Eye Cancer Early Detection, Diagnosis, and Staging

Detection and Diagnosis

Catching cancer early often allows for more treatment options. Some early cancers may have signs and symptoms that can be noticed, but that is not always the case.

- Can Eye Cancer Be Found Early?
- How Is Melanoma of the Eye Diagnosed?
- How Is Lymphoma of the Eye Diagnosed?

Stages and Outlook (Prognosis)

After a cancer diagnosis, staging provides important information about the extent of cancer in the body and anticipated response to treatment.

- Eye Cancer Stages
- Eye Cancer Survival Rates

Questions to Ask About Eye Cancer

Here are some questions you can ask your cancer care team to help you better understand your cancer diagnosis and treatment options.

- What Should You Ask Your Doctor About Eye Cancer?
Can Eye Cancer Be Found Early?

Eye cancer is uncommon, and there are no widely recommended screening tests for this cancer in people at average risk. (Screening is testing for a disease like cancer in people without any symptoms.) Still, some eye cancers can be found early.

Some doctors may recommend yearly eye exams for those at higher risk of eye melanoma, such as people with dysplastic nevus syndrome\(^1\). Regular eye exams are an important part of everyone’s health care, even if they have no symptoms. Often melanomas of the eye are found during a routine eye exam. When the doctor looks through the pupil at the back of the eye, he or she may see a dark spot that might be an early melanoma.

Many doctors feel that most melanomas start from a nevus (mole), which is a benign (non-cancerous) tumor of pigment cells. If an eye nevus is present, it should be looked at regularly by an ophthalmologist (a doctor who specializes in eye diseases). People who notice a dark spot on the colored part of their eye (the iris) should have a doctor look at it, especially if it is getting bigger.

References

See all references for Eye Cancer
(https://www.cancer.org/content/cancer/en/cancer/eye-cancer/references.html)

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Signs and Symptoms of Eye Cancer

Many people with eye melanoma don’t have symptoms unless the cancer grows in certain parts of the eye or becomes more advanced. Signs and symptoms of eye melanomas can include:

- Problems with vision (blurry vision or sudden loss of vision)
Floaters (spots or squiggles drifting in the field of vision) or flashes of light
Visual field loss (losing part of your field of sight)
A growing dark spot on the colored part of the eye (iris)
Change in the size or shape of the pupil (the dark spot in the center of the eye)
Change in position of the eyeball within its socket
Bulging of the eye
Change in the way the eye moves within the socket

Pain is rare unless the tumor has grown extensively outside the eye. In such cases, bulging or a change in the position of the eye may also be noted.

Other, less serious conditions can also cause many of these symptoms. For example, floaters can be a normal part of the aging process. Still, if you have any of these symptoms, it’s important to see a doctor right away so the cause can be found and treated, if needed.

References
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Tests for Eye Cancer

Certain signs and symptoms might suggest that a person could have an eye melanoma, but tests are needed to confirm the diagnosis.

Eye exam

Examination of the eye by an ophthalmologist (a medical doctor specializing in eye diseases) is often the most important step in diagnosing melanoma of the eye. The doctor will ask if you are having any symptoms and check your vision and eye
movement. The doctor will also look for enlarged blood vessels on the outside of the eye, which can be a sign of a tumor inside the eye.

The ophthalmologist may also use special instruments to get a good look inside the eye for a tumor or other abnormality. You may get drops in your eye to dilate the pupil before the doctor uses these instruments.

- An **ophthalmoscope** (also known as a *direct ophthalmoscope*) is a hand-held instrument consisting of a light and a small magnifying lens.

- An **indirect ophthalmoscope** and a slit lamp is more like a large microscope. For this exam, you sit down and rest your chin on a small platform, while the doctor looks into your eye through magnified lenses. This exam can often give a more detailed view of the inside of the eye than the direct ophthalmoscope.

- A **gonioscopy lens** is a specially mirrored lens that is placed on the cornea (the outer part of the eye) after it is numbed. This lets the doctor see the deep structures in the angle of the front of the eye near the iris. It can be used to look for tumor growth into areas of the eye that would otherwise be hard to see.

Most of the time if a person has an eye melanoma, a doctor can make the diagnosis with just an eye exam. In some cases, imaging tests such as ultrasound may be needed to confirm the diagnosis. Very rarely a biopsy will also be needed.

Some people might have a benign tumor in the eye called a *choroidal nevus*, which can sometimes be mistaken for an eye melanoma. A small number of these will eventually turn into melanomas. If your ophthalmologist spots one of these, he or she will likely advise regular eye exams to see if it grows.

Even if you recently had an eye exam, if you start to have any of the symptoms listed above, get another exam. Sometimes these tumors are missed or grow so fast that they weren’t there when you were last examined.

If an eye exam suggests you might have eye cancer, more tests will likely be needed. These might include imaging tests or other procedures.

**Imaging tests**

Imaging tests use sound waves, x-rays, or magnets to create pictures of the inside of your body. Imaging tests may be done for a number of reasons, including to help find a suspicious area that might be cancer, to learn how far cancer might have spread, or to help determine if treatment is working.
**Ultrasound (echography):** This is a very common test for helping to diagnose eye melanomas. Ultrasound uses high-frequency sound waves to make pictures of parts of the body. For this test, a small wand-like instrument is placed up against the eyelid or eyeball, and sound waves are sent through the eye. The instrument picks up the pattern of echoes that comes back, which is converted into an image on a computer screen.

This test is especially useful for diagnosing eye melanomas because they look a certain way on ultrasound. Using this test, doctors can confirm a diagnosis of melanoma of the eye in most cases. This test can also show the location and the size of the tumor.

Ultrasound biomicroscopy (UBM) is a special type of ultrasound that uses sound waves at even higher frequency to image the front parts of the eye.

Optical coherence tomography (OCT) is a similar type of test that uses light waves instead of sound waves to create very detailed images of the back of the eye.

If you have already been diagnosed with eye melanoma, an ultrasound may be done of your abdomen to look for tumors in the liver, which is a common site of spread of this cancer.

**Fluorescein angiography:** For this test, an orange fluorescent dye (fluorescein) is injected into the bloodstream through a vein in the arm. Pictures of the back of the eye are then taken using a special light that makes the dye fluoresce (glow). This lets the doctor see the blood vessels inside the eye. Although melanomas don’t have a special appearance with this test, some other eye problems do. Doctors can use this method to tell if something is not a melanoma.

This test can also be done using a special green dye to look at the blood vessels. This is known as *indocyanine green (ICG) angiography*.

**Chest x-ray:** If you have been diagnosed with eye melanoma, an x-ray of your chest may be done to see if the cancer has spread to your lungs. This is very unlikely unless your cancer is far advanced. This x-ray can be done in any outpatient setting. If the results are normal, you probably don’t have cancer in your lungs.

**Computed tomography (CT) scan:** A CT uses x-rays to produce detailed cross-sectional images of parts of the body. This test is sometimes used to see if a melanoma has spread outside of the eye into nearby structures. It may also be used to look for spread of the cancer to distant organs such as the liver.

A CT scanner has been described as a large donut, with a narrow table that slides in and out of the middle opening. You need to lie still on the table while the scan is being
done. CT scans take longer than regular x-rays, and you might feel a bit confined by the
ring you have to lie in while the pictures are being taken. Instead of taking one picture,
like a standard x-ray, a CT scanner takes many pictures as it rotates around you. A
computer then combines these pictures into detailed images of part of your body.

Before the scan, you might be asked to drink a contrast solution and/or get an
intravenous (IV) injection of a contrast dye that helps better outline structures in the
body. You may need an IV line through which the contrast dye is injected. The injection
can cause some flushing (redness and warm feeling). Some people are allergic and get
hives or, rarely, more serious reactions like trouble breathing and low blood pressure.
Be sure to tell the doctor if you have any allergies or have ever had a reaction to any
contrast material used for x-rays.

**Magnetic resonance imaging (MRI) scan:** MRI scans are often used to determine the
tumor’s growth and spread. They are particularly useful for looking at eye tumors. They
are also helpful in finding cancer that has spread to the brain or spinal cord, as well as
any spread of melanoma outside the eye orbit.

Like CT scans, MRI scans provide detailed images of soft tissues in the body. But MRI
scans use radio waves and strong magnets instead of x-rays. A contrast material called
gadolinium is often injected into a vein before the scan to better see details.

MRI scans take longer than CT scans — often up to an hour – and are a little more
uncomfortable. You lie on a table that slides inside a narrow tube, which can feel
confining and may upset people with a fear of enclosed spaces. Newer, open MRI
machines might help with this, but they might provide less detailed images and can’t be
used in all cases. The machine also makes loud buzzing and clicking noises that may
be disturbing. Some people might need medicine to help them relax for the test.

For more information on imaging tests, see [Imaging (Radiology) Tests](#).

**Biopsy**

For most types of cancer, the diagnosis is made by removing a small piece of the tumor
and looking at it under a microscope for cancer cells. This is known as a *biopsy*.

A biopsy is not often needed for eye melanomas because almost all cases can be
accurately diagnosed by the eye exam and imaging tests. Many doctors prefer not to do
biopsies because it can be hard to get a sample of the tumor without damaging the eye.
Also, there’s a chance the biopsy could possibly spread the tumor within or outside of
the eye.
If a biopsy is needed, it can be done either with sedation and local anesthesia (numbing medicine) or while a person is under general anesthesia (in a deep sleep). A thin, hollow needle is passed into the eye, and cells from the tumor are sucked up into a small syringe. The sample is sent to a lab, where a doctor called a pathologist looks at the cells under a microscope.

While most people with melanoma of the eye are treated without having a biopsy first, this may change in the future. New technology may make biopsies safer in situations where the diagnosis is uncertain. In recent years, some doctors have started using biopsies to get a sample of the tumor for gene testing. This can help tell whether the melanoma is likely to come back outside of the eye at some point. (See “What’s new in eye cancer research and treatment?” for more information.)

Blood tests

Blood tests can’t be used to diagnose melanoma of the eye, but they may be done once a diagnosis is made.

Liver function tests: If you have been diagnosed with eye melanoma, your doctor may order blood tests to see how well your liver is working. Abnormal test results can sometimes be a sign that the cancer has spread to the liver.

References

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How Is Melanoma of the Eye Diagnosed?

Certain signs and symptoms might suggest that a person could have an eye melanoma, but tests are needed to confirm the diagnosis.
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Many people with eye melanoma don’t have symptoms unless the cancer grows in certain parts of the eye or becomes more advanced. Signs and symptoms of eye melanomas can include:

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**Imaging tests**

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For more information on imaging tests, see Imaging (Radiology) Tests.

Biopsy

For most types of cancer, the diagnosis is made by removing a small piece of the tumor and looking at it under a microscope for cancer cells. This is known as a biopsy.

A biopsy is not often needed for eye melanomas because almost all cases can be accurately diagnosed by the eye exam and imaging tests. Many doctors prefer not to do biopsies because it can be hard to get a sample of the tumor without damaging the eye. Also, there’s a chance the biopsy could possibly spread the tumor within or outside of the eye.

If a biopsy is needed, it can be done either with sedation and local anesthesia (numbing medicine) or while a person is under general anesthesia (in a deep sleep). A thin, hollow needle is passed into the eye, and cells from the tumor are sucked up into a small syringe. The sample is sent to a lab, where a doctor called a pathologist looks at the cells under a microscope.

While most people with melanoma of the eye are treated without having a biopsy first, this may change in the future. New technology may make biopsies safer in situations where the diagnosis is uncertain. In recent years, some doctors have started using biopsies to get a sample of the tumor for gene testing. This can help tell whether the melanoma is likely to come back outside of the eye at some point. (See “What’s new in eye cancer research and treatment?” for more information.)
Blood tests

Blood tests can’t be used to diagnose melanoma of the eye, but they may be done once a diagnosis is made.

Liver function tests: If you have been diagnosed with eye melanoma, your doctor may order blood tests to see how well your liver is working. Abnormal test results can sometimes be a sign that the cancer has spread to the liver.

References

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How Is Lymphoma of the Eye Diagnosed?

Certain signs and symptoms might suggest that a person could have eye lymphoma (intraocular lymphoma), but tests are needed to confirm the diagnosis.

Signs and symptoms of eye lymphoma

The possible signs and symptoms of eye lymphomas include:

- Blurred vision or loss of vision
- Seeing floaters (spots or squiggles drifting in the field of vision)
- Redness or swelling in the eye
- Sensitivity to light
- Eye pain (uncommon)

Intraocular lymphoma most often affects both eyes, but it can cause more symptoms in
one eye than in the other.

Most of these symptoms are more likely to be caused by other, less serious conditions. For example, floaters can occur as a normal part of the aging process. Still, if you have any of these symptoms, it’s important to see a doctor right away so the cause can be found and treated, if needed.

Many of the exams and tests mentioned below are described in more detail in “How is melanoma of the eye diagnosed?”

Eye exam

The doctor will ask about any symptoms you are having and may check your vision and eye movements. During the eye exam, the doctor will use an ophthalmoscope (an instrument with a light and a small magnifying lens) to get a good look inside the eye. If lymphoma is present, the doctor may see that the vitreous (the jelly-like substance that fills most of the inside of the eye) is cloudy.

Imaging tests

Imaging tests use sound waves, x-rays, or magnets to create pictures of the inside of your body.

Ultrasound: Ultrasound is usually done to determine the size, shape, and location of the mass (tumor), especially if the back of the eye can’t be seen during the eye exam.

Magnetic resonance imaging (MRI) scan: An MRI of the head is often done not only to see the eye better, but also to look for lymphoma in the brain or meninges (the thin layers of tissue that cover the brain and spinal cord), which are common sites of spread of this cancer.

Computed tomography (CT) scan: CT scans are used less often than MRI scans for eye lymphoma because they do not provide as much detail.

Positron emission tomography (PET) scan: If a lymphoma has been found, a PET scan can help give the doctor a better idea of whether it has spread to lymph nodes or other parts of the body. A PET scan can also be useful if your doctor thinks the cancer might have spread but doesn’t know where.

For this test, a form of radioactive sugar (known as fluorodeoxyglucose or FDG) is injected into a vein (IV). (The amount of radioactivity is very low and will pass out of the
body over the next day or so.) Because cancer cells in the body are growing rapidly, they absorb more of the radioactive sugar. After about an hour, you are moved onto a table in the PET scanner. You lie on the table for about 30 minutes while a special camera creates a picture of areas of radioactivity in the body. The picture is not as detailed as a CT or MRI scan, but it can provide helpful information about whether abnormal areas seen on these tests are likely to be cancer.

Many centers have special machines that can do both a PET and CT scan at the same time (PET/CT scan). This lets the doctor compare areas of higher radioactivity on the PET scan with the more detailed appearance of that area on the CT scan.

For more information on imaging tests, see Imaging (Radiology) Tests\textsuperscript{2}.

**Biopsy**

Symptoms and the results of exams and tests might suggest you have intraocular lymphoma, but a biopsy is usually needed to confirm the diagnosis. To biopsy the eye, an ophthalmologist most often does a procedure called a *vitrectomy*. You may be sedated and get local anesthesia (numbing medicine) or you may get general anesthesia (which puts you in a deep sleep).

The doctor takes a sample of the vitreous gel from inside the eye by inserting very small instruments into the eye, cutting the vitreous, and then sucking some of it out. The cells in the biopsy sample are then sent to a lab to be looked at under a microscope and tested by other special techniques. For more information on the lab tests done on suspected lymphoma specimens, see Non-Hodgkin Lymphoma\textsuperscript{3}.

**Lumbar puncture (spinal tap)**

This test is used to look for lymphoma cells in the fluid that surrounds the brain and spinal cord (called *cerebrospinal fluid* or *CSF*). It is done in cases of known or suspected eye lymphomas because these cancers often affect the brain or spinal cord.

For this test, you lie on your side with your knees up near your chest. The doctor first numbs an area in the lower part of the back near the spine. A small, hollow needle is then placed between the bones of the spine to withdraw some of the fluid.

The fluid is then examined under a microscope for lymphoma cells. Other tests may be done on the fluid as well.
Eye Cancer Stages

After someone is diagnosed with eye cancer, doctors will try to figure out if it has spread, and if so, how far. This process is called **staging**. The stage of a cancer describes how much cancer is in the body. It helps determine how serious the cancer is and how best to **treat** it. Doctors also use a cancer’s stage when talking about survival statistics.

**How is the stage determined?**

The cancer stage is determined from the results of eye exams, imaging tests (ultrasound, CT or MRI scan, etc.) and other tests, which are described in **How Is Melanoma of the Eye Diagnosed?** and **How Is Lymphoma of the Eye Diagnosed?**

A staging system is a standard way for the cancer care team to describe how far a cancer has spread. The most common systems used to describe the stages of eye melanomas are the American Joint Committee on Cancer (AJCC) TNM system and the system used by the Collaborative Ocular Melanoma Study (COMS) group.

**AJCC TNM staging system for melanoma of the eye**

Most eye melanomas start in the uvea, which includes the iris, ciliary body, and choroid (see **What Is Eye Cancer?**). The system below is for these **uveal melanomas**.

Less often, melanomas can start in other areas in or around the eye, some of which have their own staging systems. Talk to your doctor to learn more about your stage if you have a less common type of eye melanoma.

The system described below is the most recent AJCC system, effective January 2018.
The TNM system is based on 3 key pieces of information:

- **The size and extent of the main tumor (T):** How large is the eye tumor? Has it invaded into nearby structures?
- **The spread to nearby lymph nodes (N):** Has the cancer spread to the nearby lymph nodes around the ear or neck? Has the cancer spread to (not grown into) other parts of the eye?
- **The spread (metastasis) to distant sites (M):** Has the cancer spread to distant parts of the body? (The most common site of spread is the liver.)

Numbers or letters appear after T, N, and M to provide more details about each of these factors. Higher numbers or letters mean the cancer is more advanced.

The T categories for iris melanomas are different from the T categories for ciliary body and choroidal melanomas. But the N and M categories are the same for melanomas in all 3 parts of the uvea.

**T categories for iris melanoma**

**TX:** The primary tumor cannot be assessed; information not known.

**T0:** No evidence of a primary tumor.

**T1:** Tumor is only in the iris.
  - **T1a:** The tumor is only in the iris and touches 1/4 or less of the iris.
  - **T1b:** The tumor is only in the iris and touches more than 1/4 of the iris.
  - **T1c:** The tumor is only in the iris and is causing an increase in the eye pressure (glaucoma).

**T2:** Tumor has grown into the ciliary body or choroid (or both).
  - **T2a:** Tumor has grown into the ciliary body.
  - **T2b:** Tumor has grown into the ciliary body and choroid.
  - **T2c:** Tumor has grown into the ciliary body, choroid, or both, and it is causing glaucoma.

**T3:** Tumor has grown into the ciliary body and/or choroid and into the sclera.
T4: Tumor extends outside the eyeball.

- **T4a**: The part of the tumor that is outside the eyeball is 5 millimeters (mm) — about 1/5 of an inch — or less across.
- **T4b**: The part of the tumor that is outside the eyeball is greater than 5 mm (about 1/5 of an inch) across.

**T categories for ciliary body and choroidal melanoma**

Ciliary body and choroidal melanomas are divided into 4 main T categories (T1 to T4), based on the diameter (width) and the thickness of the tumor. T1 tumors are the smallest; T4 tumors are the largest. Each of these categories is then broken down further, based on how far the tumor has grown.

**TX**: The primary tumor cannot be assessed; information not known.

**T0**: No evidence of a primary tumor.

**T1 tumors:**

- **T1a**: The T1-size tumor is not growing into the ciliary body or growing outside the eyeball.
- **T1b**: The T1-size tumor is growing into the ciliary body.
- **T1c**: The T1-size tumor is not growing into the ciliary body but is growing outside of the eyeball. The part of the tumor that is outside the eyeball is 5 mm (about 1/5 of an inch) or less across.
- **T1d**: The T1-size tumor is growing into the ciliary body and also outside of the eyeball. The part of the tumor that is outside the eyeball is 5 mm (about 1/5 of an inch) or less across.

**T2 tumors:**

- **T2a**: The T2-size tumor is not growing into the ciliary body or growing outside the eyeball.
- **T2b**: The T2-size tumor is growing into the ciliary body.
- **T2c**: The T2-size tumor is not growing into the ciliary body but is growing outside the eyeball. The part of the tumor that is outside the eyeball is 5 mm (about 1/5 of an inch) or less across.
• **T2d**: The T2-size tumor is growing into the ciliary body and also outside the eyeball. The part of the tumor that is outside the eyeball is 5 mm (about 1/5 of an inch) or less across.

**T3 tumors:**

• **T3a**: The T3-size tumor is not growing into the ciliary body and is not growing outside the eyeball.

• **T3b**: The T3-size tumor is growing into the ciliary body.

• **T3c**: The T3-size tumor is not growing into the ciliary body but is growing outside the eyeball. The part of the tumor that is outside the eyeball is 5 mm (about 1/5 of an inch) or less across.

• **T3d**: The T3-size tumor is growing into the ciliary body and also outside the eyeball. The part of the tumor that is outside the eyeball is 5 mm (about 1/5 of an inch) or less across.

**T4 tumors:**

• **T4a**: The T4-size tumor is not growing into the ciliary body or growing outside the eyeball.

• **T4b**: The T4-size tumor is growing into the ciliary body.

• **T4c**: The T4-size tumor is not growing into the ciliary body but is growing outside the eyeball. The part of the tumor that is outside the eyeball is 5 mm (about 1/5 of an inch) or less across.

• **T4d**: The T4-size tumor is growing into the ciliary body and also outside the eyeball. The part of the tumor that is outside the eyeball is 5 mm (about 1/5 of an inch) or less across.

**T4e**: The tumor can be any size. It is growing outside the eyeball and the part of the tumor that is outside the eyeball is greater than 5 mm across.

**N categories for iris, ciliary body, and choroidal melanomas**

**NX**: Lymph nodes cannot be assessed.

**N0**: Cancer has not spread to nearby lymph nodes.

**N1**: Cancer has spread to nearby lymph nodes, or it has spread as small cancer.
deposits in other parts of the eye.

- **N1a**: Cancer has spread to nearby lymph nodes.
- **N1b**: Cancer has not spread to nearby lymph nodes, but it has spread as small cancer deposits in other parts of the eye.

**M categories for iris, ciliary body, and choroidal melanomas**

**M0**: Cancer has not spread to distant parts of the body.

**M1**: Cancer has spread to distant parts of the body.

- **M1a**: The largest area of cancer spread is no more than 3 centimeters (cm) — a little over an inch — across.
- **M1b**: The largest area of cancer spread is between 3.1 and 8 cm across (8 cm is a little over 3 inches).
- **M1c**: The largest area of cancer spread is 8.1 cm or more across.

**Stage grouping**

To assign an overall stage, the T, N, and M categories are combined in a process called **stage grouping**. The stages are described by Roman numerals from I (the least advanced) to IV (the most advanced). Some stages are further divided with letters.

<table>
<thead>
<tr>
<th>Stage</th>
<th>T, N, M</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>T1a, N0, M0</td>
</tr>
<tr>
<td>II A</td>
<td>T1b to T1d, N0, M0 OR T2a, N0, M0</td>
</tr>
<tr>
<td>II B</td>
<td>T2b or T3a, N0, M0</td>
</tr>
<tr>
<td>III A</td>
<td>T2c or T2d, N0, M0 OR T3b or T3c, N0, M0 OR T4a, N0, M0</td>
</tr>
<tr>
<td>III B</td>
<td>T3d, N0, M0 OR T4b or T4c, N0, M0</td>
</tr>
<tr>
<td>III C</td>
<td>T4d or T4e, N0, M0</td>
</tr>
<tr>
<td>IV</td>
<td>Any T, N1, M0 OR Any T, any N, M1</td>
</tr>
</tbody>
</table>

This staging system for uveal melanoma can be very complex. If you’re interested in learning more about it and how it might apply to your cancer, ask your doctor to explain...
it to you in a way you understand.

**Collaborative Ocular Melanoma Study (COMS) staging of melanoma of the eye**

The TNM system is very detailed, but in practice many doctors use the simpler staging system devised by the COMS group, which has done most of the clinical research on how to treat intraocular melanoma. This system divides eye melanomas into small, medium, and large:

- **Small:** Between 1 mm and 3 mm in height and between 5 mm and 16 mm across
- **Medium:** Between 3.1 mm and 8 mm in height and no more than 16 mm across
- **Large:** More than 8 mm in height or more than 16 mm across

**Staging of intraocular lymphoma**

Intraocular lymphoma does not have its own staging system. These cancers may be staged using the system for other non-Hodgkin lymphomas, which is described in [Non-Hodgkin Lymphoma Stages](https://www.cancer.org/content/cancer/en/cancer/non-hodgkin-lymphoma/detection-diagnosis-staging/staging.html).

Unlike eye melanomas, the size of the tumor is usually not a major factor in determining the treatment options for eye lymphomas. Instead, treatment options are generally based on the type of lymphoma, as well as on whether the lymphoma is limited to the eye or is also in other areas of the body.

**Hyperlinks**


**References**
Eye Cancer Survival Rates

Doctors often use survival rates as a standard way of discussing a person’s prognosis (outlook). Some people with cancer may want to know the survival statistics for people in similar situations, while others may not find the numbers helpful or may even not want to know them. If you don’t want to know them, stop reading here and skip to the next section.

When discussing cancer survival statistics, doctors often use a number called the 5-year survival rate. The 5-year survival rate refers to the percentage of patients who live at least 5 years after their cancer is diagnosed. Of course, many people live much longer than 5 years (and many are cured).

To get 5-year survival rates, doctors have to look at people who were treated at least 5 years ago. Improvements in treatment since then may result in a better outlook for people now being diagnosed with this cancer. Five-year relative survival rates, such as the numbers below for eye melanoma, assume that some people will die of other causes and compare the observed survival with that expected for people without the cancer. This is a more accurate way to describe the outlook for patients with a particular type and stage of cancer.

Survival rates are often based on previous outcomes of large numbers of people who had the disease, but they can’t predict what will happen in any person’s case. Other factors can also affect a person’s outlook, such as the type of cells in the tumor, the patient’s age and general health, and how well the cancer responds to treatment. Your doctor knows your situation best and can tell you how the numbers below apply to you.

Survival rates for eye melanoma
The numbers below come from the National Cancer Institute’s Surveillance, Epidemiology, and End Results (SEER) database, and are based on about 1,500 patients who were diagnosed with melanoma of the eye between 1988 and 2001.

Overall, about 3 out of 4 people with eye melanoma survive for at least 5 years. Survival rates tend to be better for earlier-stage than for later-stage cancers, but accurate survival rates for eye melanomas based on a specific stage are hard to determine because these cancers are fairly rare.

When the cancer is confined to the eye, the 5-year relative survival rate is about 80%. For people with eye melanomas that have spread to distant parts of the body, the 5-year relative survival rate is about 15%.

**Survival rates for lymphoma of the eye**

Because eye lymphoma is rare, accurate survival statistics for this cancer are hard to find. In one study of patients without HIV whose lymphoma was confined to the eye, about half of the patients were still alive 5 years after diagnosis. In many cases the lymphoma has already reached the brain by the time it is found, in which case the outlook is not as good.

**References**

See all references for Eye Cancer ([https://www.cancer.org/content/cancer/en/cancer.eye-cancer/references.html](https://www.cancer.org/content/cancer/en/cancer.eye-cancer/references.html))

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**What Should You Ask Your Doctor About Eye Cancer?**

It’s important to have honest, open discussions with your doctor. Feel free to ask any question on your mind, no matter how small it might seem. Here are some questions you might want to ask.
What kind of eye cancer do I have?
Has my cancer spread beyond the eye?
What is the stage (extent) of my cancer, and what does that mean?
Will I need any other tests before we can decide on treatment?
Will I need to see other doctors?
How much experience do you have treating this type of cancer?
Should I get a second opinion? Can you recommend someone?
What treatment choices do I have?
What do you recommend and why?
What is the goal of treatment (cure, prolonging life, relieving symptoms, etc.)?
What are the risks or side effects to the treatments you suggest? What is the risk of losing vision in the eye from the different treatments?
What should I do to be ready for treatment?
How long will treatment last? What will it be like? Where will it be done?
How will treatment affect my daily activities?
What are the chances my cancer will come back (recur) after treatment?
What would we do if the treatment doesn’t work or if the cancer recurs?
What type of follow-up might I need after treatment?

Along with these sample questions, be sure to write down some of your own. For example, you might want more information about recovery times so you can plan your work or activity schedule. You might also want to ask about clinical trials for which you may qualify.

Keep in mind that doctors aren’t the only ones who can give you information. Other health care professionals, such as nurses and social workers, may be able to answer some of your questions. You can find out more about speaking with your health care team in Talking With Your Doctor.

References

See all references for Eye Cancer (https://www.cancer.org/content/cancer/en/cancer/eye-cancer/references.html)

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