

## Clinical Policy: Nadofaragene Firadenovec-vncg (Adstiladrin)

Reference Number: LA.PHAR.461

Effective Date:

Last Review Date: 05.01.23

Line of Business: Medicaid

[Coding Implications](#)

[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

Nadofaragene firadenovec-vncg (Adstiladrin®) is a gene therapy via a non-replicating adenovirus vector harboring the human interferon alpha2b gene.

### FDA Approved Indication(s)

Adstiladrin is indicated for the treatment of adult patients with high-risk, Bacillus Calmette-Guerin (BCG)-unresponsive, non-muscle invasive bladder cancer (NMIBC) with carcinoma in situ (CIS) with or without papillary tumors.

### 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 Adstiladrin is **medically necessary** when the following criteria are met:

#### I. Initial Approval Criteria

##### A. Non-Muscle Invasive Bladder Cancer (must meet all):

1. Diagnosis of NMIBC characterized as one of the following (a, b, or c) (*see Appendix D*):
  - a. CIS only;
  - b. Ta/T1 high-grade disease with concomitant CIS;
  - c. Ta/T1 high-grade without concomitant CIS;
2. Prescribed by or in consultation with an oncologist;
3. Age  $\geq$  18 years;
4. Member is refractory to BCG treatment (*see Appendix D*);  
*\*Prior authorization may be required for BCG immunotherapy*
5. For members who are not candidates for cystectomy, failure of intravesical chemotherapy, unless contraindicated or clinically significant adverse effects are experienced;
6. At the time of request, member does not have clinically significant and unexplained elevated liver or renal function tests;
7. Dose does not exceed 75 mL (4 vials) of  $3 \times 10^{11}$  viral particles (vp)/mL.

**Approval duration:** 3 months (1 dose only)

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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.

## **II. Continued Therapy**

#### **A. Non-Muscle Invasive Bladder Cancer** (must meet all):

1. 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 freedom from high-grade disease recurrence, as evaluated by cytology, cystoscopy, and/or biopsy;
3. Member has not yet received 4 total lifetime doses of Adstiladrin;
4. Dose does not exceed 75 mL (4 vials) of  $3 \times 10^{11}$  vp/mL every 3 months.

**Approval duration:** 3 months (1 dose only; total of four doses per lifetime)

#### **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*

BCG: bacillus Calmette-Guerin  
 CIS: carcinoma in-situ  
 FDA: Food and Drug Administration  
 NMIBC: non-muscle invasive bladder cancer  
 Ta/T1: description of tumor growth

Ta tumors are “papillary tumors”,  
 T1 tumors have grown into the connective tissue of the bladder wall, but not into the muscle layer  
 vp: viral particles

#### *Appendix B: Therapeutic Alternatives*

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*This table provides a listing of preferred alternative therapy recommended in the approval criteria. The drugs listed here may not be a formulary agent for all relevant lines of business and may require prior authorization.*

Drug Name	Dosing Regimen	Dose Limit/ Maximum Dose
Bacillus Calmette-Guerin vaccine (TICE BCG®)	1 to $8 \times 10^8$ CFU (a vial) intravesical instillation once per week for 6 weeks	1 to $8 \times 10^8$ CFU per week
gemcitabine	varies	varies
mitomycin	varies	varies

*Therapeutic alternatives are listed as Brand name® (generic) when the drug is available by brand name only and generic (Brand name®) when the drug is available by both brand and generic.*

#### Appendix C: Contraindications/Boxed Warnings

- Contraindication(s): hypersensitivity to interferon alfa or any component of the product
- Boxed warning(s): none

#### Appendix D: General Information

- Refractory or “BCG unresponsive” is defined as being at least one of the following:
  1. Persistent or recurrent CIS alone or with recurrent Ta/T1 disease within 12 months of completion of adequate BCG therapy, defined as at least one of the following:
    - a. At least 5 of 6 doses of an initial induction course plus at least 2 of 3 doses of maintenance therapy
    - b. At least 5 of 6 doses of an initial induction course plus at least 2 of 6 doses of the second induction course
  2. Recurrent high-grade Ta/T1 disease within 6 months of completion of adequate BCG therapy
  3. T1 high-grade disease at the first evaluation following an induction BCG course

## V. Dosage and Administration

Indication	Dosing Regimen	Maximum Dose
High grade, BCG unresponsive NMIBC	Initial dose: $1 \times 10^{11}$ vp/mL OR $3 \times 10^{11}$ vp/mL Retreatment at months 4, 7, and 10	75 mL (4 vials) of $3 \times 10^{11}$ vp/mL for a total of four doses

## VI. Product Availability

Single-use vial:  $3 \times 10^{11}$  vp/mL; four single-dose vials per carton

## VII. References

1. Boorjian SA, Alemozaffar M, Bad Konety BR, et al. Intravesical nadofaragene firadenovec gene therapy for BCG-unresponsive non-muscle-invasive bladder cancer: a single-arm, open-label, repeat-dose clinical trial [published online November 27, 2020]. *Lancet Oncol*. doi: 10.1016/S1470-2045(20)30540-4.

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- FKD Therapies Oy. A study to evaluate Instiladrin in patients with high-grade, Bacillus Calmette-Guerin (BCG) unresponsive NMIBC. Available at: <https://clinicaltrials.gov/ct2/show/study/NCT02773849>. Accessed September 27, 2021.
- Shore ND, Boorjian SA, Canter DJ, et al. Intravesical rAD-IFN $\alpha$ /Syn3 for patients with high-grade, Bacillus Calmette-Guerin refractory or relapsed nonmuscle-invasive bladder cancer: a phase II randomized study. *Journal of Clinical Oncology*. August 2017; 35(30): 3410-3416.
- National Comprehensive Cancer Network. Bladder Cancer Version 3.2022. Available at [https://www.nccn.org/professionals/physician\\_gls/pdf/bladder.pdf](https://www.nccn.org/professionals/physician_gls/pdf/bladder.pdf). Accessed January 1, 2023.

### Coding Implications

Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

HCPCS Codes	Description
J3590	Unclassified biologics
C9399	Unclassified drugs or biologicals

Reviews, Revisions, and Approvals	Date	LDH Approval Date
Policy created	05.01.23	

### 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.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions, and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable LHCC administrative policies and procedures.

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This clinical policy is effective as of the date determined by LHCC. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. LHCC retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment, or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care and are solely responsible for the medical advice and treatment of members. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

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