## The Journal Citation Reports<sup>®</sup> Impact Factor: annual results 2016



Paul Cummins, Editorial Manager; Patrick W. Serruys, Editor-in-Chief

As with the advent of every summer, the EuroIntervention Editorial Board looks forward to the annual announcement of our impact factor. This year's announcement was particularly special as we have attained our highest impact factor to date, 3.863<sup>1</sup>.

Late last month, Thomson Reuters published the 2016 Journal Citation Reports<sup>®</sup> (JCR). Although far from being a perfect metric, the JCR is still the most influential measure of evaluating peerreviewed journals<sup>2</sup>. The journal impact factor (JIF) ranking system is based on the number of times an average article is cited during the previous two years. Even though the impact factor was created in 1955 by Eugene Garfield<sup>3</sup>, the first JCR was only published in 1975. The 2016 results provide impact metrics from the 2015 data, which include 11,365 journals from 81 countries in 234 disciplines within the sciences and social sciences. Of these, 239 new journals have been included in the listing, having received their first JIF. When compared with their 2015 ratings, we can observe that 57% of journals have seen an increase in JIF, while 42% have seen a decrease. With a truly outstanding 131.723, *CA: A Cancer Journal for Clinicians* remains the journal with the highest JIF. Other notable results are *The New England Journal of Medicine* 59.558, *The Lancet* 44.002, *Nature* 38.138 and *Science* 34.661.

Unfortunately, 18 journals were excluded from this year's ranking due to integrity concerns and will be re-evaluated after a year for reconsideration. The majority of exclusions were due to excessive rates of self-citation (>50%) which led to a distortion in the category ranking: the highest self-citer was the *Journal of Physical Therapy Science* (78%). Within our category, "Cardiac & Cardiovascular Systems", the majority of the journals fall under the communally acceptable 20% self-citation level: *EuroIntervention*'s self-citation is on a par with *JACC* at 6% (Table 1).

Who cited who? Interestingly, in 2015, articles published in *JACC CVI* cited papers published in *EuroIntervention* in 2013 and 2014 108 times, followed by *CCI* citing our 2013/2014 papers 95 times. At the same time, in 2015, we cited *JACC*'s 2013/2014 papers 130 times, followed by our citing *JACC CVI*'s 2013/2014 papers 69 times. Finally, within our cardiovascular interventional subspeciality, the five-year trend remains relatively constant (**Figure 1**).



**Figure 1.** *Five-year trend of major cardiovascular interventional journals.* © 2015 Journal Citation Reports<sup>®</sup> Science Edition (Thomson *Reuters, 2016*).

Table 1. Top 10 and selected journals within the category "Cardiac & Cardiovascular Systems". Journals highlighted in red are
ESC journals with an impact factor. © 2015 Journal Citation Reports® Science Edition (Thomson Reuters, 2016).

Journal Ranking, n=124	Abbreviated Journal Title	IF	Cites in 2015 from items published in 2013+2014	Items published (2013+2014)	Self cites	IF without self cites
1	J AM COLL CARDIOL	17.759	15,752	887	6%	16.604
2	CIRCULATION	17.047	15,189	891	3%	16.422
3	EUR HEART J	15.064	9,385	623	7%	13.931
4	CIRC RES	11.551	5,637	488	5%	10.902
5	NAT REV CARDIOL	10.533	1,106	105	2%	10.238
6	JACC-CARDIOVASC IMAG	7.815	1,477	189	7%	7.190
7	JACC-CARDIOVASC INTE	7.630	2,022	265	9%	6.894
8	J HEART LUNG TRANSPL	7.509	2,140	285	13%	6.495
9	JACC-HEART FAIL	7.218	895	124	7%	6.677
10	CIRC-HEART FAIL	6.833	1,763	258	3%	6.597
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13	CIRC-CARDIOVASC IMAG	5.744	1,212	211	4%	5.493
14	CIRC-CARDIOVASC INTE	5.706	930	163	5%	5.417
15	HEART	5.693	2,613	459	5%	5.373
16	CARDIOVASC RES	5.465	2,503	458	7%	5.031
17	EUR J HEART FAIL	5.135	1,592	310	9%	4.623
18	J AM HEART ASSOC	5.117	2,702	528	2%	4.987
20	INT J CARDIOL	4.638	9,249	1,994	21%	3.639
22	REV ESP CARDIOL	4.596	717	156	42%	2.635
26	AM HEART J	4.332	2,127	491	3%	4.198
28	EUR HEART J-CARD IMG	4.293	1,275	297	21%	3.367
30	CIRC-CARDIOVASC QUAL	4.171	805	193	3%	4.005
31	CIRC J	4.124	2,668	647	38%	2.555
32	EUROPACE	4.021	1,930	480	21%	3.140
33	EUROINTERVENTION	3.863	1,379	357	6%	3.616
36	J THORAC CARDIOV SUR	3.494	3,934	1,126	19%	2.804
38	EUR J PREV CARDIOL	3.361	988	294	14%	2.878
43	AM J CARDIOL	3.154	3,936	1,248	5%	2.981
44	CAN J CARDIOL	3.112	1,478	475	9%	2.823
50	EUR J CARDIO-THORAC	2.803	1,982	707	9%	2.543
53	EUR J CARDIOVASC NUR	2.491	264	106	11%	2.198
63	CATHETER CARDIO INTE	2.181	1,775	814	13%	1.877
120	EUR HEART J SUPP	0.455	20	44	5%	0.432

We have discussed many times in these pages the merits and pitfalls of the impact factor. Concurrent to the impact factor ranking, we know downloads/website views/usage metrics are becoming increasingly important, particularly in terms of educational type papers. One may consider that usage metrics are more applicable to practitioners and that impact factors are more applicable to researchers. One aspect is certain – irrespective of the which metric is analysed (usage vs. citations) – at the dawning of the big data age, scientific analysis is becoming big business with Thomson Reuters currently valued at \$3 billion<sup>4</sup>.

## References

1. 2015 Journal Citation Reports® Science Edition (Thomson Reuters, 2016).

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3. Garfield E. Citation indexes for science; a new dimension in documentation through association of ideas. *Science*. 1955;122:108-11.

4. http://nypost.com/2016/06/19/firms-launch-bids-for-piece -of-thomson-reuters/