among patients. These data are in contrast to those of other series, which reported an increase in the percentage of non attendees.5

We consider that keeping our ED service open not only allowed diagnosis of acute conditions, but also allowed the incidental diagnosis of melanomas or other tumours. This would not have been possible with teleconsultation, as pointed out by other authors.4

There are some limitations to this study: it was a single-centre study, with data collected retrospectively and was with a previous time series. However, the data reveal changes in healthcare provision and in the usage patterns of healthcare resources as a result of the pandemic. It would be interesting to know why those patients required urgent attention, and if these trends will continue over time or return to pre-pandemic levels.

In conclusion, we found that ED consultations remain important during the pandemic period. The observed data are consistent with those reported for the first wave of the virus in other parts of the world.

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COVID-19 vaccines do not trigger psoriasis flares in patients with psoriasis treated with apremilast

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Dear Editor,

Although COVID-19 vaccination is strongly recommended for patients with psoriasis (PsO) by several dermatological societies worldwide, only one recently published Italian case series has reported the safe and effective role of the vaccine in this patient subset. Notably, the vaccine information highlights that there are limited data about the vaccine in immunosuppressed patients and that vaccination should be performed in agreement with the vaccinator.3 Furthermore, PsO itself is not considered an immunosuppressive status, but some antipsoriatic, effective and safe drugs are codified as immunosuppressants. Thus, patients with moderate to severe PsO undergoing targeted therapies [e.g. interleukin (IL)-17 inhibitor (i), IL-12/23i, IL-23i and tumour necrosis factor-α], small molecule therapy (apremilast, dimethyl fumarate) and conventional therapies (methotrexate, ciclosporin) are considered immunosuppressed by the World Health Organization.2 Among the systemic antipsoriatic treatments, only acitretin is not considered an immunosuppressant (Table 1).

Apremilast, a phosphodiesterase (PDE)-4 inhibitor, displays immunomodulatory effects on both keratinocytes and immune cells, decreasing cutaneous hyperplasia and mitigating the proinflammatory microenvironment. Notably, apremilast is orally delivered and well-tolerated in young patients, needlephobics and patients with other circumstances that represent a relative contraindication for biologics (e.g. neoplasia or HIV).2 For some patients with PsO, the COVID-19 pandemic has affected adherence,3 anti-vaccination opinions4 and lifestyle,4 complicating the monitoring of chronic immunosuppressive therapy. There are no data on interactions between apremilast and COVID-19 vaccines to guide physician daily practice during the ongoing pandemic. We report three patients with PsO under apremilast who also received COVID-19 vaccination.

Patient 1 was a 48-year-old man with PsO and psoriatic arthritis (PsA). Following nonresponse to ixekizumab or etanercept, the patient was commenced on apremilast, achieving stable remission, which was maintained for 8 months. He experienced flares of both his PsO and PsA during asymptomatic COVID-19, which resolved spontaneously 10 days after COVID-19 remission. Six months after this infection, he received both doses of the Pfizer mRNABNT162b2 vaccine without experiencing any PsO flare.

Patient 2, a 76-year-old man with PsO, had been taking apremilast since 2017 with a stable residual Psoriasis Area Severity Index (PASI) of 3. After the first dose of the AstraZeneca-Oxford vaccine AZD1222 he experienced fever...
Table 1 The Anatomical Therapeutic Chemical Classification System for the main systemic antipsoriatic drugs published by the World Health Organization Collaborating Centre for Drug Statistics Methodology.

| Systemic drug | ATC five-levels code | ATC (PDF) | ATC (L) | ATC (C) | ATC (A) | ATC (X) | IS |
|---------------|----------------------|-----------|---------|---------|---------|---------|----|
| Methotrexate  | L 04 A X 03 Yes      | 0         | 0       | 0       | 0       | 1       | 0  |
| Ciclosporin   | L 04 A D 01 Yes      | 0         | 0       | 0       | 0       | 1       | 0  |
| Acitretin     | D 05 B B 02 Not      | 0         | 0       | 0       | 0       | 1       | 0  |
| Small molecules Epromilast | L 04 A A 32 Yes | 0         | 0       | 0       | 0       | 1       | 0  |
| Apremilast    | L 04 A X 03 Yes      | 0         | 0       | 0       | 0       | 1       | 0  |
| DMF           | L 04 A X 03 Yes      | 0         | 0       | 0       | 0       | 1       | 0  |

Biologics

| Drug           | ATC five-levels code | ATC (PDF) | ATC (L) | ATC (C) | ATC (A) | ATC (X) | IS |
|----------------|----------------------|-----------|---------|---------|---------|---------|----|
| Etanercept     | L 04 A B 01 Yes      | 0         | 0       | 0       | 0       | 1       | 0  |
| Infliximab     | L 04 A B 02 Yes      | 0         | 0       | 0       | 0       | 1       | 0  |
| Certolizumab   | L 04 A B 05 Yes      | 0         | 0       | 0       | 0       | 1       | 0  |
| Adalimumab     | L 04 A B 04 Yes      | 0         | 0       | 0       | 0       | 1       | 0  |
| Ustekinumab    | L 04 A C 05 Yes      | 0         | 0       | 0       | 0       | 1       | 0  |
| Secukinumab    | L 04 A C 10 Yes      | 0         | 0       | 0       | 0       | 1       | 0  |
| Ixekizumab     | L 04 A C 13 Yes      | 0         | 0       | 0       | 0       | 1       | 0  |
| Brodalumab     | L 04 A C 12 Yes      | 0         | 0       | 0       | 0       | 1       | 0  |
| Gusekumab      | L 04 A C 16 Yes      | 0         | 0       | 0       | 0       | 1       | 0  |
| Tildrakizumab  | L 04 A C 17 Yes      | 0         | 0       | 0       | 0       | 1       | 0  |
| Risankizumab   | L 04 A C 18 Yes      | 0         | 0       | 0       | 0       | 1       | 0  |

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**Intravenous immunoglobulins: an eye opener on the successful treatment of severe adult-onset paraprotein-associated xanthogranulomatosis**

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Dear Editor,

Xanthogranulomatosis (XG) is a granulomatous dermatitis presenting as multiple xanthogranulomas. It is a common non-Langerhans histiocytosis that is mainly observed in children (juvenile XG) and usually regresses over time. By contrast, adult XG, which was first described in 1963, is characterized by persistent lesions, which can be severe, painful and sometimes disfiguring. Adult XG is often associated with haematological disorders, including monoclonal gammopathies of undetermined significance (MGUS). To date, there are no guidelines for the treatment of XG. We report two cases of adult XG successfully treated with intravenous immunoglobulin (IVIG) therapy.

Patient 1 was a 64-year-old man, who presented with a 4-year history of progressively growing lesions over his eyelids, trunk and arms. Eleven years previously, he had been diagnosed with MGUS [IgG lambda peak 20.5 g/L (normal range 8–13.5 g/L; 3% plasma cells on bone marrow aspirate (normal range 2–3%)]. Skin biopsy was consistent with xanthogranuloma. The patient was initially treated with intralesional steroids (one injection of triamcinolone 40 mg/mL), three sessions of CO2 laser and methotrexate 15 mg/week for 7 months with no improvement. The periorbital lesions continued to worsen, leading to ptosis (Fig. 1a,b). Treatment with IVIG 2 g/kg/month was then started, with a dramatic improvement in the periorbital plaques noted shortly after the first infusion (Fig. 1c,d), resulting in near-complete resolution. At the most recent follow-up (2 years after he first presented to us), a total of 12 cycles had been completed: the improvement was maintained and the M-spike level (the IgG peak) remained unchanged.

**Figure 1** (a–h) Clinical pictures of Patients 1 and 2 before and after intravenous immunoglobulin (IVIG) treatment. (a–d) Patient 1: (a) large infiltrated periorbital plaques leading to complete ptosis of the right eyelid; (b) large infiltrated periorbital plaques leading to partial ptosis of the left eyelid; (c,d) dramatic improvement after 10 cycles of IVIG. (e–h) Patient 2: (e) large infiltrated plaques and firm yellowish nodules over the forehead; (f) infiltrated plaques over the torso; (g,h) improvement after nine cycles of IVIG, with the lesions becoming progressively less infiltrated.