Background: Accumulation of advanced glycation end products (AGEs) can be a predictor of plaque vulnerability in patients with high-risk patients for future cardiovascular events. CVD, thus suggesting the clinical utility of measurement of SAF in identifying predictors of ruptured plaques. SAF and medication for diabetes were independently associated with plaque vulnerability in patients with high SAF were associated with plaque vulnerability in patients with calcified plaques.

Results: The high SAF group showed much more thin cap fibroatheroma (TCFA), macrophages, microvessels, and calcified or ruptured plaques compared to the low SAF groups.

Conclusions: The high SAF group had more TCFA, macrophages, microvessels, and calcified or ruptured plaques compared to the low SAF groups. SAF and diabetes were independently associated with plaque vulnerability in patients with CVD.

Purpose: We aimed to assess the concordance of FFR and iFR results using a new parameter, the instantaneous wave free ratio (iFR), as an alternative or complementary method to FFR which does not require the use of adenosine. The ideal cut-off points were 0.88–0.94.

Methods: We aimed to analyze the diagnostic accuracy of iFR using FFR as gold standard, iFR had a reasonable diagnostic accuracy, slightly inferior to other published results. The ideal cut-off points were 0.88–0.94.

Results: The optimal iFR cut-off point was also <0.75. The sensitivity and specificity of iFR were both lower than those of FFR, with a PPV of 19% and NPV of 97%.

Conclusions: By using FFR as a gold standard, iFR had a reasonable diagnostic accuracy, slightly inferior to other published results. The ideal cut-off points were 0.88–0.94. This strategy is much less consensual than FFR alone.

Purpose: Can we rely on iFR for avoiding FFR? Conclusions of a 5-year experience

Methods: We aimed to examine the relationship between skin autofluorescence (SAF) and plaque composition evaluated by frequency-domain optical coherence to-

Conclusions: SAF and medication for diabetes were independently associated with plaque vulnerability in patients with CVD. The high SAF group showed much more thin cap fibroatheroma (TCFA), macrophages, microvessels, and calcified or ruptured plaques compared to the low SAF groups.
the principle of the “hybrid strategy”, based on the 5-year experience of a single center. We also aimed to analyse the effect of IFR in the operator’s decision to proceed to FFR, and its impact on procedure duration and radiation time/dosage.

**Methods:** Single-center registry of all patients undergoing functional coronary lesion assessment during 5 years. FFR was used as a gold standard (with a cut-off point for intervention <0.80) for assessing the diagnostic accuracy of IFR in every patient who underwent measurements with both techniques.

For analysis purposes, an IFR value <0.86 was considered positive (i.e. proceed to intervention), a value >0.93 was considered negative (i.e. defer intervention). Values in between were deemed inconclusive. For statistical analysis we used the T student and Chi-Square tests.

**Results:** Functional testing was undertaken in 326 patients (67±11 years, 65.6% male), encompassing 402 lesions. 154 lesions underwent assessment with both techniques, 222 by FFR only and 26 cases IFR only.

The average IFR was 0.9±0.1. 60 lesions had an IFR >0.93 and 21 an IFR <0.86. An IFR value between 0.86 and 0.93 was strongly associated with the decision to proceed to FFR ($\chi^2=30.1; p<0.001$): the operators chose to perform FFR in 93 out of 94 cases. In the remaining cases, FFR was performed in 69.1% of cases, with no differences between values <0.86 vs >0.93 (71.4% vs 68%; p=0.792).

In these cases, there was a statistically significant concordance of 87% between the iFR and FFR results ($\chi^2=22.43; p<0.001$). Notwithstanding, there were 4 out of 13 cases (30.7%) of positive IFR with negative FFR and 3 out of 42 (7.1%) cases of negative IFR and positive FFR. This difference was statistically significant (p=0.026).

Regarding procedural time, radiation time and radiation dose, there were no statistically significant differences between patients who only underwent IFR, FFR only, or both techniques.

**Conclusions:** The IFR results were inconclusive (i.e. between 0.86 and 0.93) in most cases. There was a high degree of concordance between the IFR and FFR values. However, a significant proportion of patients, particularly in cases of positive IFR (<0.86), were classified as negative by FFR. The use of IFR had no impact on procedural time, radiation time and radiation dose.