

visibility and palpation items can be subjective and dependent on the rater's experience. If a patient is identified as DIVA according to SAFE, an advanced approach (ultrasound-assisted cannulation, more experienced staff, alternative vascular access) should be considered immediately.

Even though the SAFE Rule has not yet been clinically validated as a scoring tool, it represents a practical and highly usable screening tool that can reduce the number of unsuccessful attempts, patient burden, and resource consumption. Even in this case, the need for translation and validation for the population in the Czech Republic is apparent.

A-DICAVE (Adult–Difficult Venous Catheterization Scale)

A-DICAVE is a validated, simple, and reliable predictive scale used for the early identification of adult DIVA patients in emergency departments. It was developed in Spain by Salleras-Duran et al. in 2020. The methodology for creating the A-DICAVE scale was based on a detailed literature

review of DIVA assessment tools and the subsequent selection of items with sufficient scientific backing, while irrelevant or inadequately supported factors were excluded.

Subsequently, a three-round Delphi process took place with five experienced emergency department nurses, leading to a consensus on three final items (vein visibility, vein palpability, and DIVA history). These items were used to create an additive three-item scale (Table 5) which was first pilot-tested on ten patients and then validated in a prospective observational study with 392 adult patients in an emergency department. Statistical analysis confirmed a high validity and reliability of the scale, enabling its implementation as a simple and objective tool for DIVA prediction [9].

The positive aspects of the A-DICAVE scale include its simplicity, speed, and accuracy due to its high sensitivity and specificity. Its negative aspects include a certain degree of subjectivity in assessing the visibility and palpability of veins, the fact that it was only validated internally in the setting of a single facility, and the exclusion of some potentially relevant risk factors for which there was insufficient evidence at the time of its creation. The A-DICAVE scale is intended for detecting DIVA patients, particularly in emergency departments. The expert team perceives its potential for broader use and thus suggests that the scale be translated and externally validated.

DIVA-CP (Difficult Intravenous Access in Cancer Patients)

The DIVA-CP tool is a pilot-validated clinical instrument designed to assess the difficulty of PIVC insertion in cancer patients undergoing out-patient chemotherapy. It was developed in a cancer centre in Northeast Italy by a multidisciplinary team of experienced oncology nurses who based the tool's creation on a literature review and their own clinical experience. The scale consists of ten items grouped into four factors (availability of preferred veins, vein fragility, probable procedural difficulties, and repeated strain on the venous network; see Table 6).

Tab. 5. A-DICAVE [9]

Item	Score	Description
Vein visibility	0	Vein is clearly visible and suitable for puncture.
	1	Vein is barely visible, thin, or tortuous; accessible with a small calibre cannula (22 gauge or smaller).
	2	Vein is not visible (no vein suitable for puncture is visible).
Vein palpability	0	A vein suitable for puncture is palpable.
	1	A vein is barely palpable, thin, or tortuous; accessible with a small calibre cannula.
	2	Vein is not palpable (no vein suitable for puncture is palpable).
DIVA history	0	Patient denies difficult venous access/DIVA not documented.
	1	Patient reports prior difficult cannulation/DIVA documented.

Score Calculation and Interpretation: 0–2 points: easy cannulation; 3–5 points: difficult cannulation, consider using ultrasound.

Tab. 6. DIVA-CP [10]

Factor	Item	Description	Possible Values	Max Points
Availability of preferred veins	Poorly visible / non palpable veins	Veins are not well distinguishable	0 – No 1 – Yes	1
	Small vein calibre	Thin, narrow veins	0 – No 1 – Yes	1
	Veins on one upper limb unavailable	e.g., after mastectomy	0 – No 1 – Yes	1
Vein fragility	Sclerotic veins	Vein fragility	0 – No 1 – Yes	1
	Signs of phlebitis	Pain, redness, inflammation	0 – No 1 – Yes	1
	Type of chemotherapy	Non-vesicant Irritant Vesicant	0 – Non-vesicant 1 – Irritant 2 – Vesicant	2
Probable difficulties during procedure	Tortuous veins	Pronouncedly winding veins	0 – No 1 – Yes	1
	Mobile veins	Vein “moves/ slips” during puncture	0 – No 1 – Yes	1
Repeated venous system load	Treatment > 6 months	Long term repeated venipunctures	0 – No 1 – Yes	1
	Many previous venipunctures	Clear signs of repeated punctures	0 – No 1 – Yes	1