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Launching *Circulation Reports*
— A New Era of Challenge in Cardiovascular Science —

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Congratulations on the launch of a new cutting-edge online journal, *Circulation Reports*!

Circulation Reports is the sister journal of *Circulation Journal*, an official journal of the Japanese Circulation Society, guided by the strong leadership of Professor Masataka Sata at Tokushima University as Editor-in-Chief. *Circulation Reports* covers extensive fields of cardiovascular medicine, related not only to basic and clinical science, but also to surgery, engineering, nursing, clinical trials, politics, and economics.

On behalf of the editorial members of *Circulation Reports*, I would like to explain the general scope of the journal, particularly focusing on basic cardiovascular research.

Circulation Reports Strongly Encourages the Submission of Papers Related to Basic and Experimental Cardiovascular Science

According to the statistics, submitted manuscripts in the category of "experimental" for *Circulation Journal* in 2015 comprised only 10.1% of the submissions, while in contrast, those in the "clinical" category comprised 67.3% (**Figure**).[1] Our *Circulation Reports* editorial team would like to increase the number of submissions related to experimental and basic cardiovascular medicine, particularly those papers that cannot be published due to the highly competitive space limitation of *Circulation Journal*.

On the one hand, the publishing of high-quality papers in essential clinical practice and the establishing of new evidence for cardiovascular medicine has been a top priority of *Circulation Journal* since its launch. On the other hand, the editorial teams of *Circulation Journal* and *Circulation Reports* consider that good papers in clinical medicine and in basic cardiovascular science are the two sides of a coin.

Circulation Reports opens the submission window fully worldwide, while also ensuring that the Journal pays attention to the research activity of Japanese scientists, because the Journal is an official publication of the Japanese Circulation Society. Unfortunately, as the former Editor-in-Chief of *Circulation Journal*, Professor Hiroaki Shimokawa at Tohoku University, has recently pointed out, various publishing indexes indicated that the activity of basic cardiovascular research in Japan has been shrinking, in clear contrast to that in China and South Korea.[2,3]

Multiple factors, that is, less funding for research as well as difficulties in publishing papers, have caused this imbalance between clinical and basic cardiovascular sciences in our Journals, and particularly in scientific activity in Japan. The limitless publishing space of *Circulation Reports* and the seamless exchange of manuscripts with *Circulation Journal* will therefore help to increase your motivation for basic cardiovascular science. Also, this Editorial policy of course applies to cardiovascular scientists all over the world.

Circulation Reports Seeks High-Quality Papers Directly Assessing the Molecular Mechanisms of Cardiovascular Disease and the Molecular Targets

To maintain a high standard similar to *Circulation Journal*, *Circulation Reports* strongly encourages authors to submit papers directly assessing molecular mechanisms and targets related to cardiovascular disease. This is because recent clinical trials in different fields have discovered a common molecular pathway directly correlated with multiple diseases.

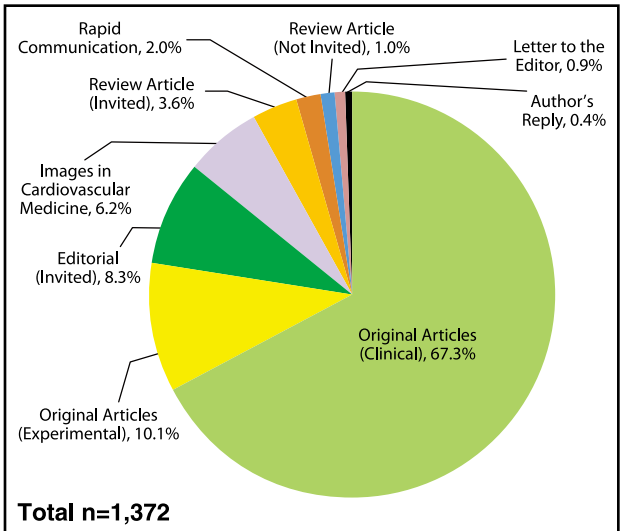

Figure. Details of manuscripts submitted to *Circulation Journal* in 2015.

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For instance, around 30 years ago sustained inflammatory reaction in atherosclerosis in both experimental and human materials was shown to involve various inflammatory cytokines, such as interleukin (IL)-1, as well as C-reactive protein (CRP),[4–6] but subsequent clinical and experimental studies have not been able to identify the main actor in inflammation in human atherosclerosis, even though mouse models have implicated IL-1 receptor signaling in plaque destabilization.[7] A recent phase 3 clinical study using canakinumab, a therapeutic monoclonal antibody targeting IL-1β, involving 10,061 patients with previous myocardial infarction and high-sensitivity CRP ≥2 mg/L, showed that inhibition of IL-1β resulted not only in decreased CRP, but also in reduction of cardiovascular event recurrence, irrespective of lipid lowering.[8,9] Therefore, that trial is the first to show that IL-1β-related innate immune response, rather than CRP, may be one of the main actors – in other words, an upstream player – in the human atherosclerosis theater.

The IL-1β story has been continued. Amazingly, a subsequent analysis of the CANTOS trial showed that anti-inflammatory treatment using canakinumab significantly reduced the incidence and mortality of lung cancer,[10] suggesting that the IL-1β signal transduction pathway is clearly common to the completely different diseases of both atherothrombosis and lung cancer. A prospective study assessing the role of IL-1β in lung cancer will be initiated in the near future.

This IL-1β story and other examples show that continuous and steady progress in basic research is required to produce epoch-making new treatment.

Closing Remarks

Clinical/basic studies as well as translational/reverse translational research are the two sides of a coin, and should be developed equally on both sides.

Welcome to *Circulation Reports*!

We editorial members welcome you valuable authors, especially young scientists, who are interested in basic and clinical cardiovascular medicine.

Disclosures

The author declares no conflict of interest.

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