Steps to Getting Published in a Research Journal

Publication Ethics

Tuesday, November 4, 2:00-4:00pm PT, Room 29B, San Diego Convention Center

Peter W. Swaan, PhD
Editor-in-Chief, Pharmaceutical Research

Give credit, where credit is due:
Various slides courtesy of Dr. David Grainger, University of Utah
Getting a paper published

- Easy to publish in terrible journals: 1000’s of choices
- Competition for space in high-impact journals is intense
- Cost of publication can be high, $360/page for some journals, plus fees for electronic archiving of databases
- Rejection rates vary, reflecting selectivity and quality:
  - *Pharmaceutical Research* = 60%
  - *JBC* = 65%
  - *NEJM, Science, Nature* = >90%
“The Seven Deadly Sins of Publishing”

1. Data manipulation, falsification
2. Duplicate manuscripts
3. Redundant publication
4. Plagiarism: uncited use of other’s language or ideas
5. Reviewing ethical abuses (rejecting a competing paper to publish own)
6. Author conflicts of interest: financial, commercial
7. Animal and human use: ethical concerns (the 3R’s: reduce, refine, replace)
Conflict of Interest declaration

- Financial or personal relationship with work performed that inappropriately influences author, reviewer or editor
  - Employment consultancies, stock ownership, expert testimony
  - Same institution, relative, mentor, student, academic adversary
  - All “potentially perceived” rather than just “actual” conflicts should be disclosed
Scientific Misconduct = Serious game

- Gift Authorship
- Redundant Publication
- Plagiarism and Self-Plagiarism
- Fabrication
- Falsification
- Conflict of Interest

Can ruin your career if you are caught!!

Editors now using routine computer tools to compare published language: [www.turnitin.com](http://www.turnitin.com), [www.iThenticate.com](http://www.iThenticate.com)
iThenticate™

Plagiarism checking using CrossCheck, Internet and published publications
**iThenticate Output in % Similarity**
(color coding for articles exceeding predefined threshold)

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Clear example of copy-and-paste plagiarism

Editorial Manager(tm) for Pharmaceutical Research Manuscript

Draft Manuscript Number: Title:

NEED TO REFORMULATE CURCUMIN: AN EXPEDITION FROM PRECLINICAL EFFECTIVENESS TO CLINICAL SUCCESS Article Type: Expert Review - INVITED

Section/Category: Other Keywords: Bioavailability; curcumin; delivery systems; preclinical; clinical. Corresponding Author:

Corresponding Author's Institution: M- Pharmacy

Order of Authors: M-

Pharmacy: Abstract: Curcumin has become a leading agent in the range of phytochemicals which are being looked up by researchers as potential agents for the prevention of human diseases including
Color-coded summary report for PHARMRES-S-10-00591

their plasma 1 h postdose. In the same study, co-ingestion of curcumin with 20 mg of pipérine appeared to increase the bioavailability of curcumin by 200%. In a study of oral curcumin, patients with pre-invasive or high-risk premalignant conditions of the bladder, skin, cervix, stomach, or oral mucosa received 0.5-6 g curcumin by mouth daily for 3 months. Plasma curcumin concentrations were found to peak 1–2 h after intake and gradually declined within 12 h. The 8-g/day dose resulted in a peak serum concentration of $1.75 \pm 0.30 \mu M$. When administered orally in micronized form with orange juice at doses of 50-200 mg to 18 healthy volunteers, no curcumin was not found in the plasma at or above the limit of quantification (approximately 0.63 ng/mL). In a clinical phase I dose-escalation study using a standardized oral Curcuma extract comprising mainly of curcumin, doses up to 180 mg of curcumin per day were administered to patients with advanced colorectal cancer for up to 4 months without toxicity or detectable systemic bioavailability. In a follow-up study in 15 patients with advanced colorectal cancer refractory to standard chemotherapy, curcumin in the form of—Curcuminoids C31 (Sabinsa Corp., 90% curcumin)—was consumed orally for up to 4 months at doses between 0.45 and 1.6 g daily. Oral consumption of 3.6 g of curcumin per day resulted in levels of drug and glucuronide/sulfate conjugates in plasma near the limit of detection (5 pmol/mL). Curcumin and its conjugates were also detected in 24 h urine collections. In the six patients who had consumed 3.6 g of curcumin, urinary levels in 24 h varied between 0.1 and 1.3 for curcumin, between 0.019 and 0.046 for curcumin sulfate, and between 0.21 and 0.31 for curcumin glucuronide. The presence of curcumin and its conjugates in the urine of patients taking 3.6 g of curcumin daily suggests that urinary curcumin/curcumin metabolites might serve as a measure of compliance with treatment.

Exploratory studies have also been performed in patients undergoing operations for colorectal cancer who consented to have tissues analysed for research purposes. Twelve patients with confirmed colorectal cancer received oral curcumin at 0.45, 1.8, or 3.6 g/day for 7 days prior to surgery. Levels of agent-derived species were determined in blood and colorectal tissue obtained at the time of surgical resection. The mean concentrations of curcumin in normal and malignant colorectal tissue of patients who had ingested 3.6 g curcumin daily were 12.7 and 7.7 nmol/g tissue, respectively.

They further explored the pharmacology of curcumin administered in capsules at daily doses ranging from 0.45 to 3.6 g daily for up to 4 months. This time, the effect of curcumin on leukocytes were measured in terms of three potential biomarkers: Glutathione (GSH) activity, malondialdehyde, deoxynucleosine adduct M(1G) levels, and Prostaglandin E2 (PGE2) production ex vivo. In a comparison of inducible PGE2 production immediately before and 1 h after dosing on days 1 and 25, the highest dose (3.6 g) elicited significant decreases (52% and 57%, respectively). Consequently, the investigators chose the 3.6 g dose for further evaluation in a phase II trial in cancers outside the gastrointestinal tract.

Curcumin sulfate and curcumin glucuronide were also found in the intestinal tissue taken from these patients; trace levels of curcumin were detected in peripheral blood samples. Compatible with the preclinical data presented earlier, these preliminary results in humans suggest that a daily dose of 3.6 g curcumin achieves measurable levels in colorectal tissue with negligible distribution of the parent drug outside of the gut. When 12 patients with liver metastases from colorectal cancer received oral curcumin (0-3.6 g) daily for 7 days prior to hepatic surgery, curcumin was not found in liver tissue resected 6–7 h after the last dose of curcumin, whereas trace levels of products of its metabolic reduction were detected. Levels of curcumin and glucuronide and sulfate conjugates in the low-nanomolar range were found in blood samples taken 1 h after the last dose. Results of this pilot study suggest that doses of oral curcumin required to produce hepatic levels sufficient to exert pharmacological activity are probably not feasible in
Unacceptable Copying from single source

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By:
As of: Oct 13, 2010 10:02:06 AM EDT
8,458 words - 141 matches - 78 sources

swelling index) is reached when the osmotic forces of the functional
groups are balanced by the restrictive forces of the higher ordering of
the polymer chains.

Swelling behaviour of these hydrophilic tablets starts with water
diffusion into the glassy HPMC material where the water plasticizes the
polymer and reduces its glass transition temperature, Tg. When Tg has
decreased to ambient temperature, a transformation from a glassy state to a
rubbery state occurs. As the water continues to enter the tablet, a highly
concentrated polymer solution is formed, denoted as a gel layer. The solvent
continues to penetrate the tablet, and the gel layer and the dimensions of the
swollen tablet increase, a process normally referred to as the swelling
process.

Ju et al. (50) suggested that a polymer concentration gradient is...
Not always a clear-cut tool: needs inspection by experienced Editor to judge degree of perceived plagiarism

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Editorial Manager for Pharmaceutical Research Manuscript Draft

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<th>in vitro and in vivo evaluation</th>
<th>Short Title: Pulsatile Systems for colon targeting Article Type: Research Paper Section/Category: Drug delivery and targeting Keywords: Budesonide; Pulsatile; Colon targeting; Spray coating Corresponding Author: Ahmed Elishaee,</th>
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Ph.D Corresponding Author’s Institution: Faculty of Pharmacy, First Author: Ph.D Order of Authors: Ph.D;

Abstract: The purpose of this study was to increase the lag time and...
Where do most articles fall?

Ithenticate Similarity Percentages (January-September 2010)
Where do we put the line?

- All manuscripts screened before assignment
- <20% similarity – normal, no further action
- 20-30% similarity – borderline, inspected by EIC and Editor for similarity distribution
- >40% automatic Triage by EIC encouraging authors to familiarize themselves with Ethics in Publication guidelines
- Repeat offenders: Letters to co-authors, department chair, dean
Common Rebuttals

• But I am just copying my own work!
  – Once paper is published, copyright transfers to publisher

• I just copied the methods sections. Everyone does that!
  – Some copying of methods is acceptable; however, large verbatim sections including multiple sentences/paragraphs is discouraged
  – Advice: “as performed previously (1), with the following modifications:”
**Self-Plagiarism:** A type of plagiarism in which the writer republishes a work in its entirety or reuses portions of a previously written text while authoring a new work.

**Copyright law:** “protects original works of authorship” (www.copyright.gov)

Chicago Manual of Style (2010, pg. 142): provides author responsibilities in guaranteeing authorship: “In signing a contract with a publisher an author guarantees that the work is original, that the author owns it, that no part of it has been previously published, and that no other agreement to publish it or part of it is outstanding”

**Self plagiarism violates the authors’ copyright agreement with the publisher**

as a “rule of thumb, one should never quote more than a few contiguous paragraphs or stanzas at a time or let the quotations, even scattered, begin to overshadow the quoter’s own material” (pg. 146).

Redundant Publication = Fraud

- “Substantial overlap” with another manuscript in print or in electronic media
- Preliminary reporting to media, government agencies or manufactures violates editorial policy of many journals
- Related work should be referred to and cited
- Consider including copies of related material with submissions to editor
- Does not apply to presentations at scientific conferences
What is a “redundant publication”? 

- Data in conference abstract? No
- Same data, different journal? Yes
- Data on website? Maybe
- Data included in review article? OK if later
- Expansion of published data set? Yes
Publication ethics and wrong-doing: mistakes or misconduct?

Author responsibility to notify the scientific community of any mistake that changes the message of the publication:

Course of action:

Retraction?
RISE OF THE RETRACTIONS

In the past decade, the number of retraction notices has shot up 10-fold (top), even as the literature has expanded by only 44%. It is likely that only about half of all retractions are for researcher misconduct (middle). Higher-impact journals have logged more retraction notices over the past decade, but much of the increase during 2006–10 came from lower-impact journals (bottom).

[Graph showing the increase in retraction notices from 1977 to 2009, with categories for PubMed and Web of Science notices.]

[Misconduct classification table with percentages: Self-plagiarism 11%, Fabrication or falsification 17%, Plagiarism 16%, Honest error 28%, Irreproducible results 11%, Other 17%.]
JOURNALS WITH MORE THAN 7 RETraction NOTICES IN WEB OF SCIENCE*, 2006–10
(journals ordered by decreasing impact factor for 2010)

Number of retraction notices


2001–05 | 2006–10

*Nature.com
Read more about retractions: go.nature.com/zuweok