**LETTER OF MEDICAL NECESSITY**

**HEREDITARY PHEOCHROMOCYTOMA/PARAGANGLIOMA GENETIC TESTING (PGLNext)**

Date: Date of service/claim

To: Utilization Review Department

 Insurance Company Name, Address, City, State

Re: Patient Name, DOB, ID #:

ICD-10 Codes:

The ICD-10 codes listed below are commonly received by Ambry from ordering providers for the testing described in this letter. Ambry provides this information as a customer service but makes no recommendations regarding the use of any diagnosis codes. As a reminder, it is the ordering provider’s responsibility to always determine, for the specific date of service, the appropriate diagnostic codes based on the patient’s signs and symptoms.

ACTIVE DIAGNOSIS:

C74.00-C74.02 Adrenocortical carcinoma

C7A.00-C7A.8 Neuroendocrine tumor, Malignant

D3A.00-D3A.8 Neuroendocrine tumor, Benign

C75.5 Paraganglioma, Malignant

D35.6 Paraganglioma, Benign

D44.7 Paraganglioma, Uncertain behavior

D35.1 Parathyroid Adenoma

D35.00-D35.02 Pheochromocytoma, Benign

E21.0 Primary Hyperparathyroidism

PERSONAL HISTORY:

Z85.858 Adrenocortical carcinoma, personal history

Z86.03 Paraganglioma (uncertain behavior), Personal History

FAMILY HISTORY:

Z80.8 Pheochromocytoma/Paraganglioma, Malignant, Family history

This letter is regarding my patient and your subscriber, referenced above, to request full coverage of medically indicated genetic testing for hereditary paraganglioma/pheochromocytoma (PGLNext) to be performed by Ambry Genetics Corporation.

Paragangliomas (PGL) and pheochromocytomas (PCC) are endocrine tumors thought to have a hereditary component in up to 40% of cases. Those with hereditary PGL/PCC are at risk for multiple PGL/PCC, some of which have a high risk of becoming malignant. Those with hereditary conditions related to PGL/PCC have an increased lifetime risk of developing tumors and/or cancers (such as up to a 70% risk of developing renal cancer in those with von Hippel-Lindau disease, and up to a 100% risk of developing medullary thyroid cancer in those with multiple endocrine neoplasia type 2). Most of these gene mutations also increase the lifetime risk for additional cancers/tumors (like pancreatic tumors, hemangioblastomas, neurofibromas, optic gliomas, acoustic neuromas, and other neuroendocrine tumors).1,2,3

According to published guidelines, **all individuals with paraganglioma or pheochromocytoma in themselves or a parent, sibling or child should be offered genetic testing**.4, 5

**In addition, individuals with any of the following should also consider genetic testing**5**:**

* Adrenal cortical carcinoma (ACC)
* Gastrinoma (duodenal/pancreatic or type 2 gastric neuroendocrine tumor/NET)
* Multifocal pancreatic neuroendocrine tumors
* Parathyroid adenoma or primary hyperparathyroidism < age 30
* Multiple parathyroid adenomas, multi-gland hyperplasia or recurrent primary hyperparathyroidism.
* Consider in a patient with duodenal/pancreatic neuroendocrine tumor at any age.
* First-degree relative meeting one of the above criteria but not available for testing.

Based on this, I am requesting coverage for this test (PGLNext), which analyzes 14 high-risk genes associated with increased risks for PGL/PCC: *EGLN1*, *FH,* *KIF1B*, *MAX, MEN1, NF1, RET, SDHA, SDHAF2, SDHB, SDHC, SDHD, TMEM127, VHL.* Due to the history stated above, there is a reasonable probability of detecting a mutation in my patient. This multi-gene test is the most efficient and cost-effective way to analyze these genes.**According to NCCN guidelines, germline genetic testing is warranted.**5

**This genetic testing will help estimate my patient’s risk to develop cancer/another primary cancer and could directly impact my patient’s medical management. Most of the genes in this test have published clinical practice guidelines** to reduce the risk for cancer and/or detect cancer early, thus reducing morbidity and mortality. Management options may include:

* Consideration of CT/MRI-based screening/technologies
* Annual biochemical screening
* More prompt removal of tumor due to increased malignant potential
* Prophylactic thyroidectomy
* Annual ophthalmology and audiology examinations
* Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

[For affected patients:] This testing may also impact the surgical and/or medical options available to treat my patient’s current cancer.

Based on these factors, this testing is medically necessary, and I request that you approve coverage of genetic testing for hereditary cancer in my patient.

Thank you for your time, and please don’t hesitate to contact me with any questions.

Sincerely,

Ordering Clinician Name (Signature Provided on Test Requisition Form)

(MD/DO, Clinical Nurse Specialist, Nurse-Midwives, Nurse Practitioner, Physician Assistant, Genetic Counselor\*)

\*Authorized clinician requirements vary by state

**Test Details**

CPT codes: 81403, 81404, 81405, 81406, 81408, or 81437, 81438, or 81479

Laboratory: Ambry Genetics Corporation (TIN 33-0892453 / NPI 1861568784), a CAP-accredited and CLIA-certified laboratory located at 7 Argonaut, Aliso Viejo, CA 92656

References:

1. Rednam SP, Erez A, Druker H, et al. Von Hippel Lindau and Hereditary Pheochromocytoma/ Paraganglioma Syndromes: Clinical Features, Genetics, and Surveillance Recommendations in Childhood. Clin Cancer Res 2017;23:e68-e75. 6
2. Muth A, Crona J, Gimm O, et al. Genetic testing and surveillance guidelines in hereditary pheochromocytoma and paraganglioma. J Intern Med 2019;285:187-204. 7
3. Neumann HPH, Young WF Jr, Eng C. Pheochromocytoma and paraganglioma. N Engl J Med 2019;381:552-565. 9
4. NatFishbein L, *et al*. Inherited mutations in pheochromocytoma and paraganglioma: why all patients should be offered genetic testing. Ann Surg Oncol. 2013 May;20(5):1444-50.
5. NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®). Neuroendocrine and Adrenal Tumors. Version 1.2022, 5/23/2022.