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How to write an abstract

The example of anti-infective drugs



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Conflict of interest:
Nothing to disclose



Examples of Research

- Drug Use Evaluation (DUE)
- Pharmacokinetic (PK)
- PK/PD (e.g. continuous infusions)
- Stability of infusions
- Safety (?)
-



What is the motivation to prepare an abstract?

- **Sharing important information**
 - for the benefit of colleagues
 - for the benefit of patients

It is not about participating at a congress or getting a travel grant!



Key question

What is new?

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Advice

- Sometimes we want to know („research“) if a drug works like in literature or is used in the labelled indication
- This will not always generate a paper/poster/presentation
- Key questions
 - What is new, what is my data adding to already published data?
 - Why do we think that something is special in some hospitals/patients?
 - What could be different to literature data?
 - Why is my data important for patients/hospitals?

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Some examples

- Title vs. Purpose vs. Conclusion
 - Is this on line?
 - Is everything mentioned in Title and Purpose covered by the Conclusion?
 - Is this of interest for others?
- Are there any results in the abstract?
 - Preliminary data?



Title vs. Purpose vs. Conclusion

Prospective-multicentre pharmacist analysis about the use of daptomycin

Background

Daptomycin is an antibacterial drug useful for complicated infections caused by gram positive. Lastly, it uses has increase with a questionable justify.

Purpose

To analyze the clinical use of daptomicin in a General Hospital and its relationship with the best evidence available.

.....

Conclusions

Daptomycin is a useful antibacterial drug, used mainly because its better profile against biofilm, frequently delivered on prosthetic devices. It used has been noted in spite of vancomycin.

- Prospective-multicenter in a (=one) General Hospital?
- Best evidence not discussed in background
- Conclusion is not answering the question (if) in purpose
 - Some minor answer in the results section



Just one problem to be solved in the future

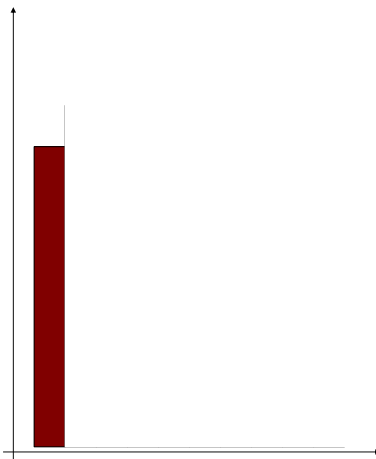
- Someone is asking a question about safety of a virustatic combination therapy on Hep C
- Many hospital pharmacies are involved (⇒ multicenter approach)
- The combined data from all centers are the result
- BUT ...
 - more than 30 abstracts with single center results
 - sometimes $n < 10$, but conclusion is: „Safe“

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Case series or “global” approach



- Consumption data
- Adverse drug reactions
- Efficacy
- Safety
- Outcome

... or ...

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What about relevance?

CONSUMPTION OF ANTIBIOTIC COLISTIN, ATC-J01XB01, IN THE PERIOD OF 2009-2015

Background

Colistin is a polypeptide antibiotic which is used in the treatment of multidrug-resistant strains of gram negative bacteria, *Pseudomonas aeruginosa* and

Acinetobacter baumannii. It is on the reserve list of antibiotics in our hospital.

Purpose

In the period 2009-2015, we expect an increase in consumption of antibiotic colistin which is proportional to the prevalence of resistant strains of bacteria. We expect price decrease caused by the emergence of drug generic parallels in the Croatian market due to entry into the EU.

Material and methods

Six-year retrospective analysis of data obtained from the Pharmacy Department computer program.

Results

In 2009 the consumption of colistin was 98 vials (1M-179kunas; 1euro=7,5kunas); in 2010-320 vials (1M-179kn); in 2011-108 (1M-179kn); 2012-936 (1M-132kn); 2013-982 (1M-139kn); 2014-3062 (1M-132kn); 2015-1665 for 3 months period (1M-124kn). The biggest consumers of the drug are as follows: abdominal surgery, neurosurgery, intensive care units, infective clinic, pediatrics, urology, neurology, cardiology, orthopedics, cardiology, although all departments and clinics at some time used colistin.

Conclusion

In observed period demand for colistin is increased; 2009 to 2010 by 226%; 2011 to 2012 by 770%, from 2012 to 2013 by 4.9%, from 2013 to 2014 by 211%, with a cost decrease of the drug for about 30% for 1M. In 2015 increase of use of the drug occurs, which is most likely topic for future research, as well as the prevalence of isolates of multiresistant pathogens.

- Language (?):
to expect (?) and
purpose
→ *in 2009-15 we realized an increase ... (?)*
- Relevance: Is this
science or a
description?
- „... which is proportional
to the prevalence of
resistant ...“
- „... We expect price
decrease ...“

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What about interest for other European Hospital Pharmacists?

- Why is this
important for an
EAHP
Congress
visitor from
ABCland?
- Is this process
unknown in
XYZland?

TREATMENT WITH LIPOGLYCOPEPTIDS : HOW TO OBTAIN THESE NEW MEDICATIONS IN XYZland ?

Background

Responsible for nosocomial infections, Methicillin Resistant *Staphylococcus Aureus* can cause cutaneous infections, bone infections or pneumonias. Specific health measures are taken in order to prevent the spread of this multi resistant bacteria. Vancomycin is the antibiotic of choice to treat MRSA infections. New lipopeptides such as daptomycin, telavancin, dalbavancin and oritavancin are an alternative to vancomycin to treat cutaneous infections and nosocomial pneumonias.

Purpose

A lipopeptid treatment regimen could be initiated by the physician to cure a severe infection caused by MRSA. Only daptomycin is currently available in XYZland. We reported in this abstract the procedural steps to obtain telavancin, dalbavancin and oritavancin when the patient is infected by a bacteria resistant to daptomycin.

Material and methods

To answer our question, we called the XYZland National Agency for Medicines and Health Products Safety (NA).

Results

Telavancin has a Marketing Authorisation Application (MAA) in the ZZZ as well as in XYZland for the treatment of nosocomial pneumonias due to MRSA. Although the medication has a MAA in XYZland, this drug is not commercialized. To acquire telavancin, an import authorisation is necessary. The pharmacist has to fill a certificate providing the generic name, its indication, the posology and the border exporter. The pharmacist then sends the application to the NA. After this request is received, the NA decides on whether or not to import the telavancin. Dalbavancin is used for the treatment of adults with complicated skin and skin structure infections caused by Gram-positive bacteria, including MRSA. Oritavancin is indicated for the acute moderate or severe cutaneous infections. As these two medications have not yet the MAA, they could be obtained via a named patient Temporary Authorisations for Use (ATU) requested by NA. This named ATU serves as an import authorisation.

Conclusion

The availability of these three lipopeptids extends the therapeutic strategy for the patients who have a severe infection to MRSA. However, the procurement of these drugs remains a time-consuming process. Therefore, these anti-staphylococci agents are used in last intention to treat patients colonized by multi-resistant bacteria.

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We are so sad ...

PREPARATION AND EFFECTIVENESS OF IMPENEM/CLASTATIN 5MG/5MG/ML COLLYRIUM TO TREAT EYE INFECTION CAUSED BY MORGANELLA MORGANII.

Background

Morganella morganii is a gram-negative bacteria usually found in the human intestinal tract as normal flora. Despite its wide distribution, it is an uncommon cause of eye infection. The ophthalmology service of our

collirio → collyrium? → eye-drops

• Important topic

What are the important points from the author

– Impenem eye-drops

- production
- stability
- compatibility
- prevention of adverse events (osmolarity)
- quality assurance
- analytics
-

– Use of IMI

- „Resistant to the others tested“?

Table 1
Room temperature and refrigerator stability of commonly used beta-lactam antibiotics

Antibiotic	Concentration	Room Temperature (h) (25°C)	Refrigerated (d) (4°C-5°C)
Ampicillin	<30 mg/mL	8	3
Cefepime	<280 mg/mL	24	7
Ceftazidime	20 mg/mL	24	7
Ceftriaxone	100 mg/mL	72	10
Doripenem	20 mg/mL	24	10
Imipenem	5 mg/mL	4	1
Meropenem	20 mg/mL	4	1
Nafcillin	40 mg/mL	24	4
Oxacillin	100 mg/mL	24	3
Penicillin G	500,000 units/mL	24	7
Piperacillin-tazobactam	20 mg/mL	24	7

Data from Crandon JL, Sutherland C, Nicolau DP. Stability of doripenem in polyvinyl chloride bags and elastomeric pumps. *Am J Health Syst Pharm* 2010;67:1539-44; and Trissel LA. *Handbook of Injectable Drugs*. 14th edition. Bethesda (MD): American Society of Health-System Pharmacists; 2007.



Sufan: We sometimes find out ...

HAM15-0233. THE INFLUENCE OF SUFAN ON THE OXIDATIVE HOMEOSTASIS AND FATTY ACID COMPOSITION OF MYOCARDIUM AND LIVER IN THE CASE OF DAUNORUBICIN-INDUCED INTOXICATION

- ... plagiarism, refreshing of old publications, ...
- That's a „no go“!

Influence of nonglycozide cardiotoxic on oxidative homeostasis and fatty acid patterns of lipids in myocardium and liver under conditions of daunorubicin intoxication

Record 3 of 3

Title: Influence of nonglycozide cardiotoxic on oxidative homeostasis and fatty acid patterns of lipids in myocardium and liver under conditions of daunorubicin intoxication
Author(s): Nuzakova, IV (Nuzakova, IV); Chikman, IS (Chikman, IS); Olsnyk, SA (Olsnyk, SA); Buzgina, TS (Buzgina, TS); Gromakova, NA (Gromakova, NA)

Source: EXPERIMENTAL ONCOLOGY Volume 22, Issue 4, Pages: 236-238 Published: DEC 2000

Abstract: The effects of the new Ukrain nonglycozide cardiotoxic drug Sufan on the oxidative homeostasis and lipid fatty acid spectrum in the myocardium and liver of normal rats as well as the rats with daunorubicin intoxication were studied. Sufan has not been shown to affect the parameters under study in normal rats. Nevertheless this drug has been proved to be effective in decreasing daunorubicin toxicity by normalizing the shifts in fatty acid patterns and disturbances of oxidative homeostasis induced by daunorubicin.

Accession Number: W05 0001668700015

ISSN: 1081-3541



Questions from the SC

- Sometimes the SC does not want to reject an abstract
 - They want clarification or they want a „new“ abstract with minor but relevant changes
- If there is no answer in time the abstract is going to be rejected

Avoid to play the google translate game!



Zur Herstellung der gebrauchsfertigen Suspension wird die Flasche bis etwa 1/4 unter der Markierung mit Trinkwasser gefüllt, die Flasche verschlossen und gut geschüttelt. Nachdem sich der auftretende Schaum abgesetzt hat, wird die Flasche bis zur Markierung mit Trinkwasser aufgefüllt.

Um die bereit Suspension herzustellen, wird die Flasche zu ca. 1/4 unter die Marke mit Wasser gefüllt war, wurde die Flasche verschlossen und gut geschüttelt. Die Flasche nach der Schaum gesetzt hat auftretende bis zur Markierung mit Wasser gefüllt.

Avoid to play the google translate game!

To prepare the ready-to-use suspension, the bottle is filled to about 1/4 below the mark with water, the bottle is closed and shaken well. After the occurring foam has settled , the bottle is filled to the mark with water.

Para preparar la suspensión lista para el uso, la botella se llena hasta aproximadamente 1/4 por debajo de la marca con agua, la botella se cierra y se agita bien. Después de la espuma occurring se ha asentado, la botella se llena hasta la marca con agua.



Para preparar la suspensión listo para su uso, la botella se llena hasta aproximadamente 1/4 bajo la marca con agua, la botella se cierra y se agita bien. A Monte Carlo después de que la espuma se ha asentado, la botella se llena hasta la marca con agua.

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To write the perfect abstract be sure ...

- to ask the right question
 - to answer the question
 - to not generalize with low numbers
 - to show relevant data only
- ... cases, at a dose of 400mg twice daily at 83.87%; the remaining 16.13% was treated ...
- to conclude only the things you have studied
 - to check the language



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