

## Patient Input Template for CADTH CDR and pCODR Programs

Name of the Drug and Indication	Filgotinib for rheumatoid arthritis
Name of the Patient Group	Arthritis Society & Canadian Arthritis Patient Alliance (CAPA)
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### 1. About Your Patient Group

The Arthritis Society has been setting lives in motion for over 70 years. Dedicated to a vision of living in a world where people are free from the devastating affects that arthritis has on the lives of Canadians, the Society is Canada's principal health charity providing education, programs and support to 6 million Canadians living with arthritis. Since its founding in 1948, The Society has been the largest non-government funder of arthritis research in Canada, investing more than \$200 million in projects that have led to breakthroughs in the diagnosis, treatment and care of people with arthritis. The Arthritis Society is accredited under Imagine Canada's Standards Program. The website [www.arthritis.ca](http://www.arthritis.ca) provides more detailed information.

The Canadian Arthritis Patient Alliance (CAPA) is a grass-roots, patient-driven, independent, national education and advocacy organization with members and supporters across Canada. CAPA creates links between Canadians with arthritis to assist them in becoming advocates and to improve their quality of life. CAPA believes the first expert on arthritis is the person who lives with arthritis, and is an organization for patients run by patients (who are all volunteers). As a virtual organization we have no physical office and communicate with our community primarily through electronic methods, such as our [website](#), quarterly newsletter, e-mail, and social media. CAPA welcomes all Canadians with arthritis, and those who support CAPA's goals, to become members.

### 2. Information Gathering

We developed a survey to hear directly from people living with rheumatoid arthritis (RA) about their experiences with RA and any experiences taking filgotinib. The Arthritis Society and CAPA collaboratively developed the survey. The survey was shared via e-mails, social media and the CAPA newsletter through our respective Canadian networks and communities. The survey was open from July 27 until August 21, 2020.

A Gilead contact provided us with names of the Canadian rheumatologist trialists who had patients enrolled in the RA filgotinib clinical trial. The Arthritis Society and CAPA reached out to Dr. Derek Haaland and Dr. Clode Lessard and asked them to pass along a letter to clinical trial participants that explained CADTH, the Common Drug Review process, and why their input would be of value. The letter provided a link to the survey as well as contact information for Helen Anderson, in case they wanted to be in touch via email and/or phone.

For our survey, 38 responses were received, of which no respondents had experience taking filgotinib. The survey collected demographic data, however not all respondents completed this section. Those who completed demographic data (n=17) represented an age range of 32-73, with the majority of respondents between 54-67. Respondents were also asked to rate the severity of their RA, with the majority of respondents (n=17) indicating moderate to severe arthritis.

### 3. Disease Experience

About 1% of Canadians live with rheumatoid arthritis (RA), and while both men and women can be diagnosed with RA, it is far more common in women (women are 2-3 times more likely to have RA than men). RA is a chronic autoimmune disease in which the body's immune system attacks and causes inflammation in joints. When uncontrolled, this inflammation results in permanent and irreversible damage to joints that are affected. RA is also a systemic disease meaning that other parts of the body in addition to joints can be affected, including the eyes, lungs, and heart. RA can vary in severity from mild to very severe. A person may experience active periods of disease (commonly known as flares or flare-ups) and times where there is decreased activity or even inactivity (remission). While people who have RA generally live with a number of the same symptoms, how they experience those symptoms and the severity of their RA can be very different from person to person – RA is unique to each person who lives with it. There is currently no cure for RA.

Symptoms that respondents indicated as having the greatest impact on their day-to-day life included joint pain and swelling, restricted mobility, fatigue and “brain fog” or trouble concentrating. Symptoms also had an impact on daily activity. Respondents had the following comments on how RA affects their daily living and quality of life:

- *“Had to retire as I could not keep up the pace at work. I played flute but had to quit. My hands are too sore to do anything that involves dexterity.”*
- *“Have a hard time walking as it's in my ankles, wrists, hands, elbows. Getting in and out of vehicles is challenging as is cooking. Just about everything is challenging!”*
- *“Joint pain widespread throughout entire body Unable to do any activities/duties that involve heavy lifting or repetitive lifting, carrying or gripping.”*
- *“RA has impacted every aspect of my life, causing severe disability that has required multiple surgeries to regain some measure of function. Had new drugs been available sooner I would have avoided all of it”*
- *“Fatigue and trouble concentrating/memory Joint pain and inflammation Mobility Virus and infections from immunosuppressive meds Side effects from meds Other autoimmune diseases triggered by meds Lack of community understanding/drs understanding/family and friends not understanding. It is a very isolating disease Not being able to do activities that I use to enjoy.*

*Biking, hiking, gardening, dancing, singing and even house work Muscle deterioration and lack of strength in muscles”*

- *“Pain, stiffness, and limited joint mobility impact me most of all. I have one joint that does not bend due to RA that is only moderately annoying, but I am concerned about future progression of the disease. It does not currently impact my work or day to day living unless I am in a flare. Then I am unable to dress, bathe, open jars, cook, work as normal without assistance.”*
- *“The biggest issue I have is fatigue management. I work fulltime and run short of energy around lunchtime. I'm having to nap. I would prefer not to have to nap.”*

RA impacts lives in many ways: completing daily tasks that many well individuals take for granted may become difficult or too exhausting to complete; participating in leisure activities can be difficult; caring for or spending time with family members such as children and loved ones, such as spouses / partners also becomes difficult.

- *“Fatigue and pain impact most of every day activities like parenting, working, running errands, doing groceries, I have to adapt many of these activities. I cannot do some things with my kids which places additional burden on my spouse. Most physical activities I have trouble doing. Sleep is also affected because of pain which causes me to feel even more fatigued.”*
- *“Was on disability 15 yrs. before actual retirement date. Extreme fatigue most important to control, weakness, stiffness, pain. Can't shop @mall. Travel restricted due to limited walking ability. Can't ride bicycle or walk with friends. House cleaning overwhelming so need to hire cleaners.”*
- *“My right hand (dominant) is quite impacted. And a bit of a hindrance as I have young children. Kitchen and house cleaning activities are a bit challenging. Opening jars etc. I cannot be as active as I would like as my left shoulder is also impacted and I have limited range in motion”*
- *“A 26 yr life with RA day to day for me does no longer include work. Just managing basic food preparations and shower and grooming. My day to day housecleaning needs to be managed by my homecare personnel. I am not yet a senior.”*
- *“Tired of being somewhat incapacitated daily in some manner or another. It's depressing and I know I have a temper with everyone as a result, though I struggle not to.”*
- *“I am not able to work any more. Life no longer seems to be normal. If I try to push things I will pay for it for a day or 2 with severe discomfort.”*
- *“My arthritis is still active and it is a problem to do grocery, cleaning and simply visit friends -it's a challenge.”*

## 4. Experiences With Currently Available Treatments

Current medications for RA aim to control inflammation and minimize disease activity to prevent irreversible joint damage and other subsequent effects, given that there is currently no cure for RA. Many treatments simply help people get through their day. Treatments used to manage RA include non-steroidal anti-inflammatory drugs (NSAIDs), corticosteroids, and disease-modifying anti-rheumatic drugs (DMARDs), such as methotrexate, sulfasalazine, hydroxychloroquine (also an anti-malarial drug) and various biologic medications (protein-based medicines, rather than small molecules), and small molecules that now target the janus kinase (JAK) pathways. The following provides a general description of the treatments used and their side effects:

- NSAIDs are used to treat inflammation which in turn often also affects (i.e. lessens) pain. The NSAIDs may cause many side effects, from stomach upset to changes in kidney function.
- Corticosteroids are commonly used to control/reduce inflammation and while effective, can produce side effects when taken for longer durations and at higher doses. Corticosteroids can cause short-term effects such as weight gain, acne, excess facial hair, mood swings, high blood pressure, high blood sugar, increased infection, stomach ulcers, hyperactivity, and increase in appetite. Long-term effects include osteoporosis, glaucoma and cataracts, osteonecrosis, skin changes, heart disease, and stroke.
- DMARDs that are antimalarial medications such as hydroxychloroquine taken in a high dose and over a long period may accumulate in the background of the eye (retina) and cause a loss of vision and in rare cases, blindness. People with RA should have annual eye exams to monitor for this.
- Other DMARDs such as methotrexate and biologic medications may include other side effects. Methotrexate often causes nausea, hair loss, and may cause liver damage. Its nausea effects are sometimes mitigated by also taking folic acid, splitting doses over the course of a few hours, and/or taking subcutaneously rather than orally. Biologic medications may have side effects such as injection reaction irritation, increase risk of upper respiratory infections, pneumonia, urinary tract infections and skin infections.
- Filgotinib is a JAK inhibitor, meaning that it targets the janus kinase (i.e. "JAK") enzyme family, and it targets the JAK1 protein (there are 2 other JAKs called JAK2 and JAK3. There are a limited number of other JAK inhibitors currently available to people who live with RA, including upadacitinib (inhibits JAK1), tofacitinib (inhibits JAK3, and to a much lesser extent, JAK1 and JAK2) and baricitinib (inhibits JAK1/2). To date, JAK inhibitors have shown side effects that include increased infections (opportunistic infections, viral infections, urinary infections, pneumonia, herpes zoster, cellulitis). Since this class of drugs is fairly new, long-term safety and efficacy data are being collected.

Treatment for RA is based on trial and error for each individual, as well as prescribing according to RA Guidelines that have been developed by professional medical associations such as the Canadian Rheumatology Association (<https://rheum.ca/resources/publications/canadian-recommendations-for-management-of-ra/>). Patients reported that they had tried a number of treatments for RA, though were often not getting the results they expected and reported that available treatments can be difficult to tolerate and manage.

A number of recurring concerns include:

- Severe side effects (particularly nausea, amongst others)
- Inability to tolerate a particular medication
- Organ damage
- Medication losing its efficacy over time

- Ongoing pain, fatigue and weakness
- High costs of medication and other treatments
- Fear that current treatment will stop working
- Stress resulting from having to switch medications numerous times

Respondents shared the following experiences with RA treatment:

- *“Orencia is the one I use now. Unlike all the others, it has prevented surprise large very painful flair-ups; but, it still does not prevent inflammation.”*
- *“I’m using biologics. They work for a few years then their effectiveness wears off and you have to change.”*
- *“The drugs prescribed are working: humira + methotrexate. Chronic pain + fatigue varies day to day. Lowering your immune system can be wearisome.”*
- *“I have been on a methotrexate program for over 10 yrs. This is all I know, at times joint pain can be very bad. Head fog can be severe at times. I’m not able to walk 3+ blocks”*
- *“I started with Plaquenil, sulphasalazine, Arava, methotrexate, Enbrel and now Humira. Rash with methotrexate, stomach problems with sulphasalazine. I still have pain that is not really being treated.”*
- *“Have used Methotrexate injections for 3 yrs and have had only mild flares. And since I started doing it at bedtime I don’t feel so tired or like I’m getting flu the next day.”*
- *“So far I have been on Dmards....made me too sick (MTX). Humira didn’t work. Then Orencia which worked for about a year then started going backwards. I then started Rinvoq but had a reaction to that....so we are starting at the beginning again. My latest side effects seems to be the obscure ones....I do have extreme fatigue lately and pain/flares”*
- *“I’ve been on everything from NSAIDs to golf injections to DMARDS to Biologics. Currently on Actemra IV + MTX SC with daily opioid and PRN NSAID. Currently constant nausea, fatigue and chills re the most bothersome sx. I have RA organ damage so we focus more on saving my life vs my joints. Constant pain daily although better than without meds.”*
- *“I included a list of some of the treatments I have used for my Rheumatoid Arthritis, Methotrexate (took it for a year but had to stop due to the horrible side effects - hair loss, upset stomach, nausea, vomiting) Sulfasalazine-short term use. Had to stop medication due to horrible side effects (headaches, upset stomach, nausea) Plauquenil- been on it for over 8 years. No serious side effects (yearly ophthalmologist appointment) Enbrel- I have been on this biologic drug for over 8 years and it seems to work to control my inflammation level which has been great, but I still suffer with chronic pain which could also be because I have fibromyalgia.”*

- *“Was on chloroquine five years with total remission -discontinued due to change in vision. Oral methotrexate effective -discontinued recently due to side effects. Starting same by injection. Humira effective with Methotrexate. Side effects of methotrexate more difficult to tolerate. Accessibility not an issue excepting can’t start methotrexate for a month when doctor can teach me syringe use. Covid keeps me away from other teachers. Never in total remission since chloroquine discontinued 35 years ago. Always experience some pain, fatigue, weakness.”*
- *“I used anti-inflammatories for 25 years. They caused stomach problems and eventually I had to stop them because they eventually damaged my liver. I have been on biologics for the last 4 years. The first one worked for 2 and a half years and then stopped. The next one didn’t work and made me nauseous every day for 5 months. I am now on another biologic which is working Ok but I have constant bouts of hives so I may be allergic to it. Although the biologic controls pain and inflammation well, it does not prevent flare-ups and in my case does nothing for the extreme fatigue. I am lucky that I have health insurance at work but each time I have to change drugs there is a whole process to go through to see if they will cover it which is stressful. Right now there is the uncertainty of what will happen if this biologic fails as there aren’t a lot of choices out there. That is a constant worry.”*
- *“I was using anti-tnf drugs which I can no longer as I have an allergic reaction to them. Other drugs like xeljanz are expensive. All drugs have side effects....”*
- *“I am taking Enbrel for more than 12 years and diclofenac for pain. I am on ODSP [Ontario Disability Support Program], so the cost of the treatment is covered. Fatigue is still a problem”*
- *“I used traditional, older DMARDs for 10 years that were unsuccessful in controlling my disease. I cycled through them all and never had my RA managed until I received my first biologic in 2000. I am on my 4th with stable disease but likely will require changing to a new one at some point.”*
- *“Over my 26 yrs many drugs variations have tried to make me comfortable. Ease of pain that helped and soothed the joints and mental health and the ability to socialize as not to become depressed is pool therapy. Fatigue was the hardest part when working, physical strain, is hard. Many complications and long hospital stays due to medication complications, I won’t name brand names but my lungs where affected and took 4 years to clear the issue. A rheumatoid arthritis worst fear, is that your medications stop working, and your hope is set aside again. I have been there so many times more than I can count. The rheumatologist never promises you just trust that the next option they give you will be the one that will make you feel what we call normal.”*
- *“Have used plaquinol successfully until recently but have been out of remission since March, resulting in pain and fatigue. Tried methotrexate very unsuccessfully. I suffered from numerous side effects including nausea, mouth sores, lack of appetite, and was only functioning for about 2 hours per day. It is exceptionally difficult to get a good rheumatologist (I fortunately have one now) and to be given choices on my own health and options. I am able to deal with costs at this time but do find the cost of medication extremely high.*

- “Sulphasalazine then added methotrexate pills which had horrible side effects Then added plaquinel Then added brenzys (biologic) Methotrexate is a horrible drug even with switching from pills to injections The biologic has helped more than the others. I can walk again with a cane. The fatigue is still horrendous and I have had 4 big infections since starting the biologic in Dec 2019. All of these treatments just slow down the disease, but come with big side effects or dangers. I started cbd /medical Marijuana for pain. Yet I can barely afford either. Plus government sites charge way more than black market even though it's legal now. So a big portion of my income if I dosed correctly would be taken by this. My insurance won't cover any of it and none of my doctors will prescribe anything else for pain. They keep telling me that once inflammation is under control the pain will subside. I think that is untrue. My marker #s for inflammation are finally low and the pain is still overwhelming yet I can get no help for it and can't afford even with a 10 percent off for lower income..... when I do take appropriate amounts of those my inflammation markers in blood work go way down. I honestly think the cbd does more for my inflammation than all these other drugs combined. I'm not sure why it's not covered. The disease, the insurance and cost really are exhausting and discouraging. Plus a lack of coverage for physio and other treatments is a real issue. Also the lack of support groups in ont or some sort of counselor. I get 15 mins with my rheumatologist every 3 months. They never answer questions I just got thrown a pamphlet on the disease and the drugs. I even had to pick my biologic on my own...I feel completely tossed aside and basically just thrown drugs and told this is how it is. My rheumatologist won't fill out any paper work for disability, parking passes. They say my family dr if willing can do that. My family dr says well I'm not treating you for this....complete run around and I have been left to fend for myself. I am discouraged, betrayed by our good health care system and alone.”*
- “I am unable to take the recommended dosage of methotrexate or sulfasalazine due to the extreme nausea each of them caused. I am now on Humira, which was difficult to start because of the cost and insurance hassle associated with a pricey drug. However, I'm unable to give myself the shots when my hands are being affected by the disease, so I depend on others. I live alone, so this is challenging. I still have occasional flare ups, my one joint has not regained flexibility, and I am severely fatigued often.”*
- “I did not tolerate methotrexate at all, it caused RA nodules that impact my function as well as severe nausea and fatigue. I was switched to plaquenil to take along with my biologic and it has made a huge difference even controlling my severe dry eyes when nothing else did”*

## 5. Improved Outcomes

People living with RA reported that current treatments are difficult to tolerate because of side effects. A variety of side effects are difficult to manage such as those described above. Some of these side effects require treatment with other medications, such as anti-nausea medications. Minimizing these side effects are important outcomes that should be considered when evaluating new therapies. Respondents also noted the impact these treatments had on their daily lives:

- “Being sick/nauseous is a hard one for me but I'm more of a glass half full and try to live a normal life. I usually push myself even if it hurts and I pay for it later but I refuse to let RA keep me from the things I love.”*

- *“Side effects are always a problem. I am on several medications because of side effects, in particular Nexium for stomach issues. I would like to see more follow up and closer monitoring of any new treatment. Not just a phone call every few months. Every medication choice is hard because they all come with a long list of scary side effects. But I will try anything that can keep me mobile and working.”*
- *“Side affects most common: stomach, nasal issues, dry eyes. The extra costs for drops for eyes, gravol are always out of pocket. quality of life when not well cannot be included in family events or other regular appointments. Or just being able to go for a simple walk since you have no energy.”*
- *“The side effects from these meds are devastating. I get 2 ok days. 3 days of being nauseated and exhausted each week only to get 2 more bad days before I get this weeks meds. I may be developing ms from the biologic I'm on. Yet if I didn't take it I was at the point where I couldn't brush my own teeth or comb my hair so not a choice I just want to be able to do things with my children.”*
- *“I've had to choose an acceptable level of nausea in order to function throughout the day, and that is very difficult to work with. It's hard to rationalize that you're going to be moderately to violently ill for 1/7 days of the week so that you can move the rest of month, but that's the choice I'm faced with everytime I take even the smallest dose of methotrexate. Not vomiting daily would save my teeth, my throat, my appetite, and would be awesome :)”*

Even with currently available treatments for RA, patients' outcomes can vary significantly. Some medications are effective for some people, while not effective for others. Some treatments will effectively manage RA for a short period of time before a person's immune system adapts to a drug's presence (i.e. becomes non-responsive to it) and they will have to switch to another medication. In some cases, people living with RA may not respond to any of the currently available medications. As a result, patients need a number of medication options to manage their RA throughout their lives.

There are outcomes that are important to people living with RA, and these include:

- reduction in pain and fatigue
  - decrease in medication side effects
  - decrease in inflammation and stiffness
  - increased mobility
  - ability to socialize and spend time with family and friends
  - ability to work and be productive at work
  - ability to carry out activities of daily living
  - easier storage and administration of medications
  - greater affordability of medications
- *“On a daily basis I deal with constant pain, fatigue, tiredness, and stiffness which is very draining. It impacts my daily routines and lifestyle. My life will change dramatically if there was a drug that*



would take away all of these symptoms that I'm experiencing daily. I would agree that side effects from certain drugs have created a lot of challenges for me. Its difficult trying new drugs and having to deal with all of the awful side effects. When you're dealing with chronic pain you will do anything and everything to try to ease the pain and discomfort."

- *"Drug side effects a problem. -transporting some drugs a problem when travelling i.e. must be kept frozen or cold. Improving drugs so that keeping cold or frozen not necessary. Drugs providing total remission would improve daily life. Choosing therapy-accept side effects or live with fatigue, pain, stiffness."*
- *"My drugs are administered once a month by intravenous. Having to take time away from work is not great once a month. The cost on my drug plan is also an issue for my employer."*
- *"Side effects are a trade off really. Methotrexate makes me tired and nauseous but is mild enough to be bearable. Treatments that are use more natural ingredients that potentially have less side effects and are less harmful for the body when ingested. Better assistance programs for those who do not have support in Canada."*
- *"[I would like to] continue to work fulltime without needing to go to bed as soon as I get home. I would like to go 1 hr without blinding pain. I am very organized yet the brain fog is out of control. There are days when I can't even remember the name of daily items .. everything would change for me. I have taken a chance on developing ms and lupus from 1 drug, eye damage from another. Thank goodness I'm not a drinker because these drugs are so hard on your liver although it would be nice once in a while at a wedding or celebration to be able to have 1 drink not a big deal, but another one normal thing this has disease has taken. It would be life changing to find a cure or treatment with less side effects for myself, my family and my children."*
- *"One of my main concerns are long term side affects of medications. As I have other health issues as well, it is sometimes difficult to coordinate drugs so that they are not counteractive. I need to be able to have a quality of life that the medications compliment as there are many things that are already restricted by the disease and having further constraints put onto my life is not something I consider an option...for example if I am able to travel and visit a vineyard in Italy it is not an option for me to not enjoy this passion and not be able to join others in my party for a tasting because my medication does not allow. If I want to take a tour but cannot get moving until noon because of severe nausea from taking medication, this is not an option for me. I need to maintain some quality of life and be able to enjoy the things I love, even if it means working through pain at times. This will also allow my family and I to participate in things together."*
- *"It would be nice to be able to work, to feel useful in some ways."*

## **6. Experience With Drug Under Review**

While none of the survey respondents had indicated using filgotinib for their rheumatoid arthritis, the survey responses addressed in sections 4 and 5 illustrate the desire for a medication with improved outcomes and potentially less side effects.

## 7. Companion Diagnostic Test

Not applicable

## 8. Anything Else?

Of 17 responses, 82.35% (n=14) had tried one or more disease-modifying anti-rheumatic drugs (DMARDs), either as monotherapy or in combination with conventional synthetic DMARDs (csDMARDs). Of those who had tried DMARDs, 64.29% (n=9) had responded inadequately or are intolerant to one or more DMARDs.