

Do the **updated** ICMJE criteria make a difference ?

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ICMJJE 'criteria':

- C1** *Conception or design or acquisition, analysis, or interpretation of data*
- C2** *Drafting or revising it critically*
- C3** *Final approval*
- C4** *Agreement to be accountable for all aspects of the work (2013)*



- Increasing number of authors on byline
- Honorary authors
- Conflict of interest
- ...

Previous studies...

	% articles with honorary author
Flanagin et al. 1998.	Annals 25% , JAMA 23% , NEJM 18% , 16% , 23% , 11%
Yank, Rennie.1999.	Lancet 44%
Hwang SS et al. 2003.	Radiology 33%
Marušić et al. 2004.	CMJ 60%
Bates et al.2004.	JAMA 4% , BMJ 21% , Annals 60%
Wislar et al. 2011.	21% 6 journals
Dotson B et al. 2011.	Honorary authors appear towards the end of a longer byline

Does the introduction of the **4th criterion** (C4) in 2013. make any difference?

METHODS

- authors' self-reported contributions in 2091 published articles
- biomedical journals:
 - 9 general
 - 8 experimental
- publicly available disclosures of contributions
- published before/after the introduction of C4 in 2013

Medicine

General and internal medicine

High IF (IF>10):

Lancet,
JAMA,
BMJ,
Ann Intern Med,
PLoS Med

Low IF (IF <10):

BMC Med,
BMJ Open,
Canadian Fam Phys,
Croat Med J

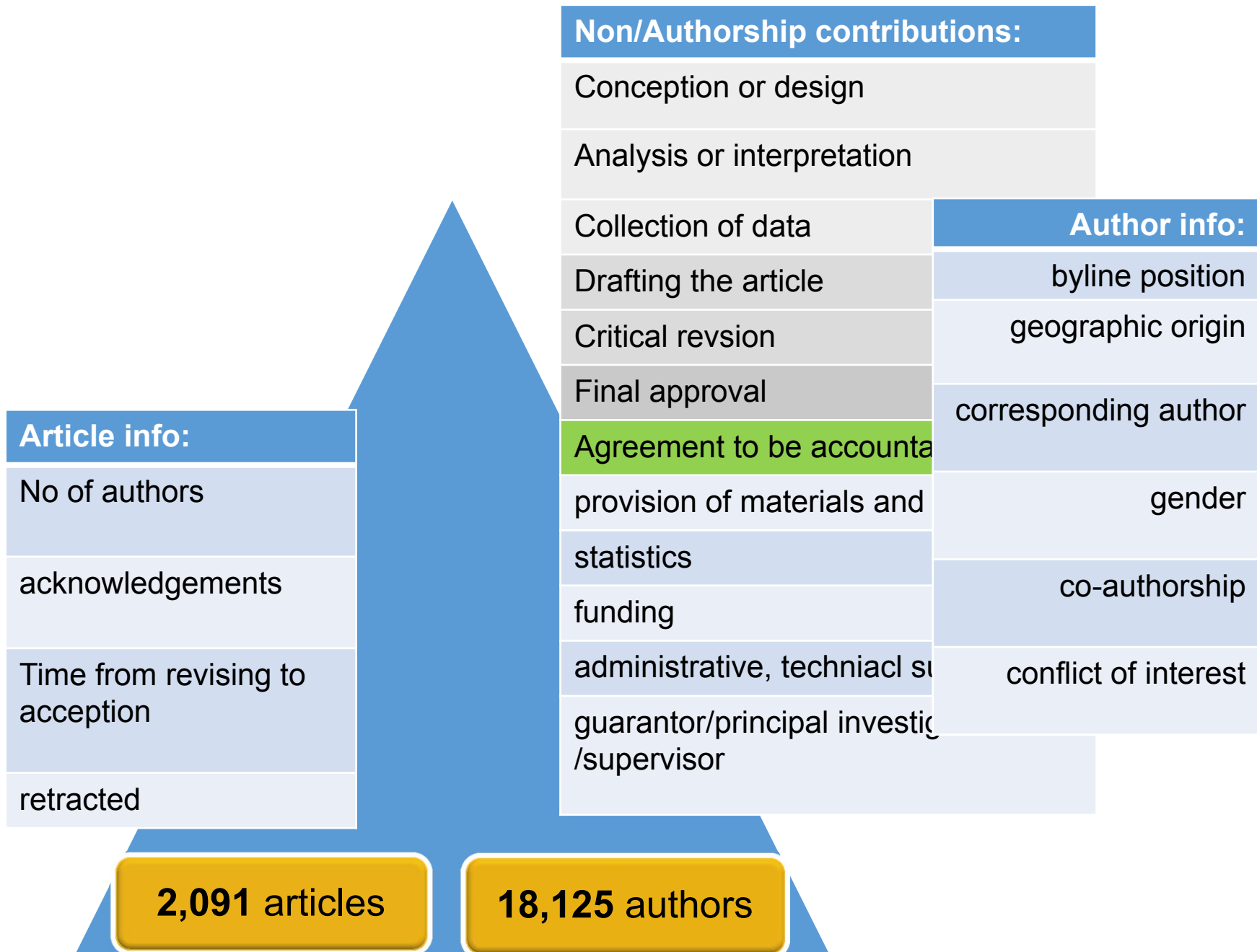
Experimental and research medicine

High IF (IF>5):

Nature Med,
EMBO Mol Med,
Clinical Science

Low IF (IF<5):

Stem Cell Res,
Orphanet J Rare Dis,
J Biomed Sci,
Trials,
Med Sci Monit.



Articles

No. of
authors:
9 ± 7



Review time:

137 ± 84 days

144 before vs. 133 after 2013

141 in exp. vs. 129 in gen. med. j.

Acknowledgments:

YES 1,421 (68%)

More often in general
med. journals

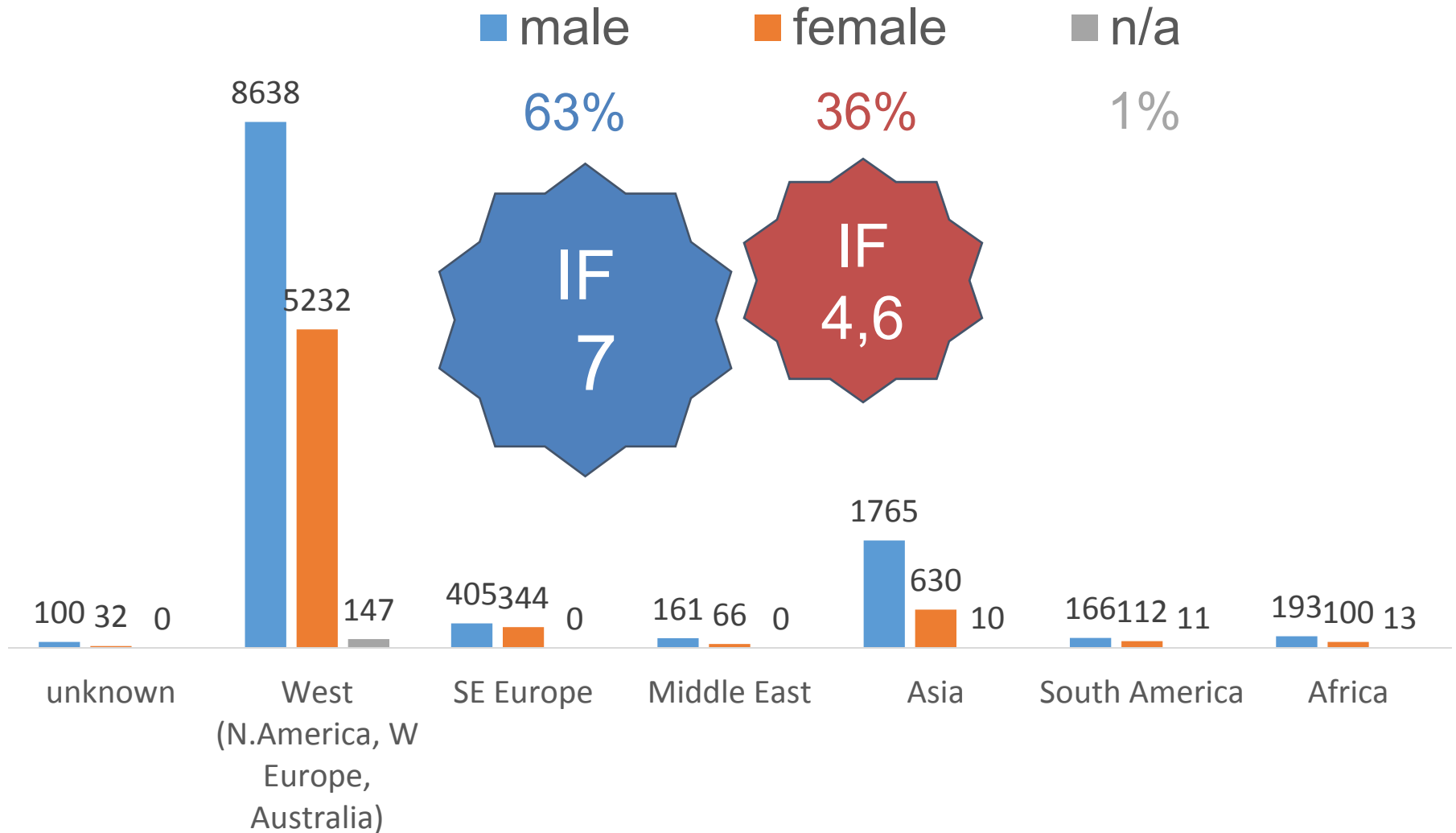
Conflict of interest:

NO 16,752 (92%)

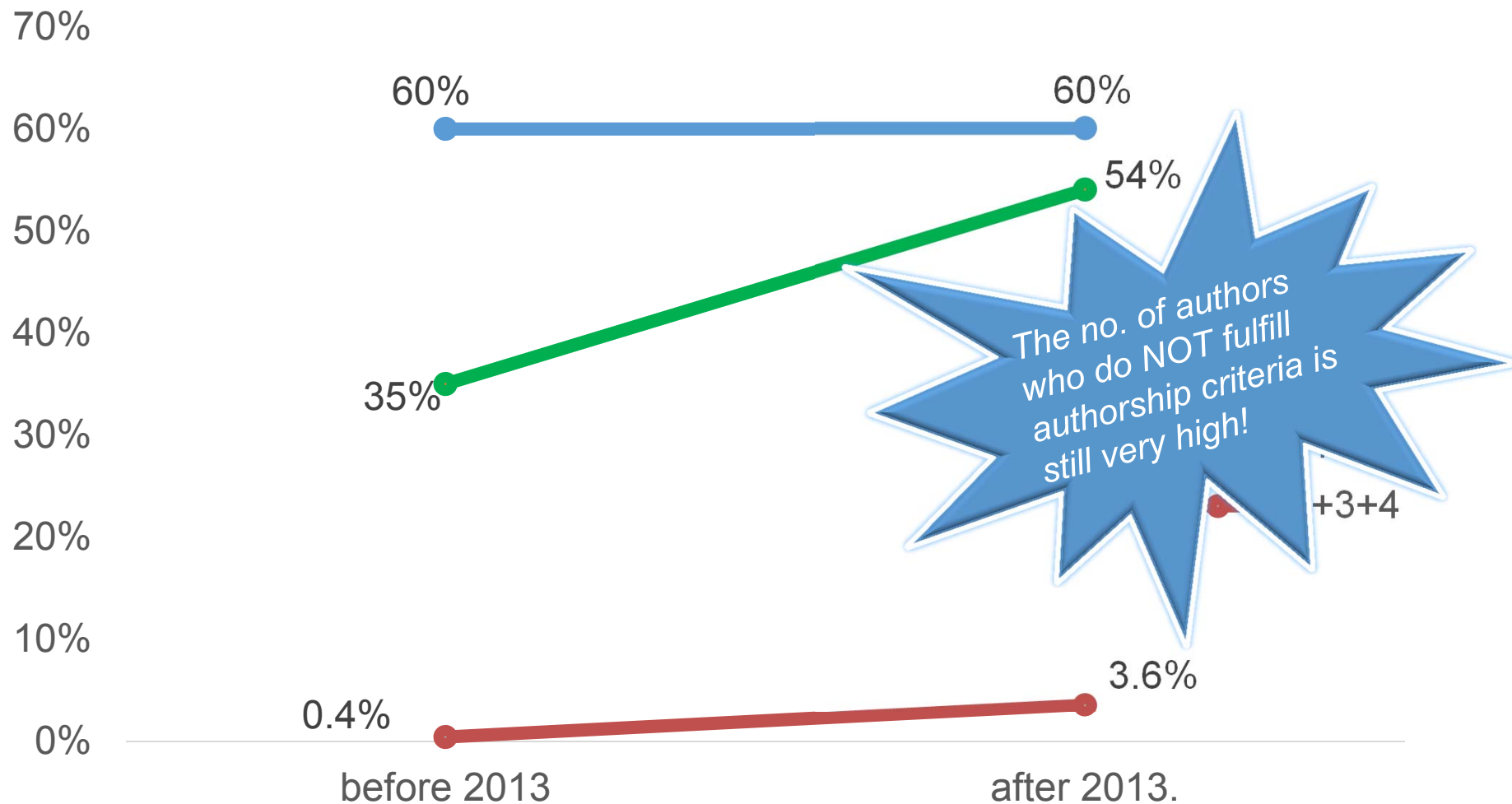
YES 955 (5.3%)

maybe 418 (2.3%)

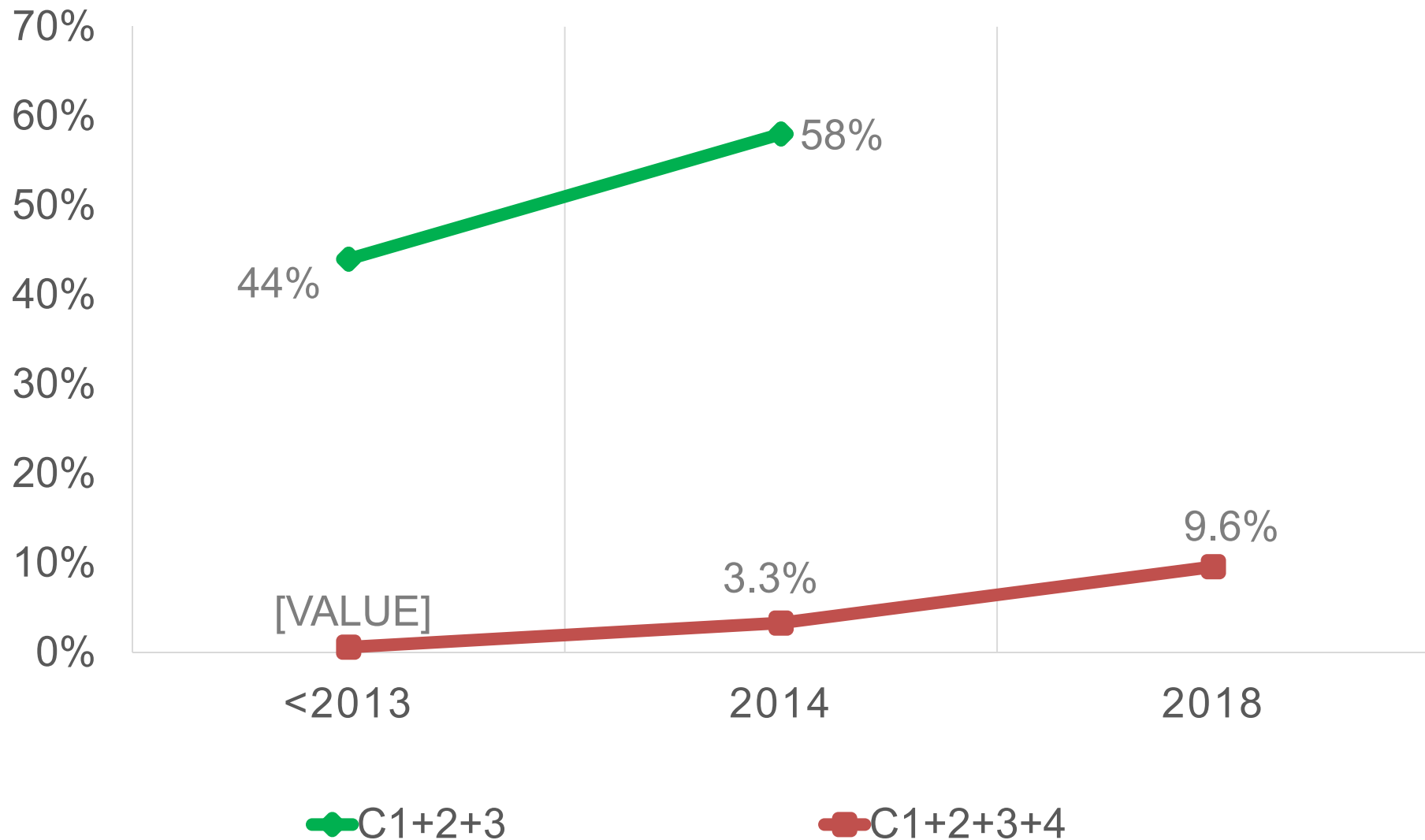
Gender/geographic distribution of authors



% of **authors** who fulfill ICMJE criteria
before and after introduction of 4th criterion in 2013



% of **articles** fulfilling all ICMJE criteria



CONCLUSIONS:

- The number of authors who do NOT fulfill authorship criteria is still very **HIGH**
- The acceptance of the latest ICMJE authorship criteria update is very **LOW** but showing an increasing trend
- The prevalence of authors fulfilling previously valid authorship criteria (C1+C2+C3) has **INCREASED** after the introduction of the 4th criterion in 2013.

may the 4th criterion be on your mind...



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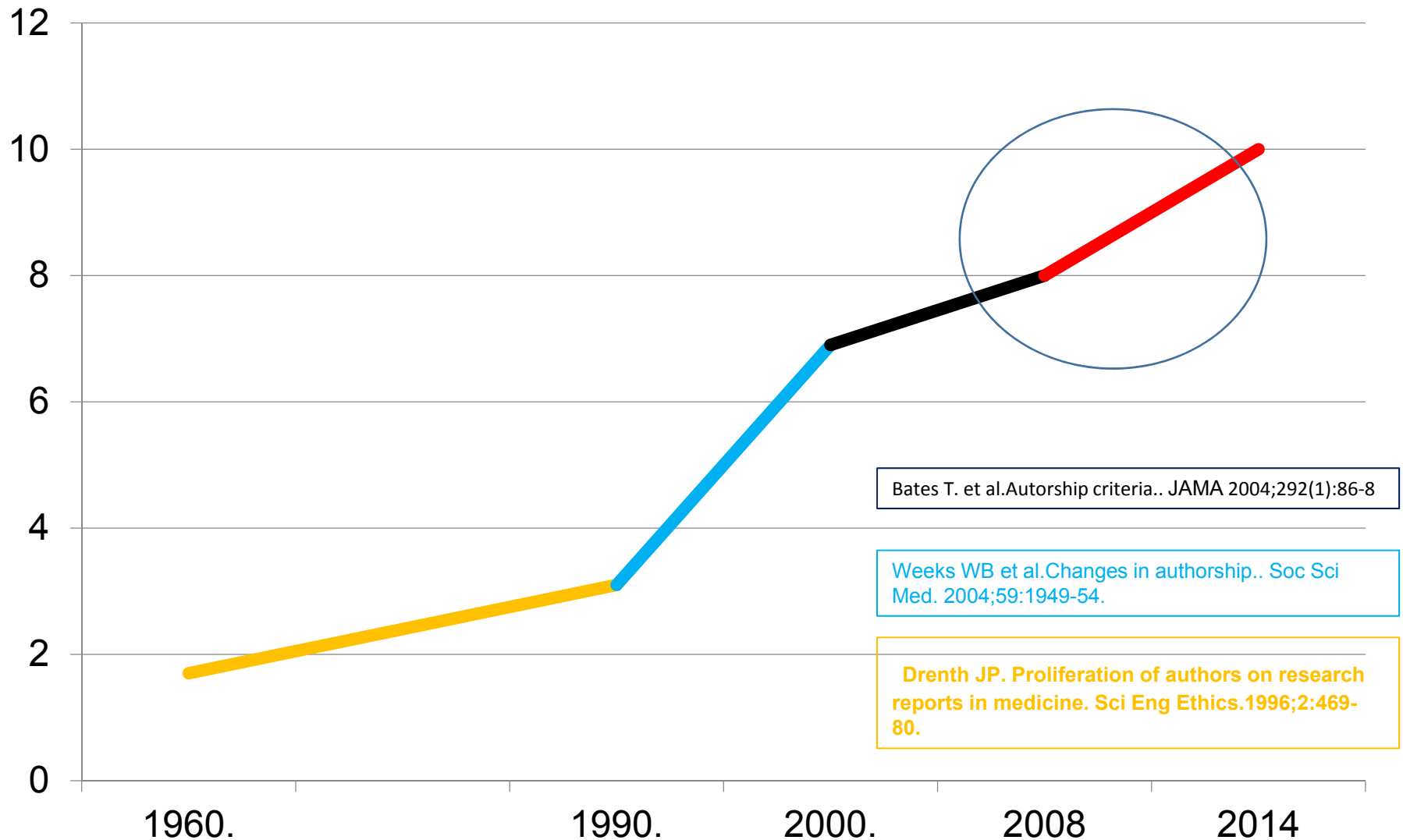
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Additional data

- The number of honorary authors (who did NOT fulfill ICMJE criteria but appear as authors) has not significantly changed:
- (13%) before and (11%) after for C1;
- (39%) before and (34%) after for C2.

Author number on the byline has increased from 8 ± 5 to 10 ± 8



Additional data

Journal criteria:

- IF > 1
- Follow ICMJE rules
- Web available
- Publicly disclosed author contributions

Article criteria:

- IF > 1
- Publicly disclosed author contributions
- original research reports
- 2 or more authors

Unit for analysing is the article.