NCT03643159**

Statistical Analysis Plan for A Multicenter, 180-day Pragmatic Clinical Trial to Measure the Difference in All-cause Hospitalizations for Patients who are Using Abilify MyCite versus Virtual Matched Controls in Adults with Schizophrenia, Bipolar 1 Disorder, and Major Depressive Disorder

Protocol No. 316-13-217

Otsuka Pharmaceutical Development & Commercialization, Inc.

Otsuka Pharmaceutical Development & Commercialization, Inc.
2440 Research Boulevard
Rockville, Maryland 20850

October 11, 2019

Version Final

TABLE OF CONTENTS

List of Abbreviations

Abbreviation	Definition
AE	Adverse event
BP1	Bipolar 1 disorder
BMI	Body mass index
CI	Confidence interval
ClinRO	Clinician reported outcomes
E&M	Evaluation and management
ET	Early termination
GLM	General Linear Model
GPI	Generic product identifier
HCP	Healthcare provider
HCPCS	Healthcare common procedure coding system
CCI [redacted]	[redacted]
CCI [redacted]	[redacted]
HR	Hazard Ratio
ICD-10-CM	International Classification of Diseases, Tenth Revision, Clinical Modification
CCI [redacted]	[redacted]
LAIs	Long-acting injectable antipsychotics
LOS	Length of stay
MedDRA	Medical Dictionary for Regulatory Activities
MDD	Major depressive disorder
OR	Odds ratio
OV	Office visit
CCI [redacted]	[redacted]
PCT	Pragmatic clinical trial
PDC	Proportion days covered
CCI [redacted]	[redacted]

CCI [redacted]	[redacted]
PT	Preferred Term
SAE	Serious adverse event
SCH	Schizophrenia
SD	Standard deviation
SOC	System organ class

1.0 INTRODUCTION

Although a large number of pharmacological treatments exist, the management of serious mental illness presents a significant personal and societal burden. For treatments to be effective, the patient must be adherent to their medication. Although many methods are used to measure adherence, studies have shown widespread nonadherence in psychiatric populations. Cramer and Rosenheck found average adherence rates of 58% and 65% for antipsychotics and antidepressants, respectively, compared with an adherence rate of 76% for nonpsychiatric medications.[1] This finding is problematic due to the relationship between nonadherence and disease burden. Consequently, nonadherence to psychiatric medications remains a major barrier to achieving optimal health outcomes in this population, and ensuring medication compliance is an unmet medical need.[1,2]

Currently available methods for monitoring adherence have limitations; as such, an unmet need exists for a simple, accurate solution for adherence monitoring to enable healthcare providers (HCPs) to objectively measure whether a patient was adherent to treatment. Increasing HCP awareness of patient nonadherence and its role in suboptimal response may allow for better treatment decision making and allow an opportunity for more HCP/patient engagement in care. The available evidence suggests that patient engagement or activation in serious mental illness, while not a main focus in clinical practice, may provide substantial benefit to patient health outcomes, including management of comorbid conditions, and should be encouraged.

Abilify MyCite® (aripiprazole tablets with sensor) was developed to fulfill these unmet needs. The Abilify MyCite system is a drug-device combination product comprised of aripiprazole (an atypical antipsychotic) tablets embedded with an ingestible event marker (IEM) sensor that communicates with a patch (wearable sensor) and a medical software application with collected information (ingestion, mood, activity, rest) tracked and summarized for patients, HCPs, and potentially caregivers. Abilify MyCite is intended to track drug ingestion and is indicated for the treatment of adults with schizophrenia (SCH), bipolar 1 disorder (BP1) (acute treatment of manic and mixed episodes or maintenance treatment), and major depressive disorder (MDD) (adjunctive treatment).[3] Abilify MyCite can provide objective patient data with regard to medication-taking behaviors and activities that can enable clinicians to make more informed and optimal therapeutic decisions. Additionally, the Abilify MyCite system allows patients to engage in taking a more active role in their personal wellbeing. The Abilify MyCite system and indications are summarized in Table 1-1.

[1] Cramer JA, Rosenheck R. Compliance with medication regimens for mental and physical disorders. Psychiatr Serv. 1998; 49:196-201.
[2] Proteus Digital Health Wearable Sensor Investigator's Brochure Rev 7. Issued 22 Mar 2016.
[3] ABILIFY MYCITE (aripiprazole tablets with sensor) US Prescribing Information. Otsuka Pharmaceutical Co., Ltd., Tokyo, Japan, Proteus Digital Health, Inc., Redwood City, CA, and Otsuka America Pharmaceutical, Inc, Rockville MD; 2017.

Table 1-1: Overview of the Abilify MyCite System

Characteristic	Description
Components	• Aripiprazole tablet embedded with an IEM sensor (Abilify MyCite) • MyCite Patch (wearable sensor) that detects the signal from the IEM sensor after ingestion and transmits data to a smartphone • MyCite App (a smartphone application [app] which is used with a compatible smartphone to display information for the patient) • Web-based portal for HCPs and caregivers
FDA-approved indication	• A drug-device combination product comprised of aripiprazole tablets embedded with an IEM sensor intended to track drug ingestion that is indicated for the treatment of adults with SCH; treatment of BP1 (including acute treatment of adults with manic and mixed episodes as monotherapy and as adjunct to lithium or valproate, or as maintenance treatment of adults as monotherapy and as adjunct to lithium or valproate); and adjunctive treatment of adults with MDD.
Limitations of use	• The ability of Abilify MyCite to improve patient compliance or modify aripiprazole dosage has not been established. • The use of Abilify MyCite to track drug ingestion in "real-time" or during an emergency is not recommended because detection may be delayed or not occur.

The Abilify MyCite system has been tested in patients with serious mental illness, with clinical trials demonstrating an ability to report tablet ingestion with high accuracy and acceptable latency time, with positive results regarding usability reported by both patients and

HCPs/caregivers.[4,5,6,7,8,9,10,11,12] The current pragmatic clinical trial (PCT) is designed to evaluate the impact of Abilify MyCite use on antipsychotic medication adherence, all-cause hospitalizations, healthcare resource utilization (HCRU), and patient-reported outcomes (PROs) in a community practice-based setting.

[4] Rohatagi S, Profit D, Hatch A, Zhao C, Docherty JP, Pickard TS. Optimization of a Digital Medicine System in Psychiatry. J Clin Psychiatry. 2016; 77(9):1201.

[5] PPD A formative usability study of the Otsuka MIND1 prototype by subjects with bipolar disorder or major depressive disorder. Otsuka Clinical Study Report for Protocol 316-204, issued 28 Jul 2014.

[6] PPD A Multicenter, 8-week, Open-label, Single-arm, Exploratory Trial to Assess the Functionality of an Integrated Call Center for the Digital Medicine System by Adult Subjects With Schizophrenia (SCH), Major Depressive Disorder (MDD), or Bipolar 1 Disorder (BP1) Who Are Treated With Oral Aripiprazole. Otsuka Clinical Study Report for Protocol 316-215, issued 18 Nov 2016.

[7] PPD Phase 1, open-label trial to evaluate the irritation potential and extent of adhesiveness of the RP4 patch following application to the skin of healthy, adult subjects. Otsuka Clinical Study Report for Protocol 316-205, issued 26 Feb 2014.

[8] PPD A multicenter, 8-week, open-label study to assess usability of the Medical Information Device #1 (MIND1) System in adult subjects with schizophrenia who are treated with oral aripiprazole. Otsuka Interim Synopsis Clinical Study Report for Protocol 316-220, issued 27 Feb 2015.

[9] Data on file. Abilify MyCite. Human factors engineering/usability engineering report: HCP/caregiver interface. NDA 207202. Otsuka Pharmaceutical Development & Commercialization, Inc. 2015b.

[10] Peters-Strickland T, Pestreich L, Hatch A, Rohatagi S, Baker RA, Docherty JP, et al. Usability of a novel digital medicine system in adults with schizophrenia treated with orally administered tablets of aripiprazole. Neuropsychiatr Dis Treat. 2016; 12:2579-87.

[11] Profit D, Rohatagi S, Zhao C, Hatch A, Docherty JP, Pickard TS. Developing a Digital Medicine System in Psychiatry: Ingestion Detection Rate and Latency Period. J Clin Psychiatry. 2016; 77(9):e1095-1100.

[12] Kopelowicz A, Baker RA, Zhao C, Brewer C, Lawson-Strickland T. A multicenter, open-label, pilot study evaluating the functionality of an integrated call center for a digital medicine system to optimize monitoring of adherence to oral aripiprazole in adult patients with serious mental illness. Neuropsychiatr Dis Treat. 2017; 13:2641-51.

2.0 STUDY OBJECTIVES

2.1 Primary Objective

The primary objective of this study is to assess the difference in all-cause hospitalizations between patients using Abilify MyCite versus virtual matched controls at Day 180.

2.2 Secondary Objective

The secondary objective is to assess the difference in medication adherence, as measured by the proportion of patients with at least 80% proportion of days covered (PDC) with antipsychotic medication, between patients using Abilify MyCite versus virtual matched controls between baseline and Day 180.

2.3 CCI

[redacted]

3.0 STUDY INVESTIGATIONAL PLAN

3.1 Study Design Overview

This is a 180-day, phase 4, open-label, prospective, PCT to assess the difference between all-cause hospitalizations in patients using Abilify MyCite (for Months 1-3, then prohibited for Months 4-6) versus virtual matched controls. Virtual matched controls CCI [redacted] will be receiving treatment as usual (i.e., any product other than Abilify MyCite, which may be oral aripiprazole or any other product). An exploratory study with a different set of physician sites and patients is planned in conjunction with this study, however this document describes the analyses for the main study only.

3.2 Study Population and Sites

The target population for this study consists of adult patients with SCH, BPI, or MDD, being treated with aripiprazole or for whom treatment with aripiprazole would be deemed appropriate by their treating physician, who have had at least one all-cause (including psychiatric) hospitalization or at least one psychiatric partial hospitalization within 60 days prior to study enrollment. Patient inclusion and exclusion criteria are outlined in sections 3.3.4 and 3.3.5 of the study protocol, respectively. Enrollment of a total of 640 patients is planned. To achieve balanced enrollment of the targeted diagnoses, a minimum enrollment of each diagnosis will be 25% or approximately 160 patients.

Participation of approximately 80 US physician sites CCI [redacted] hat provide care for a high volume of patients in the target population is anticipated.

3.3 Randomization

Not applicable.

3.4 Virtual Matched Control Group

Enrolled patients will be matched to a virtual control group in a 1:3 ratio (enrolled patients on Abilify MyCite treatment : virtual matched controls). CCI [redacted] The matching process will be conducted after 6-month study data (or early termination data, if applicable) is collected for all Abilify MyCite patients. The virtual matched control group identified in this process will be used for all study analyses with a small amount of attrition expected for the 12-month analyses for controls who no longer have Anthem insurance coverage.

A pool of potential controls will first be identified using the following criteria:

- ≥1 day of enrollment in an Anthem-affiliated commercial, Medicaid, or Medicare health plan with medical and pharmacy benefits during the observation period (from date of First Patient In up until date of Last Patient In)[13].
- ≥1 pharmacy claim for any atypical antipsychotic (excluding Abilify MyCite, clozapine, and long-acting injectable antipsychotics [LAIs][14])[15] during the observation period (Appendix F, Tables 2a and 2b).

[13] Timeframe may be extended if additional sample is needed.
[14] LAIs include: Aripiprazole monohydrate (Abilify Mantenna), Aripiprazole lauroxil (Aristada), Olanzapine pamoate (Zyprexa Relprevv), Paliperidone palmitate (Invega Sustenna), Paliperidone palmitate (Invega Trinza), Risperidone microspheres (Risperdal Consta)
[15] Drugs include: Aripiprazole, Asenapine maleate, Brexpiprazole, Cariprazine HCl, Iloperidone, Paliperidone, Pimavanserin Tartrate, Quetiapine Fumarate, Risperidone, Ziprasidone HCl, Ziprasidone Mesylate

- ≥1 all-cause hospitalization or partial psychiatric hospitalization[16] that occurs at most 60 days prior to a pharmacy claim for any atypical antipsychotic (excluding Abilify MyCite, clozapine, and LAIs).
    - The earliest such pharmacy claim observed after the earliest observed hospitalization will be set as the initial (temporary) index date for each potential control.
    - For patients with ≥2 qualifying hospitalization/pharmacy claim episodes, an iterative process will be used to find the best match, and the final index date will be assigned accordingly.
- Age 18 to 63 on index date.
- ≥1 claim for SCH, BP1, or MDD on or before index date.
- No claims for pregnancy during the observation period.
- No claims for any LAI during the observation period.
- ≥180 days of medical and pharmacy enrollment prior to index date
- ≥180 days of medical and pharmacy enrollment following index date

Prior to matching, the pool of potential controls and the Abilify MyCite cohort will be stratified by psychiatric diagnosis (SCH, BP1, MDD). The Abilify MyCite cohort psychiatric diagnosis will be based on the psychiatric diagnosis recorded in the eCRF. The potential controls psychiatric diagnosis will be based on the psychiatric diagnosis identified CCI [redacted]. In the event that more than one of the qualifying psychiatric diagnoses is identified CCI [redacted], the following hierarchy will be applied to potential controls: SCH>BP1>MDD.

From this pool of patients, combined with the active arm, logistic regression will be used within each psychiatric diagnosis to estimate a propensity score for each patient, where propensity refers to a patient's pre-index likelihood to be in the active arm. The dependent variable equals 1 for patients in the active arm and 0 for the controls. The following variables may be considered for inclusion in the propensity score model; a final determination will be made using descriptive study results on patient baseline characteristics.

- Age
- Gender
- Month of index date
- Plan type (commercial, Medicaid, or Medicare health plan with medical and pharmacy benefits)
- Number of fills for any atypical antipsychotic over 6-12 months prior to index date
- CCI [redacted]
- Occurrence/number of visits with a psychiatrist over 6-12 months prior to index date
- Comorbidities over 6-12 months prior to index date

[16] Defined as a medical claim with place of service code = 52 ("Psychiatric Hospitalization"), or with HCPCS codes H0035 or S0201.

- Region of patient residence (Northeast, South, Midwest, West)

The estimated propensity scores will be used to match active arm patients to the virtual controls in a 1:3 ratio. Prior to assessing outcomes, the validity of the propensity score adjustment will be assessed by (1) graphically examining the overlap in propensity scores across treatment and control groups[17], and (2) comparing balance in all baseline characteristics across the cohorts via standardized mean differences. A standardized mean difference >10% in absolute value will be used to indicate potential imbalance that may warrant further investigation or adjustment (e.g. through regression analysis).[18] Propensity score models will be finalized prior to the assessment of outcomes.

3.5 Evaluation Schedule and Definitions

Patients will be followed from baseline until Day 180. Following Day 180, a second optional interventional period from Day 180 to Day 360 may be initiated per the joint decision of the patients with their study physician.

3.5.1 Baseline

The baseline visit marks the beginning of the interventional phase. Patients will receive training and onboarding with Abilify MyCite based on the commercial training materials for Abilify MyCite to reflect real-world practice. Baseline assessments include: demographic data, medical and psychiatric history, height, weight, and corresponding calculated body mass index (BMI), vital signs, and hospitalization history (all-cause and psychiatric). CCI [redacted]

For analysis, baseline includes assessments conducted and patient data collected at or prior to the baseline visit and before first use of Abilify MyCite.

3.5.2 Interventional Period

The interventional period is from baseline to Day 180. Patients will use Abilify MyCite from baseline through Day 90. Day 91 through Day 180 is an Abilify MyCite nonuse period during which patients will continue with oral aripiprazole or other appropriate treatment, per routine clinical care.

After the baseline visit, there are no mandated visits until Day 180. However, it is anticipated that patients will undergo medical evaluation at regular intervals. Data collected at these routine care visits include Abilify MyCite use changes and adverse events (AEs). CCI [redacted]

[17] Garrido MM, Kelley AS, Paris J, Roza K, Meier DE, Morrison RS, Aldridge MD. Methods for constructing and assessing propensity scores. Health services research. 2014 Oct 1; 49(5):1701-20.

[18] Austin PC. Optimal caliper widths for propensity-score matching when estimating differences in means and differences in proportions in observational studies. Pharm Stat. 2011 Jan-Mar; 10(2):150-61.

CCI [redacted]

3.5.3 Mid-Study (or End of Study) visit (Day 180)

The Day 180 (± 7) visit marks the end of the interventional phase. All patients will complete the Day 180 visit. Data collected at the Day 180 visit includes Abilify MyCite use changes and AEs. CCI [redacted]

At the Day 180 visit, a second, optional interventional period (up to 6 months of Abilify MyCite; Day 180 through up to Day 360) may be initiated per the joint decision of the patients with their study physician; if the patient is not continuing into the optional second interventional period (section 3.5.4), then the Day 180 visit is the final visit.

3.5.4 Optional Second Interventional Period

At the Day 180 visit (or later during the Day 180 through up to 360 period), patients will decide jointly with their study physician whether to restart Abilify MyCite for a second interventional period (Day 180 through up to 360). Patients will re-initiate Abilify MyCite and the second interventional period will proceed similarly to the interventional period (section 3.5.2). During this second, optional interventional period, patients may start and stop Abilify MyCite as clinically indicated.

Data collected at routine care visits between Day 180 and Day 360 will include Abilify MyCite use changes and AEs.

3.5.5 End of Study (Day 360)

The Day 360 visit marks the end of the second optional interventional phase. Data collected at the Day 360 visit includes Abilify MyCite use changes and AEs. CCI [redacted]

3.5.6 Early Terminations

If a patient withdraws or is withdrawn from the study prematurely (e.g., before completing the scheduled Day 180 or Day 360 visit, if applicable), then an early termination (ET) visit should be performed, at which time all assessments and procedures that were to have been performed at the Day 180 or Day 360 (if applicable) visit should be completed. In such cases, the reason for the ET must be recorded.

4.0 STATISTICAL METHODOLOGY

4.1 General Considerations

Statistical analyses will be performed using SAS® version 9.4 or higher computer software. Analyses will utilize prospectively collected clinical data from study sites, data collected from Abilify MyCite, CCI [redacted] Data from all sources will be integrated into one dataset for analysis.

Patient characteristics, treatments and outcomes will be tabulated and summarized with descriptive statistics. All descriptive summaries will include means, medians, standard deviation (SD) and ranges for continuous variables and absolute/relative frequencies for categorical data. Statistics will be summarized for the study population overall and by treatment arm.

Raw data (i.e., minimum and maximum values presented for range in continuous variables) will be reported out to the precision with which it was collected. Means will be reported to 1 decimal place more than the raw data. SD will be reported to 1 decimal place more than the mean. Percentages will be reported to 1 decimal place. Trailing zeros will be presented to maintain a consistent level of precision, e.g. 2.0 rather than 2.

Inferential tests will be performed at the 5% level of significance. All p-values will be rounded to 3 decimal places. If a rounded p-value is 0.000 (i.e., the actual p-value is less than 0.0005), then the p-value will be presented as '< 0.001.'

4.2 Sample Size Estimation

The primary endpoint for the study is the difference in the proportion of patients with at least 1 all-cause hospitalization for the Abilify MyCite versus virtual matched control cohorts from baseline to Day 180. The sample size calculation assumptions were based on input CCI [redacted] for patients diagnosed with SCH, BP1, or MDD who had at least 1 all-cause hospitalization or partial psychiatric hospitalization within the 60 days prior to enrollment. A control group event rate of 36.3% was estimated, weighted based on an expected study distribution of 25% patients with SCH, 25% with BP1, and 50% with MDD. Sample size calculations were based on testing 2 proportions using the Z-test with unpolled variance.

The study sample size of 447 patients was calculated based on the following assumptions, CCI [redacted]: 20% reduction in the proportion of patients with all-cause hospitalizations in the Abilify MyCite group versus the virtual matched control group (29.04% Abilify MyCite versus 36.30% virtual matched control), 1:3 (Abilify MyCite:virtual matched controls) matching, 80% power, and maintaining an overall alpha level of 0.05 with the level of significance in a superiority hypothesis of 0.025. Using a 30% dropout rate at 6 months, a sample size of 640 patients will need to be enrolled to ensure completion of 447 patients.

A virtual control group of approximately 1350 patients will be identified CCI [redacted] and matched to the final sample of Abilify MyCite patients. This will create 3 controls for every 1

Abilify MyCite patient, which reduces the required Abilify MyCite sample size as compared to a 1:1 match while maintaining statistical power. Controls will be matched to Abilify MyCite patients using a propensity score (please see section 3.4) CCI [redacted]. If a sufficient population of controls is not identified to support matching in a 1:3 (Abilify MyCite:virtual matched controls) ratio, the matching ratio will be decreased sequentially to 1:2 followed by 1:1 if necessary.

4.3 Analysis of Demographic and Baseline Characteristics

Demographic and baseline characteristics will be summarized for the study population overall and by treatment (Abilify MyCite versus virtual matched controls). Discrete variables will be reported as count (frequency) and percent for each category. Continuous level variables (interval, ratio) will be reported as mean and standard deviation. Where applicable, range, minimum, maximum, and median will also be reported.

It is likely that the virtual matched controls will lack some variables that are available to the Abilify MyCite sample. As a result, a comprehensive list of each variable in the Abilify MyCite sample will be listed, while "N/A" will be listed for each variable that is not available in the virtual matched control cohort. Balance in baseline characteristics across the 2 cohorts will be evaluated prior to analysis.

4.4 Primary Endpoint

The primary endpoint is the difference in the proportion of patients with at least 1 all-cause hospitalization for the Abilify MyCite versus virtual matched control cohorts from baseline to Day 180. The primary endpoint analysis will be a McNemar's paired sample chi-square test between the treatment cohorts.

This test is directional in nature as it is testing the alternative hypothesis (H_A) that the proportion patients hospitalized will be lower in the Abilify MyCite cohort than the virtual control cohort. Adjustments will be made to the alpha level to account for the one-tail nature of the alternative hypothesis.

- H_0: $P_1 - P_2 \geq 0$ versus H_A: $P_1 - P_2 < 0$

Where:

- P_1 = proportion of Abilify MyCite patients with all-cause hospitalization from baseline to Day 180
- P_2 = proportion of virtual control patients with all-cause hospitalization from baseline to Day 180

4.5 Secondary Endpoint

The secondary endpoint compares the difference between groups (Abilify MyCite versus virtual matched controls) in the proportion of patients with at least 80% PDC (with antipsychotic medication) from baseline to Day 180.

4.6 Exploratory Endpoint

NA.

4.1 Missing data

Except where otherwise noted, missing data will not be imputed and will be excluded from the calculation of percentages.

It is likely that the virtual matched controls will lack some variables that are available to the Abilify MyCite sample. As a result, a comprehensive list of each variable in the Abilify MyCite sample will be listed, while "N/A" will be listed for each variable that is not available in the virtual matched control cohort.

4.2 Safety Analysis

All safety summaries will be descriptive in nature.

4.3 Other Analysis

There are no plans to include any other analysis other than what has been described above. Any post-hoc testing that might arise from the results or findings will be discussed and conducted in accordance with standard and accepted statistical procedures.

5.0 STATISTICAL ANALYSES

The study was earlier terminated after two subjects have enrolled and treated in the study; no efficacy assessment was obtained for these two subjects. Thus, only patient baseline information of the two subjects is summarized.

5.1 Study Populations

5.1.1 Enrolled Population

The enrolled population includes all patients who signed informed consent and were enrolled in the study.

5.1.2 Analysis Population

The analysis population includes all patients who met all of the inclusion criteria and none of the exclusion criteria and completed a Day 180 study visit.

5.1.3 Safety Population

The safety population includes all patients who enrolled in the study and initiated use of Ability MyCite.

5.2 Efficacy Analysis

NA.

5.3 Safety Analysis

All safety analyses for this study will be descriptive in nature and apply only to the Abilify MyCite group. Drug-related SAEs, device-related AEs including those leading to withdrawal from Abilify MyCite, potential hepatotoxicity cases, pregnancies, pregnancy-related outcomes will be coded Medical Dictionary for Regulatory Activities (MedDRA) using and descriptively summarized by System Organ Class (SOC) and Preferred Term (PT). Pregnancies and pregnancy-related outcomes will be summarized by those occurring in female patients versus those occurring in female partners of male patients.

5.3.1 AEs

For the purpose of this study, AEs that do not meet the definition for a "serious" AE (section 4.1.1 and section 4.1.2 of the protocol) will only be collected if they are device-related (i.e., related to the device component of Abilify MyCite, including those leading to withdrawal from Abilify MyCite.)

5.3.2 SAEs

All AEs meeting the definition of drug-related SAE (section 4.1.1 of the protocol) and device-related SAE (section 4.1.2 of the protocol) will be collected.

5.3.3 Potential Hepatotoxicity Cases

Potential hepatotoxicity cases will be collected with other AEs.

5.3.4 Pregnancy

Pregnancies occurring in female patients taking Ability MyCite during the study and within 30 days of the last dose of Abilify MyCite will be collected. Additionally, pregnancies occurring in female partners of male patients taking Ability MyCite during the study and within 90 days of the last dose of Abilify MyCite will be collected. Pregnancy, perinatal, and neonatal outcomes will be collected.

6.0 [redacted]

C						

CCI

[redacted]

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]						
[redacted]						

[redacted]

[redacted]	[redacted]	[redacted]	[redacted]

[redacted]

[redacted]

[redacted]

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

CCI

[redacted]

[redacted]

[redacted]

[redacted]

7.0 [redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

CCI

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

CCI [redacted]

[redacted]

[redacted]						
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

[redacted]

[redacted]						
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

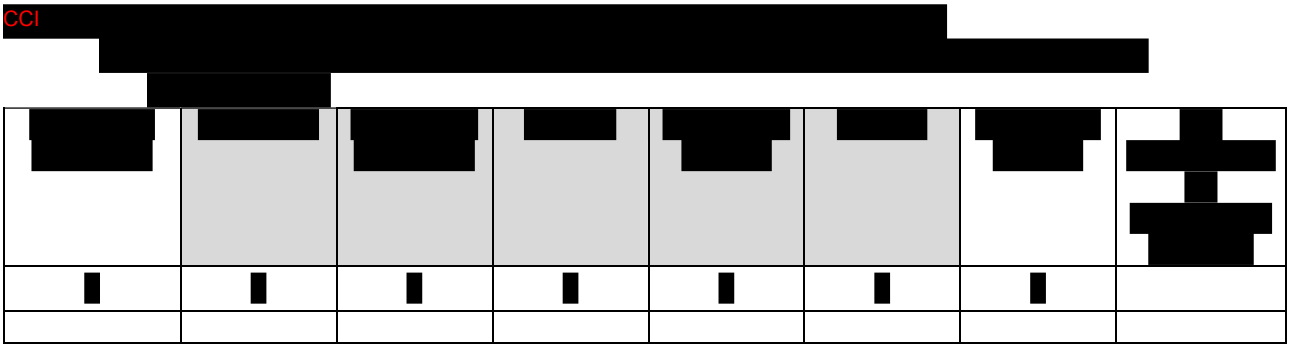
[redacted]

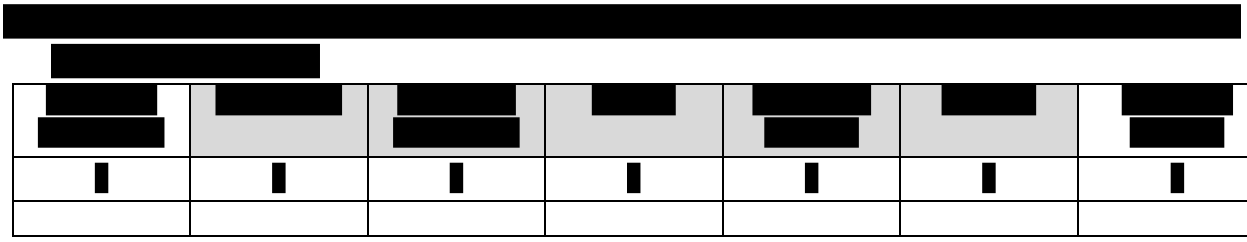
[redacted]	[redacted]
[redacted]	
[redacted]	
[redacted]	
[redacted]	

[redacted]

[redacted]	[redacted]	[redacted]
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		
[redacted]		

CCI





8.0 CCI [redacted]

[redacted]

[redacted]

[redacted]	[redacted]

[redacted]

[redacted]

[redacted]	[redacted]	[redacted]	[redacted]

[redacted]

[redacted]

[redacted]

CCI [redacted]

[redacted]						
[redacted]						
[redacted]						
[redacted]						
[redacted]						
[redacted]						
[redacted]						

9.0 CCI

CCI

[redacted]


CCI

10.0 CCI

CCI

11.0 APPENDIX F: Coding tables

Table 1: Mental health ICD diagnosis codes

Condition	ICD-10 dx
Schizophrenia	F20.1x, F20.2x, F20.0x, F21.x, F20.5x, F20.89x, F20.3x, F20.9x
Depression	F32.x, F33.x
Bipolar disorder	F30.9x, F30.10x, F31.0x, F31.1x, F31.2x, F31.3x, F31.4x, F31.5x, F31.6x, F31.9x, F31.8x, F31.7x

Table 2a: Non-LAI atypical antipsychotic GPI Codes

Brand Name	Generic Name	GPI Code
FANAPT	Iloperidone	59070035000310 59070035000320 59070035000340 59070035000360 59070035000380 59070035000385 59070035000390
FANAPT TITRATION PACK	Iloperidone	59070035006320
INVEGA	Paliperidone	59070050007505 59070050007510 59070050007520 59070050007530
PALIPERIDONE ER	Paliperidone	59070050007505 59070050007510 59070050007520 59070050007530
RISPERDAL	Risperidone	59070070000303 59070070000306 59070070000310 59070070000320 59070070000330 59070070000340 59070070002010
RISPERDAL M-TAB	Risperidone	59070070007220 59070070007230 59070070007240 59070070007250 59070070007260
RISPERIDONE	Risperidone	59070070000303 59070070000306 59070070000310 59070070000320 59070070000330 59070070000340 59070070002010
RISPERIDONE M-TAB	Risperidone	59070070007220 59070070007230 59070070007240 59070070007250 59070070007260

RISPERIDONE ODT	Risperidone	59070070007210 59070070007220 59070070007230 59070070007240 59070070007250 59070070007260
QUETIAPINE FUMARATE	Quetiapine Fumarate	59153070100310 59153070100314 59153070100320 59153070100330 59153070100340 59153070100350
QUETIAPINE FUMARATE ER	Quetiapine Fumarate	59153070107505 59153070107515 59153070107520 59153070107530 59153070107540
SEROQUEL	Quetiapine Fumarate	59153070100310 59153070100314 59153070100320 59153070100330 59153070100340 59153070100350
SEROQUEL XR	Quetiapine Fumarate	59153070107505 59153070107515 59153070107520 59153070107530 59153070107540
SAPHRIS	Asenapine Maleate	59155015100710 59155015100720 59155015100730
OLANZAPINE	Olanzapine	59157060000305 59157060000310 59157060000315 59157060000320 59157060000330 59157060000340 59157060002120
OLANZAPINE ODT	Olanzapine	59157060007210 59157060007220 59157060007230 59157060007240

ZYPREXA	Olanzapine	59157060000305 59157060000310 59157060000315 59157060000320 59157060000330 59157060000340 59157060002120
ZYPREXA ZYDIS	Olanzapine	59157060007210 59157060007220 59157060007230 59157060007240
ABILIFY	Aripiprazole	59250015000305 59250015000310 59250015000320 59250015000330 59250015000340 59250015000350 59250015002020 59250015002050
ABILIFY DISCMELT	Aripiprazole	59250015007220 59250015007230
ABILIFY MAINTENA	Aripiprazole	5925001500E430 5925001500E440 5925001500G230 5925001500G240
ARIPIPRAZOLE	Aripiprazole	59250015000305 59250015000310 59250015000320 59250015000330 59250015000340 59250015000350 59250015002020
ARIPIPRAZOLE ODT	Aripiprazole	59250015007220 59250015007230
REXULTI	Brexpiprazole	59250020000310 59250020000320 59250020000330 59250020000340 59250020000350 59250020000360
VRAYLAR	Cariprazine HCl	59400018100120 59400018100130

		59400018100140 59400018100150 5940001810B220
LATUDA	Lurasidone HCl	59400023100310 59400023100320 59400023100330 59400023100340 59400023100350
NUPLAZID	Pimavanserin Tartrate	59400028200320
GEODON	Ziprasidone HCl	59400085100120 59400085100130 59400085100140 59400085100150
ZIPRASIDONE HCL	Ziprasidone HCl	59400085100120 59400085100130 59400085100140 59400085100150
GEODON	Ziprasidone Mesylate	59400085202120

Table 2b: LAI atypical antipsychotic GPI Codes

Brand Name	Generic Name	GPI Code
INVEGA SUSTENNA	Paliperidone Palmitate	59070050101837 59070050101838 59070050101839 59070050101840 59070050101845
INVEGA TRINZA	Paliperidone Palmitate	59070050101850 59070050101860 59070050101870 59070050101880
RISPERDAL CONSTA	Risperidone Microspheres	59070070101910 59070070101920 59070070101930 59070070101940
ZYPREXA RELPREVV	Olanzapine Pamoate	59157060101950 59157060101960 59157060101970
ABILIFY MAINTENA	Aripiprazole	59250015001920 59250015001930
ARISTADA	Aripiprazole Lauroxil	5925001520E420 5925001520E430 5925001520E440 5925001520E450

This page is a manifestation of an electronically captured signature

SIGNATURE PAGE

Document Name: P31613217 Statistical Analysis PLan

Document Number: 1000055470

Document Version: 3.0

Signed by	Meaning of Signature	Server Date (dd-MMM-yyyy hh:min) - UTC timezone
PPD	Biostatistics Approval	14-Oct-2019 21:18:24
PPD	Clinical Approval	14-Oct-2019 19:01:03