# Clinician Perception of Antibiotics and Antibiotic Resistance in the Context of Managing Acne Vulgaris (AV), and Satisfaction With AV Treatment Outcomes Among Patients Administered Sarecycline in Clinical Practices Across the US: Results from PROSES Study

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

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

#### **BACKGROUND**

- Sarecycline is a newer oral tetracycline class of narrow spectrum antibiotic, a first-line therapy treatment for moderate-to-severe acne vulgaris (AV) patients. Sarecycline is a viable option for AV patients to reduce disease burden, due to its safety profile and efficacy demonstrated in two identical phase 3 randomized, controlled trials.<sup>1</sup>
- Antibiotic stewardship is an important consideration in AV treatment,<sup>2,3</sup> and results from several studies, including one presented at this meeting, have indicated varying degrees of patient and caregiver concern about antibiotic use and development of resistance.<sup>4-6</sup> Less is known about the attitudes of the healthcare providers who treat these patients.

# **OBJECTIVE**

 To evaluate clinician perceptions about antibiotics and antibiotic resistance, and their satisfaction with AV treatment outcomes among patients administered sarecycline in community practices across the US.

# **METHODS**

- A single-arm, prospective cohort study (PROSES)
  was conducted with 300 moderate-to-severe nonnodular AV patients >9 years old who were
  prescribed sarecycline in real-world community
  practices in the US.
- At baseline, clinicians were questioned regarding broad-spectrum antibiotic use, concerns about antibiotic resistance, disruption of the microbiome with long-term antibiotic use, and the importance of narrow-spectrum antibiotics in supporting antibiotic stewardship; responses were on a 5-point Likert scale of 0 (never) to 4 (all of the time) for broad spectrum antibiotic use and 0 (not at all) to 4 (extremely) for other questions.
- Clinicians separately reported their level of satisfaction with sarecycline treatment outcomes at week 12 (0, very satisfied, 4, very dissatisfied).

## **RESULTS**

## **Subjects**

- 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).
- These patients were treated by a total of 30 physicians, all in private office-based practices.
- The mean duration of practice was 19.3 years, and all had experience with the use of broad-spectrum antibiotics for AV treatment.

# RESULTS

 Most clinicians were frequent prescribers of broadspectrum antibiotics, such as doxycycline and minocycline (Figure 1). Most were at least moderately concerned about the development of antibiotic resistance (Figure 2) and treatmentassociated disruption of the microbiome (Figure 3).

Figure 1. Frequency of prescribing of broadspectrum antibiotics

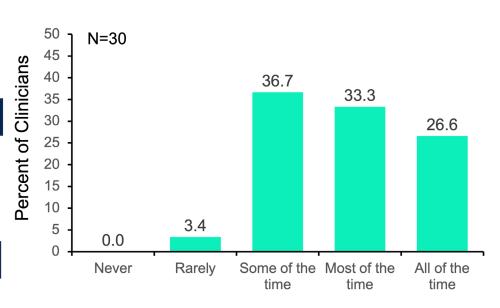


Figure 2. Concern about resistance with long-term antibiotic use

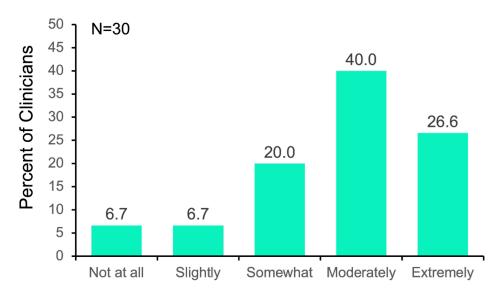
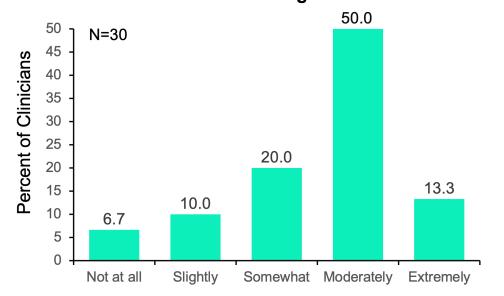


Figure 3. Concern about disruption of the microbiome with long-term antibiotic use



# Use and Attitudes Regarding Antibiotics Narrow-Spectrum Antibiotics and

# Satisfaction with Sarecycline Most clinicians viewed narrow-spectrum antibiotics as moderately or extremely important (Figure 4) and

were very satisfied with sarecycline (Figure 5).

Figure 4. Importance of narrow-spectrum antibiotics, such as sarecycline, in

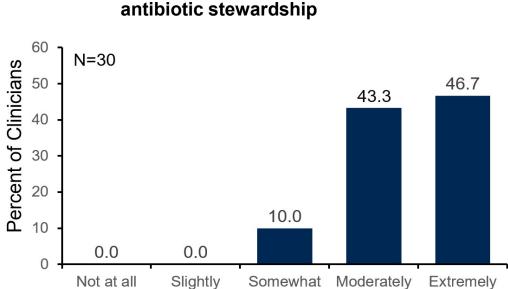
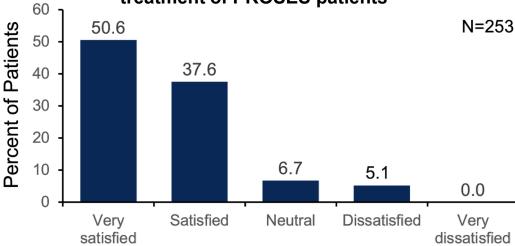


Figure 5. Satisfaction with sarecycline in the treatment of PROSES patients



# **CONCLUSIONS**

- The majority of clinicians expressed concerns about antibiotic resistance and associated disruption of the microbiome and considered use of narrow-spectrum antibiotics as extremely/ moderately important to antibiotic stewardship.
- The overwhelming majority reported high satisfaction with treatment outcomes after 12 weeks of administering sarecycline, a narrowspectrum, tetracycline-derived antibiotic.

# **REFERENCES**

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