

## HIGHLIGHTS OF PRESCRIBING INFORMATION

These highlights do not include all the information needed to use REXULTI safely and effectively. See full prescribing information for REXULTI.

REXULTI® (brexpiprazole) tablets, for oral use  
Initial U.S. Approval: 2015

### WARNING: INCREASED MORTALITY IN ELDERLY PATIENTS WITH DEMENTIA-RELATED PSYCHOSIS and SUICIDAL THOUGHTS AND BEHAVIORS

See full prescribing information for complete boxed warning.

- Elderly patients with dementia-related psychosis treated with antipsychotic drugs are at increased risk of death. REXULTI is not approved for the treatment of patients with dementia-related psychosis without agitation associated with dementia due to Alzheimer's disease. (5.1)
- Antidepressants increased the risk of suicidal thoughts and behaviors in pediatric and young adult patients. Closely monitor all antidepressant-treated patients for clinical worsening and emergence of suicidal thoughts and behaviors. Safety and effectiveness of REXULTI have not been established in pediatric patients with MDD. (5.2, 8.4)

### RECENT MAJOR CHANGES

Warnings and Precautions (5.6)

5/2025

### INDICATIONS AND USAGE

REXULTI is an atypical antipsychotic indicated for:

- Use as an adjunctive therapy to antidepressants for the treatment of major depressive disorder (MDD) in adults (1, 14.1)
- Treatment of schizophrenia in adults and pediatric patients ages 13 years and older (1, 14.2)
- Treatment of agitation associated with dementia due to Alzheimer's disease (1, 14.3)

**Limitations of Use:** REXULTI is not indicated as an as needed ("prn") treatment for agitation associated with dementia due to Alzheimer's disease (1)

### DOSAGE AND ADMINISTRATION

Administer REXULTI orally once daily with or without food. (2, 12.3)

Indication	Starting Dosage	Recommended Target Dosage	Maximum Dosage
MDD Adults (2.2)	0.5 mg/day or 1 mg/day	2 mg/day	3 mg/day
Schizophrenia Adults (2.3)	1 mg/day	2 to 4 mg/day	4 mg/day
Schizophrenia Pediatric (13 - 17 years) (2.3)	0.5 mg/day	2 to 4 mg/day	4 mg/day
Agitation associated with dementia due to Alzheimer's disease (2.4)	0.5 mg/day	2 mg/day	3 mg/day

- **Moderate to Severe Hepatic Impairment:** Maximum recommended dosage is 2 mg once daily for patients with MDD or agitation associated with dementia due to Alzheimer's disease and 3 mg once daily for patients with schizophrenia. (2.5)
- **CrCl<60 mL/minute:** Maximum recommended dosage is 2 mg once daily for patients with MDD or agitation associated with dementia due to Alzheimer's disease and 3 mg once daily for patients with schizophrenia. (2.6)
- See Full Prescribing Information for dosage modifications for CYP2D6 poor metabolizers and for concomitant use with CYP inhibitors or inducers. (2.7)

### DOSAGE FORMS AND STRENGTHS

Tablets: 0.25 mg, 0.5 mg, 1 mg, 2 mg, 3 mg, and 4 mg (3)

### CONTRAINDICATIONS

Known hypersensitivity to REXULTI or any of its components (4)

### WARNINGS AND PRECAUTIONS

- **Cerebrovascular Adverse Reactions in Elderly Patients with Dementia-Related Psychosis:** Increased incidence of cerebrovascular adverse reactions (e.g., stroke, transient ischemic attack) (5.3)
- **Neuroleptic Malignant Syndrome:** Manage with immediate discontinuation and close monitoring. (5.4)
- **Tardive Dyskinesia:** Discontinue if clinically appropriate. (5.5)
- **Metabolic Changes:** Monitor for hyperglycemia/diabetes mellitus, dyslipidemia, and weight gain. (5.6)
- **Pathological Gambling and Other Compulsive Behaviors:** Consider dose reduction or discontinuation. (5.7)
- **Leukopenia, Neutropenia, and Agranulocytosis:** Perform complete blood counts (CBC) in patients with pre-existing low white blood cell count (WBC) or history of leukopenia or neutropenia. Consider discontinuing REXULTI if a clinically significant decline in WBC occurs in absence of other causative factors. (5.8)
- **Orthostatic Hypotension and Syncope:** Monitor heart rate and blood pressure and warn patients with known cardiovascular or cerebrovascular disease, and risk of dehydration or syncope. (5.9)
- **Seizures:** Use cautiously in patients with a history of seizures or with conditions that lower the seizure threshold. (5.11)
- **Potential for Cognitive and Motor Impairment:** Use caution when operating machinery. (5.14)

### ADVERSE REACTIONS

Most common adverse reactions in adults were (6.1):

- **Adult patients with major depressive disorder (adjunctive treatment to antidepressant therapy):** Weight increased, somnolence, and akathisia (≥5% and at least twice the rate for placebo)
- **Adult Patients with schizophrenia:** Weight increased (≥4% and at least twice the rate for placebo)
- **Pediatric patients (13 to 17 years) with schizophrenia:** Extrapyramidal symptoms, excluding akathisia (≥5% and at least twice the rate for placebo)
- **Adult patients with agitation associated with dementia due to Alzheimer's disease:** Nasopharyngitis, dizziness (≥4% and at least twice the rate for placebo)

To report SUSPECTED ADVERSE REACTIONS, contact Otsuka America Pharmaceutical, Inc. at 1-800-438-9927 or FDA at 1-800-FDA-1088 or [www.fda.gov/medwatch](http://www.fda.gov/medwatch).

### DRUG INTERACTIONS

Factors	Dosage Adjustments for REXULTI (2.7)
Strong CYP2D6* or CYP3A4 inhibitors	Administer half of recommended dosage.
Strong/moderate CYP2D6 with Strong/moderate CYP3A4 inhibitors	Administer a quarter of the recommended dosage.
Known CYP2D6 poor metabolizers taking strong/moderate CYP3A4 inhibitors	Administer a quarter of the recommended dosage.
Strong CYP3A4 inducers	Double the recommended dosage and further adjust based on clinical response.

\*REXULTI may be administered without dosage adjustment in patients with MDD when administered with strong CYP2D6 inhibitors (e.g., paroxetine, fluoxetine).

### USE IN SPECIFIC POPULATIONS

**Pregnancy:** May cause extrapyramidal and/or withdrawal symptoms in neonates with third trimester exposure (8.1)

See 17 for PATIENT COUNSELING INFORMATION and Medication Guide.

Revised: 5/2025

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## FULL PRESCRIBING INFORMATION

### WARNING: INCREASED MORTALITY IN ELDERLY PATIENTS WITH DEMENTIA-RELATED PSYCHOSIS and SUICIDAL THOUGHTS AND BEHAVIORS

#### **Increased Mortality in Elderly Patients with Dementia-Related Psychosis**

Elderly patients with dementia-related psychosis treated with antipsychotic drugs are at an increased risk of death. REXULTI is not approved for the treatment of patients with dementia-related psychosis without agitation associated with dementia due to Alzheimer's disease [see [Warnings and Precautions \(5.1\)](#)].

#### **Suicidal Thoughts and Behaviors**

Antidepressants increased the risk of suicidal thoughts and behaviors in pediatric patients and young adult patients in short-term studies. Closely monitor all antidepressant-treated patients for clinical worsening, and for emergence of suicidal thoughts and behaviors [see [Warnings and Precautions \(5.2\)](#)]. The safety and effectiveness of REXULTI have not been established in pediatric patients with MDD [see [Warnings and Precautions \(5.2\)](#), [Use in Specific Populations \(8.4\)](#)].

## 1 INDICATIONS AND USAGE

REXULTI is indicated for:

- Adjunctive treatment to antidepressants for major depressive disorder (MDD) in adults
- Treatment of schizophrenia in adults and pediatric patients ages 13 years and older
- Treatment of agitation associated with dementia due to Alzheimer's disease

#### Limitations of Use:

REXULTI is not indicated as an as needed ("prn") treatment for agitation associated with dementia due to Alzheimer's disease [see [Clinical Studies \(14.3\)](#)].

## 2 DOSAGE AND ADMINISTRATION

### 2.1 Administration Information

Administer REXULTI orally, once daily with or without food [see [Clinical Pharmacology \(12.3\)](#)]

### 2.2 Recommended Dosage for Adjunctive Treatment of Major Depressive Disorder (Adults)

The recommended starting REXULTI dosage for the adjunctive treatment of MDD in adults is 0.5 mg or 1 mg orally once daily. Titrate to 1 mg once daily, then titrate to the target dosage of 2 mg once daily (based on the patient's clinical response and tolerability, increase the dosage at weekly intervals). The maximum recommended daily dosage is 3 mg. Periodically reassess to determine the continued need and appropriate dosage for treatment.

### 2.3 Recommended Dosage for Schizophrenia (Adults and Pediatric Patients 13 to 17 Years)

#### Adults

The recommended starting REXULTI dosage for the treatment of schizophrenia in adults is 1 mg orally once daily on Days 1 to 4. Titrate to 2 mg once daily on Day 5 through Day 7. On Day 8, the dosage can be increased to the maximum recommended daily dosage of 4 mg based on clinical response and tolerability. The recommended target dosage is 2 mg to 4 mg once daily.

### Pediatric Patients (13 to 17 years of age)

The recommended starting REXULTI dosage for the treatment of schizophrenia in pediatric patients 13 to 17 years of age is 0.5 mg orally once daily on Days 1 to 4. On Days 5 through 7, titrate to 1 mg per day and on Day 8 titrate to 2 mg based on clinical response and tolerability. Weekly dose increases can be made in 1 mg increments. A recommended target dosage is 2 to 4 mg once daily. The maximum recommended daily dosage is 4 mg.

## **2.4 Recommended Dosage for Agitation Associated with Dementia Due to Alzheimer’s Disease**

The recommended starting REXULTI dosage for the treatment of agitation associated with dementia due to Alzheimer’s disease is 0.5 mg orally once daily on Days 1 to 7. Increase the dosage on Days 8 through 14 to 1 mg once daily, and on Day 15 to 2 mg once daily. The recommended target dose is 2 mg once daily. The dosage can be increased to the maximum recommended daily dosage of 3 mg once daily after at least 14 days, based on clinical response and tolerability.

## **2.5 Recommended Dosage in Patients with Hepatic Impairment**

The maximum recommended dosage in patients with moderate to severe hepatic impairment (Child-Pugh score  $\geq 7$ ) is [see [Use in Specific Populations \(8.7\)](#), [Clinical Pharmacology \(12.3\)](#)].

- 2 mg orally once daily in patients with MDD or agitation associated with dementia due to Alzheimer’s disease, and
- 3 mg orally once daily in patients with schizophrenia

## **2.6 Recommended Dosage in Patients with Renal Impairment**

The maximum recommended dosage in patients with creatinine clearance  $\text{CrCl} < 60$  mL/minute is [see [Use in Specific Populations \(8.8\)](#), [Clinical Pharmacology \(12.3\)](#)].

- 2 mg orally once daily in patients with MDD or agitation associated with dementia due to Alzheimer’s disease and
- 3 mg orally once daily in patients with schizophrenia

## **2.7 Dosage Modifications for CYP2D6 Poor Metabolizers and for Concomitant Use with CYP Inhibitors or Inducers**

Dosage modifications are recommended in patients who are known cytochrome P450 (CYP) 2D6 poor metabolizers and in patients taking concomitant CYP3A4 inhibitors, CYP2D6 inhibitors, or strong CYP3A4 inducers (see Table 1). If the concomitant drug is discontinued, adjust the REXULTI dosage to its original level. If the concomitant CYP3A4 inducer is discontinued, reduce the REXULTI dosage to the original level over 1 to 2 weeks [see [Drug Interactions \(7.1\)](#), [Clinical Pharmacology \(12.3\)](#)].

**Table 1 Dosage Modifications of REXULTI for CYP2D6 Poor Metabolizers and for Concomitant Use with CYP3A4 Inhibitors, CYP2D6 Inhibitors, or CYP3A4 Inducers**

Factors	Adjusted REXULTI Dosage
<b>CYP2D6 Poor Metabolizers</b>	
CYP2D6 poor metabolizers	Administer half of the recommended dosage.
Known CYP2D6 poor metabolizers taking strong/moderate	Administer a quarter of the recommended

**Table 1 Dosage Modifications of REXULTI for CYP2D6 Poor Metabolizers and for Concomitant Use with CYP3A4 Inhibitors, CYP2D6 Inhibitors, or CYP3A4 Inducers**

<b>Factors</b>	<b>Adjusted REXULTI Dosage</b>
CYP3A4 inhibitors	dosage.
<b>Patients Taking CYP2D6 Inhibitors and/or CYP3A4 Inhibitors</b>	
Strong CYP2D6 inhibitors*	Administer half of the recommended dosage.
Strong CYP3A4 inhibitors	Administer half of the recommended dosage.
Strong/moderate CYP2D6 inhibitors with strong/moderate CYP3A4 inhibitors	Administer a quarter of the recommended dosage.
<b>Patients Taking CYP3A4 Inducers</b>	
Strong CYP3A4 inducers	Double the recommended dosage over 1 to 2 weeks.

\*In the clinical studies examining the use of REXULTI for the adjunctive treatment of MDD, dosage was not adjusted for strong CYP2D6 inhibitors (e.g., paroxetine, fluoxetine). Thus, CYP considerations are already factored into general dosing recommendations, and REXULTI may be administered without dosage adjustment in patients with MDD.

### 3 DOSAGE FORMS AND STRENGTHS

REXULTI tablets are available in 6 strengths:

- 0.25 mg tablets are light brown, round, shallow convex, bevel-edged body with “BRX” and “0.25” imprinted on one side.
- 0.5 mg tablets: are light orange, round, shallow convex, bevel-edged body with “BRX” and “0.5” imprinted on one side.
- 1 mg tablets are light yellow, round, shallow convex, bevel-edged body with “BRX” and “1” imprinted on one side.
- 2 mg tablets are light green, round, shallow convex, bevel-edged body with “BRX” and “2” imprinted on one side.
- 3 mg tablets are light purple, round, shallow convex, bevel-edged body with “BRX” and “3” imprinted on one side.
- 4 mg tablets are white, round, shallow convex, bevel-edged body with “BRX” and “4” imprinted on one side.

### 4 CONTRAINDICATIONS

REXULTI is contraindicated in patients with a known hypersensitivity to brexpiprazole or any of its components. Reactions have included rash, facial swelling, urticaria, and anaphylaxis.

### 5 WARNINGS AND PRECAUTIONS

#### 5.1 Increased Mortality in Elderly Patients with Dementia-Related Psychosis

Elderly patients with dementia-related psychosis treated with antipsychotic drugs are at an increased risk of death. Analyses of 17 placebo-controlled trials (modal duration of 10 weeks), largely in patients taking atypical antipsychotic drugs, revealed a risk of death in drug-treated patients of between 1.6 to 1.7 times the risk of death in placebo-treated patients. Over the course of a typical 10-week controlled trial, the rate of death in the drug-treated patients was about 4.5%, compared to a rate of about 2.6% in the placebo group.

Although the causes of death were varied, most of the deaths appeared to be either cardiovascular (e.g., heart failure, sudden death) or infectious (e.g., pneumonia) in nature. REXULTI is not approved for the treatment of patients with dementia-related psychosis without agitation associated with dementia due to Alzheimer's disease [see [Boxed Warning](#), [Warnings and Precautions \(5.3\)](#)].

## 5.2 Suicidal Thoughts and Behaviors in Children, Adolescents, and Young Adults

In pooled analyses of placebo-controlled trials of antidepressant drugs (SSRIs and other antidepressant classes) that included approximately 77,000 adult patients and over 4,400 pediatric patients, the incidence of suicidal thoughts and behaviors in patients 24 years of age and younger was greater in antidepressant-treated patients than in placebo-treated patients. The drug-placebo differences in the number of cases of suicidal thoughts and behaviors per 1,000 patients treated are provided in Table 2.

No suicides occurred in any of the pediatric studies. There were suicides in the adult studies, but the number was not sufficient to reach any conclusion about antidepressant drug effect on suicide.

**Table 2 Risk Differences of the Number of Patients with Suicidal Thoughts or Behaviors in the Pooled Placebo-Controlled Trials of Antidepressants in Pediatric\* and Adult Patients**

Age Range (years)	Drug-Placebo Difference in Number of Patients with Suicidal Thoughts or Behaviors per 1,000 Patients Treated
	<b>Increases Compared to Placebo</b>
<18	14 additional patients
18 to 24	5 additional patients
	<b>Decreases Compared to Placebo</b>
25 to 64	1 fewer patient
≥65	6 fewer patients

\*REXULTI is not approved in pediatric patients with MDD.

It is unknown whether the risk of suicidal thoughts and behaviors in children, adolescents, and young adults extends to longer-term use, i.e., beyond four months. However, there is substantial evidence from placebo-controlled maintenance studies in adults with MDD that antidepressants delay the recurrence of depression.

Monitor all antidepressant-treated patients for clinical worsening and emergence of suicidal thoughts and behaviors, especially during the initial few months of drug therapy and at times of dosage changes. Counsel family members or caregivers of patients to monitor for changes in behavior and to alert the healthcare provider. Consider changing the therapeutic regimen, including possibly discontinuing REXULTI, in patients whose depression is persistently worse or who are experiencing emergent suicidal thoughts or behaviors.

## 5.3 Cerebrovascular Adverse Reactions Including Stroke in Elderly Patients with Dementia-Related Psychosis

In placebo-controlled trials in elderly patients with dementia, patients randomized to risperidone, aripiprazole, and olanzapine had a higher incidence of stroke and transient ischemic attack, including fatal stroke. REXULTI is not approved for the treatment of patients with dementia-related psychosis without agitation associated with dementia due to Alzheimer's disease [see [Boxed Warning](#), [Warnings and Precautions \(5.1\)](#)].

## 5.4 Neuroleptic Malignant Syndrome (NMS)

Neuroleptic Malignant Syndrome (NMS), a potentially fatal symptom complex, has been reported in association with administration of antipsychotic drugs, including REXULTI.

Clinical manifestations of NMS are hyperpyrexia, muscle rigidity, altered mental status, and evidence of autonomic instability (irregular pulse or blood pressure, tachycardia, diaphoresis and cardiac dysrhythmia). Additional signs may include elevated creatinine phosphokinase, myoglobinuria (rhabdomyolysis), and acute renal failure.

If NMS is suspected, immediately discontinue REXULTI and provide intensive symptomatic treatment and monitoring.

## **5.5 Tardive Dyskinesia**

Tardive dyskinesia, a syndrome consisting of potentially irreversible, involuntary, dyskinetic movements, may develop in patients treated with antipsychotic drugs. The risk appears to be highest among the elderly, especially elderly women, but it is impossible to predict which patients will develop the syndrome. Whether antipsychotic drugs differ in their potential to cause tardive dyskinesia is unknown.

The risk of tardive dyskinesia and the likelihood that it will become irreversible appear to increase as the duration of treatment and the cumulative dose increases. The syndrome can develop after relatively brief treatment periods, at low doses. It may also occur after discontinuation of treatment.

Tardive dyskinesia may remit, partially or completely, if antipsychotic treatment is discontinued. Antipsychotic treatment itself may suppress (or partially suppress) the signs and symptoms of the syndrome, possibly masking the underlying process. The effect that symptomatic suppression has upon the long-term course of tardive dyskinesia is unknown.

Given these considerations, REXULTI should be prescribed in a manner most likely to reduce the occurrence of tardive dyskinesia. Chronic antipsychotic treatment should generally be reserved for patients who suffer from a chronic illness that 1) is known to respond to antipsychotic drugs and 2) for whom alternative, equally effective, but potentially less harmful treatments are not available or appropriate. In patients who do require chronic treatment, use the lowest dose and the shortest duration of treatment needed to produce a satisfactory clinical response. Periodically reassess the need for continued treatment.

If signs and symptoms of tardive dyskinesia appear in a patient treated with REXULTI, drug discontinuation should be considered. However, some patients may require treatment with REXULTI despite the presence of the syndrome.

## **5.6 Metabolic Changes**

Atypical antipsychotic drugs, including REXULTI, have caused metabolic changes including hyperglycemia, diabetes mellitus, dyslipidemia, and body weight gain. Although all of the drugs in the class to date have been shown to produce some metabolic changes, each drug has its own specific risk profile.

### Hyperglycemia/Diabetes Mellitus

Hyperglycemia and diabetes mellitus, in some cases extreme and associated with diabetic ketoacidosis hyperosmolar coma or death, have been reported in patients treated with atypical antipsychotics. There have been reports of hyperglycemia in patients treated with REXULTI. Assess fasting plasma glucose before or soon after initiation of antipsychotic medication and monitor periodically during long-term treatment.

### *Adjunctive Treatment of Major Depressive Disorder*

In the 6-week placebo-controlled, fixed-dose clinical studies in adult patients with MDD, the proportions of patients with shifts in fasting glucose from normal (<100 mg/dL) to high ( $\geq 126$  mg/dL) and borderline ( $\geq 100$  and <126 mg/dL) to high were similar in patients treated with REXULTI and placebo. In the long-term, open-label depression studies, 5% of adult patients with normal baseline fasting glucose experienced a shift to high while taking REXULTI plus an antidepressant (ADT); 25% of patients with borderline fasting glucose experienced shifts to high. Combined, 9% of patients with normal or borderline fasting glucose experienced shifts to high fasting glucose during the long-term depression studies.

### *Schizophrenia (Adults)*

In the 6-week placebo-controlled, fixed-dose clinical studies in adult patients with schizophrenia, the proportions of patients with shifts in fasting glucose from normal (<100 mg/dL) to high ( $\geq 126$  mg/dL) or borderline ( $\geq 100$  and <126 mg/dL) to high were similar in patients treated with REXULTI and placebo. In the long-term, open-label schizophrenia studies, 8% of adult patients with normal baseline fasting glucose experienced a shift from normal to high while taking REXULTI; 17% of patients with borderline fasting glucose experienced shifts from borderline to high. Combined, 10% of patients with normal or borderline fasting glucose experienced shifts to high fasting glucose during the long-term schizophrenia studies.

### *Schizophrenia Pediatric Patients (13 to 17 years of age)*

In a 6-week, placebo-controlled study in pediatric patients with schizophrenia, the proportion of patients with shifts in fasting glucose from normal (<100 mg/dL) to high ( $\geq 126$  mg/dL) or borderline ( $\geq 100$  and <126 mg/dL) to high were similar in patients treated with REXULTI and placebo. In this study, 1.1% of pediatric patients with normal baseline fasting glucose experienced a shift from normal (<100 mg/dL) to high ( $\geq 126$  mg/dL) while taking REXULTI.

In the long-term, open-label study in pediatric patients with schizophrenia, 2.7% of pediatric patients with normal baseline fasting glucose experienced a shift from normal (<100 mg/dL) to high ( $\geq 126$  mg/dL) while taking REXULTI.

### *Agitation Associated with Dementia Due to Alzheimer's Disease*

In the 12-week placebo-controlled, fixed-dose studies in patients (51 to 90 years of age) with agitation associated with dementia due to Alzheimer's disease, the proportions of patients with shifts in fasting glucose from normal (<100 mg/dL) to high ( $\geq 126$  mg/dL) or impaired ( $\geq 100$  and <126 mg/dL) to high were similar in patients treated with REXULTI (14%) and patients treated with placebo (16%).

Of the patients who were previously treated with REXULTI for 12-weeks and continued into a 12-week, active-treatment extension study, 15% of patients with normal baseline fasting glucose experienced a shift from normal (<100 mg/dL) to high ( $\geq 126$  mg/dL) fasting glucose while taking REXULTI; 30% of patients with impaired fasting glucose experienced shifts from impaired fasting glucose ( $\geq 100$  and <126 mg/dL) to high fasting glucose. Combined, 20% of patients with normal or impaired fasting glucose experienced shifts to high fasting glucose.

### Dyslipidemia

Atypical antipsychotics cause adverse alterations in lipids. Before or soon after initiation of antipsychotic medication, obtain a fasting lipid profile at baseline and monitor periodically during treatment.

### Adjunctive Treatment of Major Depressive Disorder

In the 6-week placebo-controlled, fixed-dose clinical studies in adult patients with MDD, changes in fasting total cholesterol, LDL cholesterol, and HDL cholesterol were similar in REXULTI- and placebo-treated patients. Table 3 shows the proportions of patients with changes in fasting triglycerides.

**Table 3 Change in Fasting Triglycerides in the 6-Week Placebo-Controlled, Fixed-Dose MDD Studies**

<i>Proportion of Patients with Shifts Baseline to Post-Baseline</i>				
<b>Triglycerides</b>	<b>Placebo</b>	<b>1 mg/day</b>	<b>2 mg/day</b>	<b>3 mg/day</b>
<b>Normal to High</b> (<150 mg/dL to ≥200 and <500 mg/dL)	6% (15/257)*	5% (7/145)*	13% (15/115)*	9% (13/150)*
<b>Normal/Borderline to Very High</b> (<200 mg/dL to ≥500 mg/dL)	0% (0/309)*	0% (0/177)*	0.7% (1/143)*	0% (0/179)*

\*denotes n/N where N=the total number of patients who had a measurement at baseline and at least one post-baseline result;n=the number of patients with shift

In the long-term, open-label depression studies, shifts in baseline fasting cholesterol from normal to high were reported in 9% (total cholesterol), 3% (LDL cholesterol), and shifts in baseline from normal to low were reported in 14% (HDL cholesterol) of patients taking REXULTI. Of patients with normal baseline triglycerides, 17% experienced shifts to high, and 0.2% experienced shifts to very high. Combined, 0.6% of patients with normal or borderline fasting triglycerides experienced shifts to very high fasting triglycerides during the long-term depression studies.

### Schizophrenia (Adults)

In the 6-week placebo-controlled, fixed-dose clinical studies in adult patients with schizophrenia, changes in fasting total cholesterol, LDL cholesterol, and HDL cholesterol were similar in REXULTI- and placebo-treated patients. Table 4 shows the proportions of patients with changes in fasting triglycerides.

**Table 4 Change in Fasting Triglycerides in the 6-Week Placebo-Controlled, Fixed-Dose Schizophrenia Studies in Adult Patients**

<i>Proportion of Patients with Shifts Baseline to Post-Baseline</i>				
<b>Triglycerides</b>	<b>Placebo</b>	<b>1 mg/day</b>	<b>2 mg/day</b>	<b>4 mg/day</b>
<b>Normal to High</b> (<150 mg/dL to ≥200 and <500 mg/dL)	6% (15/253)*	10% (7/72)*	8% (19/232)*	10% (22/226)*
<b>Normal/Borderline to Very High</b> (<200 mg/dL to ≥500 mg/dL)	0% (0/303)*	0% (0/94)*	0% (0/283)*	0.4% (1/283)*

\*denotes n/N where N=the total number of patients who had a measurement at baseline and at least one post-baseline result;n=the number of patients with shift

In the long-term, open-label schizophrenia studies in adult patients, shifts in baseline fasting cholesterol from normal to high were reported in 6% (total cholesterol), 2% (LDL cholesterol), and shifts in baseline from normal to low were reported in 17% (HDL cholesterol) of patients taking REXULTI. Of patients with normal baseline triglycerides, 13% experienced shifts to high, and 0.4% experienced shifts to very high triglycerides. Combined, 0.6% of patients with normal or borderline fasting triglycerides experienced shifts to very high fasting triglycerides during the long-term schizophrenia studies.

### Schizophrenia [Pediatric Patients (13 to 17 years of age)]

The safety and efficacy of REXULTI have not been established in patients under the age of 13 years. In a 6-week, placebo-controlled study in pediatric patients with schizophrenia, no clinically meaningful changes in

fasting cholesterol, LDL cholesterol, HDL cholesterol, and triglycerides were observed between the REXULTI and placebo groups.

In the long-term, open-label study in pediatric patients with schizophrenia, shifts in baseline fasting total cholesterol from normal to high (<170 to ≥200 mg/dL) were reported in 7% of patients taking REXULTI, and shifts in baseline HDL cholesterol from normal to low (>45 to <40 mg/dL) were reported in 10% of patients taking REXULTI. Of patients with normal baseline triglycerides, 15% experienced shifts from normal to high (<90 to ≥130 mg/dL).

#### *Agitation Associated with Dementia Due to Alzheimer's Disease*

In the 12-week placebo-controlled, fixed-dose clinical studies in patients (55 to 90 years of age) with agitation associated with dementia due to Alzheimer's disease, changes in total cholesterol, LDL cholesterol, and HDL cholesterol were similar in REXULTI- and placebo-treated patients.

Table 5 shows the proportions of patients with changes in fasting triglycerides in REXULTI- and placebo-treated patients.

<b>Table 5 Change in Fasting Triglycerides in the 12-Week Placebo-Controlled, Fixed-Dose Agitation Associated with Dementia Due to Alzheimer's Disease Studies</b>				
<i>Proportion of Patients with Shifts Baseline to Post-Baseline</i>				
Triglycerides	Placebo	1 mg/day	2 mg/day	3 mg/day
<i>Normal to High</i> (<150 and 200 to <500 mg/dL)	6% (10/157)*	9% (9/99)*	13% (17/133)*	6% (6/94)*
<i>Borderline to High</i> (150 and <200mg/dL to 200 and <500 mg/dL)	12% (3/26)*	33% (2/6)*	28% (7/25)*	26% (6/23)*
<i>Normal/Borderline to High</i> (<200 mg/dL to 200 and <500 mg/dL)	7% (13/183)*	11% (11/105)*	15% (24/158)*	10% (12/117)*

\*denotes n/N where N=the total number of patients who had a measurement at baseline and at least one post-baseline result;n=the number of patients with shift

Of the patients who were previously treated with REXULTI for 12 weeks and continued into a 12-week, active-treatment extension study, 9% of patients taking REXULTI showed shifts in baseline fasting total cholesterol from normal (<200 mg/dL) to high (≥240 mg/dL), and 16% of patients taking REXULTI showed shifts in baseline HDL cholesterol from normal to low (≥40 to <40 mg/dL). Of the patients with normal baseline triglycerides, 18% experienced shifts from normal (<150 mg/dL) to high (200 to <500 mg/dL).

#### Weight Gain

Weight gain has been observed in patients treated with atypical antipsychotics, including REXULTI. Monitor weight at baseline and frequently thereafter.

Adjunctive Treatment of Major Depressive Disorder: Table 6 shows weight gain data at last visit and percentage of adult patients with ≥7% increase in body weight at endpoint from the 6-week placebo-controlled, fixed-dose clinical studies in patients with MDD.

**Table 6 Increases in Body Weight in the 6-Week Placebo-Controlled, Fixed-Dose MDD Studies**

	Placebo	1 mg/day	2 mg/day	3 mg/day
	n=407	n=225	n=187	n=228

**Table 6 Increases in Body Weight in the 6-Week Placebo-Controlled, Fixed-Dose MDD Studies**

<i>Mean Change from Baseline (kg) at Last Visit</i>				
<b>All Patients</b>	+0.3	+1.3	+1.6	+1.6
<i>Proportion of Patients with a ≥7% Increase in Body Weight (kg) at Any Visit (n/N*)</i>				
	2%	5%	5%	2%
	(8/407)*	(11/225)*	(9/187)*	(5/228)*

\*N=the total number of patients who had a measurement at baseline and at least one post-baseline result;n=the number of patients with a shift ≥7%

In the long-term, open-label depression studies, 4% of patients discontinued due to weight increase. REXULTI was associated with mean change from baseline in weight of 2.9 kg at Week 26 and 3.1 kg at Week 52. In the long-term, open-label depression studies, 30% of patients demonstrated a ≥7% increase in body weight, and 4% demonstrated a ≥7% decrease in body weight.

### *Schizophrenia (Adults)*

Table 7 shows weight gain data at last visit and percentage of adult patients with ≥7% increase in body weight at endpoint from the 6-week placebo-controlled, fixed-dose clinical studies in adult patients with schizophrenia.

**Table 7 Increases in Body Weight in the 6-Week Placebo-Controlled, Fixed-Dose Schizophrenia Studies in Adult Patients**

	<b>Placebo</b>	<b>1 mg/day</b>	<b>2 mg/day</b>	<b>4 mg/day</b>
	<b>n=362</b>	<b>n=120</b>	<b>n=362</b>	<b>n=362</b>
<i>Mean Change from Baseline (kg) at Last Visit</i>				
<b>All Patients</b>	+0.2	+1.0	+1.2	+1.2
<i>Proportion of Patients with a ≥7% Increase in Body Weight (kg) at Any Visit (*n/N)</i>				
	4%	10%	11%	10%
	(15/362)*	(12/120)*	(38/362)*	(37/362)*

\*denotes n/N where N=the total number of patients who had a measurement at baseline and at least one post-baseline result;n=the number of patients with a shift ≥7%

In the long-term, open-label schizophrenia studies in adult patients, 0.6% of patients discontinued due to weight increase. REXULTI was associated with mean change from baseline in weight of 1.3 kg at Week 26 and 2.0 kg at Week 52. In the long-term, open label schizophrenia studies, 20% of patients demonstrated a ≥7% increase in body weight, and 10% demonstrated a ≥7% decrease in body weight.

### *Schizophrenia [Pediatric Patients (13 to 17 years of age)]*

In a 6-week, placebo-controlled study in pediatric patients with schizophrenia, no patients discontinued due to weight increase. The mean increase in weight from baseline to last visit was 0.8 kg in the REXULTI group and no changes were seen in the placebo groups. The percentage of pediatric patients demonstrating a ≥7% increase in body weight was 8.2% in the REXULTI group and 4.9% in the placebo group.

In the long-term, open label study in pediatric patients with schizophrenia, 0.5% of patients discontinued due to weight increase. The mean increase in weight from the open-label study baseline to last visit was 3.8 kg. To adjust for normal growth, z-scores were derived (measured in standard deviations [SD]), which normalize for natural growth of children and adolescents by comparisons to age- and gender- matched population standards. A z-score change <0.5 SD is considered not clinically significant. In this study, the mean change in z-score from open-label baseline to last visit was 0.10 SD for body weight, while 20% of patients had an increase in

age-and-gender-adjusted body weight z-score of at least 0.5 SD from baseline. When treating pediatric, weight gain should be monitored and assessed against that expected for normal growth.

#### *Agitation Associated with Dementia Due to Alzheimer's Disease*

In the 12-week placebo-controlled, fixed-dose clinical studies in patients (51 to 90 years of age) with agitation associated with dementia due to Alzheimer's disease, the proportion of the patients with a  $\geq 7\%$  increase in body weight (kg) at any visit were 2% in REXULTI compared to 0% in placebo group.

In patients who were previously treated with REXULTI for 12 weeks and who continued into a 12-week, active-treatment extension study, there was no mean change in weight (kg) from baseline to last visit in association with REXULTI. In this extension study, 4% of patients demonstrated  $\geq 7\%$  increase in body weight, and 5% demonstrated a  $\geq 7\%$  decrease in body weight from baseline to last visit.

### **5.7 Pathological Gambling and Other Compulsive Behaviors**

Post-marketing case reports suggest that patients can experience intense urges, particularly for gambling, and the inability to control these urges while taking REXULTI. Other compulsive urges, reported less frequently, include sexual urges, shopping, eating, or binge eating, and other impulsive or compulsive behaviors. Because patients may not recognize these behaviors as abnormal, it is important for prescribers to ask patients or their caregivers specifically about the development of new or intense gambling urges, compulsive sexual urges, compulsive shopping, binge or compulsive eating, or other urges while being treated with REXULTI. In some cases, although not all, urges were reported to have stopped when the dose was reduced, or the medication was discontinued. Compulsive behaviors may result in harm to the patient and others if not recognized. Consider dose reduction or stopping the medication if a patient develops such urges.

### **5.8 Leukopenia, Neutropenia, and Agranulocytosis**

Leukopenia and neutropenia have been reported during treatment with antipsychotic agents. Agranulocytosis (including fatal cases) has been reported with other agents in this class.

Possible risk factors for leukopenia and neutropenia include pre-existing low white blood cell count (WBC) or absolute neutrophil count (ANC) and history of drug-induced leukopenia or neutropenia. In patients with a pre-existing low WBC or ANC or a history of drug-induced leukopenia or neutropenia, perform a complete blood count (CBC) frequently during the first few months of therapy. In such patients, consider discontinuation of REXULTI at the first sign of a clinically significant decline in WBC in the absence of other causative factors.

Monitor patients with clinically significant neutropenia for fever or other symptoms or signs of infection and treat promptly if such symptoms or signs occur. Discontinue REXULTI in patients with absolute neutrophil count  $< 1000/\text{mm}^3$  and follow their WBC until recovery.

### **5.9 Orthostatic Hypotension and Syncope**

Atypical antipsychotics cause orthostatic hypotension and syncope. Generally, the risk is greatest during initial dose titration and when increasing the dose. In the short-term, placebo-controlled clinical studies of REXULTI plus ADT in adult patients with MDD, the incidence of orthostatic hypotension-related adverse reactions in REXULTI plus ADT-treated patients compared to placebo plus ADT-treated patients included: dizziness (2% versus 2%) and orthostatic hypotension (0.1% versus 0%). In the short-term, placebo-controlled clinical studies of REXULTI in adult patients with schizophrenia, the incidence of orthostatic hypotension-related adverse reactions in REXULTI-treated patients compared to placebo patients included: dizziness (2% versus 2%), orthostatic hypotension (0.4% versus 0.2%), and syncope (0.1% versus 0%). In 12-week, placebo-

controlled clinical studies of REXULTI in patients with agitation associated with dementia due to Alzheimer's disease, the incidence of orthostatic hypotension-related adverse reactions in patients treated with REXULTI compared to patients treated with placebo included: dizziness (3% versus 3%), orthostatic hypotension (1% versus 1%), and syncope (0.2% versus 0.8%).

Orthostatic vital signs should be monitored in patients who are vulnerable to hypotension (e.g., elderly patients, patients with dehydration, hypovolemia, concomitant treatment with antihypertensive medication), patients with known cardiovascular disease (history of myocardial infarction, ischemic heart disease, heart failure, or conduction abnormalities), and patients with cerebrovascular disease. REXULTI has not been evaluated in patients with a recent history of myocardial infarction or unstable cardiovascular disease. Such patients were excluded from the premarketing clinical studies.

### **5.10 Falls**

Antipsychotics, including REXULTI, may cause somnolence, postural hypotension, motor, and sensory instability, which may lead to falls and, consequently, fractures or other injuries. For patients with diseases, conditions, or medications that could exacerbate these effects, complete fall risk assessments when initiating antipsychotic treatment and recurrently for patients on long-term antipsychotic treatment.

### **5.11 Seizures**

Like other antipsychotic drugs, REXULTI may cause seizures. This risk is greatest in patients with a history of seizures or with conditions that lower the seizure threshold. Conditions that lower the seizure threshold may be more prevalent in older patients.

### **5.12 Body Temperature Dysregulation**

Atypical antipsychotics may disrupt the body's ability to reduce core body temperature. Strenuous exercise, exposure to extreme heat, dehydration, and anticholinergic medications may contribute to an elevation in core body temperature; use REXULTI with caution in patients who may experience these conditions.

### **5.13 Dysphagia**

Esophageal dysmotility and aspiration have been associated with antipsychotic drug use. Antipsychotic drugs, including REXULTI, should be used cautiously in patients at risk for aspiration.

### **5.14 Potential for Cognitive and Motor Impairment**

REXULTI, like other antipsychotics, may cause somnolence and has the potential to impair judgment, thinking, or motor skills. In the 6-week placebo-controlled clinical studies in patients with MDD, somnolence (including sedation and hypersomnia) was reported in 4% of REXULTI plus ADT-treated patients compared to 1% of placebo plus ADT-treated patients.

In the 6-week placebo-controlled clinical studies in adult patients with schizophrenia, somnolence (including sedation and hypersomnia) was reported in 5% of REXULTI-treated patients compared to 3% of placebo-treated patients.

In the 12-week placebo-controlled, fixed-dose clinical studies in patients (51 to 90 years of age) with agitation associated with dementia due to Alzheimer's disease, somnolence (including sedation) was reported in 3% of patients treated with REXULTI compared to 1% of patients treated with placebo.

Patients should be cautioned about operating hazardous machinery, including motor vehicles, until they are reasonably certain that REXULTI therapy does not affect them adversely.

## 6 ADVERSE REACTIONS

The following adverse reactions are discussed in more detail in other sections of the labeling:

- Increased Mortality in Elderly Patients with Dementia-Related Psychosis [see [Boxed Warning, Warnings and Precautions \(5.1\)](#)]
- Suicidal Thoughts and Behaviors in Adolescents and Young Adults [see [Boxed Warning, Warnings and Precautions \(5.2\)](#)]
- Cerebrovascular Adverse Reactions Including Stroke in Elderly Patients with Dementia-Related Psychosis [see [Warnings and Precautions \(5.3\)](#)]
- Neuroleptic Malignant Syndrome (NMS) [see [Warnings and Precautions \(5.4\)](#)]
- Tardive Dyskinesia [see [Warnings and Precautions \(5.5\)](#)]
- Metabolic Changes [see [Warnings and Precautions \(5.6\)](#)]
- Pathological Gambling and Other Compulsive Behaviors [see [Warnings and Precautions \(5.7\)](#)]
- Leukopenia, Neutropenia, and Agranulocytosis [see [Warnings and Precautions \(5.8\)](#)]
- Orthostatic Hypotension and Syncope [see [Warnings and Precautions \(5.9\)](#)]
- Falls [see [Warnings and Precautions \(5.10\)](#)]
- Seizures [see [Warnings and Precautions \(5.11\)](#)]
- Body Temperature Dysregulation [see [Warnings and Precautions \(5.12\)](#)]
- Dysphagia [see [Warnings and Precautions \(5.13\)](#)]
- Potential for Cognitive and Motor Impairment [see [Warnings and Precautions \(5.14\)](#)]

### 6.1 Clinical Trials Experience

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in clinical practice.

The most common adverse reactions in adult patients in clinical trials ( $\geq 5\%$ ) were weight increased, akathisia, headache, somnolence, and insomnia.

The most common adverse reactions in pediatric patients in clinical trials ( $\geq 5\%$ ) were weight increased, somnolence, headache, akathisia, and nasopharyngitis.

Brexpiprazole has been evaluated for safety in 12,550 adult patients who participated in multiple-dose clinical trials for major depressive disorder, schizophrenia, agitation associated with dementia due to Alzheimer's disease, attention deficit hyperactivity disorder (ADHD), post-traumatic stress disorder (PTSD), bipolar mania, and borderline personality disorder (BPD). Among them, 3,870 patients were treated with brexpiprazole for at least 180 days, and 1,910 patients were treated for at least one year of exposure.

Additionally, brexpiprazole has been evaluated for safety in 119 pediatric patients who participated in short-term trials, and 314 patients in long-term multiple-dose clinical trials for pediatric schizophrenia and autism spectrum disorders (ASD).

## Adjunctive Treatment in Major Depressive Disorder (MDD)

The safety of REXULTI was evaluated in 1054 adult patients (18 to 65 years of age) diagnosed with MDD who participated in two 6-week placebo-controlled, fixed-dose clinical studies in patients with major depressive disorder in which REXULTI was administered at doses of 1 mg to 3 mg daily as adjunctive treatment to continued antidepressant therapy; patients in the placebo group continued to receive antidepressant therapy [see [Clinical Studies \(14.1\)](#)].

### Adverse Reactions Reported as Reasons for Discontinuation of Treatment

A total of 3% (17/643) of REXULTI-treated patients and 1% (3/411) of placebo-treated patients discontinued due to adverse reactions.

### Adverse Reactions in REXULTI Studies for Adjunctive MDD in Adults

Adverse reactions associated with the adjunctive use of REXULTI (incidence of 2% or greater and adjunctive REXULTI incidence greater than adjunctive placebo) that occurred during acute therapy (up to 6-weeks in patients with MDD) are shown in Table 8.

**Table 8 Adverse Reactions in ≥2% of REXULTI-Treated Patients and Greater than Placebo in Pooled 6-Week Placebo-Controlled, Fixed-Dose Adjunctive MDD Studies in Adults (Study 1 and Study 2)**

	Placebo (N=411) %	REXULTI				All REXULTI (N=643) %
		1 mg/day (N=226) %	2 mg/day (N=188) %	3 mg/day (N=229) %		
<b>Gastrointestinal Disorders</b>						
Constipation	1	3	2	1	2	
<b>General Disorders and Administration Site Conditions</b>						
Fatigue	2	3	2	5	3	
<b>Infections and Infestations</b>						
Nasopharyngitis	2	7	1	3	4	
<b>Investigations</b>						
Weight Increased	2	7	8	6	7	
Blood Cortisol Decreased	1	4	0	3	2	
<b>Metabolism and Nutrition</b>						
Increased Appetite	2	3	3	2	3	
<b>Nervous System Disorders</b>						
Akathisia	2	4	7	14	9	
Headache	6	9	4	6	7	
Somnolence	0.5	4	4	6	5	
Tremor	2	4	2	5	4	
Dizziness	1	1	5	2	3	
<b>Psychiatric Disorders</b>						
Anxiety	1	2	4	4	3	

Restlessness	0	2	3	4	3
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*Dose-Related Adverse Reactions in the Adjunctive MDD Studies*

In Studies 1 and 2, among the adverse reactions that occurred at  $\geq 2\%$  incidence in the patients treated with REXULTI plus ADT, the incidences of akathisia and restlessness increased with increases in dose.

Schizophrenia

Adults

The safety of REXULTI was evaluated in 852 adult patients (18 to 65 years of age) diagnosed with schizophrenia who participated in two 6-week placebo-controlled, fixed-dose clinical studies in which REXULTI was administered at daily doses of 1 mg, 2 mg, and 4 mg [see [Clinical Studies \(14.2\)](#)].

*Adverse Reactions Occurring at an Incidence of 2% or More in Patients Treated with REXULTI for Schizophrenia*

Adverse reactions associated with REXULTI (incidence of 2% or greater and REXULTI incidence greater than placebo) during short-term (up to 6 weeks) studies in adult patients with schizophrenia are shown in Table 9.

**Table 9 Adverse Reactions in  $\geq 2\%$  of REXULTI-Treated Patients and Greater than Placebo in Pooled 6-Week Placebo-Controlled, Fixed-Dose Schizophrenia Studies in Adult Patients (Study 3 and Study 4)**

	Placebo (N=368) %	REXULTI				ALL REXULTI (N=852) %
		1 mg/day (N=120) %	2 mg/day (N=368) %	4 mg/day (N=364) %		
<b>Gastrointestinal Disorders</b>						
Dyspepsia	2	6	2	3	3	
Diarrhea	2	1	3	3	3	
<b>Investigations</b>						
Weight Increased	2	3	4	4	4	
Blood Creatinine Phosphokinase Increased	1	4	2	2	2	
<b>Nervous System Disorders</b>						
Akathisia	5	4	5	7	6	
Tremor	1	2	2	3	3	
Sedation	1	2	2	3	2	

Pediatric Patients (13 to 17 years of age)]

The safety of REXULTI was evaluated in 110 pediatric patients (13 to 17 years of age) diagnosed with schizophrenia who participated in a 6-week, placebo-controlled, clinical study in which REXULTI was administered at daily doses of 2 mg to 4 mg [see [Clinical Studies \(14.2\)](#)].

*Adverse Reactions Occurring at an Incidence of 2% or More in Pediatric Patients (13 to 17 years of age) Treated with REXULTI for Schizophrenia*

Adverse reactions associated with REXULTI (incidence of 2% or greater and REXULTI incidence greater than placebo) during short-term (up to 6 weeks) study in pediatric patients with schizophrenia are shown in Table 10.

**Table 10 Adverse Reactions in  $\geq 2\%$  of REXULTI-Treated Patients and Greater than Placebo in 6-Week Placebo- and Active Controlled, Schizophrenia Study in Pediatric Patients 13 to 17 years of age (Study 5)**

	Placebo (N=104) %	REXULTI (N=110) %
<b>Gastrointestinal Disorders</b>		
Nausea	4	6
<b>Nervous System Disorders</b>		
Akathisia	3	4
Extrapyramidal Symptoms*	3	6
Headache	5	6

\*Extrapyramidal Symptoms includes: blepharospasm, dystonia, extrapyramidal disorder, eye movement disorder, hypokinesia, muscle rigidity, musculoskeletal stiffness, psychomotor hyperactivity, tremor

#### Agitation Associated with Dementia Due to Alzheimer's Disease

The safety of REXULTI was evaluated in 503 patients (51 to 90 years of age), with a probable diagnosis of agitation associated with dementia due to Alzheimer's disease, who participated in two 12-week placebo-controlled, fixed-dose clinical studies in which REXULTI was administered at daily doses of 2 mg to 3 mg [see [Clinical Studies \(14.3\)](#)].

#### *Discontinuation of Treatment Due to Adverse Reactions*

In two 12-week placebo-controlled, fixed-dose, clinical studies, a total of 5.6% (28/503) of patients treated with REXULTI and 4.8% (12/251) of patients treated with placebo discontinued due to adverse reactions.

#### *Adverse Reactions Occurring at an Incidence of 2% or More in Patients Treated with REXULTI for Agitation Associated with Dementia Due to Alzheimer's Disease*

Adverse reactions associated with REXULTI (incidence  $\geq 2\%$  and greater than placebo) during the 12-week fixed-dose clinical studies in geriatric patients for treatment of agitation associated with dementia due to Alzheimer's disease are shown in Table 11.

**Table 11 Adverse Reactions in  $\geq 2\%$  of REXULTI-Treated Patients and Greater than Placebo in Pooled 12-Week Placebo-Controlled, Fixed-Dose Agitation Associated with Dementia due to Alzheimer's Disease Studies (Study 6 and Study 7)**

	Placebo (N=251) %	REXULTI			
		1 mg/day* (N=137) %	2 mg/day (N=213) %	3 mg/day (N=153) %	ALL REXULTI (N=503) %
<b>Infections and Infestations</b>					
Nasopharyngitis	2	4	2	3	3
Urinary Tract Infection	1	2	3	3	3
<b>Nervous System Disorders</b>					
Dizziness <sup>†</sup>	2	1	5	3	3
Headache	8	9	9	7	8
Somnolence <sup>‡</sup>	1	2	3	4	3
<b>Psychiatric Disorders</b>					

Insomnia <sup>§</sup>	3	5	5	2	4
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\*1 mg once day REXULTI dosage is not a recommended dosage for the treatment of agitation associated with dementia due to Alzheimer's disease [see [Dosage and Administration \(2.4\)](#)].

†Dizziness and Vertigo are grouped to Dizziness

‡Sedation and somnolence are grouped to somnolence.

§Initial insomnia and insomnia are grouped to insomnia

## Extrapyramidal Symptoms

### *Adjunctive Treatment of Major Depressive Disorder*

The incidence of reported extrapyramidal symptoms (EPS)-related adverse reactions, excluding akathisia, was 6% for REXULTI plus ADT-treated patients versus 3% for placebo plus ADT-treated patients. The incidence of akathisia events for REXULTI plus ADT-treated patients was 9% versus 2% for placebo plus ADT-treated patients.

In the 6-week placebo-controlled MDD studies, data was objectively collected on the Simpson-Angus Rating Scale (SAS) for EPS, the Barnes Akathisia Rating Scale (BARS) for akathisia and the Abnormal Involuntary Movement Score (AIMS) for dyskinesia. The mean change from baseline at last visit for REXULTI plus ADT-treated patients for the SAS, BARS and AIMS was comparable to placebo-treated patients. The percentage of patients who shifted from normal to abnormal was greater in REXULTI plus ADT-treated patients versus placebo plus ADT-treated patients for the BARS (4% versus 0.6%) and the SAS (4% versus 3%).

### *Schizophrenia (Adults)*

The incidence of reported EPS-related adverse reactions, excluding akathisia, was 5% for REXULTI-treated adult patients versus 4% for placebo-treated patients. The incidence of akathisia events for REXULTI-treated adult patients was 6% versus 5% for placebo-treated patients.

In the 6-week placebo-controlled, fixed-dose schizophrenia studies in adults, data was objectively collected on the Simpson-Angus Rating Scale (SAS) for EPS, the Barnes Akathisia Rating Scale (BARS) for akathisia and the Abnormal Involuntary Movement Scale (AIMS) for dyskinesia. The mean change from baseline at last visit for REXULTI-treated patients for the SAS, BARS and AIMS was comparable to placebo-treated patients. The percentage of patients who shifted from normal to abnormal was greater in REXULTI-treated patients versus placebo for the BARS (2% versus 1%) and the SAS (7% versus 5%).

### *Schizophrenia [Pediatric Patients (13 to 17 years of age)]*

The incidence of reported EPS-related adverse reactions, excluding akathisia, was 6.4% for REXULTI-treated pediatric patients versus 2.9% for placebo-treated patients. The incidence of akathisia events for REXULTI-treated pediatric patients was 3.6% versus 2.9% for placebo-treated patients.

In the 6-week placebo-and active controlled, schizophrenia study in pediatric patients, data was objectively collected on the Simpson-Angus Rating Scale (SAS) for EPS, the Barnes Akathisia Rating Scale (BARS) for akathisia and the Abnormal Involuntary Movement Scale (AIMS) for dyskinesia. The mean change from baseline at last visit for REXULTI-treated pediatric patients for the SAS, BARS and AIMS was comparable to placebo-treated patients. The percentage of patients who shifted from normal to abnormal was greater in REXULTI-treated patients versus placebo for the BARS (0.9% versus 0%) and the SAS (5.5% versus 2.9%).

### *Agitation Associated with Dementia Due to Alzheimer's Disease*

The incidence of reported EPS-related adverse reactions, excluding akathisia, was 3% for REXULTI-treated patients versus 2% for placebo-treated patients. The incidence of akathisia events for REXULTI-treated patients was 1% versus 0% for placebo-treated patients.

In the 12-week placebo-controlled, fixed-dose studies in agitation associated with dementia due to Alzheimer's disease, data was objectively collected on the Simpson-Angus Rating Scale (SAS) for EPS, the Barnes Akathisia Rating Scale (BARS) for akathisia and the Abnormal Involuntary Movement Scale (AIMS) for dyskinesia. The mean change from baseline at last visit for REXULTI-treated patients for the SAS, BARS and AIMS was comparable to placebo-treated patients. The percentage of patients who shifted from normal to abnormal was greater in REXULTI-treated patients versus placebo for the SAS (6% versus 2%).

### Dystonia

Symptoms of dystonia may occur in susceptible individuals during the first few days of treatment. Dystonic symptoms include spasm of the neck muscles, sometimes progressing to tightness of the throat, swallowing difficulty, difficulty breathing, and/or protrusion of the tongue. While these symptoms can occur at low doses, they occur more frequently and with greater severity with high potency and at higher doses of first-generation antipsychotic drugs. An elevated risk of acute dystonia is observed in males and younger age groups.

### Other Adverse Reactions Observed during Clinical Trial Evaluation of REXULTI

Other adverse reactions ( $\geq 1\%$  frequency and greater than placebo) within the short-term, placebo-controlled trials in adult patients with MDD and schizophrenia are shown below. The following listing does not include adverse reactions: 1) already listed in previous tables or elsewhere in the labeling, 2) for which a drug cause was remote, 3) which were so general as to be uninformative, 4) which were not considered to have clinically significant implications, or 5) which occurred at a rate equal to or less than placebo.

*Eye Disorders:* Vision Blurred

*Gastrointestinal Disorders:* Nausea, Dry Mouth, Salivary Hypersecretion, Abdominal Pain, Flatulence

*Investigations:* Blood Prolactin Increased

*Musculoskeletal and Connective Tissue Disorders:* Myalgia

*Psychiatric Disorders:* Abnormal Dreams

*Skin and Subcutaneous Tissue Disorders:* Hyperhidrosis

### Pediatric Patients (13 to 17 years of age)

In a short-term, randomized, double-blind, placebo-controlled study in pediatric patients 13 to 17 years of age with schizophrenia, safety was assessed in 110 patients in which 100 received REXULTI for at least 6 weeks. In an on-going, 2 year, open-label study in pediatric patients 13 to 17 years of age with schizophrenia, in which safety was assessed in 194 patients of which 140 received REXULTI for at least 6 months. Adverse reactions reported in clinical studies for this age group were generally similar to those observed in adult patients.

### *Hyperprolactinemia*

In a 6-week, placebo-controlled study in pediatric patients with schizophrenia, a 3.3 ng/mL mean increase (from baseline to last visit) was observed in the REXULTI group (versus a 2.8 ng/mL mean decrease in the placebo group) in females. Additionally, more female subjects in the REXULTI group (28.9%, n=13) compared to the placebo group (4.7%, n=2) had shifts from normal ( $\leq 30$  ng/mL) prolactin levels at baseline to abnormal

(>30 ng/mL) during the course of treatment. In males, overall mean shifts in the REXULTI group were not consistent with an increase in prolactin however, more male subjects in the REXULTI group (21.4%, n=9) compared to the placebo group (7.0%, n=3) had shifts from normal ( $\leq 20$  ng/mL) prolactin levels at baseline to abnormal (>20 ng/mL) during the course of treatment. One subject in the study experienced TEAE of galactorrhea without elevated prolactin.

## 6.2 Postmarketing Experience

The following adverse reaction has been identified during post-approval use of REXULTI. Because these reactions are reported voluntarily from a population of uncertain size, it is not always possible to reliably estimate their frequency or establish a causal relationship to drug exposure.

*Nervous System disorders:* Neuroleptic Malignant Syndrome

## 7 DRUG INTERACTIONS

### 7.1 Drugs Having Clinically Important Interactions with REXULTI

See Table 12 for clinically important drug interactions with REXULTI.

**Table 12 Clinically Important Drug Interactions with REXULTI**

<b>Strong CYP3A4 Inhibitors</b>	
<i>Clinical Impact:</i>	Concomitant use of REXULTI with strong CYP3A4 inhibitors increased the exposure of brexpiprazole compared to the use of REXULTI alone [see <a href="#">Clinical Pharmacology (12.3)</a> ].
<i>Intervention:</i>	With concomitant use of REXULTI with a strong CYP3A4 inhibitor, reduce the REXULTI dosage [see <a href="#">Dosage and Administration (2.7)</a> ].
<b>Strong CYP2D6 Inhibitors</b>	
<i>Clinical Impact:</i>	Concomitant use of REXULTI with strong CYP2D6 inhibitors increased the exposure of brexpiprazole compared to the use of REXULTI alone [see <a href="#">Clinical Pharmacology (12.3)</a> ].
<i>Intervention:</i>	With concomitant use of REXULTI with a strong CYP2D6 inhibitor, reduce the REXULTI dosage [see <a href="#">Dosage and Administration (2.7)</a> ].
<b>Both CYP3A4 Inhibitors and CYP2D6 Inhibitors</b>	
<i>Clinical Impact:</i>	Concomitant use of REXULTI with 1) a strong CYP3A4 inhibitor and a strong CYP2D6 inhibitor; or 2) a moderate CYP3A4 inhibitor and a strong CYP2D6 inhibitor; or 3) a strong CYP3A4 inhibitor and a moderate CYP2D6 inhibitor; or 4) a moderate CYP3A4 inhibitor and a moderate CYP2D6 inhibitor increased the exposure of brexpiprazole compared to the use of REXULTI alone [see <a href="#">Clinical Pharmacology (12.3)</a> ].
<i>Intervention:</i>	With concomitant use of REXULTI with 1) a strong CYP3A4 inhibitor and a strong CYP2D6 inhibitor; or 2) a moderate CYP3A4 inhibitor and a strong CYP2D6 inhibitor; or 3) a strong CYP3A4 inhibitor and a moderate CYP2D6 inhibitor; or 4) a moderate CYP3A4 inhibitor and a moderate CYP2D6 inhibitor, decrease the REXULTI dosage [see <a href="#">Dosage and Administration (2.7)</a> ].
<b>Strong CYP3A4 Inducers</b>	
<i>Clinical Impact:</i>	Concomitant use of REXULTI and a strong CYP3A4 inducer decreased the exposure of brexpiprazole compared to the use of REXULTI alone [see <a href="#">Clinical Pharmacology (12.3)</a> ].
<i>Intervention:</i>	With concomitant use of REXULTI with a strong CYP3A4 inducer, increase the REXULTI

dosage [see <a href="#">Dosage and Administration (2.7)</a> ].
--

\*In the clinical studies examining the adjunctive use of REXULTI in the treatment of MDD, dosage was not adjusted for strong CYP2D6 inhibitors (e.g., paroxetine, fluoxetine). Thus, CYP considerations are already factored into general dosing recommendations, and REXULTI may be administered without dosage adjustment in patients with MDD.

## 7.2 Drugs Having No Clinically Important Interactions with REXULTI

Based on pharmacokinetic studies, no dosage adjustment of REXULTI is required when administered concomitantly with CYP2B6 inhibitors (e.g., ticlopidine) or gastric pH modifiers (e.g., omeprazole). Additionally, no dosage adjustment for substrates of CYP2D6 (e.g., dextromethorphan), CYP3A4 (e.g., lovastatin), CYP2B6 (e.g., bupropion), BCRP (e.g., rosuvastatin), or P-gp (e.g., fexofenadine) is required when administered concomitantly with REXULTI.

## 8 USE IN SPECIFIC POPULATIONS

### 8.1 Pregnancy

#### Pregnancy Exposure Registry

There is a pregnancy exposure registry that monitors pregnancy outcomes in women exposed to REXULTI during pregnancy. For more information contact the National Pregnancy Registry for Psychiatric Medications at 1-866-961-2388 or visit <http://womensmentalhealth.org/clinical-and-research-programs/pregnancyregistry/>.

#### Risk Summary

Adequate and well-controlled studies have not been conducted with REXULTI in pregnant women to inform drug-associated risks. However, neonates whose mothers are exposed to antipsychotic drugs, like REXULTI, during the third trimester of pregnancy are at risk for extrapyramidal and/or withdrawal symptoms. In animal reproduction studies, no teratogenicity was observed with oral administration of brexpiprazole to pregnant rats and rabbits during organogenesis at doses up to 73 and 146 times, respectively, of maximum recommended human dose (MRHD) of 4 mg/day on a mg/m<sup>2</sup> basis. However, when pregnant rats were administered brexpiprazole during the period of organogenesis through lactation, the number of perinatal deaths of pups was increased at 73 times the MRHD [see *Data*]. The background risk of major birth defects and miscarriage for the indicated population(s) is unknown. In the U.S. general population, the estimated background risk of major birth defects and miscarriage in clinically recognized pregnancies is 2 to 4% and 15 to 20%, respectively.

#### Clinical Considerations

##### *Fetal/Neonatal Adverse Reactions*

Extrapyramidal and/or withdrawal symptoms, including agitation, hypertonia, hypotonia, tremor, somnolence, respiratory distress and feeding disorder, have been reported in neonates whose mothers were exposed to antipsychotic drugs during the third trimester of pregnancy. These symptoms have varied in severity. Some neonates recovered within hours or days without specific treatment; others required prolonged hospitalization. Monitor neonates for extrapyramidal and/or withdrawal symptoms and manage symptoms appropriately.

#### Data

##### *Animal Data*

Pregnant rats were treated with oral doses of 3, 10, and 30 mg/kg/day (7.3, 24, and 73 times the MRHD on a mg/m<sup>2</sup> basis) of brexpiprazole during the period of organogenesis. Brexpiprazole was not teratogenic and did not cause adverse developmental effects at doses up to 73 times the MRHD.

Pregnant rabbits were treated with oral doses of 10, 30, and 150 mg/kg/day (49, 146, and 730 times the MRHD) of brexpiprazole during the period of organogenesis. Brexpiprazole was not teratogenic and did not cause adverse developmental effects at doses up to 146 times the MRHD. Findings of decreased body weight, retarded ossification, and increased incidences of visceral and skeletal variations were observed in fetuses at 730 times the MRHD, a dose that induced maternal toxicity.

In a study in which pregnant rats were administered oral doses of 3, 10, and 30 mg/kg/day (7.3, 24, and 73 times the MRHD) during the period of organogenesis and through lactation, the number of live-born pups was decreased, and early postnatal deaths increased at a dose 73 times the MRHD. Impaired nursing by dams, and low birth weight and decreased body weight gain in pups were observed at 73 times, but not at 24 times, the MRHD.

## 8.2 Lactation

### Risk Summary

Lactation studies have not been conducted to assess the presence of brexpiprazole in human milk, the effects of brexpiprazole on the breastfed infant, or the effects of brexpiprazole on milk production. Brexpiprazole is present in rat milk. The development and health benefits of breastfeeding should be considered along with the mother's clinical need for REXULTI and any potential adverse effects on the breastfed infant from REXULTI or from the underlying maternal condition.

## 8.4 Pediatric Use

### Schizophrenia

The safety and effectiveness of REXULTI for treatment of schizophrenia have been established in pediatric patients 13 years of age and older. Use of REXULTI in this population is supported by evidence from adequate and well-controlled studies in adults and pediatric patients with schizophrenia, pharmacokinetic data from adults and pediatric patients, and safety data in pediatric patients 13 to 17 years of age [[see Warnings and Precautions \(5.6\)](#), [Adverse Reactions \(6.1\)](#), [Clinical Pharmacology \(12.3\)](#), [Clinical Studies \(14.2\)](#)].

The safety and effectiveness of REXULTI for the treatment of schizophrenia have not been established in pediatric patients less than 13 years of age.

### Major Depressive Disorder

The safety and effectiveness of REXULTI for treatment of major depressive disorder have not been established in pediatric patients. Antidepressants increased the risk of suicidal thoughts and behaviors in pediatric patients [[see Boxed Warning](#), [Warnings and Precautions \(5.2\)](#)].

### Irritability Associated with Autism Spectrum Disorder

The safety and effectiveness of REXULTI for the treatment of irritability associated with autism spectrum disorder have not been established in pediatric patients. Effectiveness was not demonstrated, in an 8-week, double-blind, placebo-controlled, flexible-dose clinical study conducted in 119 REXULTI-treated pediatric patients 5 to 17 years of age with irritability associated with autism spectrum disorder diagnosed by the Diagnostic and Statistical Manual of Mental Disorders, 5<sup>th</sup> Edition [DSM-5] criteria. In this study, somnolence (including sedation) occurred at a higher rate than reported in other REXULTI studies evaluating adults and elderly patients (16% in REXULTI-treated pediatric patients versus 5% for placebo). The mean increase in age-and-gender adjusted body weight z-score from baseline to last visit was 0.3 for REXULTI-treated patients

versus 0.1 for placebo-treated patients. Increases in age-and-gender adjusted body weight z-score of at least 0.5 SD from baseline was higher in REXULTI-treated patients versus placebo (19% versus 5%).

Of the 119 patients from this study, 95 patients entered the open-label treatment study and received up to 26 weeks of daily treatment with brexpiprazole. During the open-label treatment period, 2% of patients discontinued due to weight increase. In patients previously treated with REXULTI for 8 weeks, the mean increase in weight from the open-label study baseline to last visit was 4.5 kg. and 26% of patients had an increase in age-and-gender-adjusted body weight z-score of at least 0.5 SD from baseline.

#### Juvenile Animal Studies

Juvenile rats were administered oral doses of brexpiprazole of 3, 10, and 20 mg/kg/day once daily beginning from weaning (postnatal day 21) through adulthood (postnatal day 90), followed by a 4-week recovery (non-dosing) period. Results were similar to those observed in previous repeat-dose toxicity studies in adolescent (8-week-old) rats. Mortality occurred at the high-dose of 20 mg/kg/day, as well as delayed sexual maturation in males and decreased rearing and motor activity. There was no evidence of neurotoxicity or effects on fertility and reproductive function. Histopathologic changes in reproductive organs and mammary glands occurred at all doses, were related to the pharmacology of brexpiprazole and were comparable to those in adult rats. All findings were at least partially reversible. Juvenile dogs were administered oral doses of brexpiprazole of 1, 3, and 30 mg/kg/day once daily starting at 8 or 9 weeks of age for 26 weeks, followed by an 8-week recovery (non-dosing) period. Decreases in body weight, lethargy, changes in heart rate, and immature male sex organs were observed at 30 mg/kg/day. These findings were at least partially reversible.

### 8.5 Geriatric Use

Antipsychotic drugs increase the risk of death in elderly patients with dementia-related psychosis. REXULTI is not approved for the treatment of patients with dementia-related psychosis [see [Boxed Warning](#), [Warnings and Precautions \(5.1\)](#)].

#### Adjunctive Treatment of Major Depressive Disorder (MDD) and Schizophrenia

Of the total number of REXULTI-treated patients in the clinical studies for the adjunctive therapy to antidepressants for MDD and for schizophrenia, 248 (3%) were 65 years of age and older (which included 45 (18%) patients who were 75 years of age and older). Clinical studies of REXULTI in these patients did not include sufficient numbers of patients 65 years of age and older to determine whether they respond differently from younger adult patients. In general, dosage selection for the treatment of MDD or schizophrenia in a geriatric patient should be cautious, usually starting at the low end of the dosing range, reflecting the greater frequency of decreased hepatic, renal, and cardiac function, concomitant diseases, and other drug therapy.

#### Agitation Associated with Dementia Due to Alzheimer's Disease

The total number of REXULTI-treated patients 65 years of age and older in the clinical studies for agitation associated with dementia due to Alzheimer's disease (Studies 6 and 7) was 448 (86%) including 170 (33%) patients 65 to 74 years of age, 228 (44%) patients 75 to 84 years of age, and 50 (10%) patients 85 years of age and older [see [Clinical Studies \(14.3\)](#)].

In clinical studies of REXULTI for the treatment of agitation associated with dementia due to Alzheimer's disease did not include sufficient numbers of younger adult patients to determine if patients 65 years of age and older respond differently than younger adult patients.

## 8.6 CYP2D6 Poor Metabolizers

Dosage adjustment is recommended in known CYP2D6 poor metabolizers because these patients have higher brexpiprazole concentrations than normal metabolizers of CYP2D6. Approximately 8% of Caucasians and 3 to 8% of Black/African Americans cannot metabolize CYP2D6 substrates and are classified as poor metabolizers [see [Dosage and Administration \(2.7\)](#), [Clinical Pharmacology \(12.3\)](#)].

## 8.7 Hepatic Impairment

The maximum recommended dosage in patients with moderate to severe hepatic impairment (Child-Pugh score  $\geq 7$ ) is lower than those with mild hepatic impairment and those with normal hepatic function [see [Dosage and Administration \(2.4\)](#)]. Patients with moderate to severe hepatic impairment generally had higher exposure to brexpiprazole than patients with normal hepatic function [see [Clinical Pharmacology \(12.3\)](#)]. Greater exposure may increase the risk of REXULTI-associated adverse reactions .

## 8.8 Renal Impairment

The maximum recommended dosage in patients with  $\text{CrCl} < 60$  mL/minute is lower than those with mild renal impairment and those with normal renal function [see [Dosage and Administration \(2.6\)](#)]. Patients with renal impairment had higher exposure to brexpiprazole than patients with normal renal function [see [Clinical Pharmacology \(12.3\)](#)]. Greater exposure may increase the risk of REXULTI-associated adverse reactions.

## 8.9 Other Specific Populations

The recommended dosage for REXULTI is the same in males and females, in different racial groups, and in smokers and nonsmokers [see [Clinical Pharmacology \(12.3\)](#)].

# 9 DRUG ABUSE AND DEPENDENCE

## 9.1 Controlled Substance

REXULTI contains brexpiprazole, which is not a controlled substance.

## 9.2 Abuse

Animals given access to REXULTI did not self-administer the drug, suggesting that REXULTI does not have rewarding properties.

## 9.3 Dependence

Humans and animals that received chronic REXULTI administration did not demonstrate any withdrawal signs upon drug discontinuation. This suggests that REXULTI does not produce physical dependence.

# 10 OVERDOSAGE

There is limited clinical trial experience regarding human overdose with REXULTI.

Management of a REXULTI overdose should concentrate on supportive therapy, maintaining an adequate airway, oxygenation and ventilation, and management of symptoms. Close medical supervision and monitoring should continue until the patient recovers.

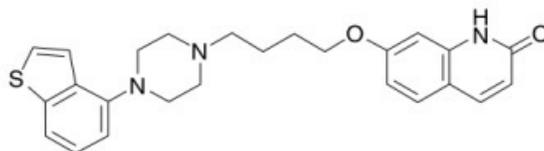
Consider contacting the Poison Help Line (1-800-222-1222) or a medical toxicologist for additional overdose management recommendations.

Oral activated charcoal and sorbitol (50 g/240 mL), administered one hour after ingesting oral REXULTI, decreased brexpiprazole  $C_{max}$  and area under the curve (AUC) by approximately 5% to 23% and 31% to 39% respectively; however, there is insufficient information available on the therapeutic potential of activated charcoal in treating an overdose with REXULTI.

There is no information on the effect of hemodialysis in treating an overdose with REXULTI; hemodialysis is unlikely to be useful because brexpiprazole is highly bound to plasma proteins.

## 11 DESCRIPTION

Brexpiprazole, an atypical antipsychotic, is available as REXULTI® (brexpiprazole) tablets. Brexpiprazole is 7-{4-[4-(1-Benzothiophen-4-yl)piperazin-1-yl]butoxy}quinolin-2(1*H*)-one. The empirical formula is  $C_{25}H_{27}N_3O_2S$ , and its molecular weight is 433.57. The chemical structure is:



REXULTI tablets are for oral administration and are available in 0.25 mg, 0.5 mg, 1 mg, 2 mg, 3 mg, and 4 mg strengths. Inactive ingredients include lactose monohydrate, corn starch, microcrystalline cellulose, hydroxypropyl cellulose, low-substituted hydroxypropyl cellulose, magnesium stearate, hypromellose, and talc. Colorants include titanium dioxide, iron oxide, and ferrosulfate.

## 12 CLINICAL PHARMACOLOGY

### 12.1 Mechanism of Action

The mechanism of action of REXULTI in the adjunctive treatment of major depressive disorder, treatment of agitation associated with dementia due to Alzheimer's disease, or treatment of schizophrenia is unknown. However, the efficacy of REXULTI may be mediated through a combination of partial agonist activity at serotonin 5-HT<sub>1A</sub> and dopamine D<sub>2</sub> receptors, and antagonist activity at serotonin 5-HT<sub>2A</sub> receptors.

### 12.2 Pharmacodynamics

Brexpiprazole has affinity (expressed as  $K_i$ ) for multiple monoaminergic receptors including serotonin 5-HT<sub>1A</sub> (0.12 nM), 5-HT<sub>2A</sub> (0.47 nM), 5-HT<sub>2B</sub> (1.9 nM), 5-HT<sub>7</sub> (3.7 nM), dopamine D<sub>2</sub> (0.30 nM), D<sub>3</sub> (1.1 nM), and noradrenergic  $\alpha_{1A}$  (3.8 nM),  $\alpha_{1B}$  (0.17 nM),  $\alpha_{1D}$  (2.6 nM), and  $\alpha_{2C}$  (0.59 nM) receptors. Brexpiprazole acts as a partial agonist at the 5-HT<sub>1A</sub>, D<sub>2</sub>, and D<sub>3</sub> receptors and as an antagonist at 5-HT<sub>2A</sub>, 5-HT<sub>2B</sub>, 5-HT<sub>7</sub>,  $\alpha_{1A}$ ,  $\alpha_{1B}$ ,  $\alpha_{1D}$ , and  $\alpha_{2C}$  receptors. Brexpiprazole also exhibits affinity for histamine H<sub>1</sub> receptor (19 nM) and for muscarinic M<sub>1</sub> receptor (67% inhibition at 10  $\mu$ M).

#### Cardiac Electrophysiology

At a dose 3 times the MRHD for the treatment of schizophrenia and 4 times the MRHD for adjunctive therapy to antidepressants for the treatment of MDD or agitation associated with dementia due to Alzheimer's disease, REXULTI does not prolong the QTc interval to any clinically relevant extent.

## 12.3 Pharmacokinetics

### Absorption

After single-dose administration of REXULTI tablets, the peak plasma brexpiprazole concentrations occurred within 4 hours after administration, and the absolute oral bioavailability was 95%. Brexpiprazole steady-state concentrations were attained within 10 to 12 days of dosing.

REXULTI can be administered with or without food. Administration of a 4 mg REXULTI tablet with a standard high-fat meal did not significantly affect the  $C_{max}$  or AUC of brexpiprazole. After single and multiple once daily dose administration, brexpiprazole exposure ( $C_{max}$  and AUC) increased in proportion to the dose administered. *In vitro* studies of brexpiprazole did not indicate that brexpiprazole is a substrate of efflux transporters such as MDRI (P-gp) and BCRP.

### Distribution

The volume of distribution of brexpiprazole following intravenous administration is high ( $1.56 \pm 0.42$  L/kg), indicating extravascular distribution. Brexpiprazole is highly protein bound in plasma (greater than 99%) to serum albumin and  $\alpha$ 1-acid glycoprotein, and its protein binding is not affected by renal or hepatic impairment. Based on results of *in vitro* studies, brexpiprazole protein binding is not affected by warfarin, diazepam, or digitoxin.

### Elimination

#### *Metabolism*

Based on *in vitro* metabolism studies of brexpiprazole using recombinant human cytochrome P450 (CYP1A1, 1A2, 2A6, 2B6, 2C8, 2C9, 2C19, 2D6, 2E1, and 3A4), the metabolism of brexpiprazole was shown to be mainly mediated by CYP3A4 and CYP2D6.

*In vivo* brexpiprazole is metabolized primarily by CYP3A4 and CYP2D6 enzymes. After single- and multiple-dose administrations, brexpiprazole and its major metabolite, DM-3411, were the predominant drug moieties in the systemic circulation. At steady-state, DM-3411 represented 23% to 48% of brexpiprazole exposure (AUC) in plasma. DM-3411 is considered not to contribute to the therapeutic effects of brexpiprazole.

Based on *in vitro* data, brexpiprazole showed little to no inhibition of CYP450 isozymes.

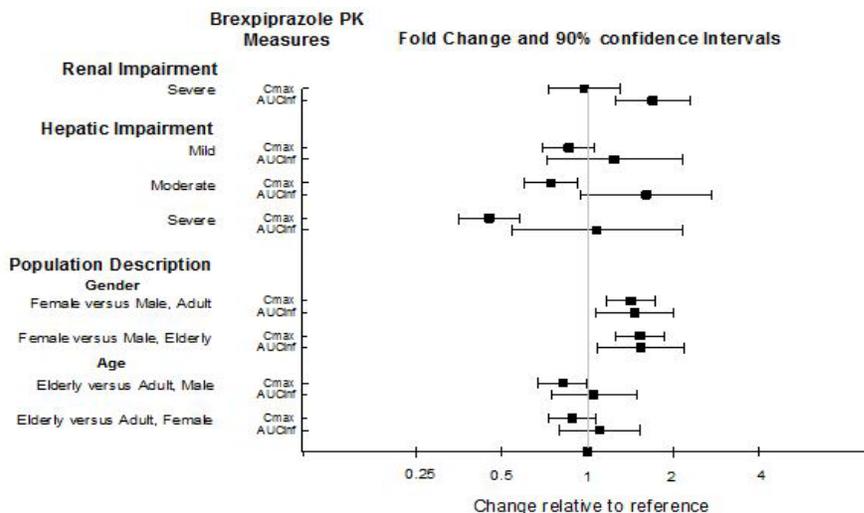
#### *Excretion*

Following a single oral dose of [ $^{14}$ C]-labeled brexpiprazole, approximately 25% and 46% of the administered radioactivity was recovered in the urine and feces, respectively. Less than 1% of unchanged brexpiprazole was excreted in the urine, and approximately 14% of the oral dose was recovered unchanged in the feces. Apparent oral clearance of a brexpiprazole oral tablet after once daily administration is  $19.8 (\pm 11.4)$  mL/h/kg. After multiple once-daily administrations of REXULTI, the terminal elimination half-lives of brexpiprazole and its major metabolite, DM-3411, were 91 hours and 86 hours, respectively.

### Studies in Specific Populations

Exposure of brexpiprazole in specific populations are summarized in Figure 1. Population pharmacokinetic (PK) analysis indicated exposure of brexpiprazole in patients with moderate renal impairment was higher compared to patients with normal renal function.

**Figure 1 The Effect of Intrinsic Factors on Brexpiprazole Pharmacokinetics**



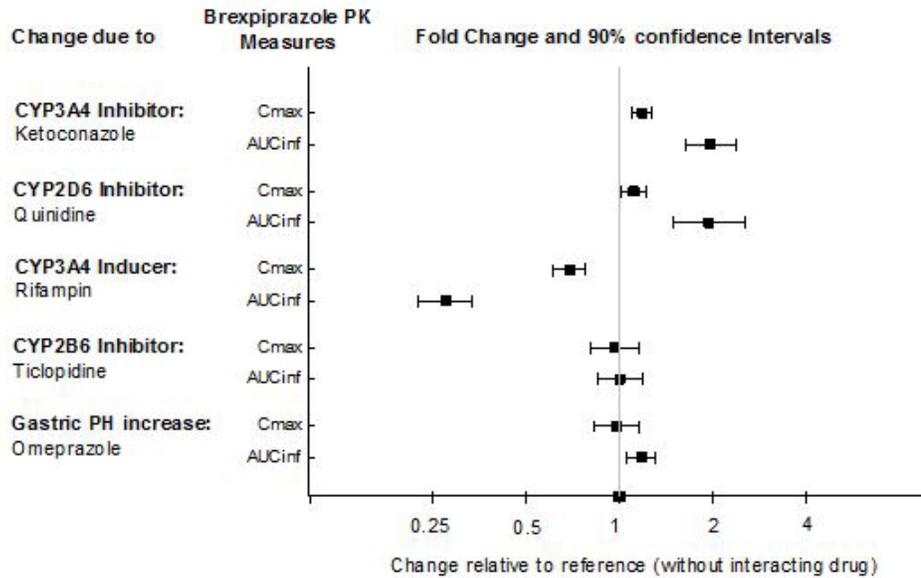
### Pediatric Patients

A multiple dose PK study (0.5, 1, 2, 3 or 4 mg/day) has been conducted in 43 pediatric patients aged 13 years to 17 years old. Population PK analysis indicated systemic exposure ( $C_{max}$  and AUC) of brexpiprazole in pediatric patients (13 to 17 years of age) was comparable to that in adult patients across the dose range from 0.5 to 4 mg.

### Drug Interaction Studies

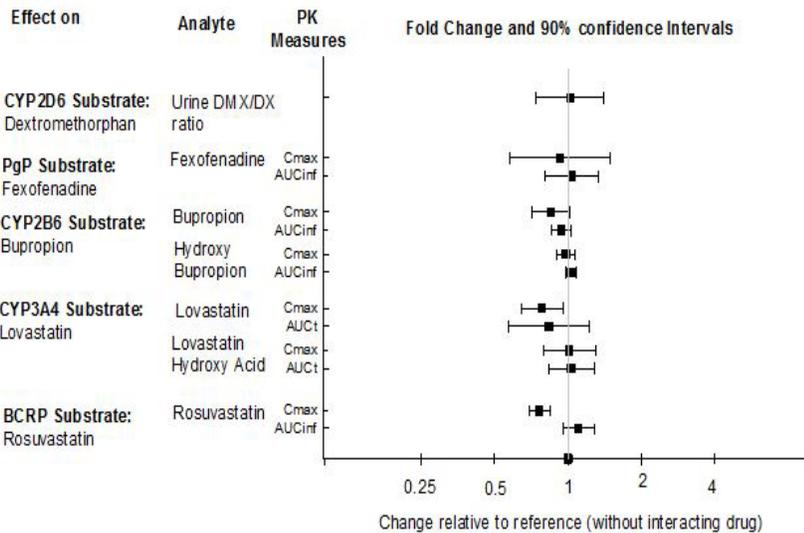
Effect of other drugs on the exposures of brexpiprazole are summarized in Figure 2. Based on simulation, a 5.1-fold increase in AUC values at steady-state is expected when extensive metabolizers of CYP2D6 are administered with both strong CYP2D6 and CYP3A4 inhibitors. A 4.8-fold increase in mean AUC values at steady-state is expected in poor metabolizers of CYP2D6 administered with strong CYP3A4 inhibitors [see [Drug Interactions \(7.1\)](#)].

**Figure 2 The Effect of Other Drugs on Brexpiprazole Pharmacokinetics**



The effect of REXULTI on the exposures of other drugs are summarized in Figure 3.

**Figure 3 The Effect of REXULTI on Pharmacokinetics of Other Drugs**



## 13 NONCLINICAL TOXICOLOGY

### 13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

#### Carcinogenesis

Lifetime carcinogenicity studies were conducted in ICR mice and Sprague Dawley rats. Brexpiprazole was administered orally for two years to male and female mice at doses of 0.75, 2, and 5 mg/kg/day (0.9 to 6.1 times the oral MRHD of 4 mg/day based on mg/m<sup>2</sup> body surface area) and to male and female rats at doses of 1, 3, and 10 mg/kg and 3, 10, and 30 mg/kg/day, respectively (2.4 to 24 and 7.3 to 73 times the oral MRHD, males and females). In female mice, the incidence of mammary gland adenocarcinoma was increased

at all doses, and the incidence of adenosquamous carcinoma was increased at 2.4 and 6.1 times the MRHD. No increase in the incidence of tumors was observed in male mice. In the rat study, brexpiprazole was not carcinogenic in either sex at doses up to 73 times the MRHD.

Proliferative and/or neoplastic changes in the mammary and pituitary glands of rodents have been observed following chronic administration of antipsychotic drugs and are considered to be prolactin mediated. The potential for increasing serum prolactin level of brexpiprazole was shown in both mice and rats. The relevance for human risk of the findings of prolactin-mediated endocrine tumors in rodents is unknown.

### Mutagenesis

Brexpiprazole was not mutagenic when tested in the *in vitro* bacterial reverse mutation assay (Ames test). Brexpiprazole was negative for clastogenic activity in the *in vivo* micronucleus assay in rats and was not genotoxic in the *in vivo/in vitro* unscheduled DNA synthesis assay in rats. *In vitro* with mammalian cells brexpiprazole was clastogenic but only at doses that induced cytotoxicity. Based on a weight of evidence, brexpiprazole is not considered to present a genotoxic risk to humans.

### Impairment of Fertility

Female rats were treated with oral doses of 0.3, 3, or 30 mg/kg/day (0.7, 7.3, and 73 times the oral MRHD on a mg/m<sup>2</sup> basis) prior to mating with untreated males and continuing through conception and implantation. Estrus cycle irregularities and decreased fertility were observed at 3 and 30 mg/kg/day. Prolonged duration of pairing and increased preimplantation losses were observed at 30 mg/kg/day.

Male rats were treated with oral doses of 3, 10, or 100 mg/kg/day (7.3, 24, and 240 times the oral MRHD on a mg/m<sup>2</sup> basis) for 63 days prior to mating with untreated females and throughout the 14 days of mating. No differences were observed in the duration of mating or fertility indices in males at any dose of brexpiprazole.

## **14 CLINICAL STUDIES**

### **14.1 Adjunctive Treatment of Major Depressive Disorder**

The efficacy of REXULTI in the adjunctive treatment of major depressive disorder (MDD) was evaluated in two 6-week double-blind, placebo-controlled, fixed-dose studies of adult patients meeting DSM-IV-TR criteria for MDD, with or without symptoms of anxiety, who had an inadequate response to prior antidepressant therapy (1 to 3 courses) in the current episode and who had also demonstrated an inadequate response throughout the 8 weeks of prospective antidepressant treatment (with escitalopram, fluoxetine, paroxetine controlled-release, sertraline, duloxetine delayed release, or venlafaxine extended release). Inadequate response during the prospective antidepressant treatment phase was defined as having persistent symptoms without substantial improvement throughout the course of treatment.

Patients in Study 1 (NCT01360645) were randomized to REXULTI 2 mg once a day or placebo. Patients in Study 2 (NCT01360632) were randomized to REXULTI 1 or 3 mg once a day or placebo. For patients randomized to REXULTI, all patients initiated treatment at 0.5 mg once daily during Week 1. At Week 2, the REXULTI dosage was increased to 1 mg in all treatment groups, and either maintained at 1 mg or increased to 2 mg or 3 mg once daily, based on treatment assignment, from Week 3 onwards. The dosages were then maintained for the 4 remaining weeks.

The primary endpoint was change from baseline to Week 6 in the Montgomery-Asberg Depression Rating Scale (MADRS), a 10-item clinician-related scale used to assess the degree of depressive symptomatology, with 0 representing no symptoms and 60 representing worst symptoms.

At randomization, the mean MADRS total score was 27. In Studies 1 and 2, REXULTI (plus ADT) 2 mg once daily and 3 mg once daily were superior to placebo plus ADT in reducing mean MADRS total scores. Results from the primary efficacy parameters for both fixed dose studies are shown below in Table 13. Figure 4 below shows the time course of response based on the primary efficacy measure (MADRS) in Study 1.

**Table 13 Change in MADRS from Baseline at Week 6 in Adult Patients for Adjunctive Treatment of MDD (Study 1 and Study 2)**

Study	Treatment Group	N	Mean Baseline Score (SD)	LS Mean Change from Baseline (SE)	Placebo-subtracted Difference* (95% CI)
1	REXULTI (2 mg/day) + ADT†	175	26.9 (5.7)	-8.4 (0.6)	-3.2 (-4.9, -1.5)
	Placebo + ADT	178	27.3 (5.6)	-5.2 (0.6)	--
2	REXULTI (1 mg/day) + ADT	211	26.5 (5.6)	-7.6 (0.5)	-1.3 (-2.7, 0.1)
	REXULTI (3 mg/day) + ADT	213	26.5 (5.3)	-8.3 (0.5)	-2.0 (-3.4, -0.5)
	Placebo + ADT	203	26.5 (5.2)	-6.3 (0.5)	--

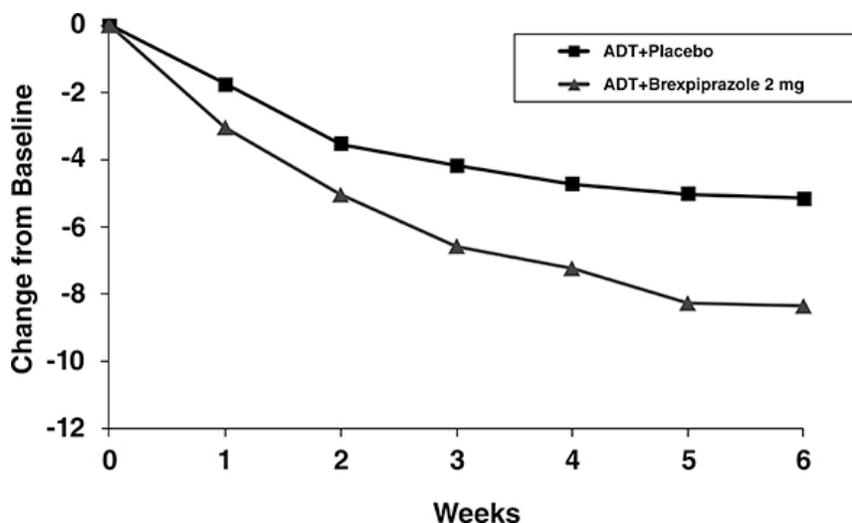
SD: standard deviation; SE: standard error; LS Mean: least-squares mean; CI: unadjusted confidence interval

\*Difference (drug minus placebo) in least-squares mean change from baseline

†Dosages statistically significantly superior to placebo

An examination of population subgroups did not suggest differential response based on age, gender, race, or choice of prospective antidepressant.

**Figure 4 Change from Baseline in MADRS Total Score by Study Visit (Week) in Patients with MDD in Adults (Study 1)**



## 14.2 Schizophrenia

Adult Patients

The efficacy of REXULTI in the treatment of adults with schizophrenia was demonstrated in two 6-week randomized, double-blind, placebo-controlled, fixed-dose clinical studies in patients who met DSM-IV-TR criteria for schizophrenia.

In both studies, Study 3 (NCT01396421) and Study 4 (NCT01393613), patients were randomized to REXULTI 2 or 4 mg once per day or placebo. Patients in the REXULTI groups initiated treatment at 1 mg once daily on Days 1 to 4. The REXULTI dosage was increased to 2 mg on Days 5 to 7. The dosage was then either maintained at 2 mg once daily or increased to 4 mg once daily, depending on treatment assignment, for the 5 remaining weeks.

The primary efficacy endpoint of both studies was the change from baseline to Week 6 in the Positive and Negative Syndrome Scale (PANSS) total score. The PANSS is a 30-item scale that measures positive symptoms of schizophrenia (7 items), negative symptoms of schizophrenia (7 items), and general psychopathology (16 items), each rated on a scale of 1 (absent) to 7 (extreme); the total PANSS scores range from 30 (best) to 210 (worst).

In Study 3, REXULTI at both 2 mg once daily and 4 mg once daily was superior to placebo on the PANSS total score. In Study 4, REXULTI 4 mg once daily was superior to placebo on the PANSS total score (Table 14). Figure 5 shows the time course of response based on the primary efficacy measure (change from baseline in PANSS total score) in Study 3.

Examination of population subgroups based on age, sex, and race did not suggest differential responsiveness.

**Table 14 Change in PANSS Total Score from Baseline at Week 6 in Adult Patients in Studies of Schizophrenia (Study 3 and Study 4)**

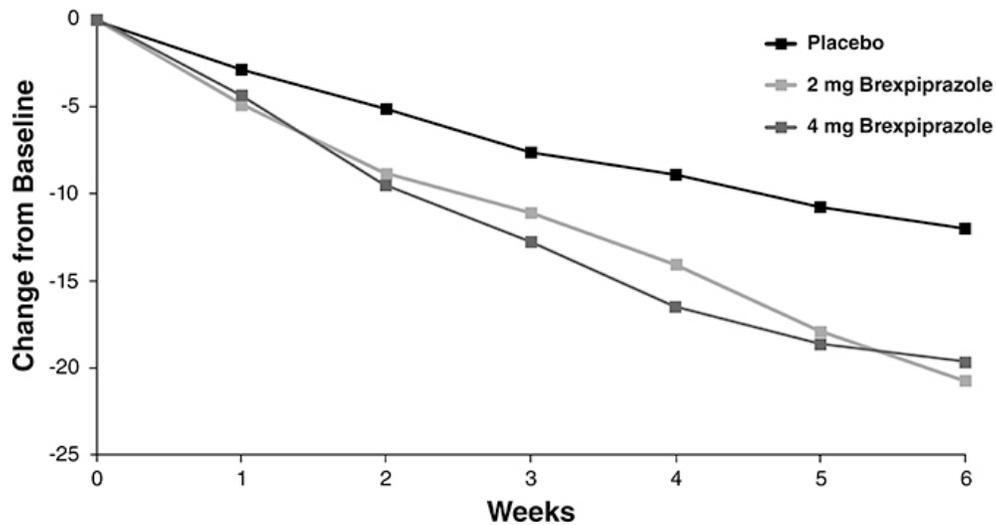
Study	Treatment Group	N	Mean Baseline Score (SD)	LS Mean Change from Baseline (SE)	Placebo-subtracted Difference* (95% CI)
3	REXULTI (2 mg/day) <sup>†</sup>	180	95.9 (13.8)	-20.7 (1.5)	-8.7 (-13.1, -4.4)
	REXULTI (4 mg/day) <sup>†</sup>	178	94.7 (12.1)	-19.7 (1.5)	-7.6 (-12.0, -3.1)
	Placebo	178	95.7 (11.5)	-12.0 (1.6)	--
4	REXULTI (2 mg/day)	179	96.3 (12.9)	-16.6 (1.5)	-3.1 (-7.2, 1.1)
	REXULTI (4 mg/day) <sup>†</sup>	181	95.0 (12.4)	-20.0 (1.5)	-6.5 (-10.6, -2.4)
	Placebo	180	94.6 (12.8)	-13.5 (1.5)	--

SD: standard deviation; SE: standard error; LS Mean: least-squares mean; CI: unadjusted confidence interval

\*Difference (drug minus placebo) in least-squares mean change from baseline

<sup>†</sup>Dosages statistically significantly superior to placebo

**Figure 5** Change from Baseline in PANSS Total Score by Study Visit (Week) in Adult Patients with Schizophrenia (Study 3)

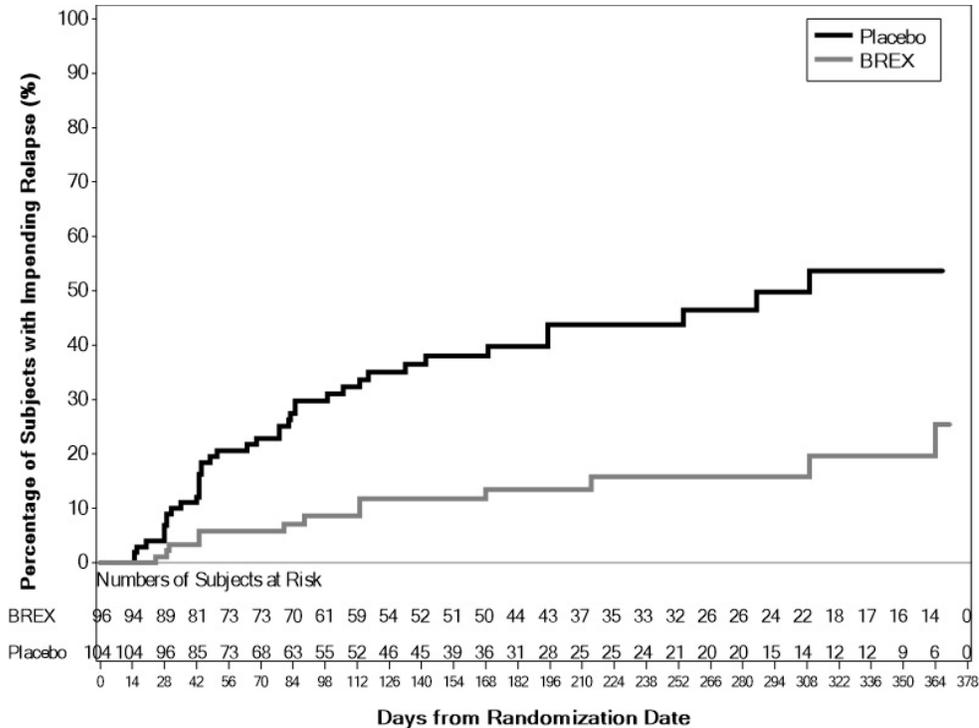


The safety and efficacy of REXULTI as maintenance treatment in adults with schizophrenia aged 18 to 65 years were demonstrated in the maintenance phase of a randomized withdrawal study (Study 5, NCT01668797). Patients were stabilized for at least 12 weeks on 1 to 4 mg/day of REXULTI (N=202). They were then randomized in the double-blind treatment phase to either continue REXULTI at their achieved stable dose (N=97), or to switch to placebo (N=105).

The primary endpoint in Study 5 was time from randomization to impending relapse during the double-blind phase, defined as: 1) Clinical Global Improvement score of  $\geq 5$  (minimally worse) and an increase to a score  $>4$  on PANSS conceptual disorganization, hallucinatory behavior, suspiciousness, or unusual thought content items, with either a  $\geq 2$  increase on a specific item or  $\geq 4$  point increase on the combined four PANSS items, 2) hospitalization due to worsening of psychotic symptoms, 3) current suicidal behavior, or 4) violent/aggressive behavior.

A pre-specified interim analysis demonstrated a statistically significantly longer time to relapse in patients randomized to the REXULTI group compared to placebo-treated patients. The study was subsequently terminated early because maintenance of efficacy had been demonstrated. The Kaplan-Meier curves of the cumulative proportion of patients with relapse during the double-blind treatment phase for REXULTI and placebo groups are shown in Figure 6. The key secondary endpoint, the proportion of patients who met the criteria for impending relapse, was statistically significantly lower in REXULTI-treated patients compared with placebo group.

**Figure 6 Kaplan-Meier Estimation of Percent Impending Relapse in Study 5**



Note: A total of 202 patients were randomized. Among them, one patient in the placebo group did not take investigational medicinal product and one patient in the REXULTI group did not have post-randomization efficacy evaluations. These two patients were excluded from the efficacy analysis.

Pediatric Patients Ages 13 to 17 years

The efficacy of REXULTI in the treatment of schizophrenia in pediatric patients 13 to 17 years of age was demonstrated in a 6-week, randomized and placebo-controlled, clinical study.

In Study 6 (NCT03198078), patients were randomized to REXULTI 2 mg to 4 mg once per day, active comparator, or placebo. Patients in the REXULTI group initiated treatment at 0.5 mg once daily on Days 1 to 4. The REXULTI dosage was increased to 1 mg daily on Days 5 to 7, and then increased to 2 mg on Days 8 to 14. The dosage was then either maintained at 2 mg or increased to 3 mg once daily from Days 15 to 21 based on patient’s tolerability or clinical response. After the titration period, patients were either kept at a maintenance dose, or increased or decreased by 1 mg, for a maximum of REXULTI 4 mg daily.

The primary efficacy endpoint was the change from baseline to Week 6 in the PANSS total score.

In Study 6, REXULTI group showed a statistically significant improvement compared to placebo on the mean change from baseline in the PANSS total score (Table 15).

Figure 7 shows the time course of response based on the primary efficacy measure (change from baseline in PANSS total score) in Study 6.

**Table 15** Change in PANSS Total Score from Baseline at Week 6 in Pediatric Patients 13 to 17 years of age in Study of Schizophrenia (Study 6)

Study	Treatment Group	N*	Mean Baseline Score (SD)	LS Mean Change from Baseline (SE)	Placebo-subtracted Difference <sup>†</sup> (95% CI)
6	REXULTI (2 - 4 mg/day) <sup>‡</sup>	110	101.1 (14.9)	-22.8 (1.5)	-5.3 (-9.6, -1.1)
	Placebo	103	102.2 (16.3)	-17.4 (1.6)	--

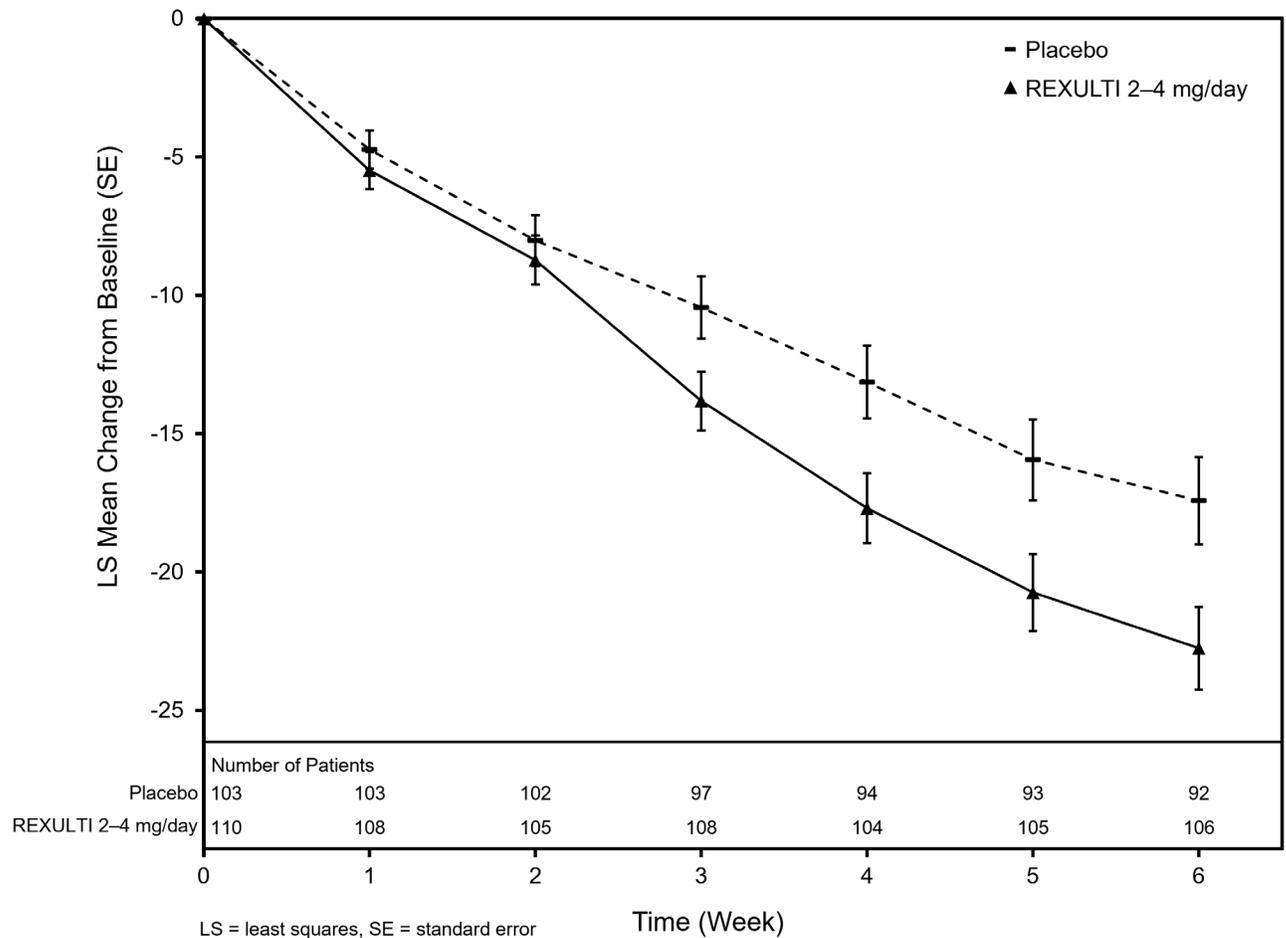
SD: standard deviation; SE: standard error; LS Mean: least-squares mean; CI: confidence interval

\* Efficacy sample includes treated subjects who have baseline and at least 1 post-baseline efficacy evaluation for the PANSS Total Score

<sup>†</sup> Difference (drug minus placebo) in least-squares mean change from baseline

<sup>‡</sup> Dosages statistically significantly superior to placebo

**Figure 7** Change from Baseline in PANSS Total Score by Study Visit (Week) in Pediatric Patients 13 to 17 years of age with Schizophrenia (Study 6)



### 14.3 Agitation Associated with Dementia Due to Alzheimer's Disease

The efficacy of REXULTI in the treatment of agitation associated with dementia due to Alzheimer's disease was demonstrated in two 12-week, randomized, double-blind, placebo-controlled, fixed-dose studies (Study 6, NCT01862640 and Study 7, NCT03548584). In these studies, patients were required to:

- Have a diagnosis of probable Alzheimer's disease according to NINCDS-ADRDA criteria,
- Have a Mini-Mental State Examination (MMSE) score of  $\geq 5$  and  $\leq 22$  and have a total score of  $\geq 4$  by the agitation/aggression item of the NPI/NPI-NH, and
- Exhibit sufficient agitation behaviors at time of entry to warrant use of pharmacotherapy, after excluding other factors.

Patients in:

- Study 6 were randomized to an oral dosage of either REXULTI 1 mg once a day, REXULTI 2 mg once a day, or placebo. Patients in both REXULTI groups started on 0.25 mg once daily for approximately three days, then received 0.5 mg once daily for approximately 12 days. Subsequently, patients in the 1 mg group received 1 mg once daily for the remainder of the 12-week study, and patients in the 2 mg group received 1 mg once daily for approximately two weeks and then received 2 mg for the remainder of the study.
- Study 7 were randomized to an oral dose of either REXULTI 2 mg or 3 mg once a day (combined treatment arm) or placebo. Patients in both REXULTI groups started on 0.5 mg once daily for 7 days, then received 1 mg once daily for 7 days and then 2 mg once daily for 14 days. Subsequently, patients in the 2 mg group received 2 mg once daily for the remainder of the 12-week study, and patients in the 3 mg group received 3 mg once daily for the remainder of the study.

Study 6 included 433 patients with a mean age of 74 years old, and a range of 51 and 90 years old; 45% were male; 96%, 3%, and 1%, were White, Black or African American, and Asian, respectively; and 16% and 83% were Latino/Hispanic and not Latino/Hispanic, respectively. Study 7 included 345 patients with a mean age of 74 years old, and a range of 56 and 90 years old; 44% were male; 95%, 4%, and 1% were White, Black or African American, and Asian, respectively; and 31% and 69% were Latino/Hispanic and not Latino/Hispanic, respectively.

The primary efficacy endpoint in these two studies was the change from baseline in the Cohen-Mansfield Agitation Inventory total (CMAI) score at Week 12. The CMAI is a clinician rated questionnaire consisting of 29 items, which assess the frequency of manifestations of agitated behaviors in elderly patients, based on caregiver input. Three specific factors can be derived from the CMAI scale: 1) Aggressive Behavior (e.g., screaming, throwing things, cursing/verbal aggression, kicking, pushing scratching, hurting self or others); 2) Physically Non-Aggressive Behavior (e.g., repetitive mannerisms, general restlessness, pacing); and 3) Verbally Agitated Behavior (e.g., complaining, repetitive questions, constant requests for attention). Each CMAI behavior was rated on a scale of 1 (never) to 7 (very frequent agitated behaviors); the total CMAI scores range from 29 (best) to 203 (worst). A negative change indicates improvement.

In Trial 6, patients in the REXULTI 2 mg group showed improved total CMAI scores compared to patients in the placebo group at Week 12. In Trial 7, patients in the REXULTI 2 mg/3 mg group showed improved total CMAI scores compared to patients in the placebo group at Week 12.

As shown in Table 16 and Figure 8, the mean change from baseline in the total CMAI score after 12 weeks in the 2 mg/or 3 mg REXULTI group was statistically significantly superior to the placebo group. The 1 mg REXULTI group did not demonstrate significantly greater mean changes at baseline from the placebo group in the total CMAI score in this patient population. The 1 mg once day REXULTI dosage is not approved and is not

recommended for the treatment of agitation associated with dementia due to Alzheimer's disease [see [Dosage and Administration \(2.4\)](#)].

**Table 16: Change in CMAI Total Score\* from Baseline at Week 12 in Patients with Agitation Associated with Dementia Due to Alzheimer’s Disease (Study 6 and Study 7)**

Study	Treatment Group	N	Mean Baseline Score (SD)	LS Mean Change from Baseline (SE)	Placebo-subtracted Difference <sup>†</sup> (95% CI)
6	REXULTI 1 mg/day	134	70.5 (16.0)	-17.6 (1.3)	0.2 (-3.4, 3.9)
	REXULTI 2 mg/day <sup>‡</sup>	138	71.0 (16.6)	-21.6 (1.3)	-3.8 (-7.4, -0.2)
	Placebo	131	72.2 (17.9)	-17.8 (1.3)	—
7	REXULTI 2 mg/day or 3 mg/day <sup>‡</sup>	225	80.6 (16.6)	-22.6 (1.1)	-5.3 (-8.8, -1.9)
	Placebo	116	79.2 (17.5)	-17.3 (1.4)	—

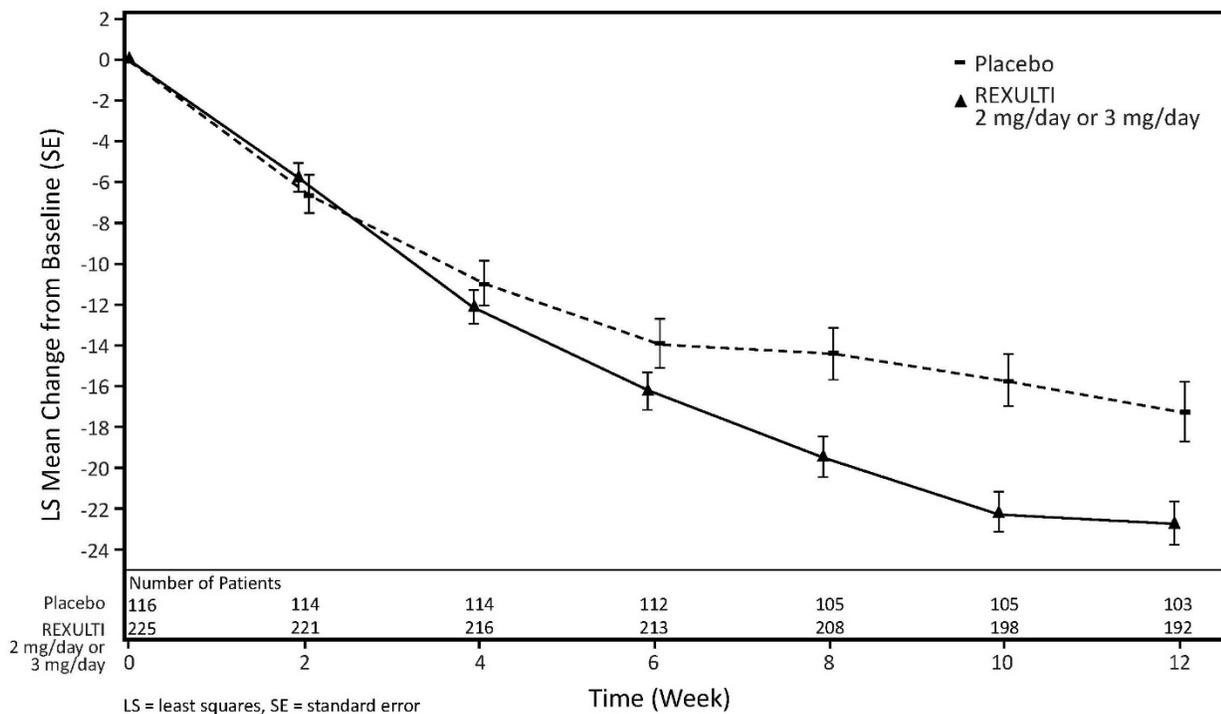
SD: standard deviation; SE: standard error; LS Mean: least-squares mean; CI: unadjusted confidence interval

\*In a supplementary analysis to examine the magnitude and direction of CMAI subscale response, Factor 1 (aggressive behavior), Factor 2 (physically non-aggressive behavior), and Factor 3 (verbal agitation) scores trended in the same direction with no single factor overly influencing the CMAI total score.

<sup>†</sup>Difference (drug minus placebo) in least-squares mean change from baseline

<sup>‡</sup>Dosages statistically significantly superior to placebo.

**Figure 8: Change from Baseline in Total CMAI Score by Study Week in Patients with Agitation Associated with Dementia Due to Alzheimer’s Disease (Study 7)**



## 16 HOW SUPPLIED/STORAGE AND HANDLING

### How Supplied

REXULTI (brexpiprazole) tablets have markings on one side and are available in the following strengths and package configurations (see below):

- 0.25 mg tablets are light brown, round, shallow convex, bevel-edged body with “BRX” and “0.25” imprinted on one side  
NDC 59148-035-13                      Bottles of 30
- 0.5 mg tablets: are light orange, round, shallow convex, bevel-edged body with “BRX” and “0.5” imprinted on one side  
NDC 59148-036-13                      Bottles of 30
- 1 mg tablets are light yellow, round, shallow convex, bevel-edged body with “BRX” and “1” imprinted on one side  
NDC 59148-037-13                      Bottles of 30
- 2 mg tablets are light green, round, shallow convex, bevel-edged body with “BRX” and “2” imprinted on one side  
NDC 59148-038-13                      Bottles of 30
- 3 mg tablets are light purple, round, shallow convex, bevel-edged body with “BRX” and “3” imprinted on one side  
NDC 59148-039-13                      Bottles of 30
- 4 mg tablets are white, round, shallow convex, bevel-edged body with “BRX” and “4” imprinted on one side  
NDC 59148-040-13                      Bottles of 30

### Storage

Store REXULTI tablets at 20°C to 25°C (68°F to 77°F); excursions permitted to 15°C to 30°C (59°F to 86°F) [see USP Controlled Room Temperature].

## 17 PATIENT COUNSELING INFORMATION

Advise the patient or caregiver to read the FDA-approved patient labeling (Medication Guide).

### Suicidal Thoughts and Behaviors

Advise patients and caregivers to look for the emergence of suicidality, especially early during treatment and when the dosage is adjusted up or down, and instruct them to report such symptoms to the healthcare provider [see [Boxed Warning](#), [Warnings and Precautions \(5.2\)](#)].

### Dosage and Administration

Advise patients that REXULTI can be taken with or without food. Advise patients regarding importance of following dosage escalation instructions [see [Dosage and Administration \(2\)](#)].

### Neuroleptic Malignant Syndrome (NMS)

Counsel patients about a potentially fatal adverse reaction, Neuroleptic Malignant Syndrome (NMS), that has been reported in association with administration of antipsychotic drugs. Advise patients to contact a healthcare

provider or report to the emergency room if they experience signs or symptoms of NMS [see [Warnings and Precautions \(5.4\)](#)].

#### Tardive Dyskinesia

Counsel patients on the signs and symptoms of tardive dyskinesia and to contact their healthcare provider if these abnormal movements occur [see [Warnings and Precautions \(5.5\)](#)].

#### Metabolic Changes

Educate patients about the risk of metabolic changes, how to recognize symptoms of hyperglycemia and diabetes mellitus, and the need for specific monitoring, including blood glucose, lipids, and weight [see [Warnings and Precautions \(5.6\)](#)].

#### Pathological Gambling and Other Compulsive Behaviors

Advise patients and their caregivers of the possibility that they may experience compulsive urges to shop, intense urges to gamble, compulsive sexual urges, binge eating and/or other compulsive urges and the inability to control these urges while taking REXULTI. In some cases, but not all, the urges were reported to have stopped when the dose was reduced or stopped [see [Warnings and Precautions \(5.7\)](#)].

#### Leukopenia, Neutropenia and Agranulocytosis

Advise patients with a pre-existing low WBC or a history of drug-induced leukopenia/neutropenia that they should have their CBC monitored while taking REXULTI [see [Warnings and Precautions \(5.8\)](#)].

#### Orthostatic Hypotension and Syncope

Educate patients about the risk of orthostatic hypotension and syncope, especially early in treatment, and also at times of reinitiating treatment or increases in dosage [see [Warnings and Precautions \(5.9\)](#)].

#### Heat Exposure and Dehydration

Counsel patients regarding appropriate care in avoiding overheating and dehydration [see [Warnings and Precautions \(5.12\)](#)].

#### Potential for Cognitive and Motor Impairment

Caution patients about performing activities requiring mental alertness, such as operating hazardous machinery or operating a motor vehicle, until they are reasonably certain that REXULTI therapy does not adversely affect their ability to engage in such activities [see [Warnings and Precautions \(5.14\)](#)].

#### Concomitant Medications

Advise patients to inform their healthcare providers of any changes to their current prescription or over-the-counter medications because there is a potential for clinically significant interactions [see [Drug Interactions \(7.1\)](#)].

#### Pregnancy

Advise patients that third trimester use of REXULTI may cause extrapyramidal and/or withdrawal symptoms in a neonate and to notify their healthcare provider with a known or suspected pregnancy. Advise patients that there is a pregnancy exposure registry that monitors pregnancy outcomes in women exposed to REXULTI during pregnancy [see [Use in Specific Populations \(8.1\)](#)].

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**MEDICATION GUIDE**  
**REXULTI® (REX-ul-TE)**  
**(brexpiprazole)**  
**tablets, for oral use**

**What is the most important information I should know about REXULTI?**

**REXULTI may cause serious side effects, including:**

- **Increased risk of death in elderly people with dementia-related psychosis.** Medicines like REXULTI can raise the risk of death in elderly people who have lost touch with reality (psychosis) due to confusion and memory loss (dementia). REXULTI is not approved for the treatment of people with dementia-related psychosis without agitation that may happen with dementia due to Alzheimer’s disease.
- **Increased risk of suicidal thoughts and actions.** REXULTI and antidepressant medicines increase the risk of suicidal thoughts and actions in people 24 years of age and younger, **especially within the first few months of treatment or when the dose is changed.**
  - Depression and other mental illnesses are the most important causes of suicidal thoughts and actions.

**How can I watch for and try to prevent suicidal thoughts and actions in myself or a family member?**

- Pay close attention to any changes, especially sudden changes in mood, behaviors, thoughts, or feelings, or if you develop suicidal thoughts or actions. This is very important when REXULTI or the antidepressant medicine is started or when the dose is changed.
- Call your healthcare provider right away to report new or sudden changes in mood, behavior, thoughts, or feelings, or if you develop suicidal thoughts or actions.
- Keep all follow-up visits with your healthcare provider as scheduled. Call your healthcare provider between visits as needed, especially if you have concerns about symptoms.

**Call a healthcare provider right away if you or your family member have any of the following symptoms, especially if they are new, worse, or worry you:**

- |  |   |
|--|---|
| ▪ thoughts about suicide or dying                    | ▪ attempts to commit suicide                |
| ▪ new or worsening depression                        | ▪ new or worsening anxiety                  |
| ▪ feeling very agitated or restless                  | ▪ panic attacks                             |
| ▪ trouble sleeping (insomnia)                        | ▪ new or worsening irritability             |
| ▪ acting aggressive, being angry, or violent         | ▪ acting on dangerous impulses              |
| ▪ an extreme increase in activity or talking (mania) | ▪ other unusual changes in behavior or mood |

See **“What are the possible side effects of REXULTI?”** for more information about side effects.

**What is REXULTI?**

REXULTI is a prescription medicine used:

- along with antidepressant medicines to treat major depressive disorder (MDD) in adults
- to treat schizophrenia in adults and children ages 13 years and older
- to treat agitation that may happen with dementia due to Alzheimer’s disease

REXULTI should not be used as an “as needed” treatment for agitation that may happen with dementia due to Alzheimer’s disease.

It is not known if REXULTI is safe and effective for the treatment of MDD in children.

It is not known if REXULTI is safe and effective for the treatment of schizophrenia in children under 13 years of age.

**Who should not take REXULTI?**

**Do not take REXULTI if you** are allergic to brexpiprazole or any of the ingredients in REXULTI. See the end of this Medication Guide for a complete list of ingredients in REXULTI.

**Before taking REXULTI, tell your healthcare provider about all of your medical conditions, including if you:**

- have or have had heart problems or a stroke
- have or have had low or high blood pressure
- have or have had diabetes or high blood sugar or a family history of diabetes or high blood sugar.
- have or have had high levels of total cholesterol, LDL cholesterol, or triglycerides, or low levels of HDL cholesterol
- have or have had seizures (convulsions)
- have or have had kidney or liver problems
- have or have had a low white blood cell count
- are pregnant or plan to become pregnant. REXULTI may harm your unborn baby. Taking REXULTI during your third trimester of pregnancy may cause your baby to have abnormal muscle movements or withdrawal symptoms after birth. Talk to your healthcare provider about the risk to your unborn baby if you take REXULTI during pregnancy.
  - Tell your healthcare provider if you become pregnant or think you are pregnant during treatment with REXULTI.
  - There is a pregnancy exposure registry for women who are exposed to REXULTI during pregnancy. If you become pregnant during treatment with REXULTI, talk to your healthcare provider about registering with the National Pregnancy Registry for Psychiatric Medications. You can register by calling 1-866-961-2388 or visit <http://womensmentalhealth.org/clinical-and-research-programs/pregnancyregistry/>.
- are breastfeeding or plan to breastfeed. It is not known if REXULTI passes into your breast milk. Talk to your healthcare provider about the best way to feed your baby during treatment with REXULTI.

**Tell your healthcare provider about all the medicines you take**, including prescription and over-the-counter medicines, vitamins, and herbal supplements.

REXULTI and other medicines may affect each other causing possible serious side effects. REXULTI may affect the way other medicines work, and other medicines may affect how REXULTI works.

Your healthcare provider can tell you if it is safe to take REXULTI with your other medicines. Do not start or stop any medicines during treatment with REXULTI without first talking to your healthcare provider.

Know the medicines you take. Keep a list of them to show your healthcare provider and pharmacist when you get a new medicine.

### How should I take REXULTI?

- Take REXULTI exactly as your healthcare provider tells you to take it. Your healthcare provider may change your dose if needed. Do not change the dose or stop taking REXULTI without first talking to your healthcare provider.
- Take REXULTI 1 time each day with or without food.
- If you take too much REXULTI, call your healthcare provider or Poison Help Line at 1-800-222-1222 or go to the nearest hospital emergency room right away.

### What should I avoid while taking REXULTI?

- Do not drive a car, operate machinery, or do other dangerous activities until you know how REXULTI affects you. REXULTI may make you feel drowsy.
- Do not become too hot or dehydrated during treatment with REXULTI.
  - Do not exercise too much.
  - In hot weather, stay inside in a cool place if possible.
  - Stay out of the sun.
  - Do not wear too much clothing or heavy clothing.
  - Drink plenty of water.

### What are the possible side effects of REXULTI?

#### REXULTI may cause serious side effects, including:

- See “What is the most important information I should know about REXULTI?”
- **Cerebrovascular problems, including stroke, in elderly people with dementia-related psychosis that can lead to death.**
- **Neuroleptic malignant syndrome (NMS) is a serious condition that can lead to death.** Call your healthcare provider or go to the nearest hospital emergency room right away if you have some or all of the following signs and symptoms of NMS:
  - high fever
  - stiff muscles
  - confusion
  - changes in your pulse, blood pressure, heart rate, and breathing
  - increased sweating
- **Uncontrolled body movements (tardive dyskinesia).** REXULTI may cause movements that you cannot control in your face, tongue, or other body parts. Tardive dyskinesia may not go away, even if you stop taking REXULTI. Tardive dyskinesia may also start after you stop taking REXULTI.
- **Problems with your metabolism such as:**
  - **high blood sugar (hyperglycemia) and diabetes.** Increases in blood sugar can happen in some people who take REXULTI. Extremely high blood sugar can lead to coma or death. Your healthcare provider should check your blood sugar before you start, or soon after you start REXULTI and then regularly during long term treatment with REXULTI.  
**Call your healthcare provider if you have any of these symptoms of high blood sugar during treatment with REXULTI:**
    - feel very thirsty
    - feel very hungry
    - feel sick to your stomach
    - need to urinate more than usual
    - feel weak or tired
    - feel confused, or your breath smells fruity
  - **increased fat levels (cholesterol and triglycerides) in your blood.** Your healthcare provider should check the fat levels in your blood before you start, or soon after you start REXULTI, and then periodically during treatment with REXULTI.
  - **weight gain.** You and your healthcare provider should check your weight before you start and often during treatment with REXULTI.
- **Unusual and uncontrollable (compulsive) urges.** Some people taking REXULTI have had strong unusual urges, to gamble and gambling that cannot be controlled (compulsive gambling). Other compulsive urges include sexual urges, shopping, and eating or binge eating. If you or your family

members notice that you are having new or unusual strong urges or behaviors, talk to your healthcare provider.

- **Low white blood cell count.** Your healthcare provider may do blood tests during the first few months of treatment with REXULTI.
- **Decreased blood pressure (orthostatic hypotension) and fainting.** You may feel dizzy, lightheaded, or pass out (faint) when you rise too quickly from a sitting or lying position.
- **Falls.** REXULTI may make you sleepy or dizzy, may cause a decrease in your blood pressure when changing position (orthostatic hypotension), and can slow your thinking and motor skills which may lead to falls that can cause fractures or other injuries.
- **Seizures (convulsions).**
- **Problems controlling your body temperature so that you feel too warm.** See “What should I avoid while taking REXULTI?”
- **Difficulty swallowing** that can cause food or liquid to get into your lungs.
- **Sleepiness, drowsiness, feeling tired, difficulty thinking and doing normal activities.** See “What should I avoid while taking REXULTI?”

**The most common side effects of REXULTI in adults** include weight gain, sleepiness, dizziness, common cold symptoms, and restlessness or feeling like you need to move (akathisia).

**The most common side effects of REXULTI in children 13 to 17 years of age** include difficulty moving or slow movement, tremors (shaking), abnormal eye movements, and muscle stiffness.

These are not all the possible side effects of REXULTI.

Call your doctor for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088.

### How should I store REXULTI?

- Store REXULTI at room temperature between 68°F to 77°F (20°C to 25°C).

**Keep REXULTI and all medicines out of the reach of children.**

### General information about the safe and effective use of REXULTI.

Medicines are sometimes prescribed for purposes other than those listed in a Medication Guide. Do not use REXULTI for a condition for which it was not prescribed. Do not give REXULTI to other people, even if they have the same symptoms you have. It may harm them. You can ask your pharmacist or healthcare provider for information about REXULTI that is written for health professionals.

### What are the ingredients in REXULTI?

**Active ingredient:** brexpiprazole

**Inactive ingredients:** lactose monohydrate, corn starch, microcrystalline cellulose, hydroxypropyl cellulose, low-substituted hydroxypropyl cellulose, magnesium stearate, hypromellose, and talc

**For color:** titanium dioxide, iron oxide, and ferrousferrous oxide

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This Medication Guide has been approved by the U.S. Food and Drug Administration.

Revised: 5/2025

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