



## ORIGINAL ARTICLE

# Should we be concerned about gastrointestinal-related adverse events in patients with plaque psoriasis receiving secukinumab therapy? A retrospective, real-life study

Federico Diotallevi  | Daisy Gambini | Giulia Radi  | Oriana Simonetti | Annamaria Offidani

Dermatological Clinic, Department of Clinical and Molecular Sciences, Polytechnic University of the Marche Region, Ancona, Italy

**Correspondence**

Federico Diotallevi, Dermatological Clinic, Department of Clinical and Molecular Sciences, Polytechnic University of the Marche Region, Ancona, Italy.  
Email: [federico.diotallevi@pm.univpm.it](mailto:federico.diotallevi@pm.univpm.it)

**Abstract**

Real-world secukinumab gastrointestinal-related adverse events (GIRAE) data in psoriatic patients treated with secukinumab are lacking. A descriptive, retrospective study was performed by reviewing the medical records of patients who received secukinumab for plaque psoriasis for at least 1 year and who made a follow-up visit to the dermatology clinic of “Ospedali Riuniti Umberto I” in Ancona between December 1, 2021, and March 31, 2022. The patients' medical history and clinical data were collected at T0, before treatment, and at T1, corresponding to the last follow-up visit. Special attention was given to gastrointestinal adverse events (GIRAE). A total of 108 patients were included in the study. At baseline median PASI was 14.8 (range 2.2–27, SD 6.1), and median DLQI was 9.3 (5–16, SD 2.6). The median PASI for treated patients was 0.7 (0–3, SD 0.8;  $p < 0.001$ ) and median DLQI was 0.3 (0–1, SD 0.5;  $p < 0.001$ ). At T1 54/114 patients (50%) reached PASI100, of the other 54, 48 (88.9%) reached PASI 90 while the other six discontinued for secondary ineffectiveness. Only three patients reported a GIRAE (diarrhea), however, when screened, no IBD was found. Consistent with data in the literature, secukinumab is an effective and safe drug for the treatment of plaque psoriasis also in a real-life experience context. There should be no concern in choosing the drug for fear of possible IBDs-related GIRAE if there is no personal history or familiarity for IBDs.

**KEYWORDS**

adverse drug reaction, GIRAE, inflammatory skin diseases, psoriasis, psoriasis treatment, secukinumab

## 1 | INTRODUCTION

Psoriasis is a complex immune-mediated disease in which T lymphocytes, dendritic cells, and cytokines (interleukin [IL] 23, IL-17, and tumor necrosis factor [TNF]  $\alpha$ ) play a central role contributing to the

Federico Diotallevi and Daisy Gambini contributed equally to the manuscript.

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial-NoDerivs](https://creativecommons.org/licenses/by-nc-nd/4.0/) License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2022 The Authors. *Dermatologic Therapy* published by Wiley Periodicals LLC.

hyperproliferation and abnormal differentiation of the epidermis, inflammatory cell infiltrates, and vascular dilatation, that characterize the pathology.<sup>1</sup>

The body of evidence demonstrating the importance of the immune system in the pathogenesis of psoriasis is contributing to the development of new therapies for the disease. Biological drugs, through the blockade of specific cytokines, guarantee an almost complete clearance in patients with moderate–severe psoriasis. In particular, biologics that specifically target IL-17A (secukinumab, ixekizumab), showed high levels of efficacy and tolerability in both phase III and postmarketing real world experience studies.<sup>2,3</sup>

However, since IL-17 has a protective role for the intestinal barrier, drugs targeting this cytokine, including secukinumab, are not indicated in patients with chronic inflammatory bowel disease (IBD) as they are believed to exacerbate existing disease. In addition, the first meta-analysis performed on registrational studies and some subsequent case reports, have shown new cases of IBD in patients on continuous treatment with secukinumab.<sup>4</sup>

In our article, we retrospectively analyzed data from patients treated for at least 1 year with secukinumab evaluating the efficacy and tolerability of the drug with a focus on gastrointestinal-related adverse events (GIRAE).

## 2 | MATERIALS AND METHODS

We retrieved the data of all patients with plaque psoriasis who received secukinumab according to normal clinical practice for at least 1 year and who performed the last follow-up visit at the dermatological clinic of the “Ospedali Riuniti Umberto I” of Ancona during the period December 1, 2021 through March 31, 2022. We collected and analyzed the clinical data, including medical history data, past use of biologics, type of psoriasis, Psoriasis Area and Severity Index (PASI), Body surface area (BSA), Physician Global Assessments (PGA) at baseline and at final observation during the study period and adverse events (AEs). Particular attention was given to defined as: definite [objective evidence of IBD (biopsy proven), clear temporal association, resolution of symptoms on drug withdrawal, no alternative explanation felt more likely], probable (as per definite, but without biopsy confirmation) or possible (gastrointestinal symptoms not fulfilling definite or probable criteria). In addition, a careful medical history of all patients was performed collecting both family and personal history data and laboratory data such as fecal calprotectin and fecal occult blood. We excluded patients with missing data on age and sex, who had not recorded clinical data on psoriasis (PASI, BSA and PGA) prior to initiation of secukinumab therapy and who did not perform at least 1 year of continuous therapy. All data were analyzed using Graph-Pad Prism online software (<https://www.graphpad.com/quickcalcs>) with the QuickCalcs package and also the Social Science Statistic website (<https://www.socscistatistics.com/>). We used Fisher's exact test to compare the proportions and Student's *t*-test to compare the mean values. The “Ospedali Riuniti Umberto I of Ancona” ethics committee approved this study.

All patients provided informed consent to participate in the study and signed a written informed consent.

## 3 | RESULTS

A total of 108 patients were included in the study. The baseline characteristics of the patients are shown in Table 1.

The majority were male (20 52.8%), with a mean age of 54.8 years (standard deviation [SD] 15.1). Overall, all of subjects were Caucasians and subjects had an average body weight of 75.7 kg (SD 14.8) with an average BMI of 26.5 (SD 4.8).

Fifty-one patients (47,22%) were smokers and no patients reported alcohol abuse.

Majority of the patients had cardiometabolic comorbidities: 69/108 patients (63.9%) had dyslipidemia, 33/108 (30.6%) were affected by arterial hypertension, 15/108 (13.9%) had diabetes mellitus type II, 9/108 (8.3%) had a positive history for previous ischemic heart disease. Finally, 12/108 patients (11.1%) reported history of atopy, 9/108 patients (8.3%) reported to be under pharmacological treatment for anxiety-depressive disorders, 3/108 (2.8%) patient had thyroid disorder, and 3/108 (2.8%) had celiac disease.

All observed patients had moderate to severe plaque type psoriasis, but six patients showed also guttate psoriasis. Fifty-one patients reported family history of plaque psoriasis, the mean age at diagnosis was 35.9 years (SD 17.9), 54 patients (50%) reported psoriatic arthritis with a mean age at diagnosis of 48.8 (SD 11.7). In addition, patients had so-called special localizations: scalp 75 (69.4%), genitalia 54 (50%) nails 45 (41.7%), palmoplantar 33 (30.6%), face 18 (16.7%).

The median disease duration was 20.1 years (SD 16.3).

As regard previous treatments, all patients had received topical treatments at least once in their life. 75 out from 108 patients (69.4%) received cyclosporine A treatment, and in 45 patients this was the last therapy before starting secukinumab. Twenty-seven of 108 patients (25%) received acitretin, 18 of 108 patients (16.7%) performed phototherapy (PUVA or UVB-nb), and 12 of 108 patients (11.1%) had been treated with methotrexate.

**TABLE 1** Demographic and clinical characteristics of patients

Variables	N = 108
Age (years)— <i>m</i> (SD)	54.8 (15.1)
Gender (male)— <i>n</i> (%)	60 (52.8)
Weight (kg)— <i>m</i> (SD)	75.7
BMI (kg/m <sup>2</sup> )— <i>m</i> (SD)	26.5 (4.8)
Smokers— <i>n</i> (%)	51 (47.2)
Comorbidity— <i>n</i> (%)	
Dyslipidemia	69 (63.9)
Hypertension	33 (30.6)
Diabetes mellitus type II	15 (13.9)
Ischemic heart disease	9 (8.3)
Atopy	12 (11.1)
Anxiety-depressive disorders	9 (8.3)
Thyroid disorder	3 (2.8)
Celiac disease	3 (2.8)

Among the selected patients 66/108 subjects (61.1%) were naïve to biological therapy: the others had previously failed at least one biological therapy: adalimumab 27/108 (25%), ustekinumab 6/108 (5.6%), etanercept 6/108 (5.6%), ixekizumab 6/108 (5.6%) certolizumab 3/108 (2.8%), golimumab 3/108 (2.8%), guselkumab 3/108 (2.8%), risankizumab 3/108 (2.8%) respectively. Thus, among patients, 9/108 (8.3%) had failed at least two biological therapies.

Before starting secukinumab therapy, 51 patients (47.2%) performed the fecal calprotectin test and tested negative, 51 patients did not perform the test and 6 patients (5.6%) tested positive with values of 101 and 266 mg/kg (positive >100 mg/kg), respectively. In addition, before starting secukinumab therapy, 51 patients (47.2%) were tested for fecal occult blood and resulted negative, while 57 patients (52.78%) were not tested.

On average, patients had been treated with secukinumab for 2.6 years (SD 1.3); 90/108 (83.3%) as monotherapy and 18/108 (16.6%) in comedication with betamethasone plus calcipotriol for resistant skin areas.

At baseline median PASI was 14.8 (range 2.2–27, SD 6.1). Twenty-seven from 108 patients (25%) had PASI higher than 20. The median BSA was 18.7 (5–50, SD 9.7), the median PGA was 3.1 (2–5, SD 0.6), the median DLQI was 9.3 (5–16, SD 2.6).

At the end of the observation (T1) 93 of 108 patients (86.1%) continued to take secukinumab while 15 patients discontinued the drug, 3 (2.78%) spontaneously because of complete clearance, 6 (5.6%) because of secondary inefficacy, 3 for pregnancy search (2.78%) and 3 (2.78%) because of the appearance of hand eczema.

The median PASI for treated patients was 0.7 (0–3, SD 0.8;  $p < 0.001$ ), the median BSA was 1.6% (0–12, SD 2.6;  $p < 0.001$ ), median PGA was 0.6 (0–2 SD 0.6;  $p < 0.01$ ), the median DLQI was 0.3 (0–1, SD 0.5;  $p < 0.001$ ).

At the end of the observation (T1) 54/108 patients (50%) reached PASI100, of the other 54, 48 (88.9%) reached PASI 90 while the other 6 had discontinued for secondary ineffectiveness.

Fifteen patients (13.9%) among the observed experienced the following adverse events: 6 (5.6%) candida infections, 3 (2.8%) upper respiratory tract infection, 3 (2.8%) xerophthalmia, 3 (2.8%) palmo-plantar eczema. None of these patients, except the last, discontinued the drug for these reasons.

No patient spontaneously reported any GIRAE; when specifically asked, only three patients reported a change in alvo with increased frequency of defecation. The patient reported this adverse event was further screened by performing fecal occult blood and calprotectin. Both tests were negative. Therefore, if such GIRAE was defined as “possible” subsequently it was not associated with a possible onset of IBDs.

## 4 | DISCUSSION

The robust phase 3 clinical trial program of the anti-IL-17A secukinumab for the treatment of moderate-to-severe plaque psoriasis, psoriatic arthritis, and ankylosing spondylitis provides a solid foundation supporting the high clinical efficacy and safety of this medication in dermatology and rheumatology.<sup>5</sup> Specifically for plaque

psoriasis, three phase 3 clinical trials provide evidence demonstrating the efficacy of secukinumab: ERASURE, FIXTURE, and CLEAR trials.<sup>3,6–10</sup> In the first two studies, the efficacy of the drug was demonstrated by achieving PASI 75 in approximately 80% of patients treated with secukinumab over 52 weeks of therapy.<sup>6</sup> Due to the high efficacy shown from that previous studies, a more stringent primary study endpoint of PASI 90 instead of PASI 75 was used in the CLEAR study.<sup>7,8</sup> In this study, at week 16, 79% of psoriasis patients achieved a PASI 90 in the secukinumab group compared to only 58% from the ustekinumab group. The distinct superiority of secukinumab compared to ustekinumab was still evident following 1 year of treatment, and secukinumab was strongly associated with a significantly higher Dermatology Life Quality (DLQI) Index.<sup>8</sup>

Additional and subsequent phase 3 trials built upon and bolster the clinical data obtained from these three major trials. The SCULPTURE trial reported a similar, sustained clinical efficacy and safety for secukinumab through 5 years.<sup>3</sup> Finally, the JUNCTURE and FEATURE trials also demonstrated the efficacy and safety of secukinumab administered for auto-injector/pen and pre-filled syringes, and clinical results were comparable with previous studies.<sup>9,10</sup>

The efficacy of secukinumab is also disclosed by real world evidence studies: a recent meta-analysis by Augustin strengthens existing evidence on the clinical effectiveness of secukinumab in patients with moderate-to-severe PsO, demonstrating high drug survival rates (over 80% at 12 months), high levels of patient-reported outcomes, and good tolerance.<sup>11</sup>

The results of our retrospective analysis confirm the high efficacy of the drug administered on average for more than 24 months: at the end of observation (T1) in fact, 50% of patients reached PASI100, 44.5% reached PASI 90 and only 5.5% of patients (i.e., six patients) did not reach these goals by discontinuing the drug. In fact, out of the fifteen patients who had discontinued the drug at the time of observation, six patients had discontinued due to secondary ineffectiveness, while the others had discontinued due to complete clearance (three patients), search for pregnancy (three patients), and appearance of hand eczema (three patients), respectively.

All other efficacy parameters considered in our retrospective analysis are comparable to those of the registration studies: drug survival of secukinumab is above 80% (86.1%) and there was a significant improvement in patients' quality of life, demonstrated by the change from a DLQI of 9.3 before therapy to a DLQI of 0.3 after therapy.

With regard to secukinumab's safety data, the same trials that demonstrated its efficacy, demonstrate its safety across multiple indications.<sup>3,5–10</sup> The most commonly reported adverse events in approximately 10% of patients was headache and nasopharyngitis or upper respiratory infections. Less common adverse events included non-serious infections or infestations, diarrhea, arthralgias, mucocutaneous candidiasis, hypertension, and hypercholesterolemia.

Rare adverse events (occurring in less than 1% of patients) included transient neutropenia, major adverse cardiac event, IBD, serious infections, uveitis, and malignancy or unspecific tumor formation.

Mucocutaneous candidiasis and IBD are two adverse events of particular interest for this particular class of drugs. The development of candida and other viral infections as a result of IL-17 inhibition

reflects the importance of this specific cytokine in providing human and skin protection against these infections. Indeed humans with congenital errors of IL-17RA or IL-17F are also associated with recurrent candida infections, upper respiratory infections, and mild skin infections providing a natural experiment in human nature that reflects complete blockade of IL-17 signaling in the skin.<sup>12</sup>

These adverse events also occurred in our real-life analysis; in fact, two patients (5.6%) experienced candida infections and one (2.8%) patient experienced upper respiratory tract infections. However, in our case these adverse events were not serious, resolved with specific therapy, and did not result in drug discontinuation.

The potential association between IL-17 blockade with secukinumab and the subsequent development of IBD is complicated. In fact, despite levels of proinflammatory cytokines are increased in patients with IBD, IL-17 seems to play a protective role in terms of gastrointestinal inflammation, as it inhibits a Th1 immune mediated response.<sup>4</sup> Hence, its blockage has been associated with new onset IBD but also with flares of inflammatory activity among IBD patients.<sup>13,14</sup>

In clinical trials, secukinumab increased risk of developing IBD.<sup>15,16</sup> Despite this finding, multiple retrospective studies have failed to establish an association between secukinumab and IBD development.<sup>4,5,15,17-19</sup> One retrospective study of 10 phase 2/3 clinical trials found the exposure adjusted incidence rate per 100 subject years for secukinumab was 0.33, which authors considered low and comparable to etanercept's 0.34.<sup>5</sup> Additionally, the same study reported no clinically meaningful difference between incidence of IBD during treatment with secukinumab over 12 and 52 weeks, indicating longer term use did not increase risk of IBD. The study also only reported three cases of Crohn's disease flares, two with pre-existing diagnoses and one possible new-onset in a patient who had previously experienced gastrointestinal (GI) issues.<sup>5</sup>

In our retrospective analysis, we wanted to focus specifically on GIRAE to observe whether gastrointestinal events had occurred in our study population during secukinumab therapy and if they could be related to new onset of IBD. Only three patients reported GIRAE referable to repeated episodes of diarrhea. By itself this adverse event cannot be referred to an IBD but is considered a possible adverse event, however the subject was investigated with fecal occult blood and fecal calprotectin analysis which were negative. Clearly, no subjects with an active IBD were present in the study population, but it is also true that not all subjects had been screened for IBD before starting secukinumab therapy. In fact, 51 of 108 subjects (47.2%) had not performed fecal calprotectin testing and 57 of 108 patients (52.8%) had not performed fecal occult blood detection. In addition, six patients had tested positive for fecal calprotectin with values of 104, 266, 114, 124, 142, 132, respectively. In these patients calprotectin was never repeated but they did not report any GIRAE. In conclusion, therefore, in our study population there was no GIRAE related to the occurrence of IBDs even though the population had not been fully screened for IBDs before starting secukinumab therapy.

In support of the fact that the selective blockade of IL-17 is not automatically connected with the new onset of IBDs there are several

scientific evidences. First of all families and individuals with inborn errors in IL-17 signaling (i.e., no production of IL-17 in the body) do not go on to develop any major sequela, such as IBD or malignancy.<sup>20</sup> Furthermore, it is known that patients with psoriasis have a higher risk of IBDs regardless of IL-17 inhibitors exposure. A recent meta-analysis found that patients with psoriasis had 1.7–2.5 times the risk of having Crohn disease and approximately 1.7 times the risk of having ulcerative colitis compared with control individuals which suggests a potential genetic rather than treatment-associated link.<sup>21</sup>

Therefore, real-world studies showing GIRAE referable to new onset IMIDs in subjects exposed to secukinumab should be analyzed considering the intrinsic risk of psoriasis patients to develop these diseases.

## 5 | CONCLUSION

In line with the scientific literature, our study did not show an increased risk of developing IBD in patients exposed to secukinumab. Furthermore, most patients who developed new gastrointestinal symptoms did not develop objective IBD or had to discontinue therapy. We believe that we do not need to preselect all patients for IBD before initiating anti-IL-17 therapy with screening tests. A careful history is sufficient to exclude patients who potentially already have an IBD or who have a marked familiarity.

## 6 | LIMITATIONS OF THE STUDY

The first limitation of the study is that, as a real-life experience study, secukinumab was administered according to normal clinical practice therefore patients with a negative family history for IBDs were probably selected, as is evident in the results.

In addition, data from patients with long exposure to the drug (more than a year) were analyzed, and this may have excluded patients who may have stopped the drug after a few weeks or months due to ineffectiveness of the drug or adverse event.

### AUTHOR CONTRIBUTIONS

All authors contributed to the writing of the manuscript.

### ACKNOWLEDGMENT

The patients in this manuscript have given written informed consent to publication of their case details. Open Access Funding provided by Universita Politecnica delle Marche within the CRUI-CARE Agreement.

### CONFLICT OF INTEREST

The authors declare no conflict of interest.

### DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

## ORCID

Federico Diotallevi  <https://orcid.org/0000-0003-2274-1742>

Giulia Radi  <https://orcid.org/0000-0003-3153-1026>

## REFERENCES

- Griffiths CE, Barker JN. Pathogenesis and clinical features of psoriasis. *Lancet*. 2007;370(9583):263-271. doi:10.1016/S0140-6736(07)61128-3
- Radi G, Campanati A, Diotallevi F, Bianchelli T, Offidani A. Novel therapeutic approaches and targets for treatment of psoriasis. *Curr Pharm Biotechnol*. 2021;22(1):7-31. doi:10.2174/1389201021666200629150231
- Bissonnette R, Luger T, Thaçi D, et al. Secukinumab demonstrates high sustained efficacy and a favourable safety profile in patients with moderate-to-severe psoriasis through 5 years of treatment (SCULPTURE extension study). *J Eur Acad Dermatol Venereol*. 2018;32(9):1507-1514. doi:10.1111/jdv.14878
- Schreiber S, Colombel JF, Feagan BG, et al. Incidence rates of inflammatory bowel disease in patients with psoriasis, psoriatic arthritis and ankylosing spondylitis treated with secukinumab: a retrospective analysis of pooled data from 21 clinical trials. *Ann Rheum Dis*. 2019;78(4):473-479. doi:10.1136/annrheumdis-2018-214273
- Van de Kerkhof PC, Griffiths CE, Reich K, et al. Secukinumab long-term safety experience: a pooled analysis of 10 phase II and III clinical studies in patients with moderate to severe plaque psoriasis. *J Am Acad Dermatol*. 2016;75(1):83-98.e4.
- Langley RG, Elewski BE, Lebwohl M, et al. Secukinumab in plaque psoriasis—results of two phase 3 trials. *N Engl J Med*. 2014;371(4):326-338. doi:10.1056/NEJMoa1314258
- Thaci D, Blauvelt A, Reich K, et al. Secukinumab is superior to ustekinumab in clearing skin of subjects with moderate to severe plaque psoriasis: CLEAR, a randomized controlled trial. *J Am Acad Dermatol*. 2015;73(3):400-409. doi:10.1016/j.jaad.2015.05.013
- Blauvelt A, Reich K, Tsai TF, et al. Secukinumab is superior to ustekinumab in clearing skin of subjects with moderate-to-severe plaque psoriasis up to 1 year: results from the CLEAR study. *J Am Acad Dermatol*. 2017;76(1):60-69. doi:10.1016/j.jaad.2016.08.008
- Paul C, Lacour JP, Tedremets L, et al. Efficacy, safety and usability of secukinumab administration by autoinjector/pen in psoriasis: a randomized, controlled trial (JUNCTURE). *J Eur Acad Dermatol Venereol*. 2015;29(6):1082-1090. doi:10.1111/jdv.12751
- Blauvelt A, Prinz JC, Gottlieb AB, et al. Secukinumab administration by pre-filled syringe: efficacy, safety and usability results from a randomized controlled trial in psoriasis (FEATURE). *Br J Dermatol*. 2015;172(2):484-493. doi:10.1111/bjd.13348
- Augustin M, Jullien D, Martin A, Peralta C. Real-world evidence of secukinumab in psoriasis treatment—a meta-analysis of 43 studies. *J Eur Acad Dermatol Venereol*. 2020;34(6):1174-1185. doi:10.1111/jdv.16180
- Puel A, Cypowij S, Bustamante J, et al. Chronic mucocutaneous candidiasis in humans with inborn errors of interleukin-17 immunity. *Science*. 2011;332(6025):65-68. doi:10.1126/science.1200439
- Rodríguez R, Vázquez JM, Pallarés H. Debut de colitis ulcerosa en context de tratamiento con secukinumab: “los anti-IL-17A pueden ser un factor desencadenante para la aparición de la enfermedad inflamatoria intestinal”. *Rev Esp Enferm Dig*. 2019;111(9):720-721. doi:10.17235/reed.2019.5841/2018
- Fries W, Belvedere A, Cappello A, et al. Inflammatory bowel disease onset during secukinumab treatment: real concern or just an expression of dysregulated immune response? *Clin Drug Investig*. 2019;39(8):799-803. doi:10.1007/s40261-019-00803-7
- Orrell KA, Murphrey M, Kelm RC, et al. Inflammatory bowel disease events after exposure to interleukin 17 inhibitors secukinumab and ixekizumab: Postmarketing analysis from the RADAR (“research on adverse drug events and reports”) program. *J Am Acad Dermatol*. 2018;79(4):777-778.
- Hueber W, Sands BE, Lewitzky S, et al. Secukinumab, a human anti-IL-17A monoclonal antibody, for moderate to severe Crohn's disease: unexpected results of a randomised, double-blind placebo-controlled trial. *Gut*. 2012;61(12):1693-1700.
- Wright S, Alloo A, Strunk A, Garg A. Real-world risk of new-onset inflammatory bowel disease among patients with psoriasis exposed to interleukin 17 inhibitors. *J Am Acad Dermatol*. 2020;83(2):382-387.
- Yamada A, Wang J, Komaki Y, Komaki F, Micic D, Sakuraba A. Systematic review with meta-analysis: risk of new onset IBD with the use of anti-interleukin-17 agents. *Aliment Pharmacol Ther*. 2019;50(4):373-385.
- Deodhar A, Mease PJ, McInnes IB, et al. Long-term safety of secukinumab in patients with moderate-to-severe plaque psoriasis, psoriatic arthritis, and ankylosing spondylitis: integrated pooled clinical trial and post-marketing surveillance data. *Arthritis Res Ther*. 2019;21(1):111.
- Lévy R, Okada S, Béziat V, et al. Genetic, immunological, and clinical features of patients with bacterial and fungal infections due to inherited IL-17RA deficiency. *Proc Natl Acad Sci U S A*. 2016;113(51):E8277-E8285. doi:10.1073/pnas.1618300114
- Fu Y, Lee C, Chi C. Association of psoriasis with inflammatory bowel disease. A systematic review and meta-analysis. *JAMA Dermatol*. 2018;154(12):1417-1423.

**How to cite this article:** Diotallevi F, Gambini D, Radi G, Simonetti O, Offidani A. Should we be concerned about gastrointestinal-related adverse events in patients with plaque psoriasis receiving secukinumab therapy? A retrospective, real-life study. *Dermatologic Therapy*. 2022;35(11):e15794. doi:10.1111/dth.15794