

Louisiana Medicaid
Lovotibeglogene autotemcel (Lyfgenia®)

The *Louisiana Uniform Prescription Drug Prior Authorization Form* should be utilized to request clinical authorization for lovotibeglogene autotemcel (Lyfgenia®).

Additional Point-of-Sale edits may apply.

By submitting the authorization request, the prescriber attests to the conditions available [HERE](#).

Approval Criteria

- The recipient is ≥ 12 years and ≤ 50 years of age or older at the expected time of gene therapy administration ~~date of the request~~; **AND**
- The recipient has a diagnosis of sickle cell disease (SCD); confirmed via genetic testing with either β^S/β^S or β^S/β^0 or β^S/β^+ genotype; **AND**
- **ONE** of the following is true and **stated on the request**:
 - ~~The provider states on the request that the~~ The recipient has experienced at least 4 severe vaso-occlusive events (VOEs) in the previous 24 months; **OR AND**
 - The recipient is currently receiving chronic transfusion therapy for recurrent VOEs; **AND**
- The recipient has had treatment failure, or intolerance to hydroxyurea (per health care professional judgement) at any point in the past ~~HU~~; **AND**
- This medication is prescribed by, or in consultation with a board-certified a hematologist with SCD experience; **AND**
- ~~If the request is for a non-preferred agent — ONE of the following is required:~~
 - ~~The recipient has had a treatment failure with at least one preferred product; OR~~
 - ~~The recipient has had an intolerable side effect to at least one preferred product; OR~~
 - ~~The recipient has a documented contraindication(s) to all of the preferred products that are appropriate to use for the condition being treated; OR~~
 - ~~There is no preferred product that is appropriate to use for the condition being treated; AND~~
- The following are true and **stated on the request**:
 - The recipient does not have advanced liver disease; **AND**
 - The recipient has not tested positive for human immunodeficiency virus [HIV] infection; hepatitis B virus [HBV] or hepatitis C virus [HCV]; **AND**
 - The recipient does not have inadequate bone marrow function, as defined by an absolute neutrophil count of $< 1000/\mu\text{L}$ ($< 500/\mu\text{L}$ for subjects on HU treatment) or a platelet count $< 100,000/\mu\text{L}$; **AND**
 - ~~The recipient does not have a history of severe cerebral vasculopathy; AND~~
 - The recipient does not have prior or current malignancy or immunodeficiency disorder, except previously treated, non-life threatening, cured tumors such as squamous cell carcinoma of the skin; **AND**
 - The recipient does not have an immediate family member with a known or suspected familial cancer syndrome; **AND**
 - The recipient is not pregnant or breastfeeding; **AND**

- The recipient is eligible to receive hematopoietic stem cell (HSC) transplantation; **AND**
- ~~○ The recipient has no known and available HLA matched family donor; **AND**~~
- ~~○ The recipient has not received prior HSC transplantation; **AND**~~
- ~~○ The recipient **has never received a dose** of any gene therapy; **AND**~~
- The recipient does not have a clinically significant and active bacterial, viral, fungal, or parasitic infection.

Duration of approval: 126 months – allow 1 dose per lifetime

References

ClinicalTrials.gov. A Study Evaluating the Safety and Efficacy of bb1111 in Severe Sickle Cell Disease. <https://clinicaltrials.gov/study/NCT02140554>

Lyfgenia (lovotibeglogene autotemcel) [package insert]. Somerville, MA: Bluebird Bio, Inc; December 2023. https://www.bluebirdbio.com/-/media/bluebirdbio/Corporate%20COM/Files/Lyfgenia/LYFGENIA_Prescribing_Information.pdf

Revision / Date	Implementation Date
Policy created / February 2024	July 2024
<u>Modified the following criteria – age, timing of administration, specific genotypes removed / confirmed genetic testing added, included chronic transfusion therapy for recurrent VOEs, included hydroxyurea failure/intolerance in the past per health care professional judgement, included consultation with board-certified hematologist with SCD experience, increased approval duration to 12 months</u>	<u>July 2025</u>