

Bibliometric Analysis of Most Cited Articles on Transcatheter Aortic Valve Implantation

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Abstract

Objective: Transcatheter aortic valve implantation has emerged as a promising therapy for the treatment of severe aortic stenosis. Bibliometric analysis can be performed in a specific field to obtain influential publications. We aimed to determine the most cited articles about transcatheter aortic valve implantation and the characteristics of these highly cited articles.

Methods: A search for transcatheter aortic valve implantation or transcatheter aortic valve replacement was implemented on Web of Science. It resulted in 13 459 publications, and the list of top 100 articles was defined according to the number of citations.

Results: Journal, author, country, organizing center, and publication year with most articles on the list were *Journal of the American College of Cardiology*, John G. Webb, USA, St. Paul Hospital, and 2012, respectively. Articles with funding had higher average citations per year than no funding articles ($P = .005$). Funding was divided into 2 groups as government or foundation and industrial (private) funding. It was indicated that no funding had lower average citation per year than industrial funding ($P = .014$). A significant relation was demonstrated between journal impact factor and either average or total citations obtained by articles along with total number of articles of journals ($r = 0.553$, $P < .001$; $r = 0.421$, $P < .001$; $r = 0.710$, $P = .001$, respectively).

Conclusion: The study provides a comprehensive analysis of the top 100 articles related to transcatheter aortic valve implantation according to the number of citations. Prominent features of the articles on the list were also reviewed.

Keywords: Transcatheter aortic valve implantation, bibliometric analysis, Web of Science, citations

Introduction

Transcatheter aortic valve implantation (TAVI) has changed the management of severe aortic stenosis and is the standard therapy for patients unsuitable for surgery and the recommended treatment for many patients at intermediate and high surgical risk.¹ Its scope of field has evolved from high surgical risk patients to even low-risk patients.²

Bibliometric citation analysis contains analysis of the most influential publications on a certain topic. The impact factor (IF) of a journal is determined for a period of time according to the number of citations obtained by the journal and the number of articles published in that journal. More influential articles have higher citations and this leads to rise in IF.³ Bibliometric analysis was applied in many areas of medicine. This method was introduced by Garfield in 1987.⁴ It was also implemented in various topics of cardiology. Coronary artery disease, interventional cardiology, and heart failure have been researched up to now.⁵⁻⁷ As a relatively novel treatment, TAVI was not evaluated by this method. We aimed to research the bibliometric analysis of highly cited articles published on the topic of TAVI.

Methods

Thomson Reuters Web of Science core collection citation index database was used for the search and information needed for the study. “Transcatheter aortic valve implantation or transcatheter aortic valve replacement (TAVR)” terms were searched. The results were combined and ranked according to the times cited. The determination of the most cited 100 articles was done by these results. In the preparation of the list, attention was paid to the articles that were directly related to TAVI. Therefore, some guidelines such as valvular heart disease guidelines were excluded from the list. The top 100 list formed was further analyzed according to document type, publication year, journal published the articles, authors of the articles, countries and organizations participating in the articles, and funding information. Impact factor of the journals (2018) on the list was also noted.

Statistical Analysis

Statistical analyses were performed using Statistical Package for Social Sciences software version 22 (IBM SPSS Corp., Armonk, NY, USA). Continuous variables were reported as mean $\pm$ standard deviation or median (minimum–maximum). Fitness to normal distribution was analyzed with the Kolmogorov–Smirnov test. Mann–Whitney U and Kruskal–Wallis tests were applied to detect the effect of funding in total citations and average citations per year gathered by articles. The relationship between IF of the journal and total citations and average citations per year acquired by articles on the list along with total number of articles of journals

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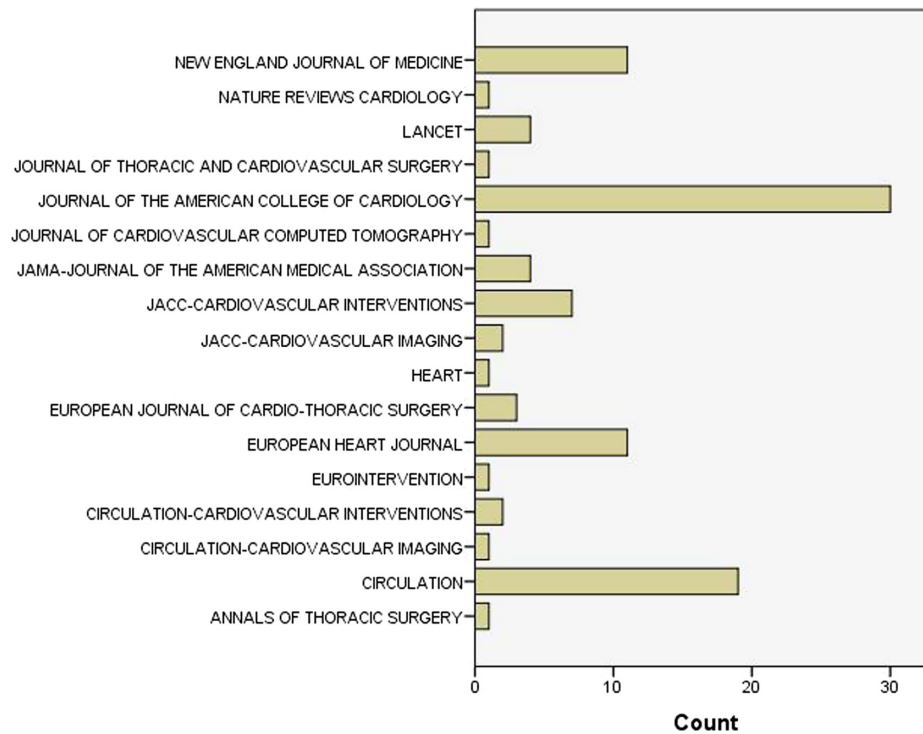


Figure 1. Journals on the list of the most cited articles with the number of publications.

were evaluated by Spearman correlation test. A P value $< .05$ was defined as statistically significant.

Results

The search revealed 13 459 articles relating to TAVI or TAVR. The results were ranked in terms of the number of citations. The list of the top 100 articles was formed and depicted in Supplementary File. The sum of times cited for the list was 48 740. It reduced to 47 798 without self-citation. Mean and median values of citations were 487.4 ± 557.3 and 327.5 (191-4011), respectively. Additionally, values of average citations per year were 57.2 ± 64.1 and 36.1 (15.3-364.6). The journal with the most articles in top 100 list was *Journal of the American College of Cardiology* with 30 articles. It was followed by *Circulation*, *European Heart Journal*, and *The New England Journal of Medicine (NEJM)*. Journals on the list of the most cited articles were depicted in Figure 1 with the number of publications. The author with the most articles on the list was John G. Webb with 39 articles. He was followed by Martin B. Leon. Authors with the highest number of articles on the list were shown in Table 1. The authors with most articles as the first author on the list were also indicated with citation values in Table 2. The publication year with the highest number of articles on the list was 2012 with 20 publications. The majority of these articles were original articles according to the document type. Moreover, the median value of total citations was higher in articles published in 2002 (1792 total citations and 94.32 average citations per year) while the value of average citations per year was the highest in articles published in 2016 [221.1 (102.8-339.4)]. The distribution of the number of articles according to publication year and citation values was depicted in Figure 2.

The country with the highest number of publications was the United States with 54 articles. Canada and Germany were in the second and third places. The distribution of the number of articles in terms of countries was demonstrated in Figure 3.

St Paul Hospital, Colombia University, and Cleveland Clinic Foundation were in top 3 centers in organizing these studies. Centers participating in studies on the list were demonstrated in Figure 4.

According to the funding of the articles, articles with funding had higher average citations per year than no funding articles [38.0 (18.18-364.64) vs. 28.33 (15.31-94.32), $P = .005$]. After funding was divided into 2 groups as government or foundation

Table 1. Authors with Number of Total Contribution for Articles, Number of Being First Author, and Type of First-Author Articles

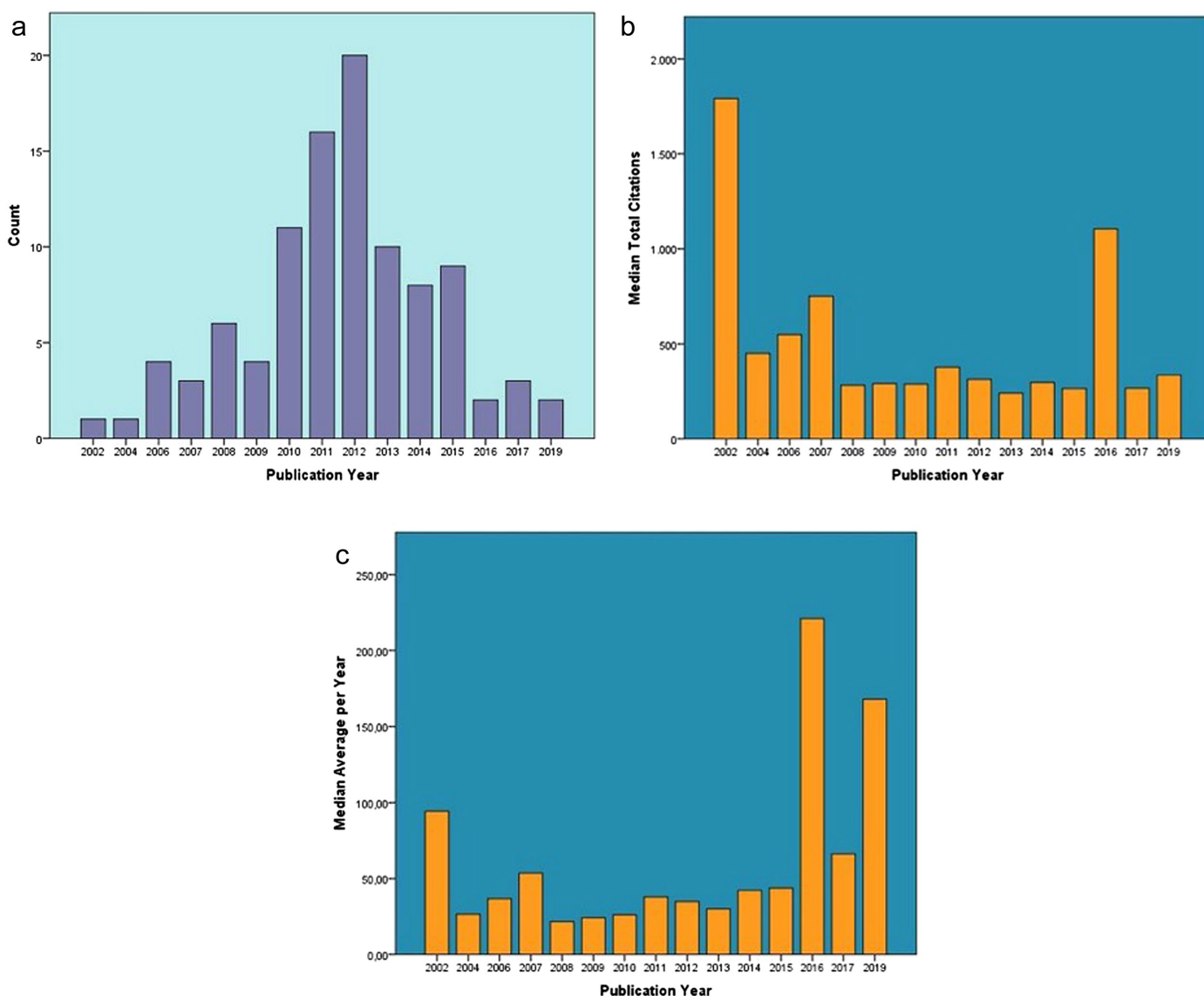
	Number of Total Contribution (Articles)	Number of Being First Author	Type of First-Author Articles
Webb, John G	39	5	Original article: 5
Leon, Martin B	32	4	Original article: 4
Kodali, Susheel K	16	2	Original article: 2
Makkar, Raj R	16	2	Original article: 2
Rodes-Cabau, Josep	15	4	Original article: 3 Review: 1
Kappetein, Arie Pieter	14	4	Original article: 4
Mack, Michael J	14	3	Original article: 3
Tuzcu, EM	14	0	None
Hahn, RT	13	0	None
Smith, Craig R	12	1	Original article: 1
Svensson, Lars G	12	1	Original article: 1

Table 2. The Authors with Most Articles as First Author in the List

Name of First Author	Number of Articles	Type of Articles	Total Citations (Min–Max)	Average Citations (Min–Max)
Webb, John G	5	Original article: 5	458 (206-731)	38.1 (29.4-56.5)
Kappetein, Arie Pieter	4	Original article: 4	472 (342-982)	55.7 (38.0-109.1)
Leon, Martin B	4	Original article: 4	1144 (467-4011)	199.25 (46.7-364.64)
Rodes-Cabau, Josep	4	Original article: 3 Review: 1	207 (203-756)	22.9 (20.4-68.73)
Cribier, A	3	Original article: 3	568 (450-1792)	37.87 (26.47-94.32)
Genereux, Philippe	3	Original article: 1 Review: 2	268 (237-358)	29.7 (29.63-39.78)
Mack, Michael J	3	Original article: 3	367 (316-697)	116.17 (39.5-183.5)
Walther, Thomas	3	Original article: 3	199 (193-448)	32.0 (15.3-32.17)

and industrial (private) funding, analyzing 3 groups revealed that no funding had a lower average citation per year [28.33 (15.31-94.32) vs. 35.90 (21.3-109.11) vs. 38.09 (18.18-364.64),

no funding, government or foundation, and industrial funding, respectively, $P = .014$] than industrial (private) funding. It indicated that the difference was mostly attributed to industrial (private)

**Figure 2.** The number of publications (a), total citations (b), and average citations per year (c) in terms of publication year.

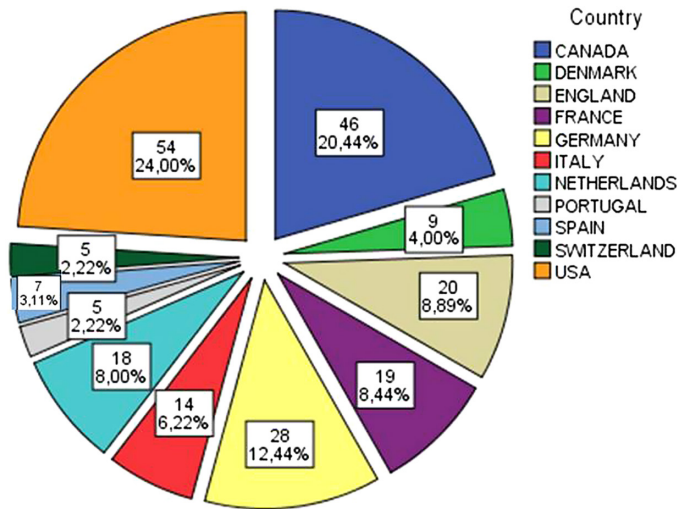


Figure 3. The number of publications according to countries involved in the studies.

funding, yet not government or foundation funding. There was no difference between groups in terms of total citations. These results were shown in Table 3.

A moderate correlation was found between journal IF and either average or total citations gathered by articles on the list ($r = 0.553$, $P < .001$ and $r = .421$, $P < .001$, respectively). Journals on the list with IF, median total, and average citation per year values were shown in Table 4. The positively strong correlation between the IF of the journal and the total number of articles of the same journal on the list ($r = 0.710$, $P = .001$) was also demonstrated. The distribution of variables related to IF and citations and also the total number of articles were demonstrated in Figure 5.

Discussion

This study provided the bibliometric analysis and characteristics of highly cited articles about TAVI. It indicated that funding of the articles was associated with higher average citations per year, yet not total citations.

Our study showed that IF of the journal correlated with total citations and average citation per year. This finding was compatible with Bradford law, which proposed that authors tend to publish their publications in certain journals. Additionally, IF of the journal was also related to the number of articles on the top cited list.⁸

Majority of the publications on the top cited articles' list consisted of either balloon-expandable or self-expanding valve trials including randomized controlled studies, observational studies, registries, and long-term results of TAVI.

The most cited publication with 4011 total citations on the list was published by Leon et al in *NEJM*. This study investigated TAVI in patients who were not suitable for surgery. It was concluded that TAVI significantly reduced death and cardiac symptoms with increased major strokes and vascular events.⁹ The second most cited article on the list was published by Smith et al in *NEJM*. The study compared TAVI and surgery in high-risk patients, indicated similar death rates at 1 year.¹⁰ The third most cited article was published by Cribier et al¹¹ in *Circulation*. This article is the first human case of TAVI in a 57-year-old patient and also the oldest article on the list published in 2002. Another article published by Leon et al¹² in 2016 had fourth place in terms of total citations, but in third place in average citation per year. The article has particular importance in the evolution of TAVI, which investigates the use of TAVI in intermediate risk patients. It showed similar results for TAVI and surgery as primary end point of death or disabling stroke. According to average citations per year, another article published in 2019 also ranks up on the list. This article (PARTNER 3 trial) by Mack et al¹³ concluded that TAVI lowered the primary end point of death, stroke, and rehospitalization at 1 year compared with surgery.

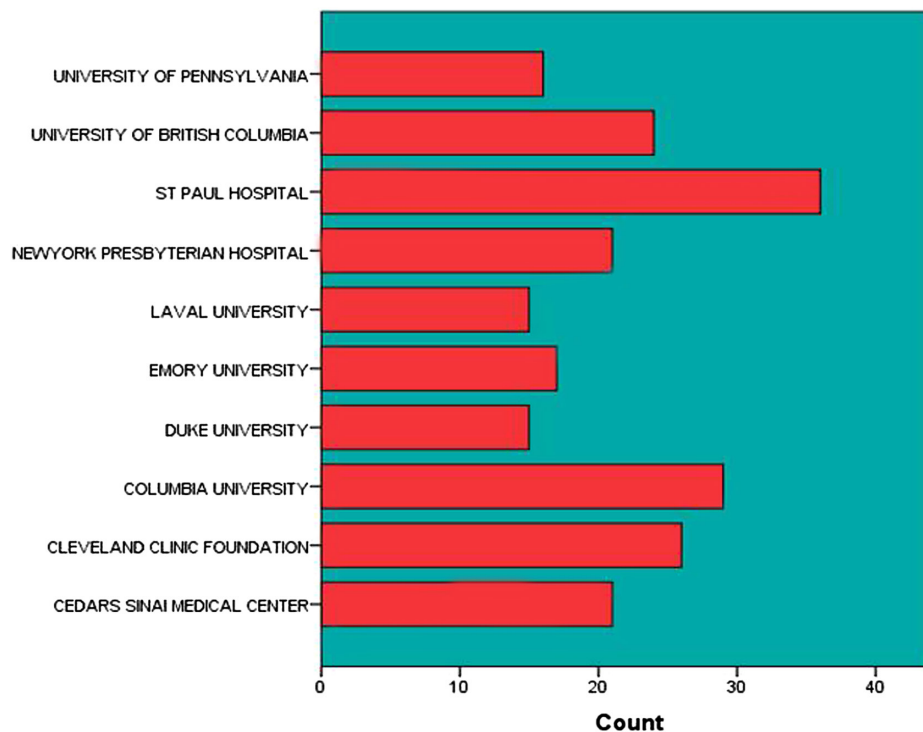


Figure 4. Organizing centers participating in the studies of the publications.

Table 3. Comparison of Funding (Government or Foundation and Industry) and No-Funding Groups According to Total and Average Citation per Year

(Min–Max)	No Funding (n = 29)	Government or Foundation (n = 13)	Industry (Private) (n = 58)	P
Total citations	332 (191-1792)	287 (204-982)	336 (191-4011)	.749
Average per year	28.33 (15.31-94.32)	35.90 (21.3-109.11)	38.09 (18.18-364.64)	.014 ^a
	No Funding (n = 29)	Funding (n = 71)		P
Total citations	332 (191-1792)	325 (191-4011)		.684
Average per year	28.33 (15.31-94.32)	38.0 (18.18-364.64)		.005

^aSignificantly increased compared to no funding.

Route of TAVI application was also one of the topics examined on the list. Transapical approach as an alternative to transfemoral approach was evaluated, and it was found that it could be safely performed with good early results.¹⁴ For patients with unsuitable iliofemoral anatomy, subclavian approach also seemed to be a safe method with good results and low complication rate.¹⁵

Complications occupy an important area in articles that are highly referenced about TAVI. Aortic regurgitation (AR) was one of these subjects. A meta-analysis (the most cited article about this subject) indicated that moderate or severe AR was common after TAVI, which was indicator of worse survival. They also stressed that AR was higher with self-expanding valves.¹⁶ Multidetector computed tomography in evaluating annulus size is of particular importance, and Binder et al concluded that annulus area sizing algorithm reduced paravalvular AR.¹⁷

Increased stroke risk in TAVI compared to surgical treatment is the major concern. A meta-analysis including 10 037 patients from the top cited article list showed that mean stroke rate was 3.3%. Besides, mortality was 3.5 times higher than non-stroke group.¹⁸

Another topic in highly cited articles was reduced aortic valve motion and possible subclinical leaflet thrombosis. Article by Makkar et al¹⁹ indicated its presence in bioprosthetic aortic valve and therapeutic anticoagulation suppress this situation.

Chakravarty et al²⁰ concluded that subclinical leaflet thrombosis was more frequent in transcatheter than surgical valves and it was also associated with stroke and transient ischemic attacks.²⁰

Vascular complications were relatively common after TAVI. This topic also gathered considerable attention. It occurred 27.6% of the patients in one of the studies on the list. Thirty-day mortality also increased due to this complication.²¹

Permanent pacemaker need after TAVI attracts attention and also finds itself in different rows on the list. A meta-analysis with highest citation in this subject indicated that male gender, some conduction anomalies before procedure, and aortic valve block during procedure were predictors for permanent pacemaker implantation. They also proposed that CoreValve had carried 2.5 times higher risk than Edwards SAPIEN valve.²²

Acute renal injury after TAVI was also one of the most cited topics on the list. Bagur et al²³ revealed that 11.7% of the patients following TAVI developed acute kidney injury. It leads to 4-fold rise in mortality.

Aortic root rupture was a dangerous complication in balloon-expandable TAVI. The only article about this topic on the list was published by Barbanti et al.²⁴ and it revealed that left ventricular outflow tract calcification and annular area oversizing were associated with this complication.

Rare, yet a fatal complication of TAVI is coronary obstruction. Ribeiro et al's²⁵ study on the list indicated that female gender,

Table 4. Journals with 2018 IFs, Median Total, and Average Citation per Year Values

	Number of Total Articles	Article Type	2018 Impact Factor	Median Total Citations of Articles	Median Average Citations of Articles
<i>Journal of the American College of Cardiology</i>	30	Original article: 26 Review: 4	18 639	288 (193-982)	34.6 (17.9-109.1)
<i>Circulation</i>	19	Original article: 19	23 054	409 (195-1792)	33.9 (17.7-94.3)
<i>European Heart Journal</i>	11	Original article: 11	24 889	288 (201-524)	36.3 (21.7-52.6)
<i>The New England Journal of Medicine</i>	11	Original article: 11	70 670	859 (305-4011)	183.5 (73.3-364.64)
<i>JACC—Cardiovascular Interventions</i>	7	Original article: 7	9544	259 (191-302)	27.29 (17.6-37.8)
<i>JAMA—Journal of the American Medical Association</i>	4	Original article: 4	51 273	331 (263-398)	46.6 (39.5-56.86)
<i>The Lancet</i>	4	Original article: 4	59 102	454 (265-697)	84.5 (65.6-116.17)
<i>European Journal of Cardio-Thoracic Surgery</i>	3	Original article: 3	3847	209 (199-342)	16.08 (15.3-38.0)
<i>Circulation—Cardiovascular Interventions</i>	2	Original article: 2	6088	263.5 (195-332)	21.6 (17.7-25.5)
<i>JACC—Cardiovascular Imaging</i>	2	Original article: 2	10 975	275 (191-359)	23.36 (19.1-27.6)

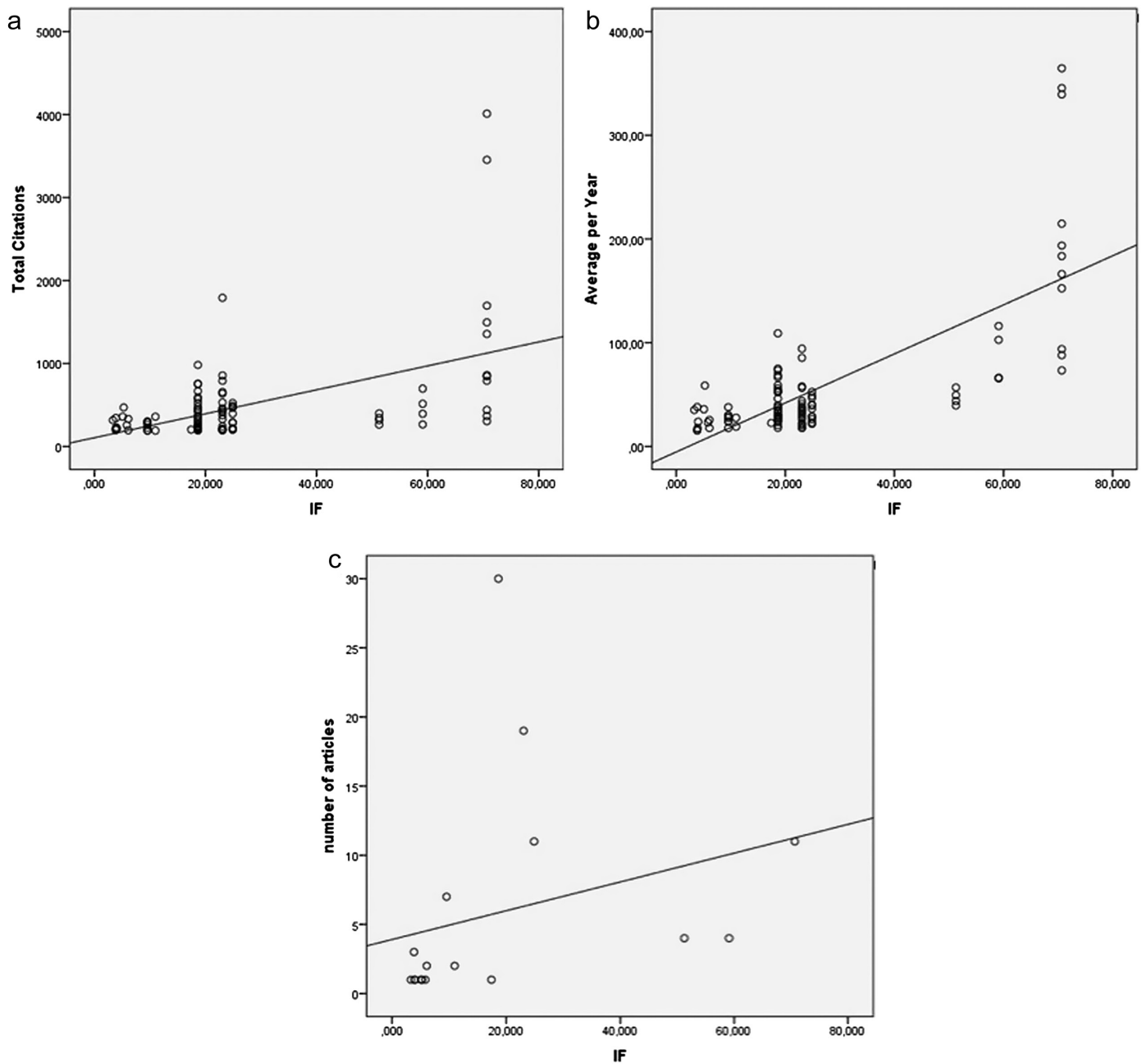


Figure 5. Diagrams of correlation analysis about impact factor of the journals and total citations (a), average citations per year (b), and total number of articles of the journals on the list (c).

balloon-expandable valve, and prior surgical bioprosthesis were associated with coronary obstruction. Cumulative mortality rate was 45.5% in this study.

Frailty of the patients undergoing TAVI was investigated, and it was found that it was not related with complications; however 1-year mortality was increased in this group.²⁶

Valve-in-valve implantation was yet another highly cited topic in TAVI. Dvir et al²⁷ demonstrated that it was an effective therapy in most of the patients with degenerated surgical aortic valves.

Comparison of balloon-expandable and self-expandable valves was also on the list, and CHOICE randomized clinical trial resulted in higher device success rate of balloon-expandable valve. However, cardiac mortality was not different.²⁸

To the best of our knowledge, this article is unique in bibliometric analysis of TAVI. It provides a perspective on the progression of TAVI and its impact on the literature. It also contains a review of the most influential publications on this subject.

Study Limitations

This study has several limitations. Citations of the articles were liable to bias due to the origin of the study, institutional reasons, or language. Moreover, age of the publication affects the number of total citations. We used Web of Science as search database. However, the choice of database might have impact on results. Other parameters of scientific influence can be assessed by h-index or citation density, which were not evaluated in the study. Lastly, number of government- or foundation-funded studies was relatively small.

The study evaluates highly cited articles related to TAVI and acts as a guide to focus on TAVI. Most cited articles in this field are funded by private, government, or foundations. Impact factor of the journals correlates with total and average citations per year of the highly cited articles.

Ethics Committee Approval: Ethical committee approval was not required due to the design of the study.

Informed Consent: Informed consent was not required due to the design of the study.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept – A.D., S.K.; Design – A.D., S.K.; Supervision – D.M.; Resources – M.S., A.D.; Data Collection and/or Processing – A.D., S.K., M.S.; Analysis and/or Interpretation – A.D., S.K.; Literature Search – A.D., M.S.; Writing Manuscript – A.D., S.K.; Critical Review – D.M.

Declaration of Interests: The authors have no conflicts of interest to declare.

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Supplementary Table 1. Top 100 Articles Related to TAVI According to the Number of Citations

Title	Authors	Source Title	Publication Year	Total Citations	Average per Year
Transcatheter Aortic-Valve Implantation for Aortic Stenosis in Patients Who Cannot Undergo Surgery.	Leon, Martin B.; Smith, Craig R.; Mack, Michael; Miller, D. Craig; Moses, Jeffrey W.; Svensson, Lars G.; Tuzcu, E. Murat; Webb, John G.; Fontana, Gregory P.; Makkar, Raj R.; Brown, David L.; Block, Peter C.; Guyton, Robert A.; Pichard, Augusto D.; Bavaria, Joseph E.; Herrmann, Howard C.; Douglas, Pamela S.; Petersen, John L.; Akin, Jodi J.; Anderson, William N.; Wang, Duolao; Pocock, Stuart	NEW ENGLAND JOURNAL OF MEDICINE	2010	4011	364.64
Transcatheter versus Surgical Aortic-Valve Replacement in High-Risk Patients	Smith, Craig R.; Leon, Martin B.; Mack, Michael J.; Miller, Craig; Moses, Jeffrey W.; Svensson, Lars G.; Tuzcu, E. Murat; Webb, John G.; Fontana, Gregory P.; Makkar, Raj R.; Williams, Mathew; Dewey, Todd; Kapadia, Samir; Babaliaros, Vasilis; Thourani, Vinod H.; Corso, Paul; Pichard, Augusto D.; Bavaria, Joseph E.; Herrmann, Howard C.; Akin, Jodi J.; Anderson, William N.; Wang, Duolao; Pocock, Stuart J.	NEW ENGLAND JOURNAL OF MEDICINE	2011	3455	345.5
Percutaneous transcatheter implantation of an aortic valve prosthesis for calcific aortic stenosis - First human case description	Cribier, A; Eltchaninoff, H; Bash, A; Borenstein, N; Tron, C; Bauer, F; Derumeaux, G; Anselme, F; Laborde, F; Leon, MB	CIRCULATION	2002	1792	94.32
Transcatheter or Surgical Aortic-Valve Replacement in Intermediate-Risk Patients	Leon, Martin B.; Smith, Craig R.; Mack, Michael J.; Makkar, Raj R.; Svensson, Lars G.; Kodali, Susheel K.; Thourani, Vinod H.; Tuzcu, E. Murat; Miller, D. Craig; Herrmann, Howard C.; Doshi, Darshan; Cohen, David J.; Pichard, Augusto D.; Kapadia, Samir; Dewey, Todd; Babaliaros, Vasilis; Szeto, Wilson Y.; Williams, Mathew R.; Kereiakes, Dean; Zajarias, Alan; Greason, Kevin L.; Whisenant, Brian K.; Hodson, Robert W.; Moses, Jeffrey W.; Trento, Alfredo; Brown, David L.; Fearon, William F; Pibarot, Philippe; Hahn, Rebecca T.; Jaber, Wael A.; Anderson, William N.; Alu, Maria C.; Webb, John G.	NEW ENGLAND JOURNAL OF MEDICINE	2016	1697	339.4
Two-Year Outcomes after Transcatheter or Surgical Aortic-Valve Replacement	Kodali, Susheel K.; Williams, Mathew R.; Smith, Craig R.; Svensson, Lars G.; Webb, John G.; Makkar, Raj R.; Fontana, Gregory P.; Dewey, Todd M.; Thourani, Vinod H.; Pichard, Augusto D.; Fischbein, Michael; Szeto, Wilson Y.; Lim, Scott; Greason, Kevin L.; Teirstein, Paul S.; Malaisrie, S. Chris; Douglas, Pamela S.; Hahn, Rebecca T.; Whisenant, Brian; Zajarias, Alan; Wang, Duolao; Akin, Jodi J.; Anderson, William N.; Leon, Martin B.	NEW ENGLAND JOURNAL OF MEDICINE	2012	1496	166.22
Transcatheter Aortic-Valve Replacement with a Self-Expanding Prosthesis	Adams, David H.; Popma, Jeffrey J.; Reardon, Michael J.; Yakubov, Steven J.; Coselli, Joseph S.; Deeb, G. Michael; Gleason, Thomas G.; Buchbinder, Maurice; Hermiller, James, Jr.; Kleiman, Neal S.; Chetcuti, Stan; Heiser, John; Merhi, William; Zorn, George; Tadros, Peter; Robinson, Newell; Petrossian, George; Hughes, G. Chad; Harrison, J. Kevin; Conte, John; Maini, Brijeshwar; Mumtaz, Mubashir; Chenoweth, Sharla; Oh, Jae K.	NEW ENGLAND JOURNAL OF MEDICINE	2014	1356	193.71
Updated Standardized Endpoint Definitions for Transcatheter Aortic Valve Implantation The Valve Academic Research Consortium-2 Consensus Document	Kappetein, A. Pieter; Head, Stuart J.; Genereux, Philippe; Piazza, Nicolo; van Mieghem, Nicolas M.; Blackstone, Eugene H.; Brott, Thomas G.; Cohen, David J.; Cutlip, Donald E.; van Es, Gerrit-Anne; Hahn, Rebecca T.; Kirtane, Ajay J.; Krucoff, Mitchell W.; Kodali, Susheel; Mack, Michael J.; Mehran, Roxana; Rodes-Cabau, Josep; Vranckx, Pascal; Webb, John G.; Windecker, Stephan; Serruys, Patrick W.; Leon, Martin B.	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2012	982	109.11
Surgical or Transcatheter Aortic-Valve Replacement in Intermediate-Risk Patients	Reardon, M. J.; Van Mieghem, N. M.; Popma, J. J.; Kleiman, N. S.; Sondergaard, L.; Mumtaz, M.; Adams, D. H.; Deeb, G. M.; Maini, B.; Gada, H.; Chetcuti, S.; Gleason, T.; Heiser, J.; Lange, R.; Merhi, W.; Oh, J. K.; Olsen, P. S.; Piazza, N.; Williams, M.; Windecker, S.; Yakubov, S. J.; Grube, E.; Makkar, R.; Lee, J. S.; Conte, J.; Vang, E.; Nguyen, H.; Chang, Y.; Mugglin, A. S.; Serruys, P. W. J. C.; Kappetein, A. P.	NEW ENGLAND JOURNAL OF MEDICINE	2017	859	214.75

(Continued)

Supplementary Table 1. Top 100 Articles Related to TAVI According to the Number of Citations (Continued)

Title	Authors	Source Title	Publication Year	Total Citations	Average per Year
Incidence and Predictors of Early and Late Mortality After Transcatheter Aortic Valve Implantation in 663 Patients With Severe Aortic Stenosis	Tamburino, Corrado; Capodanno, Davide; Ramondo, Angelo; Petronio, Anna Sonia; Ettori, Federica; Santoro, Gennaro; Klugmann, Silvio; Bedogni, Francesco; Maisano, Francesco; Marzocchi, Antonio; Poli, Arnaldo; Antonucci, David; Napolitano, Massimo; De Carlo, Marco; Fiorina, Claudia; Ussia, Gian Paolo	CIRCULATION	2011	855	85.5
Registry of Transcatheter Aortic-Valve Implantation in High-Risk Patients	Gilard, Martine; Eltchaninoff, Helene; Iung, Bernard; Donzeau-Gouge, Patrick; Chevreul, Karine; Fajadet, Jean; Leprieux, Pascal; Leguerrier, Alain; Lieve, Michel; Prat, Alain; Teiger, Emmanuel; Lefevre, Thierry; Himbert, Dominique; Tchetché, Didier; Carrie, Didier; Albat, Bernard; Cribier, Alain; Rioufol, Gilles; Sudre, Amaud; Blanchard, Didier; Collet, Frederic; Dos Santos, Pierre; Meneveau, Nicolas; Tirouvanziam, Ashok; Caussin, Christophe; Guyon, Philippe; Bosch, Jacques; Le Breton, Hervé; Collart, Frederic; Houel, Remi; Delpine, Stephane; Souteyrand, Geraud; Favreau, Xavier; Ohlmann, Patrick; Doisy, Vincent; Grollier, Gilles; Gommeaux, Antoine; Claudel, Jean-Philippe; Bournon, Francois; Bertrand, Bernard; Van Belle, Eric; Laskar, Marc	NEW ENGLAND JOURNAL OF MEDICINE	2012	845	93.89
Transcatheter Aortic-Valve Replacement for Inoperable Severe Aortic Stenosis	Makkar, Raj R.; Fontana, Gregory P.; Jilaihawi, Hasan; Kapadia, Samir; Pichard, Augusto D.; Douglas, Pamela S.; Thourani, Vinod H.; Babaliaros, Vasilis C.; Webb, John G.; Herrmann, Howard C.; Bavaria, Joseph E.; Kodali, Susheel; Brown, David L.; Bowers, Bruce; Dewey, Todd M.; Svensson, Lars G.; Tuzcu, Murat; Moses, Jeffrey W.; Williams, Matthew R.; Siegel, Robert J.; Akin, Jodi J.; Anderson, William N.; Pocock, Stuart; Smith, Craig R.; Leon, Martin B.	NEW ENGLAND JOURNAL OF MEDICINE	2012	792	88
Percutaneous transarterial aortic valve replacement in selected high-risk patients with aortic stenosis	Webb, John G.; Pasupati, Sanjeevan; Humphries, Karin; Thompson, Christopher; Altwegg, Lukas; Moss, Robert; Sinhal, Ajay; Carere, Ronald G.; Munt, Brad; Ricci, Donald; Ye, Jian; Cheung, Anson; Lichtenstein, Sam V.	CIRCULATION	2007	791	56.5
Transcatheter Aortic Valve Implantation for the Treatment of Severe Symptomatic Aortic Stenosis in Patients at Very High or Prohibitive Surgical Risk: Acute and Late Outcomes of the Multicenter Canadian Experience	Rodes-Cabau, Josep; Webb, John G.; Cheung, Anson; Ye, Jian; Dumont, Eric; Feindel, Christopher M.; Osten, Mark; Natarajan, Madhu K.; Velianou, James L.; Martucci, Giuseppe; DeVarennes, Benoit; Chisholm, Robert; Peterson, Mark D.; Lichtenstein, Samuel V.; Nietlispach, Fabian; Doyle, Daniel; Delarochelliere, Robert; Teoh, Kevin; Chu, Victor; Dancea, Adrian; Lachapelle, Kevin; Cheema, Asim; Latter, David; Horlick, Eric	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2010	756	68.73
Percutaneous aortic valve replacement for severe aortic stenosis in high-risk patients using the second- and current third-generation self-expanding CoreValve prosthesis - Device success and 30-day clinical outcome	Grube, Eberhard; Schuler, Gerhard; Buellesfeld, Lutz; Gerckens, Ulrich; Linke, Axel; Wenaweser, Peter; Sauren, Barthel; Mohr, Friedrich-Wilhelm; Walther, Thomas; Zickmann, Bernfried; Iversen, Stein; Felderhoff, Thomas; Cartier, Raymond; Bonan, Raoul	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2007	751	53.64
5-year outcomes of transcatheter aortic valve replacement or surgical aortic valve replacement for high surgical risk patients with aortic stenosis (PARTNER 1): a randomised controlled trial	Mack, Michael J.; Leon, Martin B.; Smith, Craig R.; Miller, D. Craig; Moses, Jeffrey W.; Tuzcu, E. Murat; Webb, John G.; Douglas, Pamela S.; Anderson, William N.; Blackstone, Eugene H.; Kodali, Susheel K.; Makkar, Raj R.; Fontana, Gregory P.; Kapadia, Samir; Bavaria, Joseph; Hahn, Rebecca T.; Thourani, Vinod H.; Babaliaros, Vasilis; Pichard, Augusto; Herrmann, Howard C.; Brown, David L.; Williams, Mathew; Akin, Jodi; Davidson, Michael J.; Svensson, Lars G.	LANCET	2015	697	116.17

(Continued)

Supplementary Table 1. Top 100 Articles Related to TAVI According to the Number of Citations (Continued)

Title	Authors	Source Title	Publication Year	Total Citations	Average per Year
Long-Term Outcomes After Transcatheter Aortic Valve Implantation in High-Risk Patients With Severe Aortic Stenosis The UK TAVI (United Kingdom Transcatheter Aortic Valve Implantation) Registry	Moat, Neil E.; Ludman, Peter; de Belder, Mark A.; Bridgewater, Ben; Cunningham, Andrew D.; Young, Christopher P.; Thomas, Martyn; Kovac, Jan; Spyt, Tom; MacCarthy, Philip A.; Wendler, Olaf; Hildick-Smith, David; Davies, Simon W.; Trivedi, Uday; Blackman, Daniel J.; Levy, Richard D.; Brecker, Stephen J. D.; Baumbach, Andreas; Daniel, Tim; Gray, Huon; Mullen, Michael J.	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2011	666	66.6
Percutaneous aortic valve implantation retrograde from the femoral artery	Webb, JG; Chandavimol, M; Thompson, CR; Ricci, DR; Carere, RG; Munt, BI; Buller, CE; Pasupati, S; Lichtenstein, S	CIRCULATION	2006	656	43.73
Thirty-Day Results of the SAPIEN Aortic Bioprosthesis European Outcome (SOURCE) Registry A European Registry of Transcatheter Aortic Valve Implantation Using the Edwards SAPIEN Valve	Thomas, Martyn; Schymik, Gerhard; Walther, Thomas; Himbert, Dominique; Lefevre, Thierry; Treede, Hendrik; Eggebrecht, Holger; Rubino, Paolo; Michev, lassen; Lange, Ruediger; Anderson, William N.; Wendler, Olaf	CIRCULATION	2010	638	58
Standardized Endpoint Definitions for Transcatheter Aortic Valve Implantation Clinical Trials A Consensus Report From the Valve Academic Research Consortium	Leon, Martin B.; Piazza, Nicolo; Nikolsky, Eugenia; Blackstone, Eugene H.; Cutlip, Donald E.; Kappetein, Arie Pieter; Krucoff, Mitchell W.; Mack, Michael; Mehran, Roxana; Miller, Craig; Morel, Marie-angele; Petersen, John; Popma, Jeffrey J.; Takkenberg, Johanna J. M.; Vahanian, Alec; van Es, Gerrit-Anne; Vranckx, Pascal; Webb, John G.; Windecker, Stephan; Serruys, Patrick W.	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2011	591	59.1
Treatment of calcific aortic stenosis with the percutaneous heart valve - Mid-term follow-up from the initial feasibility studies: The French experience	Cribier, A; Eltchaninoff, H; Tron, C; Bauer, F; Agatiello, C; Nercolini, D; Tapiero, S; Litzler, PY; Bessou, JP; Babaliaros, V	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2006	568	37.87
Percutaneous implantation of the CoreValve self-expanding valve prosthesis in high-risk patients with aortic valve disease - The Siegburg First-in-Man Study	Grube, Eberhard; Laborde, Jean C.; Gerckens, Ulrich; Felderhoff, Thomas; Sauren, Barthel; Buellesfeld, Lutz; Mueller, Ralf; Menichelli, Maurizio; Schmidt, Thomas; Zickmann, Bernfried; Iversen, Stein; Stone, Gregg W.	CIRCULATION	2006	530	35.33
Transcatheter Aortic Valve Replacement Using a Self-Expanding Bioprosthesis in Patients With Severe Aortic Stenosis at Extreme Risk for Surgery	Popma, Jeffrey J.; Adams, David H.; Reardon, Michael J.; Yakubov, Steven J.; Kleiman, Neal S.; Heimansohn, David; Hermiller, James, Jr.; Hughes, G. Chad; Harrison, J. Kevin; Coselli, Joseph; Drez, Jose; Kafi, Ali; Schreiber, Theodore; Gleason, Thomas G.; Conte, John; Buchbinder, Maurice; Deeb, G. Michael; Carabello, Blase; Serruys, Patrick W.; Chenoweth, Sharla; Oh, Jae K.	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2014	525	75
Transcatheter valve implantation for patients with aortic stenosis: a position statement from the European Association of Cardio-Thoracic Surgery (EACTS) and the European Society of Cardiology (ESC), in collaboration with the European Association of Percutaneous Cardiovascular Interventions (EAPCI)	Vahanian, Alec; Alfieri, Ottavio; Al-Attar, Nawwar; Antunes, Manuel; Bax, Jeroen; Cormier, Bertrand; Cribier, Alain; De Jaegere, Peter; Fournial, Gerard; Kappetein, Arie Pieter; Kovac, Jan; Ludgate, Susanne; Maisano, Francesco; Moat, Neil; Mohr, Friedrich; Nataf, Patrick; Pierard, Luc; Pomar, Jose Luis; Schofer, Joachim; Tornos, Pilar; Tuzcu, Murat; van Hout, Ben; Von Segesser, Ludwig K.; Walther, Thomas	EUROPEAN HEART JOURNAL	2008	524	40.31

(Continued)

Supplementary Table 1. Top 100 Articles Related to TAVI According to the Number of Citations (*Continued*)

Title	Authors	Source Title	Publication Year	Total Citations	Average per Year
Transcatheter aortic valve replacement versus surgical valve replacement in intermediate-risk patients: a propensity score analysis	Thourani, Vinod H.; Kodali, Susheel; Makkar, Raj R.; Herrmann, Howard C.; Williams, Mathew; Babaliaros, Vasilis; Smalling, Richard; Lim, Scott; Malaisrie, S. Chris; Kapadia, Samir; Szeeto, Wilson Y.; Greason, Kevin L.; Kereiakes, Dean; Ailawadi, Gorav; Whisenant, Brian K.; Devireddy, Chandan; Leipsic, Jonathon; Hahn, Rebecca T.; Pibarot, Philippe; Weissman, Neil J.; Jaber, Wael A.; Cohen, David J.; Suri, Rakesh; Tuzcu, E. Murat; Svensson, Lars G.; Webb, John G.; Moses, Jeffrey W.; Mack, Michael J.; Miller, D. Craig; Smith, Craig R.; Alu, Maria C.; Parvataneni, Rupa; D'Agostino, Ralph B., Jr.; Leon, Martin B.	LANCET	2016	514	102.8
Transcatheter aortic valve implantation: first results from a multi-centre real-world registry	Zahn, Ralf; Gerckens, Ulrich; Grube, Eberhard; Linke, Axel; Sievert, Horst; Eggebrecht, Holger; Hambrecht, Rainer; Sack, Stefan; Hauptmann, Karl Eugen; Richardt, Gert; Figulla, Hans-Reiner; Senges, Jochen	EUROPEAN HEART JOURNAL	2011	489	48.9
2012 ACCF/AATS/SCAI/STS Expert Consensus Document on Transcatheter Aortic Valve Replacement	Holmes, David R., Jr.; Mack, Michael J.; Kaul, Sanjay; Agnihotri, Arvind; Alexander, Karen P.; Bailey, Steven R.; Calhoon, John H.; Carabello, Blase A.; Desai, Milind Y.; Edwards, Fred H.; Francis, Gary S.; Gardner, Timothy J.; Kappetein, A. Pieter; Linderbaum, Jane A.; Mukherjee, Chirajit; Mukherjee, Debabrata; Otto, Catherine M.; Ruiz, Carlos E.; Sacco, Ralph L.; Smith, Donnette; Thomas, James D.	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2012	479	53.22
Updated standardized endpoint definitions for transcatheter aortic valve implantation: the Valve Academic Research Consortium-2 consensus document	Kappetein, A. Pieter; Head, Stuart J.; Genereux, Philippe; Piazza, Nicolo; van Mieghem, Nicolas M.; Blackstone, Eugene H.; Brott, Thomas G.; Cohen, David J.; Cutlip, Donald E.; van Es, Gerrit-Anne; Hahn, Rebecca T.; Kirtane, Ajay J.; Krucoff, Mitchell W.; Kodali, Susheel; Mack, Michael J.; Mehran, Roxana; Rodes-Cabau, Josep; Vranckx, Pascal; Webb, John G.; Windecker, Stephan; Serruys, Patrick W.; Leon, Martin B.	EUROPEAN HEART JOURNAL	2012	474	52.67
Updated standardized endpoint definitions for transcatheter aortic valve implantation: The Valve Academic Research Consortium-2 consensus document	Kappetein, A. Pieter; Head, Stuart J.; Genereux, Philippe; Piazza, Nicolo; van Mieghem, Nicolas M.; Blackstone, Eugene H.; Brott, Thomas G.; Cohen, David J.; Cutlip, Donald E.; van Es, Gerrit-Anne; Hahn, Rebecca T.; Kirtane, Ajay J.; Krucoff, Mitchell W.; Kodali, Susheel; Mack, Michael J.; Mehran, Roxana; Rodes-Cabau, Josep; Vranckx, Pascal; Webb, John G.; Windecker, Stephan; Serruys, Patrick W.; Leon, Martin B.	JOURNAL OF THORACIC AND CARDIOVASCULAR SURGERY	2013	470	58.75
Standardized endpoint definitions for transcatheter aortic valve implantation clinical trials: a consensus report from the Valve Academic Research Consortium	Leon, Martin B.; Piazza, Nicolo; Nikolsky, Eugenia; Blackstone, Eugene H.; Cutlip, Donald E.; Kappetein, Arie Pieter; Krucoff, Mitchell W.; Mack, Michael; Mehran, Roxana; Miller, Craig; Morel, Marie-Angele; Petersen, John; Popma, Jeffrey J.; Takkenberg, Johanna J. M.; Vahanian, Alec; van Es, Gerrit-Anne; Vranckx, Pascal; Webb, John G.; Windecker, Stephan; Serruys, Patrick W.	EUROPEAN HEART JOURNAL	2011	467	46.7
Transcatheter Aortic Valve Implantation Impact on Clinical and Valve-Related Outcomes	Webb, John G.; Altwegg, Lukas; Boone, Robert H.; Cheung, Anson; Ye, Jian; Lichtenstein, Samuel; Lee, May; Masson, Jean Bernard; Thompson, Christopher; Moss, Robert; Carere, Ron; Munt, Brad; Nietlispach, Fabian; Humphries, Karin	CIRCULATION	2009	458	38.17
Early experience with percutaneous transcatheter implantation of heart valve prosthesis for the treatment of end-stage inoperable patients with calcific aortic stenosis	Cribier, A; Eltchaninoff, H; Tron, C; Bauer, F; Agatiello, C; Sebah, L; Bash, A; Nusimovici, D; Litzler, PY; Bessou, JP; Leon, MB	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2004	450	26.47
Transapical minimally invasive aortic valve implantation - Multicenter experience	Walther, Thomas; Simon, Paul; Dewey, Todd; Wimmer-Greinecker, Gerhard; Falk, Volkmar; Kasimir, Marie T.; Doss, Mirko; Borger, Michael A.; Schuler, Gerhard; Glogar, Dietmar; Fehske, Wolfgang; Wolner, Ernst; Mohr, Friedrich W.; Mack, Michael	CIRCULATION	2007	448	32

(Continued)

Supplementary Table 1. Top 100 Articles Related to TAVI According to the Number of Citations (Continued)

Title	Authors	Source Title	Publication Year	Total Citations	Average per Year
Possible Subclinical Leaflet Thrombosis in Bioprosthetic Aortic Valves	Makkar, R. R.; Fontana, G.; Jilaihawi, H.; Chakravarty, T.; Kofoed, K. E.; de Backer, O.; Asch, F. M.; Ruiz, C. E.; Olsen, N. T.; Trento, A.; Friedman, J.; Berman, D.; Cheng, W.; Kashif, M.; Jehnin, V.; Kliger, C. A.; Guo, H.; Pichard, A. D.; Weissman, N. J.; Kapadia, S.; Manasse, E.; Bhatt, D. L.; Leon, M. B.; Sondergaard, L.	NEW ENGLAND JOURNAL OF MEDICINE	2015	440	73.33
Transcatheter Versus Surgical Aortic Valve Replacement in Patients With Severe Aortic Valve Stenosis 1-Year Results From the ALL-COMERS NOTION Randomized Clinical Trial	Thyregod, Hans Gustav Horsted; Steinbruchel, Daniel Andreas; Ihlemann, Nikolaj; Nissen, Henrik; Kjeldsen, Bo Juel; Petrusson, Petur; Chang, Yanping; Franzen, Olaf Walter; Engstrom, Thomas; Clemmensen, Peter; Hansen, Peter Bo; Andersen, Lars Willy; Olsen, Peter Skov; Sondergaard, Lars	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2015	440	73.33
Transapical transcatheter aortic valve implantation in humans - Initial clinical experience	Lichtenstein, Samuel V.; Cheung, Anson; Ye, Jian; Thompson, Christopher R.; Carere, Ronald G.; Pasupati, Sanjeevan; Webb, John C.	CIRCULATION	2006	425	28.33
Incidence, Predictors, and Outcomes of Aortic Regurgitation After Transcatheter Aortic Valve Replacement Meta-Analysis and Systematic Review of Literature	Athappan, Ganesh; Patvardhan, Eshan; Tuzcu, E. Murat; Svensson, Lars Georg; Lenos, Pedro A.; Fraccaro, Chiara; Tarantini, Giuseppe; Sinning, Jan-Malte; Nickenig, Georg; Capodanno, Davide; Tamburino, Corrado; Latib, Azeem; Colombo, Antonio; Kapadia, Samir R.	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2013	418	52.25
One-Year Outcomes of Cohort 1 in the Edwards SAPIEN Aortic Bioprosthesis European Outcome (SOURCE) Registry The European Registry of Transcatheter Aortic Valve Implantation Using the Edwards SAPIEN Valve	Thomas, Martyn; Schymik, Gerhard; Walther, Thomas; Himbert, Dominique; Lefevre, Thierry; Treede, Hendrik; Eggebrecht, Holger; Rubino, Paolo; Colombo, Antonio; Lange, Ruediger; Schwarz, Rebecca R.; Wendler, Olaf	CIRCULATION	2011	409	40.9
Transcatheter Aortic Valve Implantation in Failed Bioprosthetic Surgical Valves	Dvir, Danny; Webb, John G.; Bleiziffer, Sabine; Pasic, Miralem; Waksman, Ron; Kodali, Susheel; Barbanti, Marco; Latib, Azeem; Schaefer, Ulrich; Rodes-Cabau, Josep; Treede, Hendrik; Piazza, Nicolo; Hildick-Smith, David; Himbert, Dominique; Walther, Thomas; Hengstenberg, Christian; Nissen, Henrik; Bekeredjian, Raffi; Presbitero, Patrizia; Ferrari, Enrico; Segev, Amit; de Weger, Arend; Windecker, Stephan; Moat, Neil E.; Napodano, Massimo; Wilbring, Manuel; Cerillo, Alfredo G.; Brecker, Stephen; Tchetche, Didier; Lefevre, Thierry; De Marco, Federico; Fiorina, Claudia; Petronio, Anna Sonia; Teles, Rui C.; Testa, Luca; Laborde, Jean-Claude; Leon, Martin B.; Kornowski, Ran	JAMA-JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION	2014	398	56.86
Transcatheter aortic valve implantation: early results of the FRANCE (FRench Aortic National CoreValve and Edwards) registry	Elchaninoff, Helene; Prat, Alain; Gilard, Martine; Leguerrier, Alain; Blanchard, Didier; Fournial, Gerard; lung, Bernard; Donzeau-Gouge, Patrick; Tribouilloy, Christophe; Debrux, Jean-Louis; Pavie, Alain; Gueret, Pascal	EUROPEAN HEART JOURNAL	2011	396	39.6
5-year outcomes of transcatheter aortic valve replacement compared with standard treatment for patients with inoperable aortic stenosis (PARTNER 1): a randomised controlled trial	Kapadia, Samir R.; Leon, Martin B.; Makkar, Raj R.; Tuzcu, E. Murat; Svensson, Lars G.; Kodali, Susheel; Webb, John G.; Mack, Michael J.; Douglas, Pamela S.; Thourani, Vinod H.; Babaliaros, Vasilis C.; Hermann, Howard C.; Szezo, Wilson Y.; Pichard, Augusto D.; Williams, Mathew R.; Fontana, Gregory P.; Miller, D. Craig; Anderson, William N.; Akin, Jodi J.; Davidson, Michael J.; Smith, Craig R.	LANCET	2015	394	65.67
Transcatheter Valve-in-Valve Implantation for Failed Bioprosthetic Heart Valves	Webb, John G.; Wood, David A.; Ye, Jian; Gurvitch, Ronen; Masson, Jean-Bernard; Rodes-Cabau, Josep; Osten, Mark; Horlick, Eric; Wendler, O.; Dumont, Eric; Carere, Ronald G.; Wijesinghe, Namal; Nietlispach, Fabian; Johnson, Mark; Thompson, Christopher R.; Moss, Robert; Leipsic, Jonathon; Munt, Brad; Lichtenstein, Samuel V.; Cheung, Anson	CIRCULATION	2010	373	33.91

(Continued)

Supplementary Table 1. Top 100 Articles Related to TAVI According to the Number of Citations (*Continued*)

Title	Authors	Source Title	Publication Year	Total Citations	Average per Year
Aortic Stenosis in the Elderly Disease Prevalence and Number of Candidates for Transcatheter Aortic Valve Replacement: A Meta-Analysis and Modeling Study	Osnabrugge, Ruben L. J.; Mylotte, Darren; Head, Stuart J.; Van Mieghem, Nicolas M.; Nikomo, Vuyisile T.; LeReun, Corinne M.; Bogers, Ad J. J. C.; Piazza, Nicolo; Kappetein, A. Pieter	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2013	369	46.13
Transcatheter Aortic-Valve Replacement with a Balloon-Expandable Valve in Low-Risk Patients	Mack, M. J.; Leon, M. B.; Thourani, V. H.; Makkar, R.; Kodali, S. K.; Russo, M.; Kapadia, S. R.; Malaisrie, S. C.; Cohen, D. J.; Pibarot, P.; Leipsic, J.; Hahn, R. T.; Blanke, P.; Williams, M. R.; McCabe, J. M.; Brown, D. L.; Babaliaros, V.; Goldmann, S.; Sze, W. Y.; Genereux, P.; Pershad, A.; Pocock, S. J.; Alu, M. C.; Webb, J. G.; Smith, C. R.	NEW ENGLAND JOURNAL OF MEDICINE	2019	367	183.5
Aortic regurgitation after transcatheter aortic valve implantation: incidence and early outcome. Results from the German transcatheter aortic valve interventions registry	Abdel-Wahab, Mohamed; Zahn, Ralf; Horack, Martin; Gerckens, Ulrich; Schuler, Gerhard; Sievert, Horst; Eggebrecht, Holger; Senges, Jochen; Richardt, Gert	HEART	2011	359	35.9
Noninvasive Evaluation of the Aortic Root With Multislice Computed Tomography Implications for Transcatheter Aortic Valve Replacement	Tops, Laurens F.; Wood, David A.; Delgado, Victoria; Schuijff, Joanne D.; Mayo, John R.; Pasupati, Sanjeevan; Lamers, Frouke P. L.; van der Wall, Ernst E.; Schaliij, Martin J.; Webb, John G.; Bax, Jeroen J.	JACC-CARDIOVASCULAR IMAGING	2008	359	27.62
Clinical Outcomes After Transcatheter Aortic Valve Replacement Using Valve Academic Research Consortium Definitions A Weighted Meta-Analysis of 3,519 Patients From 16 Studies	Genereux, Philippe; Head, Stuart J.; Van Mieghem, Nicolas M.; Kodali, Susheel; Kirtane, Ajay J.; Xu, Ke; Smith, Craig; Serruys, Patrick W.; Kappetein, A. Pieter; Leon, Martin B.	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2012	358	39.78
Comparison of Balloon-Expandable vs Self-expandable Valves in Patients Undergoing Transcatheter Aortic Valve Replacement The CHOICE Randomized Clinical Trial	Abdel-Wahab, Mohamed; Mehili, Julinda; Freker, Christian; Neumann, Franz-Josef; Kurz, Thomas; Toelg, Ralph; Zachow, Dirk; Guerra, Elena; Massberg, Steffen; Schaefer, Ulrich; El-Mawardi, Mohamed; Richardt, Gert	JAMA-JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION	2014	346	49.43
Updated standardized endpoint definitions for transcatheter aortic valve implantation: the Valve Academic Research Consortium-2 consensus document (VARC-2)	Kappetein, Arie Pieter; Head, Stuart J.; Genereux, Philippe; Piazza, Nicolo; van Mieghem, Nicolas M.; Blackstone, Eugene H.; Brott, Thomas G.; Cohen, David J.; Cutlip, Donald E.; van Es, Gerrit-Anne; Hahn, Rebecca T.; Kirtane, Ajay J.; Krucif, Mitchell W.; Kodali, Susheel; Mack, Michael J.; Mehran, Roxana; Rodes-Cabau, Josep; Vranckx, Pascal; Webb, John G.; Windecker, Stephan; Serruys, Patrick W.; Leon, Martin B.	EUROPEAN JOURNAL OF CARDIO-THORACIC SURGERY	2012	342	38
Anatomy of the Aortic Valvar Complex and Its Implications for Transcatheter Implantation of the Aortic Valve	Piazza, Nicolo; de Jaegere, Peter; Schultz, Carl; Becker, Anton E.; Serruys, Patrick W.; Anderson, Robert H.	CIRCULATION-CARDIOVASCULAR INTERVENTIONS	2008	332	25.54
Transcatheter Aortic Valve Replacement for Degenerative Bioprosthetic Surgical Valves Results From the Global Valve-in-Valve Registry	Dvir, Danny; Webb, John; Brecker, Stephen; Bleiziffer, Sabine; Hildick-Smith, David; Colombo, Antonio; Descoutures, Fleur; Hengstenberg, Christian; Moat, Neil E.; Bekeredjian, Raffi; Napolitano, Massimo; Testa, Luca; Lefevre, Thierry; Guetta, Victor; Nissen, Henrik; Hernandez, Jose-Maria; Roy, David; Teles, Rui C.; Segev, Amit; Dumonteil, Nicolas; Fiorina, Claudia; Gotzmann, Michael; Tchetché, Didier; Abdel-Wahab, Mohamed; De Marco, Federico; Baumbach, Andreas; Laborde, Jean-Claude; Kornowski, Ran	CIRCULATION	2012	330	36.67

(Continued)

Supplementary Table 1. Top 100 Articles Related to TAVI According to the Number of Citations (*Continued*)

Title	Authors	Source Title	Publication Year	Total Citations	Average per Year
Multimodal Assessment of the Aortic Annulus Diameter Implications for Transcatheter Aortic Valve Implantation	Messika-Zeitoun, David; Serfaty, Jean-Michel; Brochet, Eric; Ducrocq, Gregory; Lepage, Laurent; Detaint, Delphine; Hyafil, Fabien; Himbert, Dominique; Pasi, Nicoletta; Laissy, Jean-Pierre; lung, Bernard; Vahanian, Alec	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2010	325	29.55
SCCT expert consensus document on computed tomography imaging before transcatheter aortic valve implantation (TAVI)/transcatheter aortic valve replacement (TAVR)	Achenbach, Stephan; Delgado, Victoria; Hausleiter, Joerg; Schoenhagen, Paul; Min, James K.; Leipsic, Jonathon A.	JOURNAL OF CARDIOVASCULAR COMPUTED TOMOGRAPHY	2012	317	35.22
Outcomes Following Transcatheter Aortic Valve Replacement in the United States	Mack, Michael J.; Brennan, J. Matthew; Brindis, Ralph; Carroll, John; Edwards, Fred; Grover, Fred; Shahian, David; Tuzcu, E. Murat; Peterson, Eric D.; Rumsfeld, John S.; Hewitt, Kathleen; Shewan, Cynthia; Michaels, Joan; Christensen, Barb; Christian, Alexander; O'Brien, Sean; Holmes, David	JAMA-JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION	2013	316	39.5
Cross-Sectional Computed Tomographic Assessment Improves Accuracy of Aortic Annular Sizing for Transcatheter Aortic Valve Replacement and Reduces the Incidence of Paravalvular Aortic Regurgitation	Jilali, Hani; Hasan, Kashif; Mohammad, Fontana, Gregory; Furugen, Azusa; Shiota, Takahiro; Friede, Gerald; Makhija, Rakhee; Doctor, Niraj; Leon, Martin B.; Makkar, Raj R.	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2012	308	34.22
Transcatheter Aortic-Valve Replacement with a Self-Expanding Valve in Low-Risk Patients	Popma, Jeffrey J.; Deeb, G. Michael; Yakubov, Steven J.; Mumtaz, Mubashir; Gada, Hemal; O'Hair, Daniel; Bajwa, Tanvir; Heiser, John C.; Merhi, William; Kleiman, Neal S.; Askew, Judah; Sorajja, Paul; Rovin, Joshua; Chetcuti, Stanley J.; Adams, David H.; Teirstein, Paul S.; Zorn, George L.; Illi, Forrest, John K.; Tchetchet, Didier; Resar, Jon; Walton, Antony; Piazza, Nicolo; Ramlawi, Basel; Robinson, Newell; Petrossian, George; Gleason, Thomas G.; Oh, Jae K.; Boulware, Michael J.; Qiao, Hongyan; Mugglin, Andrew S.; Reardon, Michael J.	NEW ENGLAND JOURNAL OF MEDICINE	2019	305	152.5
Transfemoral Aortic Valve Implantation New Criteria to Predict Vascular Complications	Hayashida, Kentaro; Lefevre, Thierry; Chevalier, Bernard; Hovasse, Thomas; Romano, Mauro; Garot, Philippe; Mylotte, Darren; Uribe, Jhonathan; Farge, Arnaud; Donzeau-Gouge, Patrick; Bouvier, Erik; Cormier, Bertrand; Morice, Marie-Claude	JACC-CARDIOVASCULAR INTERVENTIONS	2011	302	30.2
Transcatheter Aortic Valve Implantation Review of the Nature, Management, and Avoidance of Procedural Complications	Masson, Jean-Bernard; Kovac, Jan; Schuler, Gerhard; Ye, Jian; Cheung, Anson; Kapadia, Samir; Tuzcu, Murat E.; Kodali, Susheel; Leon, Martin B.; Webb, John G.	JACC-CARDIOVASCULAR INTERVENTIONS	2009	290	24.17
Determinants of Significant Paravalvular Regurgitation After Transcatheter Aortic Valve Implantation Impact of Device and Annulus Discrepancy	Detaint, Delphine; Lepage, Laurent; Himbert, Dominique; Brochet, Eric; Messika-Zeitoun, David; lung, Bernard; Vahanian, Alec	JACC-CARDIOVASCULAR INTERVENTIONS	2009	290	24.17
One year follow-up of the multi-centre European PARTNER transcatheter heart valve study	Lefevre, Thierry; Kappetein, Ari Pieter; Wolner, Ernst; Nataf, Patrick; Thomas, Martyn; Schaefer, Volker; De Bruyne, Bernard; Eltchaninoff, Helene; Thielmann, Matthias; Himbert, Dominique; Romano, Mauro; Serruys, Patrick; Wimmer-Greinecker, Gerhard	EUROPEAN HEART JOURNAL	2011	288	28.8
Acute kidney injury following transcatheter aortic valve implantation: predictive factors, prognostic value, and comparison with surgical aortic valve replacement	Bagur, Rodrigo; Webb, John G.; Nietlispach, Fabian; Dumont, Eric; De Larochelliere, Robert; Doyle, Daniel; Masson, Jean-Bernard; Gutierrez, Marcos J.; Clavel, Marie-Annick; Bertrand, Olivier E.; Pibarot, Philippe; Rodes-Cabau, Josep	EUROPEAN HEART JOURNAL	2010	287	26.09

(Continued)

Supplementary Table 1. Top 100 Articles Related to TAVI According to the Number of Citations (*Continued*)

Title	Authors	Source Title	Publication Year	Total Citations	Average per Year
Vascular Complications After Transcatheter Aortic Valve Replacement	Genereux, Philippe; Webb, John G.; Svensson, Lars G.; Kodali, Susheel K.; Satler, Lowell E.; Fearon, William F.; Davidson, Charles J.; Eisenhauer, Andrew C.; Makkar, Raj R.; Bergman, Geoffrey W.; Babaliaros, Vasilis; Bavaria, Joseph E.; Velazquez, Omaid C.; Williams, Mathew R.; Hueter, Irene; Xu, Ke; Leon, Martin B.	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2012	268	29.78
3-Dimensional Aortic Annular Assessment by Multidetector Computed Tomography Predicts Moderate or Severe Paravalvular Regurgitation After Transcatheter Aortic Valve Replacement A Multicenter Retrospective Analysis	Willson, Alexander B.; Webb, John G.; LaBounty, Troy M.; Achenbach, Stephan; Moss, Robert; Wheeler, Miriam; Thompson, Christopher; Min, James K.; Gurvitch, Ronen; Norgaard, Bjarne L.; Hague, Cameron J.; Toggweiler, Stefan; Binder, Ronald; Freeman, Melanie; Poulter, Rohan; Poulsen, Steen; Wood, David A.; Leipsic, Jonathon	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2012	267	29.67
Subclinical leaflet thrombosis in surgical and transcatheter bioprosthetic aortic valves: an observational study	Chakravarty, Tarun; Sondergaard, Lars; Friedman, John; De Backer, Ole; Berman, Daniel; Kofoed, Klaus E.; Jilaihawi, Hasan; Shiotani, Takahiro; Abramowitz, Yigal; Jorgensen, Troels H.; Rami, Tanya; Israr, Sharjeel; Fontana, Gregory; de Knecht, Martina; Fuchs, Andreas; Lyden, Patrick; Trento, Alfredo; Bhatt, Deepak L.; Leon, Martin B.; Makkar, Raj R.	LANCET	2017	265	66.25
Clinical Outcomes at 1 Year Following Transcatheter Aortic Valve Replacement	Holmes, David R., Jr.; Brennan, J. Matthew; Rumsfeld, John S.; Dai, David; O'Brien, Sean M.; Vemulapalli, Sreekanth; Edwards, Fred H.; Carroll, John; Shahian, David; Grover, Fred; Tuzcu, E. Murat; Peterson, Eric D.; Brindis, Ralph G.; Mack, Michael J.	JAMA-JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION	2015	263	43.83
The Impact of Frailty Status on Survival After Transcatheter Aortic Valve Replacement in Older Adults With Severe Aortic Stenosis A Single-Center Experience	Green, Philip; Woglom, Abigail E.; Genereux, Philippe; Daneault, Benoit; Paradis, Jean-Michel; Schnell, Susan; Hawkey, Marian; Maurer, Mathew S.; Kirtane, Ajay J.; Kodali, Susheel; Moses, Jeffrey W.; Leon, Martin B.; Smith, Craig R.; Williams, Mathew	JACC-CARDIOVASCULAR INTERVENTIONS	2012	259	28.78
Comparison of Aortic Root Dimensions and Geometries Before and After Transcatheter Aortic Valve Implantation by 2-and 3-Dimensional Transesophageal Echocardiography and Multislice Computed Tomography	Ng, Arnold C. T.; Delgado, Victoria; van der Kleij, Frank; Shanks, Miriam; van de Veire, Nico R. L.; Bertini, Matteo; Nucifora, Gaetano; van Bommel, Rutger J.; Tops, Laurens E.; de Weger, Arend; Tavilla, Giuseppe; de Roos, Albert; Kroft, Lucia J.; Leung, Dominic Y.; Schuijff, Joanne; Schali, Martin J.; Bax, Jeroen J.	CIRCULATION-CARDIOVASCULAR IMAGING	2010	255	23.18
Aortic Regurgitation Index Defines Severity of Peri-Prosthetic Regurgitation and Predicts Outcome in Patients After Transcatheter Aortic Valve Implantation	Sinning, Jan-Malte; Hammerstingl, Christoph; Vasa-Nicotera, Mariuca; Adenauer, Viktoria; Cachiguango, Sisa Josefina Lema; Scheer, Anne-Catherine; Hausen, Sven; Sedaghat, Alexander; Ghanem, Alexander; Mueller, Cornelius; Grube, Eberhard; Nickenig, Georg; Werner, Nikos	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2012	246	27.33
Predictors of Permanent Pacemaker Implantation in Patients With Severe Aortic Stenosis Undergoing TAVR A Meta-Analysis	Siontis, George C. M.; Jueni, Peter; Pilgrim, Thomas; Storteky, Stefan; Buellesfeld, Lutz; Meier, Bernhard; Wenaweser, Peter; Windecker, Stephan	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2014	245	35
Anatomical and Procedural Features Associated With Aortic Root Rupture During Balloon-Expandable Transcatheter Aortic Valve Replacement	Barbanti, Marco; Yang, Tae-Hyun; Cabau, Josep Rodes; Tamburino, Corrado; Wood, David A.; Jilaihawi, Hasan; Blanke, Phillip; Makkar, Raj R.; Latib, Azeem; Colombo, Antonio; Tarantini, Giuseppe; Raju, Rekha; Binder, Ronald K.; Nguyen, Giang; Freeman, Melanie; Ribeiro, Henrique B.; Kapadia, Samir; Min, James; Feuchtnner, Gudrun; Gurtvich, Ronen; Alqoofi, Faisal; Pelletier, Marc; Ussia, Gian Paolo; Napodano, Massimo; de Brito, Fabio Sandoli; Kodali, Susheel; Norgaard, Bjarne L.; Hansson, Nicolaj C.; Pache, Gregor; Canovas, Sergio J.; Zhang, Hongbin; Leon, Martin B.; Webb, John G.; Leipsic, Jonathon	CIRCULATION	2013	242	30.25

(Continued)

Supplementary Table 1. Top 100 Articles Related to TAVI According to the Number of Citations (*Continued*)

Title	Authors	Source Title	Publication Year	Total Citations	Average per Year
Paravalvular Leak After Transcatheter Aortic Valve Replacement The New Achilles' Heel? A Comprehensive Review of the Literature	Genereux, Philippe; Head, Stuart J.; Hahn, Rebecca; Daneault, Benoit; Kodali, Susheel; Williams, Mathew R.; van Mieghem, Nicolas M.; Alu, Maria C.; Serruys, Patrick W.; Kappetein, A. Pieter; Leon, Martin B.	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2013	237	29.63
United States feasibility study of transcatheter insertion of a stented aortic valve by the left ventricular apex	Svensson, Lars G.; Dewey, Todd; Kapadia, Samir; Roselli, Eric E.; Stewart, Alan; Williams, Matt; Anderson, William N.; Brown, David; Leon, Marty; Lytle, Bruce; Moses, Jeffrey; Mack, Michael; Tuzcu, Murat; Smith, Craig	ANNALS OF THORACIC SURGERY	2008	230	17.69
2-Year Outcomes in Patients Undergoing Surgical or Self-Expanding Transcatheter Aortic Valve Replacement	Reardon, Michael J.; Adams, David H.; Kleiman, Neal S.; Yakubov, Steven J.; Coselli, Joseph S.; Deeb, G. Michael; Gleason, Thomas G.; Lee, Joon Sup; Hermiller, James B., Jr.; Chetcuti, Stan; Heiser, John; Merhi, William; Zorn, George L., III; Tadros, Peter; Robinson, Newell; Petrossian, George; Hughes, G. Chad; Harrison, J. Kevin; Maini, Brijeshwar; Mumtaz, Mubashir; Conte, John V.; Resar, Jon R.; Aharonian, Vicken; Pfeffer, Thomas; Oh, Jae K.; Qiao, Hongyan; Popma, Jeffrey J.	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2015	227	37.83
Predictors and Clinical Outcomes of Permanent Pacemaker Implantation After Transcatheter Aortic Valve Replacement The PARTNER (Placement of Aortic Transcatheter Valves) Trial and Registry	Nazif, Tamim M.; Dizon, Jose M.; Hahn, Rebecca T.; Xu, Ke; Babaliaros, Vasilis; Douglas, Pamela S.; El-Chami, Mikhael E.; Herrmann, Howard C.; Mack, Michael; Makkar, Raj R.; Miller, Craig; Pichard, Augusto; Tuzcu, E. Murat; Szeto, Wilson Y.; Webb, John G.; Moses, Jeffrey W.; Smith, Craig R.; Williams, Mathew R.; Leon, Martin B.; Kodali, Susheel K.	JACC-CARDIOVASCULAR INTERVENTIONS	2015	227	37.83
2016 Annual Report of The Society of Thoracic Surgeons/American College of Cardiology Transcatheter Valve Therapy Registry	Grover, Frederick L.; Vemulapalli, Sreekanth; Carroll, John D.; Edwards, Fred H.; Mack, Michael J.; Thourani, Vinod H.; Brindis, Ralph G.; Shahian, David M.; Ruiz, Carlos E.; Jacobs, Jeffrey P.; Hanzel, George; Bavaria, Joseph E.; Tuzcu, E. Murat; Peterson, Eric D.; Fitzgerald, Susan; Kourits, Martina; Michaels, Joan; Christensen, Barbara; Seward, William E.; Hewitt, Kathleen; Holmes, David R., Jr.	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2017	224	56
Paravalvular regurgitation after transcatheter aortic valve replacement with the Edwards sapien valve in the PARTNER trial: characterizing patients and impact on outcomes	Kodali, Susheel; Pibarot, Philippe; Douglas, Pamela S.; Williams, Mathew; Xu, Ke; Thourani, Vinod; Rihal, Charanjit S.; Zafarinas, Alan; Doshi, Darshan; Davidson, Michael; Tuzcu, E. Murat; Stewart, William; Weissman, Neil J.; Svensson, Lars; Greason, Kevin; Maniar, Hersh; Mack, Michael; Anwaruddin, Saif; Leon, Martin B.; Hahn, Rebecca T.	EUROPEAN HEART JOURNAL	2015	218	36.33
5-Year Outcome After Transcatheter Aortic Valve Implantation	Toggweiler, Stefan; Humphries, Karin H.; Lee, May; Binder, Ronald K.; Moss, Robert R.; Freeman, Melanie; Ye, Jian; Cheung, Anson; Wood, David A.; Webb, John G.	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2013	218	27.25
EAE/ASE recommendations for the use of echocardiography in new transcatheter interventions for valvular heart disease	Zamorano, Jose L.; Badano, Luigi P.; Bruce, Charles; Chan, Kwan-Leung; Goncalves, Alexandra; Hahn, Rebecca T.; Keane, Martin G.; La Canna, Giovanni; Monaghan, Mark J.; Nihoyannopoulos, Petros; Silvestry, Frank E.; Vanoverschelde, Jean-Louis; Gillam, Linda D.	EUROPEAN HEART JOURNAL	2011	217	21.7
Results of Transfemoral or Transapical Aortic Valve Implantation Following a Uniform Assessment in High-Risk Patients With Aortic Stenosis	Himbert, Dominique; Descoutures, Fleur; Al-Attar, Nawwar; lung, Bernard; Ducrocq, Gregory; Detaint, Delphine; Brochet, Eric; Messika-Zeitoun, David; Francis, Fady; Ibrahim, Hassan; Nataf, Patrick; Vahanian, Alec	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2009	215	17.92

(Continued)

Supplementary Table 1. Top 100 Articles Related to TAVI According to the Number of Citations (Continued)

Title	Authors	Source Title	Publication Year	Total Citations	Average per Year
Predictive Factors, Management, and Clinical Outcomes of Coronary Obstruction Following Transcatheter Aortic Valve Implantation Insights From a Large Multicenter Registry	Ribeiro, Henrique B.; Webb, John G.; Makkar, Raj R.; Cohen, Mauricio G.; Kapadia, Samir R.; Kodali, Susheel; Tamburino, Corrado; Barbanti, Marco; Chakravarty, Tarun; Jilaihawi, Hasan; Paradis, Jean-Michel; de Brito, Fabio S., Jr.; Canovas, Sergio J.; Cheema, Asim N.; de Jaegere, Peter P.; del Valle, Raquel; Chiam, Paul T. L.; Moreno, Raul; Pradas, Gonzalo; Ruel, Marc; Salgado-Fernandez, Jorge; Sarmiento-Leite, Rogerio; Toeg, Hadi D.; Velianou, James L.; Zajarias, Alan; Babalarios, Vasilis; Cura, Fernando; Dager, Antonio E.; Manoharan, Ganesh; Lerakis, Stamatis; Pichard, Augusto D.; Radhakrishnan, Sam; Perin, Marco Antonio; Dumont, Eric; Larose, Eric; Pasian, Sergio G.; Nombela-Franco, Luis; Urena, Marina; Tuzcu, E. Murat; Leon, Martin B.; Amat-Santos, Ignacio J.; Leipsic, Jonathon; Rodes-Cabau, Josep	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2013	214	26.75
Risk of stroke after transcatheter aortic valve implantation (TAVI): a meta-analysis of 10,037 published patients	Esgebrecht, Holger; Schmermund, Axel; Voigtlaender, Thomas; Kahlert, Philipp; Erbel, Raimund; Mehta, Rajendra H.	EUROINTERVENTION	2012	214	23.78
Permanent Pacemaker Insertion After CoreValve Transcatheter Aortic Valve Implantation Incidence and Contributing Factors (the UK CoreValve Collaborative)	Khawaja, M. Z.; Rajani, R.; Cook, A.; Khavandi, A.; Moynagh, A.; Chowdhary, S.; Spence, M. S.; Brown, S.; Khan, S. Q.; Walker, N.; Trivedi, U.; Hutchinson, N.; De Belder, A. J.; Moat, N.; Blackman, D. J.; Levy, R. D.; Manoharan, G.; Roberts, D.; Khogali, S. S.; Crean, P.; Brecker, S. J.; Baumbach, A.; Mullen, M.; Laborde, J. -C.; Hildick-Smith, D.	CIRCULATION	2011	213	21.3
Long-Term Outcomes After Transcatheter Aortic Valve Implantation Insights on Prognostic Factors and Valve Durability From the Canadian Multicenter Experience	Rodes-Cabau, Josep; Webb, John G.; Cheung, Anson; Ye, Jian; Dumont, Eric; Osten, Mark; Feindel, Christopher M.; Natarajan, Madhu K.; Velianou, James L.; Martucci, Giuseppe; DeVarennes, Benoit; Chisholm, Robert; Peterson, Mark; Thompson, Christopher R.; Wood, David; Toggweiler, Stefan; Gurvitch, Ronen; Lichtenstein, Samuel V.; Doyle, Daniel; DeLarochelliere, Robert; Teoh, Kevin; Chu, Victor; Bailey, Kevin; Lachapelle, Kevin; Cheema, Asim; Latter, David; Dumesnil, Jean G.; Pibarot, Philippe; Horlick, Eric	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2012	210	23.33
Predictors of Mortality and Outcomes of Therapy in Low-Flow Severe Aortic Stenosis: A Placement of Aortic Transcatheter Valves (PARTNER) Trial Analysis	Herrmann, Howard C.; Pibarot, Philippe; Hueter, Irene; Gertz, Zachary M.; Stewart, William J.; Kapadia, Samir; Tuzcu, E. Murat; Babalarios, Vasilis; Thourani, Vinod; Szeto, Wilson Y.; Bavaria, Joseph E.; Kodali, Susheel; Hahn, Rebecca T.; Williams, Mathew; Miller, D. Craig; Douglas, Pamela S.; Leon, Martin B.	CIRCULATION	2013	209	26.13
Transcatheter valve implantation for patients with aortic stenosis: a position statement from the European Association of Cardio-Thoracic Surgery (EACTS) and the European Society of Cardiology (ESC), in collaboration with the European Association of Percutaneous Cardiovascular Interventions (EAPCI)	Vahanian, Alec; Alfieri, Ottavio R.; At-Altair, Nawwar; Antunes, Manuel J.; Bax, Jeroen; Cormier, Bertrand; Cribier, Alain; De Jaegere, Peter; Fournial, Gerard; Kappetein, Arie Pieter; Kovac, Jan; Luga, Susanne; Maisano, Francesco; Moat, Neil; Mohr, Friedrich -Wilhelm; Nataf, Patrick; Pierard, Luc; Pomar, Jose Luis; Schofer, Joachim; Tornos, Pilar; Tuzcu, Murat; van Hout, Ben; von Segesser, Ludwig K.; Walther, Thomas	EUROPEAN JOURNAL OF CARDIO-THORACIC SURGERY	2008	209	16.08
Transcatheter aortic valve implantation: 3-year outcomes of self-expanding CoreValve prosthesis	Ussia, Gian Paolo; Barbanti, Marco; Petronio, Anna Sonia; Tarantini, Giuseppe; Ettori, Federica; Colombo, Antonio; Violini, Roberto; Ramondo, Angelo; Santoro, Gennaro; Klugmann, Silvio; Bedogni, Francesco; Maisano, Francesco; Marzocchi, Antonio; Poli, Arnaldo; De Carlo, Marco; Napodano, Massimo; Fiorina, Claudia; De Marco, Federico; Antoniucci, David; de Cillis, Emanuela; Capodanno, Davide; Tamburino, Corrado	EUROPEAN HEART JOURNAL	2012	207	23

(Continued)

Supplementary Table 1. Top 100 Articles Related to TAVI According to the Number of Citations (*Continued*)

Title	Authors	Source Title	Publication Year	Total Citations	Average per Year
Multicenter Evaluation of a Next-Generation Balloon-Expandable Transcatheter Aortic Valve	Webb, John; Gerosa, Gino; Lefevre, Thierry; Leipsic, Jonathon; Spence, Mark; Thomas, Martyn; Thielmann, Matthias; Treede, Hendrik; Wendler, Olaf; Walther, Thomas	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2014	206	29.43
Timing, Predictive Factors, and Prognostic Value of Cerebrovascular Events in a Large Cohort of Patients Undergoing Transcatheter Aortic Valve Implantation	Nombela-Franco, Luis; Webb, John G.; de Jaegere, Peter P.; Toggweiler, Stefan; Nuis, Rutger-Jan; Dager, Antonio E.; Amat-Santos, Ignacio J.; Cheung, Anson; Ye, Jian; Binder, Ronald K.; van der Boon, Robert M.; Van Mieghem, Nicolas; Benitez, Luis M.; Perez, Sergio; Lopez, Javier; San Roman, Jose A.; Doyle, Daniel; DeLarochelliere, Robert; Urena, Marina; Leipsic, Jonathon; Dumont, Eric; Rodas-Cabau, Josep	CIRCULATION	2012	204	22.67
Cerebral Embolism Following Transcatheter Aortic Valve Implantation	Rodes-Cabau, Josep; Dumont, Eric; Boone, Robert H.; Larose, Eric; Bagur, Rodrigo; Gurvitch, Ronen; Bedard, Fernand; Doyle, Daniel; De Larochelliere, Robert; Ivasuria, Cleonie; Villeneuve, Jacques; Marrero, Alier; Cote, Melanie; Pibarot, Philippe; Webb, John G.	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2011	204	20.4
Transcatheter aortic valve implantation: current and future approaches	Rodes-Cabau, Josep	NATURE REVIEWS CARDIOLOGY	2012	203	22.56
Health-Related Quality of Life After Transcatheter Aortic Valve Replacement in Inoperable Patients With Severe Aortic Stenosis	Reynolds, Matthew R.; Magnuson, Elizabeth A.; Lei, Yang; Leon, Martin B.; Smith, Craig R.; Svensson, Lars G.; Webb, John G.; Babaliaros, Vasilis C.; Bowers, Bruce S.; Fearon, William E.; Herrmann, Howard C.; Kapadia, Samir; Kodali, Susheel K.; Makkar, Raj R.; Pichard, Augusto D.; Cohen, David J.	CIRCULATION	2011	202	20.2
The German Aortic Valve Registry (GARY): in-hospital outcome	Hamm, Christian W.; Moellmann, Helge; Holzhey, David; Beckmann, Andreas; Veit, Christof; Figulla, Hans-Reiner; Cremer, J.; Kuck, Karl-Heinz; Lange, Ruediger; Zahn, Ralf; Sack, Stefan; Schuler, Gerhard; Walther, Thomas; Beyersdorf, Friedhelm; Boehm, Michael; Heusch, Gerd; Funkat, Anne-Kathrin; Meinertz, Thomas; Neumann, Till; Papoutsis, Konstantinos; Schneider, Steffen; Welz, Armin; Mohr, Friedrich W.	EUROPEAN HEART JOURNAL	2014	201	28.71
Comparison Between Transcatheter and Surgical Prosthetic Valve Implantation in Patients With Severe Aortic Stenosis and Reduced Left Ventricular Ejection Fraction	Clavel, M. A.; Webb, J. G.; Rodas-Cabau, J.; Masson, J. B.; Dumont, E.; De Larochelliere, R.; Doyle, D.; Bergeron, S.; Baumgartner, H.; Burwash, I. G.; Dumesnil, J. G.; Mundigler, G.; Moss, R.; Kempny, A.; Bagur, R.; Bergler-Klein, J.; Gurvitch, R.; Mathieu, P.; Pibarot, P.	CIRCULATION	2010	200	18.18
Transapical minimally invasive aortic valve implantation; the initial 50 patients	Walther, Thomas; Falk, Volkmar; Kempfert, Joerg; Borger, Michael A.; Fassl, Jens; Chu, Michael W. A.; Schuler, Gerhard; Mohr, Friedrich W.	EUROPEAN JOURNAL OF CARDIO-THORACIC SURGERY	2008	199	15.31
The Impact of Integration of a Multidetector Computed Tomography Annulus Area Sizing Algorithm on Outcomes of Transcatheter Aortic Valve Replacement A Prospective, Multicenter, Controlled Trial	Binder, Ronald K.; Webb, John G.; Willson, Alexander B.; Urena, Marina; Hansson, Nicolaj C.; Norgaard, Bjarne L.; Pibarot, Philippe; Barbanti, Marco; Larose, Eric; Freeman, Melanie; Dumont, Eric; Thompson, Chris; Wheeler, Miriam; Moss, Robert R.; Yang, Tae-hyun; Pasion, Sergio; Hague, Cameron J.; Giang Nguyen; Raju, Rekha; Toggweiler, Stefan; Min, James K.; Wood, David A.; Rodas-Cabau, Josep; Leipsic, Jonathon	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2013	198	24.75
Transcatheter Aortic Valve Implantation Durability of Clinical and Hemodynamic Outcomes Beyond 3 Years in a Large Patient Cohort	Gurvitch, R.; Wood, D. A.; Tay, E. L.; Leipsic, J.; Ye, J.; Lichtenstein, S. V.; Thompson, C. R.; Carere, R. G.; Wijesinghe, N.; Nietlispach, F.; Boone, R. H.; Lauck, S.; Cheung, A.; Webb, J. G.	CIRCULATION	2010	195	17.73

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Supplementary Table 1. Top 100 Articles Related to TAVI According to the Number of Citations (*Continued*)

Title	Authors	Source Title	Publication Year	Total Citations	Average per Year
Safety and Efficacy of the Subclavian Approach for Transcatheter Aortic Valve Implantation With the CoreValve Revalving System	Petronio, Anna Sonia; De Carlo, Marco; Bedogni, Francesco; Marzocchi, Antonio; Klugmann, Silvio; Maisano, Francesco; Ramondo, Angelo; Ussia, Gian Paolo; Ettori, Federica; Poli, Arnaldo; Brambilla, Nedy; Saia, Francesco; De Marco, Federico; Colombo, Antonio	CIRCULATION-CARDIOVASCULAR INTERVENTIONS	2010	195	17.73
Renal Function as Predictor of Mortality in Patients After Percutaneous Transcatheter Aortic Valve Implantation	Sinning, Jan-Malte; Ghanem, Alexander; Steinhäuser, Hannah; Adenauer, Viktoria; Hammerstingl, Christoph; Nickenig, Georg; Werner, Nikos	JACC-CARDIOVASCULAR INTERVENTIONS	2010	194	17.64
Perioperative Results and Complications in 15,964 Transcatheter Aortic Valve Replacements Prospective Data From the GARY Registry	Walther, Thomas; Hamm, Christian W.; Schuler, Gerhard; Berkowitsch, Alexander; Koetting, Joachim; Mangner, Norman; Mudra, Harald; Beckmann, Andreas; Cremer, Jochen; Welz, Armin; Lange, Ruediger; Kuck, Karl-Heinz; Mohr, Friedrich W.; Moellmann, Helge	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	2015	193	32.17
Comparison of Transfemoral Transcatheter Aortic Valve Replacement Performed in the Catheterization Laboratory (Minimalist Approach) Versus Hybrid Operating Room (Standard Approach) Outcomes and Cost Analysis	Babaliaros, Vasilis; Devireddy, Chandan; Lerakis, Stamatios; Leonardi, Robert; Iturra, Sebastian A.; Mavromatis, Kreton; Leshnower, Bradley G.; Guyton, Robert A.; Kanitkar, Mihir; Keegan, Patricia; Simone, Amy; Stewart, James P.; Ghasemzadeh, Nima; Block, Peter; Thourani, Vinod H.	JACC-CARDIOVASCULAR INTERVENTIONS	2014	191	27.29
Multidetector Computed Tomography in Transcatheter Aortic Valve Implantation	Leipsic, Jonathon; Curvitch, Ronen; LaBounty, Troy M.; Min, James K.; Wood, David; Johnson, Mark; Ajlan, Amr M.; Wijesinghe, Namal; Webb, John G.	JACC-CARDIOVASCULAR IMAGING	2011	191	19.1