

**3-Year Follow-Up of Patients Treated With Jetstream
Combined With Ranger for Calcified Femoropopliteal
Lesions**

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I. ABBREVIATIONS	3
II. PRESENTATION OF THE PROJECT TEAM.....	4
III. OBJECTIVES AND PURPOSES.....	5
A. Background and Rationale for the Study	5
B. Study Objectives	7
1. Primary Objective.....	7
2. Secondary Objectives.....	7
C. Ethical Considerations	7
1. Regulatory Framework of the Study	7
2. Sponsor Responsibility and Insurance	8
3. Submission of Financial Agreements to the Medical Council	8
4. Transparency Law	9
D. Protocol Amendments.....	9
E. Justification of Public Interest.....	9
F. Publication of Results and Dissemination	10
1. Publication of Results.....	10
2. Disclosure and Confidentiality	11
IV. METHODOLOGY.....	12
A. Required Data	12
1. Description of the Study Cohort	12
2. Data Sources and Targeting of Relevant Data.....	13
B. Methods, Data Processing and Analysis	14
1. Study Plan and General Design	14
2. Statistical Analysis.....	14
C. Synthetic Data Flow and Matching.....	20
1. Data Flow	20
2. Matching with SNDS Data	20
D. Provisional Timeline and Feasibility of the Project.....	20
1. Study Timeline	20
2. Total Number of Study Sites / Total Number of Planned Patients	21
3. Definition of End of Study.....	21
4. Early Termination Criteria	21
V. PROTECTION OF PRIVACY, DATA SECURITY AND CONFIDENTIALITY	22
A. Patient Information and Protection of Their Rights.....	22
1. Individual Patient Information	22
2. Respect for Data Subjects' Rights	23
B. Data Storage and Security.....	24
1. Monitoring and Centralised Control	24
2. On-Site Audit and Inspection	25
3. Archiving of Data.....	25
4. Reporting of Safety Risks	25
VI. REFERENCES	26

I. ABBREVIATIONS

- ABI – Ankle–Brachial Index
- ANSM – Agence Nationale de Sécurité du Médicament et des Produits de Santé
- APERC – Association de Promotion pour l’Enseignement et la Recherche Cardiovasculaire
- AVF – Arteriovenous Fistula
- BPC – Bonnes Pratiques Cliniques
- CE – Conformité Européenne
- CNIL – Commission Nationale de l’Informatique et des Libertés
- CPP – Comité de Protection des Personnes
- CR – Rutherford Category
- CRO – Contract Research Organisation
- CSP – Code de la Santé Publique
- DCB – Drug-Coated Balloon
- DMOS – Dispositions Médicales d’Ordre Social
- EGB – Échantillon Généraliste des Bénéficiaires
- Fisher – Fisher’s Exact Test
- GDPR – General Data Protection Regulation
- GCP – Good Clinical Practice
- HDH – Health Data Hub
- MACE – Major Adverse Cardiovascular Event(s)
- MR004 – Méthodologie de Référence 004
- PAD – Peripheral Arterial Disease
- PVD – Peripheral Vascular Disease
- RC – Rutherford Category
- RGPD – Règlement Général pour la Protection des Données
- RNIPH – Recherches N’Impliquant Pas la Personne Humaine
- SAP – Statistical Analysis Plan
- SNDS – Système National des Données de Santé
- SAS – Statistical Analysis Software
- TFLs – Tables, Figures and Listings
- TLR – Target Lesion Revascularisation
- TVR – Target Vessel Revascularisation

II. PRESENTATION OF THE PROJECT TEAM

The sponsor of this study is the *Association de Promotion pour l'Enseignement et la Recherche Cardiovasculaire* (APERC), located at 4 Impasse Rhône-Durance in Avignon. APERC is a non-profit organisation dedicated to the promotion of training and research in cardiology.

APERC, as the main investigator, has entrusted the company **Excelya**—a specialised Contract Research Organisation (CRO)—with several activities related to the operational conduct of the study. Excelya is part of the Excelya Group and specialises in the management of clinical studies. The company provides the necessary material and human resources, as well as the specific expertise required for the implementation of regulatory, scientific, and operational procedures.

Excelya SAS, located at 5 rue de Paris, 92100 Boulogne-Billancourt, will be responsible for project management, statistical activities, and medical writing.

III. OBJECTIVES AND PURPOSES

A. Background and Rationale for the Study

Infra-inguinal peripheral arterial disease (PAD), also referred to as lower-limb peripheral arterial occlusive disease, corresponds to partial or complete obstruction of the arteries of the thighs, legs and/or feet. It is caused by atherosclerosis and affects the arteries beginning at the femoral level and extending distally. Patients with superficial femoral artery stenosis represent a substantial proportion of those with PAD; this lesion pattern is most frequently associated with intermittent claudication. As such, this patient population has been the focus of intensive research aimed at identifying methods to prevent disease progression and subsequent complications[1].

Atherosclerosis is characterised by the deposition of plaque—predominantly composed of lipids (atheroma)—along the arterial wall. Over time, these atheromatous plaques may damage the arterial wall (sclerosis), lead to vessel obstruction, or rupture, resulting in the formation of a thrombus that blocks blood flow and causes ischaemia, the consequences of which may be severe or even fatal. Worldwide, more than 230 million people are affected by PAD. In France, approximately 3% of the population suffers from this condition. Among individuals over 60 years of age, around one in five is affected. The disease is more frequently observed in men over the age of 50[2]. Indeed, the prevalence of peripheral vascular disease increases markedly with age. It is estimated to occur in 2.5% of individuals under 60 years, 8.3% of those aged 60–69 years, and 19% of people over 70. Men are more likely than women to develop symptoms of PAD earlier in life. The cumulative rates of mortality and major cardiovascular events (myocardial infarction and ischaemic stroke) reach 15.7%[2].

Endovascular atherectomy has proven to be an effective treatment for femoropopliteal lesions, either as a standalone therapy or in combination with adjunctive treatments[3,4], including in patients with diabetes[5]. Atherectomy may also enhance the effectiveness of drug-eluting endovascular therapies, particularly in lesions with severe calcification. Evidence suggests that severe calcification reduces the efficacy of drug-coated balloons[6], and pilot data indicate that combining atherectomy with drug-coated balloon therapy may improve vessel patency compared with drug-coated balloon use alone, although the effect was not statistically significant[7].

The effectiveness of the Jetstream device for the treatment of PAD has been demonstrated across multiple studies[1,8,9]. In a multicentre clinical trial[1], 99% of the 210 lesions were successfully treated, and freedom from revascularisation at 6 and 12 months was 85% and 74%, respectively. Participants also experienced significant reductions in mean Rutherford category[9]. The Jetstream atherectomy system has further been shown to be effective in the treatment of calcified femoropopliteal lesions[8]. In a single-centre cohort reflecting real-world practice, atherectomy Jetstream combined with a paclitaxel drug-coated balloon (LUTONIX®) significantly improved freedom from clinically driven target lesion revascularisation (TLR) compared with Jetstream atherectomy followed by plain balloon angioplasty at 16 months of follow-up. Although the mechanisms underlying this outcome are not fully understood, it is likely that Jetstream plays an important role in enhancing the penetration and distribution of antiproliferative agents within the vessel wall.

The purpose of this study is to evaluate the long-term clinical outcomes (3-year follow-up after the index procedure) of Jetstream used in combination with a paclitaxel drug-coated balloon (Ranger) in all patients treated for calcified femoropopliteal lesions (de novo, single or multiple,

unilateral or bilateral) between 1 December 2016 and 31 December 2020 at Clinique Rhône-Durance, Avignon, France.

B. Study Objectives

1. Primary Objective

The primary objective of the study is to evaluate the long-term clinical outcomes (after 3 years of follow-up) of Jetstream atherectomy combined with the Ranger drug-coated balloon in patients with calcified femoropopliteal lesions.

2. Secondary Objectives

The secondary objectives are to:

1. Evaluate the 3-year clinical outcome of Jetstream atherectomy combined with Ranger—without reintervention—in patients with calcified femoropopliteal lesions, as assessed by the Rutherford category.
2. Assess the procedural success of Jetstream atherectomy combined with Ranger in patients with calcified femoropopliteal lesions.
3. Evaluate the primary patency of Jetstream atherectomy combined with Ranger in patients with calcified femoropopliteal lesions.
4. Describe the atherectomy procedure in patients with calcified femoropopliteal lesions.
5. Confirm the absence of clinically driven revascularisation following the intervention.
6. Describe the 3-year clinical follow-up of patients treated with Jetstream combined with Ranger for calcified femoropopliteal lesions.

C. Ethical Considerations

1. Regulatory Framework of the Study

The study will be conducted in accordance with the ethical principles of the Declaration of Helsinki and in compliance with the legislation applicable to *Recherches N'Impliquant Pas la Personne Humaine* (RNIPH; research not involving human participants). RNIPH studies require exclusively the reuse of personal health data, such as those derived from medical records, existing cohorts, or the French National Health Data System (SNDS).

This research, which does not directly involve human subjects, does not fall under the scope of the Jardé Law. It is limited to the retrospective collection of data from medical records and falls within the scope of Article R1121-1, paragraph 3 of the French Public Health Code (Code de la Santé Publique, CSP). Consequently, it does not require authorisation from the *Agence Nationale de Sécurité du Médicament et des Produits de Santé* (ANSM) nor a review by a *Comité de Protection des Personnes* (CPP).

The study complies with the requirements of the Reference Methodology MR004, approved by the French Data Protection Authority (CNIL) under deliberation no. 2018-155 of 3 May 2018. In accordance with French law, the study will be registered prior to implementation on the Health Data Hub (HDH), the National Public Registry for reference methodological studies.

The investigator will conduct the study in accordance with local regulations and guidelines governing medical practice and ethics.

2. Sponsor Responsibility and Insurance

In France, as this study does not constitute interventional research involving human subjects, no insurance coverage is required.

3. Submission of Financial Agreements to the Medical Council

Not applicable.

APEREC is a non-profit medical association. It is neither a legal entity providing healthcare services (as defined in Article R1453-13 of the CSP) nor a legal entity producing or commercialising products reimbursed by statutory health insurance or products listed under Article L. 5311-1 (except for items 14°, 15°, and 17°), within the meaning of Article L. 1453-5. It is therefore not subject to the legislation on social measures (DMOS), as amended by the Law of 4 March 2002, Article L. 4113-6 of the CSP.

4. Transparency Law

Not applicable.

D. Protocol Amendments

Any modification to the protocol made after registration on the Health Data Hub (HDH) will be documented in the form of an amendment.

All amendments to the protocol must be agreed upon jointly by the Sponsor and the Investigator

E. Justification of Public Interest

As stated in Article 66 of the French Data Protection Act (*Informatique et Libertés*, CNIL), this study involving the processing of personal health data must pursue a purpose of public interest to be authorised:

“Processing operations falling under this section may only be implemented in view of the public interest purpose they serve. Ensuring high standards of quality and safety in healthcare and in medicinal products or medical devices constitutes a purpose of public interest.”

The Sponsor has relied on the following criteria to demonstrate that the objectives of this study fully comply with the requirement of public interest:

- **Purpose of the project:** to evaluate the long-term clinical effects (after 3 years of follow-up) of Jetstream atherectomy combined with the Ranger drug-coated balloon in patients with calcified femoropopliteal lesions.
- **Benefit of the project:** the study will provide improved understanding of lesion evolution and revascularisation after Jetstream atherectomy combined with Ranger over the long term (up to 3 years post-procedure). It will also provide insight into real-world procedural practice and procedural success, as well as clinical follow-up through the assessment of major events and mortality in this patient population.
- **Efforts to ensure transparency and dissemination of results,** together with documentation, software used, and links to public repositories, are detailed in Section 3.5.
- **Measures implemented to guarantee scientific integrity and data quality,** and to prevent the risk of biased results, are described in Section 4.

F. Publication of Results and Dissemination

1. Publication of Results

All manuscripts, abstracts, or other forms of presentation relating to the results of the study must be reviewed and approved in writing by the Sponsor before submission, in accordance with the terms set out in the clinical study agreement signed by the Sponsor and Excelya. This review aims to protect the Sponsor's proprietary information, whether existing at study initiation or generated during the study.

The detailed obligations regarding the publication of any data, material results, or other information generated in connection with the study are defined in the agreement between the Sponsor and Excelya.

2. Disclosure and Confidentiality

The content of this protocol and its amendments, as well as the results obtained during the study, must remain confidential for the Investigator and the investigation team. They may not be disclosed, even partially, to third parties or used for purposes other than inspection or conduct of the study without the Sponsor's prior written consent.

No data collected within this study may be used in written work, including publications, without the Sponsor's written approval. These confidentiality and non-use obligations do not replace or diminish those stipulated in the confidentiality agreement or the clinical study agreement established between the Sponsor and Excelya.

All individuals involved in the conduct of this study must be bound by a confidentiality and non-use clause, as provided in the confidentiality agreement or in the clinical study agreement signed between the Sponsor and Excelya.

IV. METHODOLOGY

A. Required Data

1. Description of the Study Cohort

All consecutive patients treated for femoropopliteal lesions (de novo, single or multiple, unilateral or bilateral) with Jetstream atherectomy combined with a paclitaxel drug-coated balloon (DCB) Ranger between 1 December 2016 and 31 December 2020 at Clinique Rhône-Durance in Avignon, France, will be included in the study.

a) Inclusion Criteria

Any adult patient who meets the following criteria:

1. Has been treated for femoropopliteal lesions using Jetstream atherectomy in combination with a paclitaxel drug-coated balloon (DCB) Ranger between 1 December 2016 and 31 December 2020.
2. Has been informed and has not expressed opposition to the use of their data.

b) Exclusion Criteria

There are no exclusion criteria.

c) Withdrawal of Patients from Evaluation

Patients remain free to refuse access to their medical records at any time, without providing a reason.

d) End of Inclusions

Recruitment will be considered complete once all patients with femoropopliteal lesions (de novo, single or multiple, unilateral or bilateral) treated with Jetstream atherectomy combined with the Ranger balloon between 1 December 2016 and 31 December 2020 at Clinique Rhône-Durance in Avignon, France, who have not objected to the use of their data, have been included.

2. Data Sources and Targeting of Relevant Data

a) Case Identification

Accurate identification of cases is essential to obtaining valid and representative information.

The clinic will be instructed to identify all patients who underwent Jetstream atherectomy combined with a paclitaxel drug-coated balloon (Ranger) for femoropopliteal lesions (de novo, single or multiple, unilateral or bilateral) between 1 December 2016 and 31 December 2020. The investigator will inform all identified patients by post and will document, in a screening log, the list of contacted patients, specifying those who have objected to the use of their data. Once the information letter has been sent to all patients, data from patients who have not expressed opposition within 15 days will be collected.

Data will be collected on site directly by the Investigator.

b) Source Data

Source documentation must include hospital reports, physicians' or nurses' notes, laboratory results, reports of specific examinations, and letters from consultants. Patient data will be collected from the source documents by the Investigator and entered into the Excel data collection file.

B. Methods, Data Processing and Analysis

1. Study Plan and General Design

This study is a non-interventional, retrospective, descriptive, single-centre study conducted in adult male and female patients treated with Jetstream combined with the Ranger drug-coated balloon for calcified femoropopliteal lesions, with the aim of evaluating the long-term clinical effects of this treatment.

The study will be conducted at Clinique Rhône-Durance. Data concerning the management of all adult patients with calcified femoropopliteal lesions treated with Jetstream combined with Ranger between 1 December 2016 and 31 December 2020 will be collected and recorded for analysis.

2. Statistical Analysis

Descriptive statistics will be used to analyse the data collected in the study. The analysis will be performed by Excelya SAS in accordance with this section and the Statistical Analysis Plan (SAP), which will supplement it.

a) General Considerations

Descriptive statistics will be used to analyse the data collected in the study.

- For qualitative variables, counts and percentages will be presented.
- For quantitative variables, a summary of the data will be presented in the form of the mean, median, minimum and maximum, standard deviation, 95% confidence interval of the mean, and the interquartile range.

For comparative tests, the following analyses will be used:

- For a quantitative variable with more than two categories: analysis of variance (ANOVA).
- For a quantitative variable with two categories: Student's t-test or Wilcoxon test.
- For a dichotomous or categorical variable: Chi-square test.
- For a dichotomous variable, when some categories contain very few individuals, Fisher's exact two-sided test will be used.

All data handling and statistical analyses will be performed using SAS version 9.4 or later.

A Statistical Analysis Plan (SAP) will describe in detail the planned statistical analysis, and a separate document entitled "Mock TFLs" will contain the templates for the tables, figures, and listings to be generated for the analysis. The SAP will be finalised before the final data collection file is imported into SAS and before the start of the study data analysis. It will provide detailed specifications for all analyses. A revision history between final/amended SAPs and changes relative to the protocol will be documented in the SAP.

b) Sample Size

The primary objective of this study is to assess the long-term clinical effects (after 3 years of follow-up) of Jetstream in patients with femoropopliteal lesions.

Given the descriptive nature of the study, no statistical hypothesis has been formulated. We estimate that all treated patients—approximately 50 individuals—may be included.

c) Endpoints

(1) Primary Endpoint

The primary endpoint will be described by:

- The estimated median time between the procedure and TLR.
- The number and proportion of lesions free from TLR at 3 years of follow-up after the procedure.

(2) Secondary Endpoints

1. **Three-year clinical outcome** will be assessed by the number and proportion of patients with:
 - A decrease of ≥ 1 Rutherford category, or
 - Stability at category 1 for patients who were Rutherford category 1 at baseline, compared with the pre-procedure reference value and **without reintervention**.
2. **Procedural success** of Jetstream atherectomy combined with Ranger in patients with calcified femoropopliteal lesions will be assessed at the time of the procedure, based on the number and proportion of patients with:
 - Residual diameter stenosis $< 30\%$,
 - Absence of dissection,
 - Presence of vessel rupture,
 - Presence of distal embolisation,
 - Presence of an arteriovenous fistula (AVF).
3. **The atherectomy procedure will be described by:**
 - The number and type of additional (bailout) stents implanted.
 - The number of paclitaxel drug-coated balloons (Ranger DCBs) used.
4. **Absence of revascularisation after the intervention** will be assessed by the number and proportion of patients with:
 - Clinically driven TLR at 1, 6, 12, and 24 months after the intervention,

- Clinically driven TVR at 1, 6, 12, 24, and 36 months after the intervention.
5. **Primary patency** evaluated by duplex ultrasound at 12 and 36 months.
6. **Clinical follow-up** will be described by:
- The number and proportion of patients with improvement in Rutherford category (reduction ≥ 1) compared with the pre-procedure reference value at 1, 6, 12, 24 and 36 months,
 - The number and proportion of patients with improvement in Ankle–Brachial Index (ABI) (increase ≥ 0.10) compared with the pre-procedure reference value at 1, 6, 12, 24 and 36 months,
 - The number and proportion of all-cause deaths and of cardiovascular deaths,
 - The number and proportion of patients who underwent major amputation at 1, 6, 12, 24 and 36 months after the intervention,
 - The number and proportion of patients who experienced a major adverse cardiovascular event (MACE) at 1, 6, 12, 24 and 36 months after the intervention,
 - The number and proportion of patients who underwent reintervention and the total number of reinterventions (endovascular or surgical bypass), at 3 years of follow-up.

d) Analysis Populations

Statistical analyses will be performed on two populations:

- **The patient population**, which will include all patients in the database—i.e., all individuals meeting the inclusion criteria by definition of a retrospective study—treated for femoropopliteal lesions (de novo, single or multiple, unilateral or bilateral) with

Jetstream atherectomy combined with a paclitaxel drug-coated balloon (DCB) Ranger between 1 December 2016 and 31 December 2020.

- **The lesion population**, which will include all lesions from all patients included in the study (as a single patient may present with multiple lesions), as recorded in the database.

e) Analysis of Demographic Data and Baseline Characteristics

Descriptive statistics will be provided for patients' demographic characteristics as well as their medical history. Baseline characteristics and reference values correspond to the data recorded prior to the procedure.

A table describing lesion characteristics will also be presented.

f) Analysis of the Primary Endpoint

The median time between the procedure and TLR will be estimated using the Kaplan–Meier method with a two-sided 95% confidence interval.

The frequency (number and percentage) of patients experiencing the event (absence of TLR) and the reasons for censoring will be presented. Reasons for censoring include:

- Death of the patient,
- Absence of revascularisation,
- Loss to follow-up.

A Kaplan–Meier curve modelling the median time between the procedure and TLR at the different follow-up timepoints (1, 6, 12, 24, and 36 months) will be plotted.

This analysis will be performed on both the patient population and the lesion population.

g) Analysis of the Secondary Endpoints

To describe the evolution of the Rutherford Category (RC), a categorical variable reflecting the status relative to baseline (Decrease / Stable / Increase) will be created and evaluated at each follow-up visit (1, 6, 12, 24, and 36 months).

Residual diameter stenosis <30% (Yes/No), as well as the absence of dissection, vessel rupture, distal embolisation, and arteriovenous fistula, will be described at each follow-up for each analysis population and will define procedural success.

The atherectomy procedure will be described by specifying the number and type of additional stents implanted and the number of Ranger balloons used per patient.

The absence of clinically driven revascularisation of the target lesion and of the target vessel will be counted at each follow-up.

Follow-up characteristics will be described at each timepoint, including improvement in ABI, deaths, major amputations, and major cardiovascular events. The total number of reinterventions per patient at 3-year follow-up will also be described.

h) Interim Analysis

Not applicable.

i) Handling of Missing Data

Unless otherwise specified, no imputation of missing data will be performed. The number of missing data points will be reported in each table. All types of missing data (not applicable, not performed, unknown) will be grouped into a category labelled “missing”. These will be

summarised in the descriptive analysis by case when referring to patient characteristics and efficacy variables.

For partial dates, if the day is missing, the convention is to use “15” (mid-month). If both the day and month are missing and the date is historical (e.g. date of birth), the convention is to use “1” for the day and “7” for the month (mid-year). This convention is useful for estimating certain time intervals and/or durations.

C. Synthetic Data Flow and Matching

1. Data Flow

No data flow is planned for this study.

2. Matching with SNDS Data

Not applicable.

D. Provisional Timeline and Feasibility of the Project

1. Study Timeline

The planned period for data collection will last 2 months, from September 2023 to October 2023.

Study milestones (provisional dates):

- Study start date (start of data collection): 09/2023
- Study end date (end of recruitment and data collection): 10/2023
- Final study report (statistical report): 05/2024

2. Total Number of Study Sites / Total Number of Planned Patients

This study will be conducted at Clinique Rhône-Durance in Avignon, France.

The estimated number of patients treated with Jetstream combined with Ranger for calcified femoropopliteal lesions between 1 December 2016 and 31 December 2020 at this centre is 50 (the justification for sample size is presented in Section 4.2.2.2).

3. Definition of End of Study

The end of the study is defined as the date on which data collection for the last patient is completed.

4. Early Termination Criteria

The study will be completed as planned unless a serious violation of Good Clinical Practice (GCP) occurs, compromising the ability to achieve the primary objective of the study and leading to the temporary suspension or early termination of the study.

The Sponsor reserves the right to discontinue the study at any time for any ethical or administrative reason.

V. PROTECTION OF PRIVACY, DATA SECURITY AND CONFIDENTIALITY

A. Patient Information and Protection of Their Rights

1. Individual Patient Information

Patients will be individually informed beforehand, in accordance with French legislation and CNIL Deliberation No. 2018-155 of 3 May 2018, which approves the Reference Methodology (MR004) relating to the processing of personal data conducted within research that does not involve human participants, as well as within studies and evaluations in the field of health.

The Investigator will ensure that each patient, or their legal representative, is fully informed—through the information letter—of the objectives and procedures of the study. The Investigator will also answer any questions concerning the study.

Patients or their legal representatives will be informed of their right to withdraw from the study at any time without affecting their medical care or legal rights. They will also be informed that representatives of the Sponsor may audit the relevant parts of the patients' medical records and study data.

The Investigator will record on a screening/inclusion form the date on which the information letter was sent and whether the patient objects to the use of their data within 15 days of receiving the letter.

Patients who wish to oppose the processing of their personal data for research purposes may express their objection at any time and in any manner, without having to justify their decision, to the Investigator or any other physician, in accordance with the French Data Protection Act (“Informatique et Libertés”) as enforced by CNIL.

2. Respect for Data Subjects' Rights

APERC undertakes to comply with all legal requirements of the French Data Protection Act (“Informatique et Libertés”, CNIL) and with Regulation (EU) 2016/679, the General Data Protection Regulation (GDPR), relating to the protection of natural persons with regard to the processing of personal data and the free movement of such data.

The data collected for the purposes of the study will comply with MR004 and will be strictly limited to data necessary and relevant to the research objectives.

Data collection in the data collection form may only begin after the patient has received written information from the Investigator.

At any time, included patients have the right to access and rectify the data collected about them, the right to restrict processing, and the right to object to the processing of their personal data.

he transmission of data covered by medical confidentiality that may be used and processed as part of this study.

To exercise these rights, patients may contact Dr Jérôme BRUNET by email at: **jeromebrunet2@wanadoo.fr**,

or by post at:

Dr Jérôme Brunet, Clinique Rhône-Durance,

1750 Chemin du Lavarin, 84000 Avignon, France.

The use of indirectly identifiable data (patients identified using a study entry number) is justified by the need to enable the Investigator to provide additional information regarding the data collected, in order to ensure data quality and the validity of the published results.

Each patient will be assigned a unique identifier by the Sponsor (a two-digit number for patient identification). Participant files or datasets transferred to the Sponsor will contain only this identifier; patient names or any other information allowing direct identification will not be transferred.

The Investigator must complete and maintain an identification log enabling them to link the study entry number back to the patient's medical record, should additional information be required.

In accordance with the French Data Protection Act (“Informatique et Libertés”) No. 2018-493 of 20 June 2018, and Articles 12, 13, and 14 of the GDPR, the patient will be informed of their right of access, objection, restriction of processing, and rectification of the data recorded during the study. These rights may be exercised at any time by contacting their physician.

Personal information relating to the Investigator will be limited to what is required for the conduct of the study. As part of the financial agreement, the Investigator will be informed of their rights of access, objection, and rectification of such information. The Investigator is responsible for informing all study personnel of these provisions.

B. Data Storage and Security

Data from patients meeting the inclusion criteria will be collected and recorded in an Excel data collection file. All eligible patients will receive an information sheet. If they do not object, their medical records will be used in a pseudonymised manner for this retrospective study on the management of their calcified femoropopliteal lesions treated with Jetstream combined with Ranger.

1. Monitoring and Centralised Control

No monitoring will be performed for this study.

2. On-Site Audit and Inspection

Before the start of the study, the Investigator must confirm their agreement to conduct the study in accordance with the protocol and to provide access to all relevant data to Excelya SAS monitors, auditors, and representatives designated by APERC, as well as to regulatory authorities if required.

If a site inspection is requested by a regulatory authority, the Investigator must inform APERC as soon as the request is received.

3. Archiving of Data

All study documents and any other data related to the study must be archived by the Investigator for 25 years after the end of the study, in accordance with local regulations.

4. Reporting of Safety Risks

This study does not involve human subjects. It does not aim to identify or quantify any safety risk associated with a CE-marked medical device already placed on the market. Therefore, no safety data will be collected and no adverse event reporting is expected in this study.

The Investigator will report adverse events according to standard French procedures, if applicable.

VI. REFERENCES

- [1] Zeller T, Kränkenberg H, Steinkamp H, Rastan A, Sixt S, Schmidt A, et al. One-Year Outcome of Percutaneous Rotational Atherectomy With Aspiration in Infrainguinal Peripheral Arterial Occlusive Disease: The Multicenter Pathway PVD Trial. *Journal of Endovascular Therapy* 2009;16:653–62.
- [2] Bouée S, Rivière AB, Laurendeau C, Gourmelen J, Thomas-Delecourt F. Incidence des événements cardiovasculaires et mortalité des sujets atteints d’une artériopathie des membres inférieurs (AOMI), une analyse à partir de l’échantillon généraliste des bénéficiaires (EGB). *Revue d’Épidémiologie et de Santé Publique* 2017;65:S118.
- [3] McKinsey JF, Zeller T, Rocha-Singh KJ, Jaff MR, Garcia LA. Lower Extremity Revascularization Using Directional Atherectomy. *JACC: Cardiovascular Interventions* 2014;7:923–33.
- [4] Zeller T, Sixt S, Schwarzwälder U, Schwarz T, Frank U, Bürgelin K, et al. Two-Year Results after Directional Atherectomy of Infrapopliteal Arteries with the SilverHawk Device. *J Endovasc Ther* 2007;14:232–40. <https://doi.org/10.1177/152660280701400216>.
- [5] Garcia LA, Jaff MR, Rocha-Singh KJ, Zeller T, Bosarge C, Kamat S, et al. A Comparison of Clinical Outcomes for Diabetic and Nondiabetic Patients Following Directional Atherectomy in the DEFINITIVE LE Claudicant Cohort. *J Endovasc Ther* 2015;22:701–11. <https://doi.org/10.1177/1526602815599550>.
- [6] Fanelli F, Cannavale A, Gazzetti M, Lucatelli P, Wlcker A, Cirelli C, et al. Calcium Burden Assessment and Impact on Drug-Eluting Balloons in Peripheral Arterial Disease. *Cardiovasc Intervent Radiol* 2014;37:898–907.
- [7] Zeller T, Langhoff R, Rocha-Singh KJ, Jaff MR, Blessing E, Amann-Vesti B, et al. Directional Atherectomy Followed by a Paclitaxel-Coated Balloon to Inhibit Restenosis and

Maintain Vessel Patency: Twelve- Month Results of the DEFINITIVE AR Study. *Circ: Cardiovascular Interventions* 2017;10:e004848.

[8] Maehara A, Mintz GS, Shimshak TM, Ricotta JJ, Ramaiah V, Foster MT, et al. Intravascular ultrasound evaluation of JETSTREAM atherectomy removal of superficial calcium in peripheral arteries. *EuroIntervention* 2015;11:96–103. <https://doi.org/10.4244/EIJV11I1A17>.

[9] Sixt S, Rastan A, Scheinert D, Krankenberg H, Steinkamp H, Schmidt A, et al. The 1-Year Clinical Impact of Rotational Aspiration Atherectomy of Infrainguinal Lesions. *Angiology* 2011;62:645–56.

