### Illinois Department of Healthcare and Family Services (HFS) University of Illinois at Chicago – College of Pharmacy

Prior Authorization Criteria

## Long-Acting Injectable (LAI) Atypical Antipsychotics

#### **Program Rationale**

This program is designed to promote appropriate utilization of LAI Atypical Antipsychotics in patients with repeated nonadherence to oral pharmacological treatment. Guidelines published by the American Psychiatric Association state that most patients with schizophrenia are at a very high risk for relapse in the absence of treatment.1 Patients with recurrent relapses related to partial or full nonadherence to oral treatment are candidates for LAI Atypical Antipsychotic medications.

See LAI Atypical Antipsychotics Dosing Guide for information on individual agents.

#### **Approval Criteria**

#### **Initial Requests**

A preferred LAI Atypical Antipsychotic may be approved when ALL the following criteria are met:

- 1. Patient is ≥ 18 years old.
- 2. Diagnosis is schizophrenia, schizoaffective disorder, or bipolar 1 in accordance with the medication's specific FDA labeling.
- 3. Prescriber is a board-certified psychiatrist.
- 4. Patient has documented:
  - a. history of nonadherence to oral antipsychotics OR
  - b. stabilization on a LAI Atypical Antipsychotic while in a mental health facility
- 5. Patient has documented oral tolerability of the active ingredient in accordance with the medication's specific FDA labeling.
  - Request for Invega Trinza requires documented trial of Invega Sustenna of at least 4 months.
- 6. The treatment regimen prescribed is not outside the medication's FDA labeling, and no contraindications or significant drug interactions to treatment exist as specified in accordance with the medication's specific FDA labeling.
- 7. If the request is for a non-preferred LAI Atypical Antipsychotic, there must be documented clinically significant treatment failure, intolerance, or contraindication to preferred LAI Atypical Antipsychotic agents.
- 8. Evidence of outpatient follow up appointment or if not available the prescriber agrees to coordinate follow up appointment and administration of the next dose of LAI Atypical Antipsychotic in accordance with the medication's specific FDA labeling.
- 9. Request for medically necessary exceptions to these criteria will be handled on a case-by-case basis.

Initial requests will be approved for 3 months.

#### References

- American Psychiatric Association. Practice guidelines for the treatment of patients with schizophrenia Third Edition. September 2020. Available at: https://psychiatryonline.org/doi/book/10.1176/appi.books.9780890424841. Accessed October
- Abilify Maintena. Package insert. Otsuka Pharmaceutical Co., Ltd.; 2020.
- Aristada. Package insert. Alkermes, Inc.; 2020.
- Aristada Initio. Package insert. Alkermes, Inc.; 2020.
- Invega Sustenna. Package insert. Janssen Pharmaceuticals, Inc.; 2021.
- Invega Trinza. Package insert. Janssen Pharmaceuticals, Inc.; 2021.
- Invega Hafyera. Package insert. Janssen Pharmaceuticals, Inc.; 2021.
- Risperdal Consta. Package insert. Janssen Pharmaceuticals, Inc.; 2021.
- Perseris. Package insert. Indivior, Inc.; 2019.
- 10. Zyprexa Relprevv. Package insert. Eli Lilly; 2019.

Medication and Dosage Form	FDA Indication / Minimum Patient age	Initial Dose	Maintenance Dose	Clinical Pearls					
Preferred (with prior approval) Agents									
Abilify Maintena (aripiprazole monohydrate)  ER powder for suspension in single-dose vial or pre-filled single-dose dual chamber syringes  300 mg 400 mg  IM injection: deltoid or gluteal	Schizophrenia in adults (≥ 18 years)  Maintenance monotherapy for bipolar I in adults (≥ 18 years)  BBW: increased mortality in elderly patients with dementia-related psychosis	Dose adjustments required for CYP2D6 poor metabolizers and those taking CYP3A4 inhibitors/inducers or CYP2D6 inhibitors	400 mg IM once monthly  Can be reduced to 300 mg IM for tolerability  Give no sooner than 26 days after previous injection.	<ul> <li>Establish tolerability with aripiprazole tablets before initiating ER IM injection. It may take up to 2 weeks to fully assess tolerability.</li> <li>Oral aripiprazole (10 – 20 mg) or current antipsychotic medication should be given concurrently with the initial injection and should be continued for 14 consecutive days.</li> <li>Do not confuse with short-acting aripiprazole injection (9.75mg/vial)</li> <li>Missed Doses of Abilify Maintena</li> <li>Give the next dose of Abilify Maintena as soon as possible if:         <ul> <li>&gt;4 and &lt;5 weeks since dose 2 or 3</li> <li>&gt;4 and &lt;6 weeks since dose ≥4</li> </ul> </li> <li>Restart Abilify Maintena AND bridge with 14 days of aripiprazole tablets if:         <ul> <li>&gt;5 weeks since dose 2 or 3</li> <li>&gt;6 weeks since dose 2 or 3</li> </ul> </li> </ul>					
Aristada (aripiprazole lauroxil)  ER suspension, singledose prefilled syringe  441 mg 662 mg 882 mg 1064 mg  IM injection: 441mg is deltoid or gluteal, other strengths gluteal only	Schizophrenia in adults (≥ 18 years)  BBW: increased mortality in elderly patients with dementia-related psychosis	Dosing based on total daily dose of oral aripiprazole.  May start in 2 ways:  1. Initio 675mg loading dose + one dose of 30mg aripiprazole PO + Aristada IM  2. Aristada IM + 21 days of aripiprazole PO  Conversion Table  aripiprazole Aristada IM  PO  10 mg/day  441 mg monthly  15 mg/day  662 mg monthly  882 mg every 6 weeks  1064 mg every 2 months  ≥20 mg/ day  882 mg monthly	441 mg IM once monthly 662 mg IM once monthly 882 mg IM once monthly or every 6 weeks 1064 mg every 2 months Dose adjustments required by for CYP2D6 poor metabolizers or those taking CYP3A4 inhibitors/inducers or CYP2D6 inhibitors	<ul> <li>Establish tolerability with aripiprazole tablets before initiating ER IM injection. It may take up to 2 weeks to fully assess tolerability.</li> <li>Aristada should not be given earlier than 14 days after previous injection.</li> <li>Missed Doses of Aristada         <ul> <li>Restart Aristada therapy with Aristada Initio OR bridge with 7 days of aripiprazole PO:</li> <li>&gt;6 and ≤7 weeks since 441 mg IM doses</li> <li>&gt;8 and ≤12 weeks since 106 mg IM dose</li> </ul> </li> <li>Restart Aristada therapy with Aristada Initio + one dose of 30mg aripiprazole PO OR bridge with 21 days of aripiprazole PO if:         <ul> <li>&gt;7 weeks since 441 mg IM dose</li> <li>&gt;12 weeks since 441 mg IM dose</li> <li>&gt;12 weeks since 662 mg, 882 mg, or 1064 mg IM doses</li> </ul> </li> </ul>					

Aristada Initio (aripiprazole lauroxil)  ER suspension, single-dose prefilled syringe  675 mg  IM injection: deltoid or gluteal	Schizophrenia in adults (≥ 18 years)  BBW: increased mortality in elderly patients with dementia-related psychosis	Used only as loading dose in combination with aripiprazole tablets and Aristada IM, not for repeat dosing.  To intiate Aristada therapy: Give 675mg Aristada Initio IM + one 30mg aripiprazole tablet + first dose of Aristada IM  To restart Aristada IM therapy after missed doses, Aristada Initio may be used. See above entry for Aristada.	Not applicable	<ul> <li>Establish tolerability with aripiprazole tablets before initiating ER IM injection. It may take up to 2 weeks to fully assess tolerability.</li> <li>Give Aristada injection on same day as Aristada Initio or up to 10 days later.</li> <li>Do not inject Aristada Initio and Aristada into the same muscle.</li> <li>Avoid use in CYP2D6 poor metabolizers or those taking strong CYP3A4 inhibitors/inducers or strong CYP2D6 inhibitors.</li> <li>Using Aristada Initio + 30mg aripiprazole + first dose Aristada will reach relevant aripiprazole concentrations within 4 days.</li> <li>Aristada Initio is not interchangeable with Aristada.</li> </ul>
Invega Sustenna (paliperidone palmitate)  ER suspension, single- dose pre-filled syringe  39 mg 78 mg 117 mg 156 mg 234 mg  IM injection: deltoid or gluteal	Schizophrenia in adults (≥ 18 years)  Schizoaffective disorder in adults (≥ 18 years)  BBW: increased mortality in elderly patients with dementia-related psychosis	Day 1: 234 mg IM Day 8: 156 mg IM (+/- 4 days)  Doses on day 1 and day 8 are given in the deltoid, subsequent doses can be given in deltoid or glute)  Missed 2 <sup>nd</sup> dose  • < 4 weeks since day 1, give 156mg IM ASAP, resume regular maintence at 5 weeks from Day 1.  • 4-7 weeks since day 1, give 156mg IM ASAP, 156 mg IM dose 7 days later, wait 28 days and give 117 mg monthly.  • > 7 weeks since day 1, restart for treatment naïve patient (i.e. Day 1 234 mg IM, Day 8 156 mg IM, week 5 117 mg IM.)	Starting 5 weeks after first injection, given monthly (+/- 7 days).  Monthly dose is based on diagnosis, tolerability, and efficacy.  Schizophrenia: range is 39 mg to 234 mg, but recommended dose is 117 mg  Schizoaffective disorder: range is 78 mg to 234 mg  Conversion table  Paliperidone PO  12 mg/day 234 mg/month 9 mg/day 156 mg/month 6 mg/day 117 mg/month 3 mg/day 39-78 mg/month	<ul> <li>Establish tolerability with oral paliperidone or risperidone before initiating Invega Sustenna. Options per clinical trials:         <ul> <li>Paliperidone ER 3 mg/day for ≥2 consecutive days</li> <li>Paliperidone ER 3 mg/day or risperidone 1 mg/day for at least 28 or 3 days</li> <li>Paliperidone ER for 4 days at a dose of 3 mg/day</li> <li>Paliperidone ER 6 mg/day for 4-6 days</li> </ul> </li> <li>Oral AAP should be discontinued with initiation of IM formulation.</li> <li>Alternate deltoid injections.</li> <li>Renal Impairment</li> <ul> <li>CrCl 50 to 80 mL/min dose adjust to Day 1: 156 mg, Day 89 117 mg, and 78 mg for maintenance</li> <li>Not recommended if CrCl &lt; 50 ml/min</li> </ul> <li>Avoid use of Invega Sustenna with strong CYP3A4/P-glycoprotein (P-gp) inducers.</li> <li>Missed maintenance doses of Invega Sustenna         <ul> <li>4 - 6 weeks since last dose, resume ASAP</li> <li>&gt;6 weeks to &lt; 6 months since last dose resume previous dose ASAP (except 234 mg)</li> <li>If stable on 234mg, give 156 mg IM ASAP followed by 156 mg 7 days later, wait 28 days and resume 234 mg IM</li> <li>&gt;6 months since last dose, restart therapy as treatment naïve patient.</li> </ul> </li> <li>Higher Cmax attained following deltoid injection versus gluteal injection. Longer half-life following gluteal injection versus deltoid injection. Recommend gluteal injection for providers requesting q 3 week administration.</li> </ul>

Invega Trinza (paliperidone palmitate)  ER Suspension, single- dose pre-filled syringe  273 mg 410 mg 546 mg 819 mg  IM injection: deltoid or gluteal	Schizophrenia in adults (≥ 18 years)  BBW: increased mortality in elderly patients with dementia-related psychosis	Start Invega Trinza only after ≥4 months of adequate treatment on Invega Sustenna.  PI recommends that the last 2 doses of Invega Sustenna be the same strength before starting Trinza.  Give the first dose of Trinza in place of the next scheduled dose of Invega Sustenna (+/- 7 days).  Dosing based on equivalent 3.5x higher dose.  Conversion Table  Sustenna Trinza		IM dosing every 3 months (+/- 14 days)  Dose adjustments made based on efficacy and tolerability.  Due to long half-life response to dose adjustment may not be apparent for several months.	<ul> <li>Missed doses of Invega Trinza</li> <li>3.5-4 months since last dose, give Trinza ASAP, then resume 3-month dosing schedule.</li> <li>4-9 months since last dose, re-initiate equivalent Invega Sustenna dose on Day 1 and Day 8, then wait 28 days and resume Trinza.</li> <li>&gt;9 months since last dose, re-initiate as treatment naïve for Invega Sustenna. See instructions above. Patient must have ≥4 months of adequate treatment with Sustenna before resuming Trinza.</li> <li>Renal Impairment</li> <li>CrCl 50 to 80 mL/min dose adjust Invega Sustenna and transition to equivalent dose of Trinza.</li> <li>Not recommended if CrCl &lt; 50 ml/min</li> <li>Avoid use of Invega Trinza with strong CYP3A4/P-glycoprotein (P-gp) inducers.</li> </ul>
		78 mg 117 mg 156 mg 234 mg	273 mg 410 mg 546 mg 819 mg	erred Agents	<ul> <li>Oral AAP should be discontinued with initiation of all IM paliperidone formulations.</li> <li>Longer half-life following gluteal injection versus deltoid injection. Recommend gluteal injection for providers requesting administration &lt; every 3 months.</li> </ul>
Invega Hafyera (paliperidone palmitate)  ER Suspension, single- dose pre-filled syringe  1092 mg 1560 mg  IM injection: gluteal	Schizophrenia in adults (≥ 18 years)  BBW: increased mortality in elderly patients with dementia-related psychosis	Start Hafyera only after:  1) trial of Sustenna ≥4 months 2) trial of Trinza for ≥1 3-month cycle  Conversion Table  Sustenna*  156 mg  1092 mg  234 mg  1560 mg  Trinza*  Hafyera  564 mg  1092 mg  819 mg  1560 mg  *other doses not studied for switching.		IM dosing to gluteal muscle every 6 months (-14 days to +21 days)  Dose adjustments made based on efficacy and tolerability.  Due to long half-life response to dose adjustment may not be apparent for several months.	<ul> <li>Invega Hafyera can only be administered to the gluteal muscle.</li> <li>Give the first dose of Hafyera in place of the next scheduled dose of Invega Sustenna (+/- 7 days); the previous 2 doses of Sustenna be the same strength before starting Hafyera.</li> <li>Give the first dose of Hafyera in place of the next scheduled dose of Invega Trinza (+/-14 days)</li> <li>Avoid use of Invega Hafyera with strong CYP3A4/P-glycoprotein (P-gp) inducers.</li> <li>Renal Impairment</li> <li>CrCl 50 to 80 mL/min dose adjust Invega Sustenna and transition to equivalent dose of Trinza.</li> <li>Not recommended if CrCl &lt; 50 ml/min</li> <li>Missed doses of Invega Hafyera</li> <li>6.75-8 months since last dose give Sustenna Day 1 and Invega Hafyera Day 29. Dosing is Sustenna 156 mg for Hafyera 1092 mg or Sustenna 234mg for Hafyear 1560 mg.</li> <li>8-11 months since last dose. Give Sustenna 156mg on Day 1 and Day 8, wait 28 days and give Hafyera 1092 mg</li> </ul>

or 1560 mg.

<b>J</b>			<b>S</b>	>11 months since last dose, do not give Hafyera. Restart as if treatment naïve with Invega Sustenna.
Schizophrenia in adults (≥ 18 years)  Maintenance monotherapy or as adjunct to lithium or valproate for bipolar I in adults (≥ 18 years)  BBW: increased mortality in elderly patients with dementia-related psychosis	Use 25mg dose for most patients  Use 12.5 mg for geriatric patients or those with poor renal/hepatic function, but efficacy has not been studied at this dose.		IM dosing every 2 weeks.  No recommendations on earliest time to next dose.  Dose adjustments made based on efficacy and tolerability.  Wait 4 weeks between each dose escalation.	<ul> <li>Establish tolerability to oral risperidone before initiating with long-acting IM injection.</li> <li>Oral risperidone or another AAP should be given with the first Consta injection and should be continued for 3 weeks of therapy and then discontinued.</li> <li>Clinical effects of dose adjustment should not be expected earlier than 3 weeks after the injection of the higher dose</li> <li>No data for missed doses. Restart Consta with oral rispidone for 3 weeks.</li> <li>Use of concurrent CYP3A4 inducers and CYP2D6 inhibitors will result in altered concentrations of risperidone.</li> </ul>
Schizophrenia in adults (≥ 18 years)  BBW: increased mortality in elderly patients with dementia-related psychosis	May start either dose. See table below for equivalency.  Equivalent Plasma Concentrations Risperidone PO Perseris 3 mg/day 90 mg/month 4 mg/day 120 mg/month		Monthly subcutaneous injection into abdomen.  No recommendations on earliest time to next dose.	<ul> <li>Establish tolerability to oral risperidone. Patients stable on &lt; 3mg/day or higher than 4 mg/day may not be good candidates for Perseris.</li> <li>Do not supplement Perseris with oral risperidone or another AAP.</li> <li>Use of concurrent CYP3A4 inducers and CYP2D6 inhibitors will result in altered concentrations of risperidone.</li> <li>For missed doses of Perseris. give next dose ASAP.</li> <li>Patients with hepatic or renal impairment, must be safely titrated to ≥3 mg/day of risperidone PO before considering Perseris 90 mg.</li> </ul>
Schizophrenia in adults (≥ 18 years)  BBW: Post-injections delirium/sedation syndrome, increased mortality in elderly patients with dementia-related psychosis	conversion table No recommenda to next dose.  Conversion Tab Olanzapine PO 10 mg/day  15 mg/day	be below.  ations on earliest time  le Week 1 - 8  IM  210 mg/2 weeks or 405 mg/4 weeks  300 mg/2 weeks	Maintenance dosing after week 8. No recommendations for missed doses.  Maintenance after week 8 IM  150 mg/ 2 weeks or 300 mg/4 weeks  210 mg/2 weeks or 405 mg/4 weeks 300 mg/2 weeks	<ul> <li>Establish tolerability with oral olanzapine before initiating ER IM injection. No Data for switching from other AAP available.</li> <li>Plasma concentrations after switch to Zyprexa Relprev may require treatment of 3 months to reestablish steady-state conditions.</li> <li>For deep IM gluteal injection only.</li> <li>For debilitated patients, those with predisposition to hypotensive reactions, slow metabolizers of olanzapine, or those pharmacodynamically sensitive to olanzapine the recommended starting dose is 150 mg/4 weeks.</li> <li>Do not confuse the short-acting formulation (Zyprexa IM 10 mg/vial) with the ER suspension Zyprex Relprevv (olanzapine</li> </ul>
	Schizophrenia in adults (≥ 18 years)  Maintenance monotherapy or as adjunct to lithium or valproate for bipolar I in adults (≥ 18 years)  BBW: increased mortality in elderly patients with dementia-related psychosis  Schizophrenia in adults (≥ 18 years)  BBW: increased mortality in elderly patients with dementia-related psychosis  Schizophrenia in adults (≥ 18 years)  Schizophrenia in adults (≥ 18 years)  BBW: Post-injections delirium/sedation syndrome, increased mortality in elderly patients with dementia-related	Schizophrenia in adults (≥ 18 years)  Maintenance monotherapy or as adjunct to lithium or valproate for bipolar I in adults (≥ 18 years)  BBW: increased mortality in elderly patients with dementia-related psychosis  Schizophrenia in adults (≥ 18 years)  BBW: increased mortality in elderly patients with dementia-related psychosis  Schizophrenia in adults (≥ 18 years)  BBW: increased mortality in elderly patients with dementia-related psychosis  Schizophrenia in adults (≥ 18 years)  BBW: Post-injections delirium/sedation syndrome, increased mortality in elderly patients with dementia-related psychosis  Schizophrenia in adults (≥ 18 years)  BBW: Post-injections delirium/sedation syndrome, increased mortality in elderly patients with dementia-related psychosis  Schizophrenia in adults (≥ 18 years)  BBW: Post-injections delirium/sedation syndrome, increased mortality in elderly patients with dementia-related psychosis	Schizophrenia in adults (≥ 18 years)  Maintenance monotherapy or as adjunct to lithium or valproate for bipolar I in adults (≥ 18 years)  BBW: increased mortality in elderly patients with dementia-related psychosis  Schizophrenia in adults (≥ 18 years)  BBW: increased mortality in elderly patients with dementia-related psychosis  Schizophrenia in adults (≥ 18 years)  BBW: increased mortality in elderly patients with dementia-related psychosis  Equivalent Plasma Concentrations  Risperidone PO Perseris  3 mg/day 90 mg/month  4 mg/day 120 mg/month  Schizophrenia in adults (≥ 18 years)  BBW: Post-injections delirium/sedation syndrome, increased mortality in elderly patients with dementia-related psychosis  Dosing for weeks 1 to 8 based on conversion table below. No recommendations on earliest time to next dose.  Conversion Table Week 1 - 8  Olanzapine IM  PO  10 mg/day 210 mg/2 weeks or 405 mg/4 weeks  15 mg/day 300 mg/2 weeks	adults (≥ 18 years)  Maintenance monotherapy or as adjunct to lithium or valproate for bipolar I in adults (≥ 18 years)  BBW: increased mortality in elderly patients with dementia-related psychosis  Schizophrenia in adults (≥ 18 years)  BBW: increased mortality in elderly patients with dementia-related psychosis  Schizophrenia in adults (≥ 18 years)  BBW: increased mortality in elderly patients with dementia-related psychosis  Schizophrenia in adults (≥ 18 years)  BBW: increased mortality in elderly patients with dementia-related psychosis  Schizophrenia in adults (≥ 18 years)  Schizophrenia in adults (≥ 18 years)  BBW: Post-injections delirium/scdations on earliest time to next dose.  Schizophrenia in adults (≥ 18 years)  BBW: Post-injections delirium/scdation syndrome, increased mortality in elderly patients with dementia-related psychosis  Schizophrenia in adults (≥ 18 years)  BBW: Post-injections delirium/scdations on earliest time to next dose.  Schizophrenia in adults (≥ 18 years)  BBW: Post-injections delirium/scdations on earliest time to next dose.  Schizophrenia in adults (≥ 18 years)  BBW: Post-injections delirium/scdations on earliest time to next dose.  Schizophrenia in adults (≥ 18 years)  BBW: Post-injections delirium/scdations on earliest time to next dose.  Schizophrenia in adults (≥ 18 years)  BBW: Post-injections delirium/scdations on earliest time to next dose.  Monthly subcutaneous injection into abdomen.  No recommendations on earliest time to next dose.  Monthly subcutaneous injection into abdomen.  No recommendations on earliest time to next dose.  Monthly subcutaneous injection into abdomen.  No recommendations on earliest time to next dose.  Monthly subcutaneous injection earliest time to next dose.  Monthly subcutaneous injection into abdomen.  No recommendations on earliest time to next dose.  Schizophrenia in adults (≥ 18 years)  Monthly subcutaneous injection earliest time to next dose.  No recommendations on earliest time to next dose.  Monthly subcutaneous injection earliest tim

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			delirium/sedation syndrome; patient must be observed for
			≥3 hours post-injection with Relprevv.

AAP atypical antipsychotics, ER extended-release, FDA United States Food and Drug Administration, IM intramuscular, PO by mouth

- 1. Abilify Maintena. Package insert. Otsuka Pharmaceutical Co., Ltd.; 2020.
- 2. Aristada. Package insert. Alkermes, Inc.; 2020.
- 3. Aristada Initio. Package insert. Alkermes, Inc.; 2020.
- 4. Invega Sustenna. Package insert. Janssen Pharmaceuticals, Inc.; 2021
- 5. Dosing of Invega Sustenna Tolerability Testing. Updated May 5, 2021. <a href="https://www.janssenmd.com/invega-sustenna/dosage-administration/tolerability/dosing-of-invega-sustenna-tolerability-testing">https://www.janssenmd.com/invega-sustenna/dosage-administration/tolerability/dosing-of-invega-sustenna-tolerability-testing</a>. Accessed October 27, 2021.
- 6. Invega Trinza. Package insert. Janssen Pharmaceuticals, Inc.; 2021
- 7. Invega Hafyera. Package insert. Janssen Pharmaceuticals, Inc.; 2021
- 8. Risperdal Consta. Package insert. Janssen Pharmaceuticals, Inc.; 2021
- 9. Perseris. Package insert. Indivior, Inc.; 2019.
- 10. Zyprexa Relprevv. Package insert. Eli Lilly; 2019.

