CADTH REIMBURSEMENT REVIEW

Patient and Clinician Group Input

abemaciclib (Verzenio)

(Eli Lilly Canada Inc.)

Indication:

Verzenio (abemaciclib) (tablets) is indicated for the treatment of HR-positive, HER2-negative advanced or metastatic breast cancer as follows:

- in combination with an aromatase inhibitor in postmenopausal women as initial endocrine-based therapy.
- in combination with fulvestrant in women with disease progression following endocrine therapy. Pre- or perimenopausal women must also be treated with a gonadotropin-releasing hormone (GnRH) agonist.
- as a single agent in women with disease progression following endocrine therapy and at least 2 prior chemotherapy regimens. At least one chemotherapy regimen should have been administered in the metastatic setting, and at least one should have contained a taxane.

March 3, 2025

This document compiles the input submitted by patient groups and clinician groups for the file under review. The information is used by CADTH in all phases of the review, including the appraisal of evidence and interpretation of the results. The input submitted for each review is also included in the briefing materials that are sent to expert committee members prior to committee meetings. **If your group has submitted input that is not reflected within this document, please contact Formulary-Support@cda-amc.ca.**

Disclaimer: The views expressed in this submission are those of the submitting organization or individual. As such, they are independent of CADTH and do not necessarily represent or reflect the views of CADTH. No endorsement by CADTH is intended or should be inferred.

By filing with CADTH, the submitting organization or individual agrees to the full disclosure of the information. CADTH does not edit the content of the submissions received.

CADTH does use reasonable care to prevent disclosure of personal information in posted material; however, it is ultimately the submitter's responsibility to ensure no identifying personal information or personal health information is included in the submission. The name of the submitting group and all conflicts of interest information from individuals who contributed to the

Patient Input Template for CDA-AMC Reimbursement Reviews

CDA Project Number: 1. PC0409-000 and 2. PC0400-000
Name of Drug: Abemaciclib (VERZENIO®)
Indication: 1. PC0409-000: Verzenio (abemaciclib) (tablets) is indicated for the treatment of HR-positive, HER2-negative advanced or metastatic breast cancer as follows:

- in combination with an aromatase inhibitor in postmenopausal women as initial endocrine-based therapy.
- in combination with fulvestrant in women with disease progression following endocrine therapy. Pre- or perimenopausal women must also be treated with a gonadotropin-releasing hormone (GnRH) agonist.
- as a single agent in women with disease progression following endocrine therapy and at least 2 prior chemotherapy regimens. At least one chemotherapy regimen should have been administered in the metastatic setting, and at least one should have contained a taxane.

Indication 2. PC0400-000: Verzenio (abemaciclib) is indicated in both early breast cancer and advanced or metastatic breast cancer, however the focus of this reassessment is the advanced or metastatic breast cancer indication: Verzenio (abemaciclib) (tablets) is indicated for the treatment of HR-positive, HER2-negative advanced or metastatic breast cancer as follows:

- in combination with an aromatase inhibitor in postmenopausal women as initial endocrine-based therapy.
- in combination with fulvestrant in women with disease progression following endocrine therapy.

Name of Patient Group: Breast Cancer Canada
Author of Submission: Kimberly Carson, CEO Breast Cancer Canada

1. About Your Patient Group

Breast Cancer Canada's (BCC) commitment is to save lives through breast cancer research and its outcomes. For the last three decades, you've known us as the Breast Cancer Society of Canada. But with a disease that is ever evolving, we have also evolved. We remain the only national organization in Canada laser focused on precision oncology breast cancer research and education because we believe in building on the outstanding progress in therapeutic outcomes that's been made. Breast Cancer Canada encourages precision oncology research and awareness collaboration among physicians and researchers. Our mission drivers are: Diversity by creating a basis of ethnically diverse breast cancer patients in clinical trials; Acceleration by driving Canadian research from the lab directly to the clinic with precision oncology; Innovation by applying research methodology that utilizes emerging technology; Patient leadership by developing Patient Reported Outcomes (PROs) for breast cancer in Canada, and Connection by rapidly expanding the network of research and sharing of data to support design and running of novel Canadian clinical trials and clinical recommendations with the REAL Alliance of clinical specialist thought leaders.

About - Breast Cancer Canada (breastcancerprogress.ca)

2. Information Gathering

INFORMATION SOURCE: SURVEY TO METASTATIC HR+ / HER2- BREAST CANCER PATIENTS WITH FIRST RECURRENCE FOLLOWING ADJUVANT THERAPY AND SUBSEQUENT RECURRENCE FOLLOWING ENDOCRINE RESISTANCE IN MBC

An electronic survey was distributed from February 15th – 23rd, 2025 to patients living with a first recurrence (i.e. frontline / 1L) of HR+/HER2- metastatic breast cancer (MBC) through our Breast Cancer Canada (BCC) community. The survey responses included 169 survivors responding, with 54 people identified as the target group for this input submission sharing their personal experiences with breast cancer (BC) subtype HR+ / HER2- receiving treatment in the frontline metastatic setting. Of these, 44 people shared that 64% reside in Ontario, 18% from Alberta, 11% from British Columbia, 3% from Quebec and 2% from both Nova Scotia and New Brunswick. The majority of the target survey participants identify as white (86%) with inclusion noted from Black (2%), Chinese (5%), Latin American (2%) and Other (5%) ethnicities.

In addition, an electronic survey was distributed from July 6th – 21st, 2023 to patients living with recurrent HR+/HER2- metastatic breast cancer (MBC) (i.e. second-line and beyond, 2L+) and their caregivers through BCC community. The survey responses included 171 personal experiences with treatment in the recurrent metastatic setting, analyzing satisfaction and quality of life with current standard systemic therapies, financial burden of long-term advanced breast cancer and the desire to maintain oral at-home treatments to delay the use of IV chemotherapy for as long as possible.

For the purposes of this double indication submission for Verzenio, BCC has collated our patient input for both 1L and 2L HR+/HER2- MBC indications.

3. Disease Experience

With the progress of endocrine therapies and novel CDK4/6 inhibitors in frontline therapy (e.g., Palbociclib and Ribociclib) impacting positive survival rates, patients' disease experience with hormone-receptor positive, HER-2 negative MBC has evolved. On one hand, new medicine has created HR+ / HER2- MBC as a managed 'chronic disease' condition and, on the other, has developed new issues for the recurrent, progression to endocrine-resistant, heavily pre-treated population. In addition to more patients being treated while living with their MBC over longer periods of time, notably to the emergence of CDK4/6 inhibitors, unfortunately financial toxicity has become an emerging issue beyond otherwise well-documented treatment side effects and cancer symptom burden.

Initial recurrence of people with HR+/HER2- MBC following treatment in the adjuvant setting (1L):

42 responders of our 2025 survey showed the average age of breast cancer diagnosis was 53 years old, of the target survey participants with recurrent HR+ / HER2- MBC (1L). Of this group, 31 responders shared their experience for duration of breast cancer (BC) remission following adjuvant therapy, including endocrine therapy (ET), demonstrating in this sample that 16% had BC recurrence within 18 months, 13% recurred between 19-24 months, 10% within 2 to 3 years, 19% between 3 and 5 years and 42% between 5 to 6 years or longer. 41 responders shared the ET prescribed in the adjuvant setting, with 28% having received tamoxifen, 54% an aromatase inhibitor (28% anastrozole, 23% letrozole, 3% exemestane) and 20% stating they were not prescribed adjuvant ET.

Recurrence of people with HR+/HER2- MBC following endocrine resistance in the metastatic setting (2L+):

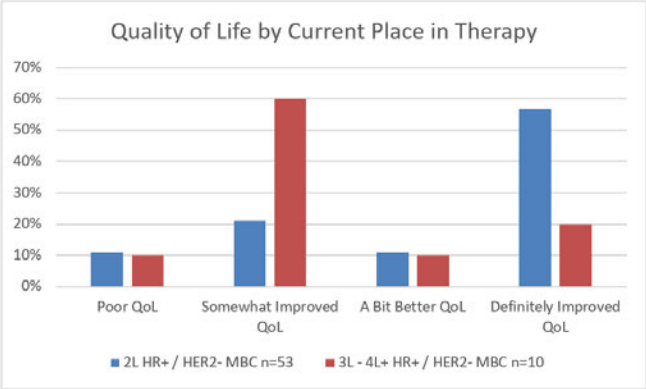
The 2023 survey identified 108 people with recurrent HR+/HER2- MBC, of which ~76% of MBC respondents are currently receiving second line (2L) treatment, ~11% are currently third line (3L) and ~13% are fourth line or more (4L+). sharing the average age at diagnosis to be 56 years old. Table 1 provides additional detail of 90 responders and their current place in therapy for MBC.

TABLE 1 provides details of 90 survey responders with recurrent HR+ / HER2- MBC (60 / 90) and caregivers (30 / 90) who shared their current treatment experience with lines of systemic therapy where the majority (69 / 90) are currently receiving 2L therapy.

# of hormone or chemotherapy TX for MBC	HR+/HER2- MBC		
	# of patients	# of caregivers	Total
Received 2 TX	53	16	69
Received 3 TX	3	7	10
Received 4 TX	4	7	11
TOTAL	60	30	90

Our survey with recurrent HR+ / HER2- MBC responders had more complete responses from 2L treated population with (53 / 90) patients compared to 3L / 4L+ treated population of n=10 / 90 patients, perhaps as a difference of general health well-being for heavily pre-treated MBC patients given the second observation of higher Quality of Life scores between the groups. As shown in Figure 1, In those treated in 2L vs those treated in 3rd / 4th+ line of therapy, 57% (30 / 53) of 2L responding population reporting a 'Definite Improvement' in QOL compared to 3L+ respondents reporting only 'Somewhat of a QOL Improvement' while on current systemic therapy.

Figure 1 Provides details of the QOL reported by HR+ / HER2- 2L and 3L / 4L+ MBC patient groups:



4. Experiences With Currently Available Treatments

Unmet needs for people with frontline HR+ / HER2- MBC having recurrence following adjuvant ET therapy:

Many patients live a good quality of life for years with metastatic disease, focusing on prolonging survival, cancer symptom control and preserving quality living. Delaying IV chemotherapy treatment at each recurrence in MBC is a primary treatment goal, therefore effective oral options are required in frontline and 2L+ MBC. CDK4/6 inhibitors (CDK4/6i's) with endocrine (ET) therapy have significantly transformed to the positive, early lines of treatment for people with HR+/HER2- MBC. However, there are differences in survival efficacy creating a dilemma for patients and clinicians among the CDK4/6i's in Canada with an inequitable scenario in agent choice and funding among the 3 available agents, palbociclib, ribociclib and abemaciclib. In Canada, ribociclib and palbociclib have been approved for reimbursement in the first line and 2L+ settings, despite palbociclib having not demonstrated an overall survival (OS) advantage. VERZENIO is only funded in the province of Quebec for 1L or 2L+, and as the only 2 agents with superior OS being ribociclib and VERZENIO, there is inequitable access of both CDK4/6i agents for the majority of Canadians under prior CADTH jurisdiction. As a result, palbociclib – despite its inferior OS data – remains the funded alternative for patients who would prefer VERZENIO treatment and side effect profile, or who are ineligible for or intolerant to ribociclib.

In addition, financial insecurity is growing over 40% in the HR+ / HER2- MBC population we surveyed who receive longer-term therapy as a chronic disease. Based on BCC financial toxicity survey in 2023 in people with this cancer type, their lived experience with financial hardship as a direct result of a breast cancer diagnosis is of high concern that goes beyond treatment side effects and cancer symptom burden.

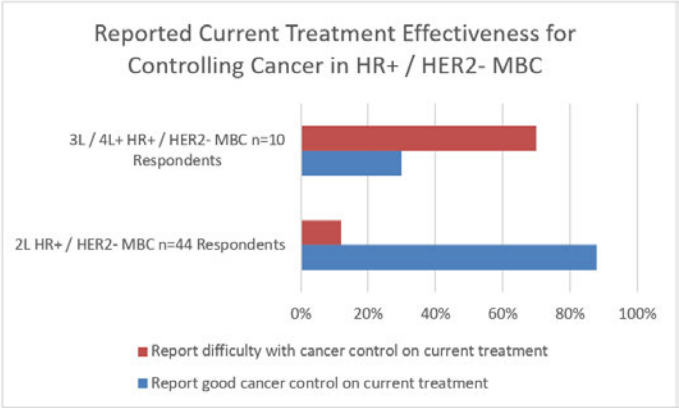
Frontline treatment experience for people with HR+/HER2- MBC after recurrence on adjuvant ET therapy:

Our recent 2025 survey described people's current MBC treatment experience started with rebiopsy at recurrence among 25 / 41 (61%) responders, to confirm recurrence of BC. 31 responders shared their current frontline MBC treatment, with 64% receiving CDK4/6 inhibitor + ET (35% ribociclib, 26% palbociclib, 3% abemaciclib), 16% receiving ET alone, 10% receiving IV-based chemotherapy and 10% who confirmed receiving treatment but did not disclose the drug prescribed.

Second line and beyond experience for people with HR+/HER2- MBC:

Our survey in 2023 among people and caregivers with ongoing MBC recurrence identified the majority of 44 respondents, at 84%, were on an oral therapy in 2L and very satisfied with their cancer control (Figure 2) . Oral treatments included single agent ET, CDK4/6i + ET and capecitabine.

Figure 2: Reports details of current systemic therapy reported experience in cancer control for HR+ / HER2- MBC in 2L compared to 3L / 4L+ MBC patients

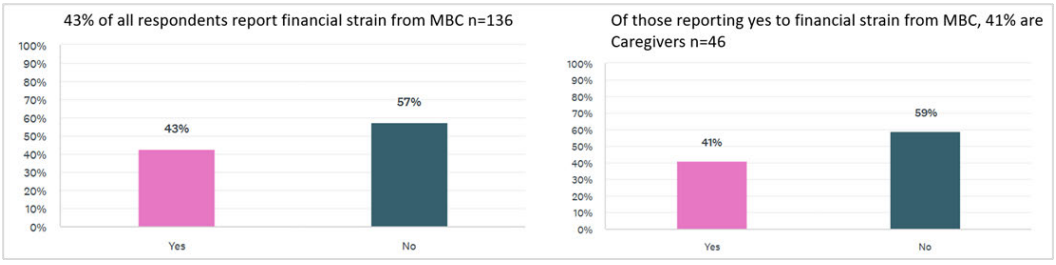


Oral CDK4/6i + ET has had a positive impact for patients in earlier lines of treatment for HR+/HER2- MBC. Patients facing MBC strongly value oral therapies that provide extended cancer control and meaningful QOL, while delaying IV chemotherapy.

Financial impact of metastatic breast cancer:

Living with chronic long-term breast cancer has been an achievement compared to 20 to 25 years ago with 5-year survival rates much higher. However, treatment is constant and ongoing with a majority of MBC patients without private 3rd party insurance making the financial burden of treatment, supportive therapies and compounded years of reduced income, a particular concern for today's HR+ MBC patient in Canada. Our 2023 survey included a focus on financial toxicity in the recurrent HR+ / HER2- MBC patient lived experience, with the inclusion of the COST-FACIT PRO[1] questionnaire and other financial-status questions. Within this long-term treated population, and their surviving caregivers left with a financial debt directly related to breast cancer diagnosis, Figures 3 and 4 reports there is financial vulnerability that should be factored into timely public funding decisions of new treatment access for recurrent MBC.

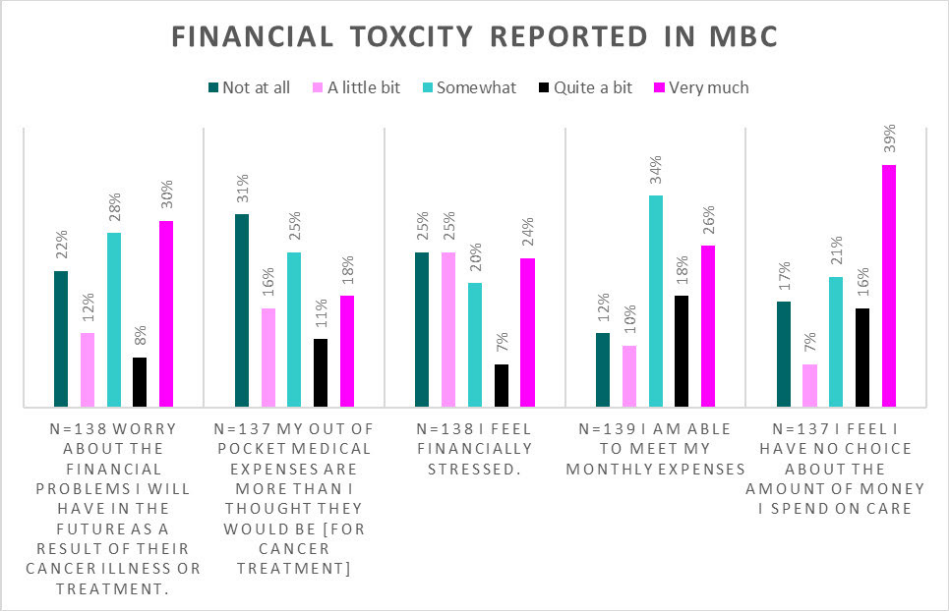
Figure 3: Reported financial strain as a result of HR+ / HER2- MBC is experienced by 43% of all survey responders, of whom 41% are caregivers.



Access to treatment in what is often a future of multi-recurrent HR+ / HER2- MBC should not add to financial toxicity for either MBC patient or surviving caregiver in Canada. As demonstrated in Figure 3, 43% (58 / 136 surveyed) of all responders reported having financial strain because of MBC, **41% (19 / 46 surveyed) of caregiver respondents reported having ongoing financial hardship**

related to breast cancer either from living on single income, reduced retirement funds and/or medical costs **after their loved one has passed**.

Figure 4: The impact of MBC disease on financial burden for patients and their caregivers



As shown in Figure 4, over half of the 137 respondents (54%, n= 74) felt that their out-of-pocket medical expenses are more than expected with ratings of 'Very much' (18%), 'Quite a bit' (11%) or 'Somewhat' (25%).

Of n=138 respondents, 66% (n=91) indicated that they worry about financial problems in the future because of their cancer illness or treatment. 76% (n=105) feel some degree of financial stress related to their MBC.

Of n=139 respondents, 56% (n=78) report they are 'Somewhat' (34%), 'A little bit' (10%) or 'Not at all' (11%) able to meet their monthly expenses. Even of those patients and caregivers that had responded to low concerns about financial toxicity, more had indicated that they felt they had no choice about the amount of money spent on care.

These patient-reported financial toxicity outcomes demonstrate a high vulnerability in this chronic population who feel required to pay out of pocket medical expenses over the long-term. We would put the case forward that compared to other tumor types, MBC patients are particularly financially vulnerable given that the majority have significant out-of-pocket costs when diagnosed in early stage, and then recur, requiring further medical expenses over a longer period of their lifetime, and that of the surviving caregiver.

When considering length of curative multi-disciplinary treatment for high-risk adjuvant breast cancer management, and then the added toll of recurrent therapy for metastatic disease, the HR+ / HER2- MBC population experiences some of the longest-term years of cancer-related costs and financial burden. Timely drug funding access will positively contribute to reducing financial stress in Canadians with HR+ / HER2- MBC.

5. Improved Outcomes

Our 2025 survey asked the target population about their goals in therapy after recurrence having received adjuvant ET. The reported results provide perspective from people with HR+/HER2- frontline MBC.

88% of all 36 target responders felt 'somewhat' (11%), 'quite' (44%) or 'very' (33%) strongly about preferring treatment that can be taken at home (I.e. not IV chemotherapy).

Of 36 responders, a sliding scale of efficacy and QOL compromise was surveyed that focused on treatment goals from people with recurrent HR+/HER2- MBC. Overwhelmingly 97% felt a long recurrence-free period was critical to their goals for treatment (responses: 3% 'somewhat', 8% 'quite a bit', 86% 'very much'); while '92% felt 'somewhat' (3%), 'quite a bit' (8%) and 'very' (81%) strongly about treatment that extends life for as long as possible, suggesting quality living is important beyond longer survival.

When treatment extends life with side effects negatively impacting 25% of daily activities and time with loved ones, 89% (36 responders) remained 'somewhat' (14%), quite' (36%) and 'very' (39%) strongly about the acceptance and trade-offs between these treatment goals. These responders consistently reported, with a 78% majority, accepting the balance of longer recurrence-free survival even in the case of a side-effect impact tradeoff of 50% inability to perform daily activities and spend time with loved ones (25% 'somewhat', 22% 'quite a bit', 31% 'very' in favour of treatment meeting treatment goals).

These survey side-effect trade-off impact opinions acceptable at 25% and 50% when considering improved efficacy outcomes are reflective of MONARCH-3 and MONARCH-2 clinical trials.

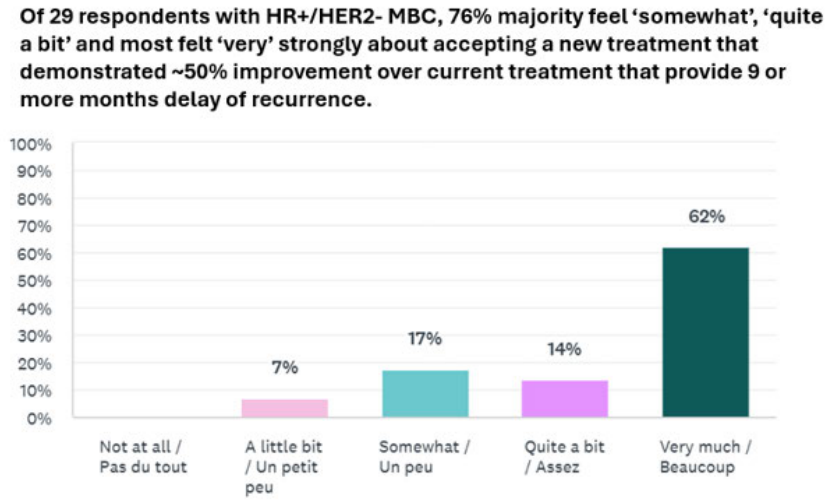
People with lived experience, HR+ / HER2- MBC in front line and 2L+ are in favour of cancer therapy when it meets their optimal treatment goals by extending cancer control and survival and providing at-home, oral therapy that preserves quality living while delaying IV chemotherapy. MONARCH-3 and MONARCH-2 trials report efficacy and quality of life study outcomes that demonstrate VERZENIO +ET combination meets the therapeutic goals of people with HR+ / HER2 MBC in the recurrent setting.

6. Experience With Drug Under Review

In BCC's recent 2025 survey, 5% (2 / 40) of responders are currently on VERZENIO in front line MBC, due to the inequitable funding access restriction only to those with 3rd party insurance. These 2 responders value a treatment that is oral administration does not impact daily living more than 25% with drug side effects, controls cancer for a long remission period and extends long-term survival.

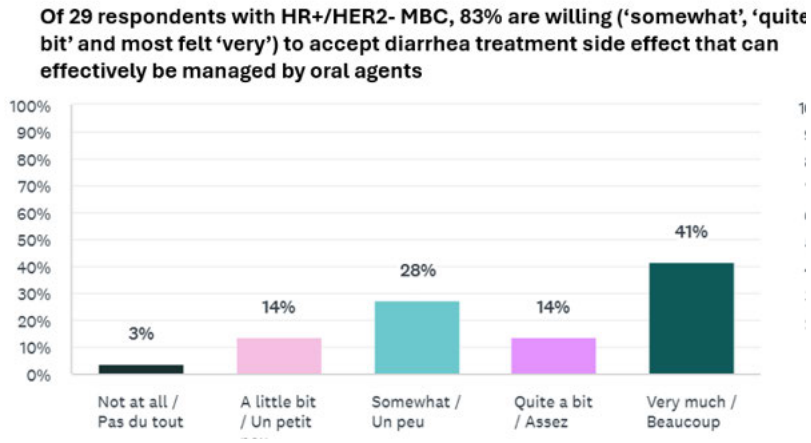
Of the 29 survey responders with HR+ / HER2- frontline MBC, the majority at 76% (22 /29) reported strongly (Figure 5) about a new treatment being meaningful to their treatment goals that provided recurrence-free duration of at least 9 months or more, with a 50% improvement over current treatment using ET (e.g. aromatase inhibitor or fulvestrant) alone.

Figure 5: Of 29 responders, the majority report 9 months of recurrence-free cancer control and a 50% improvement over current ET treatment alone, meet their goals for treatment early on in MBC.



In addition, all 29 target respondents shared their frontline treatment goals to questions about specific high rates of diarrhea as a side effect reported with taking VERZENIO + ET therapy, including their compromise to accept diarrhea as a trade-off for better recurrence-free survival outcomes. Consistent responses of 75% or higher, accepted diarrhea with standard management using oral antidiarrheal agents, as shown in Figures 6.

Figure 6: Of 29 responders, indicate >83% would accept managing diarrhea treatment side effect with oral antidiarrheal agents when considering improved efficacy outcomes.



People with MBC lived experience potentially eligible for frontline or 2L+ CDK4/6i treatment with VERZENIO, report the clinical outcomes support their treatment goals with evidence for improvement in recurrence-free efficacy, acceptable side-effect profile and quality living that have been demonstrated in the VERZENIO clinical trials in MBC.

BCC strongly urges the clinical approval of CDK4/6 inhibitor VERZENIO across Canada, by CDA, so this agent is not restricted to private insurance that most patients do not have access to, or for those only residing in Quebec. VERZENIO 1L and 2L treatment settings have demonstrated progression-free and overall survival benefit in people diagnosed with HR+/HER2- MBC. The long-term superior outcomes from MONARCH-3 and MONARCH-2 trials address extended recurrence-free and survival treatment goals of patients. Expanding the range of available CDK4/6i therapies with VERZENIO, without restriction to only unsuitable or intolerance to other CDK4/6 inhibitors, ensures a more equitable approach to treatment across all provinces, maximizing both efficacy and tolerability, for patients while minimizing drug-related out-of-pocket costs in this financially vulnerable population.

7. Companion Diagnostic Test

There is no companion diagnostic testing required for VERZENIO + ET in 1L or 2L+.

8. Anything Else?

We note, and per current standard practice, men and premenopausal women should be eligible for VERZENIO 1L and 2L+ with ET, while also receiving (ovarian function suppression).

To Summarize Top 5 Points for this BCC Input on VERZENIO in both MBC 1L and 2L+ indications / submissions under review:

1. There is a significant need for equitable CDK4/6 inhibitor therapies that have demonstrated both progression-free and overall survival in people with HR+ / HER2- MBC, in 1L or 2L treatment settings.

2. Financial toxicity of people facing MBC is significant, and timely equitable access to VERZENIO will support relief to this population from this additional cancer " financial toxicity" in Canada

3. This target population's cancer treatment goals for recurrence-free extended survival, positive quality of life with manageable side effect profile, including diarrhea, align with the evidence outcomes from MONARCH-3 (1L) and MONARCH-2 (2L) clinical trials

4. Funding eligibility should include the full intent to treat study population that included eligibility definitions from both MONARCH-3 and MONARCH-2 trials, aligned with the reimbursement indications under review

5. Expanding the range of available CDK4/6i therapies with VERZENIO, without restriction to only unsuitable or intolerance to other CDK4/6 inhibitors, ensures a more equitable approach to treatment across all provinces

References

1. de Souza J.A., Yap B.J., Wroblewski K., Blinder V., Araújo F.S., Hlubocky F.J., Nicholas L.H., O'Connor J.M., Brockstein B., Ratain M.J., Daugherty C.K., Cella D. Measuring financial toxicity as a clinically relevant patient-reported outcome: The validation of the Comprehensive Score for financial Toxicity (COST). Cancer. 2017; 123(3), 476-484; https://doi.org/10.1002/cncr.30369

2. VERZENIO Product Monograph. Health Canada. 2023; https://pi.lilly.com/ca/verzenio-ca-pm.pdf

Appendix: Patient Group Conflict of Interest Declaration

1. Did you receive help from outside your patient group to complete this submission? If yes, please detail the help and who provided it. **No outside help used.**
2. Did you receive help from outside your patient group to collect or analyze data used in this submission? If yes, please detail the help and who provided it. **No outside help used.**
3. List any companies or organizations that have provided your group with financial payment over the past 2 years AND who may have direct or indirect interest in the drug under review.

Table 1: Financial Disclosures

Check Appropriate Dollar Range With an X. Add additional rows if necessary.

Company	$0 to 5,000	$5,001 to 10,000	$10,001 to 50,000	In Excess of $50,000
BCC - Gilead Sciences Canada				x
BCC – AstraZeneca Canada				x
BCC – Novartis Canada				x
BCC – Lilly Canada				x
BCC – Merck Canada with AstraZeneca Canada				x
BCC – Roche Canada				x

I hereby certify that I have the authority to disclose all relevant information with respect to any matter involving this patient group with a company, organization, or entity that may place this patient group in a real, potential, or perceived conflict of interest situation.

Name: Kimberly Carson
Position: CEO
Patient Group: Breast Cancer Canada
Date: March 3, 2025

CADTH

CADTH Reimbursement Review
Patient Input

Name of the Drug and Indication	Abemaciclib (Verzenio) for the treatment of HR-positive, HER2-negative advanced or metastatic breast cancer in combination with an aromatase inhibitor in postmenopausal women as initial endocrine-based therapy, in combination with fulvestrant in women with disease progression following endocrine therapy. Pre- or perimenopausal women must also be treated with a GnRH agonist.
Name of the Patient Group	Canadian Breast Cancer Network
Author of the Submission	JK Harris
Name of the Primary Contact for This Submission	JK Harris
Email	[redacted]
Telephone Number	[redacted]

1. About Your Patient Group

The Canadian Breast Cancer Network (CBCN) is a leading, patient-directed, national health charity committed to ensuring the best quality of care for all Canadians affected by breast cancer through the promotion of information, education and advocacy activities. www.cbcn.ca

As a member of the Canadian Cancer Action Network, the Canadian Breast Cancer Network is committed to adhering to the Code of Conduct Governing Corporate Funding.

2. Information Gathering

Information for this submission was collected via:

Excerpt from Past Submissions: In 2018, CBCN provided CDA-AMC with input on abemaciclib for the treatment of HR-positive, HER2-negative metastatic breast cancer (project number PC0161-000). A copy of this input is reattached herein.

Key Informant Interviews: CBCN was not able to speak with patients taking abemaciclib for the treatment of HR-positive, HER2-negative metastatic breast cancer. Instead, we have included past interviews from our September 2018 palbociclib (Ibrance) input (project number PC0150-000), and our September 2019 ribociclib (Kisqali) input (project number PC0194-000).

Printed Sources: A review was conducted of current studies and grey literature to show issues and experiences that are commonly shared among many women living with breast cancer.

CBCN's 2022 Triple Negative Breast Cancer Patient Survey: Please see the Disease Experience section for 2022 Survey findings relevant for this submission.

Information for this submission was collected via:

CBCN's 2017 Survey of Metastatic Breast Cancer Patients – Results were published in "Breast Cancer: The Lived Experience" report that was released in October 2018

This online survey collected comprehensive data from 180 Canadians living with metastatic breast cancer. Survey questions comprised of a combination of scoring options and free form commentary. It is unknown whether or not patients who participated in this survey have experience with the treatment under review. Patients were contacted through CBCN's patient network, website and social media.

CBCN's 2012 Metastatic Breast Cancer Patient and Caregiver Survey: An online survey, conducted in collaboration with ReThink Breast Cancer, was distributed to patients living with metastatic breast cancer and their caregivers. No patients surveyed had experience with the treatment under review. Survey questions comprised of a combination of scoring options and free form commentary. Patients were contacted through the membership databases of CBCN and other patient organizations.

-71 patients participated in the survey

-16 caregivers participated in the survey

3. Disease Experience

Metastatic breast cancer is the spread of cancerous cell growth to areas of the body other than where the cancer first formed, and is often more severe. It is most commonly spread to the bones, but can include the lungs, liver, brain and skin. Current treatment options for hormone receptor positive metastatic breast cancer are only effective at prolonging progression-free disease, and most cases of advanced disease will progress and symptoms will worsen. Patients with a diagnosis of metastatic breast cancer understand the limitations of current treatment options, and seek to live their remining months and years with the best quality of life that they can achieve.

The physical impact of metastatic breast cancer
How the disease presents itself through symptoms, how it progresses, and how it is experienced varies by patient, but many effects of metastatic breast cancer represent a significant or debilitating impact on their quality of life. In our 2012 Metastatic Breast Cancer and Caregiver Survey (2012 survey), patients were asked what impact cancer related symptoms had on their quality of life:

- 54% of patients reported that fatigue resulted in a significant or debilitating impact, and 40% reported some or moderate impact;

- 39% of patients reported that insomnia resulted in a significant or debilitating impact, and 46% reported some or moderate impact;

- 37% of patients reported that pain resulted in a significant or debilitating impact, and 44% reported some or moderate impact;

The social impact of metastatic breast cancer
The impact of this disease spreads across all aspects of a patient's life, restricting an individual's employment and career, ability to care for children and dependents, and their ability to socially and meaningfully participate in their community. When asked in CBCN's 2017 Patient Survey (2017 Survey) what kind of impact living with metastatic breast cancer has had on their quality of life:

- 47% of respondents were employed full-time at the time of diagnosis, with only 12% employed full time at the time of the survey;

- 74% of respondents said they had experienced an impact on their mental health as a result of their diagnosis;

- 42% of respondents indicated that their diagnosis had some negative impact on their finances, with 40% reporting a large negative impact on their finances.

The 2012 Survey shared the following in terms of impact on the quality of life of a patient:

• 49% of patients identified significant restrictions and 38% identified some or moderate restrictions to their ability to exercise;

• 42% of patients identified significant restrictions and 42% identified some or moderate restrictions to their ability to pursue hobbies and personal interests;

• 41% of patients identified significant restrictions and 41% identified some or moderate restrictions to their ability to participate in social events and activities;

• 22% of patients identified significant restrictions and 52% identified some or moderate restrictions to their ability to spend time with loved ones.

Other experiences identified by patients: guilt, the feeling of being a burden on caregivers, fear of death, poor body image, not knowing what functionality will be lost, fear of impact of the cancer and the loss of a parent on children, not knowing what will happen to children, the loss of support of loved ones, martial stress/loss of fidelity and affection from partner.

"I'm 43 now and I will be in treatments for the rest of my life. I have a very difficult time still trying to figure out how to move forward while taking advantage of all the wonderful moments I still have. I have no choice but to continue to battle this war that my body has bombarded my family and me with… the most difficult aspect is planning for my mortality and trying to keep my chin up and not burden my family."(Patient 2017 Survey)

4. Experiences With Currently Available Treatments

The goals of current therapy

The goals of current treatment options for metastatic breast cancer include controlling the progression of the disease (extending life), and reducing cancer-related symptoms (extending or stabilising quality of life). Treatment options and effectiveness vary among type of cancer, location of cancer, and how symptoms are experienced. For hormone-receptor positive patients in particular, treatment options are typically limited to hormonal therapies and chemotherapy.

The financial burden of treating and managing breast cancer

The financial burden associated with living with advanced breast cancer extends far beyond any loss of income during a temporary or permanent absence from employment. In addition to the loss of income during illness, metastatic breast cancer patients can incur substantial costs associated with treatment and disease management.

Research on the financial impact of breast cancer on patients identified the following:[1]

[1] Janet Dunbrack, Breast Cancer: Economic Impact and Labour Force Re-entry. Canadian Breast Cancer Network, 2010

- 80% of breast cancer patients report a financial impact due to their illness;
- 44% of patients have used their savings, and 27% have taken on debt to cover costs.

The financial burden of treating and managing breast cancer also directly impacted whether or not patient's adhered to their cancer treatments or supportive care medications. CBCN's 2017 Survey reported:

- 39% of respondents indicated that they were prescribed cancer medications that weren't covered by the public health care system and 8% of respondents didn't take their medications due to the cost;
- 85% of respondents indicated that they were prescribed support medications that we're covered by the public health care system and 7% of respondents didn't take their medications due to the cost.

Other barriers that were mentioned include: not qualifying for insurance at work, inability to change employers due to loss of insurance, and the prohibitive cost of new treatment options.

"I worry that in the future, a drug that may work for me won't be accessible to me based on the provincial formulary" (2017 Survey Respondent)

Patient access to local resources and supports during treatment

When living with cancer, many patients experience significant barriers and challenges around availability of health care services and quality childcare in their community. In response to 2012 Survey questions about the availability of supports such as childcare, transportation, and alternative treatments in their community:

- Among patients with children or other dependents, 53% indicated that there is minimal or no access to appropriate care for their loved ones when they are experiencing debilitating symptoms related to their cancer, and 40% identified barriers to accessing quality care during cancer treatment.

Patient willingness to tolerate treatment side effects

When asked what level of side effects and how much impact on one's quality of life would be worth extending progression-free disease by six months, the message sent by patients was that this assessment can only be determined by an individual patient, in this circumstance.

When asked to rate how much impact different symptoms of cancer and cancer treatment would be considered tolerable:

- Almost two-thirds of patients indicated that when it comes to **fatigue, nausea, depression, problems with concentration, memory loss, diarrhea and insomnia**, some or a moderate impact on one's quality of life would be considered acceptable, and approximately one quarter of patients indicated that a strong or debilitating impact would be considered acceptable.
- 70% of patients indicated that when it comes to **pain,** some or a moderate impact on one's quality of life would be considered acceptable, and 27% of patients indicated that a strong or debilitating impact would be considered acceptable.

Need for personal choice

What was revealed in the responses to the open ended questions on both the 2012 and 2017 survey is that it is imperative that all women with metastatic breast cancer have the option to access new

treatments that have proven efficacy. Most patients are well aware of the adverse effects of treatment up front and they want to make a personal choice that works for them.

"I think patients (ESPECIALLY young patients) should be given more decision making power in terms of access to radical treatments to control disease. […] With two small children I am determined to access any treatment that can extend my life and I hate struggling with doctors for this access." – Patient 2012 Survey

"I believe that I would prefer to tolerate severe restrictions in the quality of my life, if it meant that I would be able to have a longer period without progression." – Patient 2012 Survey

"Accessibility to new drugs – not liming choices" – Patient 2017 Survey

"Always quality of life. If I am to suffer greatly then, no, that is not what I want" – Patient 2017 Survey

5. Improved Outcomes

Patients living with metastatic breast cancer consider both progression-free survival and overall survival to be important. Progression free survival with a well tolerated treatment can mean more time spent with a good quality of life, even if the overall survival is similar. Based on the data from the phase 3 MONARCH2/3 trials, patients expect that abemaciclib in combination with fulvestrant or an aromatase inhibitor will increase their progression free survival while allowing them to live a better quality of life than if they were relegated to chemotherapy or other therapies with high toxicity profiles.

Adverse effects

Both of these trials demonstrated that abemaciclib was well tolerated; with only approximately 1% of patients dropping out of the MONARCH2/3 trials due to side effects. The most common adverse events were diarrhea, neutropenia, nausea and fatigue. Grade 3 and 4 adverse events were able to be managed by decreasing the dosage, which mitigated patients having to stop treatment.

Impact of treatment options to patients

By delaying the progression of the disease, this treatment can relieve cancer-related symptoms, and improve a patient's quality of life. Patients living with metastatic breast cancer are looking to be able to access as many options as possible that will delay the progression of their disease and provide them with a good quality of life.

Value to patients

The value to patients of extending the time that their cancer is progression-free cannot be overestimated. Patients living with metastatic breast cancer are aware that their advanced disease will progress with worsening symptoms until death, and embrace opportunities to try new treatments, even if benefits may be as little as a six month extension of progression-free disease. It is also very important for patients to have quality of life when receiving treatment for metastatic disease. Patients that we speak to on a regular basis acknowledge the importance to have the energy to attend their children's/grandchildren's activities and to spend time with family and friends.

Disease Experience

CBCN's 2022 Triple Negative Breast Cancer Patient Survey (HR-positive, HER2-negative metastatic breast cancer)

Introduction

The following information was collected via CBCN's 2022 Triple Negative Breast Cancer Patient Survey. The 2022 Survey conducted by the Canadian Breast Cancer Network was distributed to patients living with breast cancer. Survey questions comprised of a combination of scoring options and free form commentary. Patients were contacted through the membership databases of CBCN and other patient organizations. 981 people completed the English-only survey. Below, we will share the responses from the 30 people with HR-positive, HER2-negative metastatic breast cancer (mBC) who completed this survey.

Demographic information

Figure 1 – 3 show the province of residence, first language, and age at the time of the survey for HR-positive, HER2-negative metastatic respondents, respectively.

Figure 1 shows that most respondents resided in Ontario (33.33%), followed by British Columbia (16.67%) and Alberta (13.33%). Saskatchewan (10.00%) and Newfoundland (10.00%) had moderate representation. New Brunswick (6.67%) and Quebec (6.67%) accounted for a smaller proportion of respondents. Nova Scotia (3.33%) had the lowest representation.

Figure 1: Province of Residence (%)

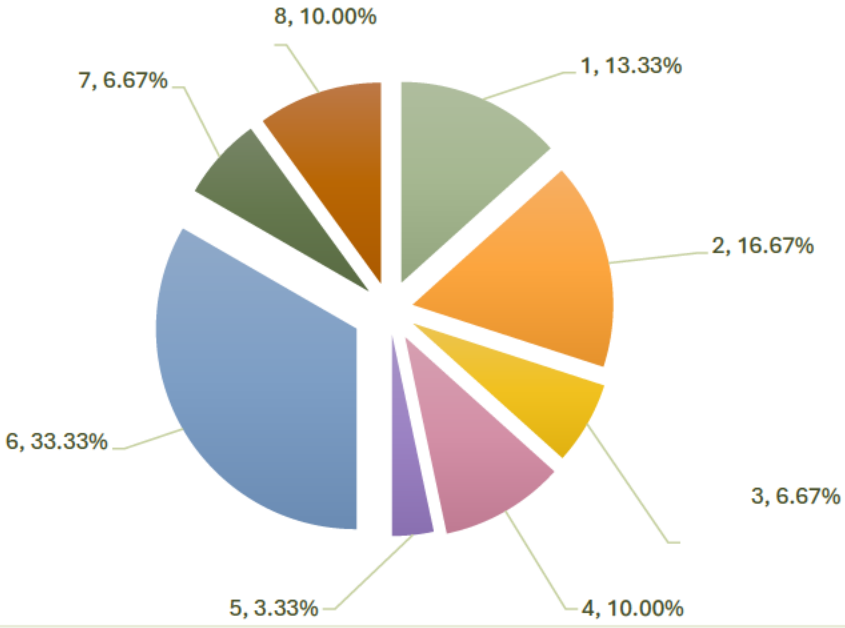


Figure 2 shows respondents' first language. Most respondents reported English (83.33%) as their first language. French (6.66%) was the next most common, followed by a language other than French or English (10%).

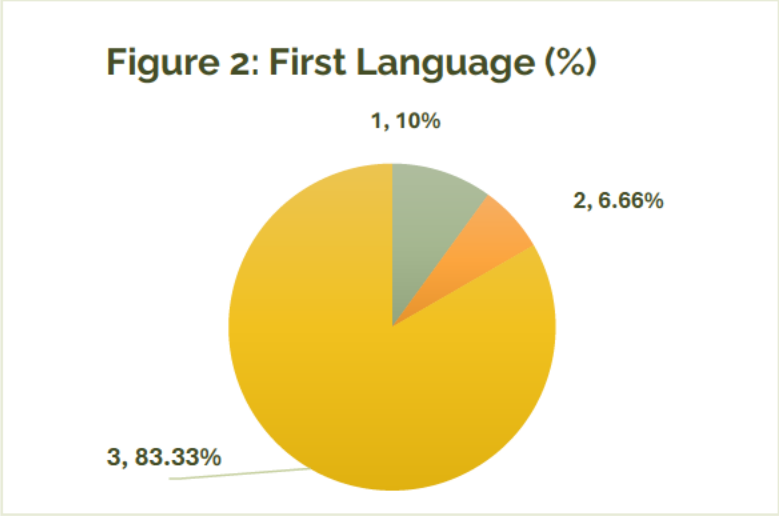
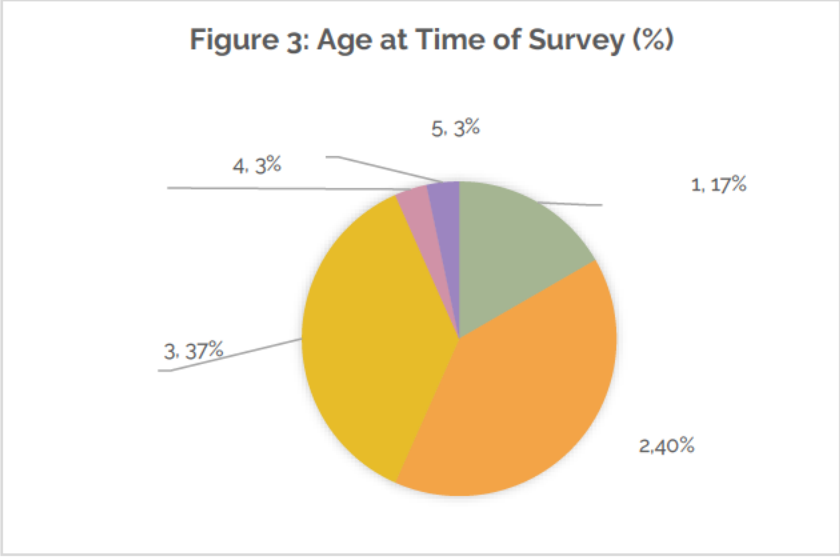


Figure 3 shows respondents' age at the time of the survey. The largest proportion of respondents were between 51-60 years old (40.00%), followed by those aged 61-70 (36.66%). Respondents aged 40-50 accounted for 16.66%, while 3.33% were older than 70. None of the respondents were younger than 40, and an additional 3.33% did not provide a response.

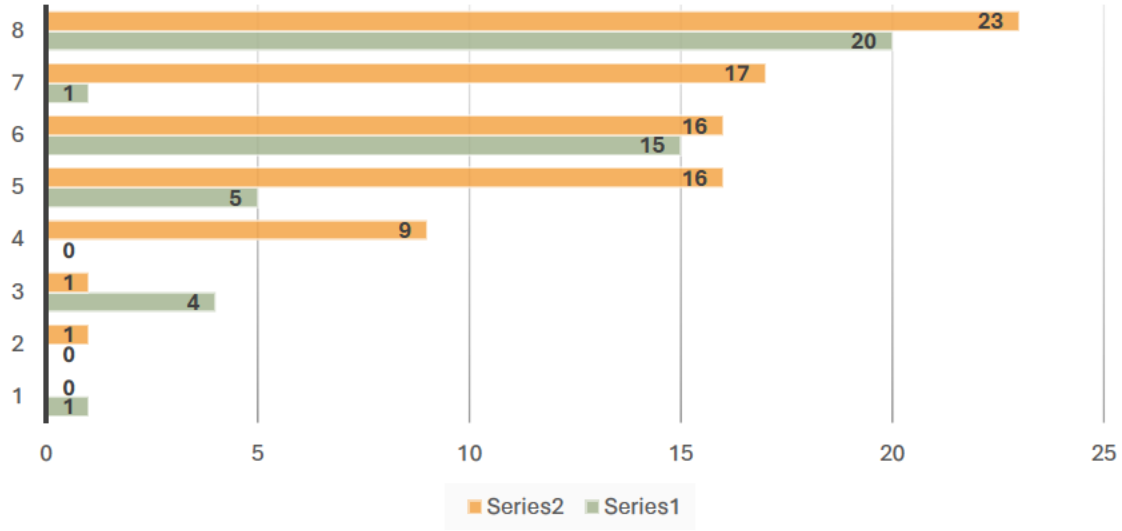


The Goals of Current Therapy

In our 2022 Survey, respondents were asked "Which of the following treatments are you CURRENTLY receiving to treat your breast cancer?" and "Which of the following treatments have you received in the PAST to treat your breast cancer?" Respondents chose all applicable selections between the following eight options: Surgery; Radiation; Chemotherapy; Hormone therapy (tamoxifen, aromatase inhibitor, etc.); Biologic or targeted therapy (trastuzumab, pertuzumab, palbociclib, ribociclib, abemaciclib, sacituzumab govitecan, etc.); Immunotherapy (pembrolizumab, atezolizumab); I have completed all treatments; and Other (please specify).

Figure 4 shows past and current treatments. Past treatments included hormone therapy (23), surgery (17), biologic/targeted therapy (16), chemotherapy (16), and radiation (9). Fewer respondents had received other treatments (1) and immunotherapy (1). Current treatments included hormone therapy (20), biologic/targeted therapy (15), and chemotherapy (5). A small number were receiving other treatments (4) and surgery (1). One respondent had completed all treatments at the time of the survey.

Figure 4: Current and past treatments used by respondants (HR-positive, HER2-negative mBC)



Key Factors for Decision-Making Around Treatment

In our 2022 Survey, we asked about the most important factors in treatment decision making, whether respondents were included in the decision-making process, comfort level in participating in treatment decisions, and topics of interest to respondents. Figure 5 – 8 present these responses, respectively.

Respondents answered the question "When making treatment decisions, what are the most important considerations (please list in order of importance, with 1 being the MOST important)." The five options were: Efficacy - how well a therapy works to treat my cancer; Quality of Life - how manageable the side effects are from my treatment, and what impact do they have on my quality of life; Work - whether I'm able to continue to work through treatment; Caregiving - whether I'm able to continue my caregiving roles through treatment; and Cost - that I don't have to pay out of pocket for the treatment.

Figure 5 shows that efficacy was the most important factor in treatment decision-making for 55.17% of respondents, with 37.93% considering it somewhat important. Quality of life was also highly important, with 35.71% ranking it as the most important and 42.86% as somewhat important. Work was ranked as medium importance by 41.38%, and care giving was ranked as less important to 40.63% of respondents. Cost was ranked as the least important factor by 34.48%, but still held importance for others, with 6.90% each considering it very important, or somewhat important.

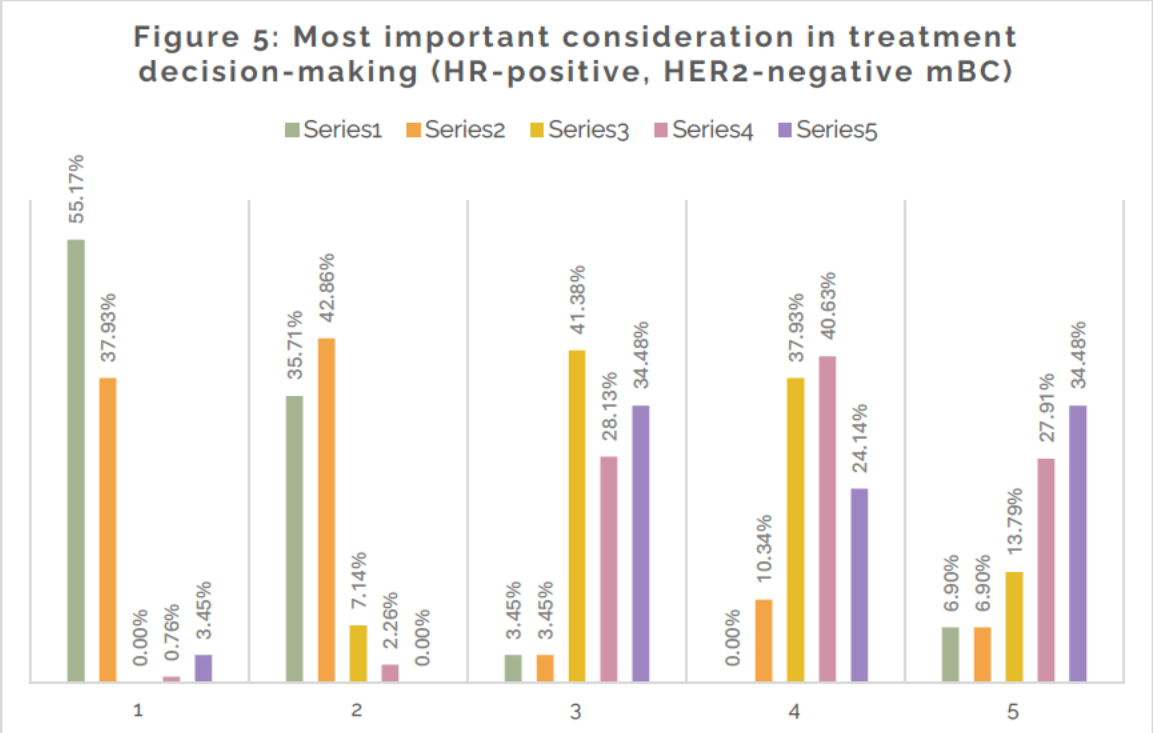


Figure 6 present responses to the questions; "Were you included in making decisions about your treatment?" Most respondents (75.86%) were included in treatment decisions, while 13.79% were not, and 10.34% did not recall.

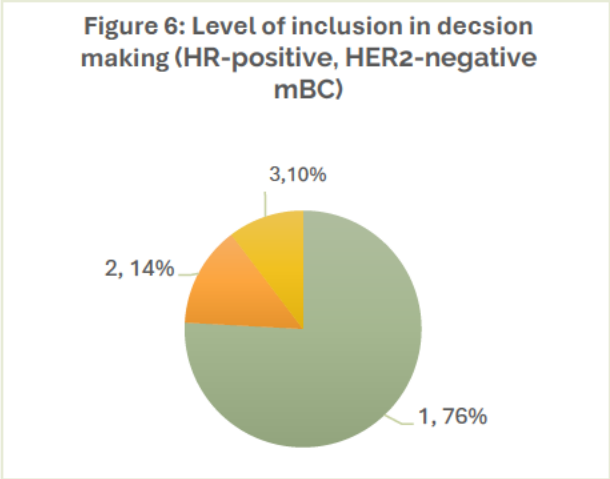
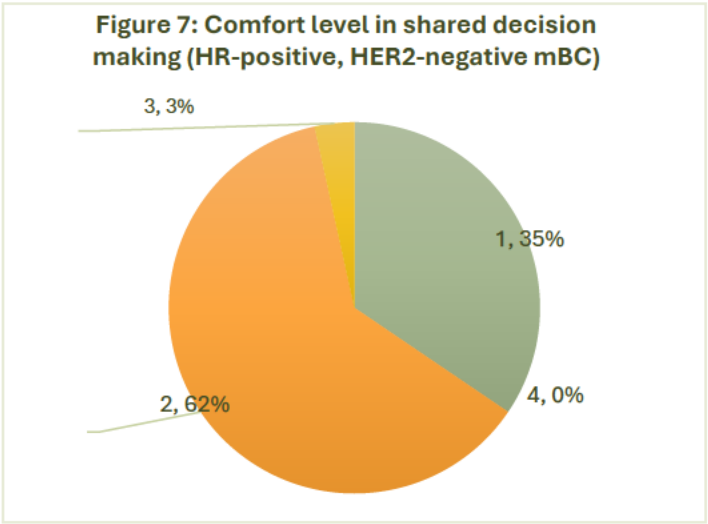


Figure 7 presents responses to the question "What was your comfort level in participating in making treatment decisions?" Most respondents felt very (34.48%) or somewhat (62.07%) comfortable, while 3.45% were not comfortable. No respondents were uninterested. Together, Figure 6 and Figure 7 show that the majority of patients felt both included in the decision-making process, and comfortable making treatment decisions

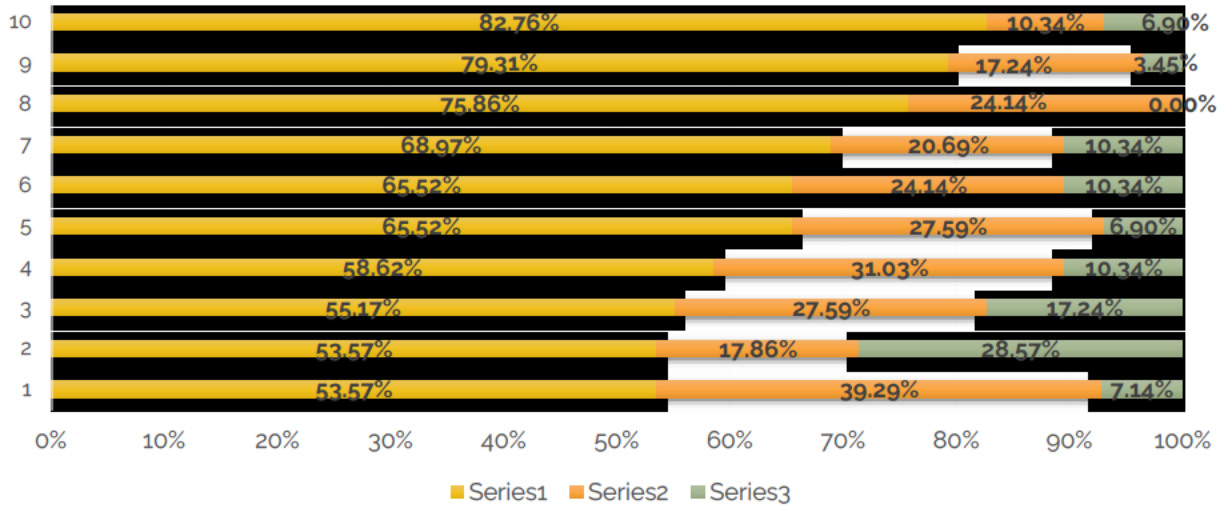


We asked respondents to indicate how interested they were in 31 different topics related to breast cancer at the time of taking the survey. Figure 8 shows the topics that at least 50% of HR-positive, HER2- negative metastatic respondents rated as "very interested." Respondents could

select “very interested”, “somewhat interested”, or “not interested” for each of these 31 topics. These results show the value patients place on each one of these topics, and by inference how each of these topics may relate to choice and decision making in treatment.

Figure 8 shows respondents prioritized topics related to treatment and research, with current breast cancer treatment options (82.76%), new treatments and the latest research (79.31%), and symptoms and side effect management (75.86%) ranking highest. Research and lifestyle factors were also key, including nutrition and exercise (68.97%), clinical trials/research studies (65.52%), and communicating with your doctor and healthcare team (65.52%). Additional areas of interest were managing the cognitive effects of treatment (58.62%), emotional and social support (55.17%), complementary and holistic health care (53.57%), and genetic and genomic testing (53.57%). These results demonstrate the value patients place on these topics and, by inference, their potential influence on treatment choices and decision-making.

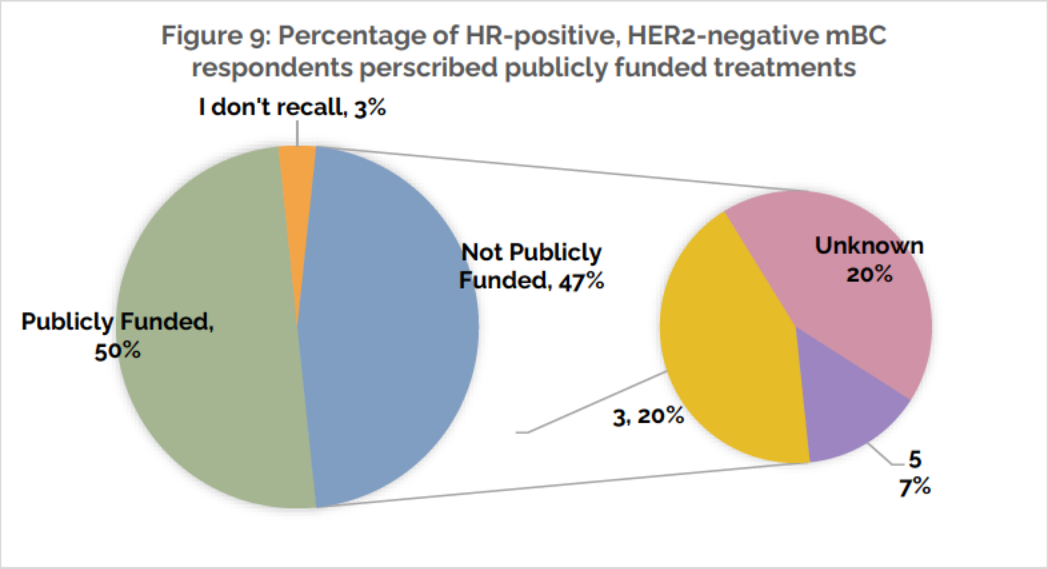
Figure 8: Topics of Interst to at least 50% of HR-positive, HER2-negative mBC respondants



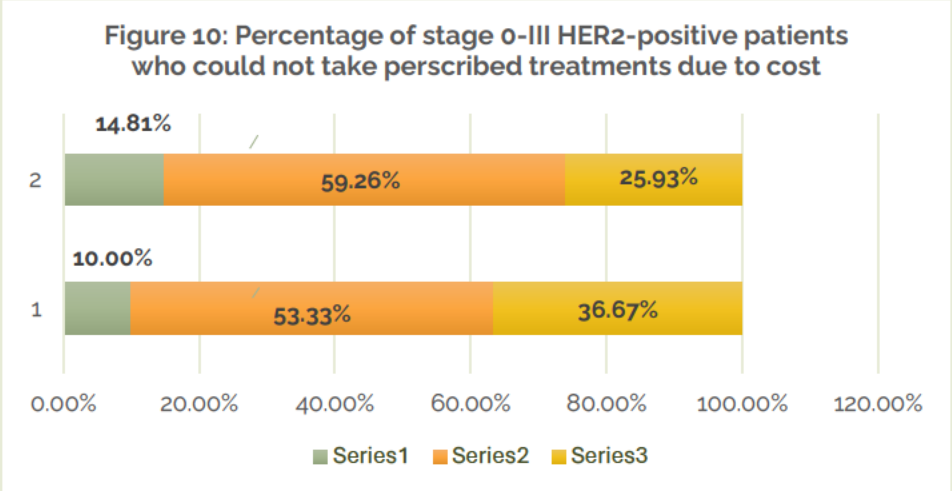
Cost and accessibility of treatments:

In our 2022 Survey, we asked about how prescribed treatments were funded, and whether the funding source affected their ability to take prescribed treatments. Respondents were asked “Were there medications prescribed to TREAT your cancer that were NOT covered by the public health care system,” and “Did the cost of the TREATMENT or SUPPORT (used to manage the side effects of treatment, not to treat the cancer) medications prevent you from taking them?”

Figure 9 shows that among stage 0-III, HER2-positive respondents, 50.00% were prescribed publicly funded treatments, while 46.66% were prescribed treatments that were not publicly funded. The non-publicly funded treatments included palbociclib (Ibrance) (either as a monotherapy, or in combination with fulvestrant, ribociclib, denosumab, or an unknown treatment) (20.00%), unknown treatments (20.00%), and other treatments (6.66%). An additional 3.33% of respondents did not recall whether their treatment was funded publicly or not.



Public funding can impact a person's ability to access treatment. Figure 10 shows that among stage 0-III, HER2-positive patients, 10.00% reported that cost prevented them from taking their prescribed treatment medication, 53.33% reported that cost did not prevent them from taking treatment medication, and 36.67% indicated that it was not applicable. For support medication, 14.81% reported that cost prevented them from taking their prescribed medication, 59.26% reported that cost did not prevent them from taking it, and 25.93% indicated that it was not applicable.



Key Informant Interviews:

Between January and February 2025, CBCN reviewed archived interviews with individuals diagnosed with HR-positive, HER2-negative metastatic breast cancer who had experience with either ribociclib (Kisqali) or palbociclib (Ibrance), which are comparators for abemaciclib.

The original interviews asked a range of questions capturing the experiences of people with HR-positive, HER2-negtive metastatic breast cancer. Below, we include responses to four of the questions which speak to unmet need in HR-positive HER2-negative metastatic breast cancer treatments. Only records that included the date of the interview, age of the patient, breast cancer type, breast cancer subtype, stage of breast cancer, and treatments used by the patient were considered for inclusion in this submission.

Patient Profiles

In September 2018, CBCN connected with 2 patients who had experience with palbociclib (Ibrance). For this submission, they are referred to as Patient 1 and Patient 2 .

> Patient 1 was over the age of 70 and had been on palbociclib (Ibrance) since February 2016 (over 2 years). She was previously on anastrozole for early-stage breast cancer.
>
> Patient 2 was between the age of 40-50 and had been on palbociclib (Ibrance) since 2018 (4 months). She had previously been treated with chemotherapy for early-stage breast cancer, as well as other unspecified treatments for metastatic breast cancer. She was accessing this treatment through her private insurance.

In September 2019, CBCN connected with one patient who had experience with ribociclib (Kisqali). For this submission, this patient is referred to as Patient 3

> Patient 3 was between the age of 51-60 and had been on treatment for 3 months. She was accessing prescribed treatment through a clinical trial in Ontario. Ribociclib was the first treatment she had been prescribed for her metastatic breast cancer.

Responses:

The importance of personal choice

When faced with a metastatic breast cancer diagnosis, it is imperative to have access to new treatments that have proven efficacy. Most patients are well aware of the adverse effects of treatment up front and they want to make a personal choice that works for them. When asked why they chose their treatment, they had this to say:

> Patient 3: *"I had heard about [ribociclib] in [a] Montreal conference and wanted to access it."*

Patient 1: *"Oncologist and naturopathic doctor recommended [it]. [Palbociclib] was their #1 choice. Also considered BRAVCAP and exemestane."*

Patient 2: *"My doctor told me that [palbociclib] was basically my last option. And the fact that it is covered by my insurance is wonderful. Had it not been covered by my insurance, I would not be on it, because being on disability and being single (I'm not married) there's no way I would be able to afford this drug."*

Accessing their current treatment

When we spoke to these individuals about their experience on the given treatment, we also asked them about what alternative treatments they would have chosen, had they not been able to access the treatment in question. Below are their responses:

Patient 3: *"I would have tried to look at new experimental treatments, as I did not want chemo. But when I got my diagnosis I wanted ribociclib- [I] knew about the results –it would be devastating if I had not been able to access it."*

Patient 1: *"I honestly don't know because I don't know them all. I really don't have a clue. I would have to defer to my oncologist at the cancer clinic to recommend something. And [then] of course, just as I did with this, I'd take it to Dr. McKinney (her naturopathic oncologist) and I'd ask his opinion."*

Patient 2: *"I have never done chemo and I will not do chemo. Even the fact that Ibrance is lowering my immune system and my counts does concern me. But at this point they've told me that basically this is my last option. When this does not work, I will just ride it out."*

Patient 3 also spoke about what having access to the given treatment meant to them. Patient 3 spoke about hope, saying*:*

"Hope in having a new medicine - I feel like I am doing something to be able to heal. Prolong my life, stable."

Patient 5 sentiments about accessing the given treatment echoed Patient 3, as she also spoke about hope. She stated:

"At the moment, it's a lifeline. For sure. It's definitely been a lifeline. It's given me hope because all of my doctors are quite keen on it…. And if they're so positive about it, that helps me feel very confident that I'm doing the right thing"

Patient 2 spoke about what access to the given treatment meant to her and other patients. She stated the following:

"It's giving me life right now. I'm still here, so it means everything. I'm still living, I'm still here with my family, my grandkids, so it means the world to me. And it actually breaks my heart that this drug is not available to all women and that some actually have to choose

chemo, which we all know does not work. And I know there's not a cure for cancer. Of course, I know that. But old-school chemo is so devastating and such a horrible thing for any woman to go through. It breaks my heart. I hope that this drug becomes available to all women because it is such an amazing alternative to chemo"

Taken together, we see there is still a need for choice in treatments that give people facing HR-positive, HER2-negative metastatic breast cancer hope and prolonged life.

Other comments on their experience

We also gave the individuals we spoke to the opportunity to share whatever else they wanted to about the treatment they were on. Patient 3 spoke about side effects and side effect management and the positive impact of being on the given treatment. She stated:

"*When your white cells are lower, you have a lot of fear about that. I would like more information about how to prevent that overall, a lot more focus on that. Can I change my diet? More information on how to deal with lower white blood cells. I wish all women could get access to it. It made me forget about cancer for a while. I don't have to be at the hospital so much and I don't have to give up my life, I can just live with cancer"*

Patient 1's comments were about access, and she said:

"I would really like it to be available to people that need it. I would hope that our country would fund it. I think it is a very worthwhile drug. It's been very worthwhile for me. And I don't think that I'm that unusual a person. I think there's probably a lot of women out there that it would be worthwhile for."

Patient 2's response echoed Patient 1 as she also spoke about access, as well as financial barriers. She had the following to say:

"*Just the fact that I hope this is approved for all women with my type of cancer. It breaks my heart that it just comes down to money and your insurance coverage and the fact that's the only thing that's preventing some women from having access to this drug. It should be like tamoxifen. It should be available to all women with my type of cancer, and I really hope they go that way. It's been great so far for me."*

Conclusion

These responses reveal that patients with HR-positive, HER2-negative metastatic breast cancer remain aware of, and concerned with the affordability and accessibility of treatments. When someone goes through a breast cancer diagnosis, they want to be able to choose which treatment will work best for them, where finances does not dictate which treatments are available to them.

Companion Diagnostic Test

6. Anything Else?

Not applicable

Appendix: Patient Group Conflict of Interest Declaration

To maintain the objectivity and credibility of the CADTH CDR and pCODR programs, all participants in the drug review processes must disclose any real, potential, or perceived conflicts of interest. This Patient Group Conflict of Interest Declaration is required for participation. Declarations made do not negate or preclude the use of the patient group input. CADTH may contact your group with further questions, as needed.

1. Did you receive help from outside your patient group to complete this submission? If yes, please detail the help and who provided it.

   CBCN did connect with the manufacturer, Lilly, to learn about results from the clinical trial, and label expansion for this treatment.

   All other research, interviews and outreach to patients was conducted independently by the Canadian Breast Cancer Network, as was the compilation of information and data for the writing of this submission.

   As a member of the Canadian Cancer Action Network, the Canadian Breast Cancer Network is committed to adhering to the Code of Conduct Governing Corporate Funding.

2. Did you receive help from outside your patient group to collect or analyze data used in this submission? If yes, please detail the help and who provided it.

   No. The Canadian Breast Cancer Network compiled and wrote this submission independently.

3. List any companies or organizations that have provided your group with financial payment over the past two years AND who may have direct or indirect interest in the drug under review.

Company	Check Appropriate Dollar Range			
	$0 to 5,000	$5,001 to 10,000	$10,001 to 50,000	In Excess of $50,000
Gilead				X
Eli Lilly				X
Novartis				X
Roche				X
Pfizer				X
AstraZeneca				X
Janssen			X	
Merck				X

I hereby certify that I have the authority to disclose all relevant information with respect to any matter involving this patient group with a company, organization, or entity that may place this patient group in a real, potential, or perceived conflict of interest situation.

Name: JK Harris

Position: Health Policy and Advocacy Lead

Patient Group: Canadian Breast Cancer Network (CBCN)

Date: February 26, 2025

CADTH

CADTH Reimbursement Review
Patient Input Template

Name of Drug: Verzenio (abemaciclib)
Indication: HR-positive, HER2-negative advanced or metastatic breast cancer in combination with an aromatase inhibitor in postmenopausal women, OR in combination with fulvestrant in women with disease progression following endocrine therapy, OR as a single agent in women with disease progression following endocrine therapy and at least 2 prior chemotherapy regimens.
Name of Patient Group: Rethink Breast Cancer
Author of Submission: Jenn Gordon

1. About Your Patient Group

Rethink Breast Cancer (Rethink) is a Canadian charity known for making positive change. Rethink educates, empowers and advocates for system changes to improve the experience and outcomes of those with breast cancer, focusing on historically underserved groups: people diagnosed at a younger age, those with metastatic breast cancer and people systemically marginalized due to race, income or other factors. We foster spaces to connect, listen, empower and rethink breast cancer, together. Rethink's strategic priorities and organizational direction are guided by the unique, unmet needs identified by breast cancer patients and their families.

Programs and Activities

- Rethink Breast Cancer builds community, bringing patients with various stages of breast cancer together through our private and public social spaces as well as in-person events
- Rethink runs patient retreats and facilitates peer-support
- Rethink creates and runs education forums and conferences
- Rethink creates support and education tools, resources and content
- Rethink funds and supports breast cancer research

You can find out more by visiting:

Rethink Breast Cancer Instagram
Rethink Breast Cancer Website

2. Information Gathering

For over 20 years, Rethink has been working closely with breast cancer patients in Canada. We learn from and listen to the community to understand their values, priorities and pain points to help drive change and system improvements. Each year, we learn from the patients we serve, survey and collaborate with. We learn from the 24 individuals that we work extremely closely with as key patient advisors; the hundreds of patients that have shared their stories on our blog; the 700 patients that participate in our virtual support groups each year; the 2,100 members of our private peer-support network; and the 44,000 people that have joined our Instagram community. We listen, learn, engage and have conversations in all these spaces.

Rethink also benefits from regular knowledge exchange with our Scientific Advisory Committee, which includes some of the leading clinical scientists in Canada who treat breast cancer.

For this submission, we have drawn on our observations and insights gathered through programming and meetings with breast cancer patients as described above. We have also drawn on the results from an online survey with 78 patients living with metastatic breast cancer (MBC) conducted by Rethink Breast Cancer to document the lived experience of patients and caregivers. Patients completed the survey between September 2018 and April 2019.

In addition, we drew on insights from interviews conducted in January and February 2025 with four people who are living with metastatic breast cancer and who have experience taking abemaciclib to treat their disease.

3. Disease Experience

Most people in the Rethink community are diagnosed at a younger age. When young people get breast cancer it may be more aggressive, which can lead to tougher treatments. In addition, those diagnosed in their 20s, 30s and early 40s face age-specific issues such as fertility or family-planning challenges, diagnosis during pregnancy, childcare, impact on relationships, body image, dating and sexuality, feeling isolated from peers who don't have cancer, career hiatuses, and financial insecurity. The physical and emotional toll that a breast cancer diagnosis and treatment take on a young person's life is devastating and traumatic.

Fear of recurrence is a reality for our community and for good reason. Despite improvements made with early detection and treatment for early-stage breast cancer, there's approximately a 20-30% chance that early breast cancer will metastasize. Moreover, 5-10% of newly diagnosed breast cancers are metastatic. There is currently no cure for metastatic breast cancer and patients' goal with treatment is to live as well as they can for as long as they can. Patients with metastatic HR+/HER2- cancers survive 4 to 5 years on average.

Processing this reality of a life-limiting diagnosis is extremely difficult, especially for the young patients in our community and the emotional impacts on quality of life cannot be understated. The physical and psychosocial challenges of metastatic breast cancer negatively impact both the patients and their loved ones who are often their caregivers. Most people with metastatic breast cancer have widespread disease, with metastasis to bone being the most common. Lung, liver, lymph nodes and skin are also commonly involved; while metastasis to the brain is less common for hormone positive MBC patients, it can happen too. Symptoms of hormone positive MBC depend on the sites of the metastasis and include fatigue, shortness of breath for lung metastasis, pain, and bone fractures for bone metastasis as well as nausea, headache and of course challenges doing normal daily activity. The challenges and uncertainty of living with MBC affects both the patients and their loved ones who support and help care for them.

4. Experiences With Currently Available Treatments

For people with HR+/HER2-negative MBC CDK4/6 inhibitors have become standard of care for first line therapy. There are currently three drugs in this class; palbociclib, ribociclib and abemaciclib. Prior to CDK4/6 inhibitors, patients were prescribed aromatase inhibitors(AIs) or selective estrogen receptor downregulator's(SERDs) that were not as effective as managing this stage of breast cancer as a single agent compared with combining them with a CDK4/6 inhibitors.

While there are currently 2 other available CDK4/6 inhibitors for the treatment of HR-positive, HER2-negative metastatic breast cancer, there are some differences between the three drugs that are relevant for patients

when considering what course of treatment is right for them. The side effect profile of the three CDK4/6 inhibitors differ, as does the dosing schedule and the monitoring schedule. Patients may have co-morbidities that need to be considered when choosing the right treatment and having choice may help ensure that they are able to adhere to a treatment that will help manage their cancer and also provide them with a good quality of life. Recent data has also shown a benefit in overall survival for abemaciclib, and patients in Canada should have the opportunity this therapy if their oncologist advises that this is the best treatment for them.

Chemotherapy is also a treatment used for this type and stage of breast cancer; however, chemotherapies are given sequentially usually with diminishing responses with each line of chemotherapy. Although initial lines of chemotherapy may provide a few months of progression free survival, this decreases substantially with later lines.

Metastatic breast cancer patients in our community go to great lengths to avoid standard chemotherapy and they are hit hard both emotionally and physically when it does come to that. In our community, we see a rapid decline once patients progress to having only standard chemotherapies as remaining options.

"While your tumour is responding to endocrine therapy, you tend to be able to remain longer on the treatment and stable. Then when it starts to progress, and you need to go into chemo because you don't have anything else, it's just faster, you know, and things go down so quickly."
-**Rosilene**, MBC patient

Patients on standard chemo have a lot of difficulty managing their illnesses. Hospital appointments increase and they become mostly housebound managing side-effects of treatment.

"On weekly IV chemo, your normal life pretty much ends. It requires two visits per week for either blood work or for the chemo. The rest of the week is managing side effects of nausea, fatigue, pain, worsening neuropathy. And that's with me being in the cohort of people who 'tolerates well.'"
-**Heather**, MBC patient

"My year on chemotherapy was a full-time job dealing with suppressed neutrophil counts that caused countless treatment delays and quality of life compromising side effects. When I was offered the chance to rely entirely on a newer therapy, the results were game changing and allowed me to get back to my active and scheduled lifestyle as it once had been. Knowing that a cutting-edge treatment option like Trodelvy may be available to me when/if I need it outside of standard of care shelf-life chemotherapies, in the precious time to come, is what helps me stay present and positive as I navigate life with this incurable diagnosis. Everyone deserves a shot at what works best for them and the more therapies available to us are key. Stage 4 needs so much more."
-**Jen**, MBC patient, diagnosed de novo

"My biggest concern with fear of progression, is that my subtype changes from triple positive to any other subtype. So of course, the more treatments that are available that are effective and not chemo are important to me. I already did loads of chemo because my targeted therapy had to go on pause because of the damage to my heart. It was not fun knowing that I could be left on chemo if the cardiotoxicity didn't improve."
-Margaret, MBC patient, diagnosed de novo while pregnant

5. Improved Outcomes

Each individual patient brings their own personal values and goals to their discussions with their oncology team. Communication and trust in their team is essential. It's important that patients have a clear understanding of trade-offs and are well prepared for common side-effects of a given treatment.

When it comes to therapy for metastatic breast cancer, the primary improvement patients seek is to extend their life beyond what is expected with the current publicly, and to choose, along with their oncologist, the therapy that is best for them.

As Jessica, a hormone positive, MBC patient from our community explains, when the stakes are so high, even a few extra months of survival matter. She explains:

"...those months could be the difference that lets me see my son start kindergarten; they could be the ones that give me time to get him off diapers before it all falls on dad; Or they could be the first time he says I Love You. While a few months are short on time they are bursting with possibility. Life happens in moments after all. Every scan matters.
Only, it's not simply a matter of days, it's also a matter of quality days. It's hard to make memories suffering the side effects of chemo on the couch. It's impossible to keep up with a toddler while managing the debilitating fatigue. An additional line of treatment that allows me quality time with my family is welcomed with open grateful arms...It's not easy for anyone to estimate the value of an extra day of life, but in my case, it could also mean my two-year old has one more day with mom. I'll give him every day I can."

In Rethink's 2018-2019 MBC survey, patients rated controlling disease and extending life expectancy as the most important outcomes for treatment. This suggests that patients value long-term health outcomes over immediate concerns like reducing symptoms or managing side effects. See the full survey results, along with methodology in Appendix A. Comments from the MBC patients surveyed included:

- "Symptom management and shrinking the cancer is the most important thing. Living well is the next most important thing."
- "Keeping me alive for my kids"
- "I want to live, LIVE, and enjoy my life for many more years and not be so afraid.

6. Experience With Drug Under Review

Rethink interviewed 4 patients in 2025 as part of the re-submission who had experience taking abemaciclib for HR+ HER2-negative MBC.

Patient 1: Lisa

I was diagnosed with breast cancer in 2019, I had been undergoing regular mammograms, but found the lump myself. At first it was thought that it was confined to the breast so I started chemo, but was also experiencing back pain scans were done to try to identify what was causing the pain. Bone metastasis were discovered in my scans, so my diagnosis was changed to DeNovo metastatic breast cancer.

In January 2020 I started taking Verzenio and letrozole, which I am still on. Because I have bone metastasis, they will never completely disappear, but they are well managed, not growing, and my scans continue to come back as unremarkable, with no signs of progression. There is a comfort in knowing that you're stable, but I am always still waiting for the other shoe to drop.

I currently undergo scans every 6 months, which is always nerve wracking, but I would prefer to keep the 6 month scans over the 9 month scans so that I am being closely monitored and we are aware as soon as possible if anything changes.

My experience with side effects has been tolerable, I have not experienced the horrible diarrhea that some patients complain about being on this therapy. I have had GI issues, but they have been mostly manageable. After being on this therapy for 6 years I have learned how to manage these side effects and also prepare for sudden onset. For example I will always bring Imodium and anti-nausea medication with me when travelling. I also experience joint pain and fatigue, but I think a lot of those side effects are from the letrozole.

I do find the side effects mostly manageable and acceptable considering that these therapies have been effective of stopping the progression of the cancer. I have taken a short break a couple of times over the past few years due to side effects building up; because abemaciclib dosing is daily, with no breaks, taking a short break helped reset my system and give me enough of a break that the side effects then became manageable again. One of the breaks I took was because I was nauseous all the time, and just taking a short time off treatment resolved this, and when I started taking treatment again the nausea had subsided.

I have been very fortunate to have an oncologist who is very familiar with this treatment and who has been willing to work with me to adjust doses, take treatment breaks, to help manage side effects. I did have a dose reduction fairly early on in treatment due to white blood counts that were too low. I am now taking 100mg twice a day and this has been a well tolerated dose that also continues to work.
I was working full time when diagnosed and have been able to continue to work full time while receiving treatment. I have been very private about my diagnosis, so many of the people I work with don't even know that I had this diagnosis. I am currently taking a break from work as I was finding that the fatigue I was experiencing was hard to manage working full time and also managing all of the things in my personal life, like having two teenage boys at home, and running a household.

Because this is an oral treatment this has made a difference in my ability to work and also participate in regular life activities. I'm not having to go to the hospital all the time for treatment, I'm not having to schedule my travel around frequent treatments. This flexibility has really made a difference in my ability to just live my life.

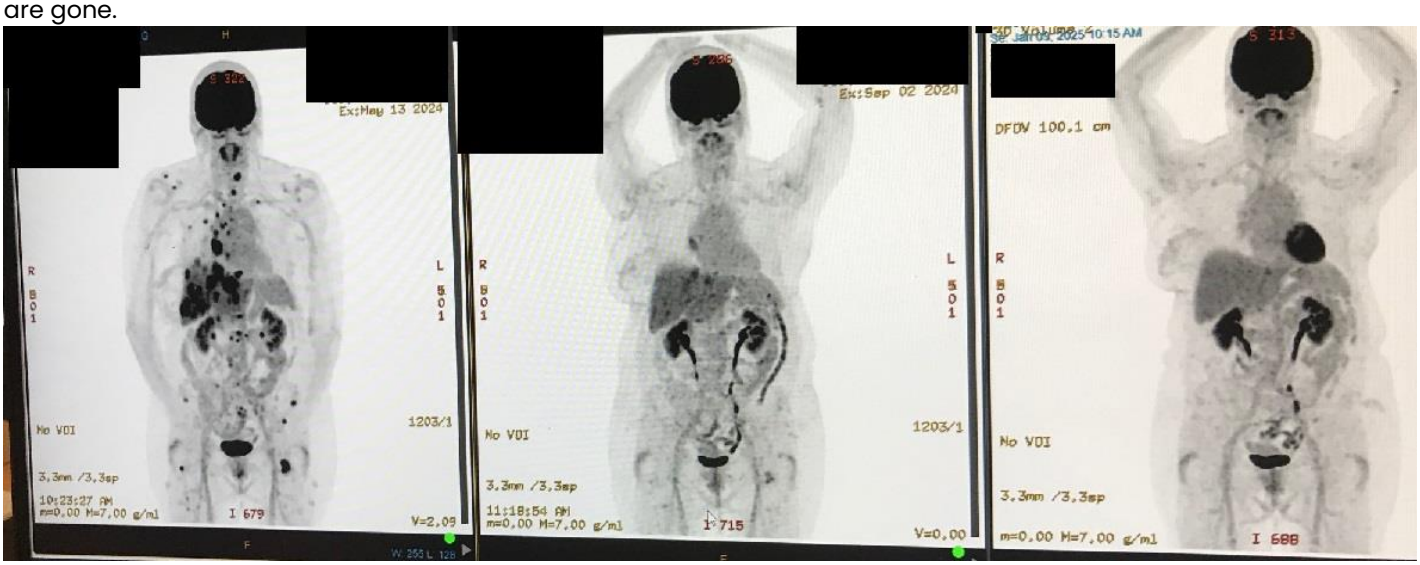
I have also been fortunate that my treatments have been covered through insurance and through support from the manufacturer. I feel for patients who are having to pay out of pocket as the cost can be unmanageable.

I think this is an important treatment for others to have access to. We know that treatment options are important; we all follow the trails, and are looking at which CDK4/6 inhibitor is doing better, but we also know that some drugs work better than others for different people. There are reasons why one therapy may be a better choice for a patient and it's important the doctors and patients have the choice to take a medicine that is the right fit for that patient.

I have been able to generally live my life and do all the things that I want to do. I have two busy teenagers that I am able to be there for; we regularly travel as a family, having just gone to Hawaii for two weeks, and also visiting Europe to see my husbands' family.

Patient 2: Laura

I started treatment for stage 4 breast cancer in May 2024, I am on 50mg of Verzenio two times a day and also faslodex. The first scan (left) is when I was initially diagnosed in May 2024, the second scan (middle) is from September 2024, and the third scan (right) is from January 2025. As you can see from my scans, nearly all my mets are gone.



I did have side effects when I started treatment, mainly diarrhea, and xgeva gave me fly type symptoms for a couple of treatments but now I'm feeling pretty good. Prior to starting treatment I had a bad cough and was very stiff, but since going on treatment I feel very healthy. It thought it was a death sentence when I was diagnosed but having access to these new drugs, they work! I'm able to continue to go on holidays, I'm retired and have been living my life. Everyone should be able to access these treatments.

Patient 3: Heather

I was first diagnosed with HR-positive early-stage breast cancer in 2004. I was later diagnosed with metastatic breast cancer in 2010. My metastatic breast cancer was HR-positive, HER2-negative, we have since learned that it's actually HER2-low but at the time of my diagnosis we were not aware of HER2-low. At the time of this interview I have been living with metastatic breast cancer for 15 years and am currently on my 15th line of treatment. I have lived in Toronto, Calgary and Ottawa during this time and have travelled to different cities in Canada and the US to access various clinical trials.

While being treated for metastatic breast cancer I continued to work up until 2020, which was through 10 lines of treatment.

I was able to gain compassionate access to Verzenio as my 11th line of treatment in 2020. I started on 200mg per day but the GI issues were very significant, so I reduced which made it much more tolerable and I was able to be on this treatment for a year before it stopped working. Even being heavily pre-treated, this treatment worked for me for a year.

Patient 4: Mary

I was diagnosed with early-stage breast cancer in 2013 and then recurred in December 2022. I had lobular breast cancer both times and was diagnosed with skin metastasis and bone metastasis on my second diagnosis.

I have been taking Verzenio and letrozole as my first line of treatment, which I started in January 2023. A PET scan showed a small lesion in my brain, and I had surgery to remove this lesion, this is why my oncologist selected Verzenio because it crossed the blood brain barrier. There has been no evidence of disease since my first scan, after taking Verzenio and letrozole, so the treatment has been working as far as managing my cancer.

I started on the original dose but experienced severe diarrhea, to the point where it was almost impossible to go anywhere as I need to be close to a bathroom. The does was lowered to 150mg per day, and then eventually to 100mg per day, but instead of taking it all at once I take 50mg twice per day, which has made a difference in terms of managing issues I had with diarrhea.

I am still experiencing other side effects, but I think they're mostly from the letrozole; this includes osteo-arthritis, brain fog and joint pain. I used to write and do a lot of genealogy research, but this has come to a halt due to the brain fog and the fatigue. My physician referred me to a palliative clinic to help with some of the side effects, including speech therapy to help with the brain fog.

I am really grateful that my cancer is stable right now. I am hopeful that even if my cancer progresses on this treatment that there are other drugs in development that will continue to help manage it.

7. Companion Diagnostic Test

Testing required for this treatment is already accessible and covered in jurisdictions across Canada.

8. Anything Else?

Patient/physician choice is an important part of treatment. Our health system recognizes that patients need personalized approaches to care that take into consideration the individual as a whole, the specifics of the biology of their tumour, co-morbidities, preference when it comes to side effects, and the dosing schedule. By restricting funding for drugs, that have the efficacy data to support their usage, we are restricting some patients from receiving optimal care. Health care professionals should be able to tailor treatment plans to best meet the needs of their patients, and by restricting reimbursement for some therapies, the health system is creating a barrier for patients.

Appendix: Patient Group Conflict of Interest Declaration

To maintain the objectivity and credibility of the CADTH reimbursement review process, all participants in the drug review processes must disclose any real, potential, or perceived conflicts of interest. This Patient Group Conflict of Interest Declaration is required for participation. Declarations made do not negate or preclude the use of the patient group input. CADTH may contact your group with further questions, as needed.

1. Did you receive help from outside your patient group to complete this submission? If yes, please detail the help and who provided it.

   No

2. Did you receive help from outside your patient group to collect or analyze data used in this submission? If yes, please detail the help and who provided it.

   No

3. List any companies or organizations that have provided your group with financial payment over the past 2 years AND who may have direct or indirect interest in the drug under review.

Table 1: Financial Disclosures

Check Appropriate Dollar Range With an X. Add additional rows if necessary.

Company	$0 to 5,000	$5,001 to 10,000	$10,001 to 50,000	In Excess of $50,000
Lilly 2024			x	
Lilly 2023			x	

I hereby certify that I have the authority to disclose all relevant information with respect to any matter involving this patient group with a company, organization, or entity that may place this patient group in a real, potential, or perceived conflict of interest situation.

Name: Jenn Gordon
Position: Lead Strategic Operations and Engagement
Patient Group: Rethink Breast Cancer
Date: February 28, 2025

APPENDIX A: MBC Patient Survey Results

Information for this report was gathered through an online survey published in English and circulated through communications from Rethink Breast Cancer as well as the Rethink Network and other partner organizations. Messages were also posted on Facebook and Twitter as well as the Breastcancer.org, Cancer Connection and Cancer Survivors Network online discussion forums. 78 metastatic breast patients completed the survey between September 2018 and April 2019.

Rethink Breast Cancer asked respondents to evaluate the importance of different outcomes for their breast cancer treatment on a scale of 1 (not important) to 5 (very important). All the listed outcomes were considered important with no average scores lower than 4.4. However, controlling disease and extending life expectancy were rated as the most important results suggesting that patient values prioritize long-term health outcomes over immediate concerns like reducing symptoms or managing side effects.

Importance of outcome	1 - not important	2	3	4	5 — very important	Average
Controlling disease progression	0.00% 0	0.00% 0	0.00% 0	2.60% 2	97.40% 75	4.97 77
Reducing symptoms	1.30% 1	0.00% 0	12.99% 10	19.48% 15	66.23% 51	4.49 77
Maintaining quality of life	0.00% 0	0.00% 0	1.30% 1	12.99% 10	85.71% 66	4.84 77
Managing side effects	1.30% 1	1.30% 1	12.99% 10	19.48% 15	64.94% 50	4.45 77
Achieving NED (no evidence of disease)	1.32% 1	1.32% 1	1.32% 1	6.58% 5	89.47% 68	4.82 76
Extending life expectancy	0.00% 0	0.00% 0	0.00% 0	2.63% 2	97.37% 74	4.97 76

Comments included:

- Symptoms and shrinking the cancer is the most important thing. Living well is the next most important thing.
- Keep me alive for my kids.
- I want to live, LIVE and enjoy my life for many more years and not be so afraid.

CADTH

CADTH Reimbursement Review

Clinician Group Input

CADTH Project Number: PC0400-000
Generic Drug Name (Brand Name): abemaciclib (Verzenio)
Indication:

This reassessment request for reimbursement is with respect to the treatment of HR-positive, HER2-negative advanced or metastatic breast cancer in combination with an aromatase inhibitor in postmenopausal women as initial endocrine-based therapy.

Verzenio (abemaciclib) is indicated for the treatment of hormone receptor (HR)- positive, human epidermal growth factor receptor 2 (HER2)-negative advanced or metastatic breast cancer in combination with an aromatase inhibitor in postmenopausal women as initial endocrine-based therapy.

Name of Clinician Group: Ontario Health (Cancer Care Ontario) Breast Cancer Drug Advisory Committee ("OH (CCO) Breast DAC")

Author of Submission: Dr. Andrea Eisen and members of the OH (CCO) Breast DAC

1. About Your Clinician Group

OH(CCO)'s Drug Advisory Committees provide timely evidence-based clinical and health system guidance on drug-related issues in support of CCO's mandate, including the Provincial Drug Reimbursement Programs (PDRP) and the Systemic Treatment Program.

2. Information Gathering

Information is gathered via teleconference meeting.

3. Current Treatments and Treatment Goals

As per current CDA Provisional Funding Algorithm (Figure 1 and Figure 2 below), current treatment options would be ribociclib or palbociclib with aromatase inhibitor (AI) in the first-line setting.

PH0053-HRPositive-HER2-Breast-Cancer_Provisional Funding Algorithm

Figure 1: Provisional Funding Algorithm Diagram for HR-Positive, HER2-Negative Breast Cancer, With Inclusion of HER2-Low

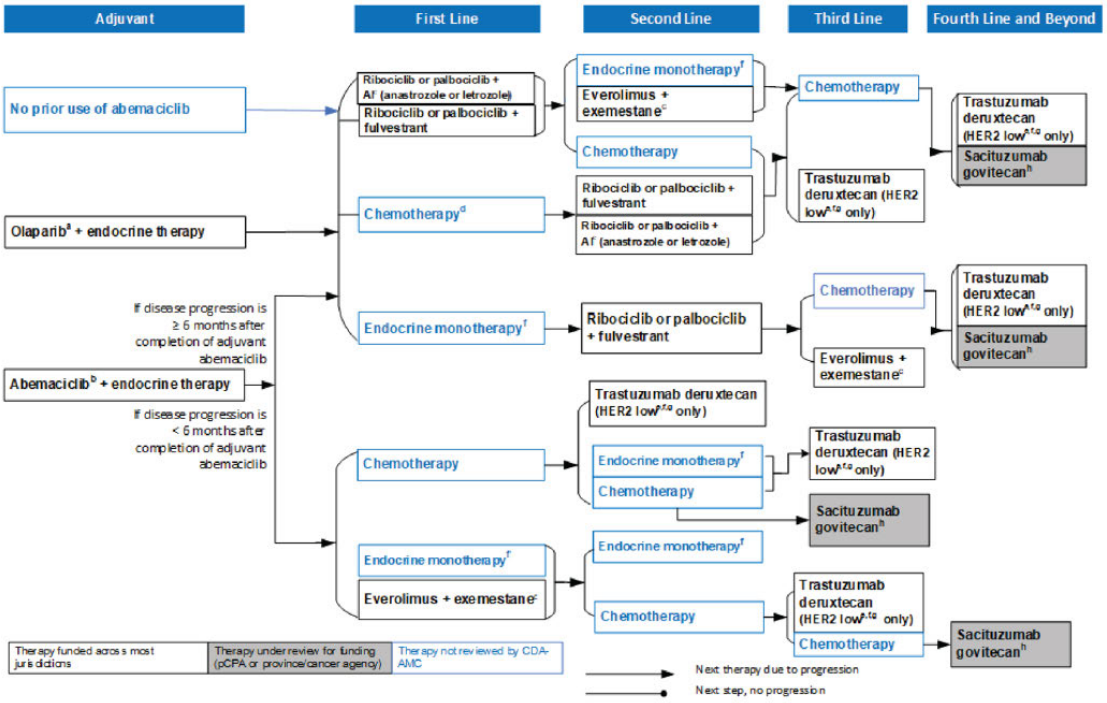
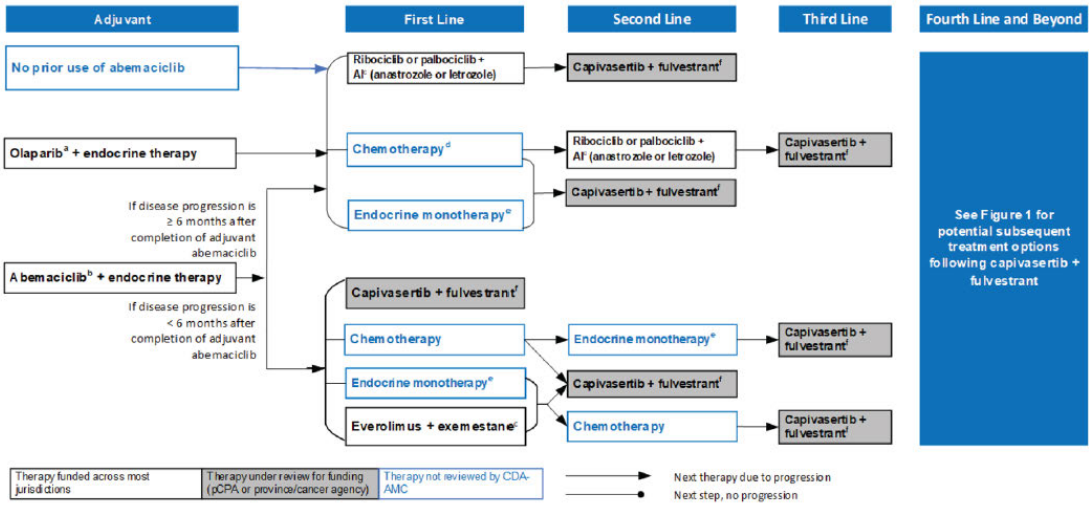


Figure 2: Provisional Funding Algorithm Diagram for Additional Treatment Options for HR-Positive, HER2-Negative Breast Cancer, With Inclusion of HER2-Low, With *PIK3CA, AKT1,* or *PTEN* Alterations



AI = aromatase inhibitor; CDA-AMC = Canada's Drug Agency; HER2 = human epidermal growth factor 2; HR = hormone receptor; pCPA = pan-Canadian Pharmaceutical Alliance.

[a]Olaparib adjuvant therapy is for patients with a deleterious or suspected deleterious germline *BRCA* mutation whose disease has been treated with neoadjuvant or adjuvant chemotherapy. Patients must have confirmation of germline *BRCA* mutation before olaparib treatment is initiated.

[b]Abemaciclib should be reimbursed for a maximum of 2 years (150 mg orally twice daily).

[c]In some jurisdictions, aromatase inhibitors may also include exemestane. Funding for everolimus plus exemestane may vary by province or cancer agency.

[d]Chemotherapy might be the first choice if visceral crisis is suspected; after adequate response, consider other choices.

[e]Patients with HR-positive breast cancer should have received at least 1 endocrine therapy and no longer be considered for endocrine therapy.

[f]Capivasertib plus fulvestrant is indicated for patients with 1 or more *PIK3CA*, *AKT1*, or *PTEN* alterations. Patients must have received at least 1 line of hormone therapy in the metastatic setting or have disease that progressed on adjuvant hormone therapy or within 12 months of adjuvant hormone therapy. Capivasertib plus fulvestrant should not be initiated in patients who have disease that progressed on prior therapy with fulvestrant, received more than 2 lines of hormone therapy, or received more than 1 line of chemotherapy in the metastatic setting.

4. Treatment Gaps (unmet needs)

4.1. Considering the treatment goals in Section 3, please describe goals (needs) that are not being met by currently available treatments.

Advanced breast cancer is incurable and better treatment is needed. Abemaciclib + AI is an oral anti-cancer treatment option, has a different toxicity profile, and MONARCH 3 demonstrated non-statistically significant but clinically meaningful overall survival (OS) benefit.

The following patients (*Patients with visceral crisis, lymphangitic spread, leptomeningeal carcinomatosis, inflammatory breast cancer, or evidence or history of central nervous system metastasis)* were excluded in MONARCH 3; however new evidence is available that patients with visceral disease would do well with CDK4/6 inhibitors and therefore should be considered for inclusion/treatment.

5. Place in Therapy

5.1. How would the drug under review fit into the current treatment paradigm?

Abemaciclib + AI would be one of the options in the first-line setting (currently where palbociclib/ribociclib + AI is on the algorithm).

This would be a good option for patients who cannot tolerate the other two options. The side effect of diarrhea is potentially challenging to manage.

In MONARCH 3, patients were required to have a disease-free interval of at least 12 months from the completion of neoadjuvant or adjuvant endocrine therapy. Prior CDK 4/6 inhibitor or any systemic therapy for advanced disease was not permitted.

5.2. Which patients would be best suited for treatment with the drug under review? Which patients would be least suitable for treatment with the drug under review?

The inclusion and exclusion criteria excluded patients with less than 12 months disease-free interval from endocrine therapy. Our group believes that patients who relapse after 6 months should be eligible, aligned with the current algorithm.

5.3 What outcomes are used to determine whether a patient is responding to treatment in clinical practice? How often should treatment response be assessed?

As per standard clinical practice for response and toxicity.

5.4 What factors should be considered when deciding to discontinue treatment with the drug under review?

Toxicity or disease progression.

5.5 What settings are appropriate for treatment with [drug under review]? Is a specialist required to diagnose, treat, and monitor patients who might receive [drug under review]?

Outpatient – both abemaciclib and AI are oral take home cancer drugs.

6. Additional Information

NA

7. Conflict of Interest Declarations

To maintain the objectivity and credibility of the CADTH drug review programs, all participants in the drug review processes must disclose any real, potential, or perceived conflicts of interest. This conflict of interest declaration is required for participation. Declarations made do not negate or preclude the use of the clinician group input. CADTH may contact your group with further questions, as needed. Please see the *Procedures for CADTH Drug Reimbursement Reviews* (section 6.3) for further details.

1. Did you receive help from outside your clinician group to complete this submission? If yes, please detail the help and who provided it.

OH (CCO) PDRP provided secretariat function to the group

2. Did you receive help from outside your clinician group to collect or analyze any information used in this submission? If yes, please detail the help and who provided it.

   No.

3. List any companies or organizations that have provided your group with financial payment over the past two years AND who may have direct or indirect interest in the drug under review. **Please note that this is required for each clinician who contributed to the input — please add more tables as needed (copy and paste). It is preferred for all declarations to be included in a single document.**

Declaration for Clinician 1

Name: Dr. Andrea Eisen
Position: Lead, OH (CCO) Breast DAC
Date: 28-02-2025

☒ **I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Clinician 1

Company	Check appropriate dollar range*			
	$0 to $5,000	$5,001 to $10,000	$10,001 to $50,000	In excess of $50,000
Add company name				
Add company name				
Add or remove rows as required				

* Place an X in the appropriate dollar range cells for each company.

Declaration for Clinician 2

Name: Dr. Olexiy Aseyev
Position: Member, OH (CCO) Breast DAC
Date: 28-02-2025

☒ I hereby certify that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 2: Conflict of Interest Declaration for Clinician 2

Company	Check appropriate dollar range*

	$0 to $5,000	$5,001 to $10,000	$10,001 to $50,000	In excess of $50,000
Add company name				
Add company name				
Add or remove rows as required				

* Place an X in the appropriate dollar range cells for each company.

Declaration for Clinician 3

Name: Dr. Orit Freedman
Position: Member, OH (CCO) Breast DAC
Date: 28-02-2025

☒ I hereby certify that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 3: Conflict of Interest Declaration for Clinician 3

	Check appropriate dollar range*			
Company	$0 to $5,000	$5,001 to $10,000	$10,001 to $50,000	In excess of $50,000
Add company name				
Add company name				
Add or remove rows as required				

* Place an X in the appropriate dollar range cells for each company.

Declaration for Clinician 4

Name: Dr. Haider Samawi
Position: Member, OH (CCO) Breast DAC
Date: 28-02-2025

☒ I hereby certify that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 4: Conflict of Interest Declaration for Clinician 4

	Check appropriate dollar range*			
Company	$0 to $5,000	$5,001 to $10,000	$10,001 to $50,000	In excess of $50,000
Novartis	X			
Add company name				

Add or remove rows as required				

* Place an X in the appropriate dollar range cells for each company.

Declaration for Clinician 5

Name: Dr. Ronita Lee
Position: Member, OH (CCO) Breast DAC
Date: 28-02-2025

☒ I hereby certify that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 5: Conflict of Interest Declaration for Clinician 5

	Check appropriate dollar range*			
Company	**$0 to $5,000**	**$5,001 to $10,000**	**$10,001 to $50,000**	**In excess of $50,000**
Novartis	X			
Pfizer	X			
Add or remove rows as required				

* Place an X in the appropriate dollar range cells for each company.

CDA Reimbursement Review
Clinician Group Input Template

Clinician Group Input

CDA Project Number: PC0400-000
Generic Drug Name (Brand Name): Abemaciclib (Verzenio)
Indication: Verzenio (abemaciclib) is indicated for the treatment of hormone receptor (HR)- positive, human epidermal growth factor receptor 2 (HER2)-negative advanced or metastatic breast cancer in combination with an aromatase inhibitor in postmenopausal women as initial endocrine-based therapy.

Name of Clinician Group: REAL Alliance
Author of Submission: Dr. Mita Manna

1. About Your Clinician Group

The Research Excellence, Active Leadership (REAL) Canadian Breast Cancer Alliance is an equitable standing nucleus committee of multi-disciplinary, clinical-academic oncologists across Canada and Breast Cancer Canada, a patient organization. Formed in December 2023 in recognition that a national ecosystem of leadership should address evidence-based guidance and recommendations for equitable breast cancer clinical management. REAL Alliance publishes national clinical consensus recommendations, routinely updated, for timely health policy, funding, and consistent clinical adoption based on research evidence and medical specialty expertise to ensure optimal outcomes for breast cancer patients across all provinces and territories in Canada.

2. Information Gathering

Our members met virtually and exchanged views via email to discuss our clinical recommendations for abemaciclib in patients with hormone receptor positive (HR+), HER-2 negative (HER2-), advanced or metastatic-stage breast cancer in the first-line setting. Our recommendations were compiled to reflect our clinical opinion as medical specialists in breast cancer on what we believe is best for our patients. Our opinion is based on literature review, level 1 data from clinical trials, and recent data releases from international congresses, as well as our collective clinical expertise. We urge CDA to consider our clinical recommendation as per the evidence in this document along with the submissions put forward by patient advocacy groups to make an informed decision regarding the place in therapy for abemaciclib with an aromatase inhibitor in patients with HR+/HER2– advanced or metastatic breast cancer in first-line treatment setting. The collective expertise from this group equates to decades of clinical experience in the management of patients with breast cancer.

3. Current Treatments and Treatment Goals

CDK4/6is + ET is the gold standard for first-line treatment of advanced or metastatic HR+/HER2-.

Breast cancer remains a significant health challenge in Canada, with an estimated 78 women diagnosed daily. In 2022, approximately 5,500 Canadian women were expected to succumb to breast cancer, accounting for 14% of all cancer-related deaths among women [1]. Despite recent advancements in breast cancer treatments, progression to metastatic disease shifts the focus from curative to

palliative, focusing on prolonging survival and preserving quality of life. That said, many patients live a good quality of life for years with metastatic disease.

The **principles of treatment** in the HR+/HER2- metastatic setting are to tailor therapy according to the treatment-free interval after the completion of adjuvant therapy, using the most effective agents in the first-line setting, and planning for subsequent lines of therapy. The **goals of treatment** are to extend life, maintain quality of life, minimize treatment-related adverse events (AEs). A key strategy in managing metastatic breast cancer is delaying the need for chemotherapy by utilizing targeted and systemic therapies with a preference for oral therapies to reduce the burden of healthcare resource utilization. As clinicians, it is important to have access to all evidenced-based therapies as patients are individuals and may tolerate one therapy and not another.

Since 2016, the introduction of cyclin dependent kinase 4/6 inhibitors (CDK4/6is) has transformed the treatment landscape for HR+/HER2– metastatic breast cancer. **Palbociclib** was the first to be approved, followed by **ribociclib** in 2018 [2] and **abemaciclib** in 2019 [3]. In 2020, ribociclib's approval expanded to include premenopausal women [4]. All agents, when combined with endocrine therapy (ET), significantly improve **progression-free survival (PFS)** in the first-line metastatic setting. Only ribociclib and abemaciclib have demonstrated an **overall survival (OS)** benefit over single-agent ETs while maintaining an acceptable quality of life. Palbociclib failed to demonstrate an OS benefit in the first-line metastatic setting. Notably, CDK4/6is are oral agents and are known to delay the need for chemotherapy, which are attributes valued by both patients and clinicians. In Canada, ribociclib and palbociclib have been approved for reimbursement in the first-line setting, even though palbociclib failed to demonstrate an OS advantage. Despite the pan-Canadian Oncology Drug Review's (pCODR) recommendation for reimbursement approval in 2019 (PC0161-000) [5], abemaciclib has only been approved for reimbursement in Quebec in the metastatic setting [5,6].

4. Treatment Gaps (unmet needs)

4.1. Considering the treatment goals in Section 3, please describe goals (needs) that are not being met by currently available treatments.

Inconsistent OS and safety limitations amongst currently funded CDK4/6i

Among **publicly funded CDK4/6 inhibitors**, ribociclib is the preferred option for the first-line treatment of HR+/HER2- advanced or metastatic breast cancer, given its proven OS benefit [7]. In contrast, palbociclib demonstrated a PFS benefit but failed to show a significant improvement in OS [8]. When ribociclib established its OS benefit, OS data for abemaciclib was still immature. As a result, palbociclib – despite its inferior OS data – remains the funded alternative for patients who are ineligible for or intolerant to ribociclib.

In the clinical trials, ribociclib was associated with QTc prolongation and thus, there is a Health Canada requirement for ECG monitoring. Furthermore, at least 10% of patients need to indefinitely stop ribociclib due to severe liver toxicity, a result of an auto-immune reaction requiring steroid administration. Ribociclib also carries issues of drug-drug interactions, specifically with antidepressants and antinausea agents, as it is a moderate inhibitor of CYP3A4 (a key enzyme in drug metabolism) [9]. This is especially concerning given that the prevalence of depressive symptoms among survivors of breast cancer is significantly higher (66%) in comparison to the general population and persists many years after diagnosis [10]. For patients who cannot tolerate ribociclib, either due to the burden of ECG monitoring, risk of prolonged QTc interval, liver toxicity, or drug-drug interactions, there is currently no other **publicly funded CDK4/6i that can offer an OS benefit.**

Ribociclib and palbociclib also present treatment challenges related to neutropenia. Both drugs follow a 21-day on/7-day off dosing schedule to allow for the bone marrow recovery, which can affect patient adherence and lead to fluctuating therapeutic levels during off-treatment periods. This inconsistency may limit their suitability for patients with more aggressive disease, who comprise approximately 15% of cases [11]. In contrast, abemaciclib is associated with lower rates of neutropenia and thus can be dosed continuously. It is also the most potent of the three CDK4/6 inhibitors, is the only one that has demonstrated monotherapy efficacy, and is preferred by some clinicians for aggressive disease [12].

Thus, more CDK4/6i options are required that have demonstrated OS benefit in the front-line HR+/HER2- metastatic breast cancer setting to address the long-term survival needs of patients. Expanding the range of available CDK4/6i therapies

ensures a more personalized approach to treatment, maximizing both efficacy and tolerability, for a broader spectrum of patients.

5. Place in Therapy

5.1. How would the drug under review fit into the current treatment paradigm?

Abemaciclib is more potent than ribociclib or palbociclib with a lower half-maximal inhibitory concentration (IC50) for both CDK4 and CDK6 and is 14 times more potent against CDK4 (important for breast tumorigenesis) than CDK6. This CDK4 selectivity results in significantly lower rates of neutropenia than either ribociclib or palbociclib, which allows for continuous dosing, enhancement of adherence, and consistent drug exposure [13,14]. Abemaciclib is also the only CDK4/6i that has demonstrated single agent activity in the metastatic setting [15].

The 2024 update to MONARCH-3 trial confirmed the **long-term PFS and OS benefit of abemaciclib** in HR+/HER2- post-menopausal patients in the first-line metastatic setting whose breast cancer relapsed >12 months after completion of adjuvant endocrine therapy [16]. In this endocrine-sensitive population, the **final PFS analysis** at a median follow-up of 26.7 months demonstrated a remarkable 13.4-month improvement in median PFS with abemaciclib plus an aromatase inhibitor (AI) versus AI alone, with a hazard ratio (HR) of 0.540 (95% CI: 0.418-0.698; P<0.000002). With a **median follow-up of 8.1 years the PFS treatment effect is persistent** with a median PFS of 29 months for abemaciclib compared to 14.8 months in the placebo arm (an absolute difference of 14.3 months). With a median follow-up of 8.1 years, the **final OS results** demonstrated a median OS of 66.8 months for abemaciclib and 53.7 months for the placebo arm, an absolute difference of 13.1 months. The 5- and 6-year OS rates were 54.5% versus 42.1% and 45.7% versus 35.2%, respectively, for abemaciclib versus placebo. The threshold for statistical significance was not met though this trend was consistent across all subgroups, including those with visceral crisis (median OS: 63.7 vs 48.8 months; HR 0.758; 95% CI: 0.558-1.030; P=0.0757). Although the OS benefit did not reach statistical significance, likely due to the study being underpowered compared to similar trials with palbociclib and ribociclib, the **observed survival difference of 13 months is clinically meaningful**. This trend in OS benefit, despite being a secondary endpoint, reinforces the role of abemaciclib in this setting.

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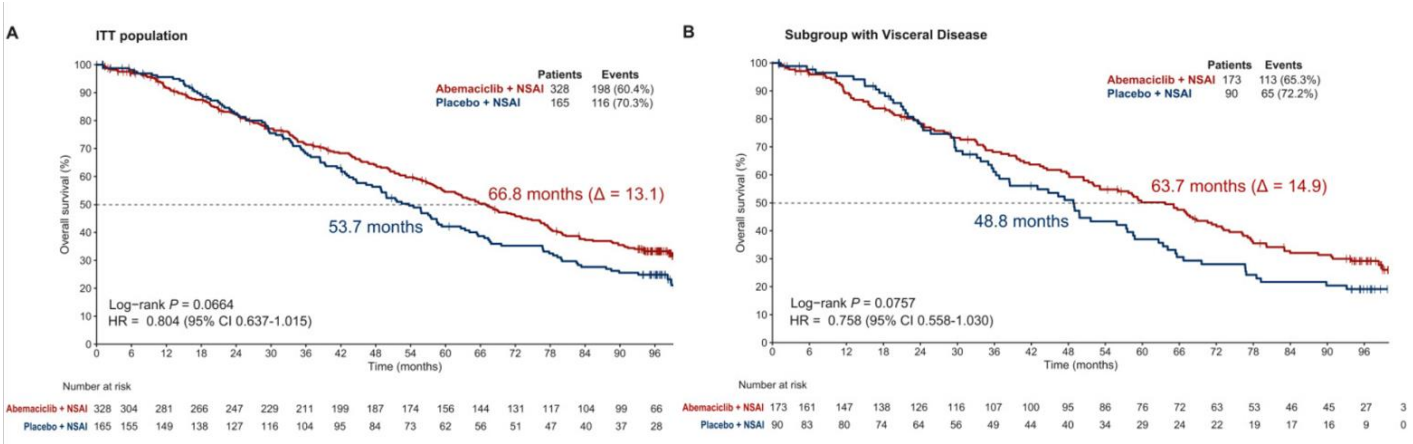

Figure 1. Kaplan–Meier curves of overall survival in the (A) ITT population and (B) subgroup with visceral disease. CI, confidence interval; HR, hazard ratio; ITT, intent-to-treat; NSAI, nonsteroidal aromatase inhibitor. Figure taken from Goetz et al. 2024 [16].

This update to Monarch-3 also showed that the regimen is **reasonably well-tolerated** with no late toxicity signals emerging. Importantly, **global patient-reported outcomes** were like those in the control arm, indicating that **quality of life is maintained**. While onset of diarrhea in this and other MONARCH trials is a known toxicity for abemaciclib, most diarrhea events occurred early in treatment (during cycle 1) and were typically low grade, manageable, and reversable [17]. Other AEs, such as neutropenia, nausea, and decreased appetite, were considerably less than what is observed with ribociclib and palbociclib. This contrasting AE profile allows

clinicians options to individualize treatments in key populations, such as those with wide-spread bone marrow involvement who could benefit from the lower cytopenia rate with abemaciclib. Of note, dose adjustments and discontinuation rates were slightly higher in older patients, but the overall safety profile supports the inclusion of abemaciclib as a viable option for this population [17].

In support of the use of **abemaciclib in patients with visceral crises**, The ABIGAIL trial further explored abemaciclib + ET in aggressive ER+/HER2- metastatic disease, including visceral involvement, comparing it to the usual standard of care paclitaxel chemotherapy. Abemaciclib + ET met its primary endpoint, achieving an objective response rate (ORR) of 58.8% versus 40% with paclitaxel [18]. This trial is significant as it challenges the traditional reliance on chemotherapy for these patients, demonstrating that abemaciclib + ET can be an effective alternative. Given that **many patients seek to avoid chemotherapy** in the frontline setting, these findings have important clinical implications.

The integration of abemaciclib into the current treatment paradigm for HR+/HER2– advanced and metastatic breast cancer offers a valuable option in the first line setting, including patients with high-risk features such as visceral metastases. Its continuous dosing schedule and manageable safety profile make it a practical and effective addition to standard AI, aligning well with current clinical practice. Furthermore, as our experience with abemaciclib in the adjuvant setting has grown, improved management strategies have emerged, which are likely to further optimize its side effect profile in real-world applications.

Thus, based on these results and our experience, we recommend that abemaciclib, in combination with AI, be made available as a frontline treatment option for patients with HR+/HER2- advanced or metastatic breast cancer.

5.2. Which patients would be best suited for treatment with the drug under review? Which patients would be least suitable for treatment with the drug under review?

We recommend abemaciclib in combination with an AI in endocrine sensitive patients with HR+/HER2- advanced or metastatic breast cancer who had no prior systemic therapy in the advanced setting, as per the MONARCH-3 trial eligibility criteria. This population has been shown to clearly derive PFS and a trend towards OS benefit **[16]**. The eligible population would not expand; rather abemaciclib would just be included as one of the treatment options for current front-line CDK4/6i standard of care.

Least suitable patient populations would include those ineligible for the MONARCH-3 study or contraindicated to abemaciclib.**[16,19]**

5.3 What outcomes are used to determine whether a patient is responding to treatment in clinical practice? How often should treatment response be assessed?

Monitoring is required most notably in the first four months of abemaciclib initiation, which largely includes blood work, monitoring for toxicities and adherence assessment. AEs are manageable with early intervention including dose reduction and standard supportive care.

Current health systems in place can incorporate this follow up monitoring of oral at-home therapy, with consideration of health system monitoring models that utilize pharmacists and nurses, where necessary, with no additional clinical workflow burden. Importantly, it reduces resources needed for intravenous chemotherapy.

5.4 What factors should be considered when deciding to discontinue treatment with the drug under review?

Abemaciclib + AI combination therapy should be discontinued at the first sign of disease progression or in the case of persistent toxicity, as per the product monograph.

5.5 What settings are appropriate for treatment with drug under review? Is a specialist required to diagnose, treat, and monitor patients who might receive drug under review?

Oncologists with experience in treating breast cancer patients are required for the initial treatment recommendation and early monitoring of abemaciclib + AI combination therapy. Pharmacy/nursing expertise can support the management of oral agent treatment and routine AE screening, including assessing for drug-drug interactions, checking lab tests, and assessing treatment adherence.

6. Additional Information

Of note, and per current standard practice, men and premenopausal women also received goserelin (ovarian function suppression).

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Declaration for Jean-Francois Boileau

Name: Dr. Jean-Francois Boileau

Position: MD

Date: 12/5/2024 | 3:58:11 PM PST

☒ **I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Jean-Francois Boileau

Company	Check appropriate dollar range*			
	$0 to $5,000	$5,001 to $10,000	$10,001 to $50,000	In excess of $50,000
Roche	x			
Genomic Health	x			
NanoString Technologies	x			
Pfizer	x			
Lilly		x		
Novartis		x		
Merck		x		
AstraZeneca	x			
Allergan	x			
Abbvie	x			
RNA Diagnostics Inc	x			
Bristol Myers Squibb	x			
Exact Sciences	x			

Declaration for Dr. Nathaniel Bouganim

Name: Nathaniel Bouganim

Position:

Date: 2024 02 20

☒ **I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Nathaniel Bouganim

	Check appropriate dollar range*			
Company	**$0 to $5,000**	**$5,001 to $10,000**	**$10,001 to $50,000**	**In excess of $50,000**
AstraZeneca	X			
Novartis		X		
Knight	X			
Gilead	X			
McGill University	X			
Pfizer	X			

New or Updated Declaration for Christine Brezden-Masley	
Name	*Dr. Christine Brezden-Masley*
Position	*Medical Oncologist and Associate Professor of Medicine, University of Toronto*
Date	*February 21, 2024*
☒	**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Conflict of Interest Declaration

List any companies or organizations that have provided your group with financial payment over the past two years AND who may have direct or indirect interest in the drug under review.

Company	Check Appropriate Dollar Range			
	$0 to 5,000	$5,001 to 10,000	$10,001 to 50,000	In Excess of $50,000
Astellas	☐	☐	☒	☐
Eli Lilly	☐	☐	☒	☐
Astra Zeneca	☐	☐	☒	☐
Pfizer	☐	☐	☒	☐
Merck	☒	☐	☐	☐
BMS	☐	☒	☐	☐
Amgen	☐	☐	☐	☐
Beigene	☒	☐	☐	☐
Gilead Sciences	☐	☒	☐	☐
Novartis	☐	☐	☒	☐
Seagen	☐	☒	☐	☐
Hoffman La Roche	☒	☐	☐	☐

Declaration for Dr. Jeffrey Cao

Name: Jeffrey Cao

Position: Provincial Breast Tumour Team Lead, Alberta Health Services Cancer Care Alberta

Date: February 26, 2025

☒ **I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Jeffrey Cao

Company	Check appropriate dollar range*			
	$0 to $5,000	$5,001 to $10,000	$10,001 to $50,000	In excess of $50,000
Oncology Education	X			
Novartis		X		
Gilead	X			
Union Oncology Centre	X			
Pfizer		X		
La Roche-Posay			X	
AstraZeneca	X			
Daiichi-Sankyo	X			
Merck		X		
Breast Cancer Canada	X			
Canadian Breast Cancer Conference	X			
Canadian Breast Cancer Symposium	X			

Declaration for Stephen Chia

Name: Dr. Stephen Chia

Position: Medical Oncologist, BC Cancer Breast Tumour Group Chair

Date: Feb 20, 2024

☒ **I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Stephen Chia

Company	Check appropriate dollar range*			
	$0 to $5,000	**$5,001 to $10,000**	**$10,001 to $50,000**	**In excess of $50,000**
Novartis		X		
Eli Lilly	X			
AstraZeneca		X		
Daiichi Sankyo	X			
Merck	X			
Gilead	X			
Hoffmann LaRoche	X			

Declaration for Scott Edwards

Name: Scott Edwards

Position: Clinical Oncology Pharmacy Specialist at the Cancer Care Program in St. John's Newfoundland

Date: **9/10/2024 | 4:15:51 PM PDT**

☒**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Scott Edwards

Company	Check appropriate dollar range*			
	$0 to $5,000	**$5,001 to $10,000**	**$10,001 to $50,000**	**In excess of $50,000**
Astellas	X			
AstraZeneca	X			
Apobiologix	X			
Gilead	X			
Novartis	X			
Pfizer		X		
Ipsen	X			

Declaration for Clinician Karen Gelmon

Name: Dr. Karen Gelmon

Position: Medical Oncologist, Department of Medical Oncology, British Columbia Cancer Agency, Professor of Medicine, University of British Columbia

Date: December 16, 2024

☒**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Karen Gelmon

	Check appropriate dollar range*			
Company	**$0 to $5,000**	**$5,001 to $10,000**	**$10,001 to $50,000**	**In excess of $50,000**
AstraZeneca		x		
Eli Lilly	x			
Gilead Sciences	x			
Novartis	x			
Pfizer	x			
Seagan	x			
McGill University	x			
CIHR	x			
Merck	x			
City of Hope Hospital	x			
Celuity	x			

Declaration for Dr. Nayyer Iqbal

Name: Nayyer Iqbal

Position: **Professor, Department of Oncology and Medical Oncologist**

Date: **12/6/2024 | 10:41:07 PM EST**

☒**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Nayyer Iqbal

Company	Check appropriate dollar range*			
	$0 to $5,000	$5,001 to $10,000	$10,001 to $50,000	In excess of $50,000
Bayer	X			
Ipsen	X			
Eisai	X			
Janseen	X			
Pfizer	X			
Novartis	X			
Astella	X			
Tolmar	X			
Astra Zeneca	X			
BMS	X			

Declaration for Anil Abraham Joy

Name: Dr. Anil Abraham Joy

Position: **Medical Oncologist**

Date: **12/6/2024 | 10:28:40 AM EST**

☒**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Anil Abraham Joy

Company	Check appropriate dollar range*			
	$0 to $5,000	$5,001 to $10,000	$10,001 to $50,000	In excess of $50,000
AstraZeneca		x		
BMS	x			
DS	x			
Gliead		x		
Eli Lilly	x			
Merck	x			
Novartis	x			
Pfizer	x			
Roche	x			

Declaration for Dr. Kara Laing

Name: Kara Laing

Position: Medical Oncologist

Date: 27-Feb-2025

☒ **I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Kara Laing

Company	Check appropriate dollar range*			
	$0 to $5,000	$5,001 to $10,000	$10,001 to $50,000	In excess of $50,000
Novartis		X		
Taro	X			
Pfizer	X			
Eli Lilly	X			

Declaration for Nathalie Levasseur

Name: Dr. Nathalie Levasseur

Position: **Médical Oncologist**

Date: **12/5/2024 | 6:34:23 PM PST**

☒**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Nathalie Levasseur

Company	Check appropriate dollar range*			
	$0 to $5,000	$5,001 to $10,000	$10,001 to $50,000	In excess of $50,000
Abbvie	x			
AstraZeneca		x		
Eli Lilly		x		
Exact Sciences		x		
Gilead		x		
Knight Therapeutics		x		
Merck	x			
Novartis		x		
Pfizer		x		
Roche	x			
Seagan	x			
TerSera	x			

Declaration for Clinician Dr. Mita Manna

Name: Dr. Mita Manna

Position: Medical Oncologist, Saskatoon Cancer Center and Provincial Disease Site Lead for Breast Oncology in Saskatchewan Assistant Professor at the University of Saskatchewan, MD FRCPC

Date: 2/13/2024 | 9:54:14 AM PST

☒**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Mita Manna

Company	Check appropriate dollar range*			
	$0 to $5,000	$5,001 to $10,000	$10,001 to $50,000	In excess of $50,000
AstraZeneca		x		
Ipsen	x			
Advanced Accelerator Applications	x			
Knights Therapeutics	x			
Eli Lilly		x		
Gilead Sciences		x		
Novartis		x		
Pfizer	x			
Bristol Myers Squibb	x			
Merck		x		
McGill University	x			

Declaration for Dr. Callista Phillips

Name: Dr. Callista Phillips

Position: **Medical Oncologist JBH cancer clinic Burlington and JCC Hamilton**

Date: **Feb 25/25**

☒ I hereby certify that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Callista Phillips

Company	Check appropriate dollar range*			
	$0 to $5,000	$5,001 to $10,000	$10,001 to $50,000	In excess of $50,000
Pfizer	Yes	No	No	No
Astra Zeneca	Yes	No	No	No
Lilly	Yes	No	No	No
Merck	Yes	No	No	No
Bayer	Yes	No	No	No
EMD Seronoi	Yes	No	No	No
Gilead Science	Yes	No	No	No

Declaration for Dr. Maged Salem

Name: Maged Salem

Position: **Medical oncologist. The Moncton Hospital**

Date: **12/10/2024 | 3:28:02 AM PST**

☒**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Maged Salem

Company	Check appropriate dollar range*			
	$0 to $5,000	**$5,001 to $10,000**	**$10,001 to $50,000**	**In excess of $50,000**
Novartis	X			
Lilly	X			
pfizer	X			
Roche	X			
AZ	X			
Gilead	X			

Declaration for Clinician Dr. Sandeep Sehdev

Name: Dr. Sandeep Sehdev

Position: Medical Oncologist, lead of breast cancer disease site group at The Ottawa Hospital Cancer Centre. Assistant Professor, U of Ottawa.

Date: 10-FEB-2024

☒**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Sandeep Sehdev

Company	Check appropriate dollar range*			
	$0 to $5,000	$5,001 to $10,000	$10,001 to $50,000	In excess of $50,000
AstraZeneca			X	
Novartis			X	

Declaration for Christine Simmons

Name: Dr. Christine Simmons

Position: **PI - medical oncologist**

Date: **12/13/2024 | 11:27:58 AM EST**

☒**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Christine Simmons

Company	Check appropriate dollar range*			
	$0 to $5,000	$5,001 to $10,000	$10,001 to $50,000	In excess of $50,000
AstraZeneca	x			
Knight	x			
Gilead	x			
Pfizer	x			
Novartis	x			
Bayer	x			
Lilly	x			
Merck	x			
Eisai	x			

CDA Reimbursement Review
Clinician Group Input Template

Clinician Group Input

CDA Project Number: PC0409-000
Generic Drug Name (Brand Name): Abemaciclib (Verzenio)
Indication: Abemaciclib (Verzenio) is indicated for the treatment of hormone receptor (HR)- positive, human epidermal growth factor receptor 2 (HER2)-negative advanced or metastatic breast cancer in combination with fulvestrant in women with disease progression following endocrine therapy. Pre- or perimenopausal women must also be treated with a GnRH agonist.

Name of Clinician Group: REAL Alliance
Author of Submission: Dr. Sandeep Sehdev

1. About Your Clinician Group

The Research Excellence, Active Leadership (REAL) Canadian Breast Cancer Alliance is an equitable standing nucleus committee of multi-disciplinary, clinical and academic oncologists across Canada and Breast Cancer Canada, a patient organization. Formed in December 2023 in recognition of the need for a national voice to support evidence-based and equitable breast cancer management. The REAL Alliance publishes national clinical consensus recommendations, routinely updated, to guide timely health policy and funding decisions and to support knowledge translation and clinical adoption to ensure optimal outcomes for breast cancer patients across all provinces and territories in Canada.

2. Information Gathering

Our members met virtually and exchanged views via email to discuss our clinical recommendations for abemaciclib in patients with HR+/HER2- advanced or metastatic-stage breast cancer whose breast cancer has progressed on endocrine therapy (ET). Our recommendations were compiled to reflect our clinical opinion as medical specialists in breast cancer on what we believe is best for our patients. Our opinion is based on literature review, level 1 data from clinical trials, and recent data releases from international congresses, as well as our collective clinical expertise. We urge CDA to consider our clinical recommendation along with the submissions put forward by patient advocacy groups. The collective expertise from this group spans decades of clinical experience in the management of patients with breast cancer.

3. Current Treatments and Treatment Goals

Breast cancer is the most common cancer among women around the world and is one of the leading causes of cancer-related deaths in women [1]. Among its subtypes, HR+/HER2- is the most prevalent, comprising 70% of all cases [2]. Advances in the last decade have resulted in curative treatments for the early stages of the disease. Despite this, many women still progress to the metastatic setting. In the metastatic setting, palliative treatment goals include extending progression-free survival (PFS) and overall survival (OS) while minimizing adverse events (AEs) to preserve quality of life. Of note, a key goal of clinicians and of patients living with metastatic breast cancer is delaying the need for chemotherapy by utilizing targeted and systemic therapies, with a preference for oral therapies.

Delaying chemotherapy aligns with patient preferences but also reduces both the burden on chemotherapy clinics and hospital resource utilization. Historically, ET has been the backbone of first-line treatment for metastatic HR+/HER2- breast cancer with aromatase inhibitors (AIs) being the preferred initial ET. In the last decade, the addition of a CDK4/6 inhibitor to an AI has significantly improved outcomes, making this combination the standard of care for most patients [3–6]. That said, AI monotherapy remains a relevant option for some patients with indolent or low-burden disease or those preferring a less intensive first-line approach, particularly in light of. recent findings from the SONIA trial, which showed non-inferior PFS2 when a CDK4/6 inhibitor (mostly palbociclib) was delayed to the second-line setting [7].

When patients are on an AI in the first-line setting (with or without a CDK4/6 inhibitor) and their disease progresses, the standard of care is to switch the ET backbone from an AI to fulvestrant. For patients who had not had first line CDK 4/6 inhibition, fulvestrant is usually combined with a CDK4/6 inhibitor in second line (ribociclib or palbociclib available outside of Quebec). Alternatively, everolimus (an mTOR inhibitor) combined with exemestane can be used, though this approach predates the widespread adoption of CDK4/6 inhibitors. The availability of multiple CDK4/6 inhibitor options with fulvestrant provides flexibility in treatment selection, allowing physicians to tailor therapy based on patient-specific factors, including contraindications. However, access to CDK4/6 inhibitors in Canada is limited to ribociclib and palbociclib, as abemaciclib is only reimbursed in Quebec in this setting [8–12]. While both ribociclib and palbociclib are available, palbociclib has not demonstrated an OS benefit, making it a less desirable option [5,13]. In contrast, ribociclib in combination with fulvestrant has shown overall survival benefit in the second-line setting [14,15]. However, its toxicity profile, including concerns over QTc prolongation and liver enzyme elevations, raises issues, especially in cardiac patients and those at risk of drug interactions. This gap in drug treatment options has led to the frequent use of palbociclib despite OS statistical significance not being reached in either the first- or second-line setting.

4. Treatment Gaps (unmet needs)

4.1. Considering the treatment goals in Section 3, please describe goals (needs) that are not being met by currently available treatments.

There is a need for more choices for CDK4/6 inhibitors in the second-line setting

As mentioned, our treatment goals in metastatic breast cancer are to extend life while preserving quality of life. It should be stated that OS is the most important efficacy endpoint in clinical trials, and it is also the most important outcome for patients. In addition, a core therapeutic goal in metastatic breast cancer is to delay the need for chemotherapy while maintaining disease control. Finally, if possible, oral agents are preferred over intravenous (IV) infusions as the burden on the cancer clinic and resource utilization is reduced. Currently, we only have access to two other CDK4/6 inhibitors in the second-line setting that meet these goals: one without OS benefit (palbociclib) and the other with sometimes challenging potential toxicities (ribociclib). Thus, there is a need for another therapeutic choice with an OS benefit drug in the second-line setting.

Abemaciclib in combination with fulvestrant in the second-line setting has proven PFS and OS benefit and a manageable safety profile and yet it is not reimbursed in the second-line setting outside of Quebec [8,9]. The publicly funded CDK4/6 inhibitor options in Canada in the second-line setting are ribociclib and palbociclib. Ribociclib has demonstrated a clear OS advantage, but its use comes with challenges [6]. In the clinical trials, ribociclib was associated with QTc prolongation and thus, there is a Health Canada requirement for electrocardiogram (ECG) monitoring. Furthermore, at least 10% of patients need to permanently discontinue ribociclib due to severe liver toxicity, a result of an auto-immune reaction requiring steroid administration. Ribociclib also carries issues of drug-drug interactions, specifically with antidepressants/sedatives, antinausea agents or drugs which may affect QTc intervals. This is especially concerning given that the prevalence of depressive symptoms among survivors of breast cancer is significantly higher (66%) in comparison to the general population and persists many years after diagnosis[16]. Palbociclib does not require ECG monitoring but it has not demonstrated an OS benefit in clinical trials, making it a less desirable option. [5,13]. Additionally, both ribociclib and palbociclib require a 21-day on/7-day off dosing schedule to manage neutropenia, which, in our experience, can lead to adherence issues or dosing errors.

5. Place in Therapy

5.1. How would the drug under review fit into the current treatment paradigm?

Abemaciclib's OS benefit, sustained PFS benefit, and distinct safety profile make it an important choice for CDK4/6 inhibitor-based therapy

The 2024 updates to the MONARCH-2 trial confirmed the sustained PFS benefit and the OS benefit of abemaciclib combined with fulvestrant in the second-line HR+/HER2- setting in patients whose disease had progressed on or within 12 months of prior endocrine therapy [17]. The study population included both postmenopausal (83%) and pre/perimenopausal (17%) women.

The latest analysis confirmed a significant OS advantage with abemaciclib, in addition to an impressive PFS benefit. At the 5-year mark, OS rates were 41.2% versus 29.2% in favor of abemaciclib, and at 6 years, the OS benefit is ongoing in favour of abemaciclib at 34.7% versus 23.7% (median OS: 45.8 vs 37.2 months; HR: 0.784; 95% CI: 0.644-0.955) [17]. Notably, the addition of abemaciclib to fulvestrant significantly delayed the need for chemotherapy (HR: 0.674; 95% CI: 0.562-0. 809), reinforcing its role in prolonging disease control while preserving quality of life. Thus, along with results demonstrating significant PFS benefit (HR: 0.553; 95% CI: 0.449-0.681; $p < 0.001$), this latest update to MONARCH-2 highlights abemaciclib as a compelling choice for the second-line setting.

With regards to AEs, while concerns such as diarrhea, nausea, and decreased appetite are noted, these side effects are typically low-grade, occur early in treatment, and can be effectively managed with supportive care and dose adjustments. Clinicians are now very experienced with managing abemaciclib as we have been prescribing it more often in the adjuvant setting for two years. Unlike ribociclib and palbociclib, abemaciclib causes significantly less neutropenia, allowing for a continuous dosing schedule. In our experience, continuous dosing is often preferred by patients and increases the likelihood of adherence to treatment. Its manageable safety profile and unique pharmacological advantages highlight its value as a treatment option. Importantly, the availability of abemaciclib in this setting will not alter current algorithms or add cost or complexity to subsequent lines of therapy. If used, it would replace the other CDK4/6 inhibitors.

Abemaciclib has also shown effectiveness after disease progression on a prior CDK4/6 inhibitor. In the primary analysis of the postMONARCH trial, abemaciclib provided significant PFS benefit [HR 0.73 (95% CI 0.57-0.95)] for patients previously treated with palbociclib [18]. Since many patients in Canada are prescribed palbociclib as first-line treatment [19], these findings highlight the potential of abemaciclib to help this patient group with recurrent disease while delaying chemotherapy. Additionally, its benefits remain consistent regardless of ESR1 mutations or PI3K pathway alterations, eliminating the need for biomarker testing. This contrasts with palbociclib, which is less effective in *PIK3CA*-mutated disease [20]. The effectiveness of ribociclib in this setting remains uncertain [21].

Abemaciclib is also the only CDK4/6i that has evidence of activity against central nervous system disease. In a phase II trial (NCT02308020), despite not meeting its primary endpoint of intracranial objective response, abemaciclib demonstrated clinical benefit in a subset of patients with HR+ metastatic breast cancer with brain metastases, with a decrease in intracranial lesion size in 38% of patients and an intracranial clinical benefit rate of 24.1% [22]. This adds to abemaciclib's unique attributes making it an important treatment option depending on the characteristics of the disease, such as CNS involvement or concerns about baseline QTc or hepatic function.

Thus, based on these results, we recommend that abemaciclib, in combination with fulvestrant, be made available as a treatment option for patients with recurrent HR+/HER2- advanced or metastatic breast cancer in the second-line setting.

5.2. Which patients would be best suited for treatment with the drug under review? Which patients would be least suitable for treatment with the drug under review?

We recommend abemaciclib in combination with fulvestrant in HR+/HER2- MBC patients (women and men) whose disease has progressed on first-line treatment with ET alone as per the MONARCH-2. Least suitable patient populations would include those ineligible for the MONARCH-2 study, those with contraindications to abemaciclib, or those that have received frontline ribociclib **[17]**.

For patients whose disease progressed on palbociclib + ET, the combination should be limited to patients who do not have rapid disease progression, or a high burden of metastasis given the limitation of postMONARCH data.

5.3 What outcomes are used to determine whether a patient is responding to treatment in clinical practice? How often should treatment response be assessed?

Response assessments will be conducted using clinical evaluation (history, physical examination), periodic restaging scans, and blood tests at standard frequencies, with more frequent monitoring as needed in the case of worsening symptoms. Typically, scans are performed every 3 months, and the fulvestrant/abemaciclib protocol will not increase the burden of required diagnostic imaging. Monitoring and clinical reassessments for adherence and toxicity will be conducted as outlined in the product monograph, with more frequent checks during the first four months of abemaciclib initiation, including standard blood work. Treatment will continue until disease progression is confirmed by clinical or radiographic criteria.

5.4 What factors should be considered when deciding to discontinue treatment with the drug under review?

Abemaciclib + fulvestrant combination therapy should be discontinued at the first evidence of disease progression based on clinical or radiographic criteria, or if persistent or unacceptable toxicity occurs.

5.5 What settings are appropriate for treatment with drug under review? Is a specialist required to diagnose, treat, and monitor patients who might receive drug under review?

The settings required for the abemaciclib + fulvestrant combination therapy would be identical to those already in place for existing drugs. Oncologists experienced in treating breast cancer patients are needed for the initial treatment recommendation and early monitoring. AEs are manageable with early intervention, including dose reduction and standard supportive care. Current health systems have already incorporated follow-up monitoring with the established use of CDK4/6 inhibitors, including health system monitoring models that utilize pharmacists and nurses, when necessary, without adding additional clinical workflow burden. Pharmacy and nursing expertise can support the management of oral agents, including adherence assessment, AE screening, drug interaction, and toxicity management.

6. Additional Information

Of note, and per current standard practice with fulvestrant, men and pre- and peri-menopausal women also received goserelin (ovarian function suppression).

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Declaration for Jean-Francois Boileau

Name: Dr. Jean-Francois Boileau

Position: MD

Date: 12/5/2024 | 3:58:11 PM PST

☒ **I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Jean-Francois Boileau

Company	Check appropriate dollar range*			
	$0 to $5,000	$5,001 to $10,000	$10,001 to $50,000	In excess of $50,000
Roche	x			
Genomic Health	x			
NanoString Technologies	x			
Pfizer	x			
Lilly		x		
Novartis		x		
Merck		x		
AstraZeneca	x			
Allergan	x			
Abbvie	x			
RNA Diagnostics Inc	x			
Bristol Myers Squibb	x			
Exact Sciences	x			

Declaration for Dr. Nathaniel Bouganim

Name: Nathaniel Bouganim

Position:

Date: 2024 02 20

☒ **I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Nathaniel Bouganim

	Check appropriate dollar range*			
Company	**$0 to $5,000**	**$5,001 to $10,000**	**$10,001 to $50,000**	**In excess of $50,000**
AstraZeneca	X			
Novartis		X		
Knight	X			
Gilead	X			
McGill University	X			
Pfizer	X			

New or Updated Declaration for Christine Brezden-Masley	
Name	*Dr. Christine Brezden-Masley*
Position	*Medical Oncologist and Associate Professor of Medicine, University of Toronto*
Date	*February 21, 2024*
☒	**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Conflict of Interest Declaration

List any companies or organizations that have provided your group with financial payment over the past two years AND who may have direct or indirect interest in the drug under review.

Company	Check Appropriate Dollar Range			
	$0 to 5,000	$5,001 to 10,000	$10,001 to 50,000	In Excess of $50,000
Astellas	☐	☐	☒	☐
Eli Lilly	☐	☐	☒	☐
Astra Zeneca	☐	☐	☒	☐
Pfizer	☐	☐	☒	☐
Merck	☒	☐	☐	☐
BMS	☐	☒	☐	☐
Amgen	☐	☐	☐	☐
Beigene	☒	☐	☐	☐
Gilead Sciences	☐	☒	☐	☐
Novartis	☐	☐	☒	☐
Seagen	☐	☒	☐	☐
Hoffman La Roche	☒	☐	☐	☐

Declaration for Dr. Jeffrey Cao

Name: Jeffrey Cao

Position: Provincial Breast Tumour Team Lead, Alberta Health Services Cancer Care Alberta

Date: February 26, 2025

☒ **I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Jeffrey Cao

Company	Check appropriate dollar range*			
	$0 to $5,000	**$5,001 to $10,000**	**$10,001 to $50,000**	**In excess of $50,000**
Oncology Education	X			
Novartis		X		
Gilead	X			
Union Oncology Centre	X			
Pfizer		X		
La Roche-Posay			X	
AstraZeneca	X			
Daiichi-Sankyo	X			
Merck		X		
Breast Cancer Canada	X			
Canadian Breast Cancer Conference	X			
Canadian Breast Cancer Symposium	X			

Declaration for Stephen Chia

Name: Dr. Stephen Chia

Position: Medical Oncologist, BC Cancer Breast Tumour Group Chair

Date: Feb 20, 2024

☒ **I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Stephen Chia

Company	Check appropriate dollar range*			
	$0 to $5,000	**$5,001 to $10,000**	**$10,001 to $50,000**	**In excess of $50,000**
Novartis		X		
Eli Lilly	X			
AstraZeneca		X		
Daiichi Sankyo	X			
Merck	X			
Gilead	X			
Hoffmann LaRoche	X			

Declaration for Scott Edwards

Name: Scott Edwards

Position: Clinical Oncology Pharmacy Specialist at the Cancer Care Program in St. John's Newfoundland

Date: **9/10/2024 | 4:15:51 PM PDT**

☒**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Scott Edwards

Company	Check appropriate dollar range*			
	$0 to $5,000	$5,001 to $10,000	$10,001 to $50,000	In excess of $50,000
Astellas	X			
AstraZeneca	X			
Apobiologix	X			
Gilead	X			
Novartis	X			
Pfizer		X		
Ipsen	X			

Declaration for Clinician Karen Gelmon

Name: Dr. Karen Gelmon

Position: Medical Oncologist, Department of Medical Oncology, British Columbia Cancer Agency, Professor of Medicine, University of British Columbia

Date: December 16, 2024

☒**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Karen Gelmon

Company	Check appropriate dollar range*			
	$0 to $5,000	$5,001 to $10,000	$10,001 to $50,000	In excess of $50,000
AstraZeneca		x		
Eli Lilly	x			
Gilead Sciences	x			
Novartis	x			
Pfizer	x			
Seagan	x			
McGill University	x			
CIHR	x			
Merck	x			
City of Hope Hospital	x			
Celuity	x			

Declaration for Dr. Nayyer Iqbal

Name: Nayyer Iqbal

Position: **Professor, Department of Oncology and Medical Oncologist**

Date: **12/6/2024 | 10:41:07 PM EST**

☒**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Nayyer Iqbal

Company	Check appropriate dollar range*			
	$0 to $5,000	$5,001 to $10,000	$10,001 to $50,000	In excess of $50,000
Bayer	X			
Ipsen	X			
Eisai	X			
Janseen	X			
Pfizer	X			
Novartis	X			
Astella	X			
Tolmar	X			
Astra Zeneca	X			
BMS	X			

Declaration for Anil Abraham Joy

Name: Dr. Anil Abraham Joy

Position: **Medical Oncologist**

Date: **12/6/2024 | 10:28:40 AM EST**

☒**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Anil Abraham Joy

Company	Check appropriate dollar range*			
	$0 to $5,000	$5,001 to $10,000	$10,001 to $50,000	In excess of $50,000
AstraZeneca		x		
BMS	x			
DS	x			
Gliead		x		
Eli Lilly	x			
Merck	x			
Novartis	x			
Pfizer	x			
Roche	x			

Declaration for Dr. Kara Laing

Name: Kara Laing

Position: Medical Oncologist

Date: 27-Feb-2025

☒ **I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Kara Laing

Company	Check appropriate dollar range*			
	$0 to $5,000	$5,001 to $10,000	$10,001 to $50,000	In excess of $50,000
Novartis		X		
Taro	X			
Pfizer	X			
Eli Lilly	X			

Declaration for Nathalie Levasseur

Name: Dr. Nathalie Levasseur

Position: **Médical Oncologist**

Date: **12/5/2024 | 6:34:23 PM PST**

☒**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Nathalie Levasseur

Company	Check appropriate dollar range*			
	$0 to $5,000	$5,001 to $10,000	$10,001 to $50,000	In excess of $50,000
Abbvie	x			
AstraZeneca		x		
Eli Lilly		x		
Exact Sciences		x		
Gilead		x		
Knight Therapeutics		x		
Merck	x			
Novartis		x		
Pfizer		x		
Roche	x			
Seagan	x			
TerSera	x			

Declaration for Clinician Dr. Mita Manna

Name: Dr. Mita Manna

Position: Medical Oncologist, Saskatoon Cancer Center and Provincial Disease Site Lead for Breast Oncology in Saskatchewan Assistant Professor at the University of Saskatchewan, MD FRCPC

Date: 2/13/2024 | 9:54:14 AM PST

☒**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Mita Manna

Company	Check appropriate dollar range*			
	$0 to $5,000	$5,001 to $10,000	$10,001 to $50,000	In excess of $50,000
AstraZeneca		x		
Ipsen	x			
Advanced Accelerator Applications	x			
Knights Therapeutics	x			
Eli Lilly		x		
Gilead Sciences		x		
Novartis		x		
Pfizer	x			
Bristol Myers Squibb	x			
Merck		x		
McGill University	x			

Declaration for Dr. Callista Phillips

Name: Dr. Callista Phillips

Position: **Medical Oncologist JBH cancer clinic Burlington and JCC Hamilton**

Date: **Feb 25/25**

☒ I hereby certify that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Callista Phillips

Company	Check appropriate dollar range*			
	$0 to $5,000	$5,001 to $10,000	$10,001 to $50,000	In excess of $50,000
Pfizer	Yes	No	No	No
Astra Zeneca	Yes	No	No	No
Lilly	Yes	No	No	No
Merck	Yes	No	No	No
Bayer	Yes	No	No	No
EMD Seronoi	Yes	No	No	No
Gilead Science	Yes	No	No	No

Declaration for Dr. Maged Salem

Name: Maged Salem

Position: **Medical oncologist. The Moncton Hospital**

Date: **12/10/2024 | 3:28:02 AM PST**

☒**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Maged Salem

Company	Check appropriate dollar range*			
	$0 to $5,000	$5,001 to $10,000	$10,001 to $50,000	In excess of $50,000
Novartis	X			
Lilly	X			
pfizer	X			
Roche	X			
AZ	X			
Gilead	X			

Declaration for Clinician Dr. Sandeep Sehdev

Name: Dr. Sandeep Sehdev

Position: Medical Oncologist, lead of breast cancer disease site group at The Ottawa Hospital Cancer Centre. Assistant Professor, U of Ottawa.

Date: 10-FEB-2024

☒**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Sandeep Sehdev

Company	Check appropriate dollar range*			
	$0 to $5,000	$5,001 to $10,000	$10,001 to $50,000	In excess of $50,000
AstraZeneca			X	
Novartis			X	

Declaration for Christine Simmons

Name: Dr. Christine Simmons

Position: **PI - medical oncologist**

Date: **12/13/2024 | 11:27:58 AM EST**

☒**I hereby certify** that I have the authority to disclose all relevant information with respect to any matter involving this clinician or clinician group with a company, organization, or entity that may place this clinician or clinician group in a real, potential, or perceived conflict of interest situation.

Table 1: Conflict of Interest Declaration for Christine Simmons

Company	Check appropriate dollar range*			
	$0 to $5,000	$5,001 to $10,000	$10,001 to $50,000	In excess of $50,000
AstraZeneca	x			
Knight	x			
Gilead	x			
Pfizer	x			
Novartis	x			
Bayer	x			
Lilly	x			
Merck	x			
Eisai	x			