Clinical Policy: Olaratumab (Lartruvo)

Reference Number: PA.CP.PHAR.326
Effective Date: 01/18
Last Review Date: 10/30/2019

Coding Implications
Revision Log

Description
The intent of the criteria is to ensure that patients follow selection elements established by Pennsylvania Health and Wellness ® clinical policy for olaratumab for injection (Lartruvo™).

FDA Approved Indication(s)
Lartruvo is indicated in combination with doxorubicin for the treatment of adult patients with soft tissue sarcoma (STS) with a histologic subtype for which an anthracycline-containing regimen is appropriate and which is not amenable to curative treatment with radiotherapy or surgery.

Limitation(s) of use: This indication is approved under accelerated approval. Continued approval for this indication may be contingent upon verification and description of clinical benefit in the confirmatory trial.

Policy/Criteria
It is the policy of Pennsylvania Health and Wellness ® that Lartruvo is **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Soft Tissue Sarcoma (must meet all):

1. Diagnosis of soft tissue sarcoma (STS);
2. Prescribed by or in consultation with an oncologist;
3. Prescribed in combination with doxorubicin;
4. Request meets one of the following (a or b):
   a. Dose does not exceed 15 mg/kg on Days 1 and 8 of each 21-day cycle;
   b. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

Approval duration: 6 months

B. Other diagnoses/indications: Refer to PA.CP.PMN.53

II. Continued Approval

A. Soft Tissue Sarcoma (must meet all)**:**

1. Currently receiving medication via Pennsylvania Health and Wellness benefit or member has previously met all initial approval criteria; or the Continuity of Care policy (PA.LTSS.PHAR.01) applies;
2. Member is responding positively to therapy;
3. If request is for a dose increase, request meets one of the following (a or b):
   a. New dose does not exceed 15 mg/kg on Days 1 and 8 of each 21-day cycle;
   b. New dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

Approval duration: 12 months

B. Other diagnoses/indications (must meet 1 or 2)**:**
1. Currently receiving medication via Pennsylvania Health and Wellness benefit and documentation supports positive response to therapy; or the Continuity of Care policy (PA.LTSS.PHAR.01) applies; or
2. Refer to PA.CP.PMN.53

Background

Description/Mechanism of Action:

Olaratumab is a human immunoglobulin G (IgG)1 antibody that binds platelet-derived growth factor receptor alpha (PDGFR-α). PDGFR-α is a receptor tyrosine kinase expressed on cells of mesenchymal origin. Signaling through this receptor plays a role in cell growth, chemotaxis, and mesenchymal stem cell differentiation. The receptor has also been detected on some tumor and stromal cells, including sarcomas, where signaling can contribute to cancer cell proliferation, metastasis, and maintenance of the tumor microenvironment. The interaction between olaratumab and PDGFR-α prevents binding of the receptor by the PDGF-AA and -BB ligands as well as PDGF-AA, -BB, and -CC-induced receptor activation and downstream PDGFR-α pathway signaling. Olaratumab exhibits in vitro and in vivo anti-tumor activity against selected sarcoma cell lines and disrupted the PDGFR-α signaling pathway in in vivo tumor implant models.

Formulations:

Lartruvo is supplied in single-dose vials as a solution available as a:
- 500 mg/50 mL (10 mg/mL) single-dose vial, individually packaged in a carton.

Appendices

Appendix A: Abbreviation/Acronym Key

FDA: Food and Drug Administration
NCCN: National Comprehensive Cancer Network
PDGFR-α: platelet-derived growth factor receptor alpha
STS: soft tissue sarcoma

Appendix B: Therapeutic Alternatives

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
doxorubicin HCL (Adriamycin®)	Labeled dosing regimen for metastatic STS: • As a single agent: 60 to 75 mg/m^2 IV every 21 days. • In combination with other chemotherapy drugs: 40 to 75 mg/m2 IV every 21 to 28 days. • Consider use of the lower doxorubicin dose in the recommended dose range or longer intervals	Varies

Drug Name	Dosing Regimen	Dose Limit/ Maximum Dose
	between cycles for heavily pretreated patients, elderly patients, or obese patients. • Cumulative doses above 550 mg/m^2 are associated with an increased risk of cardiomyopathy.	

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/Black Box Warnings
None reported.

Appendix D: STS Subtypes
- Sarcomas are divided into STS and sarcomas of bone.
- More than 50 STS histologic subtypes have been identified. Common subtypes include undifferentiated sarcoma, gastrointestinal stromal tumor, liposarcoma, and leiomyosarcoma.
- The most common anatomic STS locations are extremities, trunk, visceral, retroperitoneum, and head and neck. Rhabdomyosarcoma is the most common STS of children and adolescents and is less common in adults.
- NCCN recommends Lartruvo in combination with doxorubicin for use in STS histologies for which an anthracycline-containing regimen is appropriate (e.g., non-specific subtypes, non-pleomorphic rhabdomyosarcoma, desmoid tumors (aggressive fibromatosis)).
- NCCN also recommends Lartruvo in combination with doxorubicin for extremity, superficial trunk, and head/neck STS, retroperitoneal and intra-abdominal STS, angiosarcoma, and uterine sarcoma (e.g., endometrial stromal sarcomas, leiomyosarcoma, adenosarcoma).

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
N/A	

Reviews, Revisions, and Approvals	Date	Approval Date
4Q 2018 annual review: no significant changes; NCCN and FDA-approved uses summarized for improved clarity; specialist involvement in care and continuation of care added; references reviewed and updated.	08/18	

Reviews, Revisions, and Approvals	Date	Approval Date
4Q 2019 annual review: No changes per Statewide PDL implementation 01-01-2020	10/30/19	

References

1. Lartruvo Prescribing Information. Indianapolis, IN: Eli Lilly and Company; February 2017. Available at http://pi.lilly.com/us/lartruvo-uspi.pdf. Accessed July 19, 2018.
2. National Comprehensive Cancer Network Drugs and Biologics Compendium. Available at: http://www.nccn.org/professionals/drug_compendium. Accessed July 19, 2018.
3. National Comprehensive Cancer Network. Soft tissue sarcoma. Version 2.2018. Available at: http://www.nccn.org/professionals/physician_gls/pdf/nscl.pdf. Accessed July 19, 2018.
4. National Comprehensive Cancer Network. Uterine neoplasms. Version 2.2018. Available at: http://www.nccn.org/professionals/physician_gls/pdf/nscl.pdf. Accessed July 19, 2018.
5. Doxorubicin Prescribing Information. New York, NY: Pfizer, Inc. October 2013. Available at https://www.accessdata.fda.gov/drugsatfda_docs/label/2013/050629s022lbl.pdf. Accessed July 19, 2018.
6. Clinical Pharmacology [database online]. Tampa, FL: Gold Standard, Inc.; 2018. Available at: http://www.clinicalpharmacology-ip.com/.