

## Clinical Policy: Trofinetide (Daybue)

Reference Number: LA.PHAR.600

Effective Date:

Last Review Date: 07.24.23

Line of Business: Medicaid

[Revision Log](#)

See [Important Reminder](#) at the end of this policy for important regulatory and legal information.

**\*\*Please note: This policy is for medical benefit\*\***

### Description

Trofinetide (Daybue™) is an insulin-like growth factor 1 (IGF-1) analog.

### FDA Approved Indication(s)

Daybue is indicated for the treatment of Rett syndrome (RTT) in adults and pediatric patients 2 years of age and older.

### Policy/Criteria

*Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.*

It is the policy of Louisiana Healthcare Connections® that Daybue is **medically necessary** when the following criteria are met:

#### I. Initial Approval Criteria

##### A. Rett Syndrome (must meet all):

1. Diagnosis of RTT with both of the following (a and b):
  - a. Classic/typical RTT (*see Appendix D*);
  - b. *MECP2* gene mutation confirmed by genetic testing;
2. Prescribed by or in consultation with a pediatric neurologist, geneticist, or developmental pediatrician;
3. Age  $\geq$  2 years;
4. Weight  $\geq$  9 kg;
5. Member has had no seizures or has a stable pattern of seizures (e.g., no changes in seizure frequency, antiepileptic drugs, or behavioral treatments);
6. Documentation of one of the following baseline assessment scores (a or b):
  - a. Rett Syndrome Behavior Questionnaire (RSBQ) (*see Appendix E*);
  - b. Clinical Global Impression-Severity (CGI-S) of  $\geq$  4 (*see Appendix F*);
7. At the time of request, member does not have either of the following (a and b):
  - a. Long QT syndrome or baseline QTcF interval  $>$  450 msec;
  - b. Current treatment with insulin;
8. Dose does not exceed any of the following (a, b, c, d, or e):
  - a. Weight 9 kg to  $<$  12 kg: 10,000 mg (50 mL) per day;
  - b. Weight 12 kg to  $<$  20 kg: 12,000 mg (60 mL) per day;
  - c. Weight 20 kg to  $<$  35 kg: 16,000 mg (80 mL) per day;

- d. Weight 35 kg to < 50 kg: 20,000 mg (100 mL) per day;
- e. Weight  $\geq$  50 kg: 24,000 mg (120 mL) per day.

**Approval duration: 6 months**

**B. Other diagnoses/indications (must meet 1 or 2):**

- 1. If this drug has recently (within the last 6 months) undergone a label change (e.g., newly approved indication, age expansion, new dosing regimen) that is not yet reflected in this policy, refer to LA.PMN.255
- 2. If the requested use (e.g., diagnosis, age, dosing regimen) is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized) AND criterion 1 above does not apply, refer to the off-label use policy for the relevant line of business: LA.PMN.53 for Medicaid.

**II. Continued Therapy**

**A. Rett Syndrome (must meet all):**

- a. Currently receiving medication via Louisiana Healthcare Connections benefit or member has previously met initial approval criteria.
- 2. Member is responding positively to therapy as evidenced by, including but not limited to, improvement in any of the following parameters (a, b, or c):
  - a.  $\geq$  3-point reduction in overall RSBQ total score from baseline;
  - b. If the member has received Daybue for 6 months or less, they currently must have a CGI-I score between 1-4;
  - c. If the member has received Daybue for more than 6 months, they currently must have a CGI-I score between 1-3;
- 3. If request is for a dose increase, new does not exceed any of the following (a, b, c, d, or e):
  - a. Weight 9 kg to < 12 kg: 10,000 mg (50 mL) per day;
  - b. Weight 12 kg to < 20 kg: 12,000 mg (60 mL) per day;
  - c. Weight 20 kg to < 35 kg: 16,000 mg (80 mL) per day;
  - d. Weight 35 kg to < 50 kg: 20,000 mg (100 mL) per day;
  - e. Weight  $\geq$  50 kg: 24,000 mg (120 mL) per day.

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**B. Other diagnoses/indications (must meet 1 or 2):**

- 1. If this drug has recently (within the last 6 months) undergone a label change (e.g., newly approved indication, age expansion, new dosing regimen) that is not yet reflected in this policy, refer to LA.PMN.255
- 2. If the requested use (e.g., diagnosis, age, dosing regimen) is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized) AND criterion 1 above does not apply, refer to the off-label use policy for the relevant line of business: LA.PMN.53 for Medicaid.

**III. Diagnoses/Indications for which coverage is NOT authorized:**

- A. Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off label use policies – LA.PMN.53 for Medicaid, or evidence of coverage documents.

#### **IV. Appendices/General Information**

*Appendix A: Abbreviation/Acronym Key*

CGI-I: Clinical Global Impression-Improvement

CGI-S: Clinical Global Impression-Severity

FDA: Food and Drug Administration

IGF-1: insulin-like growth factor 1

RSBQ: Rett Syndrome Behavior Questionnaire

RTT: Rett syndrome

*Appendix B: Therapeutic Alternatives*

Not applicable

*Appendix C: Contraindications/Boxed Warnings*

None reported

*Appendix D: General Information*

- RTT is a rare neurodevelopment disorder that occurs almost exclusively in females; however, there have been cases seen in males.
- Mutations on the *MECP2* gene occur in 90-95% of RTT cases.
  - The *MECP2* gene is imperative for the normal functioning of nerve cells.
- According to the International Rett Syndrome Foundation, classical/typical RTT is defined by these criteria:
  - Main criteria
    - Partial or complete loss of acquired purposeful hand skills
    - Partial or complete loss of acquired spoken language
    - Gait abnormalities: impaired or absence of ability to walk
    - Hand wringing/squeezing/clapping, mouthing, and/or washing/rubbing that seems habitual or uncontrollable (stereotypical of RTT)
  - Exclusion criteria
    - Brain injury secondary to trauma, neurometabolic disease, or severe infection that causes neurological problems
    - Grossly abnormal psychomotor development in the first 6 months of life
  - Supportive criteria
    - Breathing disturbances when awake, bruxism when awake, abnormal muscle tone, impaired sleep pattern, peripheral vasomotor disturbances, scoliosis/kyphosis, growth retardation, small cold hands and feet, inappropriate laughing/screaming spells, diminished response to pain, intense eye communication-use of eye pointing
  - Required criteria for classical RTT
    - A period of regression followed by recovery or stabilization
    - All main criteria and all exclusion criteria
    - Supportive criteria are not required, though often present in typical RTT

- Individuals with RTT may also suffer from seizures, autism, cardiovascular dysfunction, and gastrointestinal issues, often requiring a gastrostomy tube.

*Appendix E: Rett Syndrome Behavior Questionnaire (RSBQ)*

The RSBQ is used to assess characteristics of RTT. It consists of 45 questions across eight categories, each question with three answers at values of 0, 1, and 2; 0 corresponds to “never”, 1 to “sometimes”, and 2 to “always”.

<b>RSBQ Category</b>
General mood
Breathing problems
Hand behaviors
Repetitive face movements
Body rocking and expressionless face
Night-time behaviors
Fear/anxiety
Walking/standing
<b>Total (max score = 90)</b>

*Appendix F: Clinical Global Impression Score*

Score rated on a 7-point scale used to determine if illness was improved or worsened.

<b>CGI-S</b>	<b>CGI-I</b>	<b>Score</b>
Normal	Very much improvement	1
Borderline ill	Much improved	2
Mildly ill	Minimally improved	3
Moderately ill	No change	4
Markedly ill	Minimally worse	5
Severely ill	Much worse	6
Extremely ill	Very much worse	7

**V. Dosage and Administration**

<b>Indication</b>	<b>Dosing Regimen</b>	<b>Maximum Dose</b>
RTT	Dose can be given orally or via gastrostomy (G) tube or gastrojejunal tube <ul style="list-style-type: none"> <li>• Weight 9 kg to &lt; 12 kg: 5,000 mg (25 mL) twice daily</li> <li>• Weight 12 kg to &lt; 20 kg: 6,000 mg (30 mL) twice daily</li> <li>• Weight 20 kg to &lt; 35 kg: 8,000 mg (40 mL) twice daily</li> <li>• Weight 35 kg to &lt; 50 kg: 10,000 mg (50 mL) twice daily</li> <li>• Weight ≥ 50 kg: 12,000 mg (60 mL) twice daily</li> </ul>	24,000 mg/day

**VI. Product Availability**

Oral solution: 200 mg/mL

## VII. References

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Reviews, Revisions, and Approvals	Date	LDH Approval Date
Policy created.	05.01.23	
Policy updated per approved FDA labeling and clinical trial inclusion and exclusion criteria; requirement for CGI-I in the Initial Approval Criteria section was updated to CGI-S with the requirement for a minimum score of 4 to determine moderate disease severity; for Continued Therapy, added requirement for	07.24.23	

Reviews, Revisions, and Approvals	Date	LDH Approval Date
documentation of response to therapy via specific score improvements on the RSBQ or CGI-I; references reviewed and updated.		

**Important Reminder**

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. LHCC makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved.

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