



CME INSTRUCTIONS: CORONARY CIRCULATION: PRESSURE/FLOW PARAMETERS FOR ASSESSMENT OF ISCHEMIC HEART DISEASE

Please read the instructions below before proceeding. All available Journal CME articles are available at the ASNC Learning Center (<https://asnc.community360.net>).

STATEMENT OF NEED

The following gaps in knowledge have been identified in clinical practice demonstrating the learner's need to acquire the skills and strategies presented in this CME activity.

- (1) Many different pressure flow (or both) metrics are available for assessment of the physiological status of the coronary circulation in the setting of ischemic heart disease. There is a need to better understand their differences and similarities as well as strengths and weaknesses.
- (2) More informed integration into clinical practice of both invasive and non-invasive metrics requires a thorough understanding of the underlying pathophysiology involved; an area which also requires emphasis.
- (3) Upon completion of this CME activity, the practitioner will be able to improve clinical practice through enhanced understanding of quantitative indices of the physiological status of the coronary circulation in the setting of ischemic heart disease.

TARGET AUDIENCE

This activity is targeted at imaging professionals and is intended to provide the latest information on clinical practice and cutting-edge scientific advances in nuclear cardiology and cardiac imaging.

OVERALL PURPOSE

The purpose of this CME activity in the Journal of Nuclear Cardiology is to increase the learners'

competence in the application of nuclear cardiology strategies in clinical practice.

OBJECTIVES

After reading and reflecting upon this article in the Journal of Nuclear Cardiology, the learner should be able to:

- (1) Understand the basic hydraulic equation describing a pressure drop across a coronary stenosis.
- (2) Understand strengths and limitations of commonly employed invasive and non-invasive metrics governed by this equation (e.g., FFR, iFR, CFR, IMR) which are commonly employed to characterize the physiological status of the coronary circulation in the setting of ischemic heart disease.
- (3) Understand the potential importance of quantitative PET measurements of absolute MBF (rest and stress) in informing patient management in the setting of chronic ischemic heart disease.
- (4) Understand relationships among quantitative PET measurements of absolute MBF (rest and stress) and physiological data which have been obtained from cardiac catheterization, CCTA, or CMR examinations of the coronary circulation in the setting of ischemic heart disease.

ACCREDITATION AND CONTINUING EDUCATION CREDIT

Physicians

The American Society of Nuclear Cardiology is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The American Society of Nuclear Cardiology designates this journal-based CME activity for a maximum of 1 *AMA PRA Category 1 Credits*TM. Physicians should only claim credit commensurate with the extent of their participation in the activity.

Technologists

The American Society of Nuclear Cardiology is a recognized provider of continuing education credit for technologists. ASNC's Continuing Education (CE) credit is accepted by both NMTCB and ARRT. This

journal-based activity has been approved for a maximum of 1 ARRT Category A credits for Technologists.

PRINCIPAL FACULTY AND THEIR CREDENTIALS

CME Editor: **William A. Van Decker, MD, FASNC**, Temple University Hospital

Principal Author: **Henry Gewirtz, MD**, Harvard Medical School, Boston, MA

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The following author(s) who were involved in the development of this activity reported no financial relationships: **Henry Gewirtz, MD**.

The following members of the JNC Editorial Staff and ASNC staff who were involved in the planning and development of this activity reported no financial relationships: **William Van Decker, MD, FASNC and Wendy Passerell**.

The following reviewer(s) who were involved in the development of this activity reported the following financial relationships: **Karthik Ananthasubramaniam, MD**, Research Grants—Astellas Pharma, MyoKardia, Alnylam Pharmaceuticals, Lantheus Medical Imaging; Advisory Board—Astellas Pharma, Alnylam Pharmaceuticals.

The following reviewer(s) who were involved in the development of this activity reported no financial relationships: **Maria Sciammarella, MD**.

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CONTINUING EDUCATION TERM OF APPROVAL

Release Date: March 12, 2019

Expiration Date: March 11, 2020

METHOD OF PARTICIPATION

To receive a statement of credit, participants must successfully complete the post-test quiz and evaluation questions after reading and reflecting on the article. The participant selects the single most appropriate answer for each post-test question. A score of 75% or higher is needed to pass the post-test quiz. If less than 75% of the questions were correct, the participant will be notified and may resubmit the quiz with modified answers up to three times.

Estimated time of completion is one hour.

To complete the post-test and evaluation, please visit the ASNC Learning Center at <https://asnc.communty360.net>.

BIBLIOGRAPHY

Bibliographic sources are cited throughout the article and a full bibliography is provided at the end of the article to provide you with further study resources on this topic.

MEDIUM OR COMBINATION OF MEDIUM USED

Internet Explorer (Latest Version)

Firefox (Latest Version)

Google Chrome

Safari (Latest Version)

Adobe Acrobat Reader

Internet Explorer is not supported on the Macintosh Mac OS 10.4

Windows 7 or above

PROCESSING FEES

ASNC members may claim continuing education credits at no charge. Non-members will be charged \$50 per activity.

ACKNOWLEDGEMENT OF COMMERCIAL SUPPORT

This activity has no commercial support.

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CONTACT INFORMATION

For technical assistance or information, please contact CECity at lifetimesupport@premierinc.com.

For questions regarding CME content or obtaining CME credit, please contact the American Society of Nuclear Cardiology at info@asnc.org.