Policy Replaced by LCD L34431 Effective February 26, 2018

BlueCross BlueShield of Alabama

Name of Blue Advantage Policy:

Anterior Eye Segment Optical Imaging

Policy #: 311
Category: Vision

Latest Review Date: March 2017
Policy Grade: C

Background:

Blue Advantage *medical policy does not conflict with Local Coverage Determinations (LCDs), Local Medical Review Policies (LMRPs) or National Coverage Determinations (NCDs) or with coverage provisions in Medicare manuals, instructions or operational policy letters. In order to be covered by Blue Advantage the service shall be reasonable and necessary under Title XVIII of the Social Security Act, Section 1862(a)(1)(A). The service is considered reasonable and necessary if it is determined that the service is:*

1. *Safe and effective;*
2. *Not experimental or investigational*;*
3. *Appropriate, including duration and frequency that is considered appropriate for the service, in terms of whether it is:*
    - *Furnished in accordance with accepted standards of medical practice for the diagnosis or treatment of the patient's condition or to improve the function of a malformed body member;*
    - *Furnished in a setting appropriate to the patient's medical needs and condition;*
    - *Ordered and furnished by qualified personnel;*
    - *One that meets, but does not exceed, the patient's medical need; and*
    - *At least as beneficial as an existing and available medically appropriate alternative.*

Routine costs of qualifying clinical trial services with dates of service on or after September 19, 2000 which meet the requirements of the Clinical Trials NCD are considered reasonable and necessary by Medicare. Providers should bill* ***Original Medicare* *for covered services that are related to* ***clinical trials*** *that meet Medicare requirements (Refer to Medicare National Coverage Determinations Manual, Chapter 1, Section 310 and Medicare Claims Processing Manual Chapter 32, Sections 69.0-69.11).*

Description of Procedure or Service:

Optical coherence tomography (OCT) is a high resolution method of imaging the ocular structures. Anterior segment (AS) OCT is being evaluated as a non-invasive diagnostic and screening tool for the detection of angle closure glaucoma, for presurgical evaluation, surgical guidance, and to assess complications following surgical procedures. It is also being studied in relation to pathologic processes such as dry eye syndrome, tumors, uveitis, and infections.

Optical coherence tomography (OCT) is a high-resolution method of imaging the ocular structures. OCT of the anterior eye segment is being evaluated as a noninvasive diagnostic and screening tool with a number of potential applications. One proposed use of anterior segment (AS) OCT is to determine whether there is a narrowing of the anterior chamber angle, which could lead to angle closure glaucoma. Another general area of potential use is for presurgical and post-surgical evaluation of anterior chamber procedures. This could include assessment of corneal thickness and opacity, calculation of intraocular lens power, guiding surgery, imaging intracorneal ring segments, and assessing complications following surgical procedures such as blockage of glaucoma tubes or detachment of Descemet membrane following endothelial keratoplasty. A third general category of use is to image pathologic processes such as dry eye syndrome, tumors, noninfectious uveitis, and infections. It is proposed that AS OCT is an improvement over slit-lamp biomicroscopy/gonioscopy and ultrasound biomicroscopy (UBM) based on increased resolution and avoidance of probe placement under topical anesthesia.

OCT is a non-invasive method that creates an image of light reflected from the ocular structures. In this technique, a reflected light beam interacts with a reference light beam. The coherent (positive) interference between the 2 beams (reflected and reference) is measured by an interferometer, allowing construction of an image of the ocular structures. This method allows cross-sectional imaging at a resolution of 6 to 25 microns. The Stratus OCT, which uses a 0.8-micron wavelength light source, was designed for evaluating the optic nerve head, retinal nerve fiber layer, and retinal thickness in the posterior segment. The Zeiss Visante OCT™ and AC Cornea OCT (Ophthalmic Technologies) use a 1.3-micron wavelength light source designed specifically for imaging the anterior eye segment. Light of this wavelength penetrates the sclera, allowing high-resolution cross-sectional imaging of the AC angle and ciliary body. The light is, however, typically blocked by pigment, preventing exploration behind the iris. Ultrahigh resolution OCT can achieve a spatial resolution of 1.3 microns, allowing imaging and measurement of corneal layers.

An early application of OCT technology was the evaluation of the cornea before and after refractive surgery. Since this is a non-invasive procedure that can be conducted by a technician, it has been proposed that this device may provide a rapid diagnostic and screening tool for the detection of angle closure in glaucoma. Glaucoma is a disease characterized by degeneration of the optic nerve (optic disc). A comprehensive ophthalmologic examination for glaucoma includes assessment of the optic nerve and retinal nerve fiber layer, evaluation of visual fields, and measurement of ocular pressure. The presence of characteristic changes in the optic nerve or abnormalities in visual field, together with increased intraocular pressure (IOP), is sufficient for a definitive diagnosis of glaucoma.

The classification of glaucoma as open angle or angle closure relies on assessment of the anterior segment anatomy, particularly that of the AC angle. Angle closure glaucoma is characterized by obstruction of aqueous fluid drainage through the trabecular meshwork (the primary fluid egress site) from the eye's AC. The width of the angle is one factor affecting the drainage of aqueous humor. A wide unobstructed iridocorneal angle allows sufficient drainage of aqueous humor, whereas a narrow angle may impede the drainage system and leave the patient susceptible to an increase in IOP and angle closure glaucoma. Because of the high resolution images, AS OCT is also being evaluated for a wide range of conditions.

Alternative methods of evaluating the anterior chamber are slit-lamp biomicroscopy or UBM. Slit lamp biomicroscopy is typically used to evaluate the AC; however, the chamber angle can only be examined with specialized lenses, the most common of these being the gonioscopic mirror. In this procedure a gonio lens is applied to the surface of the cornea, which may result in distortion of the globe. Ultrasonography may also be used for imaging the anterior eye segment. Ultrasonography uses high-frequency mechanical pulses (10-20 MHz) to build up a picture of the front of the eye. An ultrasound scan along the optical axis assesses corneal thickness, AC depth, lens thickness, and axial length. Ultrasound scanning across the eye creates a 2-dimensional image of the ocular structures. It has a resolution of 100 μm but only moderately high intraobserver and low interobserver reproducibility. US biomicroscopy (approximately 50 MHz) has a resolution of 30 to 50 μm. As with gonioscopy, this technique requires placement of a probe under topical anesthesia.

Policy:

Effective for dates of service on or after February 23, 2008 and prior to February 26, 2018:
Blue Advantage will treat **scanning computerized ophthalmic (e.g., optical coherence tomography (OCT)) imaging of the anterior eye segment,** as a **non-covered** benefit and as **investigational**.

Blue Advantage does not approve or deny procedures, services, testing, or equipment for our members. Our decisions concern coverage only. The decision of whether or not to have a certain test, treatment or procedure is one made between the physician and his/her patient. Blue Advantage administers benefits based on the members' contract and medical policies. Physicians should always exercise their best medical judgment in providing the care they feel is most appropriate for their patients. Needed care should not be delayed or refused because of a coverage determination.

Key Points:

The most recent literature review was updated through January 25, 2017.

Angle Closure Glaucoma
Clinical Context and Test Purpose
One potential use of AS OCT is to determine whether there is a narrowing of the anterior chamber angle, which could lead to angle closure glaucoma. There are 2 scenarios where this

might occur: (1) for the diagnosis of angle closure glaucoma and (2) as a screening method for future angle closure glaucoma.

The question addressed in this evidence review is: Does OCT of the anterior chamber leads to an improvement in health outcomes compared to alternative methods?

The following PICOTS was used to select literature is relevant to the review.

Patients
The population of interest is individuals who are being evaluated for angle closure glaucoma for diagnosis or screening

Interventions
OCT of the anterior eye segment

Comparators
Alternative tests are gonioscopy or ultrasound biomicroscopy (UBM). OCT is proposed to be an improvement over gonioscopy and UBM, which are the commonly used tests, based on an increase in resolution and avoidance of a probe placed under topical anesthesia.

Outcomes
The outcomes of interest are technical performance, including intraobserver and interobserver reliability, diagnostic accuracy in comparison to other methods, and the effect of the test on health outcomes, including prediction of angle-closure glaucoma, change in glaucoma status, and prevention of glaucoma.

Timing
The appropriate duration of follow-up is the time interval that would permit detection of the development of an increase in intraocular pressure (IOP) or angle closure glaucoma. One longitudinal study (Baskaran et al, 2015) had 4 years of follow-up after AS OCT.2 In this study, 17% of participants developed gonioscopic angle closure by 4 years. Longer follow-up is needed to evaluate the true-positive and false-positive rates.

Setting
This procedure is most likely to be used in outpatient care by an ophthalmologist.

Technical Performance
Reproducibility of Measurements
Maram et el (2014) assessed the reproducibility of angle metrics using the Visante OCT. The anterior chamber angle from 20 eyes of 20 healthy subjects (open angle) were measured (1) by masked expert graders on 2 occasions, one week apart, to assess intra-observer reliability, and (2) by 2 independent reviewers to assess inter-observer reliability. Intra-observer reproducibility was high (intraclass correlation coefficients [ICC] $\geq$ 0.93), although the inter-observer reproducibility was modest (ICC of 0.49 to 0.82) for measurements of the angle-opening distance, trabecular iris space area, and scleral spur angle. The percentage error ranged from 9.29% for the scleral spur angle to 21.18% for the trabecular iris space area.

Diagnostic Accuracy

Optical Coherence Tomography versus Gonioscopy

A number of studies have compared OCT with gonioscopy for the detection of primary angle closure. For example, Nolan et al (2007) assessed the ability of a prototype of the Visante OCT to detect primary angle closure in 203 Asian patients. The patients, recruited from glaucoma clinics, had been diagnosed with primary angle closure, primary open-angle glaucoma, ocular hypertension, and cataracts; some had previously been treated with iridotomy. Images were assessed by 2 glaucoma experts, and the results compared with an independently obtained reference standard (gonioscopy). Data were reported from 342 eyes of 200 individuals. A closed angle was identified in 152 eyes with gonioscopy and 228 eyes with OCT; agreement was obtained between the 2 methods in 143 eyes. Although these results suggest low specificity for OCT, it is noted that gonioscopy is not considered to be a criterion standard. The authors suggest 3 possible reasons for the increase in identification of closed angles with OCT: lighting is known to affect angle closure, and the lighting conditions were different for the two methods (gonioscopy requires some light); placement of the gonioscopy lens on the globe may have caused distortion of the AS; and landmarks are not the same with the 2 methods.

Narayanaswamy et al (2010) conducted a community-based cross-sectional study of glaucoma screening. The study population consisted of individuals 50 years or older who underwent ASOCT by a single ophthalmologist and gonioscopy by an ophthalmologist who was masked to the OCT findings. Individuals were excluded if they had a disease or pathology which could influence the quality of angle imaging by OCT. The angle opening distance (AOD) was calculated at 250, 500, and 750 microns from the scleral spur. Of 2047 individuals examined, 28% were excluded due to inability to locate the scleral spur, poor image quality, or software delineation errors. Of the remaining 1465 participants, 315 (21.5%) had narrow angles on gonioscopy. A noted limitation of this quantitative technique for screening of angle closure glaucoma was the inability to define the scleral spur in 25% of the study population.

A 2009 publication also examined the sensitivity and specificity of the Visante OCT when using different cutoff values for the AOD measured at 250, 500, and 750 microns from the scleral spur. OCT and gonioscopy records were available for 303 eyes of 155 patients seen at a glaucoma clinic. Blinded analysis showed sensitivity and specificity between 70% and 80% (in comparison with gonioscopy), depending on the AOD and the cutoff value. Correlation coefficients between the qualitative gonioscopy grade and quantitative OCT measurement ranged from 0.75 (AOD= 250) to 0.88 (AOD= 750). As noted by these investigators, “a truer measure of occludable angles is whether an eye develops angle-closure glaucoma in the future.”

OCT versus Ultrasound Biomicroscopy

Mansouri et al (2010) published a study that compared the accuracy in measurement of the AC angle by AS OCT and UBM in European patients with suspected primary angle closure (PACS), primary angle closure (PAC), or primary angle-closure glaucoma (PACG). In this study, 55 eyes of 33 consecutive patients presenting with PACS, PAC, or PACG were examined with OCT, followed by UBM. The trabecular-iris angle (TIA) was measured in all 4 quadrants. The AOD was measured at 500 microns from the scleral spur. In this comparative study, the OCT measurements were significantly correlated with UBM measurements but showed poor

agreement with each other. The authors do not believe that AS OCT can replace UBM for the quantitative assessment of the AC angle.

Effect on Health Outcomes

The clinical utility of OCT is closely related to its ability to accurately diagnose or prevent angle closure glaucoma, because treatment is generally initiated on confirmation of the diagnosis. Therefore, if OCT is more accurate in diagnosing clinically significant closed angles than alternatives, it can be considered to have clinical utility above that of the alternative tests.

A key question is whether the increase in cases of angle closure identified by AS OCT compared to the current standard of gonioscopy represents true cases of the disease. In 2015, Baskaran et al reported a comparative cohort study assessing the ability of OCT to predict incident gonioscopic angle closure. A total of 2052 mostly Chinese participants attending a community health center underwent gonioscopy and AS OCT by examiners masked to the other test. Of the 342 participants evaluable for follow-up at 4 years, 65 had open angles on both tests at baseline (control group) and 277 had open angles on gonioscopy but closed angles determined by OCT at baseline (experimental group). At 4-year follow-up, 17.3% of the 277 patients in the experimental group had gonioscopic angle closure compared to none of the control group. The incidence of increased IOP and angle closure glaucoma were not reported.

Section Summary: Angle Closure Glaucoma

A study of reproducibility of angle metrics (i.e., angle-opening, trabecular iris space area, scleral spur angle) found high intraobserver reproducibility but modest interobserver reproducibility. In a comparative study, the primary landmark used to measure the AC angle, the scleral spur, could not be identified in a substantial number of eyes with AS OCT.

When AS OCT measurement of the AC angle is compared with gonioscopy, AS OCT detects more narrow angles than gonioscopy. It is not known if these additional cases will lead to angle-closure glaucoma or if early detection will improve health outcomes.

Results from 1 longitudinal study found that OCT detects more cases of mild angle closure than gonioscopy, and that some of these cases will develop angle closure as measured by gonioscopy. However, the study also indicates a potentially high number of false positives, and it is not known whether clinical outcomes are improved with early monitoring based on AS OCT. Longitudinal studies are needed to determine whether eyes classified as closed by AS OCT, but not by gonioscopy, are at risk of developing primary angle closure glaucoma.

Evaluation for Surgery or Postsurgical Complications

Clinical Context and Test Purpose

Clinical Context and Test Purpose

Another potential use of AS OCT is for evaluation for anterior chamber surgical procedures. This could include a wide range of uses, such as the calculation of intraocular lens power, guiding surgery of the AS, to image intracorneal ring segments, and to assess complications following surgical procedures such as blockage of glaucoma tubes or detachment of Descemet membrane after endothelial keratoplasty.

The question addressed in this evidence review is: Does OCT of the anterior chamber leads to an improvement in outcomes compared to alternative methods of assessing the anterior chamber?

The following PICOTS was used to select literature relevant to the review.

Patients
The population of interest is individuals who are being undergoing presurgical evaluation, surgical guidance, or for complications after surgery.

Interventions
OCT of the anterior eye segment

Comparators
Alternative tests are clinical evaluation, slit-lamp biomicroscopy, or UBM

Outcomes
The outcomes of interest are technical performance in visualizing the AS compared to alternative techniques, and the effect of the test on health outcomes, including successful outcomes of surgery and postsurgical monitoring.

Timing
The duration of follow-up for these studies is short-term efficacy of the surgical procedure or near postoperative evaluation for complications of surgery.

Setting
The setting is in a surgical suite or during outpatient care by an ophthalmologist.

Diagnostic Accuracy
Aqueous Tube Shunts
One potential application of OCT is for the visualization of aqueous tube shunts or stents. In 2012, Jiang et al reported a cross-sectional, observational study of the visualization of aqueous tube shunts by high-resolution OCT, slit-lamp biomicroscopy, and gonioscopy in 18 consecutive patients (23 eyes). High-resolution OCT demonstrated shunt position and patency in all 23 eyes. Compared with slitlamp, 4 eyes had new findings identified by OCT. For all 16 eyes in which tube entrance could be clearly visualized by OCT, growth of fibrous scar tissue could be seen between the tube and the corneal endothelium. This was not identified (retrospectively analyzed) in the patient records of the slit-lamp examination.

Endothelial Keratoplasty
Use of OCT is being reported for intraoperative and postoperative evaluation of graft apposition and detachment in endothelial keratoplasty procedures. In 2011, Moutsouris et al reported a prospective comparison of AS OCT, Scheimpflug imaging, and slit-lamp biomicroscopy in 120 eyes of 110 patients after Descemet membrane endothelial keratoplasty (DMEK). All slit-lamp biomicroscopy and OCT examinations were performed by the same experienced technician and all images were evaluated by 2 masked ophthalmologists. From a total of 120 DMEK eyes, 78

showed a normal corneal clearance by all of the imaging techniques. The remaining 42 eyes showed persistent stromal edema within the first month, suggesting (partial) graft detachment. Biomicroscopy was able to determine the presence or absence of a graft detachment in 35 eyes. Scheimpflug imaging did not give additional information over biomicroscopy. In 15 eyes, only OCT was able to discriminate between a "flat" graft detachment and delayed corneal clearance. Thus, out of the 42 eyes, OCT had an added diagnostic value in 36% of cases. This led to further treatment in some of the additional cases. Specifically, a secondary Descemet stripping automated endothelial keratoplasty (DSAEK) was performed for total graft detachment, while partial graft detachments were rebubbled or observed for corneal clearing. There were no false negatives (graft detachment unrecognized) or false positives (an attached graft recognized as a graft detachment).

Effect on Health Outcomes

There is research on the risk-benefit of OCT-laser assisted cataract surgery versus traditional phacoemulsification. AS OCT is also being studied for preoperative evaluation of intraocular lens power as well as postoperative assessment of intraocular stability of phakic lens and optic changes related to intraocular lens or ocular media opacities. However, it is unclear whether these imaging capabilities would improve health outcomes.

Section Summary: Evaluation for Surgery or Postsurgical Complications

Use of AS OCT has been reported for presurgical evaluation, surgical guidance, and monitoring for postsurgical complications. There is some evidence that the high resolution images provided by AS OCT are superior to results from slit-lamp examination or gonioscopy for some indications. However, the literature at this time is very limited and there is no clear link to improvements in health outcomes.

Anterior Eye Segment Disease or Pathology

Clinical Context and Test Purpose

Patients

The population of interest is individuals who are being evaluated for anterior segment disease or pathology

Interventions

OCT of the anterior eye segment

Comparators

Alternative tests are clinical evaluation, slit-lamp biomicroscopy, or UBM.

Outcomes

The outcomes of interests are technical performance and diagnostic accuracy, and the effect of the test on health outcomes including symptoms and functional outcomes.

Timing

The duration of follow-up is short-term, for diagnosis and treatment.

Setting
The setting is outpatient care by an ophthalmologist.

Diagnostic Accuracy
Neoplastic Disease
Several retrospective studies have compared OCT with UBM for AS tumors. Bianciotto et al (2011) retrospectively analyzed 200 consecutive patients who underwent both AS OCT and UBM for AS tumors. When comparing image resolution for the 2 techniques, UBM was found to have better overall tumor visualization.

Uveitis of the AS
In a study from India, Agarwal et al (2009) evaluated the anterior chamber inflammatory reaction by AS high-speed OCT. This was a prospective, nonrandomized, observational case series of 62 eyes of 45 patients. Of 62 eyes, Grade 4 aqueous flare was detected by OCT imaging in seven eyes and clinically in five eyes. The authors concluded that AS OCT can be used as an imaging modality in detecting inflammatory reaction in uveitis and also in eyes with decreased corneal clarity. Additional studies are needed to further evaluate these results and to demonstrate the clinical utility of using OCT in this situation.

Various Indications
Garcia and Rosen (2008) evaluated the diagnostic performance of AC Cornea OCT by comparing image results with UBM in patients with conditions of the AS. Patients were recruited from various specialty clinics, and 80 eyes with pathologic conditions involving the anterior ocular segment were included in the study. Comparison of OCT and UBM images showed that while the AC Cornea OCT has high resolution for the cornea, conjunctiva, iris, and anterior angle, UBM images are also clear for these areas. In addition, UBM was found to be superior at detecting cataracts, anterior tumors, ciliary bodies, haptics, and posterior chamber intraocular lenses. OCT was found to be superior at detecting a glaucoma tube and a metallic foreign body in the cornea when imaging was performed in the coronal plane.

Effect on Health Outcomes
The criterion standard for the diagnosis of ocular surface tumors such as ocular surface squamous neoplasia (OSSN) is histologic examination of tissue specimens from excisional biopsy. In a 2014 review, Thomas et al noted that noninvasive methods of diagnosing OSSN will be increasingly important as treatment moves toward medical therapy, although future studies will have to evaluate technical performance and diagnostic accuracy for this indication.

Section Summary: Anterior Segment Disease or Pathology
The evidence on use of AS OCT for anterior segment disease or pathology, such as dry eye syndrome, tumors, uveitis, and infections is limited. However, the evidence to date does not support an improvement in imaging compared to UBM.

Summary of Evidence
For individuals who are being evaluated for angle closure glaucoma who receive AS OCT, the evidence includes case series and cohort studies. Relevant outcomes include test accuracy, symptoms, change in disease status, and morbid events. Current literature consists primarily of

assessments of qualitative and quantitative imaging and detection capabilities. Ideally, a diagnostic test would be evaluated based on its technical performance, diagnostic accuracy (sensitivity, specificity, predictive value), and effect on health outcomes. Technically, OCT has the ability to create high-resolution images of the anterior segment. Studies indicate that AS OCT detects more eyes with narrow or closed angles than gonioscopy, suggesting that the sensitivity of OCT is higher than that of gonioscopy. However, because of the lack of a true criterion standard, it is not clear to what degree these additional cases are true positives versus false positives, and therefore the specificity and predictive values cannot be determined. Evaluation of the diagnostic performance depends, therefore, on evidence that the additional eyes identified with narrow angle by AS OCT are at higher risk for primary angle closure glaucoma. Results from 1 study with mid-term follow-up indicates that some patients identified with angle closure on AS OCT will develop angle closure on gonioscopy after several years, but that there may also be a large number of false positive results. Longer term studies are needed to determine whether eyes classified as closed angle by AS OCT are at higher risk of developing primary angle closure glaucoma. It is also not known whether early detection of angle closure will improve health outcomes in individuals who do not have symptoms of angle closure. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals who are being evaluated for anterior eye surgery or post-surgical complications who receive AS OCT, the evidence includes case series. Relevant outcomes include test accuracy, symptoms, change in disease status, and morbid events. Use of AS OCT has been reported for pre-surgical evaluation, surgical guidance, and monitoring for post-surgical complications. There is some evidence that the high resolution images provided by AS OCT are superior to results from slit-lamp examination or gonioscopy for some indications. However, the literature at this time is very limited. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals who have anterior eye segment disease or pathology who receive AS OCT, the evidence includes case series. Relevant outcomes include test accuracy, symptoms, change in disease status, and morbid events. The evidence on use of AS OCT for anterior segment disease or pathology, such as dry eye syndrome, tumors, uveitis, and infections, is limited. However, the evidence to date does not support an improvement in imaging compared to UBM. The evidence is insufficient to determine the effects of the technology on health outcomes.

Practice Guidelines and Position Statements
In 2015, the American Academy of Ophthalmology (AAO) published preferred practice patterns (PPP) on primary angle closure. AAO states that gonioscopy of both eyes should be performed on all patients in whom angle closure is suspected and that AS imaging should be considered when angle anatomy is difficult to assess on gonioscopy. AS imaging methods discussed were ultrasound biomicroscopy, Scheimpflug imaging and AS OCT, although it was noted that AS OCT is limited to evaluating the iridocorneal angle.

U.S. Preventive Services Task Force Recommendations
Not applicable.

Key Words:

Scanning computerized ophthalmic, optical coherence tomography, OCT, Stratus OCT™, Zeiss OCT™, Visante OCT non-contact, high resolution tomographic and biomicroscopic device, anterior imaging techniques, AC Cornea OCT, Bioptigen Envisu™, SOCT Copernicus HR, RTVue®(Optovue), Slit-Lamp OCT(SL-OCT, Heidelberg Engineering), ReScan 700 (Zeiss), Haag-Streit iOCT®,

Approved by Governing Bodies:

Multiple optical coherence tomography (OCT) systems have been cleared for marketing by the U.S. Food and Drug Administration (FDA) through the 510(k) process. Examples of approved systems are the Visante™ OCT (Carl Zeiss Meditec); the RTVue® (Optovue); and the Slit Lamp OCT (SL-OCT; Heidelberg Engineering). The microscope-integrated OCT devices for intraoperative use include the ReScan 700 (Zeiss) and the iOCT® system (Haag-Streit). Portable devices for intraoperative use include the Bioptigen Envisu™ (Bioptigen) and the Optovue iVue® (Optovue). Ultrahigh resolution OCT devices include the SOCT Copernicus HR (Optopol Technologies).

Commercially available laser systems such as the LenSx® (Alcon), Catalys® (OptiMedica), and VICTUS® (Technolas Perfect Vision) include OCT to provide image guidance for laser cataract surgery.

Custom-built devices, which do not require FDA approval, are also used.

Benefit Application:

Coverage is subject to member's specific benefits. Group specific policy will supersede this policy when applicable.

Current Coding:

CPT Codes:

92132	Scanning computerized ophthalmic diagnostic imaging, anterior segment, with interpretation and report, unilateral or bilateral. **(Effective 01/01/2011)**

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Policy History:

Adopted for Blue Advantage, January 2008
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Medical Policy Group, December 2008
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Medical Policy Panel, July 2011
Medical Policy Group, September 2012
Medical Policy Group, February 2013
Medical Policy Group, February 2014
Medical Policy Group, February 2015
Medical Policy Group, August 2016
Medical Policy Group, March 2017
Medical Policy Group, December 2017