Mass General Brigham
Health Plan

Adstiladrin
(nadofaragene firadenovec-vncg)

Policy Number: 068

	Commercial and Qualified Health Plans	MassHealth	Medicare Advantage
Authorization Required	X	X	X
No Prior Authorization			
Not covered			

Adstiladrin is a non-replicating adenovirus vector-based gene-therapy for the treatment of adult patients with high-risk Bacillus Calmette-Guérin (BCG)-unresponsive non-muscle invasive bladder cancer (NMIBC) with carcinoma in situ (CIS) with or without papillary tumors.

Criteria

1. Criteria for Initial Approval
   Authorization may be granted to members 18 years of age or older when the following criteria are met:
   A. The member has non-muscle invasive bladder cancer with carcinoma in situ (with or without papillary tumors); AND
   B. The member has high risk disease that is unresponsive to BCG defined as one of the following:
      i. Stage T1 disease following a single induction course of BCG; or
      ii. Persistent or recurrent disease following at least five of six doses of an initial induction course of BCG plus either:
         - At least two of three doses of maintenance therapy; or
         - At least two of six doses of an additional induction course.
   C. The member has undergone transurethral resection of bladder tumor (TURBT) to remove all resectable disease (Ta and T1 components).

2. Dosing and Administration
   - The recommended dose of Adstiladrin is 75 mL at a concentration of 3 x 1011 viral particles (vp)/mL instilled once every 3 months into the bladder via a urinary catheter.
   - Premedication with an anticholinergic before instillation of Adstiladrin.
   - Adstiladrin should be administered by intravesical instillation only.
   - Adstiladrin should be left in the bladder for 1 hour following instillation.

3. Continuation of Therapy
   - Authorization of additional courses of therapy may be approved up to 12 months if the member meets all of the following:
      i. The member continues to meet the criteria for initial approval;
      ii. There is disease response with treatment as defined by stabilization of disease or decrease in size of tumor or tumor spread;
      iii. There is an absence of unacceptable toxicity to the drug.
   - If members with CIS do not have a complete response to treatment after 3 months or if CIS recurs, then providers should consider cystectomy.

Contraindications/Exclusions

1. The member has extra-vesical (i.e., urethra, ureter, or renal pelvis), muscle invasive (T2-T4), or metastatic urothelial carcinoma
2. The member is currently receiving systemic therapy for bladder cancer
3. The member has received prior treatment with adenovirus-based therapies
4. The member has a hypersensitivity to interferon alfa
5. The member is immunosuppressed or immunodeficient

MassHealth Variation

Mass General Brigham Health Plan uses the MassHealth Drug List for coverage determinations for members of the MGB ACO. Criteria for Adstiladrin are found in Table 57: Oncology Agents.

Medicare Variation

Mass General Brigham Health Plan uses guidance from the Centers for Medicare and Medicaid Services (CMS) for coverage determinations for its Medicare Advantage plan members. National Coverage Determinations (NCDs), Local Coverage Determinations (LCDs), Local Coverage Articles (LCAs) and documentation included in the Medicare manuals are the basis for coverage determinations. When there is no guidance from CMS for the requested service, Mass General Brigham Health Plan's medical policies are used for coverage determinations.

Codes

The following codes are included below for informational purposes only; inclusion of a code does not constitute or imply coverage or reimbursement.

This list of codes applies to commercial and MassHealth plans only.

Authorized CPT/HCPCS Codes	Code Description
J9029	Injection, nadofaragene firadenovec-vncg, per therapeutic dose

Summary of Evidence

Nadofaragene firadenovec-vncg, a non-replicating adenoviral vector gene therapy delivering the interferon-alpha-2b gene, has emerged as a novel treatment for Bacillus Calmette-Guérin (BCG)-unresponsive non-muscle-invasive bladder cancer (NMIBC). Key clinical evidence comes from three major studies: Dinney et al (2013) performed a dose-ascending phase I trial, and Shore et al. (2017) published phase II randomized trial results for intravesical rAd-IFNα/Syn3 in patients with BCG-refractory or relapsed disease. In Shore's study, 35% of patients had recurrence-free survival at 1 year, and the therapy was well tolerated. Boorjian et al. (2021) later presented results from a pivotal, single-arm, open-label, repeat-dose clinical trial in BCG-unresponsive patients with carcinoma in situ (CIS) or high-grade Ta or T1 tumors. For patients with CIS, Boorjian et al. demonstrated a 53% complete response rate at 3 months and durable responses lasting 12 months or more in 24%. For patients with high-grade Ta or T1 tumors, the complete response rate was 73% at 3 months, and durable response lasting 12 months or more was observed in 44%. Approved by the FDA in 2022 (Ferring Pharmaceuticals), nadofaragene firadenovec-vncg offers a new intravesical treatment option for high-grade BCG-refractory or relapsed NMIBC, addressing an unmet clinical need. MGB Health Plan considers Adstiladrin to be medically necessary in patients who meet criteria consistent with the inclusion criteria of the pivotal study by Boorjian et al. (2021).

Effective

March 2025: Annual Review. Added Summary of Evidence.
September 2024: Ad hoc update. MassHealth variation added.
March 2024: Annual Review.
December 4, 2023: Off-cycle update. Masshealth coverage added. Table edited. Criteria unchanged.
October 2023: Effective Date

References

Boorjian SA, Alemozaffar M, 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. Lancet Oncol. 2021 Jan;22(1):107-117. doi: 10.1016/S1470-2045(20)30540-4. Epub 2020 Nov 27. PMID: 33253641; PMCID: PMC7988888.

Dinney CP, Fisher MB,Navai N, et al: Phase I trial of intravesical recombinant adenovirus mediated in terferon a22b formulated in Syn3 for Bacillus Calmette Gu´ erin failures in nonmuscle invasive bladder cancer. J Urol 190:850-856, 2013

Nadofaragene firadenovec-vncg [package insert]. Kupio, Finland: Ferring Pharmaceuticals; 2022

Shore ND, Boorjian SA, Canter DJ. Et al. Intravesical rAd-IFNα/Syn3 for Patients With High-Grade, Bacillus Calmette-Guerin-Refractory or Relapsed Non-Muscle-Invasive Bladder Cancer: A Phase II Randomized Study. J Clin Oncol. 2017 Oct 20;35(30):3410-3416. doi: 10.1200/JCO.2017.72.3064. Epub 2017 Aug 23. Erratum in: J Clin Oncol. 2019 Aug 20;37(24):2187. PMID: 28834453; PMCID: PMC5648171.