Phototherapy in France: quantitative data (2007–2016) from the National Health Insurance Register

Dear Editor,

Phototherapy is a cost-effective treatment with a safe side-effect profile for the management of a wide range of dermatoses.¹ Although one of the most common indications for phototherapy is psoriasis, the use of phototherapy for psoriasis has seen a decline in the United States.^{2,3}

Data from the National Ambulatory Medical Care Survey indicate a 94% decrease in physician visits for phototherapy between 1994 and 1998.² In a 2006 survey of 1.5 million National Psoriasis Foundation members, only one-third of patients reported ever undergoing phototherapy.⁴

The decreasing use and underutilization of phototherapy may be caused by multiple factors related to the patient, the physician and the insurance company.¹ In addition, the use of biologic therapies available for psoriasis since 2000 may also contribute. However, this hypothesis was not confirmed in our previous study.⁵ In contrast, we showed an increase in both the number of UV treatments (+12%) and of UV-treated patients (+11.5%) between 2007 and 2010.

In this study, we evaluated the use of phototherapy in France in the last 4-year period, that is 2013–2016. Data from the National Health Insurance Register (Caisse Nationale d'Assurance Maladie) were used. In France, to be reimbursed, each medical treatment must be declared to the National Health Insurance Register. Systemic phototherapy is registered with the unique code QZRP003 (19.2€) which includes both systemic psoralen + ultraviolet (UV) A and UVB therapies. As shown in Table 1, the number of UV treatments performed yearly in France increased from 421 426 in 2007 to 473 269 in 2010 (+12%) and then decreased to 382 733 (-15%). Besides, the number of UV-treated patients increased from 25 270 in 2007 to 28 183 in 2010 (+11.5%) and then decreased to 21 997 (-15.6%). The number of UV treatments per patient remained steady ranging from 16.5 in 2009 to 17.4 in 2016.

After a 4-year increase, our results confirm thus the decline of phototherapy in France. Phototherapy is effective in a variety of dermatoses such as psoriasis, atopic dermatitis, vitiligo, alopecia areata, parapsoriasis, cutaneous T-cell lymphoma, graft-versushost disease and polymorphous light eruption.¹ As our data give no information about the diagnoses, it is difficult to link the decline of phototherapy to a specific dermatosis or treatment. However, several hypotheses may be suggested. From a patient's perspective, outpatient phototherapy is highly inconvenient. Phototherapy is time-consuming, and patients are required to shell out co-pays at each treatment session. From the doctor's perspective, declining reimbursement rates in combination with the higher cost of new, more efficacious NB-UVB office units, the need for trained phototherapy staff may deter physicians from prescribing phototherapy.² Furthermore, increased awareness of skin cancer risk, lack of physician training and explosion in demand for aesthetic dermatology procedures may also contribute to this decline. Lastly, newer biologic therapies may drive to the dermatologists more patients seeking more efficient treatments for psoriasis.⁶ However, we cannot exclude a decrease of

Table 1	Phototherapy in France:	quantitative data from the Natio	onal Health Insurance Register
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Year	2007	2008	2009	2010	2013	2014	2015	2016
Number of UV treatment (code QZRP 003)	421 426	435 462	448 065	473 269 +12.3%*	450 365	438 205	396 732	382 733 15%† 9%‡
Number of patients	25 270	25 718	27 180	28 183 +11.5%*	26 056	25 394	23 182	21 997 -15.6%† -12.9%‡
Number of UV treatment per patient	16.7	16.9	16.5	16.8	17.3	17.2	17.1	17.4
Number of prescribers	NA	NA	NA	NA	1324	1271	1224	1162 12.2%†

NA: not available.

*2010 vs. 2007.

†2016 vs. 2013.

‡2016 vs. 2007.

all dermatological indications of phototherapy even if currently available biologics used in dermatology are mostly for the treatment of psoriasis.¹

It should be noticed that the decline of phototherapy was observed more than 10 years after the introduction of biologics. We do not have any clear explanation for this delay, but the therapeutic inertia⁷ leading to delay the use of biologics may be suggested.

In summary, although phototherapy remains an important cost-effective therapeutic modality for psoriasis⁸ and other dermatoses, we confirm the decline of phototherapy in France that can be explained by the increased use of biologics for psoriasis.

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