HOW TO START WRITING A SCIENTIFIC PAPER

P.M. Mannucci

Editor-in-Chief,

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> LATEST MPACT FACTOR 1.657

EUROPEAN JOURNAL OF INTERNAL MEDICINE FEATURES

Appearing in this issue Clinical approach to clostridium difficile C. Pant et al

Tertipressin in refractory ascites B. Fimiani et al.

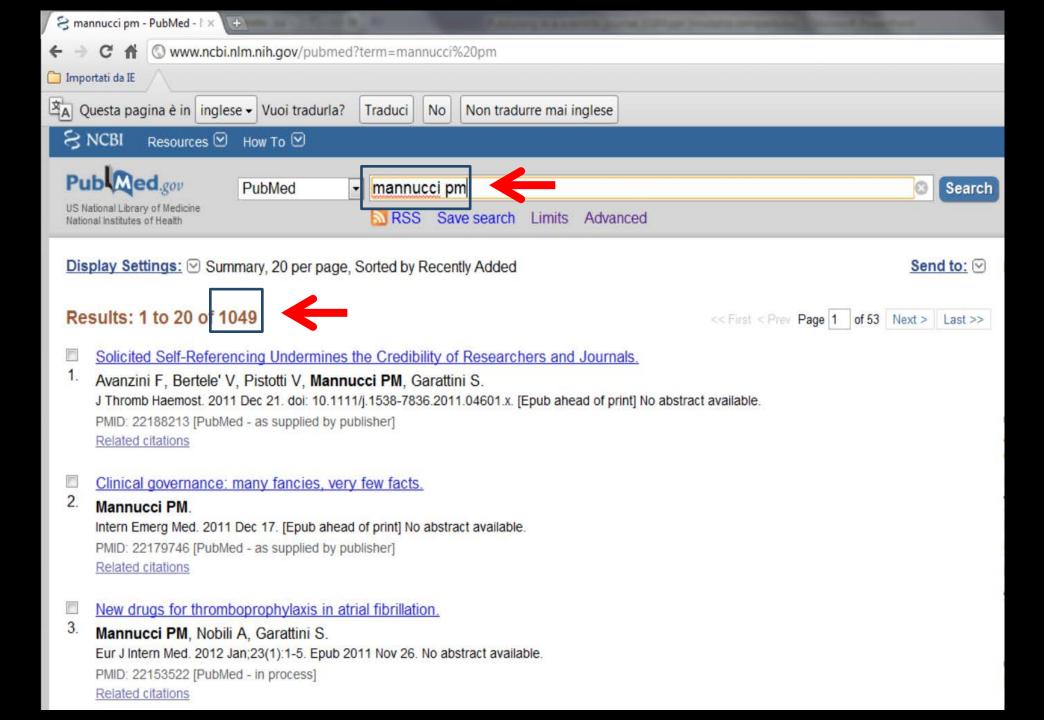


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EUROPEAN JOURNAL OF INTERNAL MEDICINE

The official journal of the **European Federation of Internal Medicine (EFIM)**



TOPICS FOR DISCUSSION

- Writing and Submitting Abstracts, Posters and Manuscripts
- Rejection of Manuscripts
- Reviewing Manuscripts

YOUR GUIDE TO START PUBLISHING

- Preparing abstracts and posters
- Overview of the publication process (with some tips, tools and tricks)

WRITING AND SUBMITTING ABSTRACTS AND POSTERS

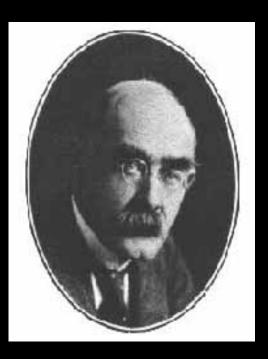
- Abstracts can be the "trigger" for a full manuscript
- Posters can help you to get organized for a full manuscript
- But: both abstracts and posters have little impact on your CV and career! What you need are full manuscripts!

YOUR GUIDE TO WRITING FULL MANUSCRIPTS

- Preparing manuscripts for submission
- Overview of the publication process and steps
- Tips, tools and tricks
- How to deal with rejection!

I keep six honest serving-men (They taught me all I knew): Their names are What and Why and When and How and Where and Who

Rudyard Kipling (1865-1936)



'Judge of a man by his questions rather than by his answers'

Voltaire (1694 – 1778)



PREPARING MANUSCRIPTS Who? Identify your audience

- All clinicians?
- Oncologists?
- Breast cancer specialists?
- Oestrogen receptor researchers?

MATCH THE JOURNAL TO YOUR TARGET AUDIENCE

Who are you writing for?

- All clinicians (general internal medicine journals)
- Oncologists (Annals of Oncology)
- Breast cancer specialists (Breast Cancer

Research)

- Basic researchers (Invasion & Metastasis)

CONTENTS OF A MANUSCRIPT THE IMRaD STRUCTURE

- Title <u>Why</u> should I read it?
- Introduction <u>Why</u> did you do it?
- <u>Methods How</u> did you do it? (and where / when did you do it?)
- <u>Results What did you find?</u>
- <u>Discussion What</u> do your findings mean?
- Conclusions <u>What</u> should you do now with your findings?

MANUSCRIPT STRUCTURE: IMRaD!

- Structure did the manuscript follow IMRaD?
 - 1. Did the Introduction contain the key background information?
 - 2. Did the <u>Methods give enough information?</u>
 - 3. Did the <u>Results clearly and simply show what you</u> found?
 - 4. Did <u>Discussion put your findings in evidence and</u> context?
 - 5. Strength and weakness of research plan, results and /or methodology

WHAT GETS A MANUSCRIPT PUBLISHED

Editors are looking for content that will appeal to their audience

ADVANCES THE FIELD	 Advances in drugs, methods, patient groups/ populations
	 A new topic (or revisiting an older topic with a fresh insight)
CLINICAL IMPORTANCE	Answers to previously un-answered problems
	 Consolidation evidence
	Changing current practice
QUALITY	 Well written
	Methodologically sound
	 Analytical and comprehensive (esp. for review articles)

PREPARING MANUSCRIPTS: THE BASICS

- Inspect similar articles on similar topics and try to follow their format (but avoid plagiarism!)
- Ask for help your mentors and more senior colleagues
- Contact the editor/journal before submission?

Raphael E. Pollock, MD, PhD Editor-in-chief, *Cancer*

Re: Suitability of Proposed Review Article for Cancer

Dear Dr. Pollock,

I am writing to you to determine the appropriateness of a review article that I would like to write for submission to *Cancer*. I feel that there is a deficiency of content pertaining to acquired factor VIII inhibitors as a cause of bleeding patients with malignancy in the current peer-reviewed oncologic literature. Although rare, acquired factor VIII inhibitors are associated with a particularly high burden of morbidity and mortality, due primarily to delays in diagnosis and initiation of appropriate treatment. The diagnosis of this elusive cause of bleeding is complicated by the numerous other, more common causes of bleeding in this patient population. The article that I propose would provide an overview of the pathogenesis, clinical presentation, and differential diagnosis of acquired factor VIII inhibitors in the patients with cancer, as well as the medical management of this condition, specifically in this patient population.

I hope you will agree that such an article fulfils an unmet need in the current oncologic literature, and that you will deem it potentially suitable for publication in your journal. Should you need any additional information as you consider this proposal, I would be happy to provide it. I look forward to hearing from you, and thank you in advance for your time and careful consideration of this request.

Sincerely

P.M. Mannucci, MD A. Bianchi Bonomi Hemophilia and Thrombosis Center Department of Medicine University Hospital of Milan Italy,

MOST COMMON DEFICIENCIES IN MEDICAL MANUSCRIPTS

Question 11			Р
Of the following 9 writing problems listed			
below which is most common?			< 0.001
Verbiage, wordiness	12	(43%)	
Poor flow of ideas	6	(21%)	
Poor syntax, poor grammar	5	(18%)	
Redundancy	3	(11%)	

Byrne DW Science Editor 2000;23:39-44

PREPARING MANUSCRIPTS: TIPS, TOOLS AND TRICKS

Specific tips and tricks for specific sections

- TITLES the title might be all your reader ever reads
 - Does it reflect the content of the manuscript?
 - Try to keep it short and attractive (avoid subtitles as much as possible)
 - Think: would I want to read this?

RIGHT AND WRONG ALTERNATIVES FOR TITLE .1

Different composed of according to the second second

RIGHT AND WRONG ALTERNATIVES FOR TITLE .2

Regular replacement therapy as prophylaxis in severe forms of von Willebrand disease: First results from Willebrand Disease Prophylaxis NELLIK (VVL)

OTHER TIPS, TOOLS AND TRICKS

- ABSTRACT it is most likely all your readers ever read
 - Follow IMRaD (so called structured abstract)
 - Be accurate and striking at the same time
 - Be brief (observe the word count)
 - Avoid references
 - Avoid abbreviations

Remember, the purpose is to get your reader wanting more!

The Introduction should answer the question: 'WHY did you do this study?'



- State main findings in words
- Do not duplicate between text, tables and figures (avoid rehashing)
- Journals prefer tables to figures

RESULTS

- Keep your message in mind
- Don't include everything you measured!
- BUT don't omit results that don't 'fit'
- Round-up to sensible decimal places

The Discussion should answer the question: *'WHAT do the results mean?'*

MISTAKES TO AVOID

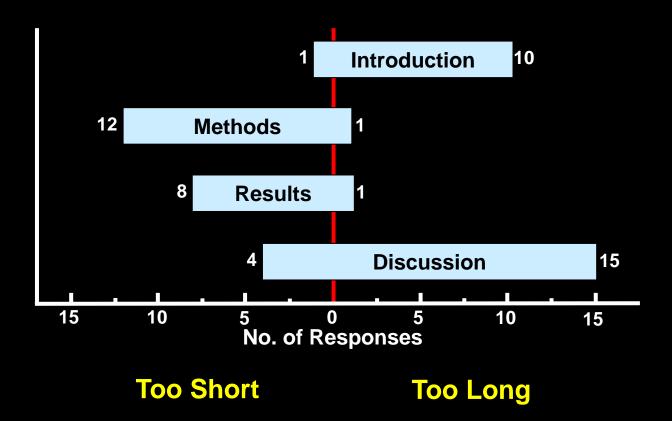
- Don't repeat all your Results in the Discussion (e.g. state in words only)
- Don't put any results in the Discussion that are not in Results
- Remember to address study limitations (nothing is perfect!)

HOW LONG?

Editors often say:

- Introduction is too long
- Discussion is too long!
- Methods and Results are too short

MOST COMMON DEFICIENCIES IN MEDICAL MANUSCRIPTS



Byrne DW. Publishing your medical research paper: what they don't teach in medical school Baltimore: Lippincot Williams & Wilkings; 1998, p.58

OTHER TIPS, TOOLS AND TRICKS

- REFERENCES must acknowledge previous input and direct the reader to know more on the topic
 - Cite the original observation and corresponding original publication
 - Make sure they include the latest research on the topic
 - Avoid as much as possible the tendency to self-cite

Where? Choosing target journals

- Scope and format
- Preferred current topics
- Rejection rate
- Time for decision / publication
- Indexing in Medline
- Impact Factor

- Co-authors'experiences / preferences

BURNING ISSUES

- Authorship of manuscripts
- Accountability of what is written
- Sponsorship of research and conflict of interest

BURNING ISSUES

Authorship of manuscripts

- Meeting at least 3 criteria:
 - Generation of data
 - Participation in writing/revising the draft
 - Review of the final version
- Accountability of what is written
 - A system based on trust

Sponsorship of research and conflict of interest
 Disclose, do not conceal!

PUBLICATION: A SYSTEM BASED ON TRUST

- Human/animal investigation ethical approval
- Informed patient consent
- Disclosure of financial support
- Disclosure of potential conflicts of interest
- Registration of clinical trials (clinicaltrials.gov)
- The emerging problem of data fabrication and scientific fraud

WOO SUK HWANG



- Claimed to have created human embryonic stem cells by cloning.
- Published 2 papers in Science (2004 & 2005), later editorially retracted.
- Admitted to various lies and frauds.

CONFLICT OF INTEREST POLICY: AMERICAN JOURNAL OF GASTROENTEROLOGY

Definition:

- Any financial interest in a commercial relationship* for the 5 years prior to the date of disclosure.
- -Remunerations exceeding \$15,000 for the previous 5 yr must be declared.
- -Rules apply to authors, reviewers and editors alike.

* Includes: employment, advisory function, leadership position, ownership, research funding, remuneration for expert testimony.

Am J Gastroenterol 2008:103:260-1

MY OWN DEFINITION OF CONFLICTS OF INTEREST

"Some facts related to an external participation in your

publication that, if revealed later, would make

a reader feel misled or deceived"

MANUSCRIPT SUBMISSION: ADDITIONAL TOOLS

MORE TOOLS AND GUIDELINES!

CONSORT PRISMA (QUOROM) STROBE

• STAR-D





WHY DO WE NEED CONSORT AND SONS?

- Survey of RCTs in 1994
- Growth of meta-analysis revealed serious problems with the reporting of RCTs
- 61% did not report allocation concealment
- Publications did not provide enough details
 - to evaluate RCTs

WHAT IS CONSORT?

- <u>CON</u>solidated <u>Standards Of Reporting Trials</u>
- Evolved from SORT guidelines & Asilomar Working Group
- First published 1996 (JAMA)
- Updated 2000, extended 2004

CONSORT AND SONS ...

CONSORT	Parallel group RCTs
CONSORT for abstracts	Conference and journal abstracts reporting RCTs
QUOROM*	Systematic reviews & meta-analyses
MOOSE	Systematic reviews of observational studies
STARD	Studies of diagnostic methods
STROBE	Observational studies

* How be replaced by PRISMA

STROBE (very much like CONSORT but for observational studies!)

Checklist with 22 items

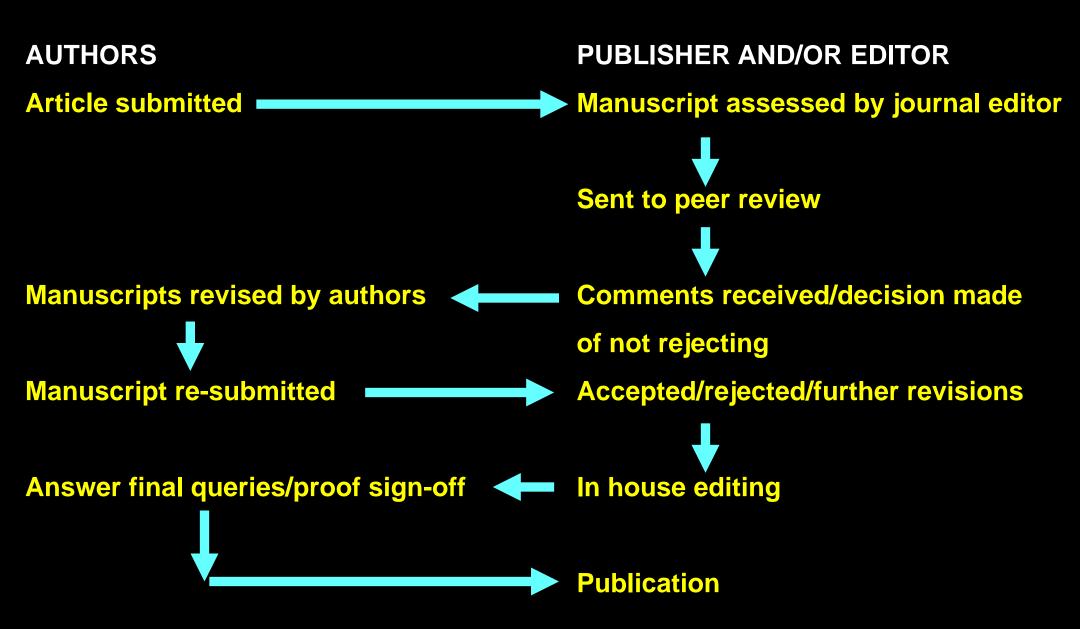
• Recommendations divided into: cohort, case-control, cross-sectional study

THE ACT OF SUBMISSION: WHAT KEEPS EDITORS AWAKE AT NIGHT?

- Duplicate submissions
- Redundant publications
- Selective publication
- Authorship problems
- Plagiarism, fabrication, falsification

A TYPICAL EDITOR?





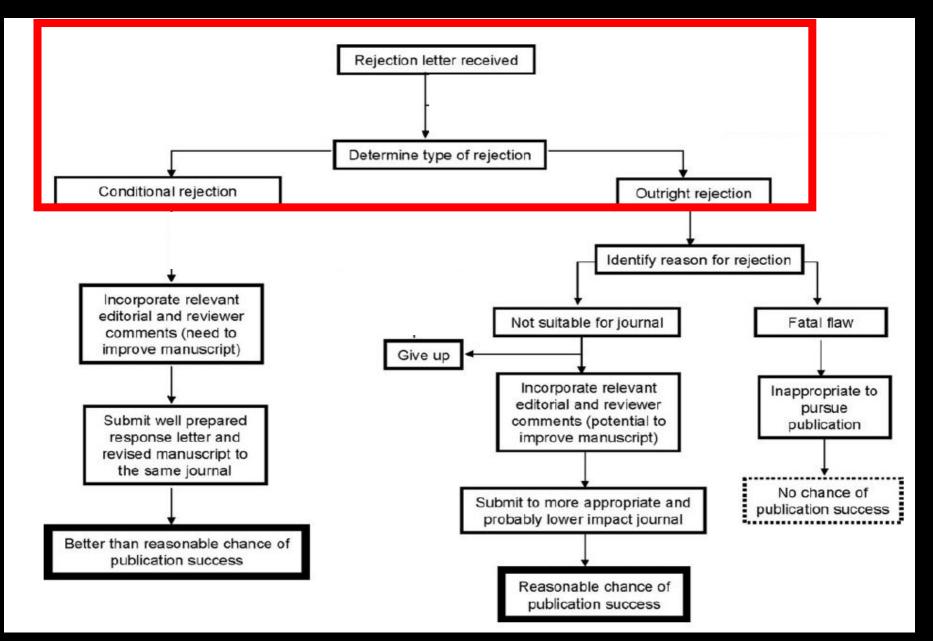
REJECTION RATES OF A FEW JOURNALS

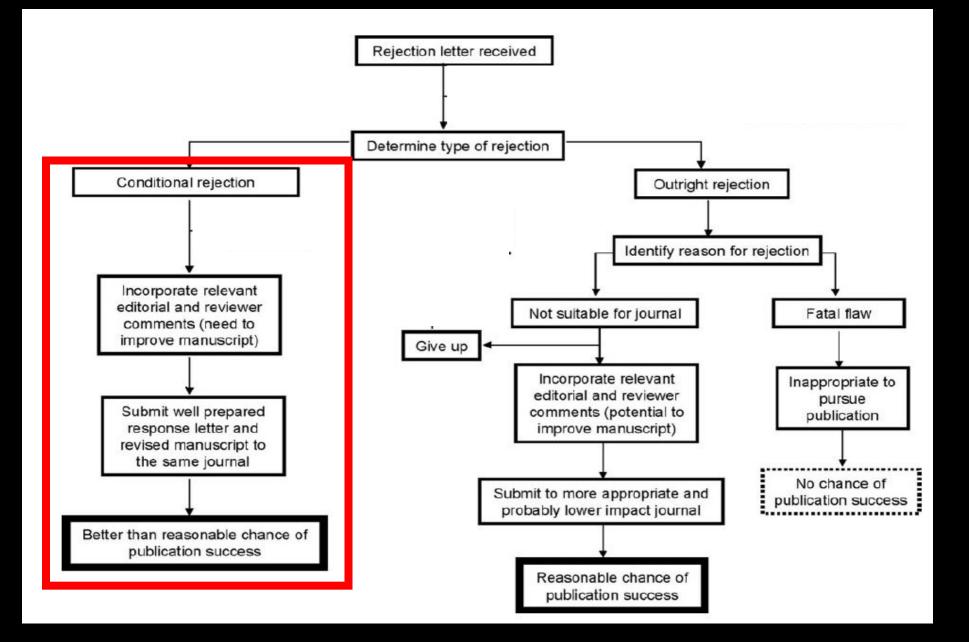
Readership	Journal	Rejection rate
General	Lancet, NEJM	>90%
Specialist	Circulation, Heart	85% 75%
Sub-specialty	Jnl of Interventional Cardiology	50-60%
Super-specialist	Jnl of Vascular Access	<60%

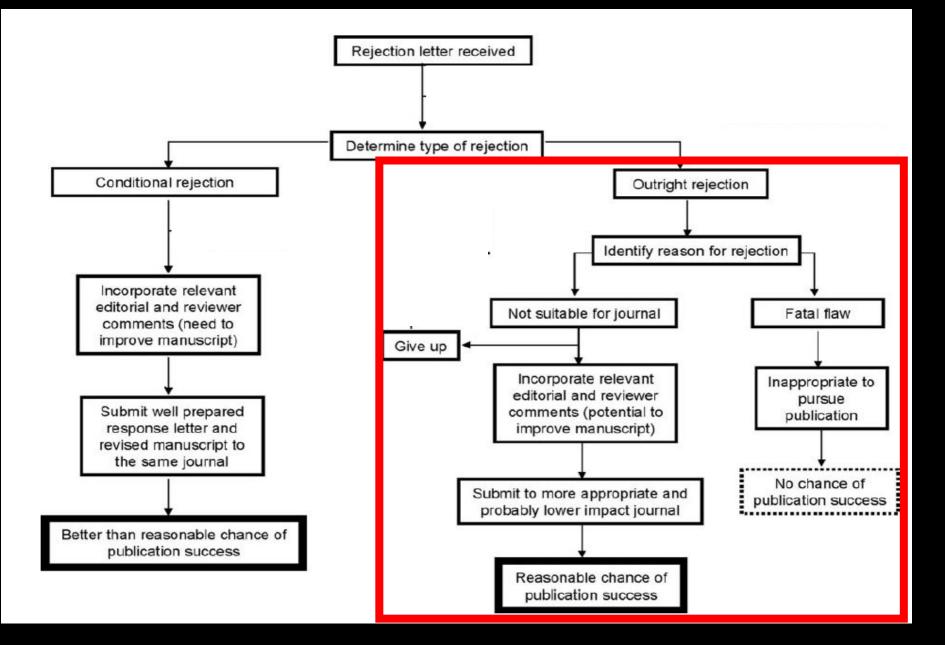
- Journal choice influence dramatically acceptance!
- Manuscript rejection is common!
- What choices do authors have after a rejection?
- Read critically and without bias and emotion the comments (particularly those of the decision maker, i.e., the Editor)

REASONS FOR REJECTING PAPERS

- Unimportant issue examined
- Redundant research
- Research poorly conducted
- Data analysis poorly conducted
- Results do not support conclusions
- Poorly written/presented manuscript









- It should be considered your duty as a member of the scientific community to accept to act as reviewer
 - -How are you chosen to review a manuscript
 - -When to accept to review
 - -How to respond to the author/editor

WHY PUBLISHING IN A SCIENTIFIC JOURNAL?

"Scientific knowledge is a communal resource that only exists because it is available for others to judge and affirm as important and useful" (B. Lewenstein, Cornell University)

"A scientific experiment is not complete until the results have been shared through publication" (B. Day, University of Delaware)

K. Devine, kdevine@the-scientist.com