CADTH

Patient Input Template for CADTH Reimbursement Reviews

Name of Drug: Lynparza (olaparib)
Indication: Lynparza (olaparib) is indicated for the adjuvant treatment of adult patients with deleterious or suspected deleterious germline BRCA-mutated (gBRCAm), human epidermal growth factor receptor 2 (HER2)-negative high risk early breast cancer who have been treated with neoadjuvant or adjuvant chemotherapy. Patients must have confirmation of a germline BRCA mutation before Lynparza treatment is initiated.
Name of Patient Group: Rethink Breast Cancer
Author of Submission: MJ DeCoteau

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 two decades, Rethink has been working closely with breast cancer patients in Canada with a focus on those diagnosed in their 20s, 30s and early 40s. 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 40 individuals that we work extremely closely with as key patient advisors; the 100 patients that share their stories on our blog; the 500 patients that participate in our virtual support groups; the 1,600 members of our private peer-support network; the 30,000 people that have joined our Instagram community; and the 150,000 individuals reached each month through the reach of that channel. We listen, learn, engage and have conversations in all these spaces.

Rethink Breast Cancer has several important patient advisory boards and working groups that offer experience-focused insights on issues related to those affected by and concerned about breast cancer, including:

- Metastatic Breast Cancer Advisory Board
- Early Breast Cancer Advisory Board
- Equity, Diversity and Inclusion working group
- Triple Negative Breast Cancer working group (all stages)

For this submission, we have drawn on our general observations and insights gathered through programming and meetings with breast cancer patients as described above. Rethink has a lot of experience supporting and working with young breast cancer patients with hereditary breast cancer as it is more likely to be diagnosed at a younger age. In 2015, Rethink made a documentary film called *High Risk* featuring women with BRCA mutated breast cancer and those at a higher risk for getting breast cancer and over the years, many people with a BRCA mutation have written about their experience for our blog and for our resources.

To further inform this input, Rethink conducted in-depth telephone interviews in August 2022 with three patients with a BRCA mutation who participated in the OLYMPIA study. All were diagnosed with Stage 3 breast cancer at least 6 years ago and have not had a recurrence. We also gathered responses from people in our Instagram community with high-risk early breast cancer in order to identify more general treatment goals and values of those with early breast cancer who have a high risk of it returning.

3. Disease Experience

Most people participating in Rethink support and education programming are diagnosed at a younger age. They 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. When young people get breast cancer it may be more aggressive, which can lead to tougher treatments and confronting mortality at a young age. The physical and emotional toll that a breast cancer diagnosis and treatment take on a young person's life is devastating and traumatic. Being diagnosed with a BRCA mutation can involve making even more treatment decisions, including double mastectomy, oophorectomy, hysterectomy, egg or embryo preservation and even decisions like possibly genetic screening of embryos. Often there is a time pressure to make these important decisions. Carmela shared her experience on our blog:

"After learning that I was a BRCA1 carrier (in my 20s), I decided almost instantly that I wanted to involve genetic screening as a part of my future family planning. I was diagnosed with stage 3 triple negative breast cancer, at the age of 30, and just a day before my scheduled preventative double mastectomy. It is incredibly overwhelming to receive a cancer diagnosis and try to make many important decisions quickly. Two weeks following my double mastectomy I began IVF. It felt as though my partner and I were rushed into family planning overnight! I struggled with the fertility treatment as it was so soon after my double mastectomy and I was still healing and accepting the cancer diagnosis." – Carmela

When it comes to a high-risk diagnosis, it's less about controlling an "aspect" of the illness and more a deep desire for their treatment to work well enough that they do not have a recurrence. Moreover, being diagnosed with an inherited mutation in your BRCA1 or BRCA2 genes can also come with extra concern about family members. Marilyn participated in the OlympiA study and in her recent interview, she told us:

"I am hoping to persuade everybody to get on board to do as much as they can for families like mine where all the siblings testing positive for BRCA2. Two of us have had breast cancer, myself and my sister, and all of the kids from my siblings who have been tested are also positive. Our dear auntie and her daughter died of breast cancer. In 2019 my niece was 34 years old and was diagnosed with cancer and had an 18-month-old and 4-year-old at the time.

I phoned everyone in my family and said is there something that you feel is important? I canvassed my family, and the hope is just that there's not many families like us. I'm hoping that other families get a break. It's supposed to be only half, 50% positive 50% negative. This would be too scary for a lot of people. They'd be so scared all the time in their life. We've had success, we have survivors in our family, so I think that helps us. But you can't help as an adult to be freaked out about the kids in your family. I've got 7 nephews and 2 nieces, and they have 6 kids. I worry about them." – Marylyn

4. Experiences With Currently Available Treatments

The treatment of HER2-negative breast cancer depends on HR status and there are different treatment options for different subtypes of HER2-negative breast cancer. HER2-negative breast cancer that's HR-positive can be treated with hormone therapies like tamoxifen, fulvestrant or aromatase inhibitors that help stop the cancer from recurring. Most of the young patients in the Rethink community are on these treatments for up to ten years. It's very difficult for them both physically and psychologically to be thrown into premature menopause; however, they work with their cancer care teams and seek peer support to help tolerate and cope with the symptoms because they know it prevents recurrence. Breast cancer that's triple-negative won't respond to some of the treatments used for HER2-negative, HR-positive breast cancer. This includes hormone therapy and many targeted therapies. These cancers are treated with chemotherapy and recent data recommends the addition of pembrolizumab to chemotherapy.

Patients on the OlympiA trial were treated with these standard therapies (without pembrolizumab as it was before that data). The addition of olaparib improved invasive disease-free survival, distant disease-free survival and overall survival. Therefore, olaparib should be used in addition to standard therapies not as a replacement.

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.

In our experience working closely with many young high risk breast cancer patients, we find most, especially those with Stage 3 are willing to trade toxicity for confidence in knowing they've "thrown everything they could" at the cancer. In other words, they will choose to endure more treatments and additional side-effects and impacts on quality of life from the toxicity of a stronger therapy to ensure they are doing everything they can to treat what they know is an

aggressive form of breast cancer. This is reflected in the responses to questions we posed on August 16, 2022, to patients in the Rethink Instagram community who have a stage two or stage three breast cancer diagnosis with a high risk of recurrence.

New treatments that reduce risk of recurrence and improve survival for high-risk early breast cancer patients matter to them because:

"I want to live a long and healthy life without the added stress of recurrence and metastasis"

"Improved outcomes, peace of mind and hope are some reasons this matters"

"Fear of recurrence takes a toll on our mental health"

"It can prolong my chances of survival, lessen my cancer anxiety and improve my lifestyle"

"TNBC has no maintenance treatment! So scary just waiting for the possibility of a recurrence"

"No one wants to fight this again; I want to watch my kids grow and live a long life with my husband"

"I never imagined I might not be able to retire from my career. I want to live."

"I have children 12, 14, 16. I want to see them grow up."

"It means I was able to eradicate residual low level and undetectable cancer cells"

"It gives me hope that there I have more life to live."

"I feel like this answer is obvious. So we can LIVE."

"So I can dream of having grey hair and wrinkles. I can hope to outlive my parents."

"Having a brand new baby with a stage 3 TNBC diagnosis is the main reason it matters"

"Diagnosed in 2021 with stage 2B lymph node involvement. I have 2 small kids. I can't die."

"My children"

6. Experience With Drug Under Review

Rethink conducted interviews with three patients who participated in the OlympiA study. All were diagnosed with Stage 3 breast cancer 6 or more years ago and have not had a recurrence.

Patient 1: Renée profile:

Renée was diagnosed in August of 2015 at age 57 with stage 3 estrogen and progesterone receptor positive, HER2 negative breast cancer and she carries the BRCA2 mutation.

"When I was diagnosed, it kind of sent me into a place where I always thought I'd be. I think somewhere in my mind, I understood that the chances were very good that I'd get breast cancer at some point in my life, because my mother had died of it, her sister died of it, their mother died of it, and her brother died of a cancer we don't know, and maybe even before that. It seemed like a fact of life to me almost. We knew this was coming. So, when I was diagnosed with stage 3 breast cancer and found out I was BRCA2+, I was able to approach it quite practically.

Because I have BRCA2, I opted for a bilateral mastectomy, and when I heard of all the options, I knew there would be no surgery for reconstruction. No more mutilation of any kind. It changed my perspective and how I viewed my body. My body was a battleground for a while, and it was time to shut the war down and give it a bit more peace and quiet. That's also what Olaparib did for me.

I was lucky to have accessed Olaparib through a clinical trial, which I heard about through my oncologist. I chose to enter the trial because I thought at least something was being done to help people in the future in my situation to have better treatment – this was my motivation. It felt amazing to have a sense of someone being behind me, having my back somehow.

Once I got out of treatment and spoke to others who have had a similar experience, I realized how traumatizing it all is, it's almost hard to believe it's over, and it's really hard to let go of it and move on. Every little ache and pain, you worry about it, wondering if it's the cancer returning. That's how hyper-sensitive we get. It's shattering because we all go on thinking, "I'll see you tomorrow," but we can't say that with absolute certainty. A diagnosis like this really brings home how fragile we are, and when you're really fragile, it would be a comfort to know that there's something that can help you, like Olaparib.

Treatments like Olaparib are ones that people can rely on and give the potential for hope. It's a very strange feeling to sit here and say I don't know what I'm going to be doing next year, and no one

does, but when you're in a situation where you've been through things like cancer, you really don't. It's everything to have that bit of peace and comfort and understanding that things could be worked out when you have a diagnosis like this. So, it was everything for me to have access to Olaparib. It changed everything.

Physically, Olaparib was the only treatment I tried that didn't give me any consequential or noticeable adverse effects. I tried Tamoxifen and others, and I could not tolerate it, most notably the body pain that was heightened and intensified while on them. My body just said no to them. And, on a personal level, Olaparib and this clinical trial put everything into context for me. Maybe this would be helpful to someone somewhere. I was struck many times from my mother's and aunt's experience firsthand, seeing the experiences they had which were so very different than my own. There's only one time that I cried throughout my whole treatment. I was in bed at night, I caught a glimpse of myself in my mirror, I was bald, I looked yellow and green, and I started to cry. I cried because I thought of how it would break my dad's heart to see me like this, because, of course, he went through all this with my mother. I was reminded of this when I learned I was able to do the trial, because now I'm doing something that maybe can help. I'm seeing today how treatments have advanced since my mother's time. If my diagnosis had been in my mother's time, I probably wouldn't have lived. Breast cancer is a part of our family in a sense and I'm glad that I was able to participate in something that maybe would change future paths.

I've been radically altered, externally and internally, from this whole experience – radically altered. Having that with you, knowing that there's so much uncertainty and that we can't predict, but also knowing there is something that could reduce the possibilities of recurrence, that is everything you would have at that point. That could be ALL you have at that point. The only hope. It would be essential, physically and emotionally. Having this bit, this glimmer of direction in the directionless world of high-risk cancer, could be all someone might have. And people in this position deserve to have access to it."

— Renée

Patient 2 Anne:

Anne was diagnosed with Stage 3 breast cancer and has the BRCA2 genetic mutation

"I probably had a little cry when they told me the news, but I've been pretty stoic about moving forward. Don't look at the big picture, just look at the next month and the road sort of thing. That's sort of how I got through the whole thing. It's a very emotional experience, you feel like you're dying.

I made a conscious decision in everything that I did to try and extend my life and come out with the most positive outcome that I could. I feel like I've been very fortunate with everything that I've done, that I've been cancer free ever since. My cancer went from being stage 1 to, over the course of 2 months, stage 3, growing very rapidly, that was very scary. Anything you can do to try and get past this disease is important. That's why I made the decision to be a part of the trial, 1) because I want to live and b) anything I can do to help another human being to not have to go through this or help them come out the other side of it, I'm more than willing to do."

— Anne

Patient 3: Marilyn

Marilyn was diagnosed in 2016 at age 62 with stage 3 estrogen and progesterone receptor positive, HER2 negative breast cancer and she carries the BRCA2 mutation.

"Unfortunately, my auntie D and her daughter both died of breast cancer. That's from my dad's side, that gene. That was my dad's sister. My poor niece with her young kids, it was frightening as hell. Thank Gosh, in our branch of the family, we've had huge, good luck that we're all ok after the cancer so far.

Of course, you have side effects from chemo. It's not a walk in the park. But I can manage them or figure something out to inhibit them. As a family, we try our best to respect our health and pay attention to the things that we're not allowed to do, like alcohol and stuff like that. We behave ourselves and remind each other that we have to behave and don't do things that could potentially assist cancer.

My sister's was pushing up against (stage) 4, and she is more analytical, so she told me recently, you feel like your cancer wasn't as serious as mine, but it was. I'm way more positive. She's more serious, she has anxiety and depression. I know the cancer doesn't give a rat's ass if you're positive or not, but I think it's so important to not worry yourself into a worse situation. I don't want to project anything onto other people.

Better outcomes is this incredible quest in breast cancer, finding out how much longevity people can have, that's important."

– Marilyn

7. Companion Diagnostic Test

It will be important for BRCA testing to be done as soon as possible after diagnosis to identify patients that will be eligible for Lynparza. Efforts are underway to expedite and expand testing in Canada since it affects treatment recommendations for several cancers.

8. Anything Else?

We'd like to emphasize that although most HER2-negative early breast cancers now have good outcomes, currently, for those in Canada with high-risk breast cancers and BRCA mutations the risk of recurrence is still very high with significant potential to become metastatic, which is almost universally incurable and drastically shortens the patient's lifespan. So, as we ponder "anything else," we think about the people we know with metastatic breast cancer and their loved ones. We know their cancer stories and we know, at least partly, the personal life stories too. We see their family pictures on Facebook and Instagram. We know what they have at stake. We know the feeling we get when we see their updates, living scan to scan posting about their stability, or their heartbreak over progression. And we think of those we've lost. Too, too many over the years. Their families will never be the same. For the BCRA positive, high risk breast cancer patients in our network, facing mortality at a young age, they want what all cancer patients want—care that will lead to the best possible outcomes, including reducing their future breast cancer risk. They want to do whatever they can to avoid metastasis. They want to survive, and eventually thrive.

Patients in Canada with a BRCA mutation have been waiting a long time for Lynparza. It's exciting that the benefit is for both estrogen receptor positive and estrogen receptor negative patients with either a BRCA 1 or BRCA 2 mutation. Seeing the OlympiA results and knowing that people with high-risk breast cancer and a BRCA mutation could improve survival with no major impact on their quality of life is huge progress and a truly exciting advancement.

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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
<Enter Name Here>				
AstraZeneca 2022				X
AstraZeneca 2021				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: MJ DeCoteau
Position: Founder and Executive Director
Patient Group: Rethink Breast Cancer
Date: August 26, 2022