



Figure 1 Clinical appearance of an asymptomatic patient with atopic dermatitis before starting dupilumab, showing no abnormalities (a). Appearance of the same eye after Lissamine Green conjunctival staining, highlighting the presence of moderate ocular surface alterations (white arrow) on the marginal portion of the lower tarsal conjunctiva (lid wiper epitheliopathy) prior to dupilumab administration (b). The same eye after 16 weeks of treatment showing severe epitheliopathy of the lower tarsal conjunctiva (yellow arrow) in addition to the previous alterations: DIOSD (c).

with AD suitable for systemic therapy with dupilumab. A correct recognition of early ocular alterations can direct us towards a targeted treatment, thus obtaining a good control of both the symptoms and the ocular clinical picture to avoid the withdrawal of such an effective drug.

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'Not relevant' responses in the era of COVID-19: are we underestimating Dermatology Life Quality Index values?

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DEAR EDITOR, Since March 2020, the UK and Ireland have entered a series of lockdowns in the wake of the coronavirus pandemic with restrictions resulting in the closure of nonessential retail, hospitality and sports with employees encouraged to work from home.^{1,2} Patients on biologic and systemic immunosuppression often restricted their lifestyles more than the general public.³ The Dermatology Life Quality

Index (DLQI) is a measure of health-related quality of life used to guide treatment decisions and is an important component of data collected for clinical trials and registries.⁴ Previous studies have demonstrated that 'not relevant' responses (NRRs) in the DLQI can impact the validity of treatment decisions.⁵ Given the restrictions imposed on our patients during this time, we hypothesized that the number of NRRs in the DLQI increased in the era of COVID-19 with the potential to affect treatments offered and analysis of data from clinical trials and registries.

Our primary aim was to identify the number of NRRs prior to and during COVID-19 restrictions and our secondary aim was to assess the difference between the DLQI and the DLQI-R (DLQI-Relevant). We completed a retrospective chart review for patients with stable plaque psoriasis attending the specialist psoriasis clinic in our centre. We defined stable disease as a change in Psoriasis Area and Severity Index (PASI) ≤ 4 , which was demonstrated previously to have no effect or a small effect on DLQI values.^{6,7} The patients' most recent DLQI score prior to restrictions was identified and compared with their most up-to-date DLQI score during lockdown. We applied the previously reported modified DLQI-R scoring system to calculate a value taking into account the NRRs.⁸ The DLQI-R assumes a measure of positivity in each NRR with multiplication by a certain factor depending on the number of NRRs. Statistical analysis was carried out using SPSS Statistics for Macintosh V27.0 (IBM Corp., Armonk, NY, USA). Student's paired t-test was used to compare continuous data and Chi-square to compare frequencies in the NRRs. As this study involved the retrospective analysis of routine clinical data, ethical approval was not required.

We identified 68 patients with psoriasis in four weekly specialist clinics with completed DLQIs before COVID-19 and during restrictions. Sixteen patients were excluded from analysis due to a change in PASI > 4.0 . In the remaining 52 patients, there were 28 females and 24 males with an average age of 55.29 (range 27–82) years. There were 40 patients on a biologic, 10 patients on a systemic agent and two patients using topical therapies. The mean interval between DLQIs was 19.83 (range 13–26) months.

The mean PASI score prior to COVID-19 was 2.16 (range 0–7.9, SD 1.77; Table 1). The mean DLQI score prior to COVID-19 was 3.13 (range 0–14, SD 3.77) with the mean NRRs 0.62 (range 0–3, SD 1.05). Application of the DLQI-R increased the mean to 3.43 (range 0–16.25, SD 4.11) giving a mean change with the DLQI-R of 0.29 (range 0–3.25, SD 0.69). There were NRRs in the sport ($n = 9$, 17%), working/studying ($n = 7$, 13%), sexual difficulties ($n = 7$, 13%), partner/friends/relatives ($n = 6$, 12%), treatment ($n = 1$, 2%), clothes ($n = 1$, 2%) and shopping/home/garden ($n = 1$, 2%) questions. There were no NRRs for the social/leisure question.

The mean PASI score during restrictions was 2.09 (range 0–7.8, SD 2.12) (Table 1). The mean DLQI score during restrictions was 3 (range 0–14, SD 3.99) with the mean NRRs 1.27 (range 0–8, SD 2.06). Application of the DLQI-R increased the mean to 3.63 (range 0–17.5, SD 4.71) giving a mean change with the DLQI-R of 0.63 (range 0–12, SD

Table 1 Mean PASI, DLQI, number of NRRs, DLQI-R and change pre-COVID-19 and during lockdown restrictions

Mean DLQI, NRRs, DLQI-R and change pre-COVID-19 and during restrictions			
	Mean	Range (SD)	P-value ^a
PASI pre-COVID	2.16	0–7.9 (1.77)	0.745
PASI during restrictions	2.09	0–7.8 (2.12)	
DLQI pre-COVID	3.13	0–14 (3.77)	< 0.001
DLQI during restrictions	3	0–14 (3.99)	
DLQI change	–0.13	–11–14 (3.36)	
NRRs pre-COVID	0.62	0–3 (1.05)	
NRRs during restrictions	1.27	0–8 (2.06)	
DLQI-R pre-COVID	3.43	0–16.25 (4.11)	
DLQI-R during restrictions	3.63	0–17.5 (4.71)	
DLQI-R change pre-COVID	0.29	0–3.25 (0.69)	
DLQI-R change during restrictions	0.63	0–12 (1.88)	
NRRs pre-COVID-19 and during restrictions, n (%)			
	Pre-COVID	During restrictions	P-value ^b
Item 3: Going shopping/looking after home/garden	1 (2)	6 (12)	< 0.001
Item 4: Clothes	1 (2)	5 (10)	< 0.001
Item 5: Social/leisure activities	0 (0)	7 (13)	< 0.001
Item 6: Sport	9 (17)	16 (31)	< 0.001
Item 7: Working/studying	7 (13)	11 (21)	0.003
Item 8: Problems with partner/close friends/relatives	6 (12)	8 (15)	0.001
Item 9: Sexual difficulties	7 (13)	11 (21)	0.003
Item 10: Treatment	1 (2)	2 (4)	< 0.001

DLQI, Dermatology Life Quality Index; DLQI-R, DLQI-Relevant; NRRs, 'not relevant' responses; PASI, Psoriasis Area and Severity Index. ^aCalculated using Student's paired t-test; ^bcalculated using Chi-square.

1.88). NRRs were seen in all questions including sport ($n = 16$, 31%), working/studying ($n = 11$, 21%), sexual difficulties ($n = 11$, 21%), partner/friends/relatives ($n = 8$, 15%), social/leisure ($n = 7$, 13%), shopping/garden/home ($n = 6$, 12%), clothes ($n = 5$, 10%) and treatment ($n = 2$, 4%).

Using Student's paired t-test for analysis, DLQI values during restrictions were significantly lower than prior to COVID-19 ($P < 0.001$) (Table 1). There was a statistically significant increase in the number of NRRs during restrictions ($P < 0.001$) with a corresponding significant increase in DLQI-R ($P < 0.001$) and in change between DLQI-R and DLQI ($P < 0.001$). The change in DLQI-R is likely to be underestimated due to the number of 0 DLQI responses pre-COVID-19 ($n = 16$) and during restrictions ($n = 20$). Prior to coronavirus there were no NRRs for the social/leisure question but this increased to seven during restrictions. The number of NRRs increased in every category during restrictions.

This is a small study with limitations including the number of patients with a DLQI of 0. However, our study has demonstrated a significant decrease in DLQI values, increase in the

NRRs in the DLQI and change between DLQI and DLQI-R during lockdown restrictions. Given the curtailment in nonessential retail, hospitality, gyms and with large numbers of patients working from home it is important for clinicians to identify the number of NRRs in the DLQI and acknowledge the potential effect on treatment decisions and data collection for disease registries and clinical trials during the pandemic.

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A national audit of oral propranolol for the treatment of infantile haemangiomas

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DEAR EDITOR, Infantile haemangiomas (IH) affect up to 4% of infants and are the most common tumour of infancy.¹ Although self-limiting, some lesions can lead to visual impairment, airway obstruction, ulceration or cosmetic disfigurement, and require intervention. Oral propranolol – a nonselective beta blocker – was serendipitously identified in 2008 as an effective treatment for IH and is now recommended as first-line therapy for complicated lesions.^{2,3}

Despite the success of therapy, there has been trepidation among dermatologists and paediatricians about how to initiate oral propranolol in the neonate population. Accordingly, in 2018 the British Society of Paediatric Dermatology (BSPD) issued unified consensus guidelines for prescribing propranolol for the treatment of IH.⁴ We undertook a national audit to determine current prescribing patterns 2 years after the publication of this guidance.

The aims of the audit were to ascertain indications for the initiation, baseline investigations, dosing and daycare admission rates for the induction of oral propranolol. The audit was accomplished in December 2020 using Survey Monkey. Six clinical scenarios with associated questions were included in the online questionnaire. Sixty-five dermatologists (227 members of the BSPD and 103 Irish Association of Dermatology members) completed the survey.

The first case described an IH of the eyelid obstructing the field of vision (Figure 1a). Ninety-five per cent of respondents agreed that oral propranolol was indicated; 3% considered topical timolol to be the first-line therapy.

The second case was an uncomplicated lesion on the abdomen (Figure 1b). Eighty-nine per cent of respondents would offer the parents reassurance, 4% would consider oral propranolol and 6% would propose treatment with topical timolol.

The third case illustrated an ulcerated lesion on the trunk (Figure 1c). In this case, physicians could choose from multiple applicable answers. Ninety-four per cent agreed that oral propranolol was indicated; 84% would also recommend topical (36%) or oral (33%) antibiotics, and topical corticosteroids (25%). Eight per cent would consider using oral corticosteroids, 5% topical timolol and 6% pulsed dye laser.

The fourth image displayed a nasal tip lesion in a healthy 6-week-old infant (Figure 1d). Ninety-three per cent of respondents agreed that oral propranolol was indicated. Prior to starting propranolol, responders were offered a range of