Post-Market Registry of the GORE® VIABAHN® VBX Balloon Expandable Endoprosthesis Implanted in Peripheral Vessels

NCT03720704

08 Jun 2020

PRINCIPAL INVESTIGATOR SIGNATURE PAGE

Principal Investigator: Please complete the information below. If instructed by W. L. Gore & Associates, Inc., (Gore), please sign and date the bottom of the page and return the original to the Gore study contact. Retain a copy with the protocol at the study site in the regulatory binder.

Device: GORE® VIABAHN® VBX Balloon Expandable Endoprosthesis

Title: Post-Market Registry of the GORE® VIABAHN® VBX Balloon Expandable Endoprosthesis Implanted in Peripheral Vessels

Short Title: EXPAND Registry

Protocol Number: VBX 17-04
Protocol Date: 08 Jun 2020
Original Protocol: 10 May 2018

I, the undersigned, have read and understood the specified protocol and agree with the contents. The protocol and any additional information provided by the sponsor will serve as a basis for conduct of the study.

Name and Title (print): _____

Address: _____

_____

_____

Phone: _____

Signature: _____ **Date**: _____

Post-Market Registry of the GORE® VIABAHN® VBX Balloon Expandable Endoprosthesis Implanted in Peripheral Vessels

Protocol number: VBX 17-04

Protocol date: 08 JUN 2020

W. L. Gore & Associates, Inc.
Medical Products Division

PROTOCOL SUMMARY

Registry Title	Post-Market Registry of the GORE® VIABAHN® VBX Balloon Expandable Endoprosthesis Implanted in Peripheral Vessels
Short Title	EXPAND Registry
Protocol Number	VBX 17-04
Sponsor	W. L. Gore & Associates, Inc. Medical Products Division [redacted] Telephone: 800-437-8181
Local Representative	Gore Authorized Representative W. L. Gore & Associates B.V. Ringbaan Oost 152A, 5013CE Tilburg, The Netherlands
Registry Design	Prospective, multicenter, observational registry
Registry Objective	The primary objective of the VBX 17-04 registry is to collect post-market safety and performance data of the GORE® VIABAHN® VBX Balloon Expandable Endoprosthesis (VBX Stent Graft) in peripheral vessels in patients who require interventional treatment
Primary Endpoint	A composite of any of the following events through 30 days post treatment. • Procedural Success • Freedom from VBX Stent Graft-related Serious Adverse Event (SAE)
Secondary Endpoints	• VBX Stent Graft-related death within 30 days post-treatment • Procedural-related death within 30 days post-treatment • Procedural-related SAE within 30 days post-treatment • VBX Stent Graft patency (primary, primary assisted, secondary) through 30 days post-treatment • VBX Stent Graft patency (primary, primary assisted, secondary) through five years post-treatment • VBX Stent Graft-related SAE through five years post-treatment • VBX Stent Graft-related death through five years post-treatment • Loss of VBX Stent Graft integrity through five years post-treatment • Limb salvage through five years post-treatment
Patient Population	Patients with peripheral lesions or needing preservation of peripheral vessels that are amenable with VBX Stent Graft treatment.

Number of Patients	Two hundred eighty (280) implanted patients with the VBX Stent Graft. No one site can contribute more than 35% of the registry's population (98 patients).
Number of Sites	A maximum of 20 sites located in Europe
Coordination PI	[redacted]
Key Inclusion Criteria	• Age ≥ 18 years. • Signed informed consent form. • Intend for no other stents to be placed in the same peripheral vessel(s) targeted for VBX Stent Graft placement
Key Exclusion Criteria	• Known hypersensitivity to heparin or a previous incident of Heparin-Induced Thrombocytopenia (HIT) type II. • Life expectancy < 12 months due to comorbidities. • Treatment would be for *de novo* iliac occlusive disease • Use of the VBX Stent Graft is for the treatment of aortic coarctations • Use of the VBX Stent Graft in the coronary, pulmonary, carotid, vertebral, isolated infrarenal aortic or vena cava vessels
Expected Time to Complete Enrollment	28 Months
Expected time of each study patient to complete the study	60 Months
Total expected duration of the study	88 Months
Schedule of Events	All registry events will be performed per standard medical practice at each participating site.
Vendor	[redacted]

LIST OF ABBREVIATIONS

AE	Adverse Event
ADE	Adverse Device Effect
AIOD	Aortoiliac Occlusive Disease
AV	Arteriovenous
CBES	Covered Balloon Expandable Stent
CDMS	Clinical Data Management System
CE	Conformité Européenne
CEC	Clinical Event Committee
CERAB	Covered Endovascular Reconstruction of Aortic Bifurcation
CRF	Case Report Form
CRO	Contract Research Organization
CTA	Computed Tomographic Angiography
EC	Ethics Committee
EDC	Electronic Data Capture system
eCRF	Electronic Case Report Form
GCP	Good Clinical Practice
HIT	Heparin-Induced Thrombocytopenia
IB	Investigator's Brochure
ICF	Informed Consent Form
ICH	International Conference on Harmonization
IFU	Instructions for Use
mm	Millimeters
PI	Principal Investigator
SAE	Serious Adverse Event
U.S.	United States
USADE	Unanticipated Serious Adverse Device Effect
VBX Stent Graft	GORE® VIABAHN® VBX Balloon Expandable Endoprosthesis

DEFINITIONS

Adverse Event: Any untoward medical occurrence, unintended disease or injury, or untoward clinical signs (including an abnormal laboratory finding) in patients, users, or other persons, whether or not related to the investigational medical device.

Adverse Device Effect: Adverse event related to the use of an investigational medical device.

Clinical Investigation Plan: A set of documents that describes the rationale, objectives, design and proposed analysis, methodology, monitoring, and the plan for the conduct of a clinical investigation. These documents may include the protocol, monitoring plans, and statistical analysis plans.

Device Deficiency: Inadequacy of a medical device with respect to its identity, quality, durability, reliability, safety, or performance. Device deficiencies include malfunctions, use errors, and inadequate labeling.

Enrollment: A patient is considered enrolled into the study once informed consent has been signed and dated.

Serious Adverse Event: An adverse event that led to death, serious deterioration in the health of the patient or led to fetal distress, fetal death, or a congenital abnormality or birth defect. Defined in more detail in **Section 9**.

Serious Adverse Device Effect: An adverse device effect that has resulted in any of the consequences characteristic of a serious adverse event.

Unanticipated Serious Adverse Device Effects: Serious adverse device effect which by its nature, incidence, severity, or outcome has not been identified in the current version of the protocol, Investigator Brochure (IB) or Instructions for Use (IFU).

1. Introduction

1.1. Background

Seminal papers by Dotter[1] and Parodi[2] introduced the medical community to the ability to treat atherosclerotic lesions that were either circulation-restrictive or critically-dilated in a less invasive fashion. Since the introduction of these concepts, the equipment, techniques, and products used in interventional procedures have vastly improved due to the refinement of device design and advancements in technology. Multiple professional study treatment guidelines now advocate the use of stent-grafts as the preferred or primary method to treat certain patients[3].

In current application, covered balloon-expandable stents (CBES) are used in a multitude of applications either within the arterial or venous systems. One of the most prominent uses of a CBES is in aortoiliac occlusive disease (AIOD). The GORE® VIABAHN® VBX Balloon Expandable Endoprosthesis (VBX Stent Graft) underwent clinical investigation of de novo Iliac occlusive disease in the United States (U.S.) and New Zealand where the device performed well in all types of occlusive disease including lesions that are considered to be more severe in nature, TASC II C / D[4, 5]. The pivotal study reported 100% technical success with a nine-month primary patency rate of 96.7% (n=98 patients). Pivotal patients will be followed for three years post-procedure. There is a reasonable expectation that some institutions may report their experiences with the VBX Stent Graft in AIOD in the near future.

Other clinical indications that may occur less frequent in the spectrum of treatment are visceral artery lesions, either iatrogenic or non-iatrogenic, that are in need for urgent, minimally invasive surgery [6, 7 8-10]. In these cases, the stent-graft is the primary method of lesion exclusion. There are other techniques where a peripheral CBES is paired with a thoracic, thoracoabdominal, or abdominal stent-graft to exclude an aneurysm as part of a system. The CBES component may be used through a pre-designed portal / fenestration to connect with the aortic stent or placed in parallel to the other device, sometimes called a chimney or snorkel procedure, in order to maintain perfusion to covered branch vessels[11, 12].

1.2. Registry Rationale

Post-market observational registries are critical to identify, collect, and analyze medical devices outcomes. Peripheral stents see usage for a broad spectrum of applications and this registry offers an opportunity to understand breakdown of usage for the VBX Stent Graft. As the nature of these registries allows for the assessment of medical device performance in a real-world setting, data collected are useful for many purposes, such as limited surveillance of marketed products, fulfillment of post-market clinical follow-up data commitments for regulatory bodies, and differential assessment of device performance from a well-controlled, clinical trial environment to that of routine medical practice.

The VBX Stent Graft leverages the stent graft design and clinical requirements of the GORE® VIABAHN® Endoprosthesis with PROPATEN Bioactive Surface. Clinical data collected from a wide range of clinical studies, registries and case studies has confirmed the long-term clinical performance of the VIABAHN® device itself[13-26] The VBX 17-04 registry is designed to collect short-term procedural and clinical information, as well as safety events through five years.

Registry Device Description

The GORE® VIABAHN® VBX Balloon Expandable Endoprosthesis (VBX Stent Graft) is manufactured in Flagstaff, Arizona of the United States of America by W. L. Gore & Associates, Inc. (Gore). The device is Conformité Européenne (CE)-marked for use in peripheral vessels where an endovascular stent-graft may be warranted. The design, device sizes, and characteristics permit the use of the device in multiple pathologies.

The VBX Stent Graft consists of a 316 L surgical grade stainless steel balloon expandable stent and a fluoropolymer graft (**Figure 1**). The CBAS Heparin Surface on the VBX Stent Graft consists of stable, covalent, end-point attached heparin of porcine origin. The endoprosthesis is pre-mounted on a delivery system equipped with a balloon. The delivery system has two radiopaque balloon markers embedded in the shaft (denoting the effective balloon length) to aid in the placement of the endoprosthesis (**Figure 2**). The delivery system is compatible with 0.035" (0.89 mm) guide wires. The delivery system can be used for initial stent placement and post stent dilatation. The pre-mounted stent system is available in a variety of endoprosthesis lengths from 15 to 79 mm and in a variety of diameters from 5 to 11 mm. The pre-mounted endoprosthesis system balloon catheter is also offered in two shaft lengths. This product is supplied sterile.

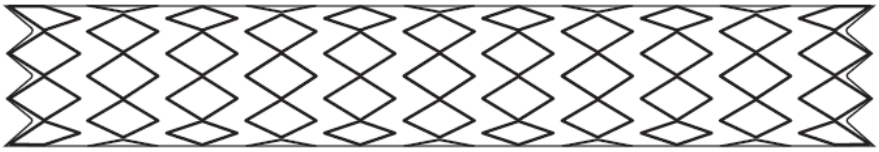


Figure 1. GORE® VIABAHN® VBX Balloon Expandable Endoprosthesis

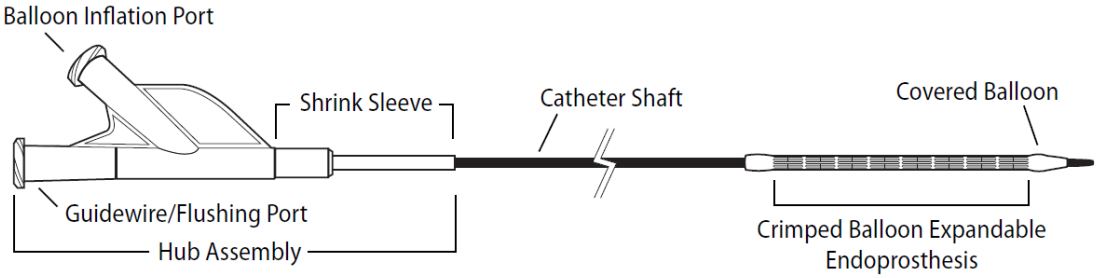


Figure 2. GORE® VIABAHN® VBX Balloon Expandable Endoprosthesis Delivery System

More detailed device information can be found in the Instructions for Use (IFU) and Investigators Brochure (IB).

2. Registry Objectives

2.1. Primary Objective(s)

The primary objective of the VBX 17-04 registry is to collect post-market safety and performance data of the VBX Stent Graft in peripheral vessel in patients who require interventional treatment. This objective is based upon the need to incorporate post-approval data into the continuing evaluations of the VBX Stent Graft over its lifecycle.

3. Registry Design

3.1. Description of Registry Design

This registry utilizes a prospective, multicenter, non-randomized single-arm design to collect VBX Stent Graft clinical data in its use within the indicated peripheral vasculature but outside of *de novo* iliac occlusive disease. Data will be representative of real-world, clinical use. Real world clinical use data are integral for Gore combined with data from long-term clinical investigations and reports from medical literature, to perform continuing assessments of device performance in addition to any long-term clinical investigations as well as reports in medical journals. To ensure that registry data are representative of real world use, the registry will employ broad inclusion / exclusion criteria to ensure its observational nature.

A maximum of 20 clinical registry sites (referred to as "sites" in the remainder of this document) in Europe will participate in this observational registry. Gore will maintain an updated list of all principal investigators, site names, and addresses. This list shall be kept separately from this protocol. From all enrolled patients, the first 280 implanted patients will be evaluated for the registry." No one site can contribute more than 35% of the total patient population (98 patients). There are no pathology-specific limitations at the registry or site level. The anticipated accrual rate is approximately 10 implanted patients per month for a total accrual period of approximately 28 months based upon the rapidity of site-start-up.

Patients may be enrolled into the registry provided all inclusion and no exclusion criteria are met as specified in **Section 4**. Patients will be evaluated through hospital discharge with follow-up data collection up to 5 years post-treatment. Patients will be followed according to the regimen determined by their follow-up physician with entry into an Electronic Data Capture (EDC) system. Total estimated duration of the registry is 88 months.

3.2. Registry Endpoint(s)

3.2.1. Definitions

The definitions in

Table 1 are provided to facilitate consistent reporting across all registry sites.

Table 1. Protocol Definitions

Protocol Term	Definition
Procedural Success	Technical Success (successful access, delivery, accurate deployment, and withdrawal of catheters) with patent VBX Stent Graft at end of procedure
Patency[27]	**Primary** - Uninterrupted patency with no procedures performed on or at the margins of the treated segment. **Primary Assisted** - Any procedure performed in the treated segment before thrombosis that might prevent eventual failure. **Secondary** - Any procedure that restores patency after thrombosis.

Limb Salvage	Freedom from Major Tissue Loss—extending above transmetatarsal level; functional foot no longer salvageable[28]
Loss of Device Integrity	Defined as any of the following: • Device damage that compromises device functionality (stent fractures, graft tears, cuts, holes, delamination) • Transient (compression) or permanent stent-graft collapse (invagination) following complete device deployment, resulting in an overall reduction in the vessel luminal diameter
Reintervention	An additional unanticipated interventional or surgical procedure (including conversion to open surgery), related to the device (including withdrawal of the delivery system) or procedure. Anticipated or unanticipated status will be determined at the discretion of the investigator. • This includes reintervention to the VBX device used during the Index procedure and not in non-VBX treatment areas
Type I endoleak[29]	A sealing failure at one of the attachment sites of the graft to the vessel wall providing arterial flow alongside the graft and into the perigraft space. • Type Ia- Proximal attachment site • Type Ib- Distal attachment site • Type Ic- Inadequate seal at distal landing zone of branch vessel device
Type II endoleak	Retrograde flow through collateral vessels into the aneurysmal sac.
Type III endoleak	• Type IIIa- Arterial flow from module disconnection • Type IIIb- Arterial flow from fabric disruption
Type IV endoleak	Arterial flow through porous fabric

3.2.2. Primary Endpoint

The primary endpoint of the VBX 17-04 registry is a composite of the following events reported within 30 days of treatment.

- Procedural Success
- Freedom from VBX Stent Graft-related Serious Adverse Event (SAE)

The first component, procedural success, describes the technical function of the VBX Stent Graft at the time of implant. The other component event, freedom from VBX Stent Graft-related SAE, is a description of short-term device safety. Possible endpoint events will be identified from site reports and adjudicated by a Clinical Events Committee (CEC) for reporting eligibility.

3.2.3. Secondary Endpoint(s)

Selected events that are illustrative of the device's potential impact to a patient from a safety perspective, overall device function described as patency or device durability captured as device integrity are the registry's secondary endpoints. Possible endpoint events will be identified from site reports with some secondary endpoints within scope of CEC adjudication.

The secondary endpoints for the VBX 17-04 registry are the following:

- VBX Stent Graft-related death within 30 days post-treatment
- Procedural-related death within 30 days post-treatment
- Procedural-related SAE within 30 days post-treatment
- VBX Stent Graft patency (primary, primary assisted, secondary) through 30 days post-treatment
- VBX Stent Graft patency (primary, primary assisted, secondary) through five years post-treatment
- VBX Stent Graft-related SAE through five years post-treatment
- VBX Stent Graft-related death through five years post-treatment
- Loss of device integrity through five years post-treatment
- Limb salvage through five years post treatment

4. Study Population

4.1. Description of Population

The registry has been designed with broad eligibility criteria to capture real-world VBX Stent Graft use, in multiple pathologies and in conditions needing preservation of peripheral vessels. It is anticipated that patients will generally benefit by the ability of the VBX Stent Graft to either exclude lesions from circulation or restore / ensure vessel patency to promote circulation to distal vessels or tissues. Only patients who meet all of the inclusion criteria and none of the exclusion criteria will be included in registry analyses. No vulnerable populations are included in this registry. The only exclusions to registry participation are in situations where the use of the VBX Stent Graft is contraindicated for safety, registry participation would infringe on patient rights, or that the collection of follow-up data would not have any utility. [redacted]

4.1.1. Treatment Population Characterization

The performance characteristics and available sizes of the VBX Stent Graft may lend itself to treating multiple pathologies in varying regions of the body. To facilitate better distribution of treated pathologies as well as to prevent a homogenous registry patient population, Gore has developed maximum enrollment goals for specific indications of device use in the registry. Treatment indications utilizing similar device use mechanisms will be grouped together into Treatment Categories. Use of Treatment Category classification will simplify study reporting and permit a common, pathology-based review of device experience.

Treatment Category	Treatment Indication Example	Max Enrollment per Treatment Category*
Lesion-exclusion (Non-iatrogenic in origin)	Peripheral artery aneurysm	90
	Pseudoaneurysm	
	Endoleaks	
Lesion-exclusion (Iatrogenic in origin)	Rupture	
	Perforation	
	Dissection	
Visceral Perfusion	Snorkel / chimney technique with standard stent graft	140
	Fenestrated / branched stent graft component	
	Iliac-branched stent graft component	
Luminal Reconstruction	Arteriovenous fistula	50
	Arteriovenous graft	
	Deep vein thrombosis	
	Venous compression	
Occlusive Disease	Artery occlusive	50
	Aortoiliac reconstruction with CERAB**technique	
	Iliac-in-stent restenosis	

* The total enrollment from all reporting categories is not meant to equal 280 patients.
** CERAB is defined as the use of three combined stents to create a new aortic bifurcation. A kissing stent technique will not utilize a dedicated aortic component and is not within scope of the registry.

These treatment categories may also be used to report statistical analyses performed in an *ad hoc* fashion at the time of registry analysis and where the available patient population makes such analyses feasible.

4.2. Inclusion Criteria

For the purpose of registry enrollment and potential VBX Stent Graft implant, the following criteria should be evaluated at the time of Informed Consent Form (ICF) signature.

The patient is / has:

1. Age ≥ 18 years.
2. Signed informed consent form.
3. Endovascular indication for treatment based on treating physician's best medical judgment.
4. Intend for no other stents to be placed in the same peripheral vessel(s) targeted for VBX Stent Graft placement.
5. Willingness of the patient to adhere to standard of care follow-up requirements.

4.3. Exclusion Criteria

Due to its observational nature, exclusion criteria for registry participation is associated with the safe use of the device and the likelihood for an enrolled patient to contribute to registry analyses.

The patient is / has:

1. Known hypersensitivity to heparin or a previous incident of Heparin-Induced Thrombocytopenia (HIT) type II.
2. Participation in concurrent research study or registry which may confound registry results, unless approved by Gore.
3. Pregnant or breast-feeding female at time of informed consent signature.
4. Life expectancy < 12 months due to comorbidities.
5. Use of the VBX Stent Graft is for the treatment of *de novo* iliac occlusive disease.
6. Use of the VBX Stent Graft is for the treatment of aortic coarctations.
7. Use of the VBX Stent Graft in the coronary, pulmonary, carotid, vertebral, isolated infrarenal aortic, or vena cava vessels.

A rationale for each inclusion / exclusion criterion is located in **Appendix A**.

5. Registry Procedures / Reporting

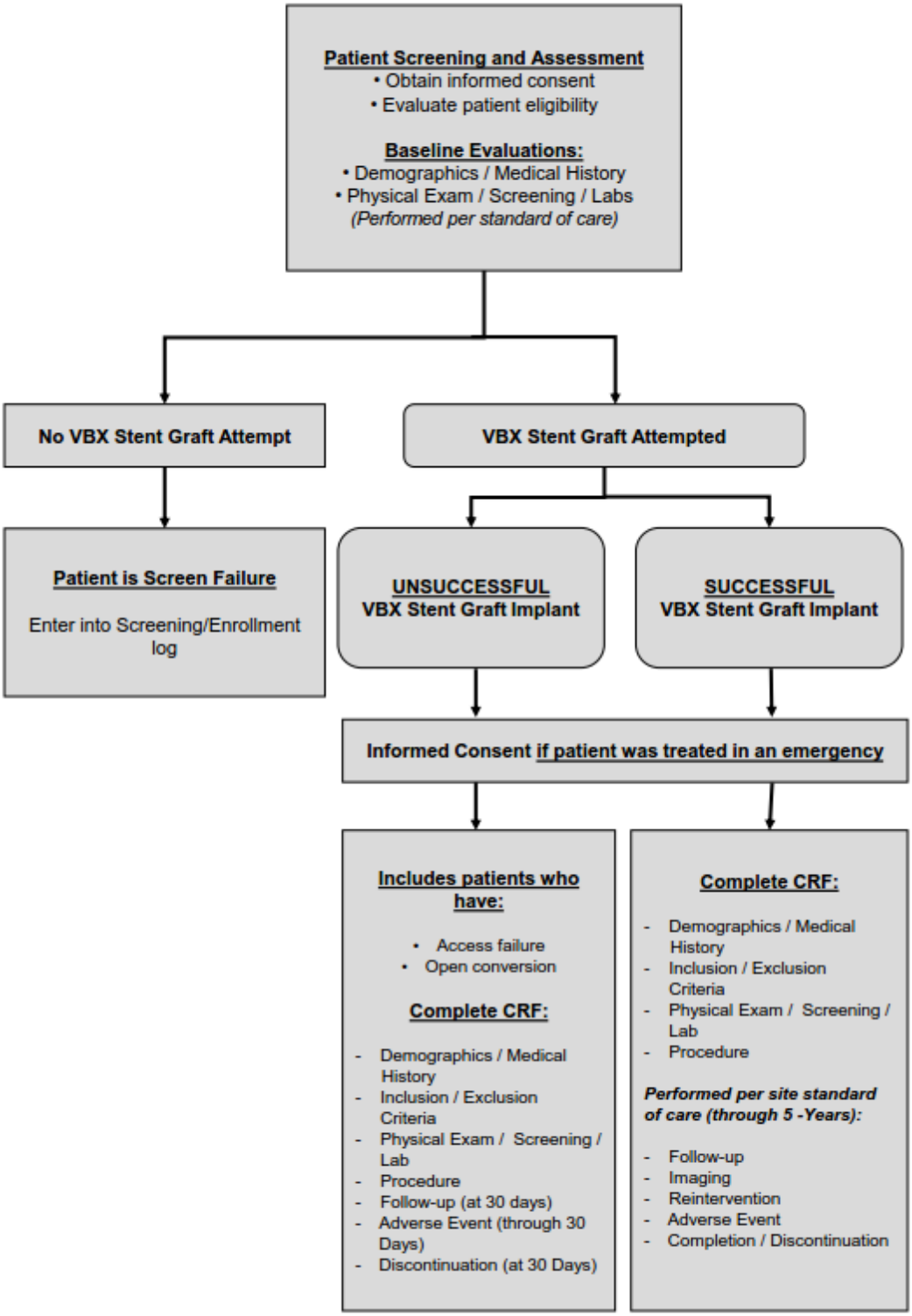
The following sections provide information regarding registry expectations, in terms of its procedures, as well as the type of clinical data that may be captured as part of the clinical investigational plan.

Due to its observational nature, the registry will not require the use of any procedure and / or test and / or medical device different from those required by routine clinical practice for treating the investigated pathologies. Each site will be responsible for using and maintaining the equipment and medical devices in accordance with the manufacturer's directions and their institutional practices.

The sponsor will not impose requirements that limit health care professionals from exercising their best medical judgment for treatment. Therefore, patient selection, diagnostic imaging, and treatment interventions will be determined by physicians based on clinical practice standards.

5.1. Registry Procedures and Evaluation Schema

Figure 3. Registry Schema



5.2. Schedule of Events

A Schedule of Events is provided in **Table 2**. The described events are consistent with the anticipated standard of care for a person receiving a vascular stent graft. The timing and content of an individual patient's follow-up care regimen may differ from this expectation. Any device-related evaluations or the identification of an Adverse Event (AE) will need to be entered into the EDC system. Informed consent is required for all registry participants and is viewed as a protection measure in terms of patient's rights and welfare.

Table 2. Schedule of Events

5.3. Informed Consent Process

All patients must provide informed consent prior to any registry-related data collection being performed. In an emergency procedure where it is not possible for the patient to provide consent prior to the implant, consent may be obtained afterward, but it should occur prior to discharge. The registry will be explained in a manner that avoids any coercion or undue improper influence on, or inducement of, the patient to participate. Patients will not waive or appear to waive their legal rights and any document will use native non-technical language that is understandable to the patient. The informed consent form (ICF) will include emergency contact details for any concerns. The case history (*i.e.*, source documents / patient chart) for each patient shall document that such informed consent was obtained. The Ethics Committee (EC)-approved consent form will be signed and personally dated by the patient and the person who conducted the informed consent discussion. The original signed ICF will be retained in the patient records. A copy of the ICF will be given to the patient for their records.

No patients deemed to be of a vulnerable population may be enrolled.

5.4. Pre-Procedure

In its management of the registry, Gore will not define the processes used to identify patients, conduct diagnostic imaging, or make medical decisions in the best interest of the patient. Physicians are encouraged to use their best medical judgment and to follow clinical practice standards in selecting patients for treatment with the VBX Stent Graft.

It is anticipated that most patients who will undergo an interventional procedure will have a physical exam with medical history, a review of their medications, and a laboratory evaluation of blood chemistries as part of standard procedure.

5.5. Enrollment

The patient is considered enrolled when informed consent is obtained. Enrolled patients who do not undergo implantation with the VBX Stent Graft will be a screen failure. The principal reason for a screen failure will be recorded in the patient screening and enrollment log. Supporting documentation for all enrolled patients will be retained in site registry files.

5.6. Procedure

The VBX Stent Graft implant procedure will be performed according to standard practice of the enrolling institution. As stated in the IFU, implanting investigators are advised to evaluate their patient for concomitant anticoagulation and / or antiplatelet medication therapy prior to and after the procedure. The necessity and choice of antiplatelet therapy can be individualize according to patient history as well as the pathology treated.

Any used VBX Stent Graft devices (implanted or opened but not implanted) will be recorded on the device accountability electronic Case Report Form (eCRF). It is recommended that a post-deployment angiogram is performed at the end of the procedure to assess device condition and efficacy of treatment provided that the patient's renal function is not prohibitive.

Procedural complications arising after enrollment of an eligible patient will be treated per investigator's best medical judgment as well as recorded in the EDC.

5.6.1. Unsuccessful Procedure

Patients who undergo the VBX Stent Graft implant procedure but are not successful either by access failure or need for an open conversion are asked to be entered in the EDC system. EDC entry may include a description of any observed procedure or VBX Stent Graft-related AEs as well as any device deficiencies.

Investigators are advised to collect follow-up information from one clinical visit following hospital discharge to ensure that the description of any AEs associated with the device or procedure are complete.

5.7. Reinterventions

Investigators are asked to record any additional treatments of the original pathology or interventions on the previously-implanted stent-graft(s). Clinically significant progression of the treated disease will be noted as an AE with any reintervention on the disease or device noted as treatment in its respective eCRF form.

5.8. Follow Up

It is expected that implanted patients will be followed according to the standard practice of the enrolling physician. Accordingly, the registry will facilitate the collection of data obtained from physical examinations, medication use, and imaging assessments for multiple types of imaging modalities (*e.g.,* CTA or ultrasound). For the purpose of registry reporting and eCRF organization, it is expected that most implanted patients will have a clinical follow-up visit within 1-3 months of the procedure with the next follow-up or device evaluation at approximately 9-12 months post-procedure. Thereafter follow-up will continue annually until 5 years post-procedure. The frequency of implanted patient evaluations and the imaging modality used to investigate treatment and device status is up to the discretion of the follow-up physician. In some cases (i.e. patient unable to reach the hospital) a phone follow-up can be acceptable as a visit.

5.8.1. Follow-Up Visit Windows

To aid in registry reporting, collected data will be organized and categorized into six visits. **Table 3** describes the range of days where collected data will be assigned to either visit type. Any evaluation of the VBX Stent Graft outside of the general reporting windows can be entered in the EDC system as an unscheduled visit.

5.9. Patient Withdrawal from the Registry

An implanted patient may withdraw from the registry at any time and should notify their follow-up physician in this circumstance. The investigator may also withdraw the patient from the registry at any time based on his / her medical judgment. When withdrawing the participation of a patient for any reason, the site investigator or sub-investigator records the date of discontinuation, the reason for discontinuation, and the patient's condition at the time of discontinuation on the eCRF. Patients may be considered withdrawn for any of the following:

- The VBX Stent Graft is explanted
- Death
- Voluntary withdrawal
- Investigator withdrawal

- Any other medical condition where evaluation of the VBX Stent Graft is not feasible (*e.g.*, bypassed VBX Stent Graft)

If the discontinuation is caused by the development or worsening of AEs, information on the AEs must also be recorded on the appropriate eCRF. All data generated prior to patient withdrawal will be maintained, and study data will be used as appropriate. If such withdrawal is due to problems related to the registry device safety or performance, the investigator shall ask for the patient's permission to follow his / her status / condition outside the registry

If possible, an additional evaluation of the VBX Stent Graft(s) is recommended prior to their withdrawal from the registry.

Sites are advised to provide patients with a recommendation on the long-term care and follow-up necessary for a device used in their specific pathology.

5.10. Patient Lost to Follow Up

A patient will be considered lost to follow up and withdrawn from the registry once they have missed three consecutive follow-up visits or phone follow-up. Three documented attempts should be made by the investigator or designee to contact the patient or next of kin. One of the three documented attempts must include a certified letter.

5.11. Registry Participant Completion

An implanted patient has completed the registry once an element of the last requested follow-up visit has been performed or the collection of follow-up information would be outside of the visit windows. An implanted patient that does not complete these requirements due to voluntary withdrawal, physician withdrawal, death, or any other reason will be considered a withdrawal. Regular follow-up after registry completion is suggested to be conducted in accordance with the discretion of the site investigator or sub-investigator(s) and standard of care.

Patients will not be provided with any medical care by Gore after registry completion or withdrawal.

5.12. Explant Procedures

[redacted]

6. Registry Administration

6.1. Training

All investigators were selected for their education, medical background, and proficiency with endovascular techniques as determined by the sponsor during the qualification process.

Prior to the start of enrollment, Gore will provide appropriate training to the investigator and their pertinent delegated staff members. Registry training will include:

- Registry protocol
- EDC system

Registry device is already marketed; therefore, specific device training for investigator and site staff will not be required.

6.2. Monitoring

Site monitoring for this protocol will be provided by a Contract Research Organization (CRO). Monitoring oversight will be provided by the sponsor. Sites must provide adequate access to all source data for the sponsor or representatives.

The site monitors are qualified by training and experience to oversee the progress of the registry at the site and will verify that the investigators and their staff understand and adhere to both the applicable regulatory requirements and the registry protocol. In addition, they may assist in resolution of any problems that may arise during the conduct of the registry.

6.2.1. Site Initiation

Site initiation will be performed to verify that each investigator and his / her staff understands the protocol, applicable regulations, human patient protection requirements, and the investigator's obligations. This visit will confirm that required documentation with the appropriate approval is in place prior to patient enrollment.

The clinical investigation shall not begin until the sponsor has confirmed the required approval / favorable opinion from the EC or regulatory authority has been obtained.

6.2.2. Periodic Site Monitoring

Periodic site monitoring will occur as necessary to verify continuing adequacy of facilities and adherence to the registry protocol, Good Clinical Practices (GCPs), and applicable regulations and laws that pertain to the conduct of the registry. These activities will also review the eCRFs and source documentation, the timely submission of accurate records to the sponsor, and the maintenance of proper records. A report will be written following each site visit and a follow-up letter will be provided to the site with a summary of findings. A close out visit will be conducted at each site to confirm that all documentation is complete.

[redacted] Monitoring procedures and requirements will be documented in a clinical monitoring plan developed and maintained by Gore.

6.2.3. Device Accountability and Storage

[redacted]

Information on Gore accessory devices used during the procedure may be collected. This may include additional non-VBX Stent Graft devices, balloon catheters, and sheaths.

6.3. Protocol Deviations

A protocol deviation is defined as any change, divergence, or departure from the registry design or procedures of a protocol. The investigator is responsible for promptly recording and reporting protocol deviations to Gore and the reviewing EC per their policy.

The investigator will not implement any changes to the protocol without first obtaining written agreement from the sponsor and documented approval from the EC, except in the event of an immediate hazard(s) to a patient.

For the purpose of this registry, as implant procedures and follow-up visits will be performed according to participating sites' standard practice, protocol deviations would only affect the informed consent signature process, verification of inclusion / exclusion criteria and data entry as specified in **Section 7.3.**

Gore will determine the impact of the protocol deviation on patient safety and determine if additional reports or actions are required. Additional action may include site retraining and / or site termination.

6.4. Protocol Amendments and ICF Revisions

The protocol and ICF may be amended by Gore throughout the life of the registry, as a result of new findings or business interests or needs. Investigators will obtain EC approval on all amendments in a timely manner. Gore will confirm proper training of investigators and site staff on all protocol amendments.

6.5. Sponsor Representatives

Gore representatives may be present during implant procedures to provide technical assistance to the investigator in the use of the device. The activities of the Gore representatives will be supervised by the investigator. Representatives may also assist in film reading, case planning, or training of site staff.

6.6. Access to Source Data / Documents

Source data are defined as all information necessary for the reconstruction and evaluation of the registry.

The investigator will keep all study records, source data, and registry devices available for inspection by Gore, its monitors, representatives of the EC, or regulatory authorities as required by local regulations. The investigator should maintain adequate and accurate source documents and registry records that include all pertinent observations on each registry patient. Source data should be attributable, legible, contemporaneous, original, accurate, and complete. When a copy is used to replace an original document, the copy should fulfill the requirements for certified copies. Changes to source data should be traceable, should not obscure the original entry, and should be explained if necessary (*e.g.,* via an audit trail).

6.7. Registry Records Retention

The investigator will maintain complete, accurate, and current study records as required by applicable regulatory requirements. [redacted] In any event, registry records will not be disposed of, nor custody of the records transferred, without prior written sponsor approval.

Investigator records will include, but not be limited to:

- All correspondence with another investigator, an EC, the sponsor, a monitor, or regulatory authority, including required reports.
- Records of each patient's case history and exposure to the device. Case histories include the CRFs worksheets and supporting data including, for example, signed and dated consent forms and medical records, including, for example, progress notes of the physician, the individual's hospital chart(s), and the nurses' notes. The protocol, any amendments, and documentation of any deviations from the protocol, including the dates and the reasons for such deviations.
- Any other records that regulatory authorities require to be maintained by regulation or by specific requirement for a category of investigations or a particular investigation.
- A signed Investigator Agreement.
- Any other records as required by the regulatory authority, the EC, and the sponsor.

6.8. Publication Plan

The International Committee of Medical Journal Editors (ICMJE) member journals have adopted a trials-registration policy as a condition for publication. This policy requires that all clinical trials be registered in a public trials registry. Gore will register the study and post results as required by this policy and applicable regional laws and regulations.

It is the intent of Gore that the multicenter results of this registry will be submitted for publication (in a peer reviewed journal). [redacted] Individual sites should coordinate requests for publication through the publications committee or Gore.

7. Data Collection and Submission

The Clinical Data Management System (CDMS) for this registry will be provided by Medidata Solutions Worldwide, Inc. Gore keeps a separate Clinical Data Management Plan describing the procedures for verification, validation, and security of the CDMS. The Clinical Data Management Plan will describe and document procedures regarding data management processes for this investigation.

7.1. Data Collection Methods

This registry will report clinical data using the Medidata Rave® CDMS web-based application. The CDMS will be the database of record for the protocol and patients to regulatory inspections and quality assurance review. All users will be trained to use the CDMS and will comply with registry-specific guidelines / instructions as well as applicable regulatory requirements.

Patient data will be collected using protocol-specific eCRFs. Site staff will enter data directly into the eCRF for transmission to the sponsor. The sites will be notified of any significant amendments to the eCRFs.

7.2. Data Clarification and Correction

Once entered, data will be evaluated to confirm that it is complete, consistent, and logically sound. If changes to the data in the CDMS are required, all changes, reasons for changes, and persons making the changes will be captured in the CDMS's audit trail. Gore will perform periodic data reviews throughout the term of the registry. Procedures and documentation for regular and ongoing data review are described in the Clinical Data Management Plan.

7.3. CRF Completion Schedule

Entry of patient data into the EDC system cannot occur prior to the collection of the patient's informed consent to participate in the registry. All registry data are targeted to be entered into the appropriate eCRF within 14 days of collection, however, data outside this window will not be considered a protocol deviation.

8. Risk Assessment

A complete listing of the known risks associated with the VBX Stent Graft can be found in both the IB and IFU. Investigators are advised to review both documents to familiarize themselves with these risks and correlate this information with the patient's presenting pathology and prior medical history.

8.1. Summary of Expected Benefits

The VBX Stent Graft is a CE-marked device indicated for the endovascular grafting of peripheral vessels. Registry participants are expected to be suffering from a medical ailment where treatment with the VBX Stent Graft may alleviate patient symptoms, maintain vessel patency, or prevent a medical event associated with significant morbidity or mortality.

Participation in this observational registry is not expected to provide any direct benefits to participating patients, other than those related to the treatment of their pathology. However, the data collected during the registry will foster a better understanding of the performance of the registry devices in real world, daily application.

Moreover, as the registry will not require the use of any procedure and / or test and / or device different from those required by routine clinical practice for the investigated conditions, enrolled patients will not be exposed to additional risks as compared to routine clinical practice.

8.2. Risk-to-Benefit Rationale

The registry will not require the use of any procedure and / or test and / or device different from those required by routine clinical practice, enrolled patients will not be exposed to additional risks when compared to routine clinical practice.

The only additional known risk is the possible loss of confidentiality. Controls have been put in place to prevent loss of confidentiality.

9. Adverse Events and Safety Monitoring

Clinical AEs are defined as any untoward medical occurrence in a patient, whether device-related or not. Pre-existing conditions will not be considered AEs unless there is worsening of the condition after enrollment. All AEs will be documented in the patient's permanent medical record, recorded on the appropriate eCRF, and reported in accordance with applicable national regulations. Emergency contact information for AE reporting can be found on the site's ICF.

9.1. Anticipated Adverse Events

Anticipated adverse events are medical complications that are known to be associated with patients undergoing endovascular stent grafting of peripheral vessels. See Section 8, Risk Assessment.

9.1.1. Adverse Event Relationship

Each reported AE will be assessed by the investigator for its primary suspected relationship to the device, procedure, or disease, as further described below:

- **VBX Stent Graft-related**
  - The functioning or characteristics of the device caused or contributed to the AE.
- **Registry Procedure-related**
  - The procedure (and not the device) caused or significantly contributed to the AE.
- **Gore Accessory Use-related**
  - Any additional Gore devices that were used during the index procedure and / or reintervention caused or contributed to the AE.
- **Unrelated to VBX Stent Graft or procedure**
  - An AE which cannot be attributed to the device, procedure, access.

Only one primary relationship will be assigned to each reported AE.

9.1.2. Adverse Event Classification

Each AE will be assessed by the investigator to determine if it is serious or non-serious, according to ISO 14155:2011. An SAE is defined as satisfying any of the following:

Serious Adverse Event[30]

A serious adverse event is an adverse event that

- Led to death
- Led to serious deterioration in the health of the patient that either resulted in:
  - A life-threatening illness or injury, or
  - A permanent impairment of a body structure or a body function, or
  - In-patient or prolonged hospitalization, or
  - Medical or surgical intervention to prevent life-threatening illness or injury or permanent impairment to a body structure or a body function
- Led to fetal distress, fetal death, or congenital abnormality or birth defect.

NOTE: Emergency room visits and 23-hour observations may not constitute hospitalization.

Non-Serious Adverse Events: Any AE not meeting the above definition of serious.

9.1.3. Adverse Event Reporting and Coding

AEs will be reported on the appropriate eCRF and documented in the patient's permanent medical record. AE reporting will start from enrollment (when informed consent is obtained). . The investigator at each site is ultimately responsible for reporting AEs to the sponsor.

The following information on each reported AE will be collected:

- Adverse event name
- Adverse event onset date
- Relationship
- Classification (serious or non-serious)
- Treatment
- Outcome
- Resolution date

AEs will be coded using the Medical Dictionary for Regulatory Activities (MedDRA).

9.1.4. Adverse event submission guidelines:

- AE reporting begins once the patient is enrolled in the registry. All AEs should be reported from enrollment through registry completion / discontinuation.
- Provide a diagnosis if possible. If unable to provide a diagnosis, report the symptoms as separate events. AEs should be reported using the full name without abbreviations or narratives.
- AEs with an outcome status of "ongoing" should be assessed at each follow-up evaluation to determine if the event has resolved. AEs ongoing at study completion / discontinuation should be left as "ongoing" on the AE case report form.

The site principal investigator or designee must report SAEs to the registry sponsor as soon as possible after onset, observation, or first reporting of the occurrence, and in accordance with applicable national regulations. It is the responsibility of each investigator to report all SAEs to the reviewing EC, according to national regulations and EC requirements. A copy of the EC report will be forwarded to the sponsor. Source documents must be submitted upon request (*e.g.,* histopathology findings, catheter lab reports, etc.). All source documents must be blinded using only the patient's unique study identifier and forwarded to the sponsor.

9.1.5. Patient Death

In this clinical investigation, death is not considered an AE, but rather the outcome of an AE. Any ongoing / unresolved AEs will be considered as ongoing at the time of death or registry withdrawal. An effort must be made to collect source documentation or death certificate in the case of death.

9.2. Unanticipated Serious Adverse Device Effects (USADE)

An Unanticipated Serious Adverse Device Effect (USADE) is defined in ISO 14155 as any serious adverse effect on health or safety or any life-threatening problem or death caused by, or associated with, a device, if that effect, problem, or death was not previously identified in nature, severity, or degree of incidence in the current version of the protocol, IB or IFU. If a complication occurs that the investigator believes may be a potential USADE, the site

should immediately contact the sponsor to determine reporting requirements. In addition, when there is a reason to believe a device may have malfunctioned, causing potential harm to a patient, the site should immediately notify the sponsor.

All USADEs must be documented by the investigator including the date of onset, a complete description of the event, possible reason(s) for the event, severity, duration, actions taken, and outcome.

9.3. Device Deficiency

A device deficiency is defined as an inadequacy of a medical device with respect to its identity, quality, durability, reliability, safety, or performance of the study device. Device deficiencies include damages, malfunctions, use errors, or inadequate labeling whether such a condition is experienced in the stage of design, supply, storage, or use. Device deficiency may not be associated with an AE suffered by a registry patient but will need to be reported to Gore immediately upon identification by the site.

The following information on each reported deficiency will be collected:

- Description of deficiency
- Date of occurrence
- Batch code and lot number of the affected device
- Related patient AE information (if applicable)

Device deficiency information on Gore accessory devices used during the procedure may be collected. This may include additional non-VBX Stent Graft devices, balloon catheters, and sheaths.

9.4. Clinical Events Committee

An independent Clinical Events Committee (CEC) will review safety-related, clinical events during the registry to ensure the consistency of endpoints reported by the site. The VBX 17-04 CEC will be comprised of an interdisciplinary team of three members with pertinent expertise who are not directly involved in the conduct of the registry.

The scope of the CEC activity includes the following:

General review and adjudication of SAE's to include:

a. Adjudication on the serious adverse event (SAE) designation

b. Adjudication on the relationship of the SAE to the study device, procedure, or unrelated

This committee will operate under pre-specified procedures as outlined in the CEC Charter. The frequency of data review and other roles and responsibilities of the CEC will be specified in the CEC Charter.

10. Statistical Analysis

10.1. Statistical Approach

No formal hypothesis will be tested for this registry. [redacted]

10.2. Sample Size Determination

Two hundred eighty (280) patients will be implanted with the VBX Stent Graft across multiple pathologies. The sample size of 280 patients was considered adequate to estimate study outcomes with reasonable precision and to have sufficient patients enrolled within each indication. The sample size was determined by Gore to characterize broad device use across device indications. In combination with strategic selection of participating registry sites, this number should be sufficient to describe the study endpoints with less than 6% margin of error.

10.3. Data Analysis

10.3.1. Timing of Analyses

[redacted]

There are no planned interim analyses or guidelines for early termination / registry stoppage due to the commercial nature of the VBX Stent Graft.

10.3.2. Analysis Populations

All enrolled patients meeting the inclusion / exclusion criteria and treated with the VBX Stent Graft will be included in the primary and secondary endpoint analyses.

10.3.3. Pooling of Data

It is expected that the VBX Stent Graft may be used in treatments that may differ by type of treatment (elective vs. emergent), patient risk (high vs. low / moderate) or role in treatment (primary repair vs. combinatorial repair). In each of these indications, the mechanism of introduction and device delivery will remain the same along with intended device function (lesion exclusion / vessel patency). The use of balloon-expandable stent grafts is a well-known and practiced endovascular therapy that is not expected to differ between selected registry sites. As such, there is no concern in regards to pooling data from different European countries or sites together for analysis.

Gore may perform analyses to detect differences in device experience according to gender, age, or pathology treated.

10.3.4. Statistical Analysis of Primary Endpoint(s)

Tables of the primary endpoints procedural success and freedom from VBX Stent Graft-related SAEs at 30 days will be reported. Data will be presented descriptively with confidence intervals.

Missing data at the time of analysis will not be included in the denominator.

10.3.5. Statistical Analysis of Secondary Endpoint(s)

Tables of the secondary endpoints—device related death at 30 days, procedural related death at 30 days, procedural related SAE at 30 days, device patency at 30 days and on yearly basis, device-related SAEs, device-related death, loss of device integrity and limb salvage at yearly basis will be reported. Data will be presented descriptively with confidence intervals, where appropriate.

Missing data at the time of analysis will not be included in the denominator.

10.3.6. Analysis by Treatment Category

Individual device treatment indications will be categorized into larger groups "Treatment Categories" based upon either similar device function or purpose. Combining treatment indications into larger groups will permit the analysis of general treatment concepts where an analysis based upon on an individual indication would not be feasible. [redacted]

10.3.7. Analysis of Individual Treatment Indications

At the conclusion of enrollment, an evaluation of the distribution of device use across individual pathologies will be performed. If feasible, device experience by indication will be tabulated for descriptive analysis.

11. Ethical and Regulatory Considerations

11.1. Statement of Compliance

The requirements of Clinical Investigation of Medical Devices for Human Patients Good Clinical Practice (ISO14155:2011), International Conference on Harmonization Good Clinical Practice (ICH E6 (R2)), and Food & Drug Administration (FDA) applicable regulations have been incorporated into applicable Clinical Quality System procedures.

The following are applicable to this registry:

ICH-GCP E6	International Conference on Harmonization Regulations Guideline For Good Clinical Practice
Medical Device Directive (93/42/EEC) Article 15 Annex X	Council Directive 93 / 42 / EEC of 14 June 1992
Amendment to the MDD (2007/47/EC) Article 15 Annex X	Directive 2007 / 47 / EC of the European Parliament and of the Council of 5 September 2007
ISO 14155:2011 (E)	Clinical investigation of medical devices for human patients – Good clinical practice

11.2. Compliance Responsibilities

Gore will conduct the registry in accordance with all applicable regulations and laws. Gore will be responsible for documenting that investigators have the necessary skills, training, and information to properly participate in the registry. Gore will confirm proper monitoring of the registry and verify that the site has obtained Ethics Committee (EC) approval prior to enrollment. Gore will provide information to the investigators and the reviewing ECs concerning the progress of and any new material information about the registry.

The investigator will conduct the registry in accordance with all applicable regulations and laws, any relevant agreements, the registry protocol, and all approval conditions of the reviewing EC. Any additional requirements imposed by the EC shall be followed. The investigator will verify EC approval is obtained prior to enrollment, maintained throughout the course of the registry, and that all EC reporting requirements are met. The investigator is responsible for protecting the rights, safety, and welfare of patients under their care. The investigator is also responsible for ensuring that informed consent is properly obtained.

The registry shall be conducted in accordance with the ethical principles that have their origin in the Declaration of Helsinki.

11.3. Informed Consent

The investigator shall verify that all potential patients for this registry are provided with a consent form describing this registry and sufficient information to make an informed decision about their participation.

The formal consent of a patient, using the EC-approved consent form must be obtained prior to a patient's entry in the registry. [redacted] The consent form will be signed and personally dated by the patient and the person who conducted the informed consent discussion. The original signed informed consent form will be retained in the patient records. A copy of the informed consent document will be given to the patient for his or her records. Any significant, new information which emerges while the registry is in progress that may influence a patient's willingness to continue to take part in the registry will be provided to the patient.

The investigator shall verify that documentation of the acquisition of informed consent is recorded in each patient's records in accordance with applicable regulations.

Emergency contact details for reporting SAEs and serious adverse device effects will be listed in the EC-approved ICF.

11.4. Independent Ethical Review

The investigator shall not enroll any patients prior to obtaining approval for the registry from a properly constituted independent EC.

The sponsor and / or designee will be responsible for submission of the IFU, protocol, draft ICF, eCRF (data requirements), and any other document required by the local EC for EC's written approval.

11.5. Conflict of Interest

All investigators will follow applicable laws and regulations as well as the conflict of interest policies of their site and the reviewing EC.

11.6. Confidentiality

All patient records will be kept confidential to the extent provided by applicable laws and regulations. The registry monitors and other authorized representatives of the sponsor may inspect all documents and records required to be maintained by the investigator, including but not limited to medical records.

Such records may also be reviewed by the site's EC and other regulatory bodies. The investigator will inform the patients that their records will be reviewed.

11.7. Registry Discontinuation or Suspension

The entire registry may be suspended or prematurely terminated by Gore in the following cases:

- If new data become available which raises concern about the safety of the registry device, so that continuation of the registry might cause unacceptable risks to the patients.
- On recommendation by the CEC for any perceived safety concern based on clinical judgment, including, but not limited to, a higher than anticipated rate for any component of the safety endpoint, device failures resulting in AEs or unexpected SAEs.
- [redacted].

Registry participation of an individual registry site or an individual member of a registry site may be suspended or prematurely terminated by Gore in the following cases:

- If a principal investigator or EC responsible for the registry has withdrawn approval for any reason.
- If Gore monitoring or auditing identifies serious or repeated deviations on the part of the registry site or an individual investigator.
- If a site does not enroll any patients.

Procedures for suspension or premature termination of this registry are:

- If Gore or EC prematurely terminates the registry, all enrolled patients shall continue to be followed and treated as per standard of care at each site. Gore may request that patients are contacted or complete an office visit prior to registry termination.
- The investigator of each site or authorized designee shall promptly inform the enrolled patients.
- If the investigator receives notice that the EC approval has been withdrawn for any reason, the investigator shall notify Gore as soon as possible and preferably within 24 hours. Registry enrollment must immediately cease until such approval is reinstated.
- If Gore suspends or prematurely discontinues the registry, Gore shall inform the investigators, the ECs and the competent authority of the rationale and provide them with the relevant data supporting this decision.
- If the registry (or a registry site) is prematurely terminated a routine close out visit will be performed.

- If the investigator terminates or suspends a registry without prior agreement of the sponsor, the investigator should inform their institution where applicable, and the investigator / institution should promptly inform the sponsor and the EC, and should provide the sponsor and the EC a detailed written explanation of the termination or suspension.

The procedures of premature study termination of an individual patient (voluntary withdrawal or withdrawal of the patient by the investigator) are detailed in **Section 5.9** of the registry protocol.

Procedure for resuming the clinical investigation after temporary suspension:

- When Gore concludes an analysis of the reason(s) for the suspension, implements the necessary corrective actions, and decides to lift the temporary suspension, Gore shall obtain concurrence from the ECs and, where appropriate, the regulatory authority by providing the rationale and relevant data supporting this decision before registry enrollment resumes.
- When concurrence from ECs and, where appropriate, other regulatory authorities is obtained, Gore shall inform the investigators to resume the registry enrollment.
- If patients have been informed of the suspension, the principal investigator or authorized designee shall inform them of the reasons for resumption.

In addition, a final report to all reviewing ECs will be submitted within six months of completion, termination, or discontinuation. Sites that have enrolled a patient and have completed all patient follow-up requirements are asked to keep the clinical investigation active in order to receive the final study report.

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APPENDIX A

The development of registry inclusion and exclusion criteria, as described in **Table 4**, was performed in a manner to permit physicians to treat patients in a relatively free manner while also preserving basic safety and ensuring the protection of patients' rights.

Table 4. Inclusion / Exclusion Criteria Justification

Number	Text	Rationale
Inclusion #1	Age ≥ 18 years	Age of legal consent for adults
Inclusion #2	Signed informed consent form	An assurance that registry participant is a willing volunteer and aware of the risks / benefits of participation.
Inclusion #3	Endovascular indication for treatment based on treating physician's best medical judgment	Exposure to any endovascular procedure must be clinically warranted
Inclusion #4	Intend for no other stents to be placed in the same peripheral vessel(s) targeted for VBX Stent Graft placement	Consistent with purpose of registry
Inclusion #5	Willingness, in the opinion of the treating physician, to adhere to standard of care follow-up requirements	Registry participation needs to be of value in terms of follow-up data collection
Exclusion #1	Known hypersensitivity to heparin or a previous incident of Heparin-Induced Thrombocytopenia (HIT) type II	Contraindication to the VBX Stent Graft
Exclusion #2	Participation in concurrent research study or registry which may confound registry results, unless approved by Gore	To promote the ability to generate meaningful data on which statistical analyses can be made
Exclusion #3	Pregnant or breast-feeding female at time of informed consent signature	The use of the VBX Stent Graft in this population has not been tested and could present unnecessary risk to a fetus
Exclusion #4	Life expectancy < 12 months due to comorbidities	Consistent with the need for 12 month data as part of endpoint analysis
Exclusion #5	Use of the VBX Stent Graft is for the treatment of *de novo* iliac occlusive disease	Treatment of this particular pathology is not within scope and objective of this registry
Exclusion #6	Use of the VBX Stent Graft is for the treatment of aortic coarctations	Outside of the indicated use
Exclusion #7	Use of the VBX Stent Graft in the coronary, pulmonary, carotid, vertebral, isolated infrarenal aortic, or vena cava vessels	Outside of the indicated use

APPENDIX B

PROTOCOL MODIFICATION SUMMARY

List of changes to VBX 17-04 Revision 6:

- Minor typographical and punctuation errors have been corrected throughout the protocol.
    - In addition, the following changes have been made to the protocol:

Section	Changes to Protocol	Rationale
Protocol - All sections	Extension of follow-up through five years. Corresponding sections, including flow chart and visit windows have been updated.	[redacted]

List of changes to VBX 17-04 Revision 5:

- Minor typographical and punctuation errors have been corrected throughout the protocol.
    - In addition, the following changes have been made to the protocol:

Section	Changes to Protocol	Rationale
Protocol summary	Updated contact name for the Local representative	[redacted]

List of changes to VBX 17-04 Revision 4:

- Minor typographical and punctuation errors have been corrected throughout the protocol.
    - In addition, the following changes have been made to the protocol:

Section	Changes to Protocol	Rationale
Protocol - All sections	Total registry patient population increased to 280 patients. Corresponding sections, including Treatment Category caps, have been updated	[redacted]
3.2.3. and protocol summary	Added “limb salvage” as secondary endpoint	[redacted]
4.1.1. Table	Edited occlusive disease treatment indication example to “artery occlusive”	[redacted]

5.3.	Edited language for clarity around consent after procedure	[redacted]
9.1.	AE reporting will start from enrollment	[redacted]
Table 1	Added definition of limb salvage	[redacted]

List of changes to VBX 17-04 Revision 3:

- Minor typographical and punctuation errors have been corrected throughout the protocol.
    - In addition, the following changes have been made to the protocol:

Section	Changes to Protocol	Rationale
Protocol summary	Changed name and address of Local representative	[redacted]
Protocol summary	Changed name and address of CRO	[redacted]

List of changes in VBX 17-04 Revision 2:

- Revision 1 of the protocol was not distributed to sites
- Minor typographical and punctuation errors have been corrected throughout the protocol.

In addition, the following changes have been made to the protocol:

Section	Changes to Protocol	Rationale
4.2 Inclusion Criteria #3	Changed word Surgical with Endovascular	[redacted]
APPENDIX A Inclusion Criteria #3 Text	Changed word Surgical with Endovascular	[redacted]
APPENDIX A Inclusion Criteria #3 Rationale	Changed word Surgical with Endovascular	[redacted]
Section 9.1.1. Adverse Event Relationship	Added category: Gore Accessory Use-related Any additional Gore devices that were used during the index procedure and / or reintervention caused or contributed to the AE	[redacted]