

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 meropenem/vaborbactam across Canada. <https://rcsurvey.radyfhs.umanitoba.ca/surveys/?s=3H4FJ7HA49MDYHY8>

Materials and Methods

An IV meropenem/vaborbactam 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 <https://rcsurvey.radyfhs.umanitoba.ca/surveys/?s=3H4FJ7HA49MDYHY8> 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 meropenem/vaborbactam questionnaires received by March 27, 2026 were tabulated and results presented are based on 10 patient treatment surveys.

Acknowledgements

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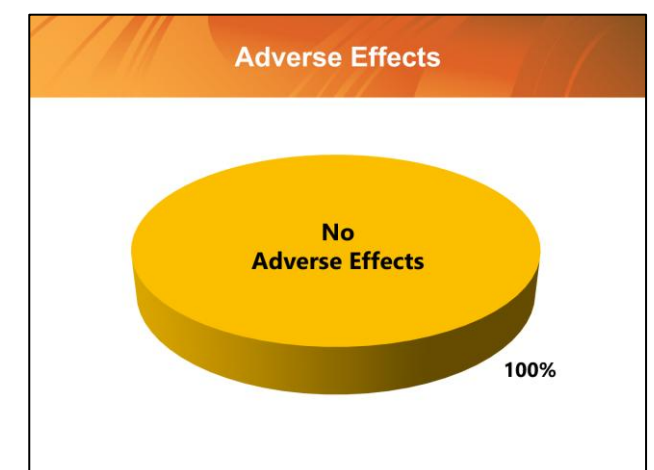
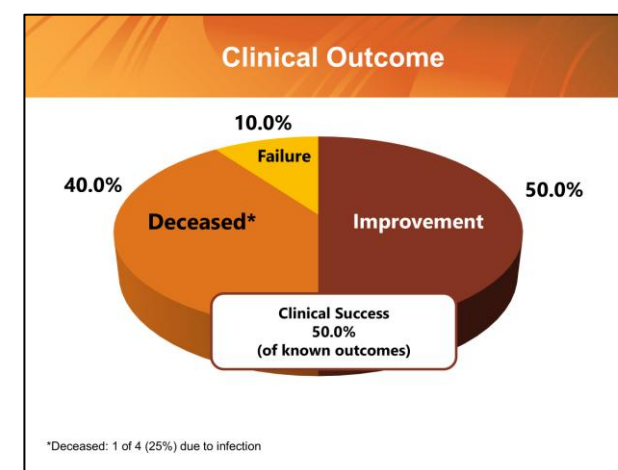
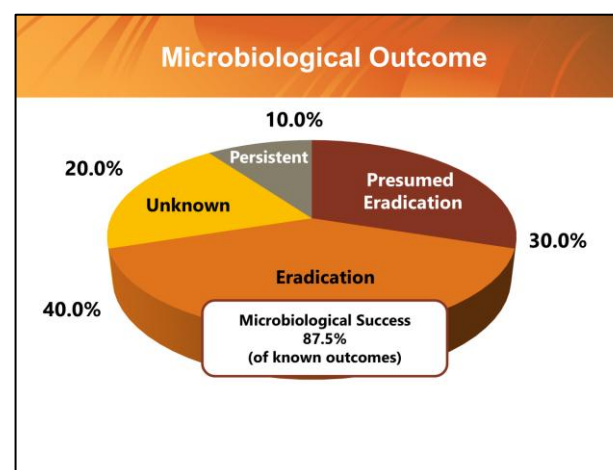
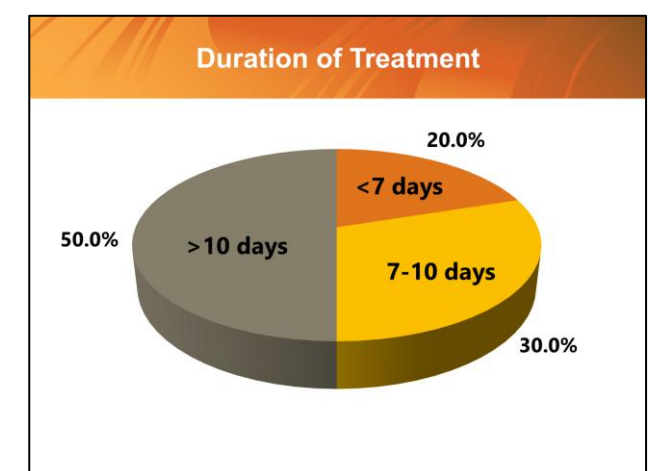
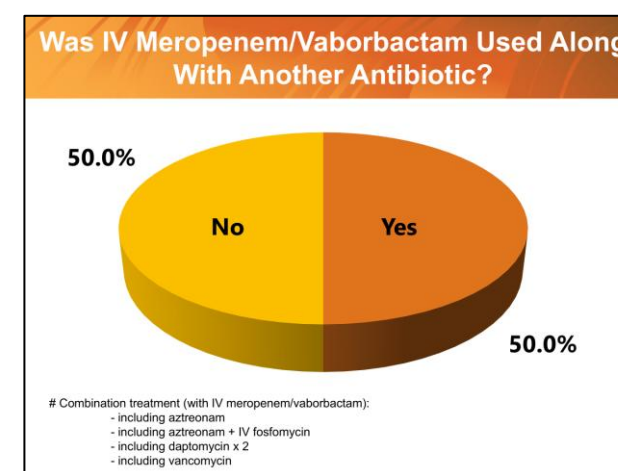
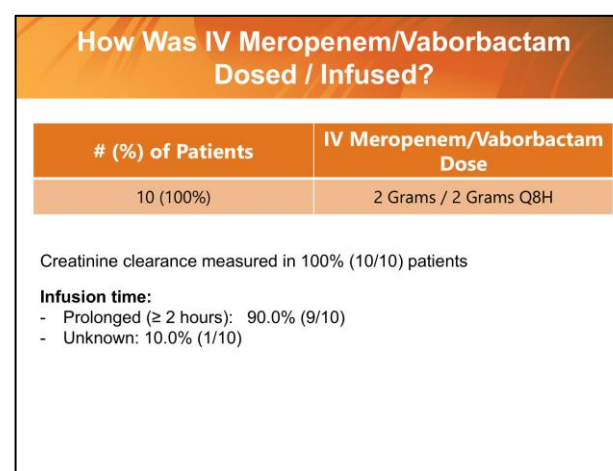
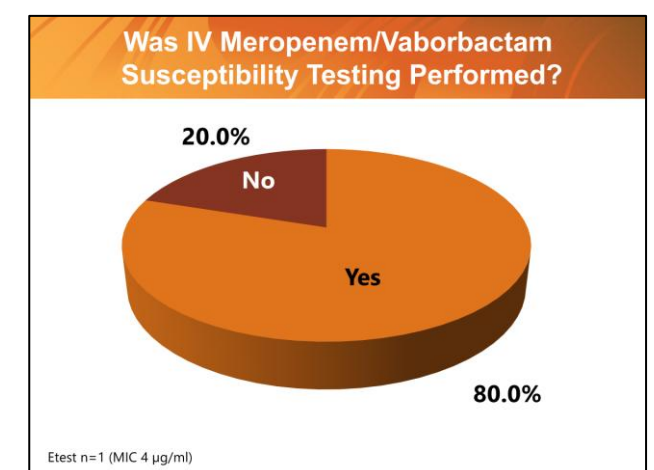
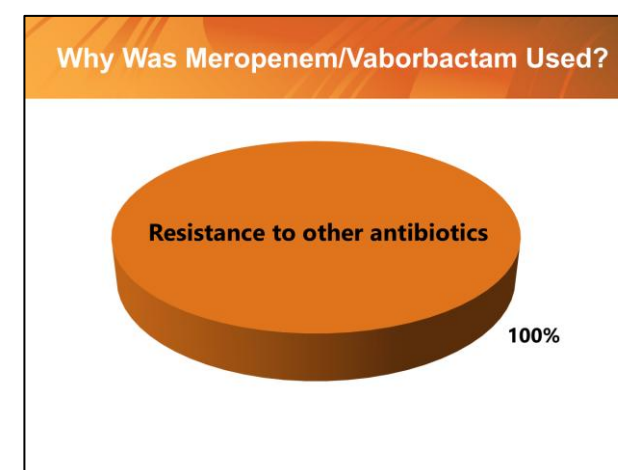
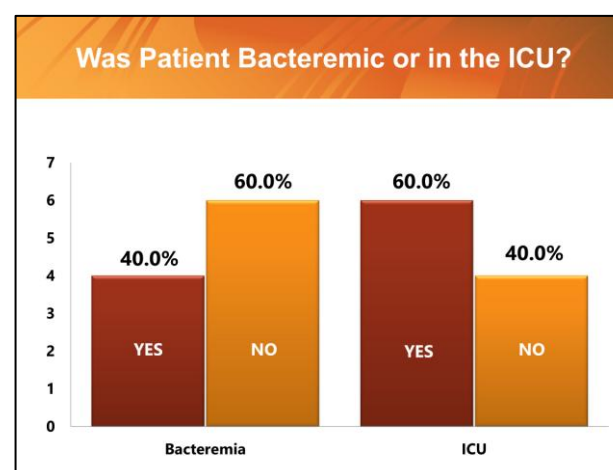
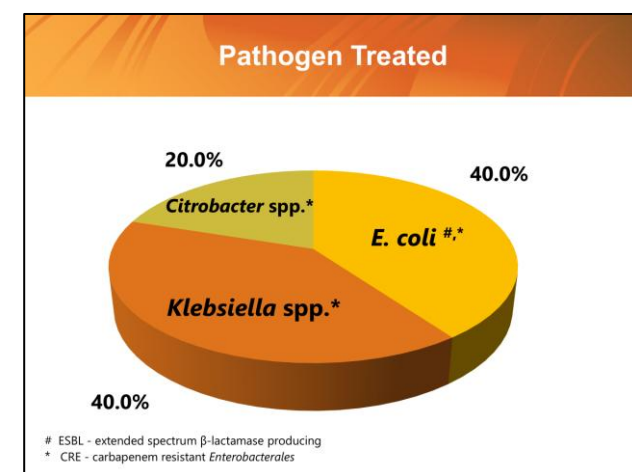
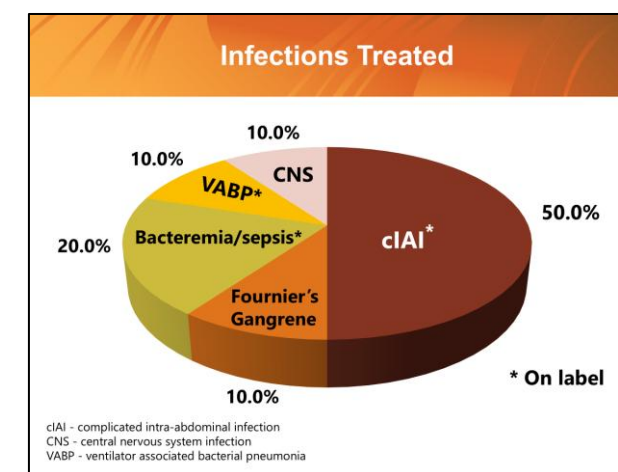
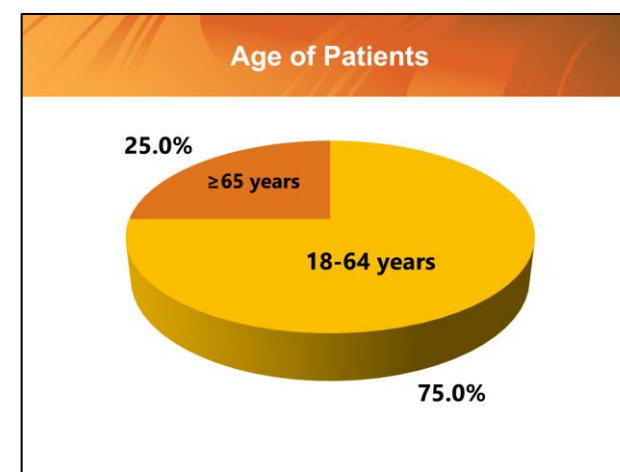
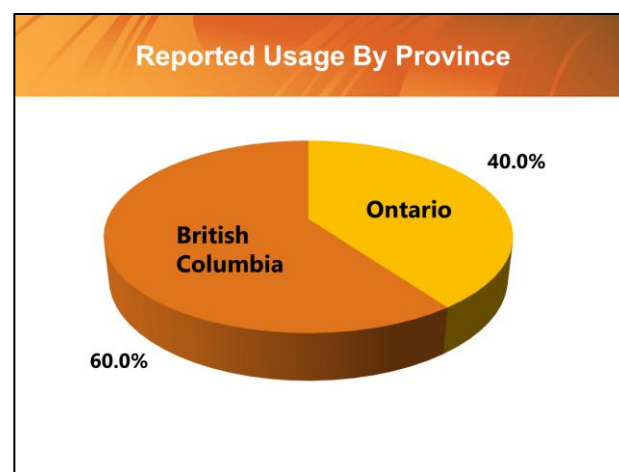
Survey Access

CLEAR – IV meropenem/vaborbactam link

<https://rcsurvey.radyfhs.umanitoba.ca/surveys/?s=3H4FJ7HA49MDYHY8>

Results

Below are the cumulative tabulated results of the questions asked in the CLEAR IV meropenem/vaborbactam usage survey questionnaires as of March 27, 2026. The following tables are based on a total of 10 patient treatment surveys.



Conclusions

1. Meropenem/vaborbactam is used to treat complicated intra-abdominal infections, central nervous system infections, ventilator-associated bacterial pneumonia, and bacteremia/sepsis.
2. Meropenem/vaborbactam is used as directed treatment for infections caused Gram-negative pathogens (ESBL and especially CRE) resistant to other antimicrobials.
3. Meropenem/vaborbactam is used due to resistance to other antimicrobials.
4. Meropenem/vaborbactam is frequently used with antimicrobial susceptibility testing.
5. Meropenem/vaborbactam is frequently combined with other antimicrobial agents.
6. The most common IV dosages are 2 Grams/2 Grams Q8H and administered using a prolonged infusion (≥ 2 hours).
7. Meropenem/vaborbactam is frequently used for durations >10 days.
8. Meropenem/vaborbactam treatment is associated with high rates of microbiological success.
9. No adverse events reported in 10 patients.