



## Corrigendum to “The significant cost of systematic reviews and meta-analyses: A call for greater involvement of machine learning to assess the promise of clinical trials” [Contemp. Clin. Trials Commun. 16 (2019) 100443]



Matthew Michelson<sup>a,\*</sup>, Katja Reuter<sup>b,c</sup>

<sup>a</sup> *Evid Science, 2361 Rosecrans Ave #348, El Segundo, 90245, Los Angeles, CA, United States*

<sup>b</sup> *Institute for Health Promotion and Disease Prevention Research, Department of Preventive Medicine, Keck School of Medicine, University of Southern California, 2001 N. Soto St, Los Angeles, CA, 90032, United States*

<sup>c</sup> *Southern California Clinical and Translational Science Institute, Keck School of Medicine, University of Southern California, 2250 Alcazar, Los Angeles, CA, 90089, United States*

The initially published search results did not match the most current results from PubMed, as perhaps the search algorithms changed from initial research to publication. Therefore, in the interest of transparency, we have updated the article accordingly.

Please see the revised sections – The **Result** section of the **abstract**, the correct values in **Table 1**, and the updated **Results** section. All of which are provided below.

**Results:** The formula estimated that each SLR costs approximately \$141,194.80. We found that on average, the ten largest pharmaceutical companies write 41.71 and the ten major academic institutions publish 177.32 SLRs per year. On average, the total cost of all SLRs per year to each academic institution amounts to \$25,036,661.94 and for each pharmaceutical company is \$5,889,235.11.

Table 1

The number of comparative studies performed by the top 10 NIH-funded research institutions and the top 10 largest pharmaceutical companies by revenue. Example of PubMed query: (meta analysis OR systematic review OR "comparative effectiveness") AND ("Roche"[ad]) AND ("2013/01/01"[Pdat]: "2018/12/31"[Pdat]).

Average	NIH-funded research institution	Number of articles in the last 5 years	Company	Number of articles in the last 5 years
	Johns Hopkins University	1238	J&J (Janssen)	152
	University of Michigan	1163	Roche	80
	University of Pittsburgh	927	Pfizer	223
	Washington University in St. Louis	198	Novartis	186
	Stanford University	1082	Sanofi	98
	University of California, San Francisco	330	GSK	170
	University of Pennsylvania	1152	Merck	120
	Massachusetts General Hospital	1163	AbbVie	41
	Brigham and Women's Hospital	1338	Bayer	38
	University of California San Diego	275	Abbot	60
<b>5 year average</b>	<b>886.60</b>		<b>116.80</b>	
<b>1 year average</b>	<b>177.32</b>		<b>23.36</b>	

DOI of original article: <https://doi.org/10.1016/j.conctc.2019.100443>

\* Corresponding author.

E-mail address: [mmichelson@evidscience.com](mailto:mmichelson@evidscience.com) (M. Michelson).

<https://doi.org/10.1016/j.conctc.2019.100450>

Available online 12 September 2019

2451-8654/ © 2019 The Author(s). Published by Elsevier Inc. All rights reserved.

## Results

We found that on average, each major academic institution will publish 177.32 and each pharmaceutical company will publish 23.36 SLRs per year (Table 1). According to our formula, each single SLR costs \$141,194.80 (\$82,090 X 1.72). Given that 44% of meta-analyses in the

pharmaceutical industry go unpublished (i.e.,  $\Pr(\text{unpub})$  is 0.44), we estimate the pharmaceutical industry publishes 41.71 studies, on average, per year. Therefore, the total cost of all SLRs per year for each pharmaceutical company averages \$5,889,235.11, and each academic institution averages \$25,036,661.94 ( $\$141,194.80 \times 177.32$ ), as we assume all studies are published in academia (i.e.,  $\Pr(\text{unpub})$  is 0).