MedStar Health, Inc.
POLICY AND PROCEDURE MANUAL

Policy Number: MP.117.MH
Last Review Date: 08/04/2016
Effective Date: 09/01/2016

MP.117.MH – Molecular Testing for Treatment of Melanoma

This policy applies to the following lines of business:
- ✓ MedStar Employee (Select)
- ✓ MedStar MA – DSNP – CSNP
- ✓ MedStar CareFirst PPO

MedStar Health considers **Molecular Testing for Treatment of Melanoma** medically necessary for the following indications:

The BRAF V600E and V600K Mutation tests are indicated as companion tests when:
1. The member is diagnosed with unresectableor metastatic melanoma
2. The melanoma is classified as a Stage IIIC or Stage IV melanoma (*see American Joint Committee on Cancer TNM Staging System reference for additional information*)
3. Treatment with Tafinlar (dabrafinib), Mekinist (trametinib) used for BRAF V600K mutations, or Zelboraf® used for BRAF V600E mutations is being considered (Refer to pharmacy policies).

Limitations
1. BRAF V600E and V600K Mutation tests are Experimental and Investigational and therefore not a covered benefit for these diagnoses:
   - Colorectal Cancer
   - For the work up of Lynch Syndrome (Hereditary nonpolyposis colorectal cancer)

Background
The primary cause of melanoma is DNA damage from exposure to ultraviolet light (sunlight). Early-stage melanoma may be treated with simple surgical excision, while later-stage melanomas may also be treated with chemotherapy and/or immunotherapy. The University of California San Francisco reports that melanoma is the most dangerous type of skin cancer, despite making up only 4% of skin cancers, it cause 77% of skin cancer deaths.

In normal skin tissue, the BRAF protein is involved with regulating cell growth, but is mutated in about have of the patients with late-stage melanomas. In melanoma patients, BRAF V600E and V600K mutations may predict response to certain tyrosine kinase inhibitor medications.

Patients with BRAF mutations are treated with three possible medications:

- Tafinlar (dabrafinib)
- Mekinist (trametinib)
- Zelboraf®.

Individuals treated for BRAF-mutated metastatic melanomas using these medications tend to have prolonged survival compared to those treated with dacarbazine.

On August 17, 2011, the FDA approved the BRAF V600E mutation test (Roche Molecular Systems, Inc), a real- time in vitro diagnostic test intended to detect the BRAF V600E mutation in DNA extracted from human melanoma tissue. Currently, testing on BRAF V600E and V600K mutations are used to determine a patient's eligibility for treatment with Tafinlar, Mekinist, or Zelboraf®.

Codes:

CPT Codes / HCPCS Codes / ICD-10 Codes	
Code	Description
CPT Codes	
81210	BRAF (v-raf murine sarcoma viral oncogene homolog B1) (eg, colon cancer), gene analysis, V600E variant
81406	Molecular pathology procedure, Level 7 (BRAF (v-raf murine sarcoma viral oncogene homolog B1) (e.g., Noonan syndrome), full gene sequence
ICD-9 codes covered if selection criteria are met (The following Diagnosis Codes are applicable only if the melanoma is Stage IIIC or Stage IV):	
172.0	Malignant melanoma of skin of lip
172.1	Melanoma of skin eyelid, including canthus
172.2	Malignant melanoma of skin of ear and external auditory canal
172.3	Malignant melanoma of skin of other and unspecified parts of face
172.4	Malignant melanoma of skin of scalp and neck
172.5	Malignant melanoma of skin of trunk except scrotum
172.6	Malignant melanoma of skin of upper limb, including shoulder
172.7	Malignant melanoma of skin of lower limb including hip

172.8	Malignant neoplasm; other specified sites of skin, malignant melanoma of contiguous or overlapping sites of skin whose point of origin cannot be determined
172.9	Melanoma of skin site unspecified
ICD-10 codes covered if selection criteria are met:	
C43.0 – C43.9	Malignant melanoma of skin
D03.0 – D03.9	Melanoma in situ

References

1. American Joint Committee on Cancer (AJCC) TNM Staging System. Last revised 03/20/2015. http://www.cancer.org/cancer/skincancer-melanoma/detailedguide/melanoma-skin-cancer-staging
2. Centers for Medicare and Medicaid Services (CMS). -Local Coverage Determination (LCD) No 34762. Molecular Diagnostic Testing. (Contractor-Wisconsin Physicians Service Insurance Corporation). Revision Effective Date: 04/15/2016. https://www.cms.gov/medicare-coverage-database/details/lcd-details.aspx?LCDId=34762&ver=24&Date=&DocID=L34762&bc=iAAAAAgAAAAAAA%3d%3d&
3. Centers for Medicare and Medicaid Services (CMS). -Local Coverage Determination (LCD) No L35396 : Biomarkers for oncology. (Contractor-Novitas Solutions, Inc.). Revision Effective Date: 01/22/2016. https://www.cms.gov/medicare-coverage-database/details/lcd-details.aspx?LCDId=35396&ver=55&Date=&DocID=L35396&bc=iAAAAAgAAAAAAA%3d%3d&
4. Hayes Genetic Test Evaluation Overview. BRAF Testing to Predict Response to Vemurafenib in Malignant Melanoma for Malignant Melanoma (Various Manufacturers). Reviewed March 24, 2015.
5. U.S. Department of Health & Human Services (HHS). Food and Drug Administration (FDA). Medical Devices. cobas® 4800 BRAF V600 Mutation Test - P110020. Approval Date: August 1, 2011 http://www.fda.gov/MedicalDevices/ProductsandMedicalProcedures/DeviceApprovalsandClearances/Recently-ApprovedDevices/ucm268836.htm
6. U.S. Department of Health & Human Services (HHS). Food and Drug Administration (FDA). Letter of Approval for cobas@ 4800 BRAF V600 Mutation Test. Dated: August 17, 2011. http://www.accessdata.fda.gov/cdrh_docs/pdf11/p110020a.pdf
7. U.S. Department of Health & Human Services (HHS). Food and Drug Administration (FDA) News Release: FDA approves Zelboraf and companion diagnostic test for late-stage skin cancer. August 17, 2011.,

http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm268241.htm
8. U.S. Department of Health & Human Services (HHS). Food and Drug Administration (FDA): Draft Guidance for Industry and FDA Staff- In Vitro Companion Diagnostic Services. Issued: July 14, 2011. http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/ucm262292.htm

Disclaimer:
MedStar Health medical payment and prior authorization policies do not constitute medical advice and are not intended to govern or otherwise influence the practice of medicine. The policies constitute only the reimbursement and coverage guidelines of MedStar Health and its affiliated managed care entities. Coverage for services varies for individual members in accordance with the terms and conditions of applicable Certificates of Coverage, Summary Plan Descriptions, or contracts with governing regulatory agencies.

MedStar Health reserves the right to review and update the medical payment and prior authorization guidelines in its sole discretion. Notice of such changes, if necessary, shall be provided in accordance with the terms and conditions of provider agreements and any applicable laws or regulations.

These policies are the proprietary information of Evolent Health. Any sale, copying, or dissemination of said policies is prohibited.