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Systemic treatment for psoriasis and malignancies: A real risk?

Dear Editor,

We read with great interest the recent article by Magnano et al. (2017) which showed that the risk of malignancy seemed not to be increased in their cohort of psoriatic patients treated with biologic drugs. Since long term effects of biologic drugs, especially on malignancy risk, is still a major matter of debate, we conducted a 12-year retrospective study (January 2005 to February 2017) investigating the development of malignancies in psoriasis patients attending the Dermatological Clinic of the University Federico II of Naples undergoing conventional or biologic systemic treatment. The study population consisted of 915 patients (mean age 58.7 years, 495 male and 420 female) affected by moderate to severe psoriasis: 534 treated with biologics, 352 with traditional systemic drug, and 29 with narrowband (nb)-UVB phototherapy. The average treatment time was 31.5 months (37.2 months for biologics and 26.6 years for conventional systemic drugs). We detected 8 cases of solid malignancies (6 male and 2 female, mean age 61 years), 4 during biologic therapy, 3 under methotrexate treatment, and 1 during nb-UVB phototherapy (Table 1). No case of hematological malignancy was observed. Mean treatment duration at tumor diagnosis was 43.6 months. Particularly, mean treatment duration at tumor diagnosis between conventional systemic drugs (49.7 months) and biologics (44.3 months) was comparable. Our results are in line with those of Magnano et al. (2017), showing that biologic treatment seemed not to increase malignancy risk in psoriasis patients. The frequency of malignancy was comparable between subjects treated with biologics or conventional drugs. However, it should be stated that most of the patients treated with biologics underwent prior conventional systemic treatment, possibly influencing our results. Very recent literature data reported that patients with psoriasis may experience an elevated risk of melanoma and hematologic cancers (Reddy, Martires, & Wu, 2017), non-melanoma skin cancer (Wilton, Crowson, & Matteson, 2016), and lung cancer (Chiesa Fuxench, Shin, Ogdie Beatty, & Gelfand, 2016). The risk seemed not to be increased by conventional systemic or biologic therapies (Reddy et al., 2017). We did not identify any case of

TABLE 1 Patients developing a malignancy during systemic treatment for psoriasis

Patient	Sex	Age	Previous therapies	Therapy	Dosage	Tumor	Time between beginning of the therapy and diagnosis of tumor (months)	Comorbidities
1	M	53	Nb-UVB therapy Acitretin Cyclosporine	Methotrexate	7.5 mg weekly	Cholangiocarcinoma	52	None
2	M	62	Cyclosporine Methotrexate Infliximab	Etanercept	50 mg weekly	Squamous cell carcinoma of the penis	72	Psoriatic arthritis, diabetes, hypertension, dyslipidemia
3	M	73	Nb-UVB Acitretin Cyclosporine	Ustekinumab	45 mg every 12 weeks	Lung cancer	31	Hypertension
4	M	71	Cyclosporine	Nb-UVB	2 times a week	Liver cancer	42	Hepatitis C
5	F	42	NB-UVB Cyclosporine	Adalimumab	40 mg every 2 weeks	Thyroid cancer	25	None
6	M	72	NB-UVB Cyclosporine Efalizumab Etanercept Adalimumab	Methotrexate	7.5 mg weekly	Bladder cancer	34	None
7	M	41	Cyclosporine	Adalimumab	40 mg every 2 weeks	Thyroid cancer	49	Psoriatic arthritis, hypertension, dyslipidemia
8	F	74	Etanercept Adalimumab	Methotrexate	7.5 mg weekly	Renal cell carcinoma	71	Psoriatic arthritis

melanoma or hematologic cancers among our cohort of psoriasis patients. Moreover, the number of detected solid neoplasia was limited (8/915), and the mean age of these subjects was also high (mean age 61 years) which is itself considered one of the most important risk factors for carcinogenesis. Indeed, it should be always kept in mind other well-known risk factor for cancerous disease such as high mean age, longtime previous treatment with other immunosuppressant agents and long duration of the disease (Zarur, D'almeida, Mafort, Gusmao, & Avelleira, 2014). In conclusions, our study confirmed the results of Magnano et al. (2017), enriching the data on a 12-year retrospective observation on over 900 patients, suggesting that biologic drugs did not seem to increase the risk for malignancies in psoriasis subjects.

CONFLICT OF INTEREST

No conflict of interest

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REFERENCES

Chiesa Fuxench, Z. C., Shin, D. B., Ogdie Beatty, A., & Gelfand, J. M. (2016). The risk of cancer in patients with psoriasis: A population based cohort study in the health improvement network. *JAMA Dermatology*, *152*, 282–290.

Magnano, M., Loi, C., Sechi, A., Sgubbi, P., Raone, B., Patrizi, A., & Bardazzi, F. (2017). Risk of malignancy in psoriatic patients: Our clinical experience. *Dermatologic Therapy*, 12476.

Reddy, S. P., Martires, K., & Wu, J. J. (2017). The risk of melanoma and hematologic cancers in patients with psoriasis. *Journal of the American Academy of Dermatology*, *76*, 639–647.

Wilton, K. M., Crowson, C. S., & Matteson, E. L. (2016). Malignancy incidence in patients with psoriatic arthritis: A comparison cohort-based incidence study. *Clinical Rheumatology*, *35*, 2603–2607.

Zarur, F. P., D'almeida, L. F., Mafort, M. S., Gusmao, P. R., & Avelleira, J. C. (2014). Two cases of renal cell cancer during immunobiologic therapy for psoriasis. *Anais Brasileiros de Dermatologica*, *89*, 1017–1018.