

Est-ce qu'on enseigne la même chose en Europe?
Quel enseignement de la sclérothérapie écho-
guidée?
Allemagne

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Conflicts of interest

- None

Sclerotherapy in Germany

- German guidelines on Sclerotherapy
 - Close to the European Guidelines
- Specialities and subspecialities with sclerotherapy in the curriculum (2018)
 - Vascular surgery
 - Angiology
 - Dermatology
 - Phlebology

Vascular surgery (72 months)

Knowledge	Personal experience and skills	N
Diagnosis	Clinical and instrumental vascular interventions	
	CW-Doppler-Sonography of peripheral arteries and veins	100
	Duplex-Sonography of peripheral veins	100
Therapy	Venous interventions	60
	- Open surgery (e.g.: high ligation + stripping, perforator surgery, phlebectomy)	50
	- endovenous, sclerotherapy	

Angiology (72 months)

Knowledge	Personal experience and skills	N
Diagnosis	B-Mode-Sonography of peripheral arteries and veins	
	CW-Doppler-Sonography of peripheral arteries and veins	100
	Duplex-Sonography of peripheral veins	100
Therapy	Indication and performance of arterial or venous interventions including radiological imaging	
	Sclerotherapy of superficial veins	

Dermatology (60 months)

Knowledge	Personal experience and skills	Numbers
Diagnosis	Doppler-/Duplex sonography of peripheral vessels	200
	Venous / functional vascular diagnosis	200
Therapy	Conservative, including physical, treatment of vascular diseases	
	Venous interventions of the lower leg (e.g.: phlebectomies, perforator surgery, high ligation + stripping, superficial thrombectomy)	

Phlebology (subspeciality) (speciality + qualification)

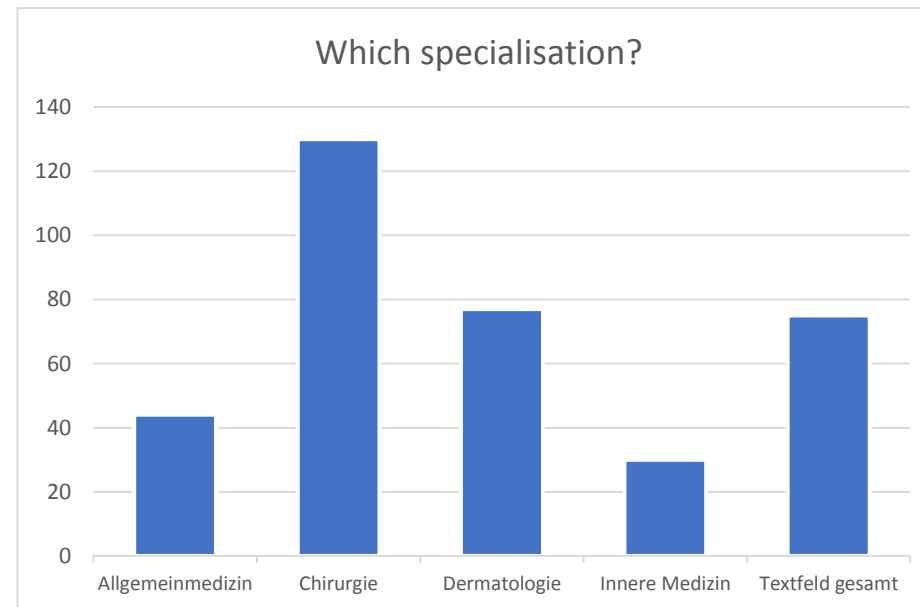
Knowledge	Personal experience and skills	N
Diagnosis	Doppler-Sonography of the veins	100
	Duplex-Sonographie of the veins	100
Therapy	Sclerotherapy	
Venous interventions of the lower extremities (e.g.: phlebectomies, varicotomy, miniphlebectomy, high ligation + stripping, perforator surgery, endovenous ablation)		

German Society of Phlebology (DGP) curriculum of the „Educational Phlebology Certificate“ valid 3 years

Knowledge	Personal experience and skills	N
Preconditions	<ul style="list-style-type: none"> - DGP membership - Subspeciality „Phlebology - or - Speciality vascular surgery, angiology, Dermatology - or - 2 years predominantly phlebological professional work - treatment of at least 300 venous patients per year - 60 phlebological credit points in the last 3 years - If no phlebology subspeciality or vascular speciality at least two hands-on courses in special venous topics 	
Diagnosis	Doppler-/Duplex sonography of the veins	200
	Venous / functional vascular diagnosis	200
Therapy	Sclerotherapy	100

Questionnaire to all members of DGP who are performing sclerotherapy

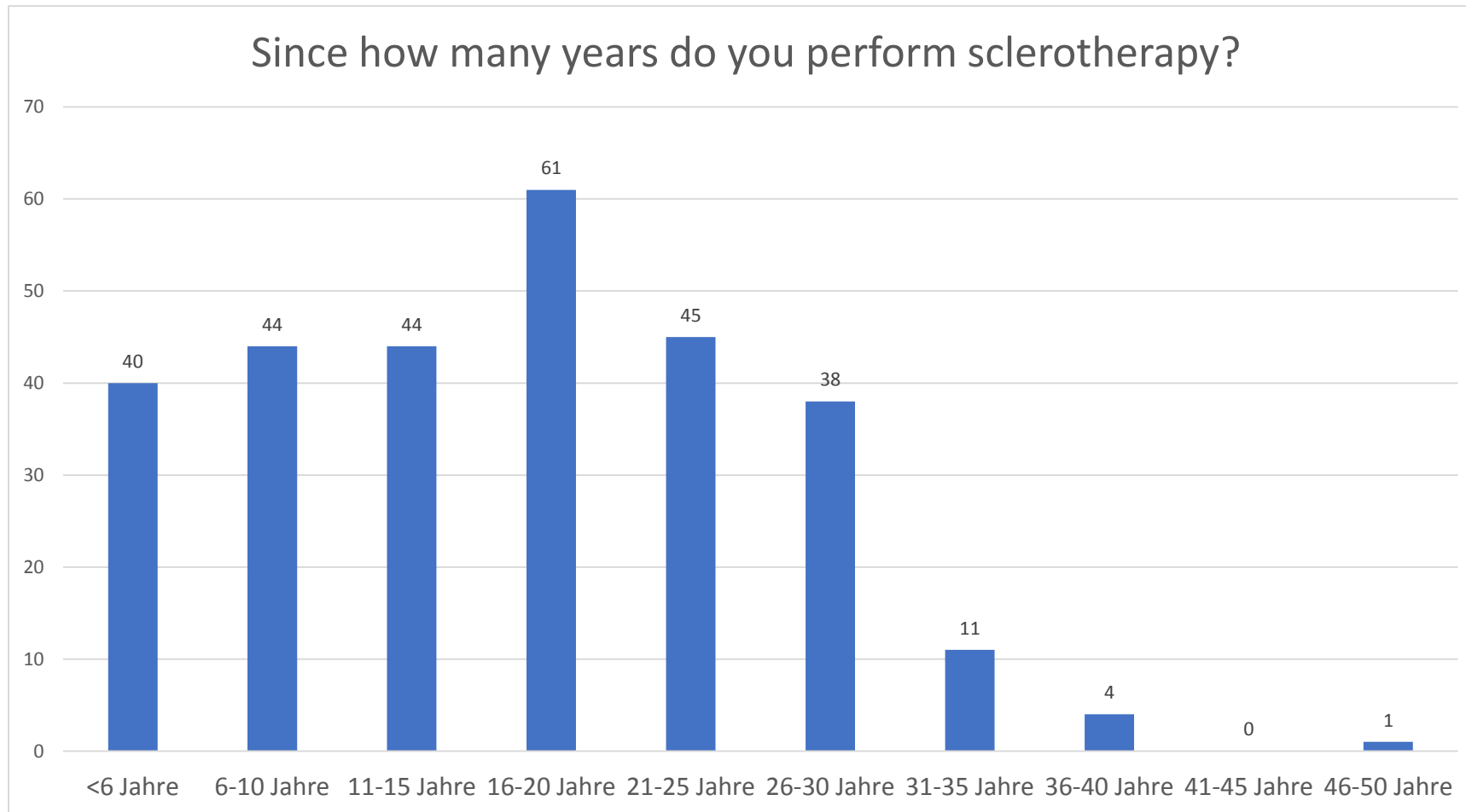
- By e-mail
- 10-12/2017
- Answers: n = 311 (197 men, 99 women, 15 unknown)
 - 191 private practice
 - 12 private hospital
 - 36 employed in practice
 - 57 employed in hospital
 - 216 „phlebologists“



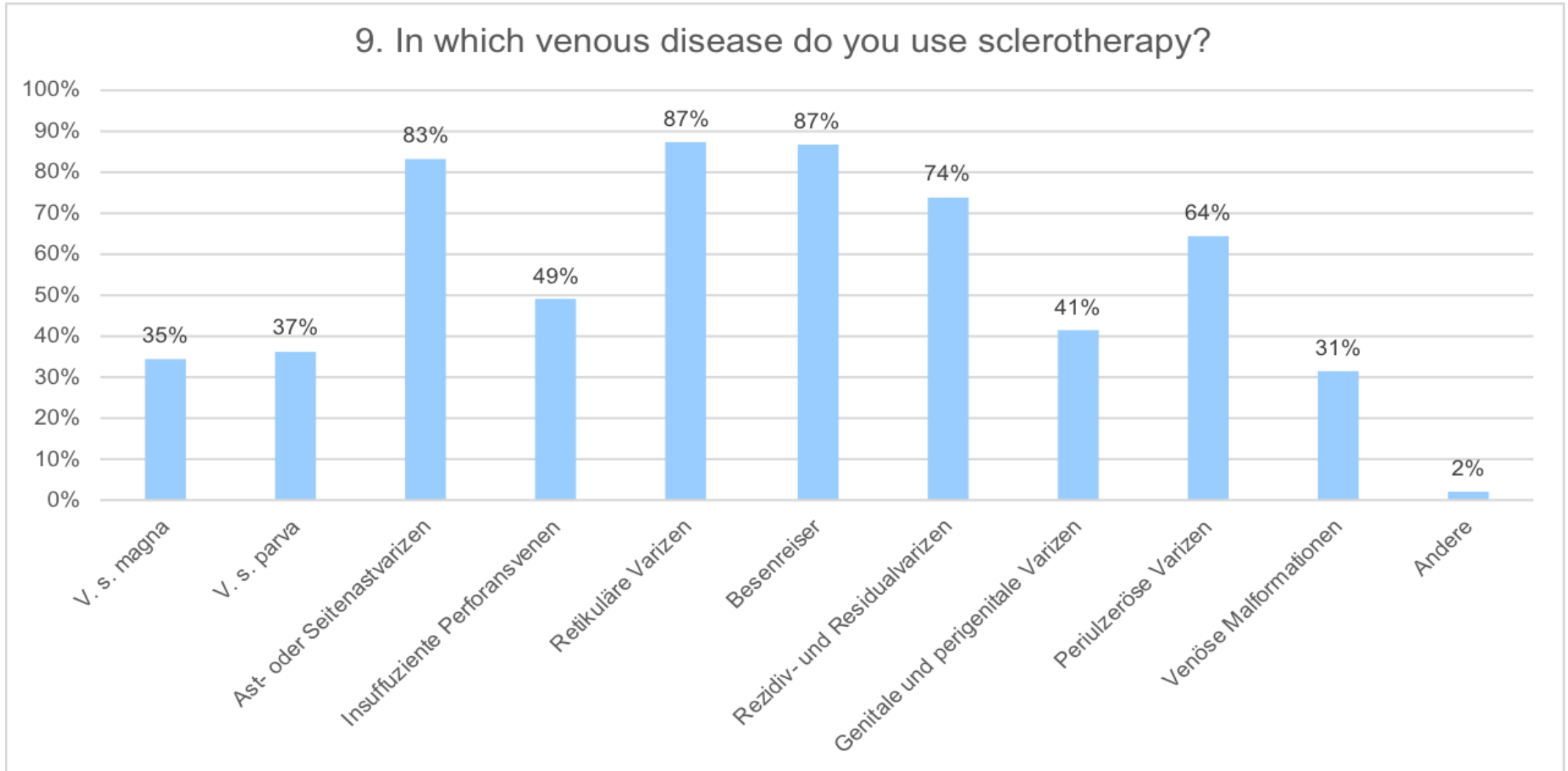
Education

Which education in sclerotherapy?	N	%
Educational courses	180	57,70
During specialisation	175	56,09
By colleagues	148	47,44
By hospitation	144	46,16
Self education	119	38,15
Online	7	2,25
Others	1	0,33

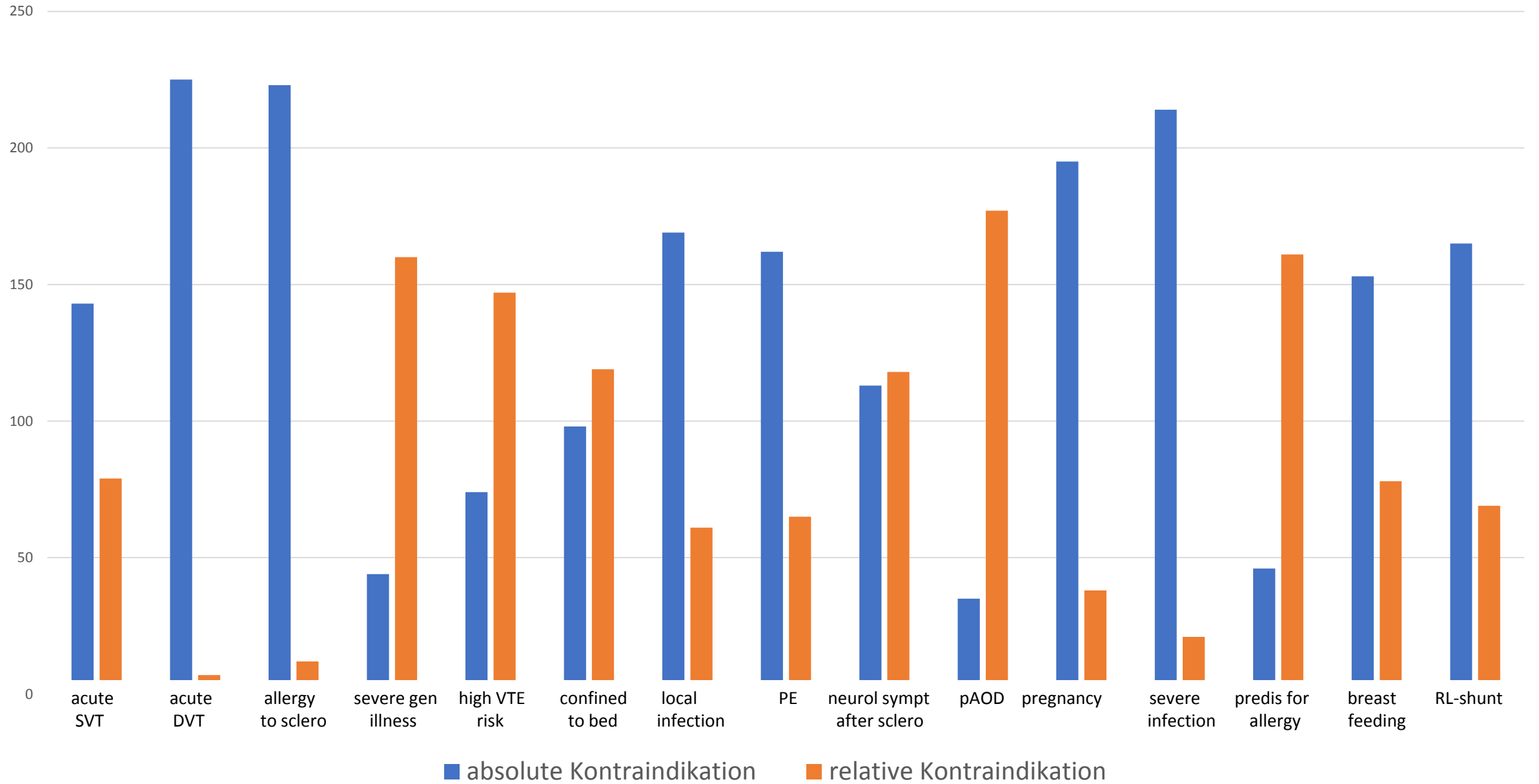
Experience



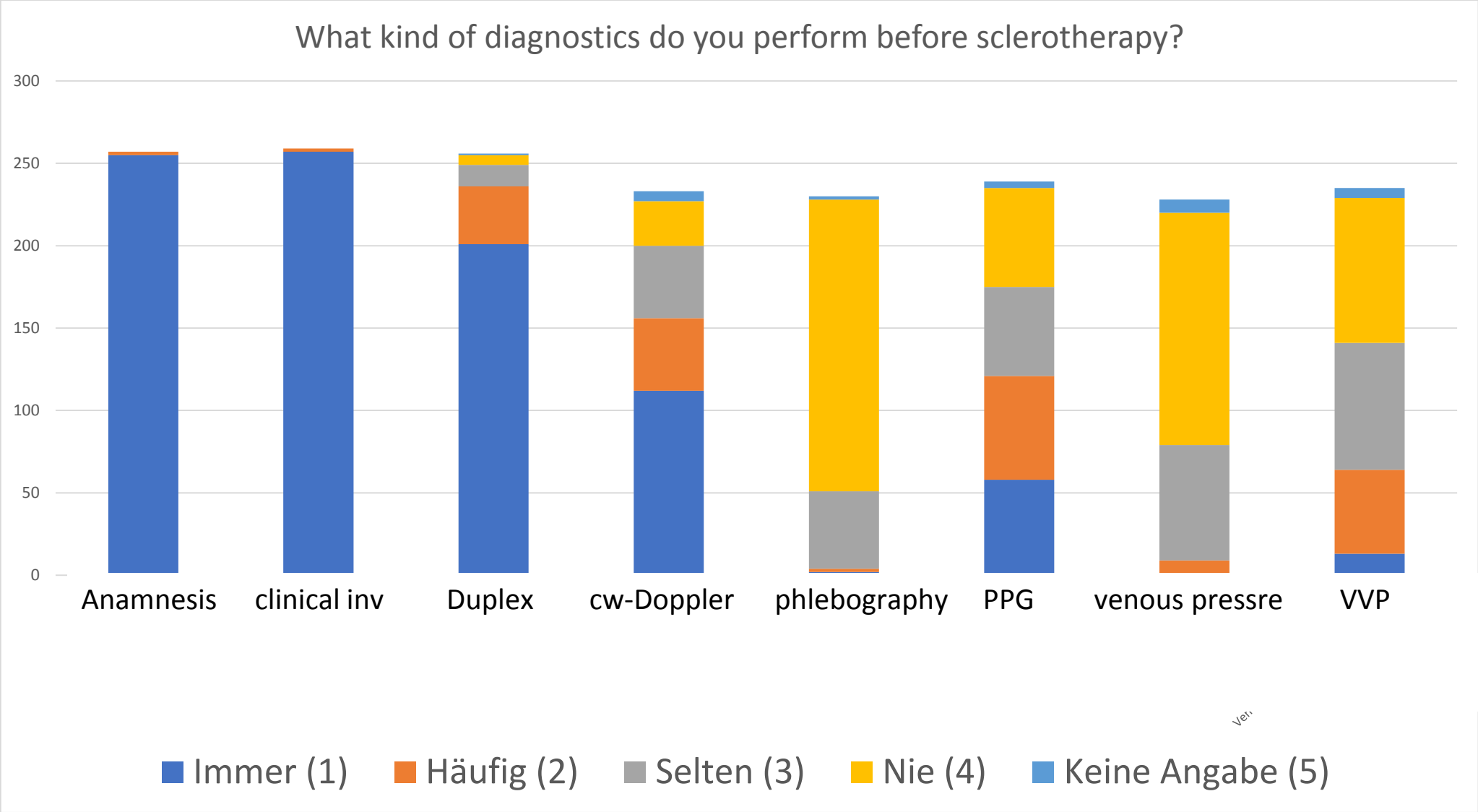
9. In which venous disease do you use sclerotherapy?



What do you consider a contraindication for foam sclerotherapy?

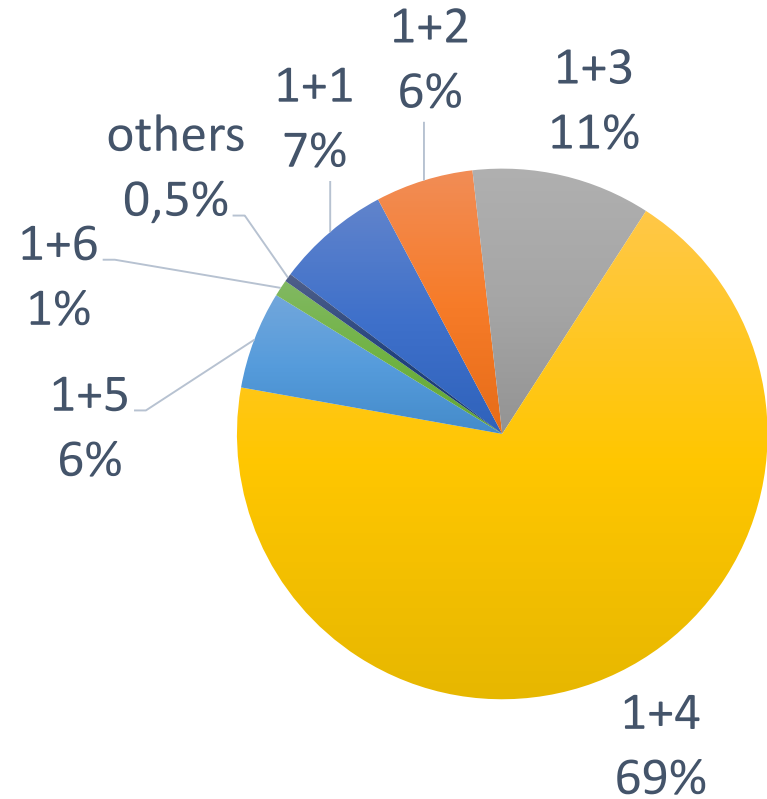


Diagnosis

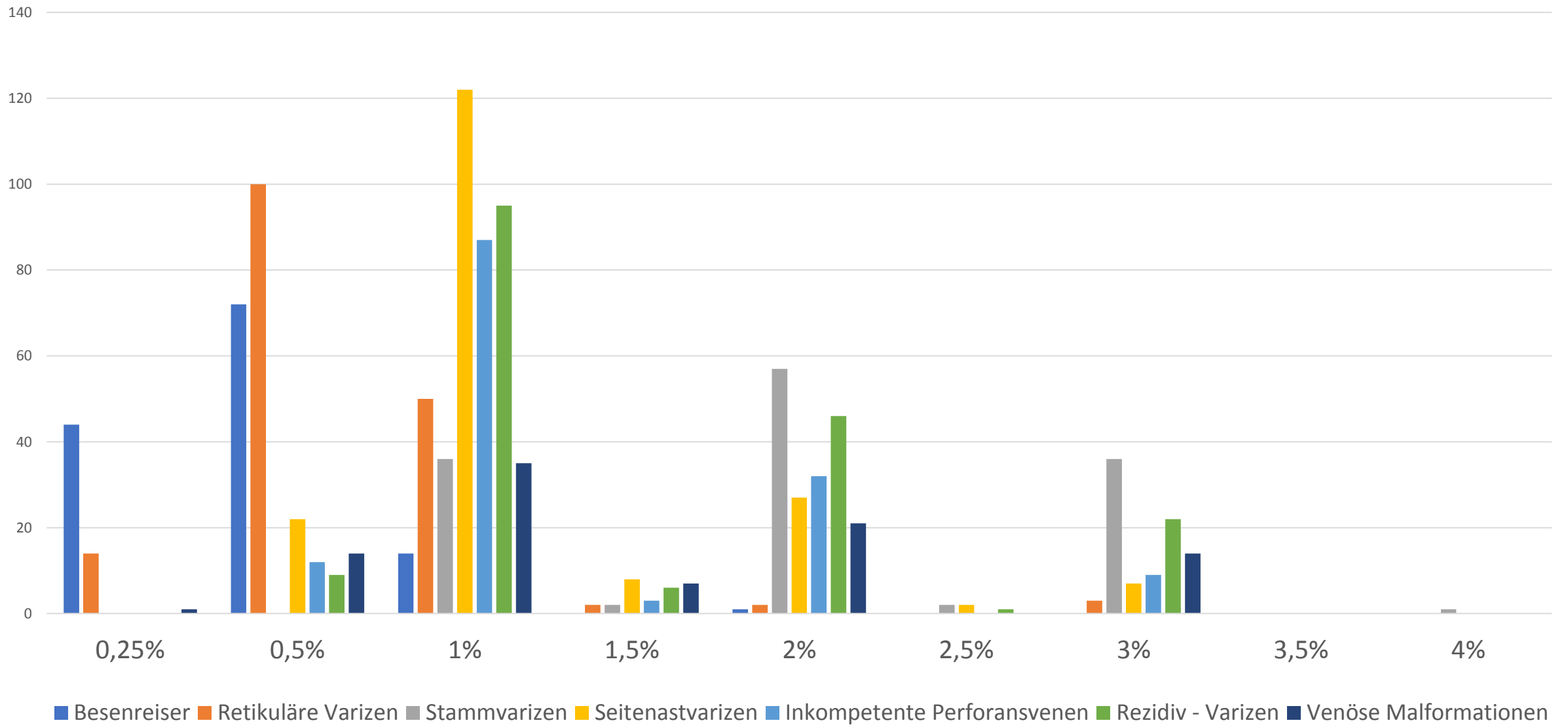


Foam sclerotherapy

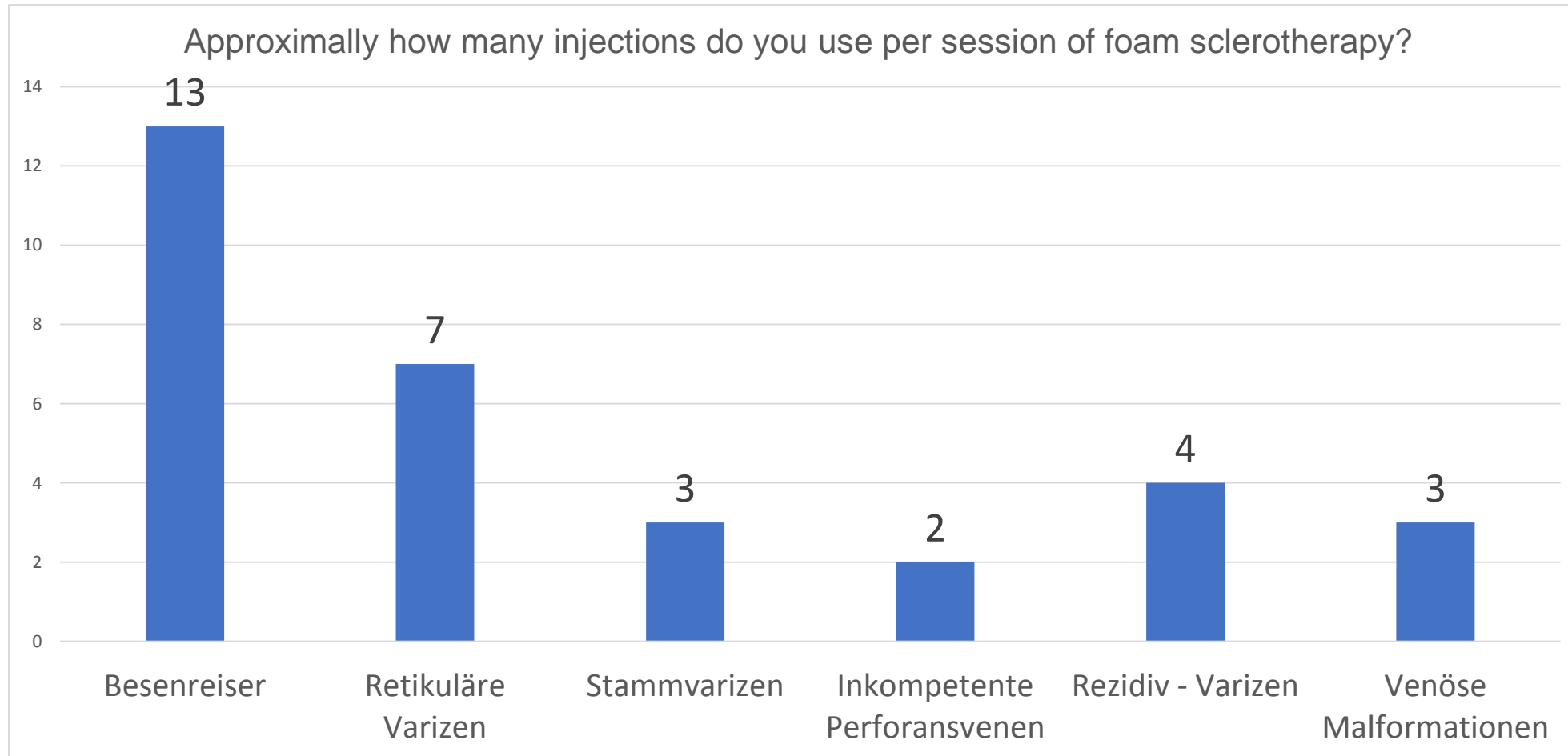
Which liquid/gas proportion do you use for foam production?



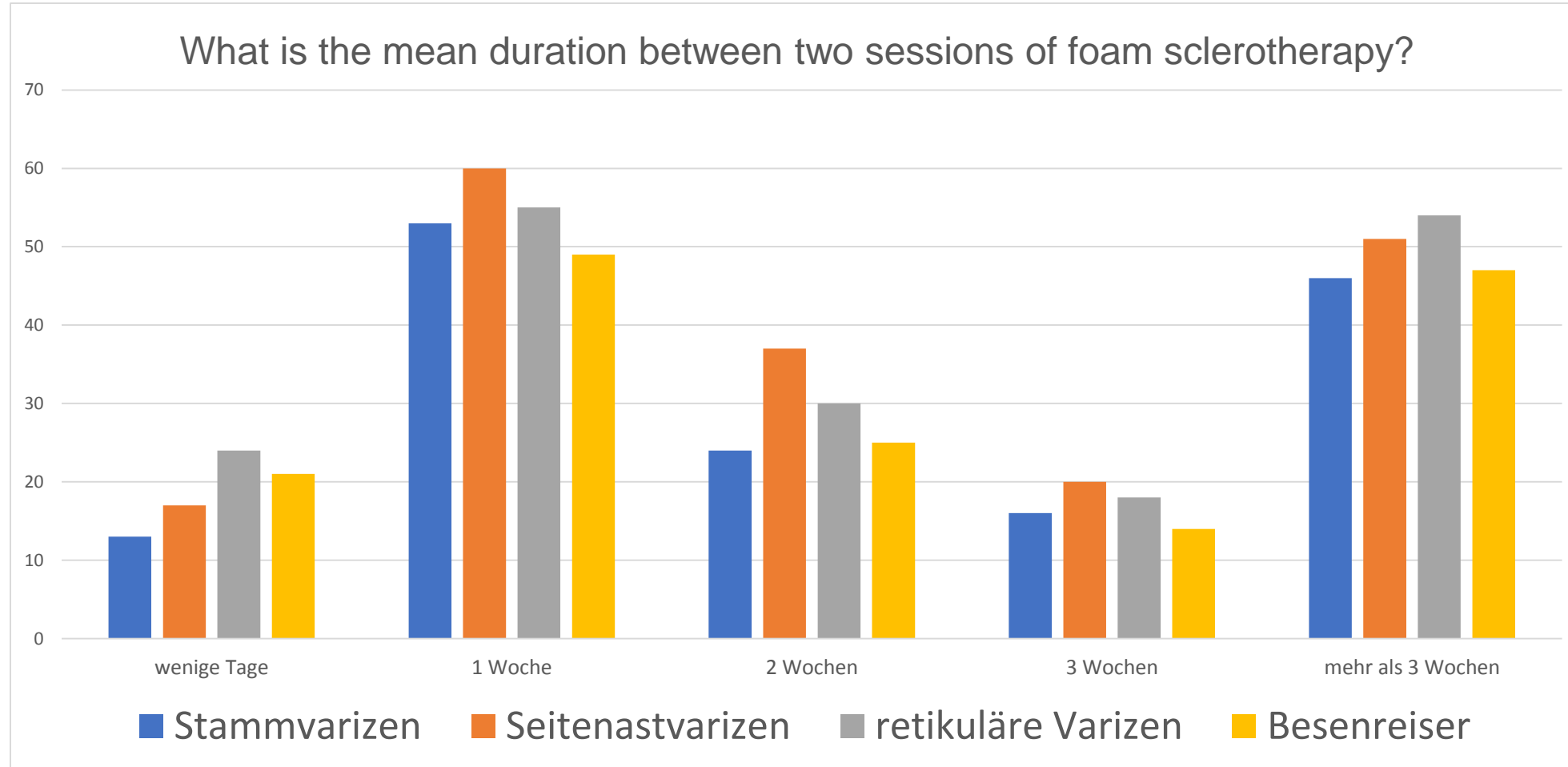
Which concentrations do you prefer for foam sclerotherapy?



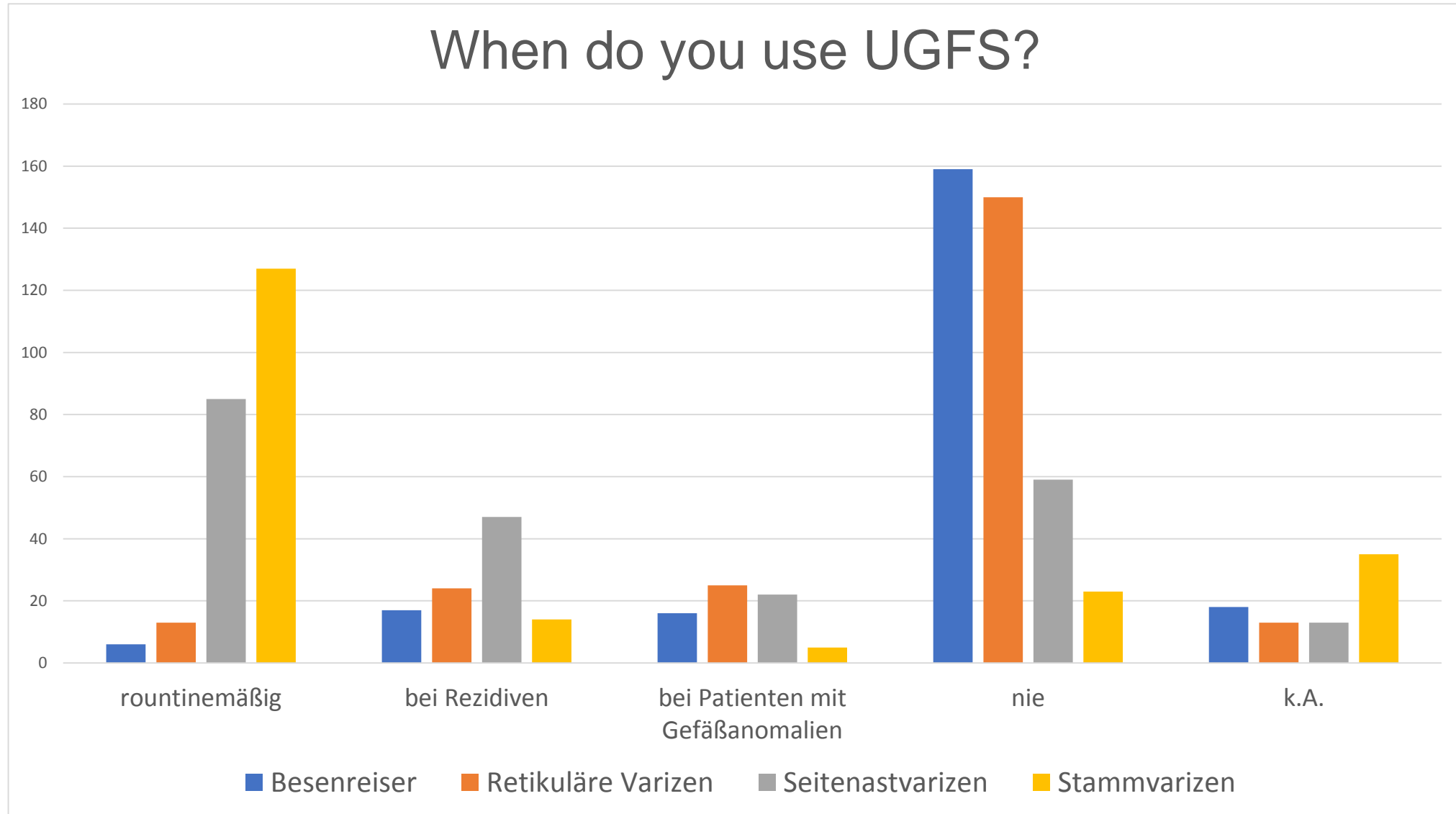
Number of injections



Interval between sessions



Ultrasound guided foam sclerotherapy (UGFS)



Summary

- Duplex-sonography of peripheral veins and sclerotherapy are part of the official curricula of vascular surgery, angiology , dermatology and phlebology (last update 2018).
- They are also part of the German Society of Phlebology (DGP) curriculum of the „Educational Phlebology Certificate“
- Foam-sclerotherapy or ultrasound guided foam sclerotherapy (UGFS) are not specifically mentioned.
- The German guidelines of sclerotherapy are the official guidance for the method (last update 2019).

Current reality

- Sclerotherapy in Germany is performed predominantly according to the European / German guidelines
- Before sclerotherapy duplex ultrasound is performed by the majority
- Foam sclerotherapy is used mainly in side branches, recurrent VV and saphenous VV
- Room air without microfilter and 1+4 liquid/gas relation are widely used
- Only polidocanol is registered
- Sclerotherapy training is performed in educational hands-on courses, during specialisation and by colleagues / hospitation in almost equal parts

Thank you very much for listening