

# Counselling patients for return to work on immunosuppression: practices of Canadian specialists during the COVID-19 pandemic

K. Ladak<sup>1</sup>, K. Winthrop<sup>2</sup>, J.K. Marshall<sup>1</sup>, J. Gelfand<sup>3</sup>, J. Pope<sup>4</sup>

<sup>1</sup>Department of Medicine, McMaster University, Hamilton, ON, Canada;

<sup>2</sup>Department of Infectious Disease, Oregon Health and Science University, Portland, OR, USA;

<sup>3</sup>Department of Dermatology, University of Pennsylvania, Philadelphia, PA, USA;

<sup>4</sup>Department of Medicine, University of Western Ontario, London, ON, Canada.

---

## Abstract

### Objective

*The COVID-19 pandemic has infected over 870,000 Canadians and caused 22,000 deaths. Many patients are attempting to balance health and financial stability. Therefore, we sought to determine how physicians who frequently prescribe immunosuppressive medications are counselling patients on return-to-work prior to widespread vaccine distribution and understand their decision processes.*

---

### Methods

*We administered a survey through the Canadian Rheumatology, Gastroenterology and Dermatology Associations. Physicians were asked whether patients have requested counselling on return-to-work during the pandemic and how they decide what advice to provide. They were shown seven clinical scenarios of patients on immunosuppressive medications, then asked whether they would provide a medical note advocating for delayed return-to-work or modified duties to reduce exposure.*

---

### Results

*151 physicians took the survey. 94% were asked for advice on return-to-work. 33% felt informed enough to provide counselling. When patients requested a medical note, physicians provided one 25% of the time. Factors most associated with providing notes were patient comorbidities, age, glucocorticoids, high risk work and vulnerable co-inhabitants. Conventional synthetic and biologic immunosuppressants did not prompt most physicians to provide a note. Respondents considered patient perspectives and workplace factors. Several requested guidelines to approach these encounters.*

---

### Conclusion

*Almost all rheumatologists, dermatologists and gastroenterologists have been asked to counsel patients on returning to work during the COVID-19 pandemic. Most do not feel informed enough to do so. Medical notes for accommodations are only provided a minority of the time, unless specific factors (e.g. glucocorticoids) are present. Guidance is needed to inform these decisions.*

---

### Key words

COVID-19, SARS-CoV-2, work, return to work, immunosuppression, autoimmune diseases

Karim Ladak, MB BCh BAO  
 Kevin Winthrop, MD, MPH  
 John K. Marshall, MD  
 Joel Gelfand, MD MSCE  
 Janet Pope, MD MPH, FRCPC

This work should be attributed to:  
 Department of Medicine,  
 McMaster University.

Please address correspondence to:  
 Karim Ladak,  
 711 Concession Street,  
 Hamilton,  
 ON, L8V1C3 Canada.  
 E-mail: karladak@gmail.com  
 karim.ladak@medportal.ca

Received on January 10, 2021; accepted  
 in revised form on March 17, 2021.

© Copyright CLINICAL AND  
 EXPERIMENTAL RHEUMATOLOGY 2021.

Statement of ethics and consent:  
 ethics approval obtained from Hamilton  
 Integrated Research Ethics Board (2020-  
 11528-GRA).

#### Competing interests:

K. Winthrop reports consulting fees from Pfizer, Abbvie, UCB, Eli Lilly & Co., Galapagos, GSK, Roche, Gilead, BMS, Regeneron, Sanofi, Novartis, AstraZeneca, and research grants from BMS and Pfizer. J. Gelfand served as a consultant for Abcentra, Abbvie, BMS, Boehringer Ingelheim, GSK, Lilly (DMC), Janssen Biologics, Novartis Corp, UCB (DSMB), Neuroderm (DSMB), and Mindera Dx., receiving honoraria; and receives research grants (to the Trustees of the University of Pennsylvania) from Abbvie, Boehringer Ingelheim, Janssen, Novartis Corp, Celgene, Ortho Dermatologics, and Pfizer Inc.; and received payment for continuing medical education work related to psoriasis that was supported indirectly by pharmaceutical sponsors. He is a Deputy Editor for the Journal of Investigative Dermatology receiving honoraria from the Society for Investigative Dermatology, is Chief Medical Editor for Healed Psoriatic Disease (receiving honoraria) and is a member of the Board of Directors for the International Psoriasis Council, receiving no honoraria. The other authors have declared no competing interests.

## Introduction

Canada has documented over 870,000 cases of COVID-19 (1-4). The federal government estimates its vaccination campaign will not finish until the end of 2021 (5-7). These authors felt many Canadians are likely asking doctors how to balance their health and financial security (8, 9).

This is particularly true for individuals with chronic inflammatory diseases. There are approximately 374,000 Canadians with rheumatoid arthritis, 270,000 with inflammatory bowel disease (IBD), 1,000,000 with psoriasis and many others with uveitis, spondyloarthritis, connective tissue diseases and other dermatologic conditions (10-12).

We distributed a survey to Canadian rheumatologists, dermatologists and gastroenterologists nationally. We assessed whether they are being asked to provide advice on returning to work amid the COVID-19 pandemic and how they approach these clinical encounters. The survey also included clinical scenarios, in which respondents were asked whether they would provide a medical note for delayed return-to-work or modified duties.

## Methods

### Study design, population and sampling

This anonymous, cross-sectional, national questionnaire surveyed physicians registered with the Canadian Rheumatology Association (CRA), Canadian Dermatology Association (CDA) and Canadian Association of Gastroenterologists (CAG). It was distributed by various channels; the CRA sent emails to its members, the CDA included it in an electronic newsletter, and the CAG by Twitter and Facebook. The survey closed after four weeks.

### Questionnaire

The survey was developed by North American collaborators in gastroenterology, rheumatology, infectious disease and dermatology, then piloted on a separate panel of physicians in both academic and community practices. Data was collected on respondents' specialties, practice locations and perceived local risk of community transmission. We enquired whether physicians had

been asked by patients on immunosuppressive medications for advice on return-to-work amid the COVID-19 pandemic, and if they felt informed enough to provide it. We asked what percent of the time they provided a note when one was requested for a delayed return-to-work or modified duties.

Respondents were given seven clinical scenarios and asked how they would proceed if patients requested a medical note. They could choose one of the following answers: "Counsel on appropriate hygiene measures and PPE, but decline a note," "Provide a note," "I am unsure how to proceed," "I do not prescribe this medication." Cases varied based on immunosuppressive therapies, patient age, comorbidities, presence of a vulnerable co-inhabitant at home and varying risk of exposure based on commute and work environment.

Respondents were asked which factors most influenced their decisions and were invited to qualitatively highlight other pertinent factors around return to work.

### Data processing and analysis

Descriptive statistics were employed. Categorical data was presented as percentages. Non-normally distributed data was reported as medians (first quartile-third quartile). We analysed free-text answers for common themes. We included all responses. Missing data was not imputed.

## Results

### Demographics

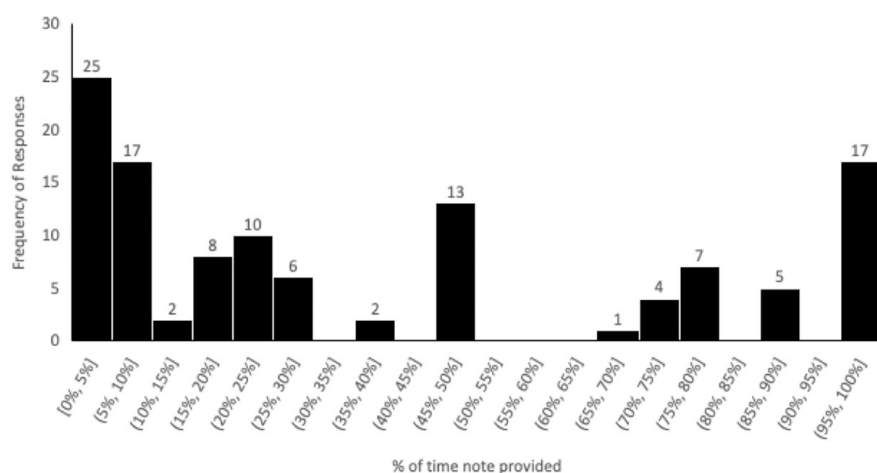
From September 8 to October 6, 2020, 151 responses (125 complete, 26 partially complete) were received. 61% were rheumatologists, 30% gastroenterologists and 9% dermatologists.

### Local risk of COVID-19

52% reported a low local risk of transmission, 39% moderate and 9% high.

### Implications of the COVID-19 pandemic on clinical practice

94% of respondents reported they had been asked for advice on return-to-work during the pandemic. 33% felt informed enough to provide this advice, 57% partially informed and 10% not



**Fig. 1.** What percent of the time physicians provide a medical note for delayed return-to-work or modified duties when one is requested by patients on immunosuppressive medication(s). Respondents provided a wide range from 0–100%, median 25%, 10–77.5%, interquartile 67.5%.

informed enough. When a medical note was requested for a delayed return-to-work or modified duties, respondents provided one 25% of the time (range 0–100%; 10–77.5, interquartile range 67.5). (Fig. 1).

#### Responses to clinical scenarios

When asked to provide or decline a delayed return-to-work/modified duties note in the clinical scenarios, we observed decreasing risk tolerance as the number of perceived risk factors increased (Table I).

1. “51yo F architect with no other comorbidities, who drives to work, on methotrexate monotherapy. She will be required to wear a non-medical mask at work. She has no vulnerable co-inhabitants at home.” 5.4% of respondents provided a note, 3.1% unsure how to proceed.

2. “37yo M office worker, with no other comorbidities, who walks to work, on combination therapy with azathioprine and methotrexate. He will be required to wear a mask at the office. He has no vulnerable co-inhabitants at home.” 8.0% of respondents provided a note, 9.6% unsure how to proceed.
3. “49yo M electrician, with no other comorbidities, who carools to work, on methotrexate and adalimumab. He will be required to wear an industrial particulate respirator (3M N95) at the jobsite. He has no vulnerable co-inhabitants at home with him.” 21.0% provided a note, 5.6% unsure how to proceed.
4. “50yo F tax auditor who drives to work at the Canada Revenue Agency, on azathioprine and moderate doses of tapering prednisone. She

will be required to wear a non-medical mask at the office. She has no significant comorbidities and no vulnerable family members at home.” 32.3% provided a note, 8.9% unsure how to proceed.

5. “48yo F personal trainer, with no other comorbidities, who takes the transit to her gym, on methotrexate and ustekinumab. She will be required to wear a non-medical mask at the jobsite. She has an elderly mother with dementia and heart failure living with her.” 57.3% provided a note, 15.3% unsure how to proceed.
6. “64yo F grade 6 teacher who walks to work, with a history of hypertension and obesity, on a JAK inhibitor and low dose prednisone. She has a diabetic husband at home. She will be required to wear a non-medical mask at work.” 59.7% provided a note, 14.5% unsure how to proceed.
7. “59yo F ER nurse in an understaffed hospital, on methotrexate and adalimumab. She carools to work. Her past medical history includes obesity, hypertension and COPD. She has a 65yo husband with similar comorbidities. She will be required to wear a face shield, gown, gloves and a surgical mask when with patients and an N95 if potential for aerosolising procedures.” 74.2% provided a note, 8.9% unsure how to proceed.

#### Factors affecting decision

##### whether to provide a medical note

Physicians selected up to four influencing factors. In order from most to

**Table I.** Case scenarios: presence of risk factors and how frequently specialists provide notes for delayed return-to-work or modified duties during the COVID-19 pandemic.

	DMARDs	Poly-pharma	Biologics	Risk during commute	Steroids	Vulnerable individuals at home	Risk at work	Comorbidity	Age over 60	% of time note provided
1	X									5%
2	X	X								8%
3	X	X	X	X						21%
4	X	X			X					32%
5		X	X		X	X	X	X	X	57%
6	X	X	X	X		X	X			60%
7	X	X	X	X		X	X	X		74%

**Table II.** Major themes and examples when rheumatologists, dermatologists and gastroenterologists were asked, “Is there anything else you would like to highlight about your decision to provide or decline a delayed return-to-work note?”

There is a need for guidance on this matter.	There is a great need to have recommendations for conduct in this area (French Translation)
	I'd like guidance on what to say to patients
	Guidelines are not clear
	This would be a great topic for a CME event
Patient preferences influence decision-making.	So much depends on the individual. Some want to ignore it and just head back to work, while others we'll have to prise back to work
	No one should have to go to a job if it is frightening to them
	I am uncomfortable refusing such notes to patients who are concerned
	I take into account the patient's desire to or not to return to work (often influenced by personal, mental health, economic considerations) (French)
The patient's drug regimen influences decision-making, especially if it contains corticosteroids.	MTX, azathioprine and biologic therapies are immunomodulators not necessarily immunosuppressants. High dose glucocorticoids are more problematic than stable low dose glucocorticoids
	Considering all biologics and DMARDs as immunosuppressors is wrong
	I am minimising the use of corticosteroids currently (French)
	Steroids (eg pred >20mg qd) are higher risk than csDMARDs, biologics and small molecules.
Workplace factors influence decision-making.	Whether or not the workplace offers the possibility of protection (French)
	It is up to the employer to provide a safe workplace that will accommodate social distancing and hygiene
	What type of PPE the patient has access to at work
	I've often asked patients what remote work options they have available; if it exists, I'll offer the note for patients I might otherwise not

least commonly identified, these were: comorbidities that predispose to severe COVID-19 infection (81.3%), patient age (68.3%), glucocorticoids (64.2%), type of work which exposes to high-risk individuals or high volumes of individuals (63.4%), local risk of COVID-19 community transmission (36.6%), biologic immunosuppression (30.1%), non-biologic immunosuppression (16.3%).

#### *Qualitative insights*

41 of 151 (27.2%) respondents provided qualitative answers. Select themes are summarised in Table II.

#### **Discussion**

Almost all (94%) Canadian rheumatologists, gastroenterologists and dermatologists have been asked for advice about returning to work during the COVID-19 pandemic. Yet only one third of respondents felt informed enough to navigate these discussions with patients.

When asked for one, most physicians only provided medical notes for a delayed return-to-work or modified duties a minority of the time (median rate 25%), but there was substantial

variation in practice patterns (range 0–100%).

Physicians were more comfortable declining notes when patients had less risk factors, but physician uncertainty and heterogeneous practice patterns became more pronounced as the number of perceived risks increased. The factors most associated with physicians providing such notes are the presence of comorbidities that predispose to severe COVID-19 infection, patient age over 60, glucocorticoids, high risk work and vulnerable co-inhabitants living with the patient. This is illustrated by contrasting cases 3 and 7.

Physicians highlighted four major themes in their qualitative answers. Firstly, they asked for guidance in the form of guidelines or continuing medical educational. Secondly, they identified patient preference as important in their decision-making. Thirdly, physicians felt that some responsibility falls upon the workplace for providing safety in the form of PPE. Finally, they specified that the medication regimen – particularly the presence of corticosteroids – influenced their decision.

The presence of csDMARDs, biologics or JAK inhibitors did not prompt most

physicians to recommend a delayed return-to-work or modified duties. This is in keeping with current literature suggesting that corticosteroids are associated with severe COVID-19 infection, while the other aforementioned agents do not negatively impact COVID-19 outcomes and may instead reduce the aggressive inflammatory response to the virus (14–17).

Our study had several strengths. We attempted to ensure our study population was representative of Canadian physicians who prescribe immunosuppressive medications regularly. This was achieved through partnership with the CRA, CDA and CAG. The study was also distributed in both English and French with a large number of francophone respondents. We also confirmed the survey formatting was available on both desktop and mobile devices. However, there were also some limitations. Firstly, each of the national associations distributed the survey through different channels, which led to different response rates between specialties. Secondly, inherent with the study's survey format there was likely selection bias (for example, as this was an online survey, younger physicians may

have been more inclined to respond than older physicians).

While multiple associations have provided guidance on the use of medications during the pandemic, advice on returning to work is limited (18). A consensus statement by the CRA, CDA, CAG or other national/international bodies would likely reduce the uncertainty observed in our study.

## References

1. Health Canada. Coronavirus disease (COVID-19) outbreak updates, symptoms, prevention, travel, preparation. Available: <https://www.canada.ca/en/public-health/services/diseases/coronavirus-disease-covid-19.html> (accessed Jan 9, 2021).
2. Johns Hopkins. Canada – Covid-19 overview. Johns Hopkins Coronavirus Resource Center. Available: <https://coronavirus.jhu.edu/region/canada> (accessed Jan 9, 2021).
3. Ontario Ministry of Health. How Ontario is responding to COVID-19. Available: <https://www.ontario.ca/page/how-ontario-is-responding-covid-19> (accessed Jan 9, 2021).
4. Manitoba Ministry of Health. COVID-19 Novel Coronavirus. *Cases and Risk of COVID-19 in Manitoba*. Available: <https://www.gov.mb.ca/covid19/updates/cases.html> (Accessed Jan 9, 2021).
5. POLACK FP, THOMAS SJ, KITCHIN N *et al.*: Safety and efficacy of the BNT162b2 mRNA Covid-19 vaccine. *N Engl J Med* 2020; 383: 2603-15.
6. JACKSON LA, ANDERSON EJ, ROUPHAEL NG *et al.*: An mRNA vaccine against SARS-CoV-2 – preliminary report. *N Engl J Med* 2020; 383: 1920-31.
7. Public Health Agency of Canada. Canada's COVID-19 Immunization Plan: Saving Lives and Livelihoods. Canada, Public Health Agency of Canada; Dec 4, 2020.
8. DESJARDINS D, FREESTONE C: Royal Bank of Canada. Market Report: Canadian Women Continue to Exit the Labour Force. November 19, 2020.
9. Government of Canada. Canada Emergency Response Benefit. Available: <https://www.canada.ca/en/services/benefits/ei/cerb-application.html> (accessed Dec 1, 2020).
10. KAPLAN GC, BERNSTEIN CN, COWARD S *et al.*: The impact of inflammatory bowel disease in Canada 2018: Epidemiology. *J Can Assoc Gastroenterol* 2019; 2 (Suppl. 1) 6-16.
11. Government of Canada. Highlights from the Canadian Chronic Disease Surveillance System. *Rheumatoid Arthritis*. Available: <https://www.canada.ca/en/public-health/services/publications/diseases-conditions/rheumatoid-arthritis.html> (accessed Dec 1, 2020).
12. Canadian Dermatology Association. Psoriasis. Available at: <https://dermatology.ca/public-patients/skin/psoriasis/> (accessed Dec 1, 2020).
13. BRENNER EJ, UNGARO RC, GEARRY RB: Corticosteroids, but not TNF antagonists, are associated with adverse COVID-19 outcomes in patients with inflammatory bowel diseases: results from an international registry. *Gastroenterology* 2020;159: 481-91.e3.
14. GIANFRANCESCO M, YAZDANY J, ROBINSON PC: Epidemiology and outcomes of novel coronavirus 2019 in patients with immune-mediated inflammatory diseases. *Curr Opin Rheumatol* 2020; 32: 434-40.
15. GIANFRANCESCO M, HYRICH KL, AL-ADELY S: Characteristics associated with hospitalisation for COVID-19 in people with rheumatic disease: data from the COVID-19 Global Rheumatology Alliance physician-reported registry. *Ann Rheum Dis* 2020; 79: 859.
16. FERRO F, ELEFANTE E, BALDINI C *et al.*: COVID-19: the new challenge for rheumatologists. *Clin Exp Rheumatol* 2020; 38: 175-80.
17. FERRO F, ELEFANTE E, PUXEDDU I *et al.*: COVID-19: the new challenge for rheumatologists. First Update. *Clin Exp Rheumatol* 2020; 38: 373-82.
18. GELFAND JM, ARMSTRONG AW, BELL S *et al.*: National Psoriasis Foundation COVID-19 Task Force Guidance for Management of Psoriatic Disease During the Pandemic: Version 1. *J Am Acad Dermatol* 2020; 83: 1704-16.