

# Medical Coverage Policy



**Blue Cross  
Blue Shield**  
of Rhode Island

## Anterior Eye Segment Optical Imaging

Device/Equipment    Drug    Medical    Surgery    Test    Other

<b>Effective Date:</b>	<b>2/17/2009</b>	<b>Policy Last Updated:</b>	<b>02/07/2012</b>
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**Prospective review is recommended/required. Please check the member agreement for preauthorization guidelines.**

**Prospective review is not required.**

**Note: This policy relates only to the anterior eye segment and not the posterior segment which is a covered service.**

### **Description:**

Optical coherence tomography (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 two 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™ (Carl Zeiss Meditec), which utilizes a 0.8 micron wavelength light source, was designed for evaluating the optic nerve head, retinal nerve fiber layer and retinal thickness. The Zeiss Visante OCT™ uses a 1.3 micron wavelength light source and is designed specifically for imaging the anterior eye segment. Light of this wavelength penetrates the sclera, allowing high-resolution, cross-sectional imaging of the anterior chamber 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.

The Visante OCT received marketing clearance through the U.S. Food and Drug Administration (FDA) 510(k) process in 2005, listing the Stratus OCT and Orbscan™ II as predicate devices. The 510(k) summary describes the Visante OCT as “a non-contact, high resolution tomographic and biomicroscopic device indicated for the in vivo imaging and measurement of ocular structures in the anterior segment, such as corneal and LASIK flap thickness.”

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. Also being investigated is the possibility that the 0.8 micron wavelength Stratus OCT, which is already available in a number of eye departments, may provide sufficient detail for routine clinical assessment of the anterior chamber angle in glaucoma patients.

Ideally, a diagnostic test would be evaluated based on its technical performance, diagnostic performance (sensitivity and specificity), and clinical validity. Current literature consists primarily

of assessments of qualitative and quantitative imaging and detection capabilities. Technically, the Visante OCT has the ability to create high-resolution images of the anterior eye segment. Studies indicate that the Visante OCT detects more eyes with narrow or closed angles than gonioscopy, showing high sensitivity and low specificity in comparison with the reference standard. However, if the reference standard is flawed (e.g., does not detect all cases), the information provided by sensitivity and specificity is limited. Evaluation of the diagnostic performance of the Visante OCT depends, therefore, on demonstration of an improvement in clinical outcomes. Although the resolution of the images and the ease of use might be considered advantageous, evidence is insufficient to determine whether use of OCT can improve detection and management of patients at risk of developing primary angle-closure glaucoma. Given the number of questions regarding the impact of this new technology on health outcomes, this procedure is considered not medically necessary.

**Medical Criteria:**

Not applicable.

**Policy:**

Anterior segment optical coherence tomography is medically necessary for BlueCHIP for Medicare\* and considered not medically necessary for all other BCBSRI products as there is inadequate peer reviewed data to support its use.

**\*NOTE:** Medicare policy is developed separately from BCBSRI policy. Medicare policy incorporates consideration of governmental regulations from CMS (Centers for Medicare and Medicaid Services), such as national coverage determinations or local coverage determinations. In addition to benefit differences, CMS may reach different conclusions regarding the scientific evidence than does BCBSRI. Medicare and BCBSRI policies may differ. However, BlueCHIP for Medicare members must be offered, at least, the same services as Medicare offers.

**Coverage:**

Benefits may vary between groups/contracts. Please refer to the appropriate Evidence of Coverage or Subscriber Agreement for applicable "Services Not Medically Necessary."

**Coding:**

The following code is **medically necessary for BlueCHIP for Medicare** when accompanied by one of the ICD-9-CM diagnosis codes listed below, and **not medically necessary for all BCBSRI products**.

**92132**

The following ICD-9-CM diagnoses codes are required for Medicare members and should be used in conjunction with code 92132:

- 190.0 malignant neoplasm of eyeball except conjunctiva cornea retina and choroid
- 190.3 malignant neoplasm of conjunctiva
- 190.4 malignant neoplasm of cornea
- 190.6 malignant neoplasm of choroid
- 190.8 malignant neoplasm of other specified sites of eye
- 224.0 benign neoplasm of eyeball except conjunctiva cornea retina and choroid
- 224.3 benign neoplasm of conjunctiva
- 224.4 benign neoplasm of cornea
- 224.6 benign neoplasm of choroid

224.8 benign neoplasm of other specified parts of eye  
360.51 foreign body magnetic in anterior chamber of eye  
360.61 foreign body in anterior chamber  
364.51 essential or progressive iris atrophy  
364.52 iridoschisis  
364.53 pigmentary iris degeneration  
364.54 degeneration of pupillary margin  
364.55 miotic cysts of pupillary margin  
364.56 degenerative changes of chamber angle  
364.57 degenerative changes of ciliary body  
364.59 other iris atrophy  
364.60 idiopathic cysts of iris and ciliary body  
364.61 implantation cysts of iris and ciliary body  
364.62 exudative cysts of iris or anterior chamber  
364.63 primary cyst of pars plana  
364.64 exudative cyst of pars plana  
364.70 adhesions of iris unspecified  
364.71 posterior synechiae of iris  
364.72 anterior synechiae of iris  
364.73 goniosynechiae  
364.74 adhesions and disruptions of pupillary membranes  
364.75 pupillary abnormalities  
364.76 iridodialysis  
364.77 recession of chamber angle of eye  
364.81 floppy iris syndrome  
364.82 plateau iris syndrome  
364.89 other disorders of iris and ciliary body  
365.02 anatomical narrow angle borderline glaucoma  
365.20 - 365.89 primary angle-closure glaucoma unspecified - other specified glaucoma  
366.16 senile nuclear sclerosis  
370.00 - 370.07 corneal ulcer unspecified - mooren's ulcer  
371.00 - 371.05 corneal opacity unspecified - phthisical cornea  
371.20 - 371.24 corneal edema unspecified - corneal edema due to wearing of contact lenses  
371.50 hereditary corneal dystrophy unspecified  
371.57 endothelial corneal dystrophy  
371.71 corneal ectasia  
371.72 descemetocoele  
371.73 corneal staphyloma  
372.40 - 372.45 pterygium unspecified - recurrent pterygium  
379.31 aphakia  
379.32 subluxation of lens  
379.33 anterior dislocation of lens  
379.39 other disorders of lens  
996.51 mechanical complication of prosthetic corneal graft  
996.53 mechanical complication of prosthetic ocular lens prosthesis  
996.69 infection and inflammatory reaction due to other internal prosthetic device implant and graft

**Also Known As:**

Optical Coherence Tomography (OCT)

**Related Topics:**

Not applicable.

**Published:**

*Provider Update*, April 2009

*Provider Update*, May 2010

*Provider Update*, May 2011

*Provider Update*, April 2012

**References:**

Centers for Medicare and Medicaid Services. Local Coverage Determination (LCD) for Scanning Computerized Ophthalmic Diagnostic Imaging (SCODI) (L30266). Accessed 01/09/2012

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