



BlueCross BlueShield
of New Mexico

If a conflict arises between a Clinical Payment and Coding Policy and any plan document under which a member is entitled to Covered Services, the plan document will govern. If a conflict arises between a CPCP and any provider contract pursuant to which a provider participates in and/or provides Covered Services to eligible member(s) and/or plans, the provider contract will govern. “Plan documents” include, but are not limited to, Certificates of Health Care Benefits, benefit booklets, Summary Plan Descriptions, and other coverage documents. Blue Cross and Blue Shield of New Mexico may use reasonable discretion interpreting and applying this policy to services being delivered in a particular case. BCBSNM has full and final discretionary authority for their interpretation and application to the extent provided under any applicable plan documents.

Providers are responsible for submission of accurate documentation of services performed. Providers are expected to submit claims for services rendered using valid code combinations from Health Insurance Portability and Accountability Act approved code sets. Claims should be coded appropriately according to industry standard coding guidelines including, but not limited to: Uniform Billing Editor, American Medical Association, Current Procedural Terminology, CPT® Assistant, Healthcare Common Procedure Coding System, ICD-10 CM and PCS, National Drug Codes, Diagnosis Related Group guidelines, Centers for Medicare and Medicaid Services National Correct Coding Initiative Policy Manual, CCI table edits and other CMS guidelines.

Claims are subject to the code edit protocols for services/procedures billed. Claim submissions are subject to claim review including but not limited to, any terms of benefit coverage, provider contract language, medical policies, clinical payment and coding policies as well as coding software logic. Upon request, the provider is urged to submit any additional documentation.

Evaluation of Dry Eyes

Policy Number: CPCPLAB043

Version 1.0

Approval Date: April 29, 2024

Plan Effective Date: January 15, 2025

Description

BCBSNM has implemented certain lab management reimbursement criteria. Not all requirements apply to each product. Providers are urged to review Plan documents for eligible coverage for services rendered.

Reimbursement Information:

1. For individuals suspected of having dry eye, testing of tear osmolarity **may be reimbursable** in **any** of the following situations:
 - a. To help determine the severity of dry eye disease;
 - b. To monitor effectiveness of therapy.
2. For individuals suspected of having dry eye disease based on comprehensive eye examination, testing for MMP-9 protein in human tears **is not reimbursable**.
3. For individuals suspected of having dry eye disease, testing for lactoferrin and/or IgE **is not reimbursable**.
4. For individuals suspected of having dry eye disease, all other testing not discussed above **is not reimbursable**.

Procedure Codes

The following is not an all-encompassing code list. The inclusion of a code does not guarantee it is a covered service or eligible for reimbursement.

Codes
82785, 83516, 83520, 83861

References:

- AAO. (2022, December). *Cornea/External Disease Summary Benchmarks - 2022*.
<https://www.aao.org/education/summary-benchmark-detail/cornea-external-disease-summary-benchmarks-2020>
- Akpek, E. K., Amescua, G., Farid, M., Garcia-Ferrer, F. J., Lin, A., Rhee, M. K., Varu, D. M., Musch, D. C., Dunn, S. P., & Mah, F. S. (2019). Dry Eye Syndrome Preferred Practice Pattern. *Ophthalmology*. <https://doi.org/10.1016/j.ophtha.2018.10.023>
- AOA. (2010). *Care of the Patient with Ocular Surface Disorders*.
<https://www.aoa.org/AOA/Documents/Practice%20Management/Clinical%20Guidelines/Consensus-based%20guidelines/Care%20of%20Patient%20with%20Ocular%20Surface%20Disorders.pdf>
- AXIM. (2021). *AXIM EYE*. Retrieved 1/12/2023 from https://aximbiotech.com/wp-content/uploads/2021/11/Axim_Eye_Brochure_11-15-21_v3.pdf

- Baenninger, P. B., Voegeli, S., Bachmann, L. M., Faes, L., Iselin, K., Kaufmann, C., & Thiel, M. A. (2018). Variability of Tear Osmolarity Measurements With a Point-of-Care System in Healthy Subjects-Systematic Review. *Cornea*, 37(7), 938-945. <https://doi.org/10.1097/ico.0000000000001562>
- Brissette, A. R., Drinkwater, O. J., Bohm, K. J., & Starr, C. E. (2019). The utility of a normal tear osmolarity test in patients presenting with dry eye disease like symptoms: A prospective analysis. *Cont Lens Anterior Eye*, 42(2), 185-189. <https://doi.org/10.1016/j.clae.2018.09.002>
- Chan, T. C., Ye, C., Chan, K. P., Chu, K. O., & Jhanji, V. (2016). Evaluation of point-of-care test for elevated tear matrix metalloproteinase 9 in post-LASIK dry eyes. *Br J Ophthalmol*, 100(9), 1188-1191. <https://doi.org/10.1136/bjophthalmol-2015-307607>
- Choi, M., Park, Y. M., & Ko, B. Y. (2023). Comparative Evaluation of Matrix Metalloproteinase-9 Immunoassay and Tear Osmolarity Measurement for Diagnosing Severity of Dry Eye Disease. *Korean J Ophthalmol*, 37(5), 409-416. <https://doi.org/10.3341/kjo.2023.0062>
- Chotikavanich, S., de Paiva, C. S., Li de, Q., Chen, J. J., Bian, F., Farley, W. J., & Pflugfelder, S. C. (2009). Production and activity of matrix metalloproteinase-9 on the ocular surface increase in dysfunctional tear syndrome. *Invest Ophthalmol Vis Sci*, 50(7), 3203-3209. <https://doi.org/10.1167/iovs.08-2476>
- Craig, J. P., Nelson, J. D., Azar, D. T., Belmonte, C., Bron, A. J., Chauhan, S. K., de Paiva, C. S., Gomes, J. A. P., Hammitt, K. M., Jones, L., Nichols, J. J., Nichols, K. K., Novack, G. D., Stapleton, F. J., Willcox, M. D. P., Wolffsohn, J. S., & Sullivan, D. A. (2017). TFOS DEWS II Report Executive Summary. *Ocul Surf*, 15(4), 802-812. <https://doi.org/10.1016/j.jtos.2017.08.003>
- Craig, J. P., Nichols, K. K., Alpek, M. D., Caffery, B., Dua, H. S., Joo, C. K., Liu, Z., Nelson, J. D., Nichols, J. J., Tsubota, K., & Stapleton, F. J. (2017). TFOS DEWS II Definition and Classification Report. *Ocul Surf*, 15(4), 276-283. <https://doi.org/10.1016/j.jtos.2017.05.008>
- Dana, R., Meunier, J., Markowitz, J. T., Joseph, C., & Siffel, C. (2020). Patient-Reported Burden of Dry Eye Disease in the United States: Results of an Online Cross-Sectional Survey. *Am J Ophthalmol*, 216, 7-17. <https://doi.org/10.1016/j.ajo.2020.03.044>
- Ezuddin, N. S., Alawa, K. A., & Galor, A. (2015). Therapeutic Strategies to Treat Dry Eye in an Aging Population. *Drugs Aging*, 32(7), 505-513. <https://doi.org/10.1007/s40266-015-0277-6>
- Farrand, K. F., Fridman, M., Stillman, I. O., & Schaumberg, D. A. (2017). Prevalence of Diagnosed Dry Eye Disease in the United States Among Adults Aged 18 Years and Older. *Am J Ophthalmol*, 182, 90-98. <https://doi.org/10.1016/j.ajo.2017.06.033>
- FDA. (2013). https://www.accessdata.fda.gov/cdrh_docs/pdf13/K132066.pdf
- FDA. (2024, 02/12/2024). K934473. Retrieved 11/20/2018 from <https://www.accessdata.fda.gov/scripts/cdrh/devicesatfda/index.cfm?db=pmn&iid=K934473>
- Foulks, G. N., Forstot, S. L., Donshik, P. C., Forstot, J. Z., Goldstein, M. H., Lemp, M. A., Nelson, J. D., Nichols, K. K., Pflugfelder, S. C., Tanzer, J. M., Asbell, P., Hammitt, K., & Jacobs, D. S. (2015). Clinical guidelines for management of dry eye associated

- with Sjögren disease. *Ocul Surf*, 13(2), 118-132.
<https://doi.org/10.1016/j.jtos.2014.12.001>
- Holland, E. J., Darvish, M., Nichols, K. K., Jones, L., & Karpecki, P. M. (2019). Efficacy of topical ophthalmic drugs in the treatment of dry eye disease: A systematic literature review. *Ocul Surf*, 17(3), 412-423.
<https://doi.org/10.1016/j.jtos.2019.02.012>
- Honda, N., Miyai, T., Nejima, R., Miyata, K., Mimura, T., Usui, T., Aihara, M., Araie, M., & Amano, S. (2010). Effect of latanoprost on the expression of matrix metalloproteinases and tissue inhibitor of metalloproteinase 1 on the ocular surface. *Arch Ophthalmol*, 128(4), 466-471.
<https://doi.org/10.1001/archophthalmol.2010.40>
- Jie, Y., Sella, R., Feng, J., Gomez, M. L., & Afshari, N. A. (2019). Evaluation of incomplete blinking as a measurement of dry eye disease. *Ocul Surf*, 17(3), 440-446. <https://doi.org/10.1016/j.jtos.2019.05.007>
- Jun JH, L. Y., Son MJ, Kim H (2020). Importance of tear volume for positivity of tear matrix metalloproteinase-9 immunoassay. *PLoS ONE*, 15(7).
<https://doi.org/10.1371/journal.pone.0235408>
- Kanellopoulos, A. J., & Asimellis, G. (2016). In pursuit of objective dry eye screening clinical techniques. *Eye Vis (Lond)*, 3, 1. <https://doi.org/10.1186/s40662-015-0032-4>
- Kawashima, M., Kawakita, T., Inaba, T., Okada, N., Ito, M., Shimmura, S., Watanabe, M., Shinmura, K., & Tsubota, K. (2012). Dietary lactoferrin alleviates age-related lacrimal gland dysfunction in mice. *PLoS ONE*, 7(3), e33148.
<https://doi.org/10.1371/journal.pone.0033148>
- Lee, Y. H., Bang, S.-P., Shim, K.-Y., Son, M.-J., Kim, H., & Jun, J. H. (2021). Association of tear matrix metalloproteinase 9 immunoassay with signs and symptoms of dry eye disease: A cross-sectional study using qualitative, semiquantitative, and quantitative strategies. *PLoS ONE*, 16(10), e0258203-e0258203.
<https://doi.org/10.1371/journal.pone.0258203>
- Messmer, E. M. (2015). The pathophysiology, diagnosis, and treatment of dry eye disease. *Dtsch Arztebl Int*, 112(5), 71-81; quiz 82.
<https://doi.org/10.3238/arztebl.2015.0071>
- Messmer, E. M., von Lindenfels, V., Garbe, A., & Kampik, A. (2016). Matrix Metalloproteinase 9 Testing in Dry Eye Disease Using a Commercially Available Point-of-Care Immunoassay. *Ophthalmology*, 123(11), 2300-2308.
<https://doi.org/10.1016/j.ophtha.2016.07.028>
- Milner, M. S., Beckman, K. A., Luchs, J. I., Allen, Q. B., Awdeh, R. M., Berdahl, J., Boland, T. S., Buznego, C., Gira, J. P., Goldberg, D. F., Goldman, D., Goyal, R. K., Jackson, M. A., Katz, J., Kim, T., Majmudar, P. A., Malhotra, R. P., McDonald, M. B., Rajpal, R. K., . . . Yeu, E. (2017). Dysfunctional tear syndrome: dry eye disease and associated tear film disorders - new strategies for diagnosis and treatment. *Curr Opin Ophthalmol*, 27 Suppl 1(Suppl 1), 3-47.
<https://doi.org/10.1097/01.icu.0000512373.81749.b7>
- Periman. (2020). The Immunological Basis of Dry Eye Disease and Current Topical Treatment Options. *Journal of Ocular Pharmacology and Therapeutics*, 36(3), 137-146. <https://doi.org/10.1089/jop.2019.0060>

- Ponzini, E., Scotti, L., Grandori, R., Tavazzi, S., & Zambon, A. (2020). Lactoferrin Concentration in Human Tears and Ocular Diseases: A Meta-Analysis. *Invest Ophthalmol Vis Sci*, 61(12), 9. <https://doi.org/10.1167/iovs.61.12.9>
- Sambursky, R., Davitt, W. F., 3rd, Latkany, R., Tauber, S., Starr, C., Friedberg, M., Dirks, M. S., & McDonald, M. (2013). Sensitivity and specificity of a point-of-care matrix metalloproteinase 9 immunoassay for diagnosing inflammation related to dry eye. *JAMA Ophthalmol*, 131(1), 24-28. <https://doi.org/10.1001/jamaophthalmol.2013.561>
- Shtein, R. (2024, 1/02/2024). *Dry eye disease*. Wolters Kluwer. <https://www.uptodate.com/contents/dry-eye-disease>
- Starr, C. E., Gupta, P. K., Farid, M., Beckman, K. A., Chan, C. C., Yeu, E., Gomes, J. A. P., Ayers, B. D., Berdahl, J. P., Holland, E. J., Kim, T., & Mah, F. S. (2019). An algorithm for the preoperative diagnosis and treatment of ocular surface disorders. *J Cataract Refract Surg*, 45(5), 669-684. <https://doi.org/10.1016/j.jcrs.2019.03.023>
- Szczotka-Flynn, L. B., Maguire, M. G., Ying, G. S., Lin, M. C., Bunya, V. Y., Dana, R., & Asbell, P. A. (2019). Impact of Dry Eye on Visual Acuity and Contrast Sensitivity: Dry Eye Assessment and Management Study. *Optom Vis Sci*, 96(6), 387-396. <https://doi.org/10.1097/oxp.0000000000001387>
- Tashbayev, B., Utheim, T. P., Utheim, Ø. A., Ræder, S., Jensen, J. L., Yazdani, M., Lagali, N., Vitelli, V., Dartt, D. A., & Chen, X. (2020). Utility of Tear Osmolarity Measurement in Diagnosis of Dry Eye Disease. *Scientific Reports*, 10(1), 5542. <https://doi.org/10.1038/s41598-020-62583-x>
- TearLab. (2023). *TearLab*. <https://www.tearlab.com/>
- Tomlinson, A., Khanal, S., Ramaesh, K., Diaper, C., & McFadyen, A. (2006). Tear film osmolarity: determination of a referent for dry eye diagnosis. *Invest Ophthalmol Vis Sci*, 47(10), 4309-4315. <https://doi.org/10.1167/iovs.05-1504>
- Willcox, M. D. P., Argüeso, P., Georgiev, G. A., Holopainen, J. M., Laurie, G. W., Millar, T. J., Papas, E. B., Rolland, J. P., Schmidt, T. A., Stahl, U., Suarez, T., Subbaraman, L. N., Uçakhan, O., & Jones, L. (2017). TFOS DEWS II Tear Film Report. *Ocul Surf*, 15(3), 366-403. <https://doi.org/10.1016/j.jtos.2017.03.006>

Policy Update History:

Approval Date	Effective Date; Summary of Revisions
04/29/2024	01/15/2025: Document updated with literature review. Reimbursement information unchanged. References revised.
06/15/2023	06/15/2023: Document updated with literature review. Reimbursement information revised for clarity. References updated; some added, others removed.

11/1/2022	11/01/2022: New policy
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