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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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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?

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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, its use has increased with a questionable justification.

Purpose

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

....

Conclusions

Daptomycin is a useful antibacterial drug, used mainly because of its better profile against biofilm, frequently delivered on prosthetic devices. Its use 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



Title vs. Purpose vs. Conclusion

A Five-year Economic Study and Analysis of Antimycotic Consumption in a Tertiary Hospital

Background

Although antimycotic cost is high, the rational use of antimycotics is imperative in order to accomplish uppermost clinical outcomes with respect to effectual management of resources in a crisis era.

Purpose

To assess the cost and the evolution of antimycotic consumption during last five years.

....

Conclusions

An increase in antimycotic use expressed in DDDs/100BD was detected. Though the antimycotic cost represented almost half of total antimicrobial expenditure a significant amount decline was observed.

- Antifungal consumption data
- No discussion on increase of DDD and decrease of costs
 - Any interventions?
 - Any changes in prices?
- What can I use for my hospital, what is new?



Just one problem to be solved in the future

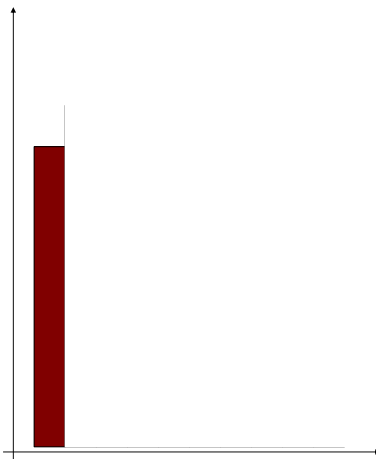
- Someone is asking a question about safety of a virustatic combination therapy on Hep C
- Many hospital pharmacies are involved (⇒ multicenter approach)
- The combined data from all centers are the result
- BUT ...
 - more than 30 abstracts with single center results
 - sometimes $n < 10$, but conclusion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

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Case series or “global” approach



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

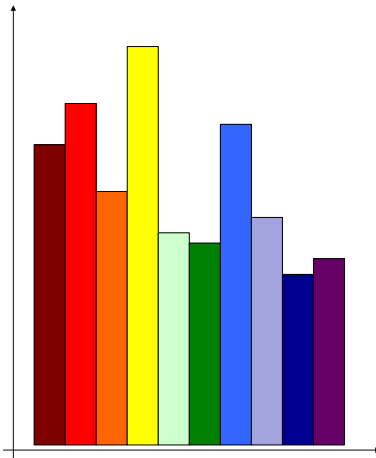
... or ...

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Case series or “global” approach



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

... or ...



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?



Abstract wants results

The development of a gentamicin dose calculator with in-built prescribing and therapeutic dose monitoring advice

Background

Gentamicin is an intravenous antibiotic used to treat gram negative organisms such as *E. coli*. Its narrow therapeutic index means the dose must be adjusted in obesity and in renal impairment, to avoid nephrotoxicity and ototoxicity. Dosing regimens vary depending on the condition being treated and patient age.

Purpose

The tool aimed to:

- (i) Recommend a gentamicin starting dose, dosing frequency and serum monitoring schedule, thereby improving reliability and accuracy.
- (ii) Print out these recommendations for inclusion in the patient notes.
- (iii) Provide dose adjustment advice, if target serum levels were not achieved.

Materials and Methods

The poster describes the multi-departmental, inter-hospital approach employed in this process, criteria employed in selecting a software company and the dual role of Pharmacy and computer engineering in tool design and validation.

Results

The poster will exhibit key user interface screens employed by the gentamicin calculator tool. It will describe the challenges encountered and outline practical aspects including costs.

Conclusions

The introduction of this tool simplified and standardised gentamicin use at Planned initiatives include its adaptation as a mobile phone application and its expansion to include other medications such as vancomycin.

- There has to be a result in the abstract
 - Sometimes preliminary results are accepted
- The “how did you do it” is of great interest



We are so sad ...

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

collirio -> collyrium ?

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

- Important topic

What are the important points from the author

- Imipenem 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	<200 mg/mL	24	7
Ceftazidime	20 mg/mL	24	7
Ceftazone	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;67:1533-44; 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 1 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): Nuzenkova, IV (Nuzenkova, IV); Chelkova, IS; Chelkova, IS; Chistykh, SA (Chistykh, SA); Brizgina, TS (Brizgina, TS); Gorchakova, NA (Gorchakova, NA)

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

Abstract: The effects of the new Ukrainian 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.

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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

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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.

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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

