**Table I.** Summary of diagnostic estimates

| | Absence of tongue papillae (partial or complete) in RDEB | Complete absence of tongue papillae in RDEB-gen sev | Partial absence of tongue papillae in RDEB-gen intermed |
|---|---|---|---|
| **Estimate** | **% (95% CI)** | **% (95% CI)** | **% (95% CI)** |
| Positive predictive value | 100 | 87 (76.77-92.75) | 100 |
| Negative predictive value | 93 (88.33-95.77) | 100 | 93 (90.36-94.29) |
| Sensitivity | 86 (76.45-92.84) | 100 (93.15-100.00) | 33 (15.63-55.32) |
| Specificity | 100 (97.47-100.00) | 95 (90.99-97.96) | 100 (98.16-100.00) |
| Accuracy | 95 (91.35-97.51) | 96 (93.05-98.44) | 93 (88.61-95.84) |

*CI*, Confidence interval; *RDEB*, recessive dystrophic epidermolysis bullosa; *RDEB-gen intermed*, generalized intermediate recessive dystrophic epidermolysis bullosa; *RDEB-gen sev*, generalized severe recessive dystrophic epidermolysis bullosa.

This innovative categorization revealed a feature present only in RDEB-gen-intermed with a PPV of 100%. Multicenter studies should be encouraged to include more EB phenotypes and genotypes to strengthen and complement our results. Summarizing, our results suggest that:

1. RDEB-localized, EB simplex, junctional EB, dominant dystrophic EB, and Kindler syndrome subtypes can be ruled out if a newborn with EB has absence of tongue papillae.
2. Patients with complete absence of tongue papillae have an 87% probability of having RDEB-gen-sev and 13% probability of RDEB-gen-intermed.
3. Patients with partial absence of tongue papillae will develop RDEB-gen intermed.

Tongue examination is a simple, accessible, noninvasive, inexpensive, and highly reliable method of subclassification of EB before confirmatory genetic results are available.

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## Belimumab for refractory manifestations of cutaneous lupus: A multicenter, retrospective observational study of 16 patients

*To the Editor:* Belimumab is a fully humanized monoclonal antibody against B-lymphocyte stimulator approved for systemic lupus erythematosus (SLE). A post hoc analysis of the 2 pivotal phase 3 studies showed that belimumab led to a better improvement than placebo on mucocutaneous

**Table I.** Characteristics of the 16 included patients with lupus

| Patient number | Age, y/sex/ phototype* | Active smoking | CLE subtypes | CLASI baseline/M6 | Cutaneous response | Systemic involvement | Previous systemic lines, n | Associated treatments | Number of infusions | Withdrawal/ reason |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 43/F/IV | 0 | SCLE/tumidus | 17/7 | PR | Articular, LN, hematologic | 4 | TCI, HCQ, GC, MMF | 16 | Yes/good improvement |
| 2 | 58/F/II | + | Tumidus | 9/5 | MR | 0 | 3 | HCQ, MTX | 13 | Yes/persistent activity |
| 3 | 33/F/V | 0 | ACLE/DLE | 15/15 | Failure | Articular, LN | 6 | HCQ, GC, MTX | 8 | Yes/failure |
| 4 | 60/M/IV | + | SCLE | 6/0 | CR | 0 | 5 | AZA, GC | 9 | Yes/CR |
| 5 | 28/F/V | 0 | ACLE/DLE | 15/5 | PR | Articular | 3 | HCQ, GC | 9 | Yes/loss of follow-up |
| 6 | 63/F/II | 0 | SCLE | 18/30 | Failure | LN | 7 | CQ, GC, MTX | 6 | Yes/failure |
| 7 | 19/F/V | 0 | ACLE/DLE | 9/0 | CR | Articular, serositis, LN | 3 | HCQ, GC, MMF | 15 | No |
| 8 | 65/F/IV | 0 | DLE | 6/3 | PR | Articular, LN, hematologic | 8 | HCQ, GC | 10 | Yes/persistent activity |
| 9 | 51/F/III | 0 | DLE | 20/24 | Failure | Articular, LN | 9 | TCS | 7 | Yes/failure |
| 10 | 36/F/II | + | DLE | 11/11 | Failure | Articular | 8 | HCQ, lenalidomide | 6 | Yes/failure |
| 11 | 53/F/II | 0 | DLE | 8/4 | PR | Articular, serositis, hematologic | 7 | HCQ, GC, MMF | 8 | Yes/persistent activity |
| 12 | 46/F/II | 0 | SCLE/DLE | 4/8 | Failure | Articular | 5 | HCQ, GC, lenalidomide | 8 | Yes/failure |
| 13 | 29/F/IV | + | DLE | 5/0 | CR | Articular, serositis | 11 | HCQ, GC, MMF | 5 | Yes/CR |
| 14 | 51/F/VI | + | DLE | 42/18 | PR | 0 | 10 | HCQ, alitretinoin, lenalidomide | 5 | Yes/persistent activity |
| 15 | 61/F/III | 0 | DLE | 8/8 | Failure | Articular, hematologic | 4 | HCQ, GC, dapsone | 7 | Yes/failure |
| 16 | 37/F/VI | 0 | DLE | 18/14 | MR | Hematologic, serositis | 8 | HCQ, GC | 6 | Yes/persistent activity |

No significant differences were observed between patients with or without partial response regarding smoking status, CLE subtype (DLE vs other subtypes), and the number of previous failed treatments.

*ACLE,* Acute cutaneous lupus erythematosus; *AZA,* azathioprine; *CLASI,* Cutaneous Lupus Erythematosus Disease Area and Severity Index; *CLE,* cutaneous lupus erythematosus; *CQ,* chloroquine; *CR,* complete response; *DLE,* discoid lupus erythematosus; *F,* female; *GC,* oral glucocorticoids; *HCQ,* hydroxychloroquine; *LN,* Lupus Nephritis; *M,* male; *M6,* month 6; *MMF,* mycophenolate mofetil; *MR,* minimal response (decrease of CLASI activity of 4 points or 20%, which has been shown to be a reliable meaningful clinical improvement[4]); *MTX,* methotrexate; *PR,* partial response (decrease of CLASI activity of at least 50%); *SCLE,* subacute cutaneous lupus erythematosus; *TCI,* topical calcineurin inhibitor; *TCS,* topical corticosteroids.

*According to the Fitzpatrick scale.

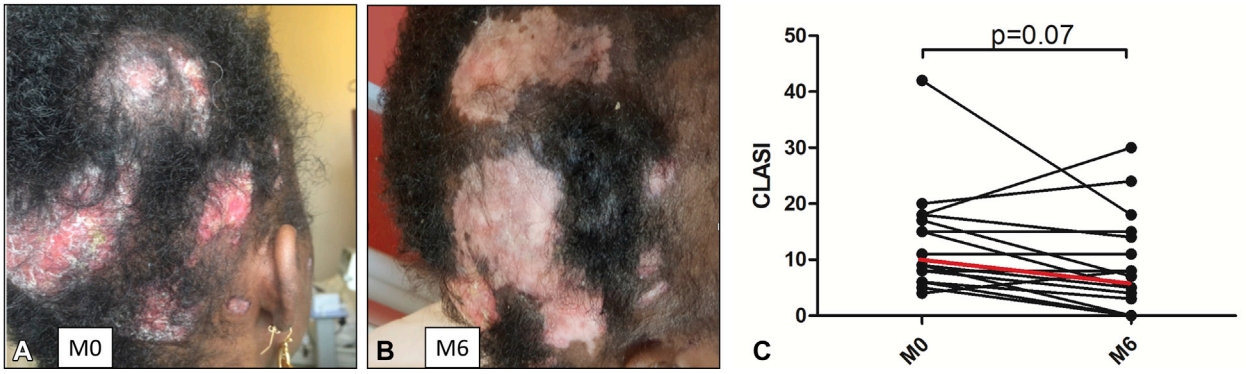


**Fig 1. A**, Before and **(B)** after photographs of a patient with cutaneous lupus erythematosus that responded to belimumab. **(C)** Variation of Cutaneous Lupus Erythematosus Disease Area and Severity Index (CLASI) before and after 6 months in patients with lupus treated with belimumab for refractory skin disease. CLASI changes for 16 patients (black bars) and median CLASI improvement (red bars) before and after 6 months of belimumab treatment. Two patients stopped belimumab after 5 infusions, and therefore, we used CLASI activity after 5 months. *M,* Month.

domains. However, these studies used global scores that do not accurately assess improvement of cutaneous lupus erythematosus (CLE).[1] There are very few data on the efficacy of belimumab using appropriate tools to assess CLE activity, particularly for chronic subtypes.[2,3] This multicenter, retrospective observational study enrolled patients with histologically confirmed CLE who received belimumab between 2014 and May 2019. Patients had disease that was refractory to hydroxychloroquine and received at least 2 ineffective second-line systemic treatments. We specifically assessed the number of responders defined by a decrease in the CLE Disease Area and Severity Index activity of at least 50% (CLASI-50) at 6 months (M6).[4]

We included 16 patients (15 women; median age at diagnosis, 48 years; range, 19-65 years) (Table I). Thirteen patients had associated SLE, and 3 had isolated CLE. Belimumab was administered intravenously at 10 mg/kg every 2 weeks for 3 doses and then monthly. The median duration of lupus was 18 years (range, 3 to 38), and patients previously experienced failure with a median of 6.5 systemic treatments (range, 3-11) before belimumab. Most patients (n = 12, 75%) had chronic CLE. The median number of belimumab infusions was 8 (range, 5-16). No change in treatments that could affect CLE activity was noted in the 3 months before belimumab initiation. At M6 (or M5, n = 2 patients), CLASI-50 was observed in 8 patients (50%), and 3 (19%) had a complete response. A trend for an overall improvement of CLASI activity was observed (10 [range, 4-42] vs 7.5 [range, 0-30]; $P = .07$) (Fig 1). CLASI-50 was observed more frequently in patients with CLE with Fitzpatrick phototypes IV to VI than II or III (7/9 [78%] vs 1/7 [18%]; $P = .04$), and baseline CLASI tended to be lower in patients with complete response than without (6 [range, 5-9] vs 15 [range, 4-42]; $P = .09$). Among patients with SLE with cutaneous response to belimumab, a decrease of 4 points of SLE Disease Activity Index was noted in 2 of 6 (33%), and a decrease of 25% or greater from baseline prednisone dose was noted in 4 of 5 (57%). No adverse events were recorded. At the last follow-up, belimumab was stopped in 5 of 8 patients with initial response because of a persistent activity.

To our knowledge, only 2 patients with chronic CLE treated with belimumab have been previously reported.[2] In our study, 50% of patients had CLE response, although an overall statistical improvement was not observed. This suggests that belimumab may be beneficial in some patients, mostly those with mild persistent activity and phototypes IV to VI. Interestingly, a clinical response was observed in the 3 patients with isolated CLE, which supports the results of a recent ex vivo study on the role of B-lymphocyte stimulator in CLE pathogenesis.[5] The main limitations of this study are the small number of patients and its retrospective nature. Moreover, we included patients with very severe and refractory CLE, which could explain the limited response. The role of belimumab as a second-line treatment for CLE could therefore be investigated.

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## Eosinophil cationic protein is a potential surrogate marker of allergic contact dermatitis: A single-center, retrospective study of 216 patients

*To the Editor:* Although patch testing is the gold standard diagnostic test for allergic contact dermatitis, assessing the clinical relevance and differentiating between allergic and irritant contact dermatitis or another intrinsic eczema can be challenging[1] because of a lack of reliable diagnostic tools and disease-specific biomarkers to support the diagnosis.

**Table I.** Comparison of patient characteristics and serum allergy markers between allergic and nonallergic contact dermatitis groups

| | ACD group (n = 169) | Non-ACD group (n = 47) | *P* value |
|---|---|---|---|
| MOAHLFA index, No. (%) | | | |
| Men | 46 (27.2) | 20 (42.6) | .07* |
| Occupational† | 16 (9.5) | 3 (6.4) | .77* |
| Atopic dermatitis‡ | 0 | 0 | NA |
| Hand dermatitis | 26 (15.4) | 6 (12.8) | .83* |
| Leg dermatitis | 18 (10.7) | 6 (12.8) | .88* |
| Face dermatitis§ | 59 (34.9) | 18 (38.3) | .80* |
| Age ≥40 y | 103 (60.9) | 26 (55.3) | .60* |
| Disease duration, mo | 20.0 (12.5—41.5) | 17.0 (8.0—37.0) | .10‖ |
| BSA involvement (%) | 3.0 (1.5—6.8) | 4.5 (1.8—10.2) | .19‖ |
| Serum allergy marker | | | |
| ECP, μg/L | 20.6 (12.9—31.3) | 13.3 (6.7—18.3) | <.001‖ |
| Eosinophil count, cells/μL | 140 (70—215) | 110 (70—170) | .19‖ |
| Total IgE, IU/mL | 60.6 (22.3—142) | 36.3 (15.5—96) | .07‖ |

Nonparametric continuous variables are presented as median (P25-P75).
*ACD*, Allergic contact dermatitis; *BSA*, body surface area; *ECP*, eosinophil cationic protein; *IgE*, immunoglobulin E; *NA*, not available.
*$\chi^2$ Test (with Yates continuity correction) or Fisher's exact test; $P < .05$ statistically significant.
†Excludes uncertain.
‡Patients with atopic dermatitis were excluded, according to the study design.
§Primary sites of lips, nose, eyes, and eyelids are all included.
‖Mann-Whitney *U* test.

Eosinophil cationic protein is a sensitive marker of allergic inflammation that has diagnostic and prognostic roles in eosinophil-related diseases such as asthma and atopic dermatitis.[2] However, a role for serum eosinophil cationic protein has not been previously evaluated in allergic contact dermatitis, to our knowledge. Therefore, we analyzed the relationship between serum eosinophil cationic protein levels and the clinical and laboratory findings in allergic contact dermatitis.

We retrospectively reviewed the 216 patients with suspected allergic contact dermatitis and categorized them into allergic contact dermatitis and nonallergic contact dermatitis groups; patients with relevant