What's New in Ovarian Cancer Treatment?

What patients and families should know in 2026



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What we'll cover today



01

The basics

What ovarian cancer is and the usual treatment roadmap



02

Surgery

Why removing all visible cancer matters, and what is new



03

Medicines

Chemotherapy, testing, targeted therapies, and new approvals



04

Research

Clinical trials to watch and how to know if one fits you

Tip: jot down questions as we go — we'll save time at the end to answer them.

Ovarian cancer at a glance

~21,000

people in the U.S. are expected to be diagnosed in 2026

75%+

are diagnosed after the cancer has spread beyond the ovaries

~1 in 4

see the cancer return within 6 months of finishing first-line platinum chemotherapy

One disease, three names. Ovarian, fallopian tube, and primary peritoneal cancers behave alike and are treated the same way. Many of the most common type, high-grade serous cancer, actually begin in the fallopian tube. The good news: treatment has changed more in the past decade than in the 30 years before it.

Sources: American Cancer Society 2026 estimates (via Merck press materials); OVHIPEC-2 protocol, IJGC 2020; KEYNOTE-B96 press materials, 2026.

The usual treatment roadmap



Diagnose and test

Imaging, biopsy, CA-125 blood test, genetic and tumor testing

Surgery

Remove all visible cancer

Chemotherapy

Carboplatin + paclitaxel, usually 6 cycles

Maintenance

PARP inhibitor and/or bevacizumab to keep cancer away longer

Follow-up

Regular visits; a plan ready if the cancer returns

The order can flip: many patients receive chemotherapy first, then surgery, then more chemotherapy. Both paths aim for the same goal.

PART 1

Surgical management

Removing all visible cancer is still the cornerstone of care

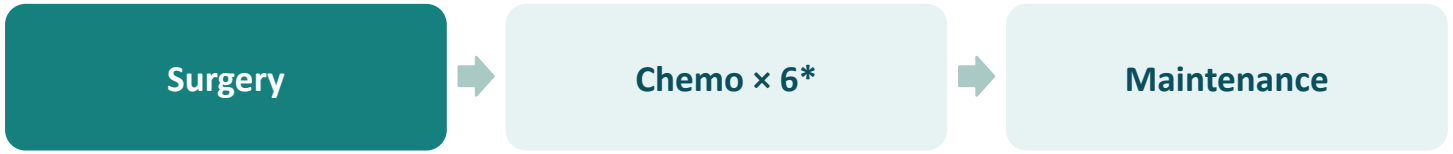
The goal of surgery, and two ways to get there

THE #1 SURGICAL GOAL

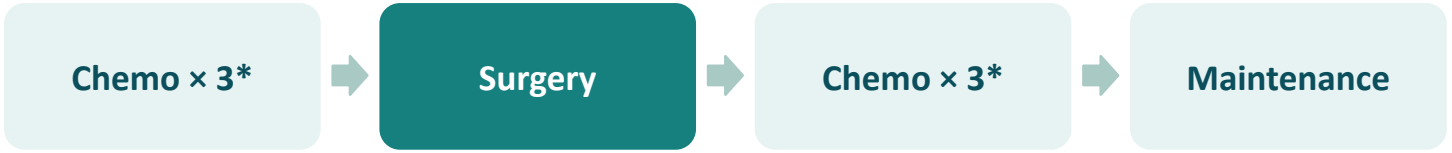
No visible cancer left behind

Called “complete cytoreduction” or “debulking.” It is the strongest surgical predictor of how well patients do long term.

Path A — Surgery first



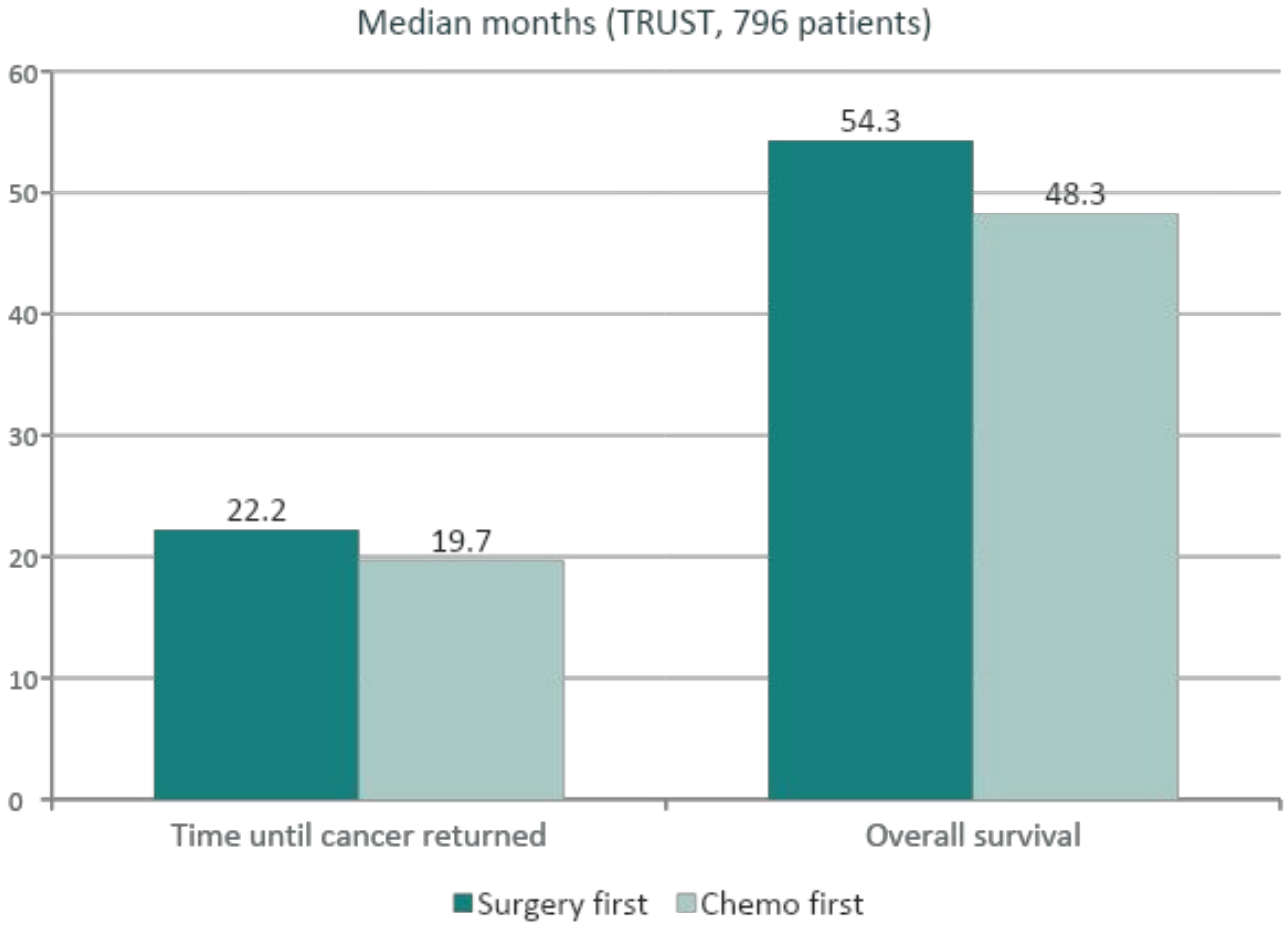
Path B — Chemo first (“neoadjuvant”)



How your team chooses

- How much cancer there is, and where it has spread
- Your overall health and fitness for a long operation
- Whether all visible cancer can likely be removed up front

New evidence: surgery first vs. chemo first (TRUST trial)



Done at expert centers

Hospitals performing many of these operations each year

Surgery first delayed recurrence

About 2.5 months longer on average; most for stage III

Survival difference not proven

Longer on average, but not statistically significant

What it means for you

Both paths are reasonable — the right choice is individual

Source: Mahner S, et al. TRUST (ENGOT-ov33/AGO-OVAR OP.7), ASCO 2025, LBA5500. Overall survival HR 0.89, P = .24; recurrence HR 0.80.

Other advances in surgical care

HIPEC: heated chemotherapy

Warm chemo is circulated through the abdomen at the end of surgery. It improved survival when given at surgery after chemo-first treatment; national guidelines list it as an option.

Minimally invasive surgery

For select patients who respond very well to chemo first, laparoscopic or robotic surgery may be possible. The LANCE trial is testing whether it is as effective as open surgery.

Surgery when cancer returns

For carefully selected patients with a late, limited recurrence, a second operation followed by chemo can lengthen survival.

Experience matters

Higher complete-removal rates are seen at centers with surgical experts.

Sources: van Driel, NEJM 2018 (OVHIPEC-1); NCCN Guidelines Ovarian Cancer v2.2026; LANCE, JAMA Netw Open 2024; Harter, NEJM 2021 (DESKTOP III).

PART 2

Medical management

Testing, chemotherapy, and what “platinum-sensitive” means

Testing now guides treatment choices

Inherited (germline) testing

A blood or saliva test for genes such as BRCA1 and BRCA2

- Recommended for everyone with epithelial ovarian cancer
- Can open the door to PARP inhibitors
- Relatives can be tested too, to guide their own prevention

Tumor (biomarker) testing — what each result can unlock

BRCA / HRD	→ PARP inhibitors (olaparib, niraparib)
FRα (folate receptor alpha)	→ Mirvetuximab (Elahere)
HER 2	→ Traztuzumab deruxtecan (Enhertu)
CPS	→ Pembrolizumab (Keytruda)

Ask: "Has my tumor been tested? When and for what?

Source: NCCN Guidelines Ovarian Cancer v2.2026; FDA approval announcements 2022–2026.

ctDNA blood tests: what they can and can't tell you

What is it? Tumors shed tiny fragments of their DNA into the bloodstream. A ctDNA test, sometimes called a "liquid biopsy," looks for those fragments with a simple blood draw.

What it can tell us

- Tumor gene changes (like BRCA) when tissue can't be tested
- A positive test after treatment signals a higher chance of recurrence
- Returning cancer, sometimes months before scans or CA-125

What we don't know yet

- Whether acting on an early result helps people live longer
- A negative test does not guarantee the cancer is gone
- Not in guidelines for routine follow-up; often not covered by insurance

Should you get it? Not as routine monitoring today. Worth discussing if your tumor tissue can't be tested, or as part of a clinical trial.

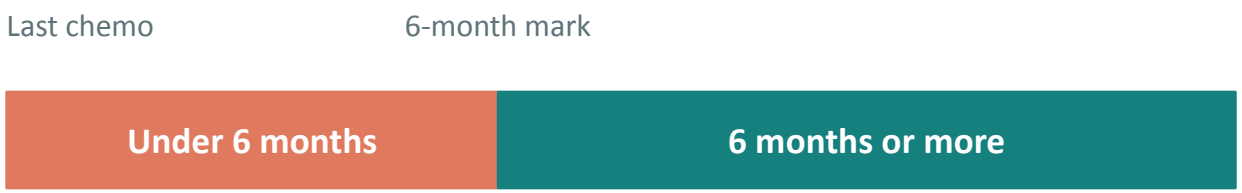
Sources: Heo J, et al. Cancer Res 2024; Clark HD, et al. ASCO 2026 abstr 5567; Christie EL, et al. J Clin Oncol 2017; Rustin GJ, et al. Lancet 2010 (MRC OV05).

Chemotherapy, and why “platinum sensitivity” matters

First-line chemotherapy

- Carboplatin (a “platinum” drug) + paclitaxel
- Usually every 3 weeks for about 6 cycles
- Bevacizumab (Avastin) may be added and continued afterward
- Common side effects — tiredness, hair loss, numb fingers and toes, low blood counts — are usually manageable

Time from the last platinum dose to the cancer returning



Platinum-resistant
Platinum is unlikely to work again; other drugs are used. This is where most new approvals have landed.

Platinum-sensitive
Platinum-based chemo often works again, sometimes followed by maintenance.

About 1 in 4 patients develop platinum resistance within 6 months of first-line treatment.

Sources: NCCN Guidelines Ovarian Cancer v2.2026; Merck KEYNOTE-B96 press materials, 2026.

PART 3

PARP inhibitors

A major advance in keeping cancer away after first treatment

How PARP inhibitors work

1

Cells have two DNA repair kits

BRCA is the main kit. PARP is the backup.

2

Some cancers lost the main kit

Tumors with a BRCA mutation or “HRD” rely on PARP to survive.

3

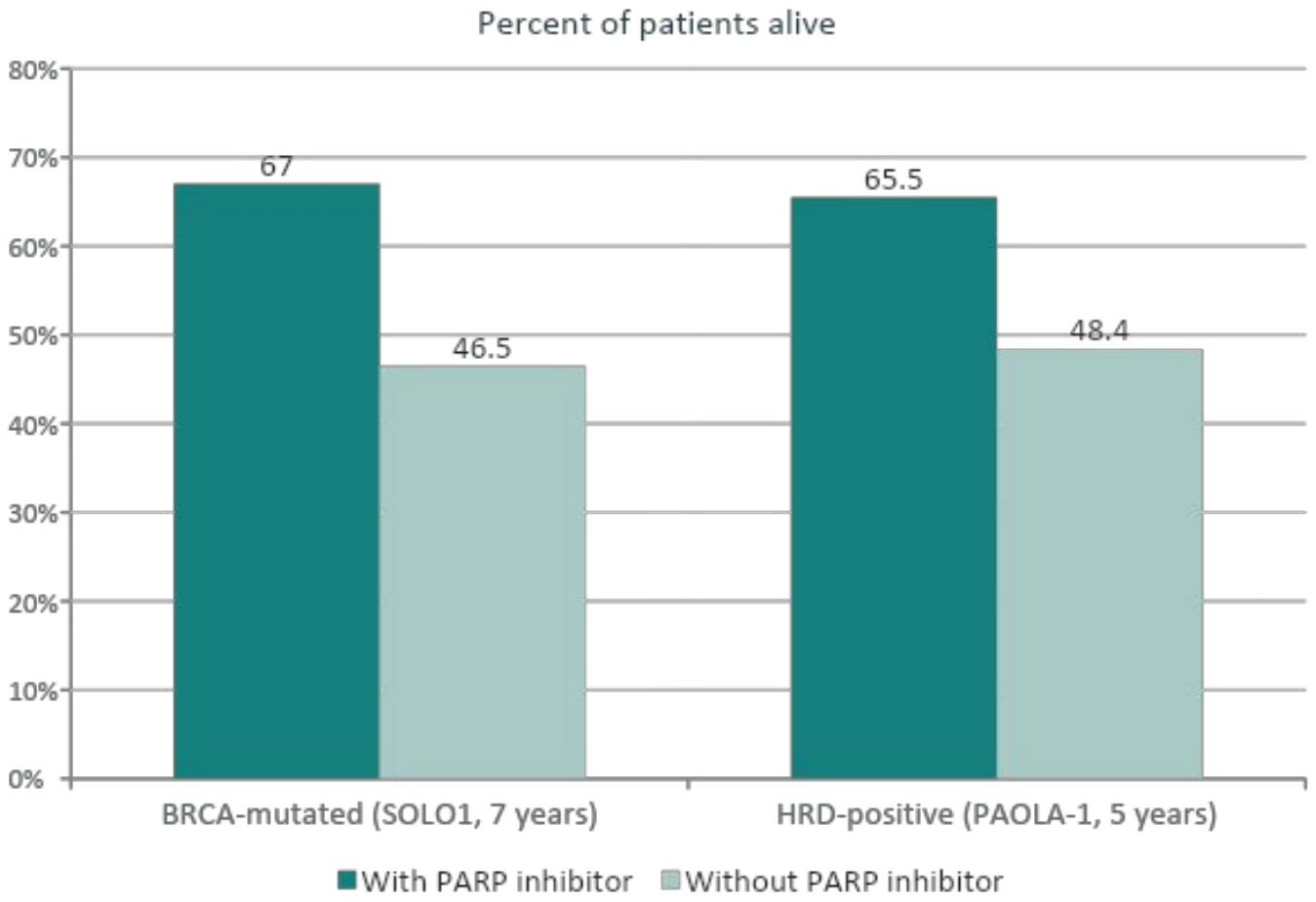
The pill blocks the backup

With no way to repair DNA, the cancer cell dies. Healthy cells still have their main kit.

An analogy: a car that already has a flat tire (the BRCA problem) is stopped for good once its spare is taken away (the PARP inhibitor). Cars with good tires keep driving.

Pills taken at home
Olaparib (Lynparza)
Niraparib (Zejula)

Used early, PARP inhibitors help people live longer



2 out of 3

people with BRCA-mutated cancer who took olaparib were alive at 7 years

Lasting

benefit continued years after the 2-year course of pills ended

Under 2%

developed a rare blood disorder (MDS/leukemia) at 7 years in SOLO1

Sources: DiSilvestro P, et al. SOLO1 7-year OS, J Clin Oncol 2023; Ray-Coquard I, et al. PAOLA-1 final OS, ESMO 2022 (HRD-positive subgroup, exploratory).

Who benefits most — and what has changed

BRCA-mutated



Largest benefit

Strong, long-lasting benefit when used as first-line maintenance

HRD-positive



Meaningful benefit

Clear benefit, especially combined with bevacizumab

HRD-negative



Smaller benefit

Guidelines now discourage PARP maintenance for HRD-negative, non-BRCA-mutated disease and sharply limit recurrent use.

What changed in 2022

After longer follow-up, the FDA withdrew PARP inhibitors as late-line treatment. Lesson: they work best early, in the right patients.

Living with a PARP inhibitor

Common: nausea, tiredness, low blood counts. Regular blood tests are needed, and dose adjustments are common and normal. Usually taken for 2–3 years.

Sources: FDA/manufacturer label updates, 2022; Olivier and Prasad, J Cancer Res Clin Oncol 2023; PAOLA-1 final OS, ESMO 2022.

PART 4

New options when cancer returns

Four approvals since 2024 for hard-to-treat recurrences

Recent FDA approvals

Mirvetuximab (Elahere)

Full approval · 2024

For: FRα-positive, platinum-resistant

First ovarian “ADC”; helped patients live longer (MIRASOL). Eye side effects need drops and eye exams.

Pembrolizumab (Keytruda) + weekly paclitaxel

Approved · Feb 2026

For: PD-L1-positive, platinum-resistant, after 1–2 prior regimens

First immunotherapy for ovarian cancer; median survival 18.2 vs 14.0 months.

Relacorilant (Lifyorli) + nab-paclitaxel

Approved · Mar 2026

For: Platinum-resistant

A pill that blocks cortisol signals; lowered risk of death by about 35%.

fam-Traztuzumab deruxtecan (T-DXd or Enhertu)

Accelerated · April 2024

For: tumor-agnostic HER-2 positive (IHC 3+)

63% response rate in HER-2 3+ recurrent ovarian cancer.

Sources: FDA approvals — pembrolizumab 2/10/2026 (KEYNOTE-B96); relacorilant 3/2026 (ROSELLA, OS HR 0.65); avutometinib/defactinib 5/8/2025 (RAMP 201); MIRASOL, NEJM 2023.

Antibody–drug conjugates: “guided missile” chemotherapy



Finds the target

An antibody locks onto a marker found mostly on cancer cells.



Carries chemo

A powerful chemo drug is attached to the antibody by a chemical link.



Releases it inside

The cell pulls it in, and the chemo is set free inside the cancer cell.

Targets being studied in ovarian cancer

FRα	Approved + new ADCs
CDH6	Phase 2/3
B7-H4	Early trials
Claudin-6	Phase 2
NaPi2b	Early trials

Why it matters: more chemo reaches the cancer, less reaches healthy tissue. Side effects still occur but often differ from standard chemo.

PART 5

Clinical trials and what's next

Promising research — and how to know if a trial is right for you

Medicines in late-stage trials to watch

Treatment	What it is	Who it's for	Where it stands (late 2026)
Rinatabart sesutecan (Rina-S)	FRα-targeted ADC	Platinum-resistant	Phase 3 (RAINFOL-02), enrolling
Raludotatug deruxtecan (R-DXd)	CDH6-targeted ADC	Platinum-resistant	Phase 2/3 (REJOICE-Ovarian01); early combo with bevacizumab shrank tumors in ~80%
Mocertatug rezetecan (Mo-Rez)	B7-H4-targeted ADC	Platinum-resistant	Durable responses reported at ESMO 2026
Ixotatug vedotin (Ixo-V)	Claudin-6-targeted ADC	CLDN6-positive, platinum-resistant	Randomized phase 2 (CATALINA-2); results expected mid-2027

Sources: ClinicalTrials.gov NCT06619236, NCT06843447; ESMO 2026 abstracts 1247RO, LBA41; TORL BioTherapeutics, 2026; Verastem/OCRA, 2025. Early results can change.

Trials asking bigger questions

OVHIPEC-2

Does heated chemotherapy (HIPEC) help when surgery is done first?

Who: Stage III, surgery first

Status: Primary results anticipated 2026

LANCE

Is minimally invasive surgery after chemo as effective as open surgery?

Who: Strong response to chemo first

Status: Phase 3, enrolling

Moving ADCs earlier

Could ADCs work before surgery or right after first-line chemo?

Who: Newly diagnosed (e.g., CATALINA-4)

Status: Early-phase studies

Sources: OVHIPEC-2 (NCT03772028), IJGC 2020; LANCE (NCT04575935), JAMA Netw Open 2024; TORL BioTherapeutics CATALINA-4, 2026.

Is a clinical trial right for me?

MYTH	FACT
“Trials are a last resort.”	Many trials are for newly diagnosed patients or first recurrence.
“I might get only a sugar pill.”	Cancer trials almost always compare new treatment against the best standard care.
“I lose control of my care.”	You can leave a trial at any time, for any reason.

ClinicalTrials.gov
OCRA trial finder: ocrahope.org

Living well during and after treatment



Supportive and palliative care

Extra help with symptoms, pain, and stress — at any stage, alongside cancer treatment.



Genetic counseling for family

If you carry a BRCA or similar change, relatives can be tested and take steps to lower their risk.



Emotional support

Counselors, social workers, and support groups help patients and caregivers alike.



Activity and nutrition

Staying as active as you can and eating well can help energy and recovery.

For families: caregivers need support too. Ask the team about caregiver resources and respite options.

Questions to ask your care team

1. Has my tumor been tested for BRCA, HRD, FRα, and other markers?
2. Have I had inherited (germline) genetic testing? Should my family?
3. Is surgery first or chemotherapy first better for me, and why?
4. Is maintenance therapy recommended for me? Which one, and for how long?
5. Is my cancer platinum-sensitive or platinum-resistant?
6. Am I eligible for any clinical trials, here or nearby?
7. What side effects should I report right away, and to whom?
8. Who can help with symptoms, emotional support, and costs?

Tip: bring a friend or family member to take notes.

Key takeaways

01 **Surgery is a cornerstone of treatment**

The goal is no visible cancer; surgery-first and chemo-first are both valid paths.

02 **Testing unlocks treatment**

Genetic and tumor tests now point to specific medicines.

03 **PARP inhibitors work best early**

Especially for BRCA-mutated and HRD-positive cancers.

04 **More options than ever**

New tools for recurrence with more in trials.



Thank you — questions?

Dr. Warring

Resources and references

For patients and families

- Ovarian Cancer Research Alliance — ocrahope.org
- National Ovarian Cancer Coalition — ovarian.org
- NCCN Guidelines for Patients — nccn.org/patients
- FORCE (hereditary cancer) — facingourrisk.org
- ClinicalTrials.gov

Key references

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