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### Willingness to travel in underinsured patients undergoing tele-dermatology consultation

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With the growing prevalence of cutaneous disease, teledermatology provides an alternative solution to provider shortages in underserved communities. However, some cases may require face-to-face evaluation. We aimed to delineate how far the underserved community is willing to travel for face-to-face consultations. A 10-month, prospective study was performed creating a local teledermatology network between Mayo Clinic and Mountain Park Health Clinic (MPHC), which serves underinsured patients in Phoenix, Arizona. A total of 37 patients were surveyed with a 100% response rate. Of those surveyed, 91.9% were able to travel for face-to-face consultations: 2.7% less than 5 miles, 10.8% 5-10 miles, 10.8% 11-25 miles, 59.5% 26-50 miles, and 8.1% greater than 50 miles. When asked distance willing to travel: 5.4% were not willing to travel, 2.7% less than 5 miles, 13.5% 5-10 miles, 59.5% 11-25 miles, 10.8% 26-50 miles, and 8.1% greater than 50 miles. As institutions develop teledermatology networks, understanding how far underinsured patients are both able and willing to travel is important. If travel distance was between 11-25 miles, 78.1% of these patients would be able and 78.4% would be willing to travel for a face-to-face consultation. If travel distance was between 26-50 miles, 67.6% of these patients would be able but only 18.9% would be willing to travel for a face-to-face consultation. Our results suggest that teledermatology networks should refer within a 25-mile radius.

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### Psoriasis patients treated with ixekizumab were maintained longer on monotherapy compared with other biologics in real-world clinical practice settings: Results from IBM MarketScan databases

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**Objective:** To compare drug therapy days and monotherapy days in psoriasis patients treated with ixekizumab versus secukinumab, adalimumab, ustekinumab, and etanercept.

**Methods:** Patients diagnosed with psoriasis from 7/1/2016 to 1/1/2018 in IBM MarketScan databases, had a first claim (index date) of ixekizumab (n = 698), secukinumab (n = 795), adalimumab (n = 2960), ustekinumab (n = 1665) or etanercept (n = 485), and had prior 6 months and post 1 year of continuous eligibility were identified. Patients with other comorbid diseases (rheumatoid arthritis, ankylosing spondylitis, psoriatic arthritis or inflammatory bowel disease) treated with the same biologics in the prior 6 months were excluded. Days on monotherapy, defined as days on each index biologic without concomitant medications (corticosteroids, phototherapy and topical medications), were compared between ixekizumab and other biologics using *t* tests after inverse probability of treatment weighting (IPTW) was utilized to address cohort imbalances.

**Results:** Over the 1-year post-index follow up, ixekizumab had significantly more total days on medication ( $236.5 \pm 294.4$  days) and monotherapy days ( $211.2 \pm 297.9$  days) compared with other biologics combined ( $217.0 \pm 107.3$  and  $188.9 \pm 107.1$  days, respectively,  $P < .001$ ). Ixekizumab demonstrated significantly longer total days on medication and on monotherapy, respectively ( $P < .01$ , all), versus adalimumab ( $224.4 \pm 114.9$  and  $194.3 \pm 115.3$  days), ustekinumab ( $206.4 \pm 119.1$  and  $179.8 \pm 118.4$  days), and etanercept ( $180.7 \pm 150.8$  and  $151.7 \pm 145.3$  days). Ixekizumab showed numerically greater total days on medication and monotherapy days compared with secukinumab ( $232.9 \pm 133.3$ ,  $P = .155$  and  $204.8 \pm 135.0$  days,  $P = .352$ ).

**Conclusions:** Over the course of one year psoriasis patients were more adherent to ixekizumab and secukinumab, and remained longer on monotherapy, when compared with other biologics in real-world clinical practice settings.

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16000

### Preliminary results of an open-label study assessing efficacy and safety of repository corticotropin injection for treatment of refractory cutaneous manifestations of dermatomyositis

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**Background:** Dermatomyositis (DM) is often refractory to treatment.

**Design:** We are performing an open-label study to assess efficacy and safety of repository corticotropin injection (RCI) for refractory cutaneous DM treatment. Here, interim results of this trial are reported.

**Methods:** DM patients with >mild active cutaneous disease (Cutaneous Dermatomyositis Disease Area and Severity Index (CDASI) activity >12) despite prior treatment with >2 systemic agents are eligible. Patients are initiated on 80 U RCI twice weekly for 6 months. Primary outcomes include decreases in CDASI activity and Physician's Global Assessment (PGA) activity scores.

**Results:** Eleven adults (9 female, 2 male) with DM (10 classic, 1 amyopathic) have enrolled in the study (average age 57.8 years). Patients had been treated with an average 4.1 systemic medications prior to entry, and were being treated with an average of 2.2 systemic medications at study entry. Average baseline CDASI activity score was 20.0 and average PGA activity score was 6/10. For patient assessments, baseline patient global skin (PGS) scores averaged 3.3/10 and patient global itch (PGI) scores averaged 6.2/10. Nine patients had detectable myositis-associated autoantibodies (8 anti-TIF1 $\gamma$ , 1 anti-SAE antibodies). At 6 months, 8/9 patients had improved CDASI activity scores (average decrease = 8.6) and PGA activity scores (average improvement = 2.2). Furthermore, PGS scores improved in 8/9 patients and PGI scores improved in 5/9 patients at 6 months. Adverse effects were mild and no patient discontinued medication during the study.

**Conclusions:** Our interim results suggest RCI is an effective, safe, and well tolerated treatment for refractory cutaneous manifestations of dermatomyositis.

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### Orally administered EDP1815, a monoclonal strain of *Prevotella bisticola*, has potent systemic anti-inflammatory effects

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**Introduction:** The small intestine plays a central role in governing the body's immune, metabolic, and neurological systems. Evelo Biosciences is developing orally-delivered medicines that act on cells in the small intestine to drive therapeutic effects at distal sites. EDP1815 is a monoclonal strain of *Prevotella bisticola* which was selected for its potent anti-inflammatory pharmacology. We report the in vivo efficacy of EDP1815 in T<sub>H</sub>1- and T<sub>H</sub>17-driven models of inflammation, including keyhole limpet haemocyanin (KLH) delayed-type hypersensitivity (DTH), imiquimod-induced skin inflammation (IMQ), and experimental autoimmune encephalomyelitis in PLP-immunized SJL mice (EAE).

**Methods:** All models were performed according to standard protocols. Mice were orally gavaged daily from day 1 through to the end of the study with EDP1815 or vehicle. For the KLH DTH model, mice were given an intradermal KLH ear injection on day 8, and ear thickness was measured 24 hours later. For EAE, a disease score was measured daily from days 7 through 41, and histopathology of the spinal cord was performed at the end of the study. For IMQ, mice were treated with a 5% imiquimod cream for 7 days, and ear thickness was measured on day 8.

**Results:** and **Conclusion** In multiple models of T<sub>H</sub>1- and T<sub>H</sub>17-mediated inflammation, treatment with EDP1815 led to significant reduction of inflammation and pro-inflammatory cytokines in affected tissues. These results demonstrate that orally-delivered EDP1815 can modulate systemic inflammation and support the clinical development of EDP1815 for T-cell-mediated inflammatory diseases.

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