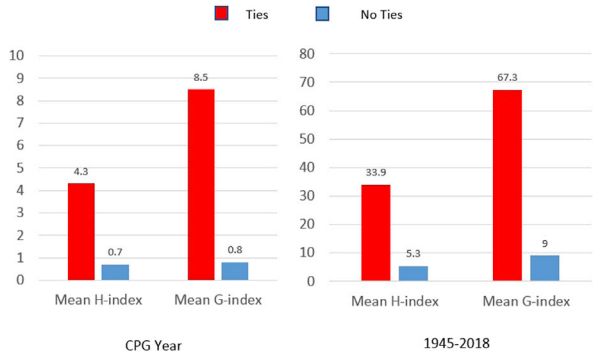

Fig 1. Publication productivity. The publication productivity as measured by the mean h-index and g-index of authors with and without ties to industry were compared. The comparison was made for the year in which the CPG was published and separately for all years combined (1945-2018). Authors with ties had higher mean h- and g-indices for both the CPG publication year and all years (1945-2018) than authors without ties. *CPG*, Clinical practice guideline.

calculations.[2] The h-index relies on an author's quantity of Medline-referenced publications and citations whereas the g-index relies more on the author's most cited publication. H-indices from Web of Science were also utilized. Publication productivity was compared by using Mann-Whitney *U* tests. The overall number of papers and percentage of papers on psoriasis that were published during the CPG year were calculated for each group of authors.

In total, 55 authors contributed to 3 psoriasis CPGs; the 42 authors with industry ties had higher mean h- and g-indices during CPG publication year than the 13 authors without ties ($P < .0002$, Fig 1). Authors with ties had higher cumulative mean h- and g-indices for all years ($P < .00001$, Fig 1) and published a greater number of papers and a greater percentage of articles on psoriasis (15 papers/author, 74.2%) than authors without ties (1 paper/author, 58.3%). Similar findings were obtained using h-indices from Web of Science.

Authors of psoriasis CPGs with ties had considerably greater publication productivity than authors without ties, conflicting with Hart et al's previous study. The discrepant findings could be due to our focusing on psoriasis CPGs, as psoriasis has been an area with considerable development of new drugs, this development is linked to clinical trials with many associated publications. A strength of our study is the evaluation of all authors rather than just a sample of them; moreover, the effect size was so large that statistically significant differences were seen. Other metrics of expertise, including academic rank or years post residency, could be used. If, as mentioned in the previous analysis, publication number was a true surrogate measure of expertise important for guideline development, excluding authors with industry ties might have the potential to reduce the level of expertise of CPG panels.

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Benzodiazepine receptor agonists and subsequent risk of psoriasis: A 5-year follow-up cohort study

To the Editor: Benzodiazepine receptor agonists (BZRAs), including diazepam, flurazepam, and zolpidem, are commonly used for insomnia, anxiety,

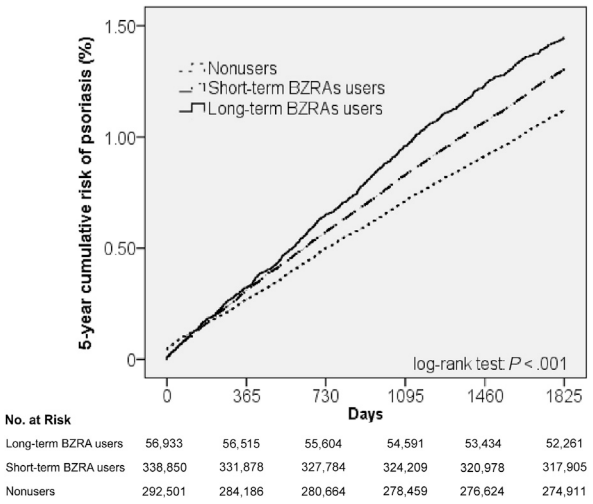

Fig 1. Five-year cumulative risk of psoriasis for long-term BZRA users, short-term BZRA users, and nonusers measured by using a Kaplan–Meier curve with log-rank test. *BZRA*, Benzodiazepine receptor agonists.

and epilepsy.[1] The annual prevalence of any anxiolytic-hypnotic drug use is ~20% in Taiwan.[2] To date, several reviews have indicated that BZRAs might be a triggering factor for psoriasis.[3] The immune system might be involved in this association; however, the definite biologic mechanisms are unclear.[4] Previous epidemiologic studies have reported conflicting results. Several studies have ignored the biased indications of BZRAs, and no study has examined the risk of psoriasis in long- and short-term BZRA users.[5] Therefore, this population-based study is the first study aiming to investigate the causal relationship between long- or short-term BZRA use and psoriasis by using the cohort study design and a propensity score–matching strategy.

This cohort study used data of 1 million individuals who were randomly selected from all insured residents in the Taiwan National Health Insurance program. To investigate BZRA use and new incidence of psoriasis among the selected residents, we excluded patients with psoriasis diagnoses at baseline. We identified 56,933 long-term BZRA users, 338,850 short-term BZRA users, and 292,501 nonusers during 2001-2008 using Anatomical Therapeutic Chemical codes (N05BA, N05CD, and N05CF). Cumulative defined daily dose (cDDD) was used to classify the BZRA exposure (long-term BZRA users: ≥180 cDDD; short-term BZRA users: 1 cDDD~179 cDDD). Each patient was independently tracked for 5 years to ascertain whether he or she received a psoriasis diagnosis (International Classification of Disease, Ninth Revision, Clinical Modification code 696).

Table I. Incidence and hazard ratios for psoriasis during a 5-year follow-up period, stratified by the frequency of BZRA use in full cohort study and propensity score–matching analyses

	Full cohort study				Propensity score–matched analyses			
					BZRAs long-term effects		BZRAs short-term effects	
Category	Total sample, n = 688,284	Long-term BZRA users, n = 56,933	Short-term BZRA users, n = 338,850	Nonusers, n = 292,501	Long-term BZRAs users, n = 40,533	Nonusers, n = 40,533	Short-term BZRAs users, n = 162,247	Nonusers, n = 162,247
Incidence (95% CI) per 1000 person-years	2.50 (2.44-2.55)	2.93 (2.73-3.14)	2.63 (2.55-2.71)	2.26 (2.18-2.34)	2.80 (2.57-3.04)	1.86 (1.67-2.07)	2.69 (2.58-2.81)	2.10 (2.00-2.21)
Crude HR (95% CI)	--	1.30 (1.20-1.40)*	1.17 (1.11-1.22)*	1.00	1.50 (1.31-1.71)*	1.00	1.28 (1.20-1.36)*	1.00
Adjusted HR (95% CI)	--	1.48 (1.34-1.63)*	1.23 (1.17-1.29)*	1.00	1.50 (1.31-1.71)*	1.00	1.30 (1.22-1.39)*	1.00

Adjustments were made for patients' age, sex, urbanization level, monthly income, diabetes, hypertension, hyperlipidemia, anxiety, epilepsy, insomnia, obesity, alcohol abuse, and tobacco disorder.
BZRA, Benzodiazepine receptor agonist; *CI*, confidence interval; *HR*, hazard ratio.
*$P \leq .001$.

Further-more, the propensity score–matching analyses were performed to eliminate potential bias. This study was exempted from full review by the Tri-Service General Hospital Institutional Review Board.

Among the total selected patients with psoriasis, the mean and median time intervals from cohort entry date to psoriasis incidence date were 850 and 829 days, respectively. The log-rank test revealed that long-term BZRA users had a higher likelihood than short-term BZRA users and nonusers in receiving a psoriasis diagnosis ($P < .001$; Fig 1). The adjusted hazard ratio (aHR) for psoriasis for long-term BZRA users was 1.48 (95% confidence interval 1.34-1.63) compared with nonusers (Table I), whereas the aHR for psoriasis in short-term BZRA users was 1.23 (95% confidence interval 1.17-1.29) compared with nonusers. In addition, Table I summarizes the HRs of psoriasis incidence among BZRA users and their matched nonusers. The findings of this study demonstrate that long-term BZRA users were 1.50 times more likely to develop psoriasis than their propensity score–matched nonusers after adjustments were made, whereas short-term BZRA users had a significantly greater risk of psoriasis than their matched nonusers (aHR 1.30).

Nevertheless, several limitations should be taken into account in this study. First, the data sets used provide no information regarding genetic factors, sunlight exposure, body mass index, or smoking habits. Second, the National Health Insurance program database had no records regarding the Psoriasis Area Severity Index. Therefore, we could not estimate the influence of psoriasis severity.

In conclusion, this study shows that long- and short-term BZRA use could increase the risk of psoriasis. Consequently, clinicians should assess the risks and benefits of BZRA use. More direct biologic evidence is required to validate the connection between BZRA use and psoriasis.

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Clinicopathologic comparison of Rowell syndrome, erythema multiforme, and subacute cutaneous lupus erythematosus

To the Editor: Rowell syndrome is characterized by erythema multiforme–like lesions with serologic and historical evidence of lupus erythematosus (LE).[1] Classification of Rowell syndrome remains controversial, given overlapping clinical features of erythema multiforme and cutaneous LE (CLE).[2] Our objective was to identify histologic and immunohistochemical findings that support classification of Rowell syndrome because current definitions lack these criteria.[3]