

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 is an initiative coordinated by the Canadian Antimicrobial Resistance Alliance (CARA). CLEAR is a national usage registry platform that enables the accumulation of knowledge regarding the clinical usage of new IV antimicrobials recently introduced into the Canadian marketplace. In this study, CLEAR is accumulating data on the usage of IV ceftobiprole for endocarditis only across Canada.

Materials and Methods

An IV ceftobiprole for endocarditis usage questionnaire was developed using the input of infectious diseases/medical microbiology specialists (physicians and pharmacists) across Canada. The CLEAR registry protocol/questionnaire was submitted to and received approval by the Human Ethics Committee at the University of Manitoba (Winnipeg, Canada; April 2019). Using the web-based research data management program, REDCap™ (Research Electronic Data Capture), clinicians (physicians and clinical pharmacists) responded directly to the usage questionnaire online. The REDCap™ online survey link was distributed via email to >550 CLEAR participants (members of the Association of Medical Microbiology and Infectious Diseases Canada [AMMI] and Canadian Society of Hospital Pharmacists [CSHP]). Clinicians were sent an email every 3-4 months encouraging their participation in CLEAR. A series of drop-down menus and short answer questions allowed for rapid (~3 minutes) completion of the survey. Clinicians were encouraged to voluntarily complete usage questionnaires for as many patients as possible. The CLEAR IV ceftobiprole for endocarditis questionnaires received by March 27, 2026 were tabulated and results presented are based on 56 patient treatment surveys.

Acknowledgements

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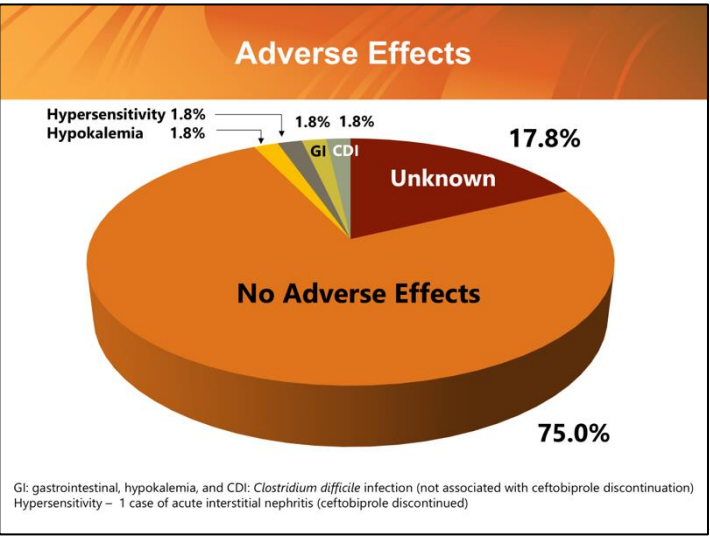
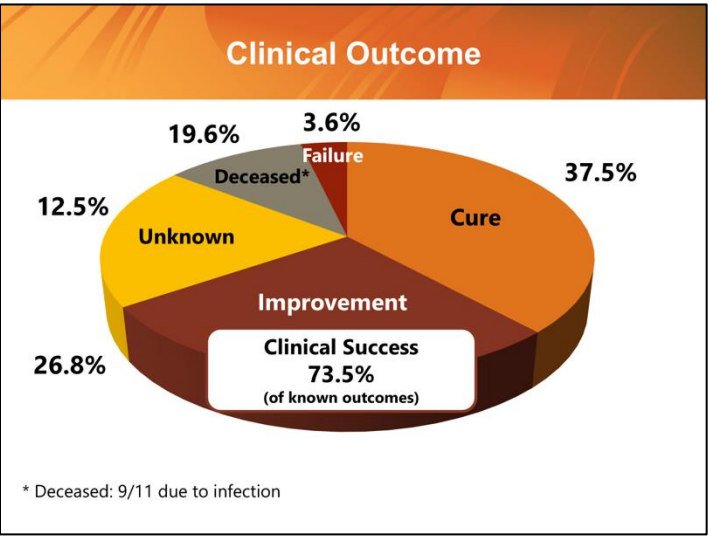
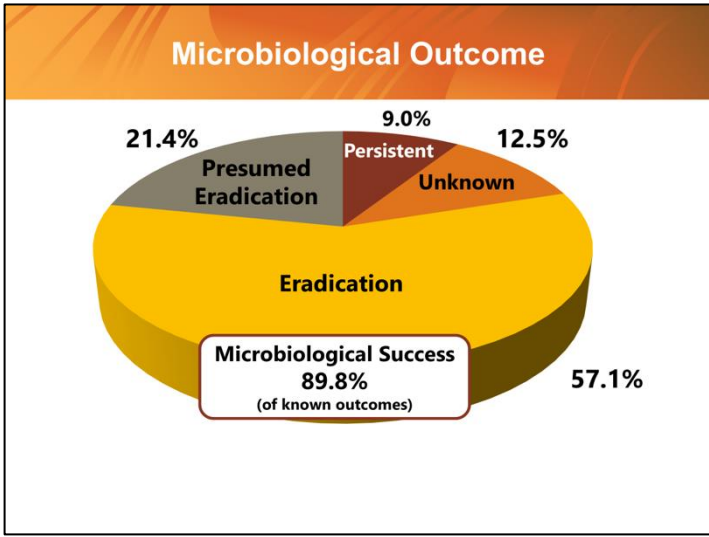
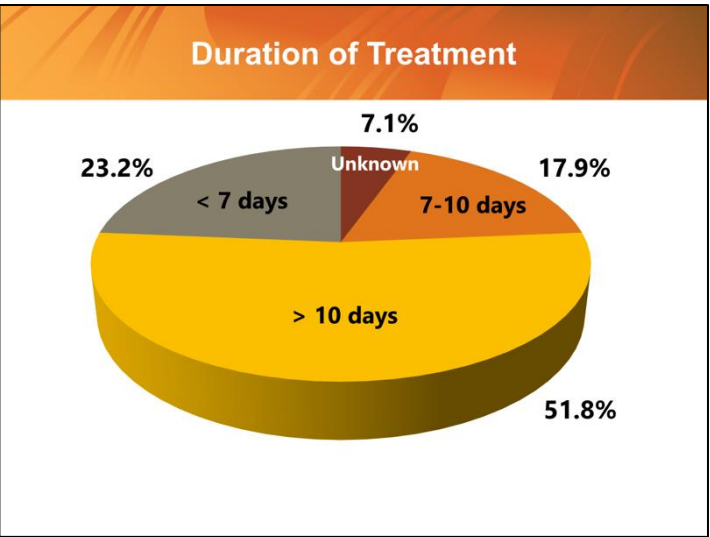
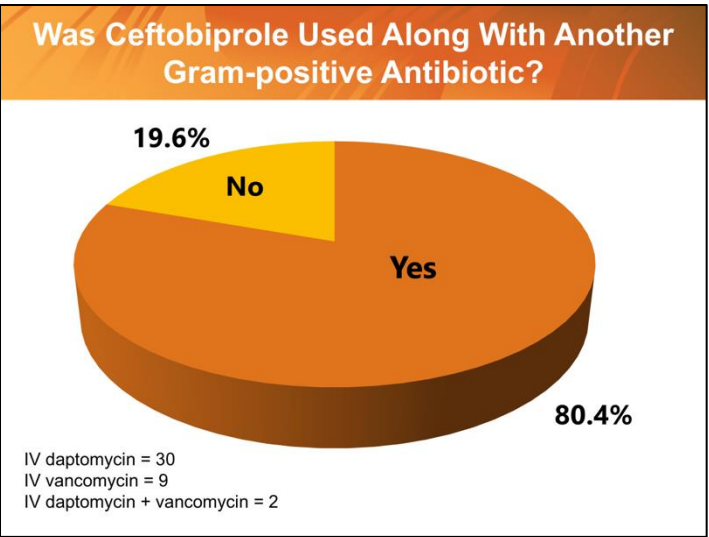
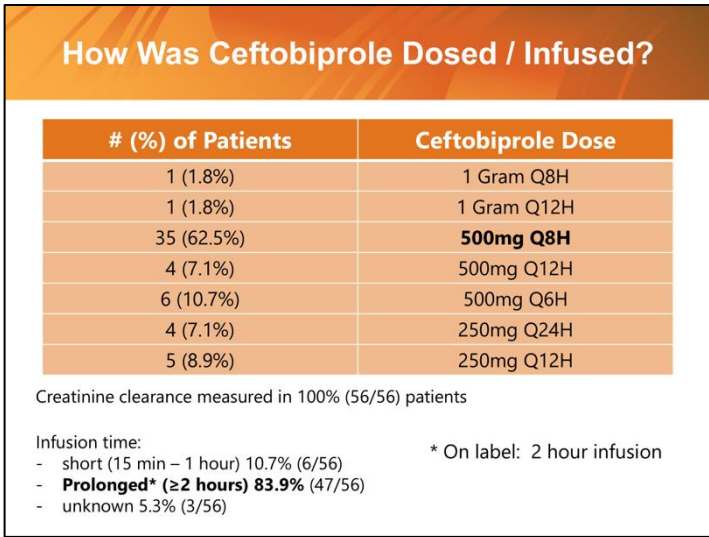
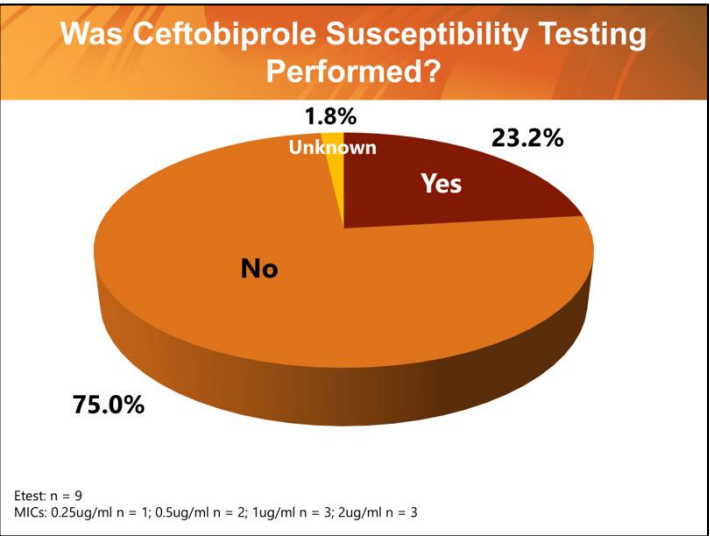
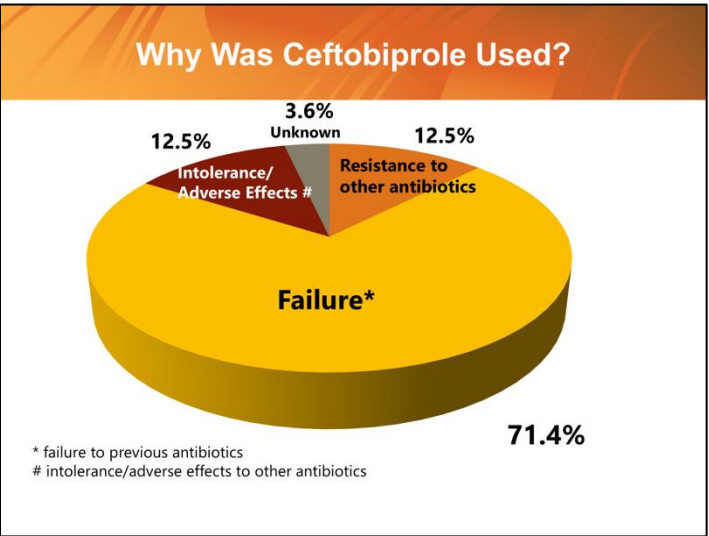
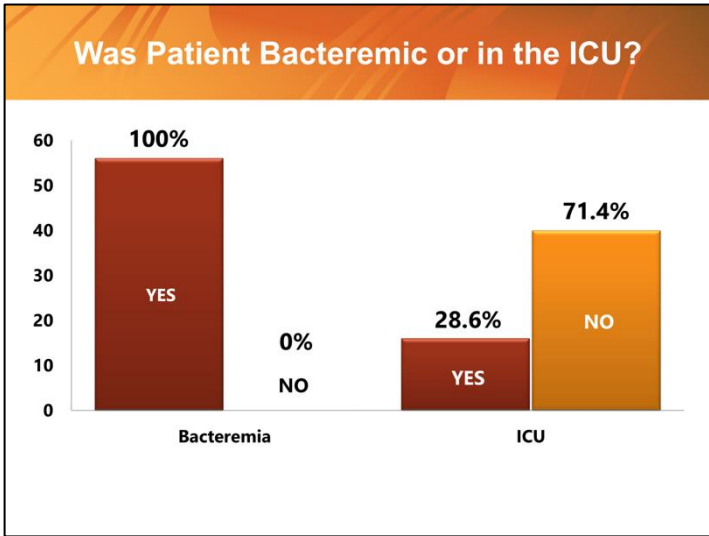
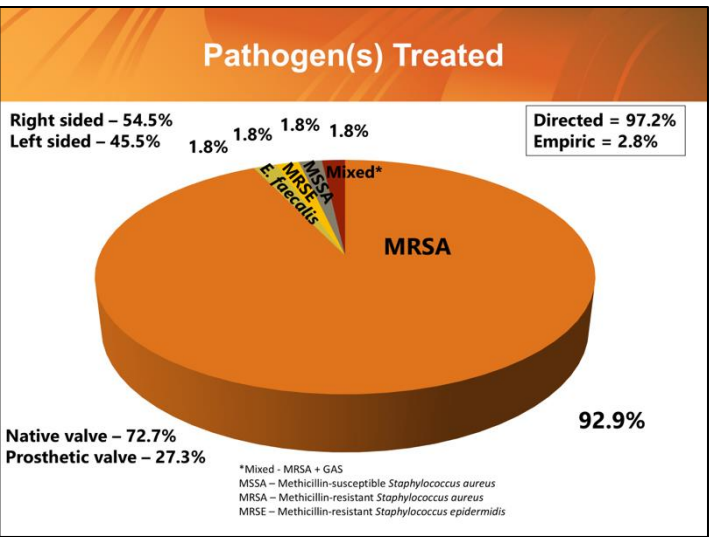
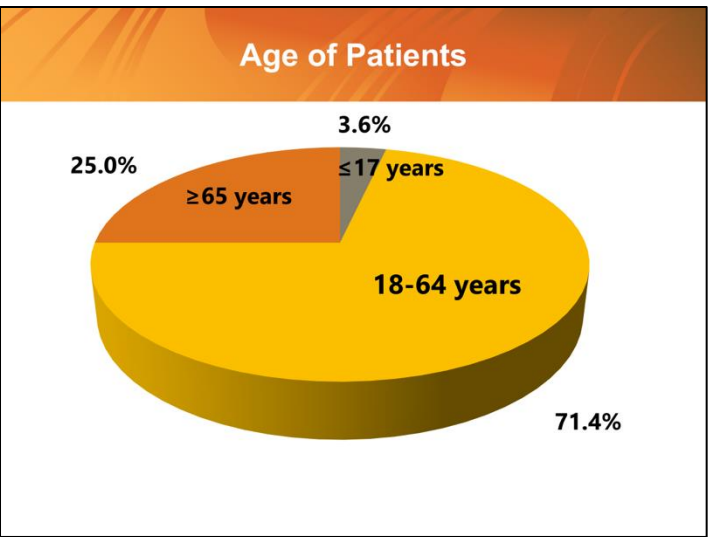
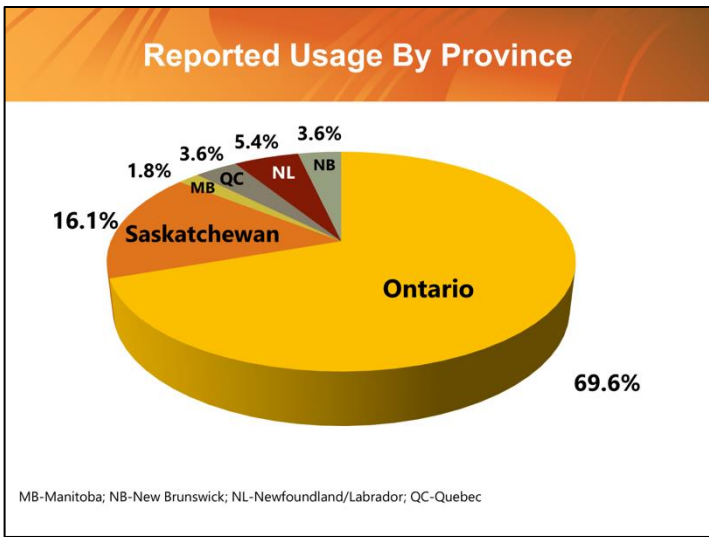
Survey Access

CLEAR – IV ceftobiprole endocarditis link

<https://rcsurvey.radyfhs.umanitoba.ca/surveys/?s=JM8JJHLA8N3JDKWA>

Results

Below are the cumulative tabulated results of the questions asked in the CLEAR IV ceftobiprole endocarditis usage survey questionnaires as of March 27, 2026. The following tables are based on a total of 56 patient treatment surveys.



Conclusions

- Ceftobiprole is used to treat endocarditis (all patients having bacteremia) primarily in adults 18-64 years of age.
- Ceftobiprole is used primarily as directed therapy for infections caused by MRSA (though mixed MRSA/GAS and *E. faecalis* also treated).
- Ceftobiprole is primarily used due to failure of previous antibiotics.
- Ceftobiprole is frequently used without antimicrobial susceptibility testing.
- Ceftobiprole is frequently added to an existing MRSA agent such as daptomycin and/or vancomycin.
- The most common IV dosage administered is 500mg Q8H and the most common administration is using prolonged infusion ≥2 hours (on label 2 hours).
- Ceftobiprole is frequently used for durations >10 days.
- Ceftobiprole treatment is associated with high rates of microbiological and clinical success.
- Adverse events were reported in 4 (7.1%) patients, 1 requiring drug discontinuation.