



<b>Policy Name</b>	Clinical Policy – Cataract Surgery
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<b>Department</b>	Clinical Product & Strategy
<b>Subcategory</b>	Medical Management
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<b>Company Entities Supported (Select All that Apply)</b> <input checked="" type="checkbox"/> Superior Vision Benefit Management <input checked="" type="checkbox"/> Superior Vision Services <input checked="" type="checkbox"/> Superior Vision of New Jersey, Inc. <input checked="" type="checkbox"/> Block Vision of Texas, Inc. d/b/a Superior Vision of Texas <input type="checkbox"/> Davis Vision (Collectively referred to as 'Versant Health' or 'the Company')
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<b>ACRONYMS and DEFINITIONS</b>	
<b>BCVA</b>	Best corrected visual acuity
<b>Cataract</b>	Clouding of the lens in the eye causing a decrease in vision
<b>IOL Intraocular lens</b>	An artificial lens implanted inside the eye to replace the eye's natural lens when it is removed during cataract surgery.

<b>PURPOSE</b>
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This policy addresses functional, medical, and diagnostic indications for cataract surgery and provides the medical necessity criteria to render medical necessity determinations. Applicable procedure codes are also defined.

<b>POLICY</b>
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**A. BACKGROUND**

Cataract removal is medically necessary when the lens opacification interferes with normal activities of daily living, or when the surgery is required for the treatment of another eye condition. Cataract surgery involves the removal of the natural lens and placement of an intraocular lens (IOL) implant. Surgeries are performed for both medical, functional reasons or as a non-medically necessary refractive, cosmetic procedure.

**B. Medically Necessary Indications for standard cataract surgery**

**CPT codes: 66840, 66850, 66920, 66930, 66940, 66983, 66984**

1. Cataract surgery with intraocular lens implantation (IOL) is medically necessary to improve functional impairment in the activities of daily living (ADLs) due to the cataract. The ADL documentation of functional impairment is required for activities of daily living, including:
  - a. Reading, watching television, driving, or occupational, vocational, or recreational activities, and any specific difficulties with glare; and,
  - b. Meets ADL evaluation requirements as listed in section D Documentation.
2. The following are indications for standard cataract surgery independent of functional impairment assessment and do not require a signed functional impairment assessment to establish medical necessity. The specific conditions and comorbidities must be documented in the medical plan of care to support the medical necessity for cataract surgery. These include:
  - a. Clinically significant anisometropia of two diopters or more accompanied by visual complaints related to this finding such as imbalance or dizziness due to the eyeglasses; or,
  - b. Cataract that interferes with the diagnosis and management of posterior segment conditions such as age related macular degeneration (ARMD) and diabetic retinopathy (DR); or,
  - c. Lens induced inflammatory disease and secondary glaucoma; or,
  - d. Lens induced angle closure; or,
  - e. Monocular diplopia due to ipsilateral cataract; or,
  - f. Complex comorbid ocular disease such as cataract-glaucoma, cataract-corneal disease, and cataract-retinal disease where the surgeon recommends single stage surgery as the best treatment for the patient.

3. ~~66982~~ Patient has undergone preoperative evaluation that documents the following:
  - a. Best corrected visual acuity (BCVA) determined by manifest refraction showing that visual impairment and function are not correctable by glasses or other non-surgical methods. (An autorefractometer vision with correction or pinhole is an unacceptable substitute metric for BCVA); and,
  - b. A dilated fundus exam/retina evaluation demonstrates the cataract is the cause of vision impairment; and,
  - c. An anterior segment exam demonstrating the presence of a cataract; or,
  - d. Reduced visual acuity on glare testing in patients who complain of specific problems related to glare such as difficult functioning outside because of glare from the sun or difficult nighttime driving due to headlight glare.

### **C. Medically Necessary Indications complex cataract surgery CPT code 66982**

1. Complex cataract surgery refers to a specific subgroup of patients who meet both the criteria for standard cataract surgery (as above in standard cataract section) and the criteria below.
2. Complex cataract surgery may be considered medically necessary for the following indications:
  - a. A miotic pupil that will not dilate enough to allow adequate visualization of the lens in the eye's posterior chamber. The degree of miosis would then require techniques and instrumentation not typically used in standard cataract surgery.  
These would include:
    - i. the insertion of iris retractors through additional incisions; or,
    - ii. a Beehler expansion device; or,
    - iii. a Malyugin ring to expand a miotic pupil; or,
    - iv. a sector iridectomy with subsequent suture repair of iris sphincter; or,
    - v. sphincterotomies created with scissors; or,
  - b. Pediatric cataract surgery; or,
  - c. Pre-existing zonular weakness requiring use of capsular tension rings or intraocular suturing of the intraocular lens; or,
  - d. The cataract requires capsular staining technologies such as Trypan Blue

The indications in the list above are typically identifiable prior to surgery but may become apparent during surgery. Should that occur, the operative report is required to support the medical necessity of procedure 66982.

### **D. Medically Necessary Indications Second Eye Cataract Surgery**

Second eye cataract surgery refers to when the initial cataract surgery is for only one eye because initially (at the time of the first cataract surgery), the second eye did not meet medical necessity criteria for cataract surgery. The second eye surgery then is considered when the nonsurgical eye then meets the medical necessity criteria for cataract surgery.

1. The indications for second eye cataract surgery are the same as for the first eye as noted in cataract sections above.

2. In requesting cataract surgery in a second eye, the record must demonstrate that there is continuing or newly developed functional impairment in specific ADLs due to the cataract in the second eye, that was not relieved by or has developed since the initial surgery.
3. A separate functional impairment evaluation is required for the second eye. The evaluation should document the best corrected vision for the second eye after the first eye surgery and be signed and dated by the patient. If the evaluation is conducted over the phone, the evaluation should be signed by the staff member and indicate the information was obtained via phone conversation with the patient.
4. The second eye ADL evaluation must also meet the ADL evaluation requirements as listed in Documentation section.

#### **E. Medically Necessary Indications Bilateral Simultaneous Cataract Surgery**

When patient specific circumstances require bilateral simultaneous cataract surgery, medical necessity determination will be made by a Versant Health medical director after reviewing the medical record, as needed, with the requesting surgeon.

#### **F. Medically Necessary Indications for intraocular lens procedures CPT codes 66825 66985 and 66986**

1. Indications for CPT codes 66825 repositioning of IOL, and 66986 exchange of intraocular lens:
  - a. Anisometropia with visual complaints not improved with glasses; or,
  - b. Intraocular lens dislocation; or,
  - c. Lens malposition causing iris chafing without uveitis-glaucoma-hyphema (UGH); or,
  - d. Pseudophakic bullous keratopathy; or,
  - e. Uveitis-glaucoma-hyphema (UGH) syndrome; or,
  - f. Other visual symptoms, related to the IOL, that is negatively affecting patient's ADLs; or,
  - g. Correction of symptomatic anisometropia resulting from surgery or trauma <sup>1</sup>; or,
    - i. when there is greater than or equal to 2 diopters difference between the two eyes; and,
    - ii. the preceding surgical procedure was not a cosmetic refractive lens exchange with premium intra-ocular lens implant; and,
    - iii. intolerance of spectacles or contact lenses.
  - h. Correction of symptomatic astigmatism resulting from surgery or trauma <sup>2</sup>
    - i. when there is greater than or equal to 3 diopters; and,
    - ii. the preceding surgical procedure is not cosmetic refractive lens exchange with premium intra-ocular lens implant; and,
    - iii. failure to tolerate spectacles or contact lenses.

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<sup>1, 2</sup> Clinical Policy 1333 Refractive Surgery

2. CPT code 66985 secondary IOL implant may be medically necessary for the diagnosis of aphakia.
3. Where visual dysfunction or visual symptoms are the primary reason for an IOL procedure, an ADL evaluation should be completed that meets the ADL evaluation requirements listed in the Documentation section.

**G. Medically Necessary Indications Endoscopic Cyclophotocoagulation with Cataract Surgery: CPT codes 66987 and 66988**

1. Endoscopic Cyclophotocoagulation may be considered medically necessary when the individual has:
  - a. Mild to moderate open angle glaucoma (primary, pigmentary or pseudoexfoliation); and,
  - b. Individual is currently being treated with an ocular hypotensive medication; or,
  - c. For individuals not currently on ocular hypotensive medications the record must document failure of therapy due to lack of efficacy, intolerance, compliance, infirmity, contraindications, memory problems, cost, or treatment burden.
2. For CPT 66987 medical necessity criteria must be met for both the endoscopic cyclophotocoagulation procedure and for complex cataract surgery
3. For CPT 66988 medical necessity criteria must be met for both the endoscopic cyclophotocoagulation procedure and for standard cataract surgery.

**H. Medically Necessary Indications Cataract removal with ab-interno insertion of aqueous drainage device without reservoir: CPT codes 66991 and 66989**

1. The drainage device may be considered medically necessary when the individual has:
  - a. Mild to moderate open angle glaucoma (primary, pigmentary or pseudoexfoliation); and,
  - b. Individual is currently being treated with an ocular hypotensive medication; or,
  - c. For individuals not currently on ocular hypotensive medications the record must document failure of therapy due to lack of efficacy, intolerance, compliance, infirmity, contraindications, memory problems, cost, or treatment burden.
2. For CPT 66991 (Cataract removal standard with ab-interno insertion of aqueous drainage device without reservoir) medical necessity criteria must be met for both the drainage device as noted above and for standard cataract surgery.
3. For CPT 66989 (Cataract removal complex with ab-interno insertion of aqueous drainage device without reservoir) medical necessity criteria must be met for both the drainage device as noted above and for complex cataract surgery.

## **I. Not Medically Necessary**

1. The use of femtosecond laser to assist with cataract surgery is an incidental part of the surgery and will not be separately reviewed for medical necessity.
2. The use of intraoperative wavefront aberrometry during cataract surgery is an incidental part of the surgery and may not be separately reviewed for medical necessity.
3. Upgraded lenses (IOLs) that correct presbyopia or astigmatism are considered cosmetic and are not medically necessary.
4. The use of intraoperative visual axis identification using patient fixation is an incidental part of the surgery and may not be separately reviewed for medical necessity.
5. Cataract surgery may not be medically necessary or may be contraindicated in the following circumstances:
  - a. The patient's ADLs or eye health is not compromised by cataract
  - b. The patient is unable to undergo surgery due to comorbid conditions
  - c. Surgery will not improve visual function or eye health

## **J. Documentation**

Medical necessity must be supported by adequate and complete documentation in the patient's medical record that describes the procedure and the medical rationale for it. Documentation requires at a minimum all the following items. All items must be available upon request to initiate or sustain previous payments. For any retrospective review, the full operative report and the medical plan of care is required.

Every page of the record must be legible and include appropriate patient identification information (e.g., complete name, date(s) of service). Services provided/ordered must be authenticated by the physician. The method used shall be handwritten or electronic signature. Stamped signatures are not acceptable.

Documentation requirements for cataract surgery and IOL procedures are as follows:

1. The patient has received a comprehensive ophthalmic evaluation. The findings for each component of the examination must be included in the medical records received for medical necessity evaluation.
2. The ADL documentation of functional impairment, includes:
  - a. Reading, watching television, driving, or occupational, vocational, or recreational activities, and any specific difficulties with glare; and,

- b. The functional impairment evaluation documents impairment in specific activities of daily living due to the cataract or lens in the eye for which surgery is requested.
  - c. The evaluation must be a dated, standardized, written questionnaire signed by the patient, or by the staff member documenting the information, and indicating on the form that this information was taken over the phone.
  - d. Any screening instrument approved by The American Academy of Ophthalmology is acceptable.<sup>3</sup>
3. The ADL evaluation must document the functional impairment(s) due to cataract or lens dysfunction in the eye or eyes for which the surgery is proposed. The evaluation must include the status of the impairments(s) with and without corrective glasses and must clearly state which eye or eyes were evaluated.

#### K. Procedural Detail

CPT Codes	
66825	Repositioning of intraocular lens prosthesis, requiring an incision (separate procedure)
66840	Removal of lens material; aspiration technique, 1 or more stages
66850	Removal of lens material; phacofragmentation technique (mechanical or ultrasonic) (e.g., phacoemulsification), with aspiration
66852	Removal of lens material; pars plana approach, with or without vitrectomy
66920	Removal of lens material; intracapsular
66930	Removal of lens material; intracapsular, for dislocated lens
66940	Removal of lens material; extracapsular (other than 66840, 66850, 66852)
66982	Extracapsular cataract removal with insertion of intraocular lens prosthesis (1-stage procedure), manual or mechanical technique (e.g., irrigation and aspiration or phacoemulsification), complex, requiring devices or techniques not generally used in routine cataract surgery (e.g., iris expansion device, suture support for intraocular lens, or primary posterior capsulorrhexis) or performed on patients in the amblyogenic developmental stage; without endoscopic cyclophotocoagulation
66983	Intracapsular cataract extraction with insertion of intraocular lens prosthesis (1 stage procedure)
66984	Extracapsular cataract removal with insertion of intraocular lens prosthesis (1 stage procedure), manual or mechanical technique

<sup>3</sup> Sources includes screening tools that fulfill this requirement.

	(e.g., irrigation and aspiration or phacoemulsification); without endoscopic cyclophotocoagulation
66985	Insertion of intraocular lens prosthesis (secondary implant), not associated with concurrent cataract removal
66986	Exchange of intraocular lens
66987	Extracapsular cataract removal with insertion of intraocular lens prosthesis (1-stage procedure), manual or mechanical technique (e.g., irrigation and aspiration or phacoemulsification), complex, requiring devices or techniques not generally used in routine cataract surgery (e.g., iris expansion device, suture support for intraocular lens, or primary posterior capsulorrhexis) or performed on patients in the amblyogenic developmental stage; with endoscopic cyclophotocoagulation
66988	Extracapsular cataract removal with insertion of intraocular lens prosthesis (1 stage procedure), manual or mechanical technique (e.g., irrigation and aspiration or phacoemulsification); with endoscopic cyclophotocoagulation
66989	Extracapsular cataract removal with insertion of intraocular lens prosthesis (1-stage procedure), manual or mechanical technique (e.g., irrigation and aspiration or phacoemulsification), complex, requiring devices or techniques not generally used in routine cataract surgery (e.g., iris expansion device, suture support for intraocular lens, or primary posterior capsulorrhexis) or performed on patients in the amblyogenic developmental stage; with insertion of intraocular (e.g., trabecular meshwork, supraciliary, suprachoroidal) anterior segment aqueous drainage device, without extraocular reservoir, internal approach, one or more (replaces 0191T)
66991	Extracapsular cataract removal with insertion of intraocular lens prosthesis (1 stage procedure), manual or mechanical technique (e.g., irrigation and aspiration or phacoemulsification); with insertion of intraocular (e.g., trabecular meshwork, supraciliary, suprachoroidal) anterior segment aqueous drainage device, without extraocular reservoir, internal approach, one or more (replaces 0376T)
<b>Required Modifiers</b>	
RT	Right side
LT	Left side
50	Bilateral
<b>Invalid Modifiers</b>	
24	Unrelated E&M service during post-operative period.



25	Significant, separately identifiable E&M service by same provider on the same day of a procedure or other service.
57	Decision for surgery same day or within 24 hours before the surgery.
95	Telemedicine
E1 – E4	Eyelid (Upper, lower, left, right)
26	Professional component
TC	Technical component

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<b>RELATED POLICIES AND PROCEDURES</b>	
1305	Posterior Capsulotomy
1327	Glaucoma Surgery
1333	Refractive Surgery

<b>DOCUMENT HISTORY</b>		
<b><i>Approval Date</i></b>	<b><i>Revision</i></b>	<b><i>Effective Date</i></b>
07/10/2017	Initial policy	07/10/2017
10/24/2017	Major revision with functional impact assessments	10/24/2017
01/23/2018	Annual review; no substantive changes	01/23/2018
12/12/2018	Annual review; no substantive changes	12/12/2018
02/19/2020	Annual review; criteria update with new codes for cyclophotocoagulation, 66987 and 66988	06/01/2020
06/03/2020	Addition of 0514T secondary code	09/01/2020
04/07/2021	Criteria revised for bilateral sequential cataract surgery allowing a functional impairment of glare vision; eliminated requirement for bilateral sequential surgery to require a functional assessment to be documented for each eye.	09/01/2021
01/05/2022	Annual review; add procedure ab-interno insertion of aqueous drainage device without reservoir and criteria. Add 2 newly released CPT codes	04/01/2022
01/17/2023	Annual review; requires diagnostic test results as a pre-op requirement but removes requirements for specific diagnostic tests for certain conditions; removes all wording related to achieving target intraocular pressure; states that femtosecond laser (66999) and visual axis ID using patient fixation (0514T) are incidental parts of surgery and not medically necessary as separate procedures; deletes CPT code 66830 (to be added to YAG policy) and 0514T (CMS deleted); adds CPT code 66825; separates and clarifies criteria for IOL procedures apart from cataract surgery.	07/01/2023
09/20/2023	Administrative review for CMS 2024 final rule Medicare Part C equity: no changes.	n/a
01/03/2024	Removed requirement to predict patient's ADL improvements; removed criteria for bilateral sequential surgery - if two separate dates of surgery are requested then each eye should be evaluated as individual surgeries.	04/01/2024

<b>REFERENCES AND SOURCES</b>
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1. Ahmed IIK, Hill WE, Arshinoff SA. Bilateral Same-Day Cataract Surgery: An Idea Whose Time Has Come #COVID-19. *Ophthalmology*. 2021 Jan;128(1):13-14. doi: 10.1016/j.ophtha.2020.08.028. Epub 2020 Sep 2. PMID: 32888947; PMCID: PMC7462754.
2. Ahmed IIK, De Francesco T, Rhee D, et.al.; HORIZON Investigators. Long-term Outcomes from the HORIZON Randomized Trial for a Schlemm's Canal Microstent in Combination Cataract and Glaucoma Surgery. *Ophthalmology*. 2022 Jul;129(7):742-751. doi: 10.1016/j.ophtha.2022.02.021. Epub 2022 Feb 23. PMID: 35218867.
3. Bali J, Bali O, Sahu A, et.al. Health economics and manual small-incision cataract surgery: An illustrative mini review. *Indian J Ophthalmol*. 2022 Nov;70(11):3765-3770. doi: 10.4103/ijo.IJO\_1266\_22. PMID: 36308093.
4. Bernhisel A, Pettet J. Manual small incision cataract surgery. *Curr Opin Ophthalmol*. 2020 Jan;31(1):74-79. doi: 10.1097/ICU.0000000000000624. PMID: 31770166.
5. Bremond-Gignac D, Daruich A, Robert MP, et.al. Recent developments in the management of congenital cataract. *Ann Transl Med*. 2020 Nov;8(22):1545. doi: 10.21037/atm-20-3033. PMID: 33313290; PMCID: PMC7729375.
6. González-Cruces T, Cano-Ortiz A, Sánchez-González MC, et.al. Cataract surgery astigmatism incisional management. Manual relaxing incision versus femtosecond laser-assisted arcuate keratotomy. A systematic review. *Graefes Arch Clin Exp Ophthalmol*. 2022 Nov;260(11):3437-3452. doi: 10.1007/s00417-022-05728-0. Epub 2022 Jun 17. PMID: 35713710.
7. Gutiérrez-Robledo LM, Villasís-Keever MA, Avila-Avila A, et.al. Effect of Cataract Surgery on Frequency of Falls among Older Persons: A Systematic Review and Meta-Analysis. *J Ophthalmol*. 2021 Mar 15; 2021:2169571. doi: 10.1155/2021/2169571. PMID: 33815834; PMCID: PMC7987466.
8. Khandelwal, RR, Raje, D., Rathi, A. et.al. Surgical outcome of safe surgery system trabeculectomy combined with cataract extraction. *Eye (London, England)*, 29(3), 363–370.2015.
9. Li J, Chen X, Yan Y, et.al. Molecular genetics of congenital cataracts. *Exp Eye Res*. 2020 Feb; 191:107872. doi: 10.1016/j.exer.2019.107872. Epub 2019 Nov 23. PMID: 31770519.
10. Li J, Xia CH, Wang E, et.al. Screening, genetics, risk factors, and treatment of neonatal cataracts. *Birth Defects Res*. 2017 Jun 1;109(10):734-743. doi: 10.1002/bdr2.1050. Epub 2017 May 22. PMID: 28544770.
11. Li Y, Butcher R. Immediately Sequential Bilateral Cataract Surgery for the Treatment of Bilateral Cataracts: A Review of Safety and Guidelines [Internet]. Ottawa (ON): Canadian Agency for Drugs and Technologies in Health; 2020 Aug 25. PMID: 33347109.
12. Magone MT, Kueny L, Singh GA, et.al. Eleven Years of Cataract Surgery in Veterans Without Pre-existing Ocular Comorbidities. *Mil Med*. 2019 Jul 1;184(7-8): e191-e195. doi: 10.1093/milmed/usy375. PMID: 30690510.
13. Masket S. Same Day Bilateral Cataract Surgery-Who Benefits? *Ophthalmology*. 2021 Jan;128(1):11-12. doi: 10.1016/j.ophtha.2020.08.017. Epub 2020 Sep 18. PMID: 32951873; PMCID: PMC7498406.
14. Mediero S, Peralta Calvo J, Pastora Salvador N, et.al. Elevated intraocular pressure in pediatric cataract surgery in a reference centre. *Arch Soc Esp Oftalmol (Engl Ed)*. 2019 Aug;94(8):377-383. English, Spanish. doi: 10.1016/j.oftal.2019.05.009. Epub 2019 Jun 17. PMID: 31221471.
15. Miura M, Inomata T, Nakamura M, et.al. Prevalence and Characteristics of Dry Eye Disease After Cataract Surgery: A Systematic Review and Meta-Analysis. *Ophthalmol Ther*. 2022 Aug;11(4):1309-1332. doi: 10.1007/s40123-022-00513-y. Epub 2022 May 9. PMID: 35534685; PMCID: PMC9253209.

16. Obuchowska I, Konopinska J. Fear and Anxiety Associated with Cataract Surgery Under Local Anesthesia in Adults: A Systematic Review. *Psychol Res Behav Manag.* 2021 Jun 18; 14:781-793. doi: 10.2147/PRBM.S314214. PMID: 34177276; PMCID: PMC8219311.
17. Rabin, R. L., Rabin, A. R., Zhang, A. D., et.al. Co-management of cataract and glaucoma in the era of minimally invasive glaucoma surgery. *Current opinion in ophthalmology*, 29(1), 88–95. 2018.
18. Schmidt DC, Al-Bakri M, Rasul A, et.al. Cataract Surgery with or without Intraocular Lens Implantation in Pediatric Uveitis: A Systematic Review with Meta-Analyses. *J Ophthalmol.* 2021 Jun 11; 2021:5481609. doi: 10.1155/2021/5481609. PMID: 34221492; PMCID: PMC8213487.
19. Shah, M., Law, G., & Ahmed, I. I. Glaucoma and cataract surgery: two roads merging into one. *Current opinion in ophthalmology*, 27(1), 51–57; 2016.
20. Sharma B, Abell RG, Arora T, et al. Techniques of anterior capsulotomy in cataract surgery. *Indian J Ophthalmol.* 2019 Apr;67(4):450-460. doi: 10.4103/ijo.IJO\_1728\_18. PMID: 30900573; PMCID: PMC6446625.
21. Shiels A, Hejtmancik JF. Biology of Inherited Cataracts and Opportunities for Treatment. *Annu Rev Vis Sci.* 2019 Sep 15; 5:123-149. doi: 10.1146/annurev-vision-091517-034346. PMID: 31525139; PMCID: PMC6791712.
22. Sim PY, Day AC, Leak C, et.al. Cochrane Corner: immediate sequential bilateral surgery versus delayed sequential bilateral surgery for cataracts. *Eye (Lond).* 2023 Oct;37(14):2841-2843. doi: 10.1038/s41433-023-02436-9. Epub 2023 Feb 10. PMID: 36765268; PMCID: PMC10517021.
23. Theeuwes J, Alferdinck JW, Perel M. Relation between glare and driving performance. *Human Factors.* 44(1):95-107; 2002.
24. Xu, X., Ma, Y. Y., & Zou, H. D. (2016). Cost-Utility Analysis of Cataract Surgery in Advanced Glaucoma Patients. *Journal of glaucoma*, 25(7), 2016.
25. Yadav S, Tandon R, Singh R, et.al. Viscoelastic cannula acting as a wrecker and savior during cataract surgery. *BMJ Case Rep.* 2019 Aug 15;12(8): e231778. doi: 10.1136/bcr-2019-231778. PMID: 31420443; PMCID: PMC6700576.
26. Yang L, Li H, Zhao X, et.al. Association between Cataract Surgery and Age-Related Macular Degeneration: A Systematic Review and Meta-Analysis. *J Ophthalmol.* 2022 May 5; 2022:6780901. doi: 10.1155/2022/6780901. PMID: 35573811; PMCID: PMC9098349.
27. Zhang F. Femtosecond laser-assisted cataract surgery versus conventional cataract surgery comparison. *J Cataract Refract Surg.* 2019 Jun;45(6):889. doi: 10.1016/j.jcrs.2019.03.004. PMID: 31146946.
28. Zhang ML, Hirunyachote P, Jampel H. Combined surgery versus cataract surgery alone for eyes with cataract and glaucoma. *Cochrane Database Syst Rev.* 7(7):CD008671; Jul 2015.

## SOURCES

1. American Academy of Ophthalmology. Cataract in the Adult Eye PPP - 2016. October 2016. Available at: <https://www.aao.org/preferred-practice-pattern/cataract-in-adult-eye-ppp-2016> Accessed 2/5/2021.
2. American Academy of Ophthalmology, Sue Vicchilli, Academy Director of Coding and Reimbursement, Fact Sheet Documenting the Need for Cataract Surgery, EyeNet , pg. 46, January 2021.
3. CMS Micro Invasive Glaucoma Surgery. L39620, 11/23/2023, Document Note. Effective 12/24/2023. <https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?lcdId=39620&ver=3>. Accessed 11/28/2023.