


**SYNCHRONOUS trial 12 months follow-up data**  
(simultaneous ASV treatment for patients undergoing GSV ablation)

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**Conflicts of interest TOBIAS HIRSCH**

- Consulting: Kreussler, Medtronic,
- Honoraria: Medtronic, Biolitec, Merit, Kreussler
- Sponsoring: Biolitec, Medtronic, Intros, Kreussler,
- Studies: Medtronic, Biolitec
- SYNCHRONOUS 

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f, 42y

History:

- RFA on right GSV in 2004
- Recurrent SVT 2024

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**ANTERIOR SAPHENOUS VEIN GUIDELINES**

The anterior saphenous vein. Part 1. A position statement endorsed by the American Vein and Lymphatic Society, the American Venous Society, and the American Venous Forum.

The anterior saphenous vein. Part 2. Anatomic considerations in normal and refluxing patients. Endorsed by the American Vein and Lymphatic Society, the American Venous Society, and the American Venous Forum.

The anterior saphenous vein. Part 3. Systematic review of the literature and payor coverage policies. Endorsed by the American Vein and Lymphatic Society, the American Venous Society, and the American Venous Forum.

The anterior saphenous vein. Part 4. Clinical and technical considerations in treatment. Endorsed by the American Vein and Lymphatic Society, the American Venous Society, and the American Venous Forum.

Edward M. Boyle<sup>1</sup>, Rachel Orgstein<sup>2</sup>, Nicos Labropoulos<sup>3</sup>, Alberto Caggiani<sup>4</sup>, Antonios Gasparis<sup>5</sup>, Sait Doganci<sup>6</sup>, and Mark Meissner<sup>7</sup>. *Bravely Ode Story Book, NY, Rome, Italy, Ankara, Turkey, and Seattle, WA*

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**ANTERIOR SAPHENOUS VEIN GUIDELINES**

**Should the normal ASV be treated when initially treating refluxing GSV?**

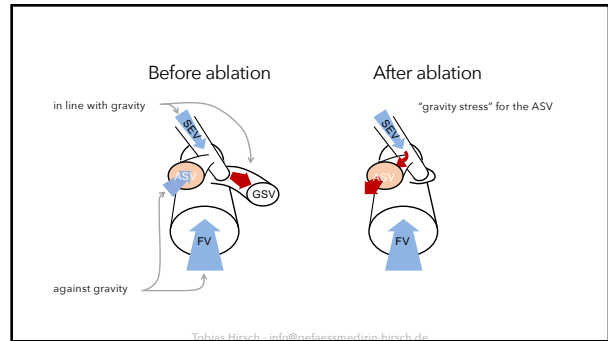
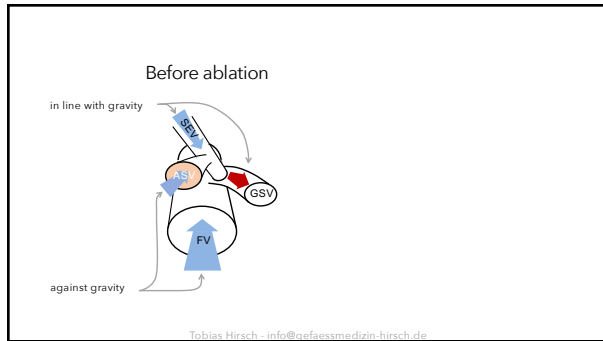
The impact of synchronous prophylactic treatment of the ASV on the incidence of recurrence in patients undergoing thermal ablation of an incompetent GSV is being studied in a randomized prospective trial (the SYNCHRONOUS-Study) with 1150 patients.<sup>18</sup> Studies such as this will help determine if there is sufficient evidence to recommend such a prophylactic approach to reduce recurrence in the future.

<sup>18</sup> Gasparis<sup>18</sup> and Seattle, WA

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The ASV is a major cause of recurrence

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Can preventive ASV removal reduce the rate of recurrence?

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Open access Protocol

**BMJ Open** Impact of a synchronous prophylactic treatment of the anterior accessory saphenous vein on the recurrent varicose vein rate in patients undergoing thermal ablation of an insufficient great saphenous vein (SYNCHRONOUS-Study): study protocol for a prospective, multicentre, controlled observational study

Christina Fink, <sup>1</sup> Karsten Hoffmann, <sup>1</sup> Thomas Matuschik, <sup>1</sup> Hans-Christian Wenzel, <sup>1</sup> Philipp Zollmann, <sup>1</sup> Jürgen Vöhrman, <sup>1</sup> Thomas Weiler, <sup>1</sup> Guido Langguth, <sup>1</sup> Lutz Müller, <sup>1</sup> Marcus Stöcker, <sup>1</sup> Franziska Pannse, <sup>1</sup> Carsten Dieckhoff, <sup>1</sup> Lorenz Urban, <sup>1</sup> Tobias Hirsch, <sup>1</sup> a synchronous prophylactic

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**The SYNCHRONOUS trial:**  
 "A multicentre, prospective, controlled, clinical study to evaluate the impact of a **synchronous treatment of the anterior accessory saphenous vein for prevention of recurrent varicose veins** in patients undergoing thermal ablation of an insufficient great saphenous vein"

**Primary endpoint:**

- Impact of synchronously treating the ASV to prevent recurrent varicose veins

**Secondary endpoints:**

- Complication rate (bruising, hyperpigmentation, paresthesia)
- EHIT/DVT
- AWQ, VCSS
- Patient satisfaction (NRS)

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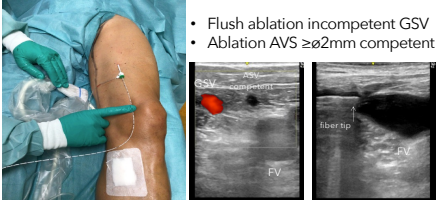
**The SYNCHRONOUS trial:**  
 "A multicentre, prospective, controlled, clinical study to evaluate the impact of a **synchronous treatment of the anterior accessory saphenous vein for prevention of recurrent varicose veins** in patients undergoing thermal ablation of an insufficient great saphenous vein"

- 1,031 patients
- 150 healthy individuals (estim.)

First-in: 7 Feb 2019  
 End of roll-in: 30 April 2022

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- Flush ablation incompetent GSV
- Ablation AVS  $\geq 2$ mm competent

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**Baseline characteristics:**

<b>n = 1.031</b>	
Age	50.5 years
Gender	62% female
BMI	27.2
<b>SFI/ASV at baseline (Groups A + B)</b>	
ASV not present	23%
SFI: ASV → GSV	42%
SFI: ASV → FV	5%
SFI: ASV → SEV → GSV / FV	30%

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**Primary endpoints**

	GSV + ASV		w/o ASV <2mm		w/o ASV >2mm	
	6M	12 M	6M	12M	6M	12M

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**Primary endpoints**

	GSV + ASV		w/o ASV <2mm		w/o ASV >2mm	
	6M	12 M	6M	12M	6M	12M
<b>N</b>	456/596	319/596				
<b>No ASV visible</b>	437 (95.8%)	296 (92.8%)				
<b>ASV patent</b>	19 (4.2%)	23 (7.2%)				
• without reflux	18 (3.9%)	20 (6.3%)				
• with reflux	1 (0.2%)	3 (0.9%)				

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**Primary endpoints**

	GSV + ASV		w/o ASV <2mm		w/o ASV >2mm	
	6M	12 M	6M	12M	6M	12M
<b>N</b>	456/596	319/596	276/337	189/337	4 (1.8%)	2 (1.1%)
<b>No ASV visible</b>	437 (95.8%)	296 (92.8%)	114 (41.2%)	81 (42.9%)	4 (1.8%)	2 (1.1%)
<b>ASV patent</b>	19 (4.2%)	23 (7.2%)	162 (58.7%)	108 (57.1%)	217 (98.2%)	180 (98.9%)
• without reflux	18 (3.9%)	20 (6.3%)	68 (24.6%)	56 (27.6%)	137 (62.0%)	114 (63.4%)
• with reflux	1 (0.2%)	3 (0.9%)	9 (3.3%)	9 (4.8%)	18 (8.1%)	25 (13.7%)

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**Primary endpoints**

	GSV + ASV		w/o ASV <2mm		w/o ASV >2mm	
	6M	12 M	6M	12M	6M	12M
<b>N</b>	456/596	319/596	276/337	189/337	221/267	182/267
<b>No ASV visible</b>	437 (95.8%)	296 (92.8%)	114 (41.2%)	81 (42.9%)	4 (1.8%)	2 (1.1%)
<b>ASV patent</b>	19 (4.2%)	23 (7.2%)	162 (58.7%)	108 (57.1%)	217 (98.2%)	180 (98.9%)
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**Secondary endpoints: AE – paresthesia, EHIT, DVT**

week	GSV only	GSV+AASV	p-value	week	GSV only	GSV+AASV	p-value
week 1	n=509	n=522		week 24	n=366	n=291	
paresthesia	10 (1.96%)	13 (2.49%)	0.6747	paresthesia	22 (6.01%)	14 (4.81%)	0.6055
EHIT I	1	1	1	EHIT I	0	0	1
EHIT II	1	1	1	EHIT II	0	0	1
EHIT III	0	2	0.4996	EHIT III	1	1	1
DVT	1	1	1	DVT	0	1	0.4429

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**Original Article**  
 Safety of synchronous prophylactic ablation of the anterior saphenous vein in patients undergoing great saphenous vein thermal ablation – 6 months follow-up data of the SYNCHRONOUS study

Carsten K. Hirsch<sup>1</sup>, Tobias Hirsch<sup>2</sup>, Karsten Hartmann<sup>3</sup>, Thomas Maternack<sup>4</sup>, Hans-Christoph Wenzel<sup>5</sup>, Philipp Zollmann<sup>6</sup>, Jürgen Vilmann<sup>7</sup>, Thomas K. Weber<sup>8</sup>, Guido Langhans<sup>9</sup>, Jan Müller<sup>10</sup>, Markus Sticker<sup>11</sup>, Felicitas Passler<sup>12</sup>, Lorenz Ulmhaus<sup>13</sup>, and Christian Müller-Christmann<sup>14</sup>

**Original Article**  
 Compression therapy after endovenous laser ablation: Patient compliance and impact on clinical outcome

Carsten K. Hirsch<sup>1</sup>, Markus Sticker<sup>2</sup>, Karsten Hartmann<sup>3</sup>, Tobias Hirsch<sup>4</sup>, Thomas Maternack<sup>5</sup>, Hans-Christoph Wenzel<sup>6</sup>, Philipp Zollmann<sup>7</sup>, Jürgen Vilmann<sup>8</sup>, Thomas K. Weber<sup>9</sup>, Guido Langhans<sup>10</sup>, Jan Müller<sup>11</sup>, Felicitas Passler<sup>12</sup>, Christiane Cengel<sup>13</sup>, Lorenz Ulmhaus<sup>14</sup>, and Christian Müller-Christmann<sup>15</sup>

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**Conclusion**

- After 12 months, 13.7% of untreated ASVs >2mm and 4.8% of ASVs <2mm have reflux, but only 0.9% of ASVs in the GSV+ASV group.
- When a preventive ablation of the ASV is being considered, it can be stated that there is no increased rate of side effects.
- Compression therapy after EVLA leads to significantly fewer symptoms compared to no compression. Therapy duration of up to 14 days was found to be the most effective regime.

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Thank you for your attention!  
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