



## Message From the Editor-in-Chief

Hiroaki Shimokawa, MD, PhD

Dear Colleagues,

On behalf of the *Circulation Journal*, I am pleased to report the most frequently quoted CJ papers in 2014 by category that substantially contributed to the 2014 impact factor of the Journal.

### The Most Frequently Quoted CJ Papers (2012–2013) in 2014 by Category

The following papers, published in 2012–2013, were among the most frequently quoted papers in 2014 by category, thereby substantially contributing to the 2014 Impact Factor of the Journal (number in the parenthesis denotes the number of quotation in 2012–2013).

#### 1. Arrhythmia/Electrophysiology

1. (47) Hori M, Matsumoto M, Tanahashi N, Momomura S, Uchiyama S, Goto S, et al; on behalf of the J-ROCKET AF study investigators. Rivaroxaban vs. warfarin in Japanese patients with atrial fibrillation: The J-ROCKET AF Study. *Circ J* 2012; **76**: 2104–2111.
2. (22) Inoue H, Okumura K, Atarashi H, Yamashita T, Origasa H, Kumagai N, et al; on behalf of the J-RHYTHM Registry investigators. Target international normalized ratio values for preventing thromboembolic and hemorrhagic events in Japanese patients with non-valvular atrial fibrillation: Results of the J-RHYTHM Registry. *Circ J* 2013; **77**: 2264–2270.
3. (12) Kaseno K, Naito S, Nakamura K, Sakamoto T, Sasaki T, Tsukada N, et al. Efficacy and safety of periprocedural dabigatran in patients undergoing catheter ablation of atrial fibrillation. *Circ J* 2012; **76**: 2337–2342.
- (12) Yamashita T, Koretsune Y, Yasaka M, Inoue H, Kawai Y, Yamaguchi T, et al. Randomized, multicenter, warfarin-controlled phase II study of edoxaban in Japanese patients with non-valvular atrial fibrillation. *Circ J* 2012; **76**: 1840–1847.
5. (10) Suzuki S, Sagara K, Otsuka T, Matsumoto S, Funada R, Uejima T, et al. Gender-specific relationship between serum uric acid level and atrial fibrillation prevalence. *Circ J* 2012; **76**: 607–611.

#### 2. Cardiovascular Intervention

1. (8) Lahtela H, Rubboli A, Schlitt A, Karjalainen PP, Niemela M, Vikman S, et al; The AFCAS (Management of patients with Atrial Fibrillation undergoing Coronary Artery Stenting) study group. Heparin bridging vs. uninterrupted oral anticoagulation in patients with atrial fibrillation undergoing coronary artery stenting: Results from the AFCAS Registry. *Circ J* 2012; **76**: 1363–1368.
2. (7) Maeda K, Kuratani T, Mizote I, Shimamura K, Takeda Y, Torikai K, et al. Early experiences of transcatheter aortic valve replacement in Japan. *Circ J* 2013; **77**: 359–362.
- (7) Otake H, Shite J, Shinke T, Miyoshi N, Kozuki A, Kawamori H, et al. Impact of stent platform of paclitaxel-eluting stents: Assessment of neointimal distribution on optical coherence tomography. *Circ J* 2012; **76**: 1880–1888.
4. (6) Nagoshi R, Shinke T, Otake H, Shite J, Matsumoto D, Kawamori H, et al. Qualitative and quantitative assessment of stent restenosis by optical coherence tomography: Comparison between drug-eluting and bare-metal stents. *Circ J* 2013; **77**: 652–660.
- (6) Hariki H, Shinke T, Otake H, Shite J, Nakagawa M, Inoue T, et al. Potential benefit of final kissing balloon inflation after single stenting for the treatment of bifurcation lesions: Insights from optical coherence tomography observations. *Circ J* 2013; **77**: 1193–1201.

#### 3. Cardiovascular Surgery

1. (8) Sezai A, Soma M, Nakata K, Hata M, Yoshitake I, Wakui S, et al. Comparison of febuxostat and allopurinol for hyperuricemia in cardiac surgery patients (NU-FLASH Trial). *Circ J* 2013; **77**: 2043–2049.
2. (7) Yoshioka D, Sakaguchi T, Saito S, Miyagawa S, Nishi H, Yoshikawa Y, et al. Predictor of early mortality for severe heart failure patients with left ventricular assist device implantation: Significance of INTERMACS level and renal function. *Circ J* 2012; **76**: 1631–1638.
- (7) Hong DM, Jeon Y, Lee CS, Kim HJ, Lee JM, Bahk JH, et al. Effects of remote ischemic preconditioning with postconditioning in patients undergoing off-pump coronary artery bypass surgery: Randomized controlled trial. *Circ J* 2012; **76**: 884–890.

- (7) Imamura T, Kinugawa K, Shiga T, Endo M, Kato N, Inaba T, et al. Novel risk scoring system with preoperative objective parameters gives a good prediction of 1-year mortality in patients with a left ventricular assist device. *Circ J* 2012; **76**: 1895–1903.
5. (6) Handa N, Miyata H, Motomura N, Nishina T, Takamoto S. Procedure- and age-specific risk stratification of single aortic valve replacement in elderly patients based on Japan adult cardiovascular surgery database. *Circ J* 2012; **76**: 356–364.

#### 4. Heart Failure

1. (10) Kinugasa Y, Kato M, Sugihara S, Hirai M, Yamada K, Yanagihara K, et al. Geriatric nutritional risk index predicts functional dependency and mortality in patients with heart failure with preserved ejection fraction. *Circ J* 2013; **77**: 705–711.
- (10) Imamura T, Kinugawa K, Shiga T, Kato N, Muraoka H, Minatsuki S, et al. Novel criteria of urine osmolality effectively predict response to tolvaptan in decompensated heart failure patients: Association between non-responders and chronic kidney disease. *Circ J* 2013; **77**: 397–404.
3. (8) Oh J, Kang SM, Won H, Hong N, Kim SY, Park S, et al. Prognostic value of change in red cell distribution width 1 month after discharge in acute decompensated heart failure patients. *Circ J* 2012; **76**: 109–116.
- (8) Shirakabe A, Hata N, Kobayashi N, Shinada T, Tomita K, Tsurumi M, et al. Prognostic impact of acute kidney injury in patients with acute decompensated heart failure. *Circ J* 2013; **77**: 687–696.
- (8) Imamura T, Kinugawa K, Minatsuki S, Muraoka H, Kato N, Inaba T, et al. Urine osmolality estimated using urine urea nitrogen, sodium and creatinine can effectively predict response to tolvaptan in decompensated heart failure patients. *Circ J* 2013; **77**: 1208–1213.

#### 5. Imaging

1. (19) Takigiku K, Takeuchi M, Izumi C, Yuda S, Sakata K, Ohte N, et al; on behalf of the JUSTICE investigators. Normal range of left ventricular 2-dimensional strain: Japanese Ultrasound Speckle Tracking of the Left Ventricle (JUSTICE) Study. *Circ J* 2012; **76**: 2623–2632.
2. (15) Kume T, Okura H, Miyamoto Y, Yamada R, Saito K, Tamada T, et al. Natural history of stent edge dissection, tissue protrusion and incomplete stent apposition detectable only on optical coherence tomography after stent implantation: Preliminary observation. *Circ J* 2012; **76**: 698–703.
3. (7) Ozaki Y, Kitabata H, Tsujioka H, Hosokawa S, Kashiwagi M, Ishibashi K, et al. Comparison of contrast media and low-molecular-weight dextran for frequency-domain optical coherence tomography. *Circ J* 2012; **76**: 922–927.
- (7) Nakajima K, Matsuo S, Okuyama C, Hatta T, Tsukamoto K, Nishimura S, et al. Cardiac event risk in Japanese subjects estimated using gated myocardial perfusion imaging, in conjunction with diabetes mellitus and chronic kidney disease. *Circ J* 2012; **76**: 168–175.
5. (6) Nakamori S, Matsuoka K, Onishi K, Kurita T, Ichikawa Y, Nakajima H, et al. Prevalence and signal characteristics of late gadolinium enhancement on contrast-enhanced magnetic resonance imaging in patients with takotsubo cardiomyopathy. *Circ J* 2012; **76**: 914–921.

#### 6. Ischemic Heart Disease

1. (13) Satoh K, Fukumoto Y, Sugimura K, Miura Y, Aoki T, Nochioka K, et al. Plasma cyclophilin A is a novel biomarker for coronary artery disease. *Circ J* 2013; **77**: 447–455.
2. (12) Domei T, Yokoi H, Kuramitsu S, Soga Y, Arita T, Ando K, et al. Ratio of serum n-3 to n-6 polyunsaturated fatty acids and the incidence of major adverse cardiac events in patients undergoing percutaneous coronary intervention. *Circ J* 2012; **76**: 423–429.
3. (9) Shiono Y, Kitabata H, Kubo T, Masuno T, Ohta S, Ozaki Y, et al. Optical coherence tomography-derived anatomical criteria for functionally significant coronary stenosis assessed by fractional flow reserve. *Circ J* 2012; **76**: 2218–2225.
4. (7) Biasucci LM, Porto I, Di Vito L, De Maria GL, Leone AM, Tinelli G, et al. Differences in microparticle release in patients with acute coronary syndrome and stable angina. *Circ J* 2012; **76**: 2174–2182.
5. (6) França CN, Pinheiro LFM, Izar MCO, Brunialti MKC, Salomão R, Bianco HT, et al. Endothelial progenitor cell mobilization and platelet microparticle release are influenced by clopidogrel plasma levels in stable coronary artery disease. *Circ J* 2012; **76**: 729–736.

#### 7. Molecular Cardiology/Myocardial Disease

1. (8) Delmas C, Lairez O, Mulin E, Delmas T, Boudou N, Dumonteil N, et al. Anxiodepressive disorders and chronic psychological stress are associated with Tako-tsubo cardiomyopathy: New physiopathological hypothesis. *Circ J* 2013; **77**: 175–180. (Myocardial Disease)
2. (7) Virani SS, Brautbar A, Lee VV, Elayda M, Morrison AC, Grove ML, et al. Chromosome 9p21 single nucleotide polymorphisms are not associated with recurrent myocardial infarction in patients with established coronary artery disease. *Circ J* 2012; **76**: 950–956. (Molecular Cardiology)

3. (6) Otsuka H, Arimura T, Abe T, Kawai H, Aizawa Y, Kubo T, et al. Prevalence and distribution of sarcomeric gene mutations in Japanese patients with familial hypertrophic cardiomyopathy. *Circ J* 2012; **76**: 453–461. (Myocardial Disease)
- (6) Kosuge M, Ebina T, Hibi K, Iwahashi N, Tsukahara K, Endo M, et al. Differences in negative T waves between takotsubo cardiomyopathy and reperfused anterior acute myocardial infarction. *Circ J* 2012; **76**: 462–468. (Myocardial Disease)
- (6) Choi JO, Kim EY, Lee GY, Lee SC, Park SW, Kim DK, et al. Predictors of left ventricular reverse remodeling and subsequent outcome in nonischemic dilated cardiomyopathy. *Circ J* 2013; **77**: 462–469. (Myocardial Disease)

## 8. Pediatric Cardiology and Adult Congenital Heart Disease

1. (7) Kamiya CA, Iwamiya T, Neki R, Katsuragi S, Kawasaki K, Miyoshi T, et al. Outcome of pregnancy and effects on the right heart in women with repaired tetralogy of Fallot. *Circ J* 2012; **76**: 957–963.
2. (6) Kodo K, Nishizawa T, Furutani M, Arai S, Ishihara K, Oda M, et al. Genetic analysis of essential cardiac transcription factors in 256 patients with non-syndromic congenital heart defects. *Circ J* 2012; **76**: 1703–1711.
3. (5) Saji T, Matsuura H, Hasegawa K, Nishikawa T, Yamamoto E, Ohki H, et al. Comparison of the clinical presentation, treatment, and outcome of fulminant and acute myocarditis in children. *Circ J* 2012; **76**: 1222–1228.

## 9. Peripheral Vascular Disease/Pulmonary Circulation

1. (14) Fukumoto Y, Yamada N, Matsubara H, Mizoguchi M, Uchino K, Yao A, et al. Double-blind, placebo-controlled clinical trial with a Rho-kinase inhibitor in pulmonary arterial hypertension: A pilot efficacy trial. *Circ J* 2013; **77**: 2619–2625. (Pulmonary Circulation)
2. (10) Soga Y, Iida O, Kawasaki D, Yamauchi Y, Suzuki K, Hirano K, et al; REAL-AI investigators. Contemporary outcomes after endovascular treatment for aorto-iliac artery disease. *Circ J* 2012; **76**: 2697–2704. (Peripheral Vascular Disease)
3. (8) Motoji Y, Tanaka H, Fukuda Y, Ryo K, Emoto N, Kawai H, et al. Efficacy of right ventricular free-wall longitudinal speckle-tracking strain for predicting long-term outcome in patients with pulmonary hypertension. *Circ J* 2013; **77**: 756–763. (Pulmonary Circulation)
4. (7) Ishihara T, Haraguchi G, Tezuka D, Kamiishi T, Inagaki H, Isobe M. Diagnosis and assessment of Takayasu arteritis by multiple biomarkers. *Circ J* 2013; **77**: 477–483. (Peripheral Vascular Disease)
- (7) Katsuragi S, Yamanaka K, Neki R, Kamiya C, Sasaki Y, Osato K, et al. Maternal outcome in pregnancy complicated with pulmonary arterial hypertension. *Circ J* 2012; **76**: 2249–2254. (Pulmonary Circulation)

## 10. Reviews/Editorials

1. (22) Swift DL, Lavie CJ, Johannsen NM, Arena R, Earnest CP, O'Keefe JH, et al. Physical activity, cardiorespiratory fitness, and exercise training in primary and secondary coronary prevention. *Circ J* 2013; **77**: 281–292. (Review)
2. (19) Berne P, Brugada J. Brugada syndrome 2012. *Circ J* 2012; **76**: 1563–1571. (Review)
3. (18) Antzelevitch C. Genetic, molecular and cellular mechanisms underlying the J wave syndromes. *Circ J* 2012; **76**: 1054–1065. (Review)
4. (17) Simon DI. Inflammation and vascular injury: Basic discovery to drug development. *Circ J* 2012; **76**: 1811–1818. (Review)
5. (15) Elrod JW, Molkentin JD. Physiologic functions of cyclophilin D and the mitochondrial permeability transition pore. *Circ J* 2013; **77**: 1111–1122. (Review)
6. (14) Minamino T. Cardioprotection from ischemia/reperfusion injury: Basic and translational research. *Circ J* 2012; **76**: 1074–1082. (Review)
7. (13) Ishihara M. Acute hyperglycemia in patients with acute myocardial infarction. *Circ J* 2012; **76**: 563–571. (Review)
- (13) Annema W, von Eckardstein A. High-density lipoproteins: Multifunctional but vulnerable protections from atherosclerosis. *Circ J* 2013; **77**: 2432–2448. (Review)
9. (12) Ohira T, Iso H. Cardiovascular disease epidemiology in Asia: An overview. *Circ J* 2013; **77**: 1646–1652. (Review)
- (12) Veerakul G, Nademanee K. Brugada syndrome: Two decades of progress. *Circ J* 2012; **76**: 2713–2722. (Review)
11. (11) Feigenbaum H, Mastouri R, Sawada S. A practical approach to using strain echocardiography to evaluate the left ventricle. *Circ J* 2012; **76**: 1550–1555. (Review)
- (11) Oldenburg O. Cheyne-stokes respiration in chronic heart failure: Treatment with adaptive servoventilation therapy. *Circ J* 2012; **76**: 2305–2317. (Review)
- (11) Sakata Y, Shimokawa H. Epidemiology of heart failure in Asia. *Circ J* 2013; **77**: 2209–2217. (Review)
- (11) Murakoshi N, Aonuma K. Epidemiology of arrhythmias and sudden cardiac death in Asia. *Circ J* 2013; **77**: 2419–2431. (Review)
15. (10) Pisters R, Lane DA, Marin F, Camm AJ, Lip GYH. Stroke and thromboembolism in atrial fibrillation: Systematic review of stroke risk factors and risk stratification schema. *Circ J* 2012; **76**: 2289–2304. (Review)
16. (9) Maron BA, Michel T. Subcellular localization of oxidants and redox modulation of endothelial nitric oxide synthase. *Circ J* 2012; **76**: 2497–2512. (Review)

- (9) Onouchi Y. Genetics of Kawasaki disease: What we know and don't know. *Circ J* 2012; **76**: 1581–1586. (Review)
- (9) Beech DJ. Characteristics of transient receptor potential canonical calcium-permeable channels and their relevance to vascular physiology and disease. *Circ J* 2013; **77**: 570–579. (Review)
- (9) Polomsky M, Puskas JD. Off-pump coronary artery bypass grafting: The current state. *Circ J* 2012; **76**: 784–790. (Review)
- (9) Alegria-Barrero E, Chan PH, Paulo M, Duncan A, Price S, Moat N. Edge-to-edge percutaneous repair of severe mitral regurgitation: State-of-the-art for Mitraclip® implantation. *Circ J* 2012; **76**: 801–808. (Review)

## 11. LBCT/LBCS/Rapid

1. (21) Sugimura K, Fukumoto Y, Satoh K, Nochioka K, Miura Y, Aoki T, et al. Percutaneous transluminal pulmonary angioplasty markedly improves pulmonary hemodynamics and long-term prognosis in patients with chronic thromboembolic pulmonary hypertension. *Circ J* 2012; **76**: 485–488. (Rapid)
2. (14) Sato N, Kajimoto K, Keida T, Mizuno M, Minami Y, Yumino D, et al; on behalf of the ATTEND investigators. Clinical features and outcome in hospitalized heart failure in Japan (from the ATTEND Registry). *Circ J* 2013; **77**: 944–951. (LBCS)
3. (11) Takano H, Mizuma H, Kuwabara Y, Sato Y, Shindo S, Kotooka N, et al; on behalf of the PEARL Study investigators. Effects of pitavastatin in Japanese patients with chronic heart failure: The Pitavastatin Heart Failure Study (PEARL Study). *Circ J* 2013; **77**: 917–925. (LBCT)
4. (6) Aoki T, Takahashi J, Fukumoto Y, Yasuda S, Ito K, Miyata S, et al. Effect of the Great East Japan Earthquake on cardiovascular diseases: Report from the 10 hospitals in the disaster area. *Circ J* 2013; **77**: 490–493. (Rapid)
- (6) Daida H, Miyauchi K, Ogawa H, Yokoi H, Matsumoto M, Kitakaze M, et al; PACIFIC investigators. Management and two-year long-term clinical outcome of acute coronary syndrome in Japan: Prevention of Atherothrombotic Incidents Following Ischemic Coronary Attack (PACIFIC) Registry. *Circ J* 2013; **77**: 934–943. (LBCS)

## 12. Other Categories

1. (22) Matsubara J, Sugiyama S, Akiyama E, Iwashita S, Kurokawa H, Ohba K, et al. Dipeptidyl peptidase-4 inhibitor, sitagliptin, improves endothelial dysfunction in association with its anti-inflammatory effects in patients with coronary artery disease and uncontrolled diabetes. *Circ J* 2013; **77**: 1337–1344. (Vascular Biology and Vascular Medicine)
2. (15) Jang JS, Jin HY, Seo JS, Yang TH, Kim DK, Kim TH, et al. Sodium bicarbonate therapy for the prevention of contrast-induced acute kidney injury: A systematic review and meta-analysis. *Circ J* 2012; **76**: 2255–2265. (Renal Disease)
- (15) Chung SY, Sheu JJ, Lin YJ, Sun CK, Chang LT, Chen YL, et al. Outcome of patients with profound cardiogenic shock after cardiopulmonary resuscitation and prompt extracorporeal membrane oxygenation support: A single-center observational study. *Circ J* 2012; **76**: 1385–1392. (Critical Care)
4. (12) Watanabe I, Tatebe J, Namba S, Koizumi M, Yamazaki J, Morita T. Activation of aryl hydrocarbon receptor mediates indoxyl sulfate-induced monocyte chemoattractant protein-1 expression in human umbilical vein endothelial cells. *Circ J* 2013; **77**: 224–230. (Vascular Biology and Vascular Medicine)
5. (10) Lee HC, An SG, Lee HW, Park JS, Cha KS, Hong TJ, et al. Safety and effect of adipose tissue-derived stem cell implantation in patients with critical limb ischemia: A pilot study. *Circ J* 2012; **76**: 1750–1760. (Regenerative Medicine)
6. (9) Ohigashi H, Haraguchi G, Konishi M, Tezuka D, Kamiishi T, Ishihara T, et al. Improved prognosis of Takayasu arteritis over the past decade: Comprehensive analysis of 106 patients. *Circ J* 2012; **76**: 1004–1011. (Vascular Medicine)
- (9) Nohara R, Daida H, Hata M, Kaku K, Kawamori R, Kishimoto J, et al; Justification for Atherosclerosis Regression Treatment (JART) Investigators. Effect of intensive lipid-lowering therapy with rosuvastatin on progression of carotid intima-media thickness in Japanese patients: Justification for Atherosclerosis Regression Treatment (JART) Study. *Circ J* 2012; **76**: 221–229. (Vascular Medicine)
- (9) Moon JH, Chae MK, Kim KJ, Kim HM, Cha BS, Lee HC, et al. Decreased endothelial progenitor cells and increased serum glycated albumin are independently correlated with plaque-forming carotid artery atherosclerosis in type 2 diabetes patients without documented ischemic disease. *Circ J* 2012; **76**: 2273–2279. (Vascular Biology and Vascular Medicine)

The Editorial Team looks forward to receiving manuscripts with high scientific impact from all over the world.

Hiroaki Shimokawa, MD, PhD

Editor-in-Chief

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