Your Guide to HR+ / HER2- Breast Cancer Care

Breast Cancer is Personal. Treatment Should Be Too.

With over 50 types of breast cancer, care and treatment are not the same for everyone. This playbook was created to explore REAL Canadian Breast Cancer Alliance national care recommendations, understand your breast cancer type, and support informed conversations with your care team.

A National Standard for Your Care

Through Breast Cancer Canada's REAL Alliance, expert clinicians from across the country have developed evidence-based guidelines for the best treatment approaches we know today. Our goal is simple: to ensure every Canadian breast cancer patient receives consistent, high-quality care based on the latest research – responsive to real-world experience and expertise.

Expertise

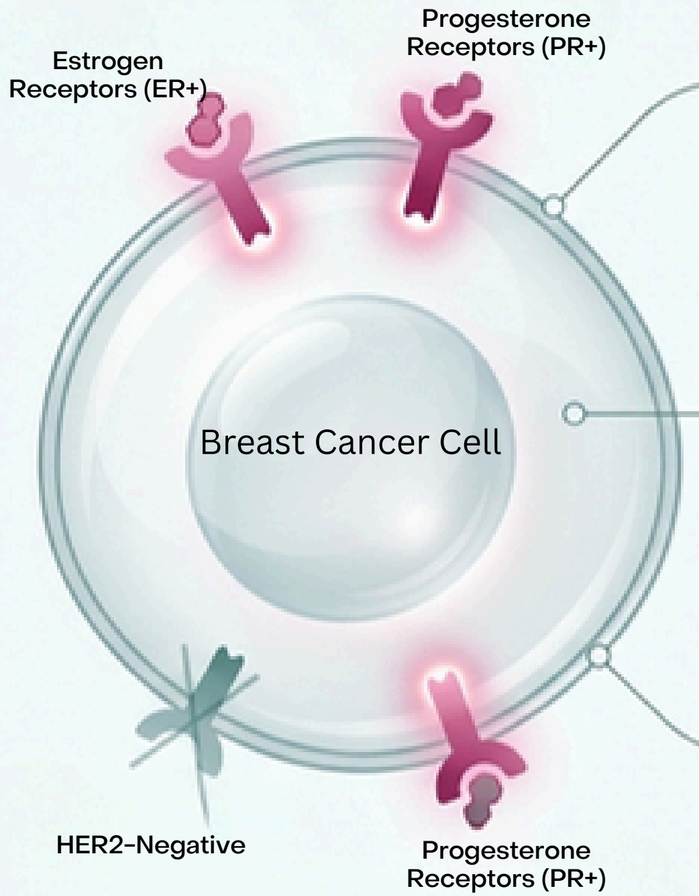
Equity

Action

The Dominant Subtype: HR+/HER2-

~66%

Two-thirds of all early breast cancer diagnoses are Hormone Receptor-Positive and HER2-Negative.



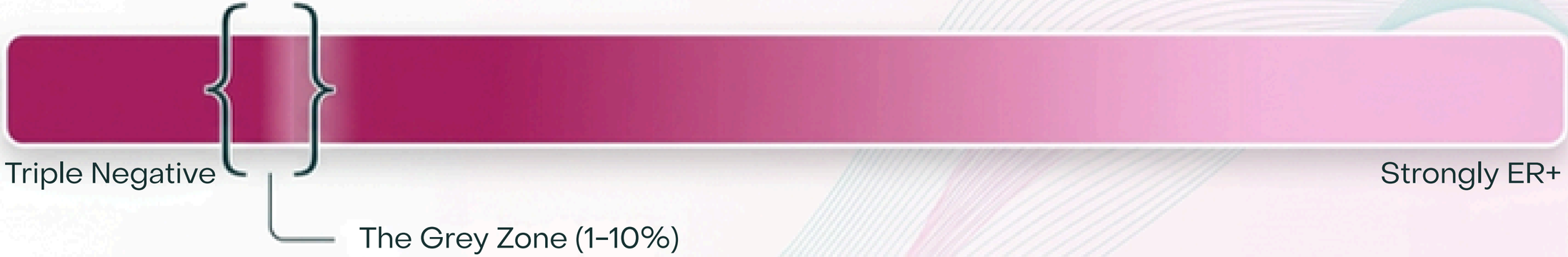
Hormone-Driven: These tumours are fuelled by estrogen and/or progesterone hormones.

Targetable: Because they rely on hormones, blocking these hormonal pathways is the cornerstone of treatment.

Intentention to Cure: Diagnosed primarily at an early stage (Stages I-III) due to screening programs, allowing for highly effective, treatment strategies.

Diagnosis & Biology

The Biological Grey Zone: ER-Low (1-10%)



The Paradox:
Tumours that express Estrogen Receptors at very low levels (1–10%) are technically classified as HR+, but biologically, they behave much more like Triple-Negative Breast Cancer (TNBC) when hormones and HER2 proteins are not contributing to cancer cell growth.

Clinical Management:

- Guidelines advise against treating these exactly like classic HR+ disease. If high risk, Neoadjuvant Chemotherapy is often preferred.
- Endocrine Therapy (and potentially CDK4/6 inhibitors) can be discussed, but the absolute benefit is significantly lower than in strongly ER+ tumours,

Your Voice is Your Most Powerful Tool

Quality of Life

A primary goal is keeping you active and comfortable. Alert your oncologist early about any side effects so they can be managed promptly.

You

Shared Decisions

Your thoughts, values, and life goals must be included at every step. You and your health care team decide your path together.

Clinical Trials

If you qualify, clinical trials are highly encouraged. They ensure you receive the current standard of care plus access to promising new treatments to help doctors find better ways to treat cancer.

A Tale of Two Tumours: Luminal A vs. Luminal B

Not all HR+/HER2- cancers behave identically. Genomic profiling and biological markers divide them into two primary groups based on characteristics.

Luminal A-like

Biology
High hormone (ER/PR) expression, low grade, low proliferation (low Ki-67).

Behaviour
Slow-growing.

Standard Response
Excellent outcomes on hormone blockade (endocrine) therapy (ET). Can often safely avoid chemotherapy.

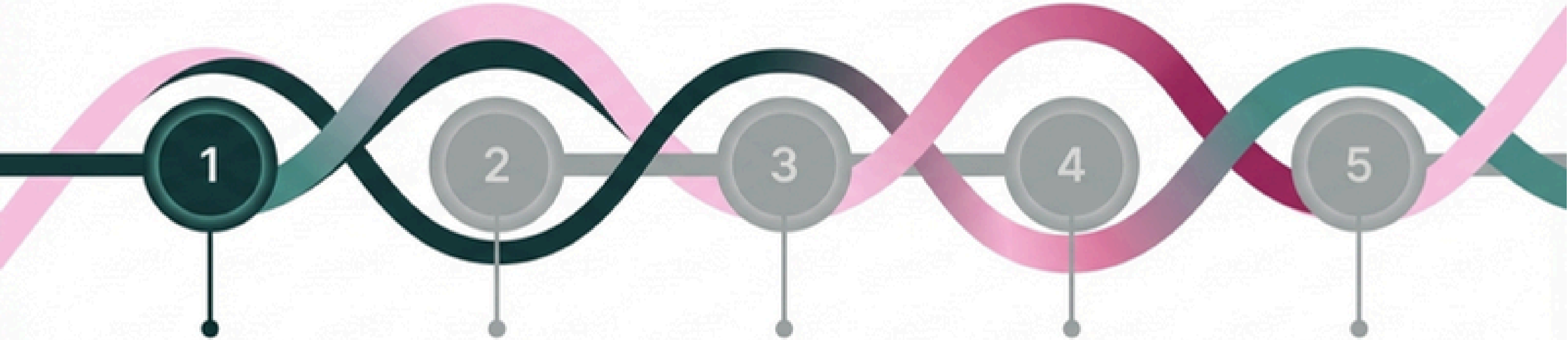
Luminal B-like

Biology
Faster growth / higher grade, elevated cancer marker of rapid growth Ki-67, low PR expression, or high chance of cancer cancer returning based on recurrence score test results.

Behaviour
More aggressive, tumour tests indicate a high risk of breast cancer returning.

Standard Response
Requires treatment intensification – often benefiting from hormone blockade, chemotherapy and/or advanced targeted therapies (CDK 4/6 inhibitors).

The Patient Journey Timeline



Diagnosis & Biology
Establishing the cancer's profile

Neoadjuvent (Pre-Surgery) Therapy
Cancer drug treatment before surgery

Surgical Management
Removing the tumour and assessing lymph nodes

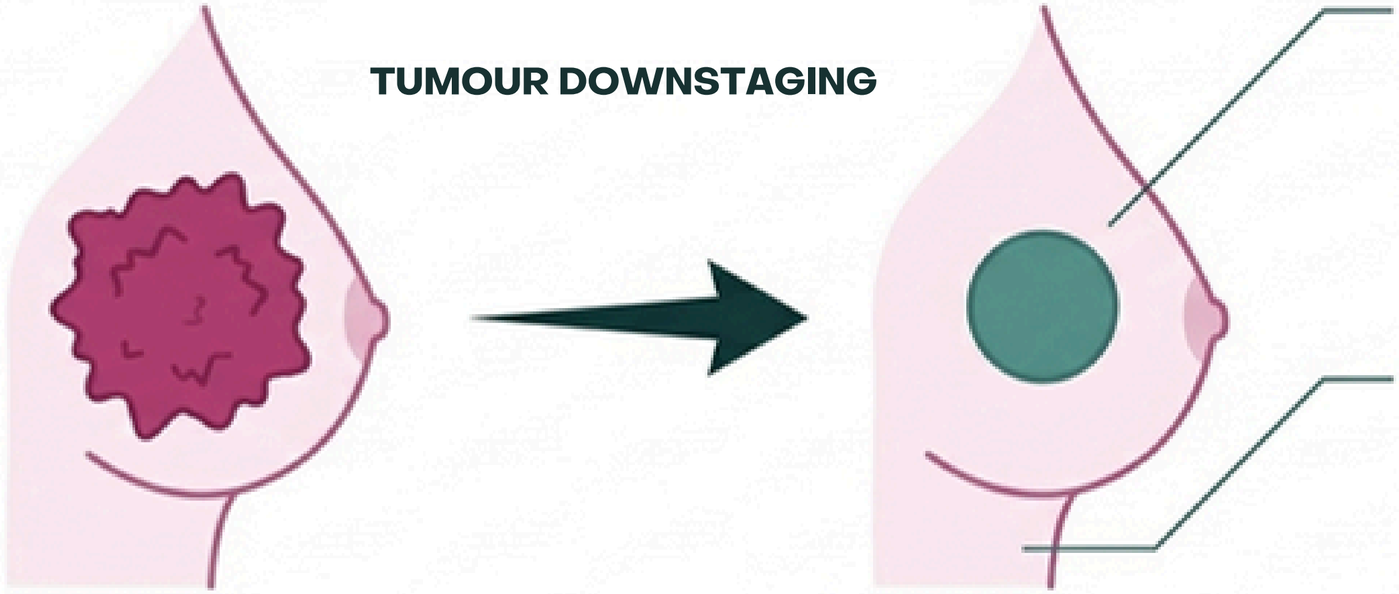
Adjuvant (After Surgery) Therapy
The long defense: hormone blockade or cancer drug therapy to eliminate microscopic breast cancer

Maintenance & Supportive Care
Maintaining hormone blockade +/- targeted CDK4/6 inhibitor therapy while protecting the whole patient long term

Neoadjuvant

The First Moves: Neoadjuvant Therapy

Core Concept: In HR+/HER2- disease, the primary goal of cancer drug therapy before surgery (neoadjuvant) is not necessarily to improve long-term survival, but to achieve less invasive surgery.



Surgical De-escalation
Shrinking the tumour can convert a patient from requiring a full mastectomy to being eligible for Breast-Conserving Surgery (BCS).

Protection of Underarm Lymph Nodes
Making the lymph nodes smaller can let your doctor check just a few key lymph nodes, instead of a bigger surgery by removing many from your underarm. This helps lower the chance of side effects and makes recovery easier.

Clinical Note: Up to 50% of selected patients achieve breast-conserving surgery following neoadjuvant chemotherapy.

Surgery

Upfront Surgery: The Standard in Low Risk of Recurrence

Key Principle: For patients with 1 of 3 low-risk profiles, treatment before surgery (neoadjuvant therapy) offers no survival advantage. Upfront surgery followed by cancer drug therapy, based on final pathology, is the gold standard.

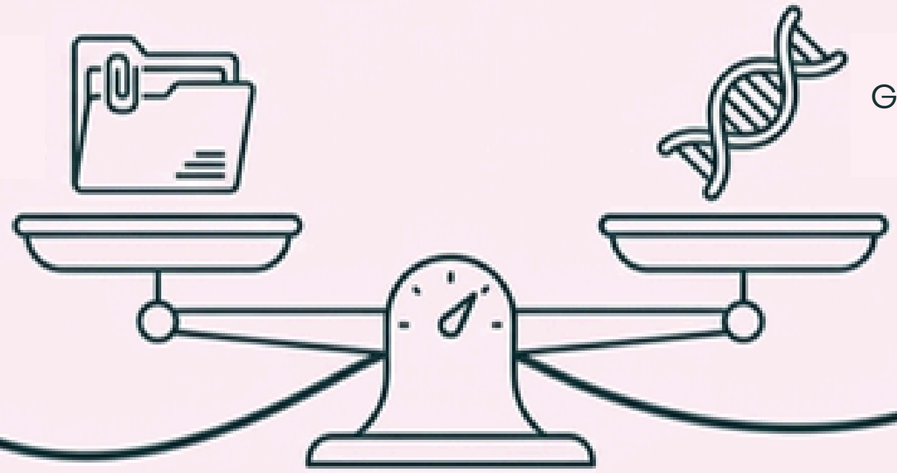
Profile 1: Stage 1 or 2 with low-risk of returning based on breast cancer features (e.g. no cancer spread to underarm lymph nodes, low grade / slow growing).

Profile 2: Postmenopausal women with small to medium-sized breast tumour (called T1 or T2) that has spread to a few lymph nodes (proven after a biopsy), Luminal A characteristics.

Profile 3: Older patients able to have surgery (≥ 70 years) with breast tumour size that can be removed by surgery.

Diagnosis & Biology

The Tipping Point: Genomic Risk Testing



The Challenge: Is there a high-risk of breast cancer returning after surgery?

The Solution: Multigene expression assays (like Oncotype DX or MammaPrint) analyze the breast tissue biopsy to provide a range of risk for the cancer returning to determine if chemotherapy is needed.

Who needs testing?

- Patients with mid-level risk of cancer recurrence based on features
- Postmenopausal patients with 1-3 positive lymph nodes, test results will guide chemotherapy omission.

Who avoids testing?

- Very small or clearly low level risk of cancer recurrence (Grade 1, Luminal A). This type of breast cancer does well on hormone-blockade (Endocrine) therapy alone.

The Long Defense: Cancer Drug Therapy After Surgery

Surgery removes the visible threat. Cancer drug therapy after surgery (Adjuvant Treatment) seeks to eliminate microscopic disease that surgery cannot reach.

The Arsenal: The backbone is Hormone Blockade called Endocrine Therapy (ET), with Chemotherapy and targeted CDK4/6 inhibitors deployed only when the biological risk demands treatment intensification.

Chemotherapy After Surgery: Selecting the Adjuvant Regimen

Adjuvant Chemotherapy Indicated

Standard Intensity

- **Regimen**: Combination of 2 types of chemotherapy drugs (Anthracycline + Taxane).
- **Patient Profile**: Lymph nodes felt under the arm, and high risk of cancer returning.
- **Goal**: Maximum cancer micro-cell eradication.

Risk-Adapted Alternative

- **Regimen**: Combination of 2 types of chemotherapy drugs (Taxane + cyclophosphamide).
- **Patient Profile**: Contraindications to standard intensity drug Anthracycline (i.e. cardiac issues), concerns about long-term side effects, or shared decision-making opting for lower side effects.
- **Goal**: Effective defense to reduce cancer recurrence while preserving cardiac health.

Adjuvant

The Cornerstone: Adjuvant Endocrine Therapy (ET)

Core Philosophy

Because HR+ tumours are fueled by hormones, long-term estrogen blockade reduces recurrence and mortality across all stages.

Duration

Standard duration is 5 years, but can be extended to 7 or 10 years based on individualized recurrence risk.

The Endurance Challenge

The challenge full blockade on cancer growth, WITH endurance. ET has side effects that require active partnership with your care team to remain on treatment as best possible while providing a personalized balance of quality living while on therapy.

Tailoring ET: The Menopausal Divide

Pre-menopausal Patients

Base Strategy: Hormone blockade with Tamoxifen (Aromatase Inhibitor for some).

Escalation: For those at higher risk of recurrence adding Ovarian Function Suppression (OFS) to Tamoxifen or an Aromatase Inhibitor (AI) improves disease-free survival.

Post-menopausal Patients

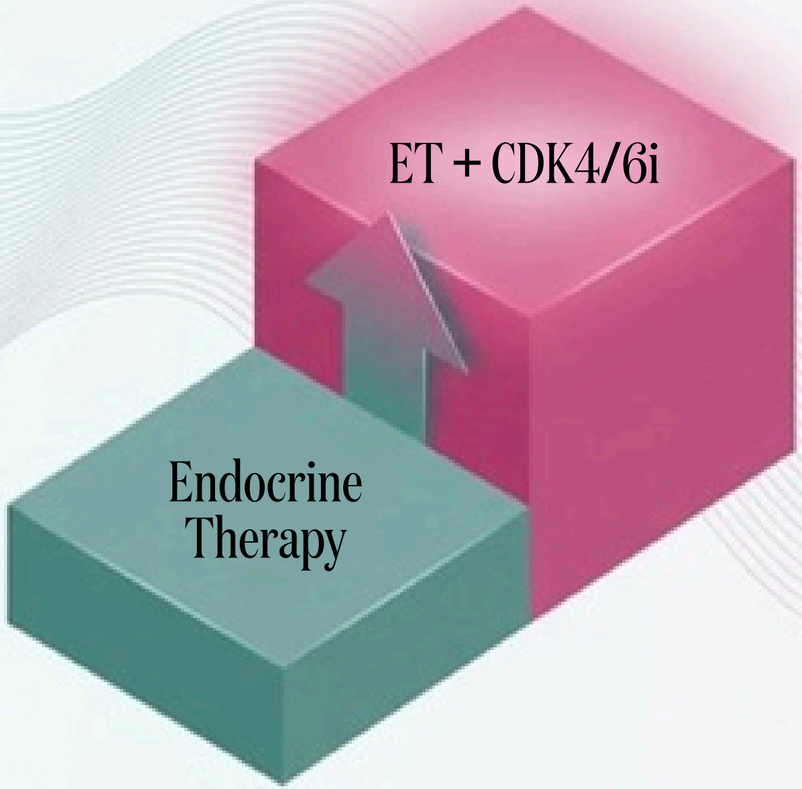
Base Strategy: Hormone blockade with Aromatase Inhibitors (AIs) are preferred over Tamoxifen due to superior long-term outcomes and efficacy.

Reduction: Tamoxifen is used only if AIs are contradicted or poorly tolerated.

For men with HR+ breast cancer, Tamoxifen is the preferred ET standard.

Adjuvant

Treatment Intensification: Enter CDK4/6 Inhibitors



The Reality: For patients with high-risk clinical features, there is a persistent risk of late recurrence despite Endocrine Therapy.

The Standard of Care: For high-risk early breast cancer (pre- or post-menopausal), adding a targeted CDK4/6 inhibitor (Abemaciclib or Ribociclib) to ET is standard practice.

Who is High Risk?

- >4 positive lymph nodes in the underarm with breast cancer
- 1-3 positive nodes plus tumour size > 5cm, Grade 3 speed of growth, or Ki-67 biomarker count > 20%
- No cancer in lymph nodes but mid-size tumour with high recurrence risk features (take Ribociclib specifically)

Adjuvant

The Synergistic Blockade

Receptor Blockade Model

Mechanism 1: Starvation

Endocrine Therapy (e.g. drugs called Aromatase Inhibitors or Tamoxifen) deprives the cancer cell of the estrogen it needs to signal growth.

Mechanism 2: The Cell Cycle Lock

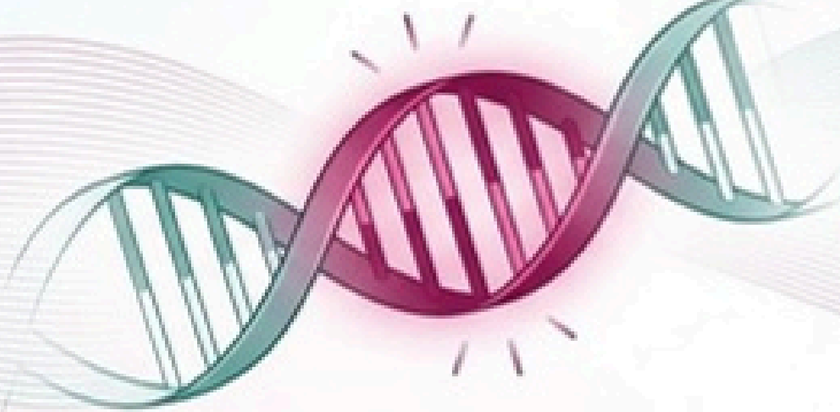
CDK4 and CDK6 are proteins that drive cancer cell growth. Inhibiting them halts the cell replicating, forcing the cancer into a state of arrest.

Clinical Reality

Because this combination is powerful, side effects must be actively managed by a specialized monitoring pathway (checking bloodwork, drug interactions) to ensure patients can stay on treatment.

Maintenance

Targeting Genetics: The BRCA Pathway



1 year Olaparib → Consider CDK4/6i

The Context: A subset of HR+/HER2− patients carry inherited genetic changes (germline BRCA1 or BRCA2 pathogenic variants) that put them at distinctly higher risk of recurrence.

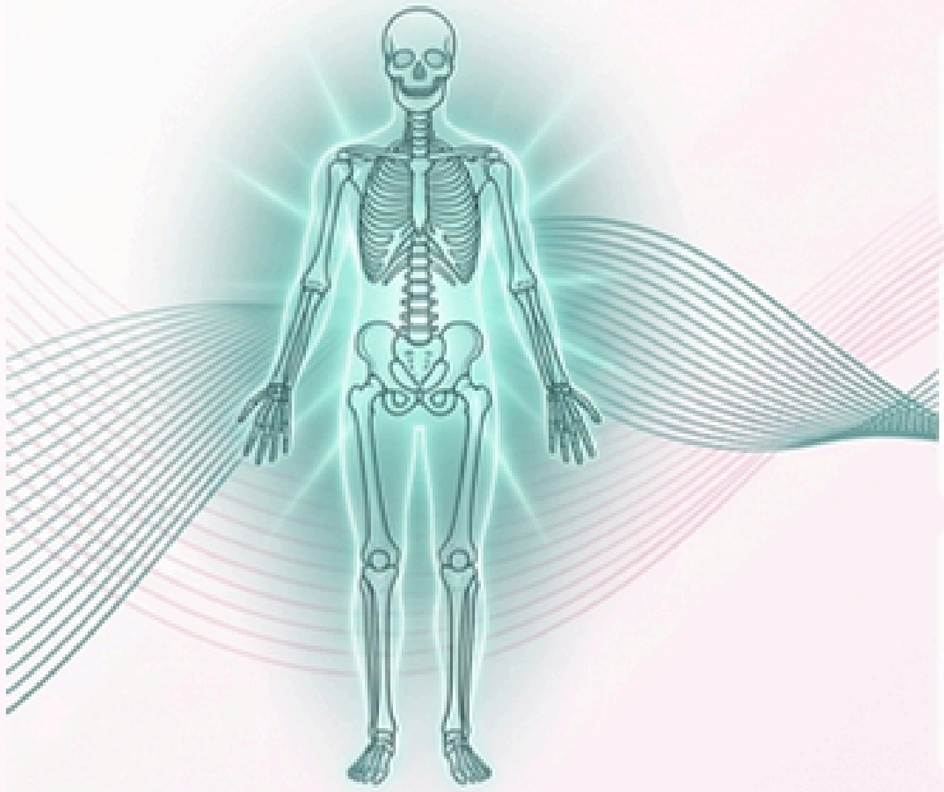
Guided Alignment: Genetic testing should be discussed for all newly diagnosed breast cancer patients aged 65 or younger.

Targeted Standard of Care: For these high-risk patients, the targeted PARP inhibitor drug, Olaparib, is administered for 1 year.

Sequential Strategy: After completing Olaparib, multidisciplinary teams may consider adding a CDK4/6 inhibitor for continued defense.

Maintenance

Fortifying the Environment: Addding Bisphosphonates



Target Population

- Postmenopausal women (or premenopausal women rendered postmenopausal via OFS) who are at a higher risk of recurrence.

Dual Purpose

1. Prevents bone density loss caused by hormone blockade using Aromatase Inhibitors
2. Actively alters the bone microenvironment, significantly reducing the risk of bone metastases and improving overall survival

Required Supportive Care

- Prior to starting, patients require a dental assessment (due to rare risks like jaw complications), plus routine Calcium and Vitamin D supplementation.

Maintenance

The Human Element: Fertility & Pregnancy

Fertility Preservation

Standard of Care: For patients of child-bearing potential, fertility preservation options (like egg or embryo freezing) must be discussed before any cancer drug treatment begins.

Pregnancy-Associated Breast Cancer

Standard of Care: Diagnosis during pregnancy demands an immediate unified team approach.

Team Composition: Oncology, Obstetrics, and Maternal-Fetal Medicine experts collaborating to prioritize both maternal health and fetal well-being.

Breast Cancer Canada | PROGRESS CONNECT

Knowledge is a powerful tool.

Research has shown us that there are more than 50 types of breast cancer. Progress CONNECT is an online tool that provides people with breast cancer with information specific to their diagnosis. After completing a series of questions, a personalized report is generated. Designed by Breast Cancer Canada and validated by cutting edge research, Progress CONNECT aims to educate people with breast cancer and enable them to have informed discussions with their oncology team.

Learn more about your HR+/ HER2- treatment.

progressconnect.ca

Breast Cancer Canada | PROGRESS TRACKER

There is beauty in the numbers.

PROgress Tracker brings together the experiences of people affected by breast cancer. The information is organized according to the type of cancer, age, ethnicity, and geographic location of those affected and will show the complexity of the treatment and long-term effects. Researchers will use the data to assess quality of life while identifying gaps and disparities. Our goal is to inform cancer policy and clinical care standards from coast-to-coast.

Consider sharing your lived experience with HR+ / HER2- breast cancer.

progresstracker.ca

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