Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

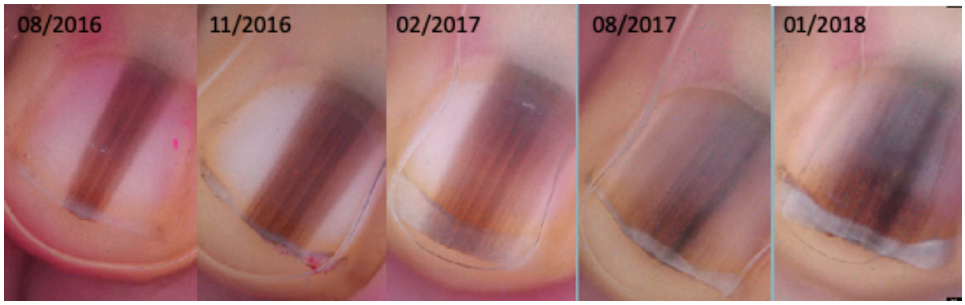

Fig 1. Congenital nevus of the nail apparatus showing broadening of the band of melanonychia, new bands appearing, and new colors. A biopsy confirmed the diagnosis of melanocytic nevus of the nail matrix.

E-mail: fcpozzobonnt@unal.edu.co

REFERENCES

1. Ohn J, Choe YS, Mun JH. Dermoscopic features of nail matrix nevus (NMN) in adults and children: a comparative analysis. *J Am Acad Dermatol*. 2016;75:535-540.
2. Lazaridou E, Giannopoulou C, Fotiadou C, Demiri E, Ioannides D. Congenital nevus of the nail apparatus---diagnostic approach of a case through dermoscopy. *Pediatr Dermatol*. 2013;30:e293-e294.
3. Agusti-Mejias A, Messeguer F, Febrer I, Alegre V. Congenital subungual and periungual melanocytic nevus. *Actas Dermosifiliogr*. 2013;104:446-448.
4. Lee JH, Lim Y, Park JH, et al. Clinicopathologic features of 28 cases of nail matrix nevi (NMNs) in Asians: comparison between children and adults. *J Am Acad Dermatol*. 2018;78(3):479-489.
5. Scope A, Marchetti MA, Marghoob AA, et al. The study of nevi in children: principles learned and implications for melanoma diagnosis. *J Am Acad Dermatol*. 2016;75:813-823.

https://doi.org/10.1016/j.jaad.2020.02.042

Treatment discontinuation and rate of disease transmission in psoriasis patients receiving biologic therapy during the COVID-19 pandemic: A Canadian multicenter retrospective study

To the Editor: Limited data are available to guide use of biologics for moderate to severe plaque psoriasis in the current coronavirus disease 2019 (COVID-19) health care landscape.[1,2] We aimed to further understand the rate of patient-driven biologic discontinuation in moderate to severe psoriasis because of concerns regarding COVID-19 complications. Furthermore, our goal was to add to the limited but increasing body of literature on whether biologic use should be considered a risk factor for greater susceptibility to COVID-19.

After research ethics approval, a multicenter retrospective study was undertaken of all patients from 2 tertiary academic hospitals affiliated with the University of Toronto, Canada, and a community practice in Hamilton, Canada. Inclusion criteria were patients aged 18 years or older with moderate to severe psoriasis who received at least 1 dose of a biologic before February 1, 2020. Data were retrospectively obtained from Patient Support Program case managers of all major suppliers of biologic agents for psoriasis. February 1, 2020, was the starting point of data collection (5 documented COVID-19 cases and 0 deaths in Canada) and patients were followed up until June 1, 2020 (91,703 cumulative cases and 7594 deaths).[3]

As of February 1, 2020, there were 2095 patients receiving biologic therapy for psoriasis who met inclusion criteria. Total number of patients who temporarily discontinued their biologic at any point during the 4-month period because of COVID-19–related concerns was 23 (1.1%) (Table I). Of the 23 patients who temporarily discontinued their biologic, 7 did so in February, 11 in March, 3 in April, and 2 in May. This corresponded to a total of 17 (0.81%), 18 (0.86%), and 18 (0.86%) patients discontinuing treatment at each of April 1, May 1, and June 1, 2020 timepoints, respectively. Biologic discontinuation by class included tumor necrosis factor α inhibitors (8/749, 1.07%), interleukin 12 and 23 inhibitors (5/371, 1.35%), interleukin 17 inhibitors (4/482, 0.83%), and interleukin 23 inhibitors (6/493, 1.22%) (Table II). Mean duration of biologic treatment before discontinuation was 50.6 ± 35.7 months. Five patients who temporarily discontinued their biologic elected to restart the same biologic before June 1 compared with 18 who remained without treatment. All patients who restarted their biologic (5/5, 100%) did so because of a flare of their psoriasis. Of the 23 patients who temporarily discontinued treatment, 14 (60.9%) were men, mean age was 56.4 ± 12.6 years, and 1 (4.3%) also had psoriatic arthritis. Of the 2095 patients in our cohort (2072 [98.9%] of whom continued to receive a biologic throughout the entire follow-up period), 0 had a confirmed positive diagnosis of COVID-19.

Table I. Demographics of psoriasis patients who temporarily discontinued biologic treatment because of coronavirus disease 2019 concerns

Discontinuation month, 2020	Biologic	Sex	Age, years	Diagnosis	Duration, months	Restart before June 1
February	Adalimumab	Man	56	Ps	78	Yes
	Adalimumab	Man	70	Ps	90	No
	Adalimumab	Man	43	Ps	88	No
	Guselkumab	Man	56	Ps	19	No
	Guselkumab	Man	67	Ps	23	No
	Infliximab	Man	63	Ps	133	No
	Ustekinumab	Man	45	Ps	43	No
March	Adalimumab	Man	46	Ps	92	No
	Adalimumab	Woman	65	Ps + PsA	83	No
	Adalimumab	Woman	65	Ps	43	Yes
	Guselkumab	Woman	64	Ps	24	No
	Guselkumab	Man	48	Ps	17	No
	Guselkumab	Woman	69	Ps	22	No
	Ixekizumab	Woman	66	Ps	26	Yes
	Ixekizumab	Man	70	Ps	23	Yes
	Ustekinumab	Man	30	Ps	100	No
	Ustekinumab	Man	49	Ps	2	No
	Ustekinumab	Woman	51	Ps	36	Yes
April	Guselkumab	Man	56	Ps	18	No
	Ustekinumab	Woman	71	Ps	35	No
	Secukinumab	Woman	73	Ps	56	No
May	Adalimumab	Man	43	Ps	91	No
	Ixekizumab	Woman	32	Ps	21	No

Biologics reviewed included adalimumab, brodalumab, certolizumab, etanercept, guselkumab, infliximab, ixekizumab, risankizumab, secukinumab, and ustekinumab.
Ps, Psoriasis; *PsA*, psoriatic arthritis.

All patients who developed COVID-19–related symptoms received testing, results of which were negative. Of the 16 new biologic treatment initiations between April 1 and June 1, 2020, the majority were interleukin 17 inhibitors (n = 13, 81.2%), followed by tumor necrosis factor α inhibitors (n = 2, 12.5%) and interleukin 23 inhibitors (n = 1, 6.2%).

The results of this study demonstrate that the rate of patient-driven biologic discontinuation during the peak of COVID-19 cases in Canada remained low during the entire 4-month follow-up period. Although interleukin 17 inhibitors had the lowest rate of temporary discontinuation, there did not appear to be a major class-specific difference in rates. Our findings provide some of the earliest evidence supporting current COVID-19 biologic treatment guidelines and encourage continuation of biologics in asymptomatic patients with negative COVID-19 test results despite the risk of future outbreaks.[4,5] Discontinuation of treatment out of concerns about contracting COVID-19 is not supported because it may lead to decreased efficacy outcomes with reintroduction or a flare of psoriasis, as observed with our cohort. Low volumes of new biologic initiations highlight the need for improved access to nonurgent care during the pandemic.

Jorge R. Georgakopoulos, MD,[a] Asfandyar Mufti, MD,[a] Ron Vender, MD, FRCPC,[b,c] and Jensen Yeung, MD, FRCPC[a,d,e,f]

From the Division of Dermatology, Department of Medicine, University of Toronto, Ontario, Canada[a]; Department of Dermatology, McMaster University, Hamilton, Ontario, Canada[b]; Dermatrials Research Inc & Venderm Innovations in Psoriasis, Hamilton, Ontario, Canada[c]; Sunnybrook Health Sciences Centre, Toronto, Ontario, Canada[d]; Women's College Hospital, Toronto, Ontario, Canada[e]; and Probity Medical Research Inc, Waterloo, Ontario, Canada.[f]

Funding sources: None.

Conflicts of interest: Dr Vender has been a speaker, consultant, advisory board member, and investigator for AbbVie, Actelion, Amgen, Astellas, Celgene, Dermira, Eli Lilly, Galderma, Janssen Ortho, Leo, Merck, Novartis, Pfizer, Regeneron, and Takeda. Dr Yeung has been a speaker,

Table II. Percentage of patient-driven temporary biologic treatment discontinuation during the coronavirus disease 2019 pandemic

Variable	Combined	Adalimumab	Brodalumab	Certolizumab	Etanercept	Guselkumab	Infliximab	Ixekizumab	Risankizumab	Secukinumab	Ustekinumab
Total patients*	2095	290	29	46	365	388	48	249	105	204	371
Discontinued before April 1	17 (0.81)	5 (1.7)	0	0	0	5 (1.3)	1 (2.1)	2 (0.8)	0	0	4 (1.08)
Discontinued before May 1	18 (0.86)	5 (1.7)	0	0	0	6 (1.5)	1 (2.1)	0	0	1 (0.5)	5 (1.35)
Discontinued before June 1	18 (0.86)	5 (1.7)	0	0	0	6 (1.5)	1 (2.1)	1 (0.4)	0	1 (0.5)	4 (1.08)
Total no. of restarts	5	2	0	0	0	0	0	2	0	0	1
Combined all months†	23 (1.1)	7 (2.4)	0	0	0	6 (1.5)	1 (2.1)	3 (1.2)	0	1 (0.5)	5 (1.35)

Data are presented as No. (%) unless otherwise indicated.
*Total number of patients receiving a biologic for psoriasis as of February 1, 2020, and followed throughout the entire 4-month study period.
†Total number of patients who discontinued their biologic, including those who restarted before June 1.

consultant, and investigator for AbbVie, Allergan, Amgen, Astellas, Boehringer Ingelheim, Celgene, Centocor, Coherus, Dermira, Eli Lilly, Forward, Galderma, GSK, Janssen, Leo, Medimmune, Merck, Novartis, Pfizer, Regeneron, Roche, Sanofi Genzyme, Takeda, UCB, Valeant, and Xenon. Drs Georgakopoulos and Mufti have no conflicts of interest to declare.

Reprints not available from the authors.

Correspondence to: Jensen Yeung, MD, FRCPC, Department of Dermatology, Women's College Hospital, 76 Grenville St, Fifth Floor, Toronto, Ontario, Canada, M5S 1B2

E-mail: jensen.yeung@utoronto.ca

REFERENCES

1. Warren RB, Gooderham M, Burge R, et al. Comparison of cumulative clinical benefits of biologics for the treatment of psoriasis over 16 weeks: results from a network meta-analysis. *J Am Acad Dermatol*. 2019;82(5):1138-1149.
2. Kim HJ, Lebwohl MG. Biologics and psoriasis: the beat goes on. *Dermatol Clin*. 2019;37(1):29-36.
3. Johns Hopkins Coronavirus Resource Center. COVID-19 case tracker. Available at: https://coronavirus.jhu.edu/; 2020. Accessed June 2, 2020.
4. Lebwohl M, Rivera-Oyola R, Murrell DF. Should biologics for psoriasis be interrupted in the era of COVID-19? *J Am Acad Dermatol*. 2020;82(5):1217-1218.
5. Shah P, Zampella JG. Use of systemic immunomodulatory therapies during the coronavirus disease 2019 (COVID-19) pandemic. *J Am Acad Dermatol*. 2020;82(6):e203-e204.

https://doi.org/10.1016/j.jaad.2020.07.021

Applying to dermatology residency during the COVID-19 pandemic

To the Editor: As the coronavirus disease 2019 pandemic continues to unfold, the medical community has been forced to make a number of social and institutional adaptations to reduce the risk to patients and providers. Changes to the residency application process are particularly influential on students pursuing competitive specialties such as dermatology. In April 2020, the Dermatology Residency Program Directors released a consensus statement regarding the 2020-2021 application cycle.[1] In this announcement, program directors acknowledged disruptions that may occur in extracurriculars, such as in-person clinical projects and community outreaches, research, United States Medical Licensing Examination (USMLE) step 2, and subinternships of dermatology applicants, calling for understanding from residency programs in this coming application cycle and making