Genetic testing: dermatologic conditions

These services may or may not be covered by your HealthPartners plan. Please see your plan documents for your specific coverage information. If there is a difference between this general information and your plan documents, your plan documents will be used to determine your coverage.

Administrative Process

Prior authorization is required for the following services:

- Genetic testing for Capillary Malformation-Arteriovenous Malformation Syndrome (CM-AVM)
- Congenital Ichthyosis Multigene Panels
- Genetic testing for Covered Dermatologic Conditions
- Testing that is associated with a procedure code listed in “Box A”, below

Tests that require prior authorization will be reviewed for medical necessity of the testing as a whole. That is, a single coverage decision will apply to all of the tests, services, and/or procedure codes associated with the genetic test, whether they are requested/billed together or separately.

Box A: Genetic testing procedure codes that require prior authorization
Molecular pathology procedures, Tier 2 or unlisted (CPT 81400-81408, 81479)
Unlisted multianalyte assays (CPT 81599)
Any other listed or unlisted laboratory/pathology CPT code when it is used in association with a genetic test.

Policy Reference Table

If available, codes are listed below for informational purposes only, and do not guarantee member coverage or provider reimbursement. The list may not be all-inclusive.

Coverage Criteria Sections	Example Tests (Labs)	Common CPT Codes	Common ICD Codes
Capillary Malformation-Arteriovenous Malformation Syndrome (CM-AVM)			
RASA1 and *EPHB4* Sequencing and/or Deletion/Duplication Analysis or Multigene Panel	Capillary Malformation- Arteriovenous Malformation Syndrome (CM-AVM) Panel, Sequencing and Deletion/Duplication (ARUP Laboratories)	81479	Q27.3, Q27.9
	Vascular Malformation NGS Panel (Greenwood Genetic Center)		
	RASA1 Full Gene Sequencing and Deletion/Duplication (Invitae)		
	EPHB4 Full Gene Sequencing and Deletion/Duplication (Invitae)		
Congenital Ichthyosis			
Congenital Ichthyosis Multigene Panels	Ichthyosis Panel (Blueprint Genetics)	81405, 81479	Q80
	Ichthyosis NGS Panel (HNL Lab Medicine)		
	Invitae Congenital Ichthyosis Panel (Invitae)		
Covered Dermatologic Conditions			
Other Covered Dermatologic Conditions	See Below	81401, 81402, 81403, 81404, 81405, 81406, 81407, 81408, 81479	Varies

Coverage

Capillary Malformation- Arteriovenous Malformation (CM-AVM) Syndrome

RASA1 and _EPHB4_ Sequencing and/or Deletion/Duplication Analysis or Multigene Panel

1. _RASA1_ and _EPHB4_ sequencing and/or deletion/duplication analysis or multi-gene panel analysis to establish a diagnosis of capillary malformation-arteriovenous malformation (CM-AVM) syndrome is considered **medically necessary** when:
    - A. The member displays one or more of the following:
        - i. Capillary malformations, **or**
        - ii. Arteriovenous malformations/arteriovenous fistulas, **or**
        - iii. Parkes Weber syndrome phenotype, a cutaneous capillary malformation associated with underlying multiple micro-AVFs and soft-tissue and skeletal hypertrophy of the affected limb.
2. _RASA1_ and _EPHB4_ sequencing and/or deletion/duplication analysis or multi-gene panel analysis to establish a diagnosis of capillary malformation-arteriovenous malformation (CM-AVM) syndrome is considered **investigational** for all other indications.

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Congenital Ichthyosis

Congenital Ichthyosis Multigene Panels

1. Multigene panel analysis to establish or confirm a diagnosis of congenital ichthyosis is considered **medically necessary** when:
    - A. The member has scaly skin with or without a history of harlequin ichthyosis, collodion membrane, or thick, hyperkeratotic skin, **and**
    - B. One or more of the following:
        - i. Ectropion (eversion of eyelids), **or**
        - ii. Eclabium (eversion of lips), **or**
        - iii. Scarring alopecia, **or**
        - iv. Palmar and/or plantar hyperkeratosis, **or**
        - v. Erythroderma (red skin)
2. Multigene panel analysis to establish or confirm a diagnosis of congenital ichthyosis is considered **investigational** for all other indications.

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Other Covered Dermatologic Conditions

1. Genetic testing to establish or confirm one of the following dermatologic conditions to guide management is considered **medically necessary** when the member demonstrates clinical features* consistent with the condition (the list is not meant to be comprehensive, see 2. below):
    - A. Hidrotic Ectodermal Dysplasia 2 (Clouston Syndrome)
    - B. Hypohidrotic Ectodermal Dysplasia
    - C. Ocular albinism, X-linked
    - D. Oculocutaneous albinism
    - E. Epidermolysis Bullosa
2. Genetic testing to establish or confirm the diagnosis of all other dermatologic conditions not specifically discussed within this or another medical policy will be evaluated by the criteria outlined in **General Approach to Genetic and Molecular Testing** (see policy coverage criteria).

*Clinical features for a specific disorder may be outlined in resources such as GeneReviews, OMIM, National Library of Medicine, Genetics Home Reference or other scholarly sources.

Definitions

1. **Close relatives** include first, second, and third-degree **blood** relatives:
    - A. **First-degree relatives** are parents, siblings, and children
    - B. **Second-degree relatives** are grandparents, aunts, uncles, nieces, nephews, grandchildren, and half siblings
    - C. **Third-degree relatives** are great grandparents, great aunts, great uncles, great grandchildren, and first cousins

Products

This information is for most, but not all, HealthPartners plans. Please read your plan documents to see if your plan has limits or will not cover some items. If there is a difference between this general information and your plan documents, your plan documents will be used to determine your coverage. These coverage criteria do not apply to

Medicare Products. For more information regarding Medicare coverage criteria or for a copy of a Medicare coverage policy, contact Member Services at 952-883-7272 or 1-877-778-8384.

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References

1. Bayrak-Toydemir P, Stevenson DA. Capillary Malformation-Arteriovenous Malformation Syndrome. 2011 Feb 22 [Updated 2019 Sep 12]. In: Adam MP, Ardinger HH, Pagon RA, et al., editors. GeneReviews® [Internet]. Seattle (WA): University of Washington, Seattle; 1993-2024. Available from: https://www.ncbi.nlm.nih.gov/books/NBK52764/
2. Richard G. Autosomal Recessive Congenital Ichthyosis. 2001 Jan 10 [Updated 2017 May 18]. In: Adam MP, Ardinger HH, Pagon RA, et al., editors. GeneReviews® [Internet]. Seattle (WA): University of Washington, Seattle; 1993-2024. Available from: https://www.ncbi.nlm.nih.gov/books/NBK1420/
3. Adam MP, Ardinger HH, Pagon RA, et al., editors. GeneReviews® [Internet]. Seattle (WA): University of Washington, Seattle; 1993-2024. Available from: https://www.ncbi.nlm.nih.gov/books/NBK1116/
4. Online Mendelian Inheritance in Man, OMIM®. McKusick-Nathans Institute of Genetic Medicine, Johns Hopkins University (Baltimore, MD). World Wide Web URL: https://omim.org/
5. MedlinePlus [Internet]. Bethesda (MD): National Library of Medicine (US). Available from: https://medlineplus.gov/genetics/