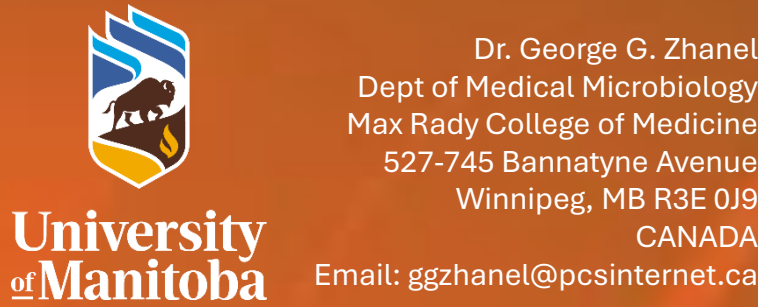




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Introduction

Over the past several years in Canada, when new IV antimicrobials are approved and introduced onto the market, they are used primarily by infectious diseases/medical microbiology specialists and frequently used to treat “off-label” infectious indications. There is commonly limited data sharing between clinicians regarding why they chose to use these new IV antimicrobials (i.e., because of failure, resistance, or adverse effects associated with use of other antimicrobial agents), the types of infections treated, and how (i.e., dosage regimen, duration of therapy, as monotherapy or in combination with one or more other antimicrobial agents) they use new IV antimicrobial agents in real world scenarios.

The CLEAR (Canadian LEadership on Antimicrobial Real-life Usage) registry was initiated in 2019 as a voluntary, national platform that collects data on the clinical use of new antimicrobials introduced into the Canadian marketplace. CLEAR is coordinated by the Canadian Antimicrobial Resistance Alliance (CARA; <http://www.can-r.ca/index.php>). In this poster, we summarize the final results of the CLEAR registry clinical use study of IV fosfomycin in Canadian patients which accrued data from October 1, 2020 to September 1, 2025.

Materials and Methods

A usage questionnaire for IV fosfomycin was developed with the input of infectious disease/medical microbiology specialists (physicians and pharmacists) across Canada. The CLEAR registry protocol/questionnaire was submitted, reviewed, and received Human Ethics Committee approval (HS22785-H2019:156) at the University of Manitoba (Winnipeg, Canada) in 2019. Using the web-based research data management program, REDCap™ (Research Electronic Data Capture), clinicians (physicians and clinical pharmacists) responded directly to the questionnaire online starting in October 2020. The REDCap™ online survey (link now disabled),

<https://rcsurvey.radyfhs.umanitoba.ca/surveys/?s=F7JXNDFXEF>,

was distributed via email to >500 CLEAR participants (members of the Association of Medical Microbiology and Infectious Diseases Canada [AMMI] and Canadian Society of Hospital Pharmacists [CSHP]). Every 3-4 months clinicians were sent an email encouraging their “voluntary” participation in CLEAR. A series of drop-down menus and short answer questions allowed for rapid (~3 minutes) completion of the survey. Clinicians were invited to voluntarily complete questionnaires for as many patients as possible. In this poster, the CLEAR IV fosfomycin questionnaires received by September 1, 2025, were tabulated and the final results presented here are based on 117 patient treatment surveys received from October 1, 2020, to September 1, 2025.

Acknowledgements

The authors thank all the infectious diseases and medical microbiology experts (physicians and pharmacists) across Canada for submitting patient data and for their support of CLEAR.

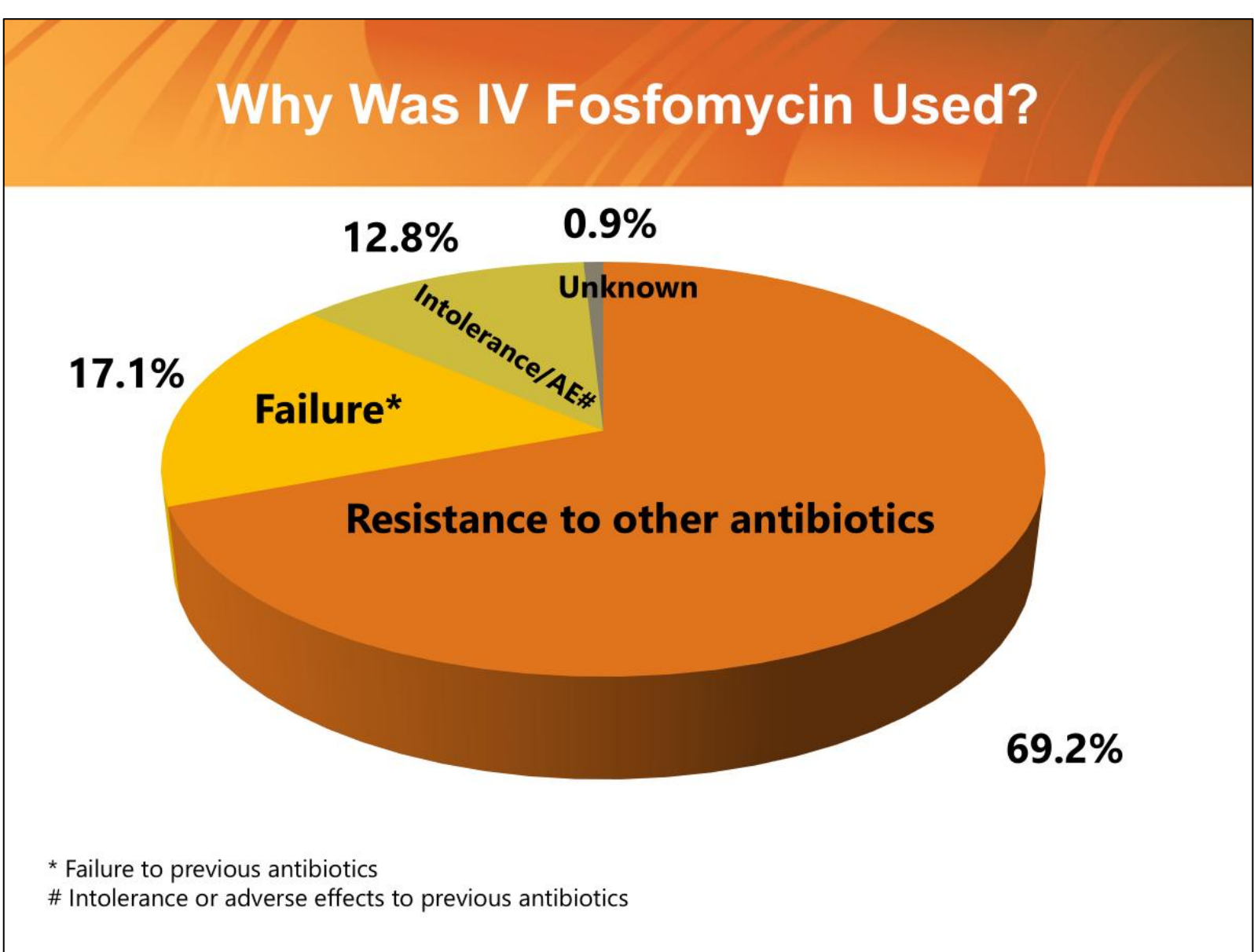
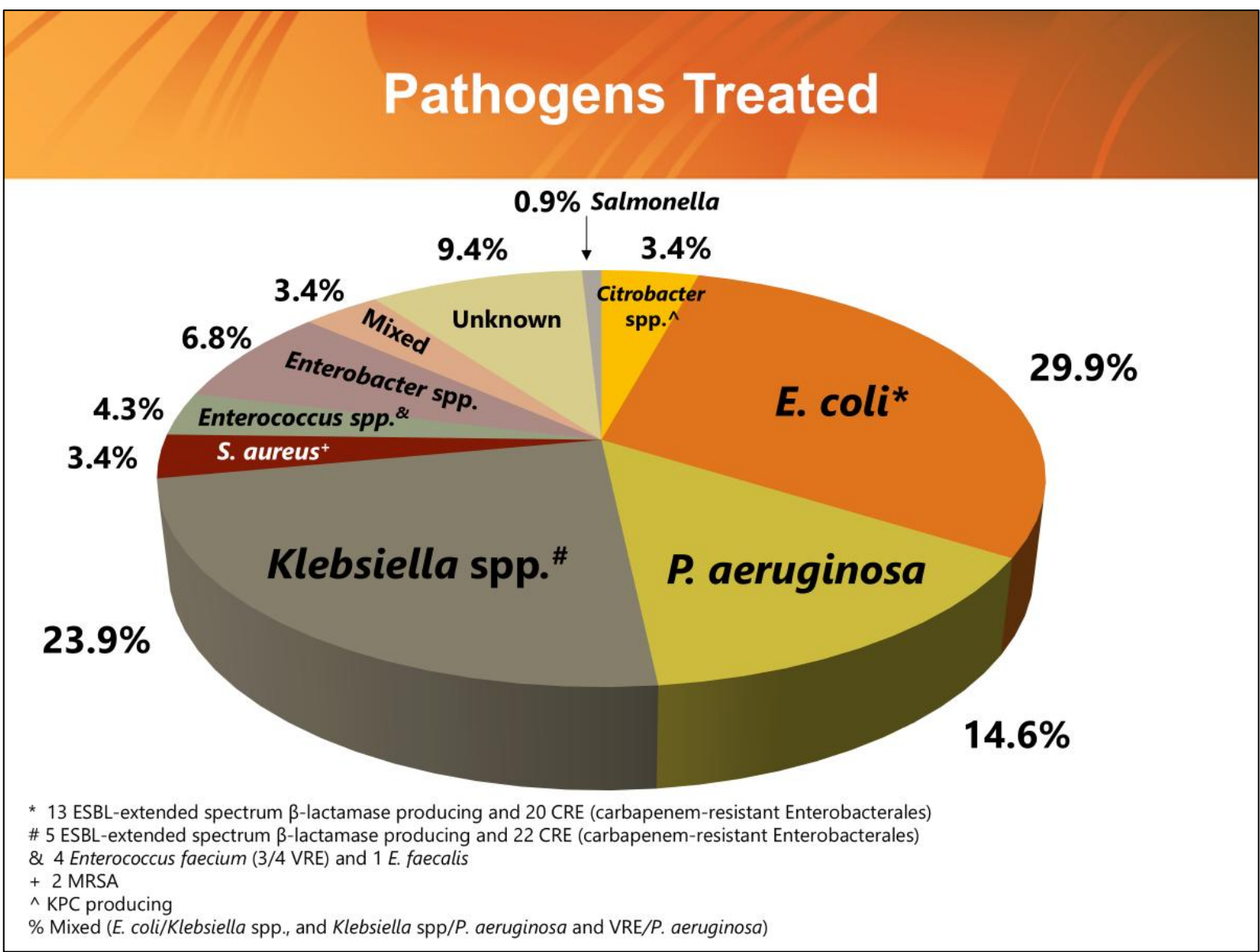
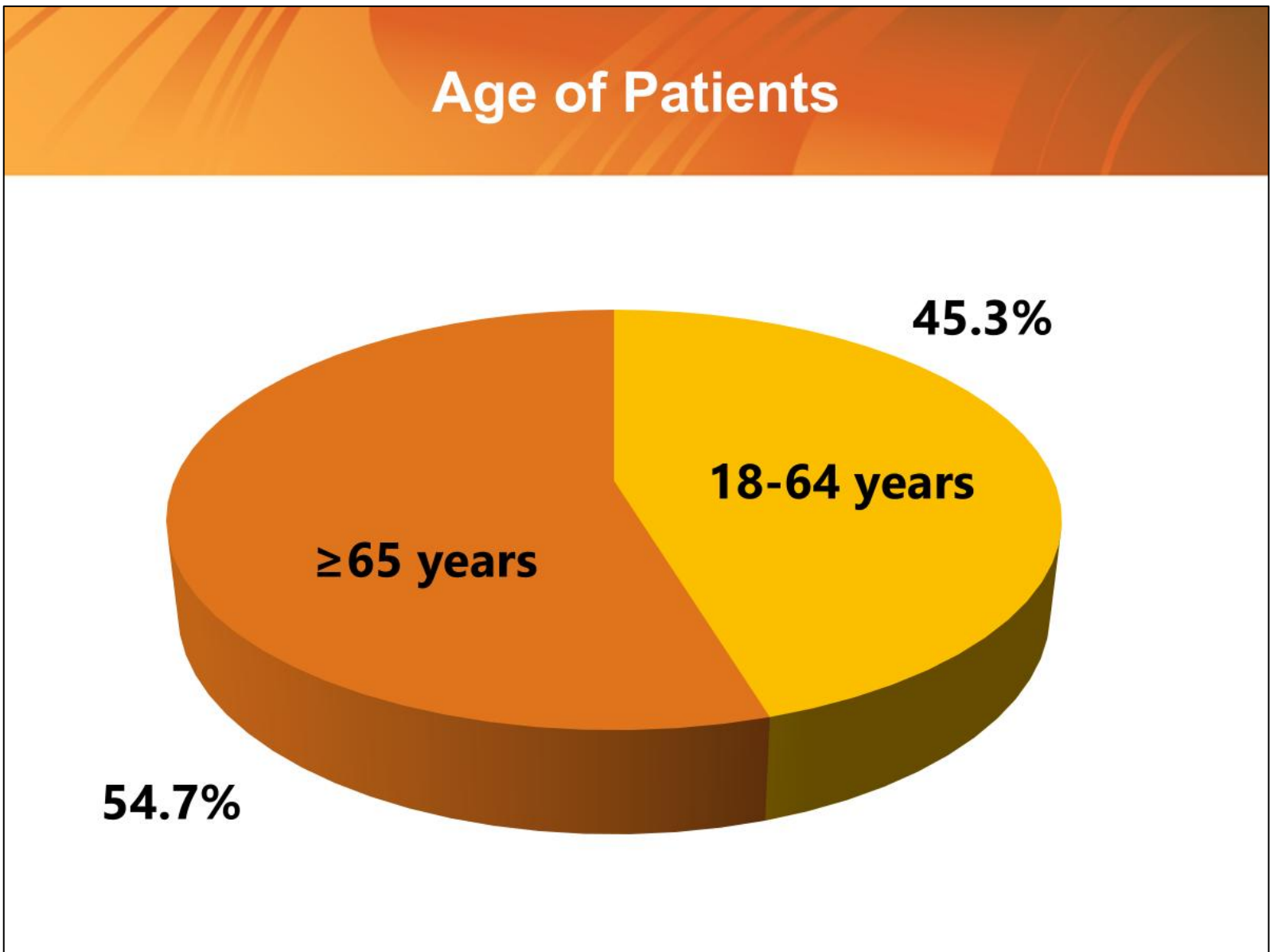
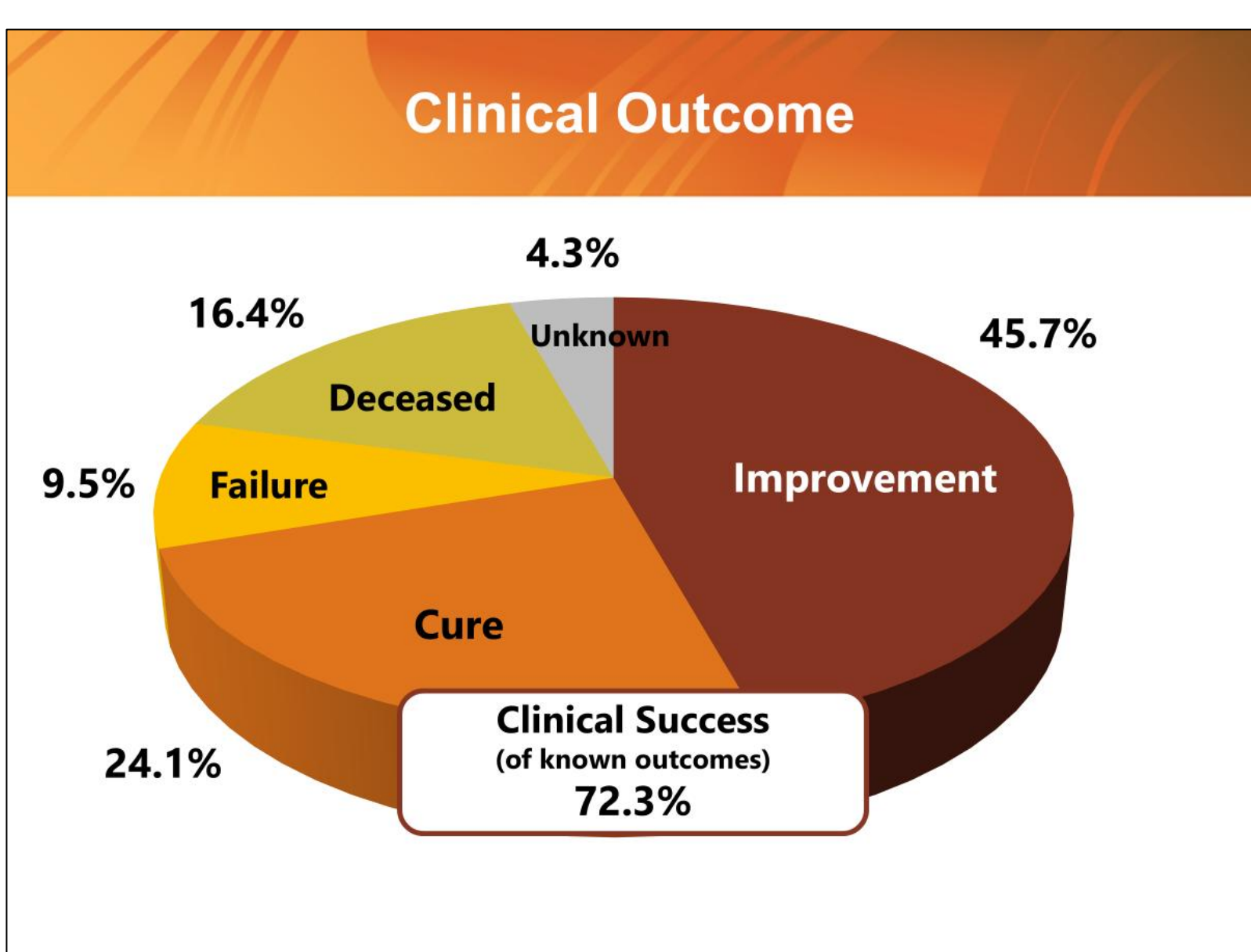
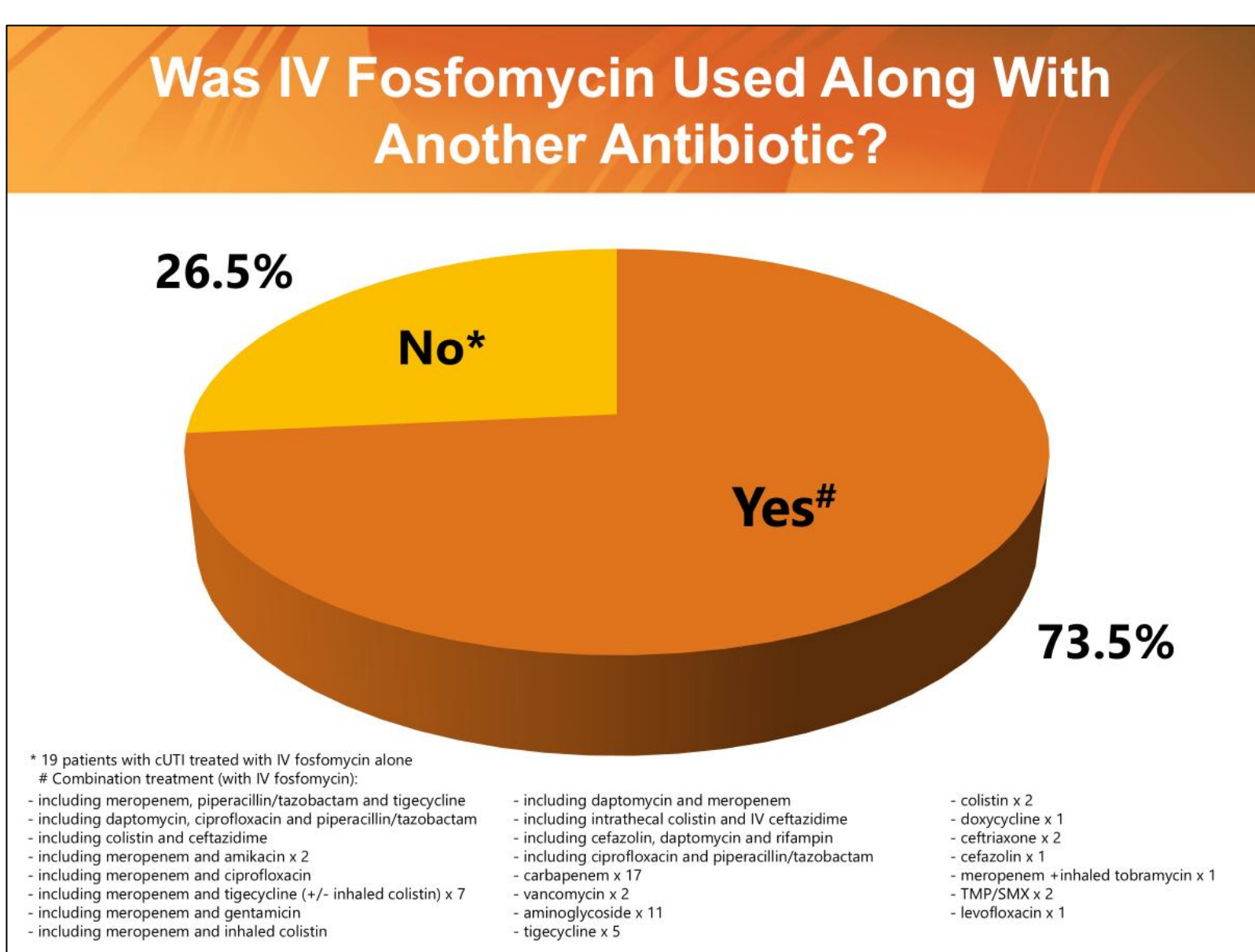
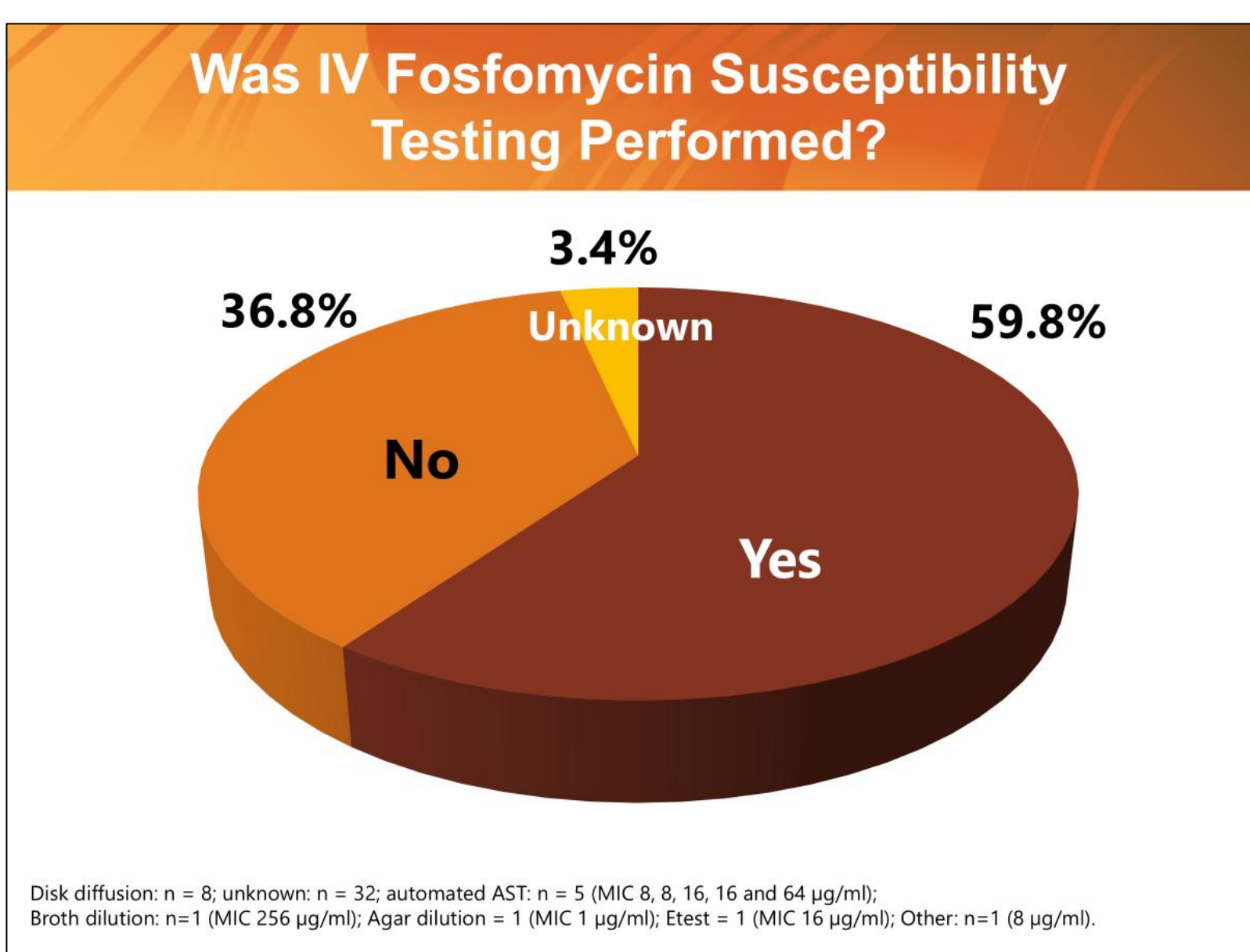
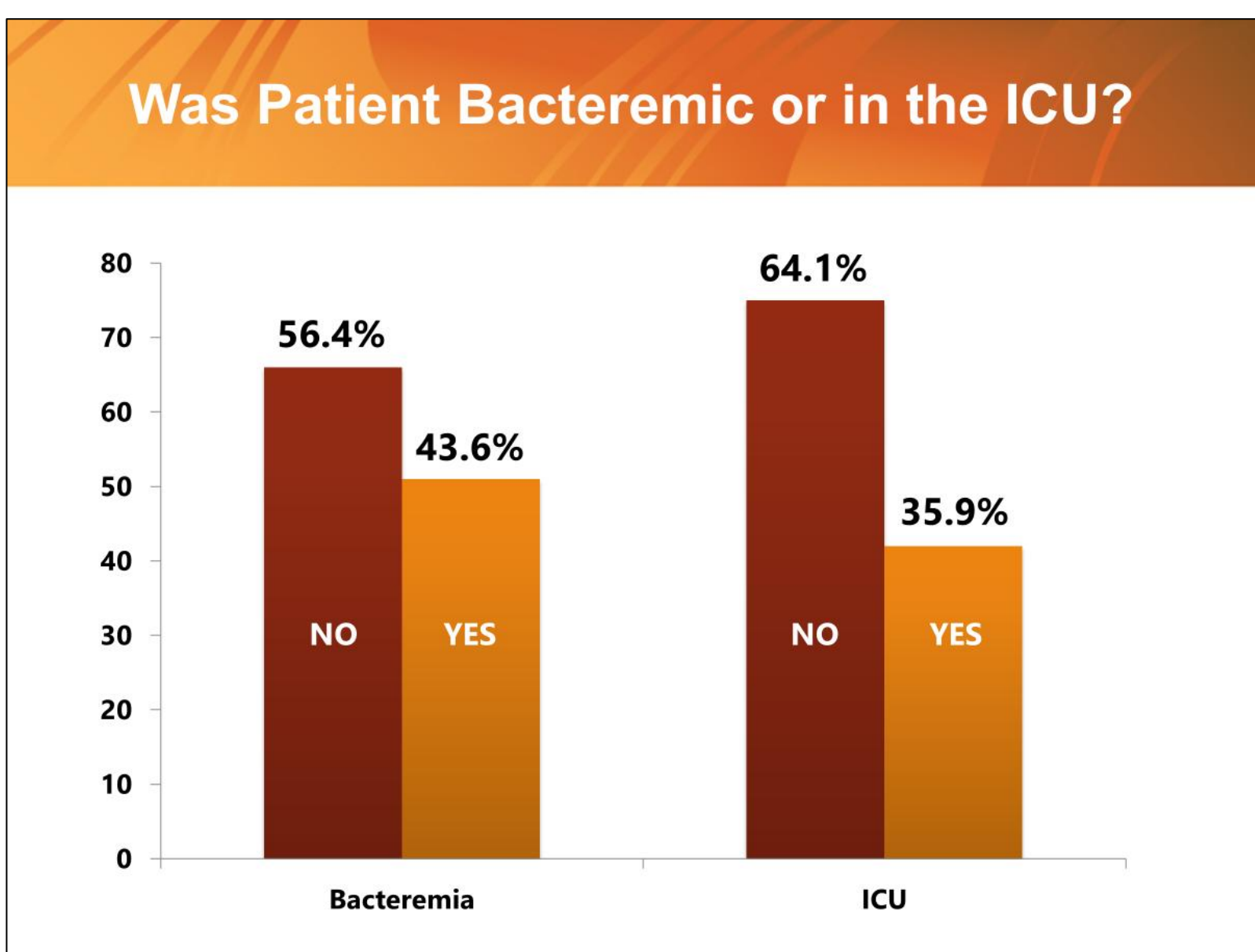
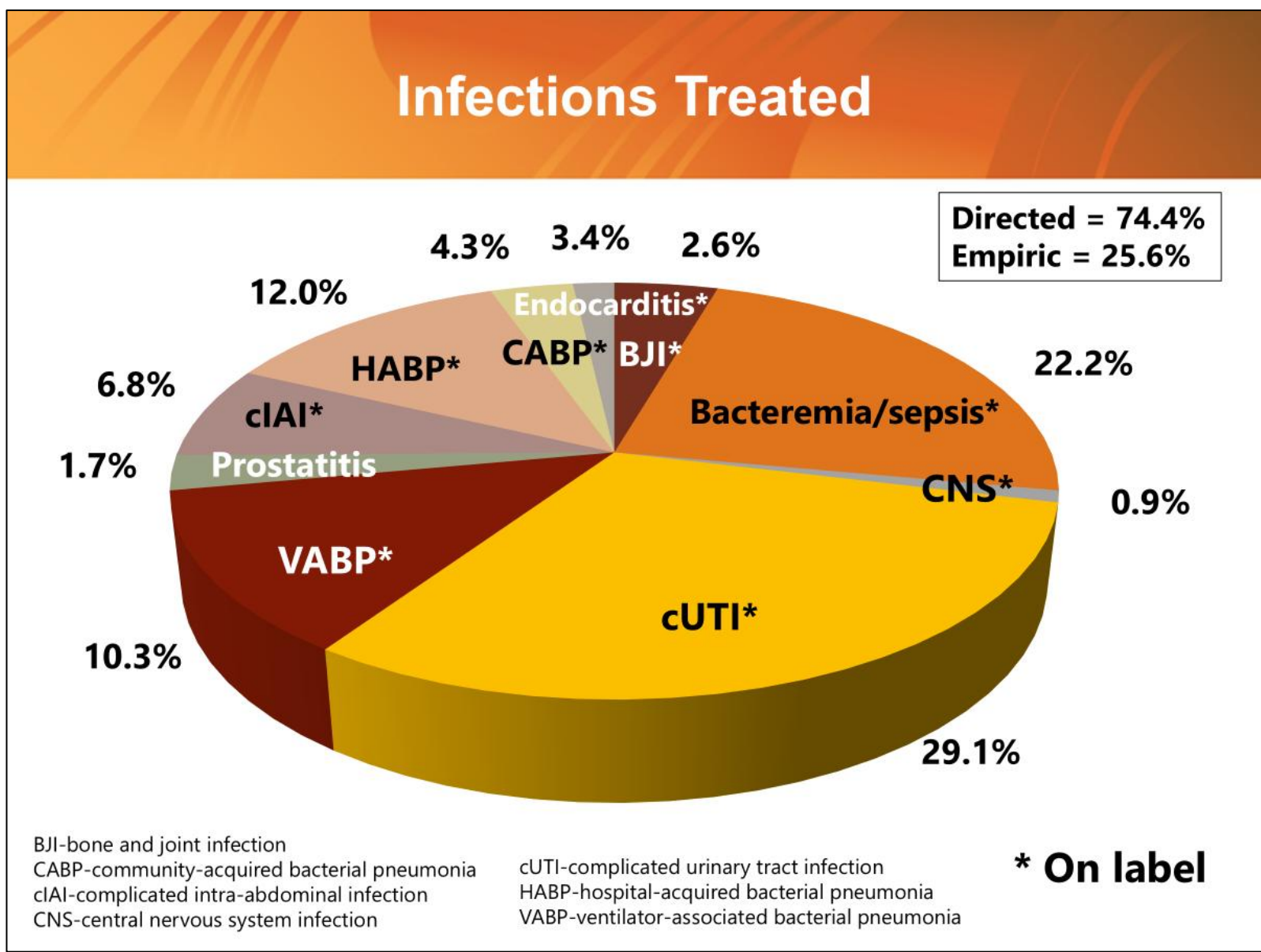
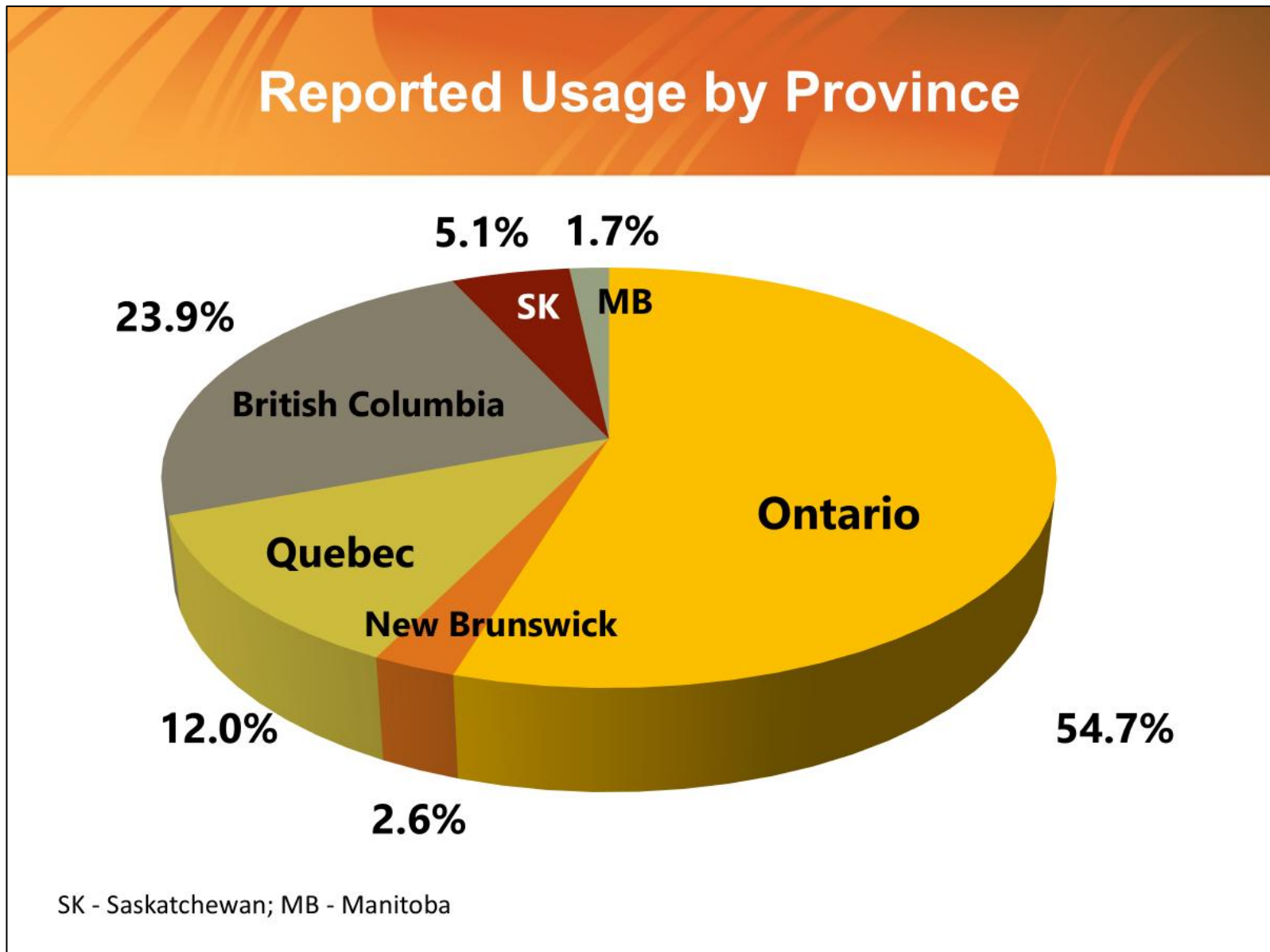
Verity Pharma provided an unrestricted education grant.

Conclusions

- We report data on the use of IV fosfomycin for 117 patients in Canada captured by the national CLEAR registry from October 2020 to September 2025.
- The most common infections treated with IV fosfomycin were complicated urinary tract infection (cUTI) (27.3%), bacteremia/sepsis (22.2%), hospital-acquired bacterial pneumonia (12.0%), and ventilatory-associated bacterial pneumonia (10.3%).
- IV fosfomycin was used as directed and as empiric treatment for infections caused by Gram-negative and Gram-positive pathogens resistant to other antimicrobials.
- IV fosfomycin was primarily combined with other antimicrobial agents for most infection types except cUTI for which it was often used as monotherapy.
- Treatment with IV fosfomycin was associated with acceptable rates of microbiological (85.4%) and clinical (73.2%) success along with a satisfactory profile (minor adverse effects in 19.8% of patients including hypokalaemia and hypernatraemia).

Results

Below are the cumulative tabulated results of the CLEAR IV fosfomycin usage survey questionnaires. The following tables are based on a total of 117 patient treatment surveys.



How Was IV Fosfomycin Dosed / Infused?

# (%) of Patients	IV Fosfomycin Dose
10 (8.5%)	2 Grams Q8H
2 (1.7%)	3 Grams Q8H
1 (0.9%)	3 Grams Q6H
5 (4.3%)	4 Grams Q12H
12 (10.3%)	8 Grams Q12H
13 (11.2%)	6 Grams Q8H
22 (19.0%)	8 Grams Q8H
25 (21.4%)	4 Grams Q8H
10 (8.5%)	4 Grams Q6H
6 (5.1%)	2-4 Grams Q24H
7 (6.0%)	2-4 Grams post HD
2 (1.7%)	1 Gram Q6H
1 (0.9%)	1.6 Gram Q8H
1 (0.9%)	Unknown

Creatinine clearance measured in 100% (117/117) patients
Infusion time:
- short (15 min – 1 hour) 84.6% (99/117)
- prolonged (≥ 2 hours) 10.3% (12/117)
- Unknown 5.1% (6/116)

