

ROLLING-STONE REGISTRY

The largest prospective multi-center registry comparing the performace of IVL versus atherectomy (AT) in a real-world, all-comers population

Marco Pavani, Enrico Cerrato, Vincenzo Galiffa, Gianmarco Annibali, Rocco Vergallo, Veronica Lio, Marco Arena, Simone Persampieri, Paolo Vadalà, Mohamed Abdirashid, Fabrizio Ugo, Roberta Rossini, Federico Conrotto, Fabio Ferrari, Giuseppe Patti, Italo Porto, Giuseppe Musumeci, and Ferdinando Varbella

Adapted from: Cerrato, E. (2025, March). Intravascular Lithotripsy And/Or Mechanical Debulking Multicenter Registry For The Treatment Of Complex Calcified Coronary Arteries: Rolling Stone Registry. Cardiovascular Research Technologies (CRT) 2025.



What is the ROLLING-STONE Registry?

ROLLING-STONE compared the procedural success, intraprocedural complications and 30 day and 1 year MACE rates after propensity score matching (PSM) of IVL versus rotational atherectomy (RA) and orbital atherectomy (OA)



Why this Registry Matters?

ROLLING-STONE is the largest, prospective registry (N = 1,005) including IVL, RA and OA with a head-to-head comparison after PSM



Trial Design

Prospective, multi-center, all-comers registry of 1,005 patients with moderate-severe calcification treated with atherectomy or IVL from 23 Italian institutions



Safety Endpoints*

Freedom from MACE at 30 days and 1 year after PSM and Inverse Probability Weighting (IPW)



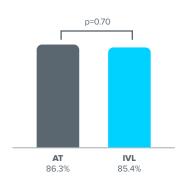
Primary Efficacy Endpoint*

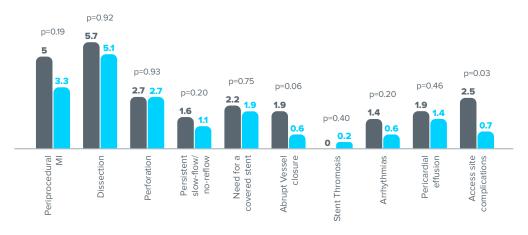
Procedural Success: stent delivery with residual stenosis <30% and absence of in-hospital MACE

IVL DEMONSTRATES SIMILAR PROCEDURAL SUCCESS WITH NUMERICALLY FAVORABLE INTRAPROCEDURAL COMPLICATIONS AS COMPARED TO ATHERECTOMY

PROCEDURAL SUCCESS

INTRAPROCEDURAL COMPLICATIONS

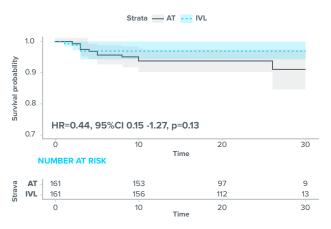


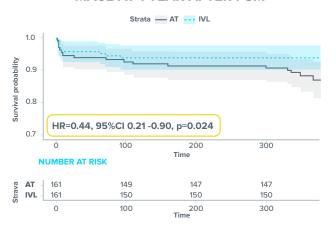


IVL DEMONSTRATES A FAVORABLE 30-DAY MACE AND STATISTICALLY SIGNIFICANT LOWER 1-YEAR MACE AFTER PSM AS COMPARED TO ATHERECTOMY

MACE AT 30 DAYS AFTER PSM

MACE AT 1 YEAR AFTER PSM





ROLLING-STONE adds head-to-head evidence demonstrating IVL's first-in-class safety and supports IVL's utility as front line calcium modification strategy when required

An educational grant was provided by Shockwave Medical for the Rolling-Stone Registry.

Coronary Safety Information

In the United States: Rx only, Indications for Use— The Shockwave Intravascular Lithotripsy (IVL) System with the Shockwave C2+ Coronary IVL Catheter is indicated for lithotripsy enabled, low-pressure balloon dilatation of severely calcified, stenotic de novo coronary arteries prior to stenting. Contraindications— The Shockwave C2+ Coronary IVL System is contraindicated for the following: This device is not intended for stent delivery. This device is not intended for stent delivery. This device is not intended for use in carotid or cerebrovascular arteries. Warnings— Use the IVL Generator in accordance with recommended settings as stated in the Operator's Manual. The risk of a dissection or perforation is increased in severely calcified lesions undergoing percutaneous treatment, including IVL. Appropriate provisional interventions should be readily available. Balloon loss of pressure was associated with a numerical increase in dissection which was not statistically significant and was not associated with MACE. Analysis indicates calcium length is a predictor of dissection and balloon loss of pressure. IVL generates mechanical pulses which may cause atrial or ventricular capture in bradycardic patients. In patients with implantable pacemakers and defibrillators, the asynchronous capture may interact with the sensing capabilities. Monitoring of the electrocardiographic rhythm and continuous arterial pressure during IVL treatment is required. In the event of clinically significant hemodynamic effects, temporarily cease delivery of IVL therapy. Precautions—Only to be used by physicians trained in angiography and intravascular coronary procedures. Use only the recommended balloon inflation medium. Hydrophilic coating to be wet only with normal saline or water and care must be taken with sharp objects to avoid damage to the hydrophilic coating. Appropriate anticoagulant therapy vessel closure—Allergic reaction to contrast medium, anticoagulant and/or antithrombotic therapy. Aneurysm-Arrhythmia-Arteriovenous fistula-B

