# How To Write A Paper ...And More

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## **Objectives**

- 1. Explain the steps required when attempting to publish a paper
- 2. Provide insight into the editorial process

#### **Disclosures**

- Data Safety and Monitoring Committee: REDUCE LAP-2 HF Randomized Trial (Corvia Medical)
- Clinical Events Committee: ANTHEM HFrEF-2 (LivaNova)
- Speaker's Bureau: none
- Consultant: Relypsa, Array Biopharma

#### **Disclosures**

- 1. I currently edit a journal and was an associate editor at two other journals in the past. This means I am biased. Some of my suggestions are based on experience rather than a "golden rule"
- 2. I will use examples predominantly from the heart failure discipline. This means that I have limited vision. Maybe!

## **General Principles**

- This is harder than it looks but can be learned
- "Everything should be made as simple as possible but no simpler"
- Let the data speak
- Provide context
- Choose your journal and format wisely
- Prepare to spend some time on this
- Don't give up:

"Every paper can find a home"



## **General Principles**

- Verbose is fine with the early drafts
- Be persistent with your colleagues
- When you are ready to submit, wait!!
- Grammar and spelling errors are to be avoided at all costs (and please no typos)
- "Marketing" can play a role

## **Authorship**

A very important issue!

- Consider only those who contributed meaningfully to the intellectual content of the paper: the concept, critical help with data acquisition, the data analysis, important contributions to the development of the manuscript.
- Strict guidelines now exist at most journals (but it is unclear if they are enforced)

## **Authorship**

A very important issue!

• If you are a co-author, read the paper, add input on all facets of the paper... don't rubber stamp it.

## **Authorship**

And now for something completely different...

Lack of Association Between the Trp719Arg
Polymorphism in Kinesin-Like Protein-6 and
Coronary Artery Disease in 19 Case-Control Studies

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JACC Vol. 56, No. 19, 2010 November 2, 2010:1552-63 Assimes et al. Kinesin-Like Protein-6 and Coronary Disease 1553

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# **Ghost Writing aka Papers Written by "Medical Education Companies"**

Some words of wisdom

- 1. Do not agree to it
- 2. Authors must retain full control of the data, the analysis, the presentation, the conclusions.
- 3. Do not agree to it

## **Authorship and Ghost Writing** in our Times

Anecdotes are Fun, Sort of...

- 1. Offered of Co-Authorship on a Paper Already Written. The authors said nothing and neither did the Editor.
- 2. Reviewed a submission to JAMA authored by a senior researcher with formal acknowledgment of a medical education company. A professional embarrassment.

## **Conflict of Interest**

Be expansive in revealing relationships you have that could be construed as COI.

This can be (but should not be) a "perception is reality" problem.

You have the option of discussing it off line with the Editor.

## Model papers: Review them!

• For clinical trials: a wide choice! CHARM, SCD-HeFT...

Packer, Pfeffer, TIMI...

• For editorials and reviews

Packer, Braunwald

For abstracts

Take a look at Circulation (AHA)
Take a look at JACC (ACC meeting)
Find the good and the ugly

# How to Choose a Journal for your Submission

- Strategy is key
  - Know the options in your discipline
  - Know the rankings
  - Aim high to start
  - Read the Instructions to Authors carefully

    Not all journals accept case reports, research letters etc.

# How to Choose a Journal for your Submission

- Hauptman's General Modus Operandus
  - Ask yourself a critical question about the paper's quality and the potential interest of the journal
  - After 1-2 attempts at a high level journal, select the paper's "natural home"
  - After 2-3 attempts at natural home, move down the list
  - Pay attention to the reviews: you may learn something and the manuscript might actually get better if you incorporate some of the suggestions

# How to Choose a Journal for your Submission

- Inquiries can be sent to the Editor by email with a brief outline of the proposed paper (i.e. the abstract). However, this will be of limited utility. Editors have a default: "yes", so that they can add to their count of the number of submissions
- Occasionally they will say "no", and that can be very helpful

## **Manuscript by Section**

- Abstract
- Introduction
- Methods
- Results
- Conclusions
- Tables/Figures
- References

## **Manuscript Abstract**

- Carefully follow the instructions
- Every word has meaning
  Why did you write this?
  Why are your findings important?
  Why should the reviewer care?

## Introduction

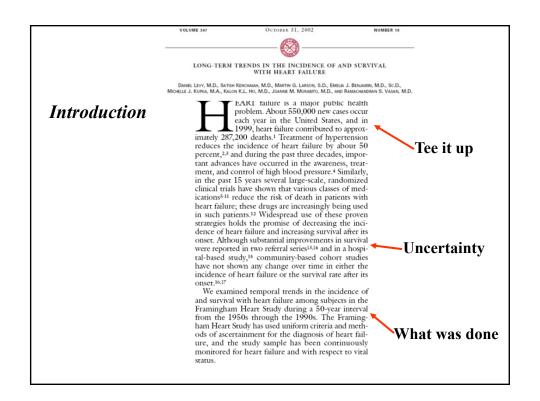
• 2-4 paragraphs

Paragraph 1: Overview (tee it up)

Paragraph 2: Uncertainties

Paragraph 3: Aim/Hypothesis

This is not a PhD dissertation or thesis!



#### Introduction: Beginning

#### Tee it up

Congestive heart failure (International Classification of Diseases, Tenth Revision [ICD10] code 150.0; ICD-9 code 428.0) is a leading cause of morbidity and mortality in older adults. <sup>1-3</sup> The number of patients aged >65 years admitted with a first listed diagnosis of heart failure admitted with a first listed diagnosis of heart failure increased from 20.3 to 22.1 per 1000 Medicare enrollees from 1990 to 2000. In the year 2003 alone, 1093000 patients were discharged from acute care hospitals with a diagnosis of congestive heart failure; most were aged ≥65 years. Heart failure is a common cause for rehospitalization within 30 days in the Medicare population. When the disease progresses to the point that the patient has symptoms at rest despite standard medical therato, vortions are limited.

the point that the patient has symptoms at rest despite standard medical therapy, options are limited. One option, the use of intravenous inotropic drugs, has been part of the treatment of acutely decompen-

uphton). milted April 27, 2006; accepted August 8, 2006. mint requests: Poul J. Houphton MD, Division of Cardiology FDT-15, Saint Loversity Houpital, 3635 Visto Avenue, 9. Louis MO 63110.

mail: haupimpi@slu.edu 002.8703/\$ - see front matter 2006, Mosby, Inc. All rights resi oi:10.1016/j.ahj.2006.08.003

#### What was done/ **hypothesis**

the American Heart Association/American College of Cardiology<sup>10</sup> classifies the administration of chronic infusions in patients with refractory symptoms as a class infusions in patients with refractory symptoms as a class Ib indication "inseufluense/ficiacy is less well estab-lished by expert opinion") because the effects on morbidity and mortality are not clear. <sup>11,12</sup> Indeed, several oral inotropes developed in the last 15 years shown to acutely improve cardiac output, decrease filling pressures, and in some cases, enhance quality of life were associated with higher mortality rates when used chronically, <sup>15,15</sup> raising concerns that intravenous dobutamine and militinone may also increase mortality; lotted one investigator awared "the patients should placed one investigator awared "the patients should

dobutamine and milrinone may also increase mortality— Indeed, one investigator augued "the patients should be fully informed that although inortopic therapy might make them feel better, it also might shorten life expectancy." The control of chronic intravenous inortopes has been limited by the lack of well-designed investigations, related in part to practical difficulties encountered in performing placebo-controlled trials in New York Heart Association Class IV patients. Most observational studies have been performed in specialized heart failure centers, raising questions about the general applicability of the results. Further, the studies are seldom powered aderesults. Further, the studies are seldom powered adequately to lead to definitive conclusions about efficacy

Therefore, we characterized a Medicare cohort treated

calculated the costs to Medicare associated with this calculated the costs to Medicare associated with this treatment to determine whether expenditures signifi-cantly increased or decreased after inotrope initiation. We hypothesized short-term mortality would be high, since 1-year mortality after a heart failure admission in the general Medicare population approaches 40%. Furthermore, we predicted a reduction in the number of hospitalizations after inotrope initiation would decrease the amounts reimbursed by Medicare. This decrease would be only partly offset by the reimbursement for inotrope and associated costs.

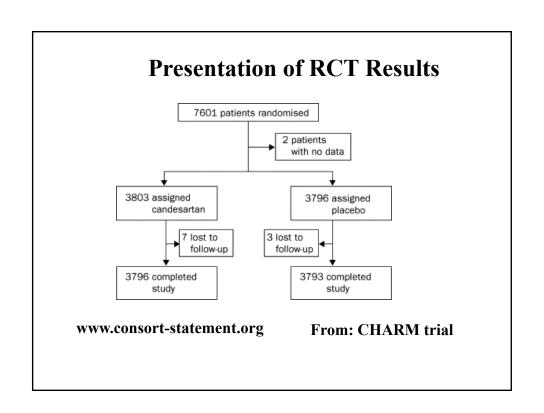
### **CHARM Trial Manuscript**

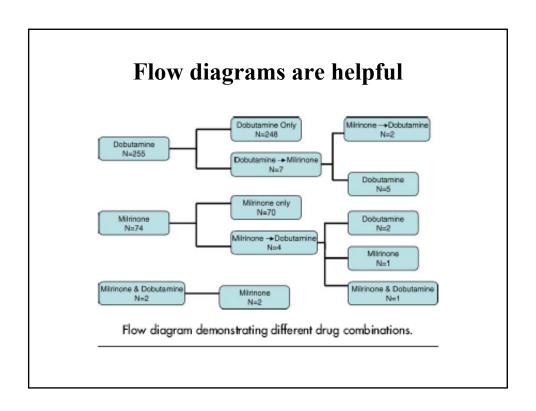
A wonderful final paragraph to the Introduction: simple and direct

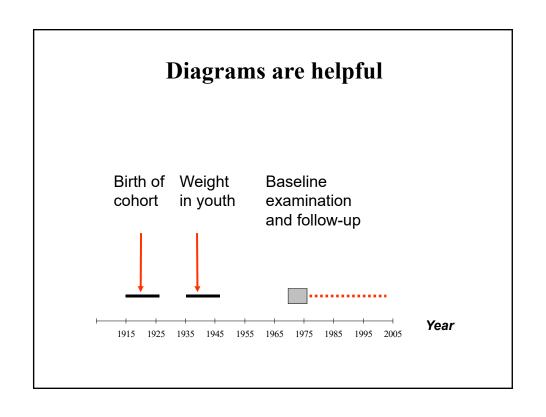
"We designed each trial to find out whether the use of candesartan would reduce the risk of cardiovascular death or hospital admission for CHF management in the specific population. The overarching hypothesis of the CHARM program pre-specified that use of candesartan would reduce the risk of death from any cause in the broad spectrum of patients with heart failure. The population was appropriate to test for consistency of benefits in subgroups and potential safety issues."

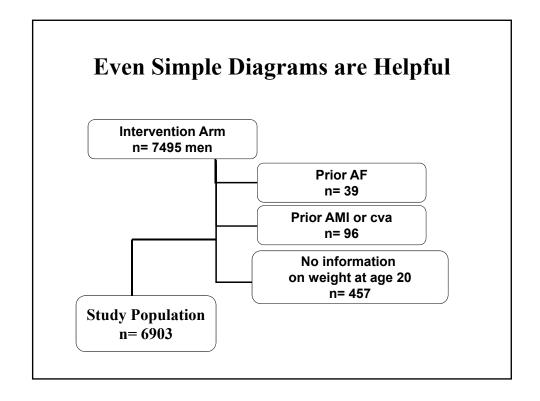
### **Methods**

- State succinctly what you did and how you did it but be expansive in the first draft. Do not assume that everyone knows what you did.
- No results!
- Statistical analysis is, in general, the last paragraph and/or statement about IRB approval, posting on ClinicalTrials.gov, etc.









## Results

- Rules of Thumb
  - --Two major and one minor finding; avoid too much or too little
  - --Alternative: One major and two minor findings
  - -- Findings should be connected, not disjointed

#### **Results**

- Use subtitles to facilitate transitions
- Use tables and figures in economical fashion... to save you from detailing all the findings in the text. *Highlight but do not repeat what can be found in the tables/figures*.
- Avoid "too many" tables and figures

### Results

- No commentary ("Interestingly..." or "Not surprisingly..." or "As expected...")
- No methods
- Just the facts!
- Always start with the basics: demographics, enrollment data, time period of enrollment etc.

## **Discussion**

Pivotal to the success of the paper

- Structure is key
- Readability is important
- Summarize the results
- Place your results in context

## **Discussion**

"I often quote myself. It adds spice to my conversation"

-G. B. Shaw



#### **SCD-HeFT**

#### Discussion: **Beginning**

#### DISCUSSION

Our study has two principal findings. First, therapy with a conservatively programmed, shock-only ICD significantly decreased the relative risk of death by 23 percent, resulting in an absolute reduction of 7.2 percentage points at five years among patients with CHF who received state-of-the-art background medical therapy, and the benefit did not vary according to the cause of CHF. Second, amiodarone had no beneficial effect on survival, despite the use of appropriate dosage and reasonable compliance rates over longer periods than in other placebocontrolled trials.1,9,10

## End

Our findings may also be pertinent to constraining the costs of ICD therapy. ICDs were inserted on Discussion: an outpatient basis, and testing of the devices was very limited. Outpatient insertion is certainly less expensive than inpatient insertion and can easily be translated to routine practice. Moreover, given the finding that no patient who underwent ICD testing required more than the maximal output of the device to terminate ventricular fibrillation, a reasonable argument can be made that defibrillation testing is unwarranted in this population. The risk and cost of defibrillation testing are likely to outweigh the remote possibility that a rare patient might benefit from it. A simplified, effective approach to the implantation of single-lead, shock-only ICDs such as ours should translate into cost savings.

> Bardy G et al NEJM 2005;352:225-37

### Limitations

- Do not limit your discussion of limitations, at least in the first draft. No dataset is ideal ...everyone understands that.
- Be expansive
- Consider this section as if you were the reviewer: what would you have wanted? Head the reviewer off at the pass!

## Limitations: Be Expansive

Start

Is this too long?

impact on the pharmacological treatment of patients with decompensated heart failure. Newer trial data and alternative drug therapies may influence practice and modify current approaches; nevertheless, the reassessment of restricted has had pronounced and rapid effects on practitioners, patients, and—by extension—indusity.

#### Limitations

sion—industry.\*

Lintations

It is possible that the change in nesiritide prescribing reflects a wide array of influences including the mass media and changes in marketing.\*

A definitive causal relationship with any single factor cannot be made. However, the fact that a continual decrease was seen over a period of 10 months suggests, from an analytical perspective, that the publications\*\*

Additionally, we do not know details about antecedent care or prior use of intravenous vasoactive therapy in this patient cohort. The reasons for the admission (e.g. noncompliance, new arrhythmia, etc.) are not known. Furthermore, it is possible that a given patient may be admitted more than once during the period under study and therefore consistency with the period under study and therefore consistency. We did not specifically look at dosing of intravenous herapy, because most doses are based on patient weight and may be frequently changed during the course of the hospitalization. However, it is possible that the average per-leilogram dose of nestitide declined during the period under study and this would likely represent an important shift toward on-label use, for which a dose of 0.01 µg/kg per minute is standard.

We were unable to pinpoint the exact timing of the beginning of the decrease in nestitude use, because the article suggestrate and the standard.

We were unable to pinpoint the exact timing of the beginning of the decrease in nestritide use, because the article suggesting a detrimental effect on mortality was published on the 20th day of the month April 2005). Our data provides month and year of admission (as well as day of service detail but does not include the precise calendar date. Nevertheless, the impact, if sudden, would have been limited to the last 10 days of the month. Furthermore, since

the database is driven by month of dis-charge, the data we have for Decem-ber 2005 does not include all hospital-izations in that month. Patients admitted in December 2005 and dis-charged in January 2006, are not cap-tured in the database. Because these pa-ients may have longer lengths of stay and hence be considered sicker and more likely to receive intravenous va-soactive therapy, we may have slightly underestimated the use of nestride in that month. Finally, we may have un-derestimated the participation of a car-derestimated the participation of a carthat month. Finally, we may have un derestimated the participation of a car diologist in the care of the patients be cause we were limited to the admittin, physician of record and the attendin physician during the hospitalization.

Conclusions
In conclusion, we have observed a rapid de-adoption of a drug prescribed for decompensated heart failure after a series of publications brough into question its clinical safety profile. Because in the conclusion of the conclusion is clinical safety profile. Because increasingly driven by necitified, the overall use of these therapies also declined. However, among patients on intravenous vasoactive therapy, a higher proportion was prescribed intravenous instroptic drugs. The rate of deadoption appears to be faster than what has been conventionally described for the adoption of new heart failure medications. Whether the magnitude of these changes can be anticipated or are

End

## **Limitations: Two Reviewers React**

**Reviewer** #1: "The study has several limitations, i.e., limited sample for responders-non responders comparison, problems linked to accuracy of self report, but they have been correctly stated by the authors."

**Reviewer** #2: "The authors are appropriately circumspect in their conclusions."

### **Limitations and Strengths**

- Generally avoid listing the strengths, except in the explanation for why the paper may be important in the Cover Letter
- You can *indirectly* discuss the strengths *without* directly labeling them as such.
  - Examples: "While other investigators have shown A, we demonstrate B..."; "We believe our findings have relevance to heart failure diagnostics because..."
- If you have presented well, the reviewers and editors will figure this out and then support the paper. No direct chest thumping at this stage!

#### References

- Make sure that they are the correct ones!
- Make sure that the format is right (*PubMed is format is used by most journals*)
- Make sure that the numbers correspond (do not give the reviewer a chance to look upon the work as sloppy)
- Don't cite abstracts
- Cynical viewpoint: cite papers from journal you are submitting to...

#### **Cover Letter**

#### Convince the Editor

- <u>Paragraph 1+2</u>: "On behalf of my co authors, we are submitting a manuscript entitled..."
  - --State clearly what you have done and what you have shown in a few sentences
- <u>Paragraph 3</u>: Put it all in context
- <u>Paragraphs 4 and beyond</u>: Authorship, COI, "the manuscript is not currently under review..." and other requisite statements
- Closing: "We look forward to your review"
  - ....No personal greetings or salutations...
  - ....No entreaties and no fauning...

#### **Cover Letter**

#### Word to the Wise

Make sure that you have the correct editor and the correct journal. Every time you send your paper out, double check that the Letter has been modified appropriately and that you are following the journal's guidelines (section names, word count, etc).

"When you resubmit, it is advisable to address your letter to the correct editor"

#### **Cover Letter**

#### Sell to the Editor

Dear Dr. Smith,

On behalf of my co authors, I am submitting a manuscript entitled "Underutilization of beta blocker use" as an original contribution.

Using data from a large managed care organization database with national representation we demonstrate underutilization of beta blockers in patients undergoing a cardiac device procedure and....

Specifically, our analysis indicates that ....

#### **Cover Letter**

Therefore, we believe that this paper has relevance because...

All the authors had full access to all the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis.

The manuscript represents valid work and neither this manuscript nor one with substantially similar content has been published or is being considered for publication elsewhere. A preliminary analysis of this work was presented in abstract form at the American Heart Association meeting in November 2016.

#### **Cover Letter**

The Authorship Responsibility, Financial Disclosure, Copyright Transfer and Acknowledgement form will be sent separately by fax. We outline financial disclosures / conflicts of interest and author contributions in the acknowledgement section.

We look forward to your review.

Sincerely,
Alfred E. Newman

## **Cover Letter**

- Suggestions about potential reviewers: avoid unless specifically asked by the journal in the *Instructions to Authors*.
- You can ask the Editor to avoid certain reviewers but do this carefully and only 1-2 names, to avoid raising suspicion. Most editors will honor the request.

## Rejections!!!

- Get used to them!!!
- Do not get discouraged!!!
- Not all Editors recognize good work!!!
- Rejection letters can be aggravating without any indication about the reasons for the rejection; the reviews can be favorable!!!

## Rejections

- Get used to them!!!
- Do not take it personally: this is an imperfect system

## Rejections

- Read the reviews carefully
  - If helpful, consider reconfiguring your paper. Sometimes the reviewer is correct!
- Appeal?
  - If factually incorrect or "indecent", you can consider an appeal to the editor. However, this is a relatively rare event and most editors will not give your appeal due consideration. Except me. However, most editors include language that uses the term "priority" and may make it clear that even if the reviews are favorable, the editorial decision to reject was based on "priority"

## Rejections

- An appeal can include
  - (1) a Cover Letter, carefully worded, with point-bypoint discussion of all issues raised by the reviewers, as if you were asked to revise. But the focus should be on the point(s) that you are disputing or...
  - (2) a Cover Letter that simply addresses the points of contention, asking if a new version can be submitted

### **Revisions**

- Be expansive and respectful in your response: make it a point-by-point discussion and clearly outline the changes that you made (see instructions to authors).
- Do everything the reviewers want, except for 1 or 2 points of contention *if* you cannot cede the point....but do it with literature citations and other sophisticated arguments.

#### **Revisions Need Cover Letter**

#### A key document!

Intro:"On behalf of my co authors, I am resubmitting our manuscript entitled..."

Paragraph 2: "We have responded to the Reviewers' concerns and believe that the changes have demonstrably improved the manuscript..."

Paragraph 3: "Specifically..."

#### **Revisions**

Helpful to use consistent font for text by the Reviewer, your response and then the edits:

The Reviewer states "A significant limitation to this report is the inclusion of patients who may be represented a number of times as multiple admissions."

• The Reviewer is correct that individuals may contribute multiple times to the database. However, we do not see this as a significant limitation because the unit of analysis is the admission, not the patient. We clarify this in the text (page 4, lines 12-13) as follows: "Although a significant limitation to this report is the inclusion of patients who may have been admitted multiple times, the unit of analysis is the admission"

## **Revisions**

Real Life example from the Journal of Cardiac Failure, May 9<sup>th</sup>, 2020...

## **Case Reports**

- They won't earn you an academic promotion
- They are more difficult to publish than ever
- Try alternative angles:
  - 1. Case series
  - 2. Case Report and Review of the Literature
  - 3. Is there a new technique to report?

## **Review Papers-Part 1**

### Challenging despite appearances!!

- Play the role of teacher: provide an overview and context, filter the data, teach the subject.
- Consider a "State of the Art" approach and discuss gaps in knowledge
- Avoid regurgitation of studies: "Jones et al showed this and Smith et al showed that and Fred showed this and that"

Your job is data synthesis

### **Reviews-Part 2**

• Consider the topic carefully: it should be focused

Bad ideas: "Coronary intervention in AMI"

"Stress Echocardiography"

Better ideas: "Coronary Intervention in Nonagenarians"

"DSE in Heart Transplantation"

• Think: Noontime lecture, not a text book chapter!

## **Abstracts for Meetings**

- Reductive language
- Precise, clear and bold introduction
- Precise, clear and bold conclusion
- Make 1 (2) points
- A Figure or Table help

"If every word is important in a paper, every letter is important in an abstract..."

## Hauptman's Observations on the Life of Abstracts

1. An accepted abstract does not become a manuscript. There are many reasons for this, mostly "data fatigue".

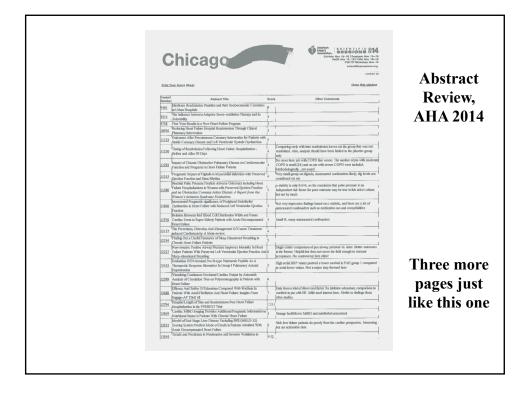
# Hauptman's Golden Rule for Abstracts

The manuscript needs to be submitted prior to the meeting!

# Hauptman's Observations on the Life of Abstracts

2. A rejected abstract is likely to become a manuscript because when you have a good idea, you do not take rejection well

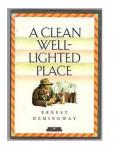
Once again, do not take it personally This is a **highly imperfect** system



## Galleys

• Reading galleys should be a religious experience. Sit in a 'Clean Well Lighted Place'. You do NOT want to have to defend carelessness or publish "erratum"





## Galleys

- Check your name, affiliation, recalculate the denominators and percentages in the tables, check the reference numbers.
  - -- Check it all!
  - -- Never aspire to have an "erratum" published under your name!

## Galleys: Sage Advice

• "Read them backwards"

-Thomas W Smith

## **Correction: Implications**

Vol. 55, No. 10, 2010 ISSN 0735-1097/10/\$36.00

#### CORRECTION

Wazni O, Epstein LM, Carrillo RG, Love C, Adler SW, Riggio DW, Karim SS, Bahir J, Greenspon AJ, DiMarcdo JP, Cooper JM, Onufer JR, Ellenbogen KA, Kutalek SP, Dentry-Mabry S, Ervin CM, Wilkoff BL. Lead Extraction in the Contemporary Setting: the LExICon Study: An Observational Retrospective Study of Consecutive Laser Lead Extractions. J Am Coll Cardiol 2010;55:579-86.

On page 582, the following errors exist:

- 2nd to last paragraph in the left column: "... and when the extraction center volume was ≥60 cases...." should be
- 2nd to last paragraph in the left column: "... with lead implant durations of ≤10 years..." should be ≥10 years.
  2nd to last paragraph in the left column: "... the extraction center volume of extraction was ≥60 cases..." should
- be ≤60 cases.

On page 582, the following error exists:

 Near the end of the last paragraph in the right column: "... with renal insufficiency (creatinine ≤2.0 mg/dl)..." should be ≥2.0 mg/dl

The odds of an in-hospital mortality were 7.0 times higher in DRE patients with renal insufficiency (creatinine ≥2.0 mg/dl) than among those with DRE and creatinine <2.0 mg/dl (12.4% vs. 2.0%, p < 0.0001).

doi:10.1016/j.jacc.2010.02.002

### **Correction: Implications**

Journal of the American College of Cardiology © 2010 by the American College of Cardiology Foundation Published by Elsevier Inc.

Vol. 55, No. 10, 2010 ISSN 0735-1097/10/\$36.00

#### CORRECTION



17 authors!

Wazni O, Epstein LM, Carrillo RG, Love C, Adler SW, Riggio DW, Karim SS, Bahir J, Greenspon AJ, DiMarcdo JP, Cooper JM, Onufer JR, Ellenbogen KA, Kutalek SP, Dentry-Mabry S, Ervin CM, Wilkoff BL. Lead Extraction in the Contemporary Setting: the LExICon Study: An Observational Retrospective Study of Consecutive Laser Lead Extractions. J Am Coll Cardiol 2010;55:579-86.

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The corrected sentence is below:

The odds of an in-hospital mortality were 7.0 times higher in DRE patients with renal insufficiency (creatinine  $\geq 2.0$ mg/dl) than among those with DRE and creatinine <2.0 mg/dl (12.4% vs. 2.0%, p < 0.0001).

#### CLINICAL RESEARCH STUDY



#### **Errata in Medical Publications**



Paul J. Hauptman, MD,<sup>a,c</sup> Eric S. Armbrecht, PhD,<sup>c</sup> John T. Chibnall, PhD,<sup>b</sup> Camelia Guild, MPH,<sup>c</sup> Jeremy P. Timm, MD,<sup>a,d</sup> Michael W. Rich, MD<sup>e</sup>

"Department of Medicine, "Department of Neurology and Psychiatry and Center for Outcomes Research, Saint Louis University School of Medicine, St Louis, Mo, "Department of Medicine, University of Utah School of Medicine, Salt Lake City, Ut; 'Division of Cardiology, Department of Medicine, Washington University School of Medicine, St Louis, Mo.

Hauptman PJ et al Am J Med 2014;127:779-85

Journal	Errata Reports		Errata Occurrence Rate	
	n	Percent	n	Percent
New England Journal of Medicine	129	23.2	66/426	15.5
Lancet	91	16.3	56/298	18.8
British Medical Journal	78	14.0	31/425	7.3
Circulation	70	12.6	32/784	4.1
The Journal of the American Medical Association	57	10.2	29/345	8.4
Annals of Internal Medicine	31	5.6	17/197	8.6
Archives of Internal Medicine	29	5.2	18/289	6.2
Journal of the American College of Cardiology	24	4.3	27/606	4.5
American Heart Journal	13	2.3	12/473	2.5
Heart Rhythm	10	1.8	9/322	2.8
American Journal of Preventive Medicine	6	1.1	2/333	0.6
European Heart Journal	6	1.1	4/394	1.0
American Journal of Medicine	5	0.9	6/216	2.8
European Journal of Heart Failure	3	0.5	4/219	1.8
Heart	2	0.4	2/336	0.6
American Journal of Cardiology	1	0.2	1/902	0.1
Annals of Thoracic Surgery	1	0.2	2/700	0.3
Preventive Medicine	1	0.2	6/244	2.5
Journal of Internal Medicine	0	0	1/77	1.3
Journal of Cardiovascular Electrophysiology	0	0	0/219	0.0
Total	557	100	325/7805	4.2

The Errata Report count includes all article categories across the study period; the errata occurrence rate is limited to original, meta-analysis, and review articles and is based on articles published in the initial 18-month study period plus errata collection out an additional 18-months (see "Methods" and

Hauptman PJ et al Am J Med 2014;127:779-85

Table	2	autation.	Data	£	Article	Times
lable	2 Desi	criptive	Udid	101	viricie	13he2

Article Type	n	Percent
Original	267	47.9
Review	51	9.2
Guidelines	37	6.6
Meta-analyses	10	1.8
Additional Errata		
Other	62	11.1
Letter	36	6.5
Editorial	34	6.1
Comment	25	4.5
<b>Opinion</b>	15	2.7
Case Report	13	2.3
Book Review	5	0.9
Image	2	0.4

Hauptman PJ et al Am J Med 2014;127:779-85

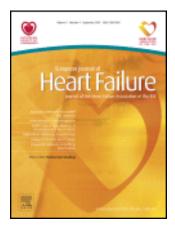
Table 3 Percent (n) of All Articles with Errata (N = 557) by Type and Severity of Erratum

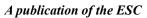
Type of Erratum	Trivial	Minor	Major
Author Disclosure/	4.3 (24)	4.1 (23)	1.8 (10)
Conflict of Interest			
Author Attribute	18.8 (105)	1.6 (9)	0.2 (1)
Abstract Contents	2.2 (12)	3.4 (19)	1.4 (8)
Methods Description	2.0 (11)	3.6 (20)	1.3 (7)
Results Description	1.8 (10)	6.3 (35)	2.9 (16)
Conclusions Description	7.7 (43)	12.2 (68)	6.1 (34)
Numeric Data: Narrative	0.2 (1)	4.1 (23)	1.3 (7)
Numeric Data/Label:	4.8 (27)	19.7 (110)	11.7 (65)
Table/Figure			
References/Citations	5.2 (29)	3.0 (17)	0.2 (1)

Table values indicate the percent of article with errata (N = 557) having at least 1 erratum of a given type and severity. For example, of the 577 articles, 4.3% (N = 24) had at least 1 Author Disclosure/Conflict of Interest erratum of trivial severity.

> Hauptman PJ et al Am J Med 2014;127:779-85

# **How to Review a Paper**

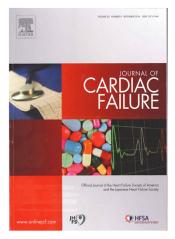






A publication of the AHA

# **How to Review a Paper**



A publication of the HFSA

### How To Review a Paper

This is an important academic & service-related exercise. Take it seriously.

- Treat unto others...
- Be comprehensive with Major and Minor comments
- Do not say anything that might reveal who you are
- Spend the most time on papers that are in the proverbial gray zone

### How To Review a Paper

Take it seriously

- <u>Comments to Editors</u> should be focused. What is this paper about and is it important? Do not hesitate to be opinionated
- <u>Comments to the Authors</u> should be detailed unless the paper is awful and avoid personalization (e.g. "I think..."; prefer "This reviewer believes that...")

### How To Review a Paper: Example

Newman et al use single center data and attempt to evaluate the impact of what they refer to as "non-persistence of medication" in a disease management program. They limit their analysis to patients with systolic dysfunction.

This is obviously an important topic but the current paper has significant methodological issues.

The authors have used a series of terms (adherence, compliance, persistence) in ways that are not universally understood. In particular persistence appears to be considered a physician or patient driven phenomenon; compliance is deemed to be related in part to patient misunderstanding of dosing regimens.

#### **How To Review a Paper: Example**

Specifically,

#### Introduction

1. Page 2, line 3: The term "persistence in time" should be clarified. Do the authors wish to convey changes in adherence over time on the part of the prescriber or patient?

#### Methods

1. Page 4, lines 3-14: The authors should clearly state how the data were derived; what methods were used to ensure validity and reliability of the data abstraction process; and what type of inter and intra rater reliability testing was performed?

#### Results

1. Page 7, lines 5-8: The authors state that 1,232 samples were examined but in the abstract, the figure is 1,150.

### How to Review a Paper: Example

The results section can be shortened, especially because most of the data are purely descriptive. The focus should be (1) demographics of the patients (2) use of medication and (3) doses of medication.

The Discussion is too long and summarizes the results in an overly expansive manner. This Reviewer would like to see a discussion focused on the implications of the study and specifically how the results can potentially inform us about quality improvement initiatives (both in terms of types of initiatives and their intensity).

Table 1. Was there any CRT or ICD use in this population?

Table II. Should be an appendix, not a table.

Table III. Please distinguish loop from thiazide diuretic

Figure 1. Not informative: remove

#### A Learning Opportunity For You

The Reviewers usually receive the decision of the journal with a copy of *all* the reviews. This can be very informative and educational. Read them!

#### **Comments to the Editor**

- Be brutally honest
- Do not simply copy your *Comments to the Authors*
- Offer to review a revision if you are generous
- Is the paper good? Is the paper borderline but can be salvaged?

### Comments to the Editor: Real Example from the JCF

"There are huge pitfalls in this sort of integrated metric as I explain in the review and discussion. Admittedly, it may be beyond the abilities of the author as the metric is tricky to understand and harder to explain. I do not see this as a particular good fit for the Journal and I doubt that this paper will be cited. Many thanks for asking me to review."

# **A Learning Opportunity**

Glad to demonstrate Journal editing for anyone who wants to have the experience.

Note that an invitation to participate on an Editorial Board is not the same as being an Associate Editor...

# **Impact Factor**

- It's a long story
- Helpful to know some general concepts

## Four Letter Word: Impact Factor

- Incorporates a count of the number of times a given paper is cited
- Considers the last two calendar years but not the year of publication
- Does not include Letters, Errata, Editor's Pages, Editorials in the denominator
- A value <2 represents a (relatively) weak journal. Tenths and maybe hundredths matter.

#### Four Letter Word: Impact Factor

For those of you who miss algebra...

$$IF_{y} = \frac{Citations_{y-1} + Citations_{y-2}}{Publications_{y-1} + Publications_{y-2}}$$

## Four Letter Word: Impact Factor

- Complex way to infer the importance of a journal
- Gamesmanship is possible
  - Large RCTs contribute a lot
  - Distribution of citations is not normal, but skewed
  - Time of year of publication matters
  - Coercive citations
  - Some editors obsess over it

#### **Impact Factor: Examples**

Some top and some not so top numbers

- NEJM 79.258
- Lancet 53.254
- JAMA 47.661
- Transfusion and Apheresis Science 0.768
- Acta Orthopaedica et Traumatologica Turcica 0.637
- International Journal of Gerontology 0.531

# **Impact Factor: Some Cautionary Words**

- Represent the mean, not median. A problem because the data are not normally distributed
- Within a single journal, there is a wide variation of citations article-to-article
- Cannot compare journals across disciplines

# 

# **Impact Factor and Journals: What Matters Most**

• "There are only so many strategic adjustments an editor should make in order to line up a journal with an assessment score. From my perspective, the most important metric is the rigor of the papers and the general "readability" of the Journal. Are we delivering a scientific journal that, within our discipline, is regarded with respect? Are we a desired and logical place for authors to submit? If so, then we have succeeded"

#### **More Four Letter Words**

- Immediacy Index: one (recent) year
- CiteScore: three year time frame but the denominator includes everything and anything that is PubMed cited. An Elsevier invention.

#### H-Index: for the Author

- H-index: Important reflection of the author's body of works but can be problematic especially for junior faculty
  - Publications are lined up in order of the number of citations; look for the last position in which the number of citations is greater/equal to the position

#### H-Index: for the Author

• H-index example:

Publication	Times Cited	
1	 87	
2	 70	
3	 46	
4	 32	
5	 19	
6	 15	
7	 10	
8	 9	
9	 8	Cut-off
10	 6	
11	 4	
12	 1	

#### H-Index: for the Author

- A researcher cannot have a high h-index without a substantial number of publications
- The publications have to be cited
- Benefit: discounts the disproportionate weight of highly cited publications and of work that has not yet been cited.
- Available in Web of Science and Scopus

#### **New Index for our Times: Altmetrics**

 Provides article views, downloads, retweets and social media mentions. Unclear what this really means

# **How to Write a Paper: Summary**

- 1. The process is not easy. It takes time, patience and persverence
- 2. Specific skills are required
- 3. There is a learning curve but you can learn it and do it well
- 4. "Don't give up. Don't ever give up!"
- 5. The rewards are tangible



The great Jim Valvano →

# **How to Write a Paper: Summary**

Thank you!