

Patient and Caregiver Perception of Antibiotics and Antibiotic Resistance in the Context of Managing Acne Vulgaris (AV), and Patient Global Assessment (ptGA) of AV Among Patients Administered Sarecycline in US Clinical Practices: Results from PROSES Study

Adelaide Hebert,¹ Julie C. Harper,² Emmy Graber,³ Evan A Rieder,⁴ Richard G. Fried,⁵ Linda Stein Gold,⁶ Andrew F. Alexis,⁷ Leon Kircik,⁸ James Del Rosso,⁹ Siva Narayanan,¹⁰ Volker Koscielny,¹¹ Ismail Kasujee,¹¹ Hilary Baldwin.¹²

¹UTHealth McGovern Medical School, Houston, TX; ²The Dermatology and Skin Care Center of Birmingham, Birmingham, AL; ³The Dermatology Institute of Boston and Northeastern University, Boston, MA; ⁴Private Practice, New York, NY; ⁵Yardley Dermatology Associates, Yardley, PA; ⁶Henry Ford Health System, Bloomfield, MI; ⁷Weill Cornell Medical College, New York, NY; ⁸Icahn School of Medicine, Mount Sinai, New York, NY; ⁹JDR Dermatology Research/Thomas Dermatology, Las Vegas, NV; ¹⁰Avant Health LLC, Bethesda, MD; ¹¹Almirall SA, Barcelona, Spain; ¹²Acne Treatment and Research Center, Brooklyn, NY.

BACKGROUND

- Acne vulgaris (AV) affects up to 50 million Americans and is the most common skin condition in the United States (US).¹
- Sarecycline is a newer oral tetracycline class of narrow spectrum antibiotic, a first-line therapy treatment for moderate to severe AV patients. Sarecycline is a viable option to reduce disease burden due to its safety profile and efficacy demonstrated in two identical phase 3 randomized, controlled trials.²
- Antibiotic stewardship is an important consideration in acne treatment,^{3,4} but only a small number of studies have addressed this issue with patients or caregivers and reported levels of awareness and concern are variable.^{5,6}

OBJECTIVE

- To evaluate perceptions about antibiotics and antibiotic resistance among adult patients and caregivers of pediatric patients with AV, and Patient Global Assessment (ptGA) of AV, in the cohort of AV patients administered sarecycline in community practices across the US.

METHODS

- A single-arm, prospective cohort study (PROSES) was conducted with 300 moderate-to-severe non-nodular AV patients >9 years old who were prescribed sarecycline in real-world community practices in the US.
- At baseline, adult patients and caregivers of pediatric patients with AV were individually asked about their concerns regarding using (self, or for child, respectively) antibiotics for AV, and concerns about antibiotic resistance. Responses were recorded on a 5-point Likert scale of 0 (not at all) to 4 (extremely).
- ptGA of AV was assessed on a 5-point Likert scale of 0 (clear), 1 (almost-clear), 2 (mild), 3 (moderate), 4 (severe) at baseline and week 12.

RESULTS

Patients and Caregivers

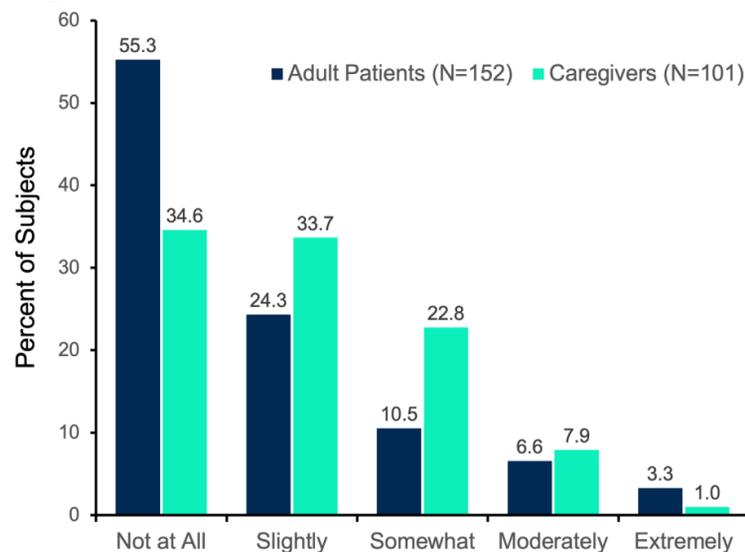
- The study analysis included 101 pediatric patients (50.5% male, mean age 14.8 years) and 152 adult patients (22.4% male, mean age 26.6 years). The 101 caregivers for pediatric patients included 18.8% males and they had a mean age of 45.9 years.

RESULTS

Attitudes Regarding Antibiotics

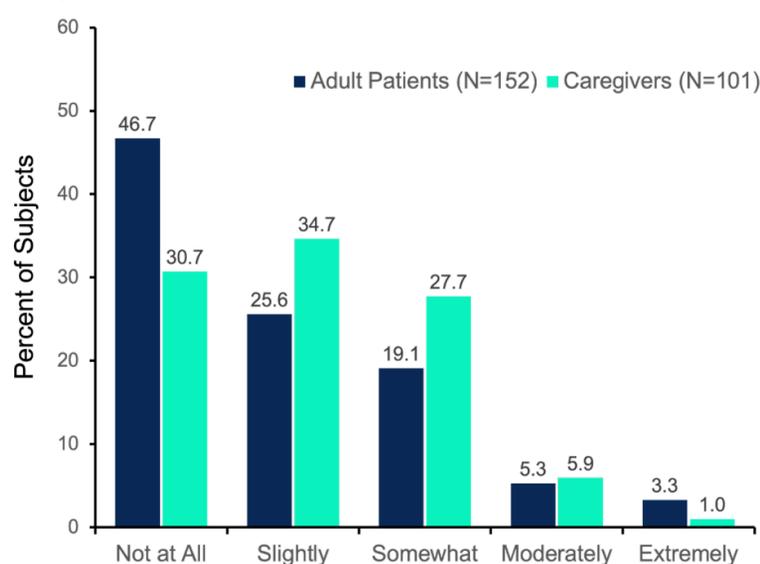
- Most adult patients and caregivers were not at all or only slightly concerned about the use of antibiotics to treat AV (Figure 1).
- The mean score for caregivers (1.07) was significantly higher than that for adult patients (0.78) ($P=0.037$).

Figure 1. Concern about antibiotic use in AV



- Most adult patients and caregivers also were not at all or only slightly concerned about antibiotic resistance (Figure 2).
- There was no significant difference between mean scores for caregivers (1.12) and adult patients (0.78) ($P=0.15$).

Figure 2. Concern about antibiotic resistance



REFERENCES

1. Bickers DR, et al. *J Am Acad Dermatol.* 2006;55(3):490-500. 2. Moore A, et al. *Br J Dermatol.* 2020;183(2):349-356. 3. Grada A, et al. *Antibiotics (Basel).* 2022;11(6):722. 4. MacGibeny MA, et al. *JAMA Dermatol.* 2022;158(9):989-991. 5. Ip A, et al. *BMJ Open.* 2021;11(2):e041794. 6. Del Rosso JQ, et al. *J Clin Aesthet Dermatol.* 2019;12(6):30-41.

RESULTS

Patient Global Assessment of AV

- Most patients had moderate-to-severe AV at baseline (Figure 3) and achievement of a clear/almost clear result was achieved by 29.2% of patients by 4 weeks and 59.3% at 12 weeks ($P<0.0001$ vs baseline) (Figure 4).

Figure 3. ptGA at baseline and 12 weeks

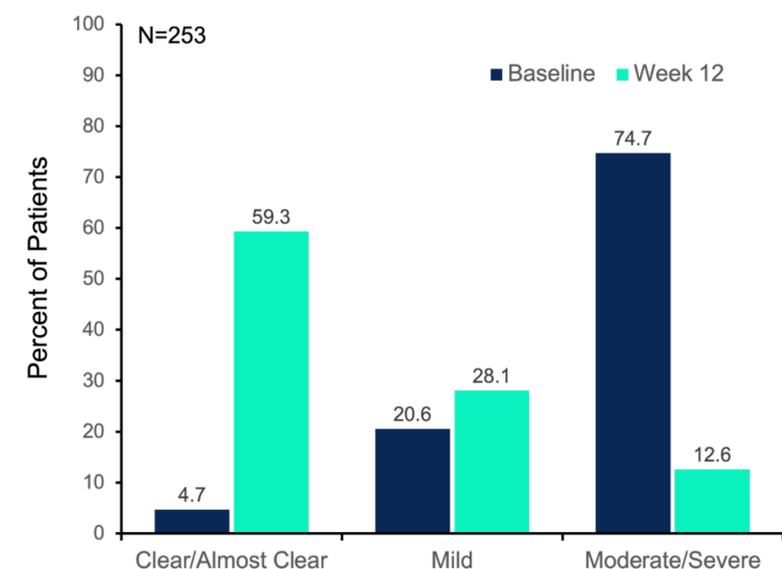
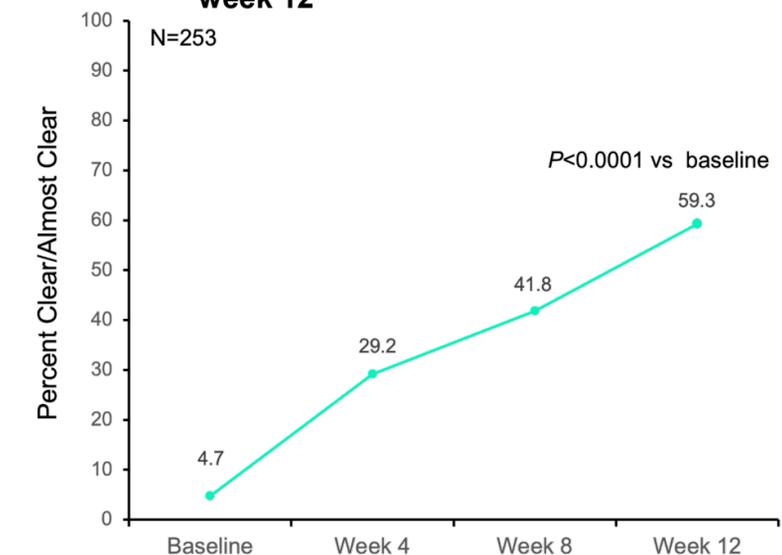


Figure 4. Improvement in ptGA from baseline to week 12



CONCLUSIONS

- Within the study cohort administered sarecycline, a narrow-spectrum, tetracycline-derived antibiotic, adult patients, and caregivers of pediatric patients expressed limited concern about antibiotics or antibiotic resistance at baseline.
- The majority of patients reported clear/almost clear AV after 12 weeks of sarecycline treatment.