

ANSORP NOW

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Dear ANSORP Investigators

Greetings from Seoul !
I hope all ANSORP investigators are doing well.

This is the **2014 November issue of ANSORP NOW**. It provides update information and current status of ANSORP activities. "ANSORP NOW" is a monthly newsletter, delivered to all ANSORP investigators by e-mail and website of APFID (www.apfid.org).



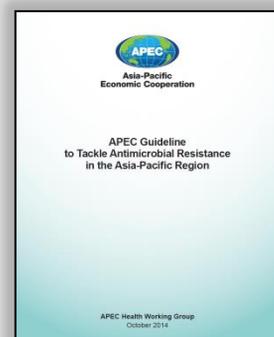
Please read this ANSORP NOW carefully to update our international collaboration. If you have any ideas, opinions, or issues that can be shared with other ANSORP investigators, please send us e-mails or FAX.

I always appreciate your active participation in the ANSORP activities.

Jae-Hoon Song, MD, PhD
Organizer, ANSORP
Founder & Chairman, APFID

APEC guideline to tackle antimicrobial resistance in the Asia-Pacific region

APEC has been supporting serial projects to set up the future strategies to control and prevent antimicrobial resistance (AMR) in the Asia-Pacific region since 2010. The "APEC guideline to tackle antimicrobial resistance in the Asia-Pacific region" is prepared by the Asia Pacific Foundation for Infectious Diseases (APFID) in collaboration with countries in the APEC region, based on the results of the serial APEC projects since 2010.



The guideline is primarily based on the strategic action plan to control and prevent AMR in the region which consists of six major components; 1) Surveillance of AMR and antibiotic use, 2) Increased awareness of AMR, 3) Appropriate use of effective antibiotics, 4) Hospital infection prevention and control, 5) Vaccination, and 6) Policies and regulations. The APEC guideline can provide Asian countries with the general concept and the frame of the strategies to address the growing threat of AMR in the region for the first time. Since current problems and issues of AMR and antibiotic uses may vary by country, implementation of the strategic action plan should be individualized based on local situation.

For more information, please visit the APEC publication website below:
http://publications.apec.org/publication-detail.php?pub_id=1577

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: Minocycline for the Treatment of Multidrug-Resistant *Acinetobacter baumannii*

Update on acinetobacter species: mechanisms of antimicrobial resistance and contemporary in vitro activity of minocycline and other treatment options

Clin Infect Dis. 2014 Dec 1;59 Suppl 6:S367-73.

Castanheira M, Mendes RE, Jones RN.

ABSTRACT

Among *Acinetobacter* species, *A. baumannii* and other closely related species are commonly implicated in nosocomial infections. These organisms are usually multidrug resistant (MDR), and therapeutic options to treat *A. baumannii* infections are very limited. Clinicians have been resorting to older antimicrobial agents to treat infections caused by MDR *A. baumannii*, and some of these agents have documented toxicity and/or are not optimized for the infection type to be treated. Recent clinical experience supported by antimicrobial susceptibility data suggests that minocycline has greater activity than other tetracyclines and glycylicyclines against various MDR pathogens that have limited therapeutic options available, including *Acinetobacter* species. An intravenous formulation of minocycline has recently become available for clinical use, and in contrast to most older tetracyclines, minocycline has high activity against *Acinetobacter* species. In this report, we summarized some of the characteristics of the tetracycline class, and quantified the minocycline activity against contemporary (2007-2011) isolates and its potential therapeutic role against a collection of 5477 *A. baumannii* and other relevant gram-negative organisms when compared directly with tetracycline, doxycycline, and other broad-spectrum antimicrobial agents. *Acinetobacter baumannii* strains were highly resistant to all agents tested, with the exception of minocycline (79.1% susceptible) and colistin (98.8% susceptible). Minocycline (minimum inhibitory concentration that inhibits 50% and 90% of the isolates [MIC_{50/90}]: 1/8 µg/mL) displayed greater activity than doxycycline (MIC_{50/90}: 2/>8 µg/mL) and tetracycline hydrochloride (HCL) (only 30.2% susceptible) against *A. baumannii* isolates, and was significantly more active than other tetracyclines against *Burkholderia cepacia*, *Escherichia coli*, *Serratia marcescens*, and *Stenotrophomonas maltophilia* isolates. In vitro susceptibility testing using tetracycline HCL as a surrogate for the susceptibility other tetracyclines fails to detect minocycline-susceptible isolates and the potential utility of minocycline for the treatment of many MDR *A. baumannii* infections and other difficult-to-treat species, where there are often limited choices of antimicrobials.

Bad bugs need old drugs: A stewardship program's evaluation of minocycline for multidrug-resistant *Acinetobacter baumannii* infections

Clin Infect Dis. 2014 Dec 1;59 Suppl 6:S381-7.

Goff DA, Bauer KA, Mangino JE.

ABSTRACT

BACKGROUND:

Minocycline is an "old-drug" with Food and Drug Administration approval for the treatment of infection due to *Acinetobacter* species. The purpose of this study is to describe an Antimicrobial Stewardship Program's evaluation of minocycline for the treatment of patients with multidrug resistant *A. baumannii* (MDR-AB) infections.

METHODS:

This study evaluated hospitalized adult patients (September 2010 through March 2013) who received minocycline intravenously (IV) for a MDR-AB infection. Clinical and microbiological outcomes were analyzed. Secondary outcomes included infection-related mortality, length of hospital stay (LOS), infection-related LOS, intensive care unit (ICU) LOS, mechanical ventilation days, and 30-day readmission.

RESULTS:

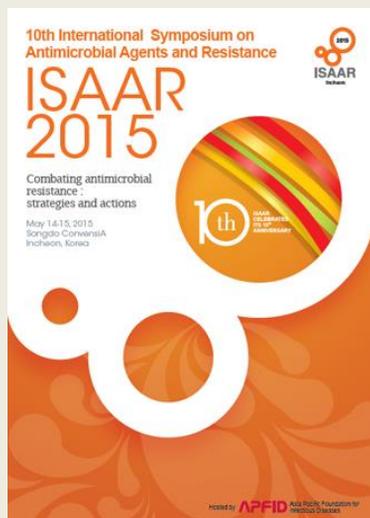
A total of 55 patients received minocycline. Median age was 56 (23-85) years, 65% were male with an APACHE II score of 21 (4-41). Clinical success was achieved in 40/55 (73%) patients treated with minocycline monotherapy (n = 3) or in combination with a second active agent (n = 52). Overall 43 (78%) patients demonstrated documented or presumed microbiologic eradication. Infection-related mortality was 25%. Hospital LOS was 31 (5-132) and infection-related LOS was 16 (2-43) days. Forty-seven (85%) patients were admitted to the ICU for a LOS of 18 (2-78) days. Thirty-nine (71%) patients required mechanical ventilation for 6 (2-29) days. One patient had a 30-day readmission.

CONCLUSIONS:

The response rate to minocycline monotherapy or in combination for the treatment of MDR-AB infections is encouraging as therapeutic options are limited. Prospective studies in patients with MDR-AB infections will help establish the role of minocycline alone or in combination with other antimicrobials.

If you need PDF version of the papers, please contact ANSORP Project Manager (Dr. So Hyun Kim, shkim@apfid.org).

10th International Symposium on Antimicrobial Agents and Resistance (ISAAR 2015) in Songdo, Korea in May 2015



We would like to cordially invite you to join the 10th International Symposium on Antimicrobial Agents and Resistance (ISAAR 2015), which will be held at Songdo Convensia in Songdo, Korea from May 14 to 15, 2015. Please visit www.isaar.org for updates to the program and additional information to enhance your participation in this important meeting on infectious diseases and antimicrobial resistance. We hope that many ANSORP investigators can join the ISAAR 2015 and celebrate the 10th anniversary of ISAAR.

IMPORTANT DATES

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| • Deadline for abstract submission | March 2, 2015 |
| • Notice of acceptance of abstract | March 9, 2015 |
| • Deadline for early registration | March 15, 2015 |
| • Late registration deadline | April 20, 2015 |



We always appreciate your active contribution to ANSORP activities.
If you have any questions, or issues that can be shared with other ANSORP investigators, please let us know them at any time.