ACIST Diastolic Pressure Ratio (dPR)

Non-hyperemic index for coronary physiology

Reducing costs, time and patient discomfort

ACIST diastolic pressure ratio (dPR), using the ACIST RXi[®] Rapid Exchange System, provides a non-hyperemic alternative for physiological assessment of coronary disease. Non-hyperemic pressure ratios, such as dPR, may reduce patient discomfort^{*}, cost^{**} and procedural time.^{***}







ACIST RXi[®] Rapid Exchange System

Uses Navvus MicroCatheter, the go-to alternative to traditional pressure wires, enabling the physician to use their 0.014" guidewire of choice for reliable assessment of coronary physiology.

2 2

ACIST dPR algorithm

The dPR algorithm provides a non-hyperemic alternative for evaluating coronary artery stenosis by measuring a ratio of P_d to P_a at the peak-to-peak midpoint, averaged over five consecutive heartbeats, without relying on an ECG signal for the calculation.





ACIST dPR by the numbers (compared to iFR)¹

0.89 dPR cutpoint 0.993 AUC 99.68% Sensitivity





ACIST Diastolic Pressure Ratio (dPR)

Analysis of the ACIST dPR vs. iFR¹

Purpose

Waveform data collected during the CONTRAST² clinical study was retrospectively assessed on both the ACIST RXi System and Philips CORE Mobile System to compare dPR and iFR results.

Methods

A validated hemodynamic test fixture was used to simulate signals to the RXi and Philips consoles for 671 paired lesions.

12 sites



Results

Diagnostic accuracy of dPR (cutpoint of 0.89) referenced to iFR (0.89) was **93.89%**

Key points

- ACIST dPR is highly correlated with iFR
- ACIST dPR provides similar diagnostic accuracy as iFR

Passing-Bablok Comparison between dPR (cutpoint 0.89) and iFR (0.89)



Learn more about ACIST dPR* and the Navvus® Rapid Exchange Pressure MicroCatheter at ACIST.com

ROnly

- * Reduced side effect profile when comparing resting approach (iFR, dPR, Pd/Pa) to FFR with adenosine induced hyperemia.
 ** Cost savings based on the reduced cost of utilizing a resting approach compared to conventional FFR and respective cost of administration of hyperemic agent (adenosine).
- *** When comparing resting index (iFR, dPR, Pd/Pa) to FFR with adenosine induced hyperemia.
- 1. Data on file TR-14743.
- 2. Johnson NP, Jeremias A, Zimmermann FM, et al. Continuum of Vasodilator Stress From Rest to Contrast Medium to Adenosine Hyperemia for Fractional Flow Reserve Assessment. JACC Cardiovasc Interv. 2016;9(8):757-767.

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