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 Texas may use reasonable discretion interpreting and applying this policy to services being delivered in a particular case. BCBSTX 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 28, 2025

Plan Effective Date: August 8, 2025

Description

The plan 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:

1. Craig JP, Nichols KK, Alpek MD, et al. TFOS DEWS II Definition and Classification Report. *The ocular surface*. Oct 2017;15(4):276-283. doi:10.1016/j.jtos.2017.08.003
2. Dana R, Meunier J, Markowitz JT, Joseph C, Siffel C. Patient-Reported Burden of Dry Eye Disease in the United States: Results of an Online Cross-Sectional Survey. *Am J Ophthalmol*. Aug 2020;216:7-17. doi:10.1016/j.ajo.2020.03.044
3. Willcox MDP, Argüeso P, Georgiev GA, et al. TFOS DEWS II Tear Film Report. *The ocular surface*. Jul 2017;15(3):366-403. doi:10.1016/j.jtos.2017.03.006
4. Ezuddin NS, Alawa KA, Galor A. Therapeutic Strategies to Treat Dry Eye in an Aging Population. *Drugs & aging*. Jul 2015;32(7):505-13. doi:10.1007/s40266-015-0277-6
5. Farrand KF, Fridman M, Stillman IO, Schaumberg DA. Prevalence of Diagnosed Dry Eye Disease in the United States Among Adults Aged 18 Years and Older. *Am J Ophthalmol*. Oct 2017;182:90-98. doi:10.1016/j.ajo.2017.06.033

6. Shtein R. Dry eye disease. Wolters Kluwer. 11/16, 2018. Updated Aug 07, 2024. https://www.uptodate.com/contents/dry-eye-disease
7. Periman. The Immunological Basis of Dry Eye Disease and Current Topical Treatment Options. *Journal of Ocular Pharmacology and Therapeutics*. 2020;36(3):137-146. doi:10.1089/jop.2019.0060
8. Jie Y, Sella R, Feng J, Gomez ML, Afshari NA. Evaluation of incomplete blinking as a measurement of dry eye disease. *The ocular surface*. Jul 2019;17(3):440-446. doi:10.1016/j.jtos.2019.05.007
9. Szczotka-Flynn LB, Maguire MG, Ying GS, et al. Impact of Dry Eye on Visual Acuity and Contrast Sensitivity: Dry Eye Assessment and Management Study. *Optom Vis Sci*. Jun 2019;96(6):387-396. doi:10.1097/opx.0000000000001387
10. Messmer EM. The pathophysiology, diagnosis, and treatment of dry eye disease. *Deutsches Arzteblatt international*. Jan 2015;112(5):71-81; quiz 82. doi:10.3238/arztebl.2015.0071
11. Holland EJ, Darvish M, Nichols KK, Jones L, Karpecki PM. Efficacy of topical ophthalmic drugs in the treatment of dry eye disease: A systematic literature review. *The ocular surface*. Jul 2019;17(3):412-423. doi:10.1016/j.jtos.2019.02.012
12. Milner MS, Beckman KA, Luchs JI, et al. Dysfunctional tear syndrome: dry eye disease and associated tear film disorders - new strategies for diagnosis and treatment. *Current opinion in ophthalmology*. Jan 2017;27 Suppl 1(Suppl 1):3-47. doi:10.1097/01.icu.0000512373.81749.b7
13. Tomlinson A, Khanal S, Ramaesh K, Diaper C, McFadyen A. Tear film osmolarity: determination of a referent for dry eye diagnosis. *Investigative ophthalmology & visual science*. Oct 2006;47(10):4309-15. doi:10.1167/iovs.05-1504
14. Akpek EK, Amescua G, Farid M, et al. Dry Eye Syndrome Preferred Practice Pattern. *Ophthalmology*. 2019;doi:10.1016/j.ophtha.2018.10.023
15. Baenninger PB, Voegeli S, Bachmann LM, et al. Variability of Tear Osmolarity Measurements With a Point-of-Care System in Healthy Subjects-Systematic Review. *Cornea*. Jul 2018;37(7):938-945. doi:10.1097/ico.0000000000001562
16. Honda N, Miyai T, Nejima R, et al. Effect of latanoprost on the expression of matrix metalloproteinases and tissue inhibitor of metalloproteinase 1 on the ocular surface. *Archives of ophthalmology (Chicago, Ill : 1960)*. Apr 2010;128(4):466-71. doi:10.1001/archophthalmol.2010.40
17. Chotikavanich S, de Paiva CS, Li de Q, et al. Production and activity of matrix metalloproteinase-9 on the ocular surface increase in dysfunctional tear syndrome. *Investigative ophthalmology & visual science*. Jul 2009;50(7):3203-9. doi:10.1167/iovs.08-2476
18. Sambursky R, Davitt WF, 3rd, Latkany R, et al. Sensitivity and specificity of a point-of-care matrix metalloproteinase 9 immunoassay for diagnosing inflammation related to dry eye. *JAMA ophthalmology*. Jan 2013;131(1):24-8. doi:10.1001/jamaophthalmol.2013.561
19. Messmer EM, von Lindenfels V, Garbe A, Kampik A. Matrix Metalloproteinase 9 Testing in Dry Eye Disease Using a Commercially Available Point-of-Care Immunoassay. *Ophthalmology*. Nov 2016;123(11):2300-2308. doi:10.1016/j.ophtha.2016.07.028
20. AXIM. AXIM EYE. Accessed 1/12/2023, https://aximbiotech.com/wp-content/uploads/2021/11/Axim_Eye_Brochure_11-15-21_v3.pdf

21. Kanellopoulos AJ, Asimellis G. In pursuit of objective dry eye screening clinical techniques. *Eye and vision (London, England)*. 2016;3:1. doi:10.1186/s40662-015-0032-4
22. Brissette AR, Drinkwater OJ, Bohm KJ, Starr CE. The utility of a normal tear osmolarity test in patients presenting with dry eye disease like symptoms: A prospective analysis. *Cont Lens Anterior Eye*. Apr 2019;42(2):185-189. doi:10.1016/j.clae.2018.09.002
23. Tashbayev B, Utheim TP, Utheim ØA, et al. Utility of Tear Osmolarity Measurement in Diagnosis of Dry Eye Disease. *Scientific Reports*. 2020/03/26 2020;10(1):5542. doi:10.1038/s41598-020-62583-x
24. Chan TC, Ye C, Chan KP, Chu KO, Jhanji V. Evaluation of point-of-care test for elevated tear matrix metalloproteinase 9 in post-LASIK dry eyes. *Br J Ophthalmol*. Sep 2016;100(9):1188-91. doi:10.1136/bjophthalmol-2015-307607
25. Jun JH LY, Son MJ, Kim H Importance of tear volume for positivity of tear matrix metalloproteinase-9 immunoassay. *PLoS ONE*. 2020;15(7)doi:10.1371/journal.pone.0235408
26. Lee YH, Bang S-P, Shim K-Y, Son M-J, Kim H, Jun JH. 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*. 2021;16(10):e0258203-e0258203. doi:10.1371/journal.pone.0258203
27. Choi M, Park YM, Ko BY. Comparative Evaluation of Matrix Metalloproteinase-9 Immunoassay and Tear Osmolarity Measurement for Diagnosing Severity of Dry Eye Disease. *Korean J Ophthalmol*. Oct 2023;37(5):409-416. doi:10.3341/kjo.2023.0062
28. Kawashima M, Kawakita T, Inaba T, et al. Dietary lactoferrin alleviates age-related lacrimal gland dysfunction in mice. *PLoS One*. 2012;7(3):e33148. doi:10.1371/journal.pone.0033148
29. Ponzini E, Scotti L, Grandori R, Tavazzi S, Zambon A. Lactoferrin Concentration in Human Tears and Ocular Diseases: A Meta-Analysis. *Investigative ophthalmology & visual science*. Oct 1 2020;61(12):9. doi:10.1167/iovs.61.12.9
30. AAO. Dry Eye Syndrome PPP 2023. https://www.aao.org/education/preferred-practice-pattern/dry-eye-syndrome-ppp-2023
31. AAO. Cornea/External Disease Summary Benchmarks - 2022. Updated December. https://www.aao.org/education/summary-benchmark-detail/cornea-external-disease-summary-benchmarks-2020
32. Craig JP, Nelson JD, Azar DT, et al. TFOS DEWS II Report Executive Summary. *The ocular surface*. Oct 2017;15(4):802-812. doi:10.1016/j.jtos.2017.08.003
33. AOA. 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
34. Foulks GN, Forstot SL, Donshik PC, et al. Clinical guidelines for management of dry eye associated with Sjögren disease. *The ocular surface*. Apr 2015;13(2):118-32. doi:10.1016/j.jtos.2014.12.001

35. Starr CE, Gupta PK, Farid M, et al. An algorithm for the preoperative diagnosis and treatment of ocular surface disorders. *J Cataract Refract Surg*. May 2019;45(5):669-684. doi:10.1016/j.jcrs.2019.03.023
36. FDA. K934473. Updated 02/03/2025. Accessed 11/20/2018, 2018. https://www.accessdata.fda.gov/scripts/cdrh/devicesatfda/index.cfm?db=pmn&id=K934473
37. FDA. OcuSense, Inc., TearLab Osmolarity System https://www.accessdata.fda.gov/cdrh_docs/pdf8/K083184.pdf
38. Turkera Medical. TearLab Osmolarity System. https://trukera.com/
39. FDA. 501(k) Summary of Safety and Effectiveness. https://www.accessdata.fda.gov/cdrh_docs/pdf13/K132066.pdf

Policy Update History:

Approval Date	Effective Date; Summary of Changes
04/28/2025	08/08/2025; Document updated with literature review. Reimbursement information unchanged. References revised.
09/13/2024	01/01/2025: New policy.