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THE LONG-ACTING THERAPEUTICS PATENTS AND LICENCES DATABASE

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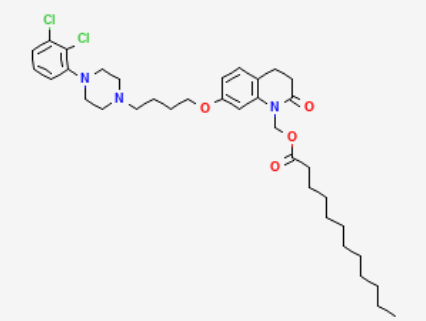


Aripiprazole

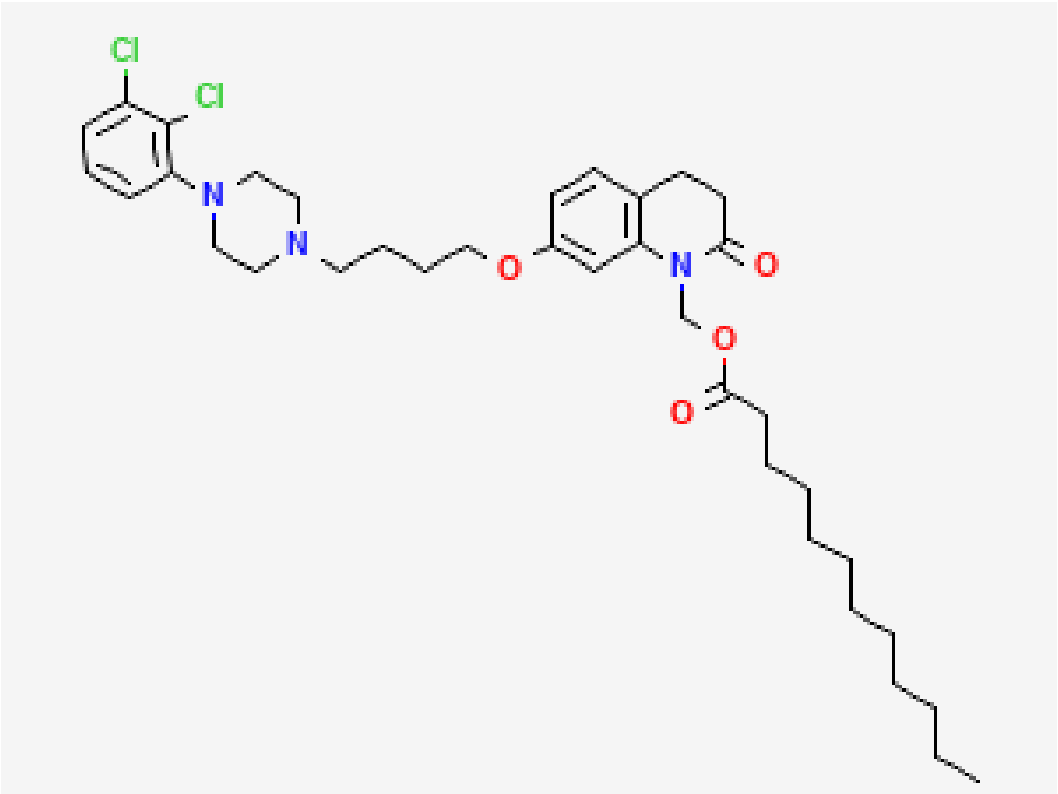
Developer(s)

Otsuka

Originator

https://www.abilifyasimtufii.com/

Drug structure



Chemical structure depiction of Aripiprazole Lauroxil

https://pubchem.ncbi.nlm.nih.gov/compound/49831411#section=2D-Structure

Drug information

Associated long-acting platforms

Inorganic nanoparticles

Administration route

Oral, Intramuscular

Therapeutic area(s)

Mental health

Use case(s)

Treatment

Use of drug

Ease of administration

Administered by a community health worker
Administered by a nurse
Administered by a specialty health worker

User acceptance

Not provided

Dosage

Available dose and strength

441mg/1.6ml (275.63mg/ml); 662mg/2.4ml (275.83mg/ml); 882mg/3.2ml (275.63mg/ml)

Frequency of administration

Once monthly, Every 6 weeks and Once every 2 months

Maximum dose

1064 mg single dose as subcutaneous injection

Recommended dosing regimen

Option 1: Administer one intramuscular injection of ARISTADA INITIO 675 mg (in either the deltoid or gluteal muscle) and one dose of oral aripiprazole 30 mg in conjunction with the first ARISTADA injection. The first ARISTADA injection may be administered on the same day as ARISTADA INITIO or up to 10 days thereafter. See the ARISTADA INITIO prescribing information for additional information regarding administration of ARISTADA INITIO. o Avoid injecting both ARISTADA INITIO and ARISTADA concomitantly into the same deltoid or gluteal muscle. Option 2: Administer 21 consecutive days of oral aripiprazole in conjunction with the first ARISTADA injection.

Additional comments

Not provided

Dosage link(s)

https://www.accessdata.fda.gov/drugsatfda_docs/label/2020/207533s017,209830s005lbl.pdf

Drug information

Drug's link(s)

https://go.drugbank.com/drugs/DB14185

Generic name

Aripiprazole Lauroxil

Brand name

ARISTADA

Compound type

Small molecule

Summary

1) ARISTADA (Aripiprazole Lauroxil) is a long-acting antipsychotic (partial agonist—D2, D3, 5-HT1A, and 5-HT2A receptor) used for the treatment of schizophrenia and related psychotic disorders. 2) The efficacy of ARISTADA is produced by aripiprazole and dehydro-aripiprazole (major metabolite). 3) Pharmacokinetic parameters: t1/2—53.9 days to 57.2 days; Vd—268 L; 4) > 99% bound to albumin 5) The levels of Cmax and AUC values are 2.5% higher for extensive metabolizers of CYP2D6

Approval status

ARISTADA is approved only in the USA at a price of 1,304 USD for the 441mg dose to 4,107.79 USD for the 1064 mg dose

Regulatory authorities

ARISTADA is approved by US FDA.

Delivery device(s)

No delivery device

Scale-up and manufacturing prospects

Scale-up prospects

Not provided

Tentative equipment list for manufacturing

Reactor vessel; heating systems; Nitrogen atmosphere setup; Filtration apparatus; Vacuum distillation setup

Manufacturing

Manufacturing can be divided into two steps: 1) Formation of Aripiprazole Intermediate (Hydroxymethyl Aripiprazole) using paraformaldehyde, organic solvent (e.g., toluene), and base (e.g., DBU or potassium carbonate). 2) Esterification to form Aripiprazole lauroxil using lauric acid, DCC (activator), DMAP (catalyst), solvent (e.g., dichloromethane)

Specific analytical instrument required for characterization of formulation

1. High-Performance Liquid Chromatography (HPLC) 2. Mass Spectrometer

Clinical trials

ALK9072-A401

Identifier

NCT02634320

Link

https://clinicaltrials.gov/study/NCT02634320

Phase

Marketed

Status

Completed

Sponsor

Alkermes, Inc.

More details

This study will evaluate the safety and tolerability of aripiprazole lauroxil (also known as ARISTADA, ALKS 9070).

Purpose

A Study of Aripiprazole Lauroxil (Also Known as ARISTADA TM) in Subjects With Schizophrenia

Interventions

Intervention 1

Aripiprazole Lauroxil

Countries

United States of America

Sites / Institutions

Not provided

Trials dates

Anticipated Start Date

Not provided

Actual Start Date

2015-12-01 00:00:00

Anticipated Date of Last Follow-up

2018-11-09 00:00:00

Estimated Primary Completion Date

Not provided

Estimated Completion Date

Not provided

Actual Primary Completion Date

2017-07-11 00:00:00

Actual Completion Date

2017-07-11 00:00:00

Studied populations

Age Cohort

- Adults

- Older Adults

Genders

- All

Accepts pregnant individuals

Unspecified

Accepts lactating individuals

Unspecified

Accepts healthy individuals

No

Comments about the studied populations

Inclusion Criteria: * Has demonstrated tolerability to test doses of oral aripiprazole during screening; OR has a history of tolerated use of aripiprazole * Has a diagnosis of schizophrenia * Is clinically stable * Has received at least 3 doses of risperidone long acting injection (Risperdal Consta) or paliperidone palmitate (Invega Sustenna) prior to screening. * Has no antipsychotic medication regimen change for 4 weeks prior to Day 1 * Agreed to abide by the contraceptive requirements o the protocol * Resides in a stable living situation * Additional criteria may apply Exclusion Criteria: * Is currently pregnant or breastfeeding, or is planning to become pregnant during the study * Has received Invega Trinza, aripiprazole lauroxil, or IM depot aripiprazole within 6 months of screenin

Health status

Not provided

Study type

Interventional (clinical trial)

Enrollment

51

Allocation

Not provided

Intervention model

Single group assignment

Intervention model description

Not provided

Masking

Open label

Masking description

Not provided

Frequency of administration

Weekly
Monthly
Once every 6 months

Studied LA-formulation(s)

Injectable

Studied route(s) of administration

Intramuscular

Use case

Treatment

Key resources

Not provided

ALK9072-A105

Identifier

NCT02320032

Link

https://clinicaltrials.gov/study/NCT02320032

Phase

Phase I

Status

Completed

Sponsor

Alkermes, Inc.

More details

This study will evaluate the safety, tolerability, and pharmacokinetics (PK) of various doses and dosing intervals of aripiprazole lauroxil.

Purpose

An Open-Label Study of Aripiprazole Lauroxil in Subjects With Stable Schizophrenia

Interventions

Intervention 1

Aripiprazole Lauroxil

Countries

United States of America

Sites / Institutions

Not provided

Trials dates

Anticipated Start Date

Not provided

Actual Start Date

2014-12-01 00:00:00

Anticipated Date of Last Follow-up

2018-08-28 00:00:00

Estimated Primary Completion Date

Not provided

Estimated Completion Date

Not provided

Actual Primary Completion Date

2016-04-01 00:00:00

Actual Completion Date

2016-04-01 00:00:00

Studied populations

Age Cohort

- Adults
- Older Adults

Genders

- All

Accepts pregnant individuals

Unspecified

Accepts lactating individuals

Unspecified

Accepts healthy individuals

No

Comments about the studied populations

Inclusion Criteria: * Has stable schizophrenia or schizoaffective disorder * Has demonstrated ability to tolerate aripiprazole * Has been on a stable antipsychotic medication regimen without any changes for at least 2 months prior to screening * Has a body mass index (BMI) of 18.0 to 35.0 kg/m2, inclusive * Additional criteria may apply Exclusion Criteria: * Is pregnant, breastfeeding, or is planning to become pregnant during the study period * Has received aripiprazole lauroxil or IM depot aripiprazole within 6 months, or other long-acting, injectable antipsychotic medication within 3 months * Is a danger to himself/herself at screening or upon admission * Has a history of or positive test result for human immunodeficiency virus (HIV), hepatitis B, or hepatitis C * Has a positive urine

Health status

Not provided

Study type

Interventional (clinical trial)

Enrollment

140

Allocation

Randomized

Intervention model

Parallel Assignment

Intervention model description

Not provided

Masking

Open label

Masking description

Not provided

Frequency of administration

Monthly
Once every 2 months

Studied LA-formulation(s)

Injectable

Studied route(s) of administration

Intramuscular

Use case

Treatment

Key resources

Not provided

ALK9072-A106

Identifier

NCT02636842

Link

https://clinicaltrials.gov/study/NCT02636842

Phase

Phase I

Status

Completed

Sponsor

Alkermes, Inc.

More details

The study will determine the safety, tolerability, and pharmacokinetics of aripiprazole lauroxil in adults with schizophrenia or schizoaffective disorder.

Purpose

A Study of Aripiprazole Lauroxil in Subjects With Schizophrenia or Schizoaffective Disorder

Interventions

Intervention 1

Aripiprazole Lauroxil

Countries

United States of America

Sites / Institutions

Not provided

Trials dates

Anticipated Start Date

Not provided

Actual Start Date

2015-12-01 00:00:00

Anticipated Date of Last Follow-up

2016-07-13 00:00:00

Estimated Primary Completion Date

Not provided

Estimated Completion Date

Not provided

Actual Primary Completion Date

2016-06-01 00:00:00

Actual Completion Date

2016-06-01 00:00:00

Studied populations

Age Cohort

- Adults
- Older Adults

Genders

- All

Accepts pregnant individuals

Unspecified

Accepts lactating individuals

Unspecified

Accepts healthy individuals

No

Comments about the studied populations

Inclusion Criteria: * Has a diagnosis of chronic schizophrenia or schizoaffective disorder * Has demonstrated ability to tolerate aripiprazole * Has been on a stable antipsychotic medication regimen without any changes for at least 2 months prior to screening * Has a body mass index (BMI) of 18.0 to 40.0 kg/m2, inclusive * Additional criteria may apply Exclusion Criteria: * Is pregnant, is planning to become pregnant, or is currently breastfeeding * Has received aripiprazole lauroxil or IM depot aripiprazole within 6 months, or other long-acting, injectable antipsychotic medication within 3 months or currently treated with clozapine * Is a danger to himself/herself at screening or upon admission * Has a history of or positive test result for human immunodeficiency virus (HIV), hepatitis

Health status

Not provided

Study type

Interventional (clinical trial)

Enrollment

47

Allocation

Not provided

Intervention model

Single group assignment

Intervention model description

Not provided

Masking

Open label

Masking description

Not provided

Frequency of administration

Once

Studied LA-formulation(s)

Injectable

Studied route(s) of administration

Intramuscular

Use case

Treatment

Key resources

Not provided

ALK9072-A306

Identifier

NCT03345979

Link

https://clinicaltrials.gov/study/NCT03345979

Phase

Phase III

Status

Completed

Sponsor

Alkermes, Inc.

More details

This study will evaluate the efficacy of initiating treatment of schizophrenia with ARISTADA INITIO plus 30 mg oral aripiprazole followed by a 2-month dose of AL.

Purpose

A Study of Aripiprazole Lauroxil or Paliperidone Palmitate for the Treatment of Schizophrenia

Interventions

Intervention 1

Aripiprazole Lauroxil

Intervention 3

Paliperidone Palmitate

Countries

United States of America

Sites / Institutions

Not provided

Trials dates

Anticipated Start Date

Not provided

Actual Start Date

2017-11-15 00:00:00

Anticipated Date of Last Follow-up

2020-07-29 00:00:00

Estimated Primary Completion Date

Not provided

Estimated Completion Date

Not provided

Actual Primary Completion Date

2019-03-12 00:00:00

Actual Completion Date

2019-03-12 00:00:00

Studied populations

Age Cohort

- Adults
- Older Adults

Genders

- All

Accepts pregnant individuals

Unspecified

Accepts lactating individuals

Unspecified

Accepts healthy individuals

No

Comments about the studied populations

Inclusion Criteria: * Has a diagnosis of schizophrenia * Requires acute treatment for symptoms of schizophrenia * Willing and able to be confined to an inpatient study unit for up to 3-4 weeks * Has experienced at least one previous hospitalization for schizophrenia * Has been able to achieve outpatient status for more than 3 months in the past year * Has a body mass index (BMI) between 18.0 and 40.0 kg/m\^2 * Resides in a stable living situation when not hospitalized * Has an identified reliable caregiver (for example, family member) * Additional criteria may apply Exclusion Criteria: * Poses a current suicide risk * Pregnant, planning to become pregnant, or breastfeeding * Initiated first antipsychotic treatment within the past 12 months * Has received a long-acting injectable antipsy

Health status

Not provided
Other health status: Schizophrenia

Study type

Interventional (clinical trial)

Enrollment

200

Allocation

Randomized

Intervention model

Parallel Assignment

Intervention model description

Not provided

Masking

Quadruple-blind masking

Masking description

Not provided

Frequency of administration

Once

Studied LA-formulation(s)

Injectable

Studied route(s) of administration

Intramuscular

Use case

Treatment

Key resources

Not provided

APPRAISE

Identifier

NCT04203056

Link

https://clinicaltrials.gov/study/NCT04203056

Phase

Marketed

Status

Terminated

Sponsor

University of California, Los Angeles

More details

This 12-month study will evaluate the efficacy of aripiprazole lauroxil compared to oral aripiprazole in preventing the re-emergence of psychotic symptoms in patients with a recent onset of schizophrenia.

Purpose

Aripiprazole Lauroxil for Preventing Psychotic Relapse After an Initial Schizophrenia Episode

Interventions

Intervention 1

Aripiprazole Lauroxil

Intervention 3

ARI-ORAL

Intervention 5

AL-NCD

Countries

United States of America

Sites / Institutions

Not provided

Trials dates

Anticipated Start Date

Not provided

Actual Start Date

2019-12-16 00:00:00

Anticipated Date of Last Follow-up

2023-11-04 00:00:00

Estimated Primary Completion Date

Not provided

Estimated Completion Date

Not provided

Actual Primary Completion Date

2022-10-01 00:00:00

Actual Completion Date

2022-10-01 00:00:00

Studied populations

Age Cohort

- Adults

Genders

- All

Accepts pregnant individuals

Unspecified

Accepts lactating individuals

Unspecified

Accepts healthy individuals

No

Comments about the studied populations

Inclusion Criteria: 1. Is between 18 and 45 years of age, inclusive, at Screening. 2. Has a diagnosis of schizophreniform disorder, schizophrenia, or schizoaffective disorder, depressed type. 3. Has a first episode of a psychotic illness that occurred within the 24 months before entry. 4. Fluency (oral and written) in the English language. 5. Exhibits tolerability to ARI ORAL during the Stabilization period. 6. Resides within commuting distance of the UCLA Aftercare Research Program in a stable living situation where the patient can be located. 7. Agrees to abide by the contraceptive requirements of the protocol. 8. Additional criteria may apply Exclusion Criteria: 1. Evidence of a known neurological disorder (e.g., epilepsy) or significant head injury. 2. Premorbid IQ less than 70. 3.

Health status

Not provided

Study type

Interventional (clinical trial)

Enrollment

15

Allocation

Randomized

Intervention model

Parallel Assignment

Intervention model description

Not provided

Masking

Open label

Masking description

Not provided

Frequency of administration

Monthly
Once every 2 months
Other : "Every 6 weeks "

Studied LA-formulation(s)

Injectable

Studied route(s) of administration

Intramuscular

Use case

Treatment

Key resources

Not provided

NCT05662306

Identifier

NCT05662306

Link

https://clinicaltrials.gov/study/NCT05662306

Phase

Marketed

Status

Terminated

Sponsor

University of Miami

More details

The purpose of this study is to examine the role of clinical stability in functional recovery. in first episode schizophrenia.

Purpose

C-Cog in Early Course Schizophrenia Study

Interventions

Intervention 1

Aripiprazole Lauroxil

Intervention 3

Computerized cognitive and functional skills training

Countries

United States of America

Sites / Institutions

Not provided

Trials dates

Anticipated Start Date

Not provided

Actual Start Date

2024-01-23 00:00:00

Anticipated Date of Last Follow-up

2025-03-14 00:00:00

Estimated Primary Completion Date

Not provided

Estimated Completion Date

Not provided

Actual Primary Completion Date

2025-03-03 00:00:00

Actual Completion Date

2025-03-03 00:00:00

Studied populations

Age Cohort

- Adults
- Older Adults

Genders

All

Accepts pregnant individuals

Unspecified

Accepts lactating individuals

Unspecified

Accepts healthy individuals

No

Comments about the studied populations

Inclusion Criteria: 1. Adults 2. Diagnosis of schizophrenia 3. Current Hospitalization or outpatient relapse 4. Fewer than four previous admissions 5. Willing to accept long-acting injectable treatment and participate in rehabilitation Exclusion Criteria: 1. Primary diagnosis other than schizophrenia 2. Prior Long Acting Injectable treatment 3. Current Suicide Risk 4. Hypersensitivity to Aripiprazole 5. Pregnancy 6. Positive illicit drug screen other than cannabis (rescreening allowed in 4 weeks for drug positive cases) 7. Unable to give personal informed consent 8. History of treatment resistance as evidenced by clozapine treatment 9. Unable to stop treatment with medications that are strong Cytochrome (CYP) 2D6 or CYP 3A4 inhibitors and or strong CYP3A4 inducers (2.3, 7.1) for at 14 d

Health status

Not provided

Study type

Interventional (clinical trial)

Enrollment

60

Allocation

Not provided

Intervention model

Single group assignment

Intervention model description

Not provided

Masking

Open label

Masking description

Not provided

Frequency of administration

Once every 2 months

Studied LA-formulation(s)

Injectable

Studied route(s) of administration

Intramuscular

Use case

Treatment

Key resources

Not provided

ALK9072-003

Identifier

NCT01469039

Link

https://clinicaltrials.gov/study/NCT01469039

Phase

Phase III

Status

Completed

Sponsor

Alkermes, Inc.

More details

The study will determine the efficacy of ALKS 9072 (also known as aripiprazole lauroxil or ALKS 9070) for the treatment of schizophrenia in subjects experiencing an acute exacerbation.

Purpose

A Study to Evaluate the Efficacy and Safety of ALKS 9072 (Also Known as Aripiprazole Lauroxil, ALKS 9070, or ARISTADA) in Subjects With Schizophrenia

Interventions

Intervention 1

ALKS 9072

Intervention 3

Placebo

Countries

Bulgaria
Malaysia
Philippines
Romania
Russian Federation
Ukraine
United States of America

Sites / Institutions

Not provided

Trials dates

Anticipated Start Date

Not provided

Actual Start Date

2011-12-01 00:00:00

Anticipated Date of Last Follow-up

2019-01-14 00:00:00

Estimated Primary Completion Date

Not provided

Estimated Completion Date

Not provided

Actual Primary Completion Date

2014-01-01 00:00:00

Actual Completion Date

2014-03-01 00:00:00

Studied populations

Age Cohort

- Adults
- Older Adults

Genders

- All

Accepts pregnant individuals

Unspecified

Accepts lactating individuals

Unspecified

Accepts healthy individuals

No

Comments about the studied populations

Inclusion Criteria: * Diagnosis of schizophrenia according to DSM-IV-TR criteria * Has been able to achieve outpatient status for more than 3 months in the past year * Body mass index (BMI) of 18.5 to 40.0 kg/m2 (inclusive) * Resides in a stable living situation * Willing and able to be confined to an inpatient study unit for 2 weeks or longer Exclusion Criteria: * History of poor or inadequate clinical response to treatment with aripiprazole * History of treatment resistance * Known or suspected intolerance of, allergy, or hypersensitivity to aripiprazole, its ingredients, other antipsychotic agent, or INTRALIPID (including peanuts, soy, egg, or glycerol) * Diagnosis of current substance dependence (including alcohol) * Pregnant, lactating, or breastfeeding * Receipt of any antipsychot

Health status

Not provided

Study type

Interventional (clinical trial)

Enrollment

623

Allocation

Randomized

Intervention model

Parallel Assignment

Intervention model description

Not provided

Masking

Quadruple-blind masking

Masking description

Not provided

Frequency of administration

Monthly

Studied LA-formulation(s)

Injectable

Studied route(s) of administration

Intramuscular

Use case

Treatment

Key resources

Not provided

2008P-001861

Identifier

NCT01246765

Link

https://clinicaltrials.gov/study/NCT01246765

Phase

Marketed

Status

Recruiting

Sponsor

Massachusetts General Hospital

More details

The National Pregnancy Registry for Psychiatric Medications is dedicated to evaluating the safety of psychiatric medications such as antidepressants, ADHD medications, sedative hypnotics, and atypical antipsychotics that many people take during pregnancy to treat a wide range of mood, anxiety, executive function, or psychiatric disorders. The goal of this Registry is to gather information on the safety of these medications during pregnancy, as current data is limited.

Purpose

National Pregnancy Registry for Psychiatric Medications

Interventions

Intervention 1

Aripiprazole Lauroxil

Countries

United States of America

Sites / Institutions

Not provided

Trials dates

Anticipated Start Date

Not provided

Actual Start Date

2008-11-01 00:00:00

Anticipated Date of Last Follow-up

2023-11-08 00:00:00

Estimated Primary Completion Date

2033-12-01 00:00:00

Estimated Completion Date

2033-12-01 00:00:00

Actual Primary Completion Date

Not provided

Actual Completion Date

Not provided

Studied populations

Age Cohort

Unspecified

Genders

Unspecified

Accepts pregnant individuals

Unspecified

Accepts lactating individuals

Unspecified

Accepts healthy individuals

Unspecified

Comments about the studied populations

Not provided

Health status

Not provided

Study type

Not provided

Enrollment

5000

Allocation

Not provided

Intervention model

Not provided

Intervention model description

Not provided

Masking

Not provided

Masking description

Not provided

Frequency of administration

Other

Studied LA-formulation(s)

Injectable

Studied route(s) of administration

Topical (Other)

Use case

Unspecified

Key resources

Not provided

ALKS 9072-A403N

Identifier

NCT03919994

Link

https://clinicaltrials.gov/study/NCT03919994

Phase

Marketed

Status

Completed

Sponsor

Alkermes, Inc.

More details

The objectives of this study are to describe characteristics, treatment patterns, and outcomes of patients with schizophrenia newly initiated on 1 of 4 FDA-approved atypical Long Acting Injectable (LAI) antipsychotics (ABILIFY MAINTENA®, ARISTADA®, INVEGA SUSTENNA® or RISPERDAL CONSTA®)

Purpose

Observational Study of Long Acting Injectable Medications (LAIs) in Schizophrenia (OASIS)

Interventions

Intervention 1

Aripiprazole Lauroxil

Countries

United States of America

Sites / Institutions

Not provided

Trials dates

Anticipated Start Date

Not provided

Actual Start Date

2019-03-28 00:00:00

Anticipated Date of Last Follow-up

2023-02-01 00:00:00

Estimated Primary Completion Date

Not provided

Estimated Completion Date

Not provided

Actual Primary Completion Date

2023-01-04 00:00:00

Actual Completion Date

2023-01-04 00:00:00

Studied populations

Age Cohort

Unspecified

Genders

Unspecified

Accepts pregnant individuals

Unspecified

Accepts lactating individuals

Unspecified

Accepts healthy individuals

Unspecified

Comments about the studied populations

Not provided

Health status

Not provided

Study type

Not provided

Enrollment

338

Allocation

Not provided

Intervention model

Not provided

Intervention model description

Not provided

Masking

Not provided

Masking description

Not provided

Frequency of administration

Other

Studied LA-formulation(s)

Injectable

Studied route(s) of administration

Intramuscular

Use case

Treatment

Key resources

Not provided

Excipients

Proprietary excipients used

Not provided

Novel excipients or existing excipients at a concentration above Inactive Ingredients Database (IID) for the specified route of administration

Not provided

Residual solvents used

Not provided

Patent info

Description

Methods for administering aripiprazole

Brief description

The present invention relates to pharmaceutical compositions comprising a compound of Formula (I) that are useful for the intramuscular delivery of antipsychotic drugs using rapid injection rates.

Representative patent

US8759351B2

Category

Formulation

Patent holder

Alkermes Pharma Ireland Ltd

Exclusivity

Not provided

Expiration date

March 13, 2035

Status

Active

Description

Pharmaceutical compositions comprising sorbitan esters

Brief description

The present invention relates to a pharmaceutical composition comprising sorbitan esters of carboxylic acids that are useful for the delivery of anti-psychotic drugs.

Representative patent

US20240131024A1

Category

Formulation

Patent holder

Alkermes Pharma Ireland Ltd

Exclusivity

Not provided

Expiration date

Not provided

Status

Pending

Supporting material

Publications

Efficacy and Safety of a 2-Month Formulation of Aripiprazole Lauroxil With 1-Day Initiation in Patients Hospitalized for Acute Schizophrenia Transitioned to Outpatient Care: Phase 3, Randomized, Double-Blind, Active-Control ALPINE Study.

Weiden, P. J., Claxton, A., Kunovac, J., Walling, D. P., Du, Y., Yao, B., Yagoda, S., Bidollari, I., Keane, E., & Cash, E. (2020). *The Journal of clinical psychiatry*, *81*(3), 19m13207.

https://doi.org/10.4088/JCP.19m13207

Objective: Evaluate efficacy and safety of a 2-month formulation of aripiprazole lauroxil (AL) with 1-day initiation during hospitalization for acute exacerbation of schizophrenia followed by transition to outpatient care.

Methods: The phase 3b double-blind Aripiprazole Lauroxil and Paliperidone palmitate: INitiation Effectiveness (ALPINE) study was conducted from November 2017 to March 2019. Adults with acute schizophrenia according to DSM-5 criteria were randomized (1:1) to AL (AL NanoCrystal Dispersion + oral aripiprazole 30 mg, day 1; AL 1,064 mg, day 8 and every 8 weeks [q8wk]) or paliperidone palmitate (PP 234 mg, day 1; PP 156 mg, day 8 and then q4wk) for 25 weeks. Patients remained hospitalized ≥ 2 weeks after randomization per protocol. Primary endpoint was within-group change in Positive and Negative Syndrome Scale total score (PANSST) from baseline to week 4. Secondary analyses included within- and between-group changes from baseline at various time points. Adverse events (AEs) and laboratory data were monitored.

Results: A total of 200 patients were randomized (AL, n = 99; PP, n = 101); 56.6% and 42.6%, respectively, completed the study. For AL, the mean baseline PANSST was

94.1; scores were significantly reduced from baseline at week 4 (-17.4; P < .001) and were also reduced at weeks 9 (-19.8) and 25 (-23.3). With PP, PANSST also improved significantly from baseline (94.6) at week 4 (-20.1; P < .001) and also improved at weeks 9 (-22.5) and 25 (-21.7). The 3 most common AEs over 25 weeks in the AL group were injection site pain (17.2%), increased weight (9.1%), and akathisia (9.1%). The same AEs were the most common in the PP group (injection site pain [24.8%], increased weight [16.8%], and akathisia [10.9%]).

Conclusions: AL and PP were efficacious and well-tolerated for initiating treatment of schizophrenia in the hospital and continuing outpatient treatment.

Best Practices for Aripiprazole Lauroxil Administration: From Formulation Development to Injection Technique.

Farwick, S., Hickey, M. B., Jacobs, G., Faldu, S. P., Vandiver, J., & Weiden, P. J. (2019).

Journal of psychiatric practice, *25*(2), 82–90.
https://doi.org/10.1097/PRA.0000000000000376

Long-acting injectable (LAI) antipsychotics are an important treatment option for patients with schizophrenia. Advances and variability in formulation technology have provided several LAI antipsychotic treatment options for schizophrenia, with a wide range of doses and dose intervals. However, clinical reviews of LAIs have not focused on formulation development despite its clinical relevance to injection safety and technique. This article reviews the relationship between formulation technology and clinical practices for LAIs, with a focus on aripiprazole lauroxil, a long-acting atypical antipsychotic indicated for the treatment of schizophrenia. The formulation developed for aripiprazole lauroxil is an aqueous-based suspension suitable for use as a prefilled syringe that, after injection, will release aripiprazole slowly into the plasma. The clinical relationship between the aripiprazole lauroxil formulation and proper injection

techniques is explained, including why tapping and shaking the syringe to resuspend the drug particles and rapid injection speed are key steps for best injection practices for this formulation.

Aripiprazole Lauroxil Compared with Paliperidone Palmitate in Patients with Schizophrenia: An Indirect Treatment Comparison.

Cameron, C., Zummo, J., Desai, D. N., Drake, C., Hutton, B., Kotb, A., & Weiden, P. J. (2017).

Value in health : the journal of the International Society for Pharmacoeconomics and Outcomes Research, *20*(7), 876–885. https://doi.org/10.1016/j.jval.2017.03.010

Background: Aripiprazole lauroxil (AL) is a long-acting injectable atypical antipsychotic recently approved for treatment of schizophrenia on the basis of a large-scale trial of two doses of AL versus placebo. There are no direct-comparison studies with paliperidone palmitate (PP; long-acting antipsychotic used most often in acute settings) for the acute psychotic episode.

Objectives: To indirectly compare efficacy and safety of the pivotal AL study with all PP studies meeting indirect comparison criteria.

Methods: Systematic searches of MEDLINE, Embase, Cochrane CENTRAL, PsycINFO, ClinicalTrials.gov, International Clinical Trials Registry Platform, and gray literature were performed to identify randomized controlled trials of PP with similar designs to the AL trial. Bayesian network meta-analysis compared treatments with respect to symptom response and tolerability issues including weight gain, akathisia, parkinsonism, and likelihood of treatment-emergent adverse events.

Results: Three appropriate PP studies were identified for indirect comparison. Both doses of AL (441 mg and 882 mg monthly) were used and compared with two efficacious doses of PP (156 mg and 234 mg monthly). All four active-treatment conditions were associated with comparable reductions in acute symptoms (Positive

and Negative Syndrome Scale) versus placebo and were of similar magnitude (range of mean difference -8.12 to -12.01, with overlapping 95% credible intervals). Between-group comparisons of active-treatment arms were associated with summary estimates of magnitude near 0. No clinically meaningful differences in selected safety or tolerability parameter incidence were found between active treatments.

Conclusions: These results suggest that both AL and PP are effective for treatment of adults experiencing acute exacerbation of schizophrenia.

Keywords: aripiprazole lauroxil; indirect comparison; paliperidone palmitate; schizophrenia.

Additional documents

No documents were uploaded

Useful links

There are no additional links

Access principles

Collaborate for development

Consider on a case by case basis, collaborating on developing long acting products with potential significant public health impact, especially for low- and middle-income countries (LMICs), utilising the referred to long-acting technology

Not provided

Share technical information for match-making assessment

Provide necessary technical information to a potential partner, under confidentiality agreement, to enable preliminary assessment of whether specific medicines of public health importance in LMICs might be compatible with the referred to long-acting technology to achieve a public health benefit

Not provided

Work with MPP to expand access in LMICs

In the event that a product using the referred to long-acting technology is successfully developed, the technology IP holder(s) will work with the Medicines Patent Pool towards putting in place the most appropriate strategy for timely and affordable access in low and middle-income countries, including through licensing

Not provided

Comment & Information

Not provided