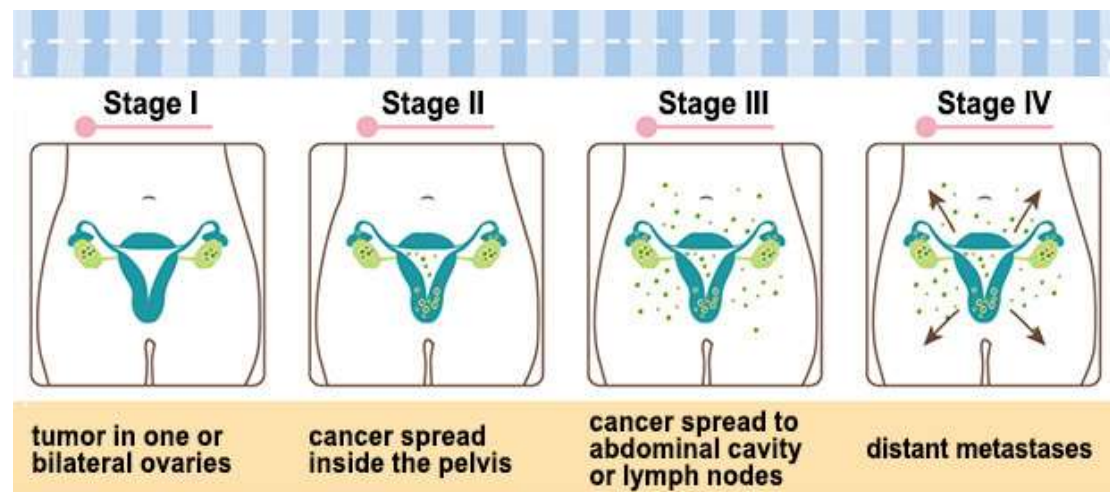
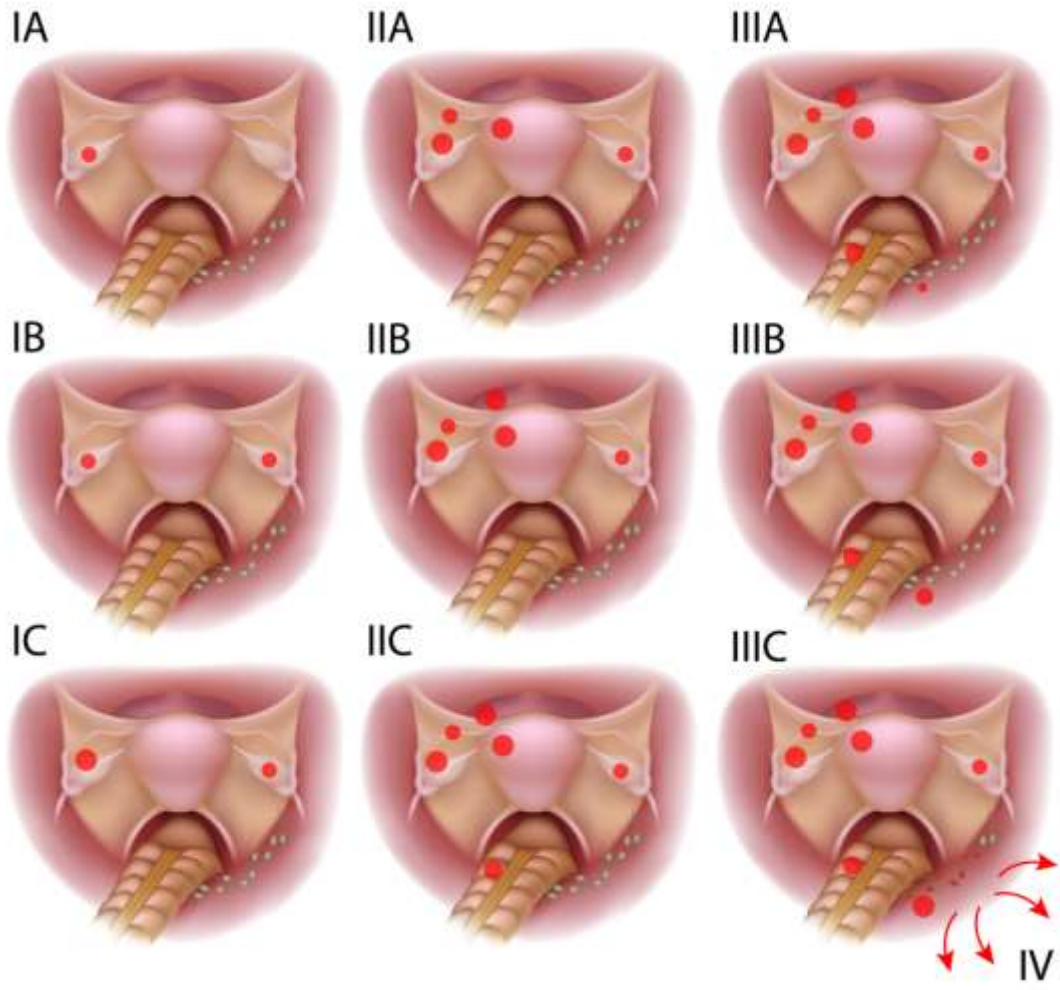


## Stages of ovarian cancer



Stage	Extent of disease	5-year survival
<b>I</b>	<b>Limited to ovaries</b>	<b>75-90%</b>
Ia	One ovary	
Ib	Both ovaries	
Ic	Ruptured capsule, surface tumour, or positive peritoneal washings/ascites	
<b>II</b>	<b>Limited to pelvis</b>	<b>45-60%</b>
IIa	Uterus, tubes	
IIb	Other pelvic structures	
IIc	The above plus positive peritoneal washings/ascites	
<b>III</b>	<b>Limited to abdomen</b>	<b>30-40%</b>
IIIa	Microscopic metastases	
IIIb	Macroscopic metastases <2cm	
IIIc	Macroscopic metastases >2cm, regional lymph nodes	
<b>IV</b>	<b>Distant metastases outside abdominal cavity</b>	<b>&lt;20%</b>

# Stages of Ovarian Cancer



### Stage I

The tumor (cancer) is in one or both ovaries and the cancer hasn't spread to other organs or tissues.

- **Stage IA** – Cancer is only within one ovary and there is no cancer on the surface of the ovary.
- **Stage IB** – Cancer is in both ovaries, but there is no cancer on the surface of the ovaries.
- **Stage IC** – Cancer is in one or both ovaries, plus any of the following: the outer covering of the ovary has burst or broken; cancer has spread to the surface of one or both ovaries; or cancer cells are in abdominal fluid (ascites or peritoneal washings).

### Stage II

Cancer is in one or both ovaries and has spread to nearby organs in the pelvis.

- **Stage IIA** – Cancer has grown into and/or spread implants on the uterus, Fallopian tubes, or both.
- **Stage IIB** – Cancer has grown into and/or spread implants on other tissues in the pelvis, including or not including the uterus, Fallopian tubes, or both.
- **Stage IIC** – Cancer has grown into and/or spread implants on the uterus, Fallopian tubes, or both, and/or other tissues in the pelvis. Cancer cells are also in abdominal fluid (ascites or peritoneal washings).

### Stage III

Cancer is in one or both ovaries and has spread outside of the pelvis to the peritoneum (tissue that lines the inside of the abdomen and covers most organs in the abdomen) and/or to nearby lymph nodes.

- **Stage IIIA** – Cancer that has spread to the lining of the abdomen (peritoneum) outside of the pelvis is so small that it can only be seen with a microscope.
- **Stage IIIB** – Cancer that has spread to the lining of the abdomen (peritoneum) outside of the pelvis is 2 cm (centimeters) or smaller, but can be seen without a microscope.
- **Stage IIIC** – Cancer that has spread to the lining of the abdomen (peritoneum) outside of the pelvis is larger than 2 cm and/or cancer has spread to lymph nodes in or near the pelvis.

### Stage IV

Cancer has spread to other parts of the body beyond the area of the pelvis and abdomen.

## Stages

- 1 Cancer is contained to one or both ovaries or fallopian tubes.
- 2 Cancer has spread to nearby organs in the pelvis.
- 3 Cancer has spread beyond the pelvis in the abdomen.
- 4 Cancer has spread beyond the abdomen.



# TNM staging

	Tis/0	T1abc	T2abc	T3abc	M 1=IV
<b>N0</b>	0	Iabc	IIabc	IIIabc	
<b>N1=IIIC</b>		IIIC			
<b>M1=IV</b>					<b>IV</b>

- **T1: Limited**
  - § to one(a) or both(b) ovaries
  - § + ruptured capsule, tumor on ovarian surface, +ve cells in peritoneum (C)
- **T2: Pelvic extension**
  - § Tubes or uterus (a), other pelvic organs (b)
  - § +ve cells in peritoneum (C)
- **T3: Extra-pelvic extension**
  - § microscopic (a), macroscopic  $\leq 2$ cm(b), macroscopic  $\geq 2$ cm(c)
- **No T4:**
- **N1: +ve LNs**
- **M1 Distant mets**
- **Grade: 1,2,3**

## Ovarian Cancer Stages

- After a woman is diagnosed with ovarian 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.
  
- Ovarian cancer stages range from stage I (1) through IV (4).
- As a rule, the lower the number, the less the cancer has spread. A higher number, such as stage IV, means cancer has spread more.
- Although each person's cancer experience is unique, cancers with similar stages **tend to have a similar outlook and are often treated in much the same way.**
- One of the goals of surgery for ovarian cancer is to take tissue samples for diagnosis and staging.
- To stage the cancer, samples of tissues are taken from different parts of the pelvis and abdomen and examined in the lab.

### How is the stage determined?

- The 2 systems used for staging ovarian cancer, the
- **FIGO (International Federation of Gynecology and**
- **Obstetrics) system** and
- The **AJCC (American Joint Committee on Cancer) TNM staging systems** are basically the same.

They both use 3 factors to stage (classify) this cancer :

- **The extent (size) of the tumor (T):**
- Has the cancer spread outside the ovary or fallopian tube? Has the cancer reached nearby pelvic organs like the uterus or bladder?

- **The spread to nearby lymph nodes (N):**
- Has the cancer spread to the lymph nodes in the pelvis or around the aorta (the main artery that runs from the heart down along the back of the abdomen and pelvis)? Also called para-aortic lymph nodes.
- **The spread (metastasis) to distant sites (M):**
- Has the cancer spread to fluid around the lungs (malignant pleural effusion) or to distant organs such as the liver or bones?
- 
- Numbers or letters after T, N, and M provide more details about each of these factors.
- Higher numbers mean the cancer is more advanced.
- Once a person's T, N, and M categories have been determined, this information is combined in a process called **stage grouping to assign an overall stage**.
- **The staging system in the table below uses the pathologic stage (also called the surgical stage).**
- It is determined by examining tissue removed during an operation.
- This is also known as **surgical staging**.
- Sometimes, if surgery is not possible right away, the cancer will be given a clinical stage instead.
- This is based on the results of a **physical exam, biopsy, and imaging tests** done **before** surgery.
- For more information see [Cancer Staging](#).

The system described below is the most recent AJCC system effective January 2018.

It is the staging system for ovarian cancer, fallopian tube cancer, and primary peritoneal cancer.

Cancer staging can be complex, so ask your doctor to explain it to you in a way you understand.

AJCC Stage	Stage grouping	FIGO Stage	Stage description*
<b>I</b>	T1 N0 M0	I	The cancer is only in the ovary (or ovaries) or fallopian tube(s) (T1). It has not spread to nearby lymph nodes (N0) or to distant sites (M0).
<b>IA</b>	T1a N0 M0	IA	The cancer is <b>in one ovary</b> , and the tumor is <b>confined to the inside of the ovary</b> ; or the cancer is in one fallopian tube, and is <b>only inside the fallopian tube</b> . <b>There is no cancer</b> on the outer surfaces of the ovary or fallopian tube. <b>No cancer cells</b> are found in the fluid (ascites) or washings from the abdomen and pelvis (T1a). <b>It has not spread</b> to nearby lymph nodes (N0) or to distant sites (M0).

<b>IB</b>	T1b N0 M0	IB	<p>The cancer is in <b>either both ovaries or fallopian tubes but not on their outer surfaces</b>.</p> <p>No cancer cells are found in the fluid (ascites) or washings from the abdomen and pelvis (T1b).</p> <p>It has not spread to nearby lymph nodes (N0) or to distant sites (M0).</p>
<b>IC</b>	T1c N0 M0	IC	<p>The cancer is in <b>one or both ovaries or fallopian tubes</b> and any of the following are present:</p> <ul style="list-style-type: none"> <li>• <b>The tissue (capsule) surrounding the tumor broke during surgery, which could allow cancer cells to leak into the abdomen and pelvis (called surgical spill). This is stage IC1.</b></li> <li>• Cancer is on the outer surface of at least one of the ovaries or fallopian tubes <b>or</b> the capsule (tissue surrounding the tumor) <b>has ruptured (burst) before surgery (which could allow cancer cells to spill into the abdomen and pelvis). This is stage IC2.</b></li> <li>• <b>Cancer cells are found in the fluid (ascites) or washings from the abdomen and pelvis.</b> This is stage <b>IC3</b>.</li> </ul> <p>It has not spread to nearby lymph nodes (N0) or to distant sites (M0).</p>
<b>II</b>	T2 N0 M0	II	<p>The cancer <b>is in one or both ovaries or fallopian tubes and has spread to other organs (such as the uterus, bladder, the sigmoid colon, or the rectum) within the pelvis or</b></p> <p>There is <b>primary peritoneal cancer (T2)</b>.</p> <p>It has not spread to nearby lymph nodes (N0) or to distant sites (M0).</p>
<b>IIA</b>	T2a N0 M0	IIA	<p>The cancer has spread to or has invaded (grown into) the <b>uterus or the fallopian tubes, or the ovaries</b>. (T2a).</p> <p>It has not spread to nearby lymph nodes (N0) or to distant sites (M0).</p>
<b>IIB</b>	T2b N0 M0	IIB	<p>The cancer is on <b>the outer surface of or has grown into other nearby pelvic organs such as the bladder, the sigmoid colon, or the rectum (T2b)</b>.</p> <p>It has not spread to nearby lymph nodes (N0) or to distant sites (M0).</p>

<b>IIIA1</b>	T1 or T2 N1 M0	IIIA1	The cancer is in one or both ovaries or fallopian tubes, <b>Or</b> there is primary peritoneal cancer (T1) and it may have spread or <b>grown into nearby organs in the pelvis</b> (T2). It <b>has spread to the retroperitoneal (pelvic and/or para-aortic) lymph nodes only.</b> It has not spread to distant sites (M0).
<b>IIIA2</b>	T3a N0 or N1 M0	IIIA2	The cancer is in one or both ovaries or fallopian tubes, <b>or</b> there is primary peritoneal cancer and it has spread or <b>grown into organs outside the pelvis.</b> <b>During surgery,</b> no cancer <b>is visible in the abdomen</b> (outside of the pelvis) <b>to the naked eye,</b> but tiny deposits of cancer are found in the lining of the abdomen when it is examined in the lab (T3a). The cancer might or might not have spread to <b>retroperitoneal lymph nodes (N0 or N1),</b> But it has not spread to distant sites (M0).
<b>IIIB</b>	T3b N0 or N1 M0	IIIB	There is cancer in one or both ovaries or fallopian tubes, <b>or</b> there is primary peritoneal cancer and it has spread or grown into organs outside the pelvis. The deposits of cancer <b>are large enough for the surgeon to see, but are no bigger than 2 cm (about 3/4 inch) across. (T3b).</b> It may or may not have <b>spread to the retroperitoneal lymph nodes (N0 or N1),</b> But it has not spread to the inside of the liver or spleen or to distant sites (M0).
<b>IIIC</b>	T3c N0 or N1 M0	IIIC	The cancer is in one or both ovaries or fallopian tubes, <b>or</b> there is primary peritoneal cancer and it has spread or grown into organs outside the pelvis. The deposits of <b>cancer are larger than 2 cm (about 3/4 inch)</b> across and may be on the outside (the capsule) of the liver or spleen (T3c). It may or may not have spread to the retroperitoneal lymph nodes (N0 or N1), But it has not spread to the inside of the liver or spleen or to distant sites (M0).
<b>IVA</b>	Any T Any N M1a	IVA	Cancer cells are found in the <b>fluid around the lungs</b> (called a malignant pleural effusion) With no other areas of cancer spread such as the liver, spleen, intestine, or lymph nodes outside the abdomen (M1a).

<b>IVB</b>	Any T Any N M1b	IVB	<b>The cancer has spread to the inside of the spleen or liver, to lymph nodes other than the retroperitoneal lymph nodes, and/or to other organs or tissues outside the peritoneal cavity such as the lungs and bones (M1b).</b>
------------	-----------------------	-----	--

\* The following additional categories are not described in the table above:

- **TX:** Main tumor cannot be assessed due to lack of information
- **T0:** No evidence of a primary tumor.
- **NX:** Regional lymph nodes cannot be assessed due to lack of information.