



PADEC Curriculum

The PAD endovascular certification examination consists of three parts:

- First of all, the theoretical written part, which will consist of 40 multiple-choice questions with one correct answer per five provided responses (60 minutes). Minimum pass mark 70%.
- Secondly, two oral cases, in which the candidate will have to discuss the case, regarding the indication, diagnostic and treatment, explaining technical details. Each candidate will have 15 minutes per case.
- Thirdly, two practical cases (SFS occlusion and BTK stenosis), during which candidates will have to demonstrate their practical skills when performing a peripheral endovascular procedure. Ten minutes per case.

A detailed curriculum of the examination:

1. Written Theoretical Examination

The written examination assesses core theoretical knowledge related to PAD endovascular treatment.

The ESVS does not provide full theoretical contents, but provides links to existing ESVS materials: Guidelines, textbook, videos, podcasts, Vascunet, featured papers, e.g. Furthermore, evidence derived from published randomized studies or high-impact studies on peripheral arterial disease of the lower extremities should be considered.

In general, knowledge on peripheral endovascular treatment is needed in this fields:

- Aorto-iliac
- Femoro-popliteal
- Below the knee (BTK)
- Multi-level disease
- Radiation protection
- Acute limb-ischemia

Structure

40 multiple-choice questions (MCQs)

Each question has 5 possible answers, with **only one correct option**

Time Limit

Last updated: March 2026



60 minutes

Pass Mark

A minimum score of **70%** is required to pass

Format

Paper-based exam

Candidates only need a pen or pencil to mark their answers

This part of the exam focuses on guidelines, indications, device knowledge, complications, and evidence-based decision-making in endovascular PAD treatment.

2. Oral Case Discussions

The oral examination evaluates clinical reasoning, structured thinking, and the ability to apply guidelines to real-life scenarios.

The candidate will be asked to develop a discussion regarding the diagnosis, complementary exams, proposed treatment, and technical details of the procedure. During the discussion, references to guidelines and recommendations are expected.

2.1. Structure

6 stations in total

At each station: **two examiners and one candidate**

Number of cases: 2 clinical cases per candidate

2.2. Duration

15 minutes per case

Total of **30 minutes** for the two oral cases

2.3. Case Format

Cases are presented by the examiners using **PowerPoint presentations on laptops**

The candidate is expected to actively engage in discussion

2.4. What Is Assessed

For each case, candidates must demonstrate:



- Diagnostic reasoning
- Selection and justification of complementary examinations
- Proposed treatment strategy
- Technical aspects of the endovascular procedure
- Appropriate reference to current guidelines and recommendations

2.5. Scoring

Each case is scored using a binary system:

0 = Fail

1 = Pass

Assessment is based on:

- Logical and structured diagnostic reasoning
- Appropriate investigations
- Safe and guideline-compliant treatment proposals
- Correct description of key technical steps

Both oral cases must be passed to successfully complete this part of the examination

Hereafter, please find the Oral Cases Scoring Criteria Form:

Oral Cases Scoring Criteria Form

Item	0 - Fail	1 - Pass
Diagnostic reasoning	Incoherent or incorrect reasoning; unable to justify diagnostic hypotheses.	Structured and logical reasoning; correct or justifiable diagnosis with clear clinical explanation.
Complementary exams	Fails to indicate relevant exams, or suggests unnecessary/unsafe investigations.	Identifies appropriate exams and justifies their role in confirming the diagnosis.
Proposed treatment	No proposal, or unsafe/incorrect treatment contrary to good practice.	Proposes a safe, adequate treatment consistent with the case and current guidelines.
Technical aspects of procedure	Incorrect or unsafe description of essential technical steps.	Correctly describes relevant technical aspects, demonstrating awareness of safety.
Reference to guidelines/recommendations	Does not reference or misuses guidelines/recommendations.	Correctly refers to and applies current guidelines and recommendations.



3. Practical Endovascular Skills Assessment

The practical examination evaluates hands-on endovascular skills, procedural safety, and technical decision-making.

3.1 Structure

2 hands-on endovascular cases

Stations available:

- Femoro-popliteal occlusion
- Iliac stenosis

Each candidate performs **two different cases**.

3.2. Duration

15 minutes per case

Total of **30 minutes** for the practical assessment

3.3. Assessment Environment

Procedures are performed using **endovascular simulators**

Examiners may assist with simulator or machine-related technical issues

3.4. Items Evaluated

Candidates are assessed on:

- Procedure planning and peri-procedural management (including heparin use)
- Vascular access
- Sheath selection
- Angiographic preset (radiation and contrast safety)
- Catheter selection
- Wire selection
- Material selection (balloons and/or stents)
- Dexterity (wire and catheter handling)
- Post-procedural care and closure
- During the procedure, candidates are expected to **explain their technical choices and material selection**.

3.5. Scoring System

Each item is scored from **1 (Very Poor) to 5 (Excellent)**



A global pass requires:

- A total score of $\geq 25/35$, and
- No item scored below **3 (Adequate)**, and
- No failure in critical safety domains (access, angio preset, dexterity)
- Failure in any critical safety item results in **automatic failure** of the practical exam.

Hereafter, please find the Practical Endovascular Skills Scoring Criteria Form:

Practical Scoring Criteria Form

Item	1 – Very Poor	2 – Poor	3 – Adequate	4 – Good	5 – Excellent
Access	Unsafe puncture, repeated failures	Frequent errors, poor anatomical understanding	Access achieved with some errors	Accurate puncture, minor guidance needed	Precise, safe, efficient
Sheath	Wrong size/length, poor handling	Frequent mistakes	Adequate but hesitant or insecure	Correct choice and handling, minor issues	Perfect choice, secure, independent
Angio preset	Inadequate setup, unsafe	Poor quality images, misuse of contrast/radiation	Acceptable but suboptimal	Good images, safe contrast/radiation use	Optimal setup, anticipates needs
Catheter selection	Inappropriate choice	Frequent wrong selections	Adequate but not always optimal	Good selections, safe handling	Always optimal, anticipates anatomy
Wire selection	Wrong/unsafe choices	Poor escalation/de-escalation	Basic adequacy, occasional errors	Appropriate, minor hesitation	Always correct, strategic and efficient
Material selection (balloons/stents)	Wrong size/type, unsafe	Poor match to lesion	Acceptable but not ideal	Correct, safe, minor adjustments	Ideal choice, anticipates needs
Dexterity (wire/catheter handling)	Unsafe, clumsy, risky	Frequent errors, poor control	Acceptable, occasional mistakes	Safe, controlled, efficient	Excellent, smooth, elegant

PASS rule (must meet BOTH A and B)

PASS if:

- A. Total score $\geq 25/35$ (average ≥ 3.6 across domains), and
- B. No item scored < 3 (i.e., all items are at least "Adequate").

FAIL rule

FAIL if any of the following:

- Any critical safety gate (Access, Angio preset (radiation/contrast safety), Dexterity (wire/catheter handling)) item is ≤ 2 (automatic FAIL), or
- Any item is < 3 , or
- Total score $\leq 24/35$.

Final Remarks

The ESVS PAD Certification Examination is designed to reflect real-world endovascular practice, combining knowledge, clinical judgment, and technical performance. Candidates are encouraged to prepare thoroughly, be familiar with current guidelines, and adopt a structured, safe, and patient-centred approach throughout all parts of the examination.