



**ASKLEPIOS**  
KLINIK ST. GEORG



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ST. GEORG

# TLE Current Status and Future Steps ...

**ASKLEPIOS** Klinik St. Georg 

**Samer Hakmi**



**1** **Current status**

**2** **Right Heart Masterclass**

**3** **Future steps ...**

**AGENDA**

# 1 Current status

## Lead Extraction in the Contemporary Setting: The LExlCon Study

An Observational Retrospective Study  
of Consecutive Laser Lead Extractions

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2010



2017



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**CLINICAL RESEARCH**

*Arrhythmia/electrophysiology*

## The European Lead Extraction ConTRolled (ELECTRa) study: a European Heart Rhythm Association (EHRA) Registry of Transvenous Lead Extraction Outcomes

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# The German Laser Lead extraction RegistrY-GALLERY

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**Michael Knaut**<sup>5</sup>, **Hermann Reichenspurner**<sup>1</sup>, **Stephan Willems** <sup>3</sup>,  
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**Was bleibt davon?**



data

**Table 3 Results and outcomes**

<b>Procedure (patient) related</b>	<b><i>n</i> = 2524</b>
Median duration of hospital stay, days (IQR)	9.0 (5–16)
Median duration of postoperative hospital stay, days (IQR)	2.0 (1–4)
Clinical procedural success, <i>n</i> (%)	2470 (97.86)
Procedural failure, <i>n</i> (%)	54 (2.14)
Laser sheath ratio per case, <i>n</i> ± SD	1.06 ± 0.24
Additional tools used <sup>a</sup> , <i>n</i> (%)	168 (6.65)
Mechanical rotating sheaths, <i>n</i> (%)	91 (3.60)
Snare, <i>n</i> (%)	24 (0.95)
Other/unknown tools, <i>n</i> (%)	62 (2.45)
Median procedural time, min (IQR)	81.0 (56–125.25)
Median fluoroscopy time, min (IQR)	6.0 (3–11.9)
<b>Lead related</b>	<b><i>n</i> = 5499</b>
Complete lead removal, <i>n</i> (%)	5216 (94.85)
Incomplete lead removal, <i>n</i> (%)	283 (5.15)

Values are expressed as mean ± SD, median (inter-quartile range), or counts (*n*) and percentages (%).

<sup>a</sup>Tool combination possible.



**... es bleibt leider nichts anderes!**

know-how

Excel Datei Bearbeiten Ansicht Einfügen Format Extras Daten Fenster Hilfe

TLE\_Database\_08.11.2022.xlsm

Auf dem Blatt suchen

Start Layout Tabellen Diagramme SmartArt Formeln Daten Überprüfen

Bearbeiten Schriftart Ausrichtung Zahl Format Zellen Designs

Ausfüllen Calibri 12 abc Zeilenumbruch Standard

Einfügen Löschen F K U Zusammenführen % 000

Bedingte Formatierung Formatvorlagen Einfügen Löschen Format Designs

D391 ='Conven. database'!D101

	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	
1	al database folder	Samer: iPhone + 3D CT							Education data																		
2		Intraoperative			Postoperative																					No	No
3		Anesthesia							L	Post HTX	Liberator	No									Should hav	No					Other
4	No	GE	No	No	No	No	No	R	No	No	14	No	No	No	No	No	To control	Yes	No	No	No	No	No	No	No	Attain Stab	No
5	Yes	Philips	Yes	Yes	Yes	Yes	Yes	Femoral	Yes	Yes	16	Yes	Yes	Yes	Yes	To decision	Yes (sub)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Starfix	Yes
6	3D CT	3D TEE	iPhone	Fluoro	X-ray	TTE	TEE	Imagin	Side	Damag	LLD	Laser	Outer	Upsizir	Switch	Calcific	Venog	TightR	Evolut	brocke	Lead e	Needle	Spaghe	EN Sna	ONE Sr	CS Lea	Sig
387	No	No	Yes	DICOM				L	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	No	No	No	No	No	No	No	No	No
388	No	No	No	DICOM				L	No	Yes	16	No	No	Yes	Yes	Yes	No	Yes	No	No	No	No	No	No	No	Yes	No
389	No	No	Yes	DICOM				L	No	Yes	16	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No
390	No	No	Yes	DICOM				L	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	No
391	No	No	Yes	DICOM				L	No	Yes	14	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No
392	No	No	Yes	DICOM				L	No	Yes	14	No	No	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No
393																											
394																											
395	No	No	Yes	DICOM				L	No	Yes	14	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No
396	No	No	Yes	DICOM				L	No	Yes	16	No	No	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No
397	No	No	Yes	DICOM				L+R	No	Yes	16	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No
398	No	No	No	DICOM				L	No	Yes	16	No	No	No	Yes	No	No	No	No	No	No	No	No	No	Yes	Yes	No
399	No	No	Yes	DICOM				L	Yes	No	16	No	No	Yes	No	No	No	No	No	Yes	No	No	No	No	Yes	No	No
400	No	No	Yes	DICOM				L	Yes	Yes	14	No	No	No	No	Yes	No	No	No	Yes	No	No	No	No	No	No	No
401	No	No	Yes	DICOM				L	Yes	Yes	16	No	No	Yes	Yes	No	No	No	Yes	No	No	No	No	No	No	Yes	No
402	No	No	Yes	DICOM				L	No	Yes	16	No	No	No	No	Yes	No	No	No	No	No	No	No	No	Yes	No	No

Conven. database Visual Database UKE TLE Database

Normalansicht Bereit

1 von 1 ausgewählt, 7,68 GB verfügbar

Summe=0



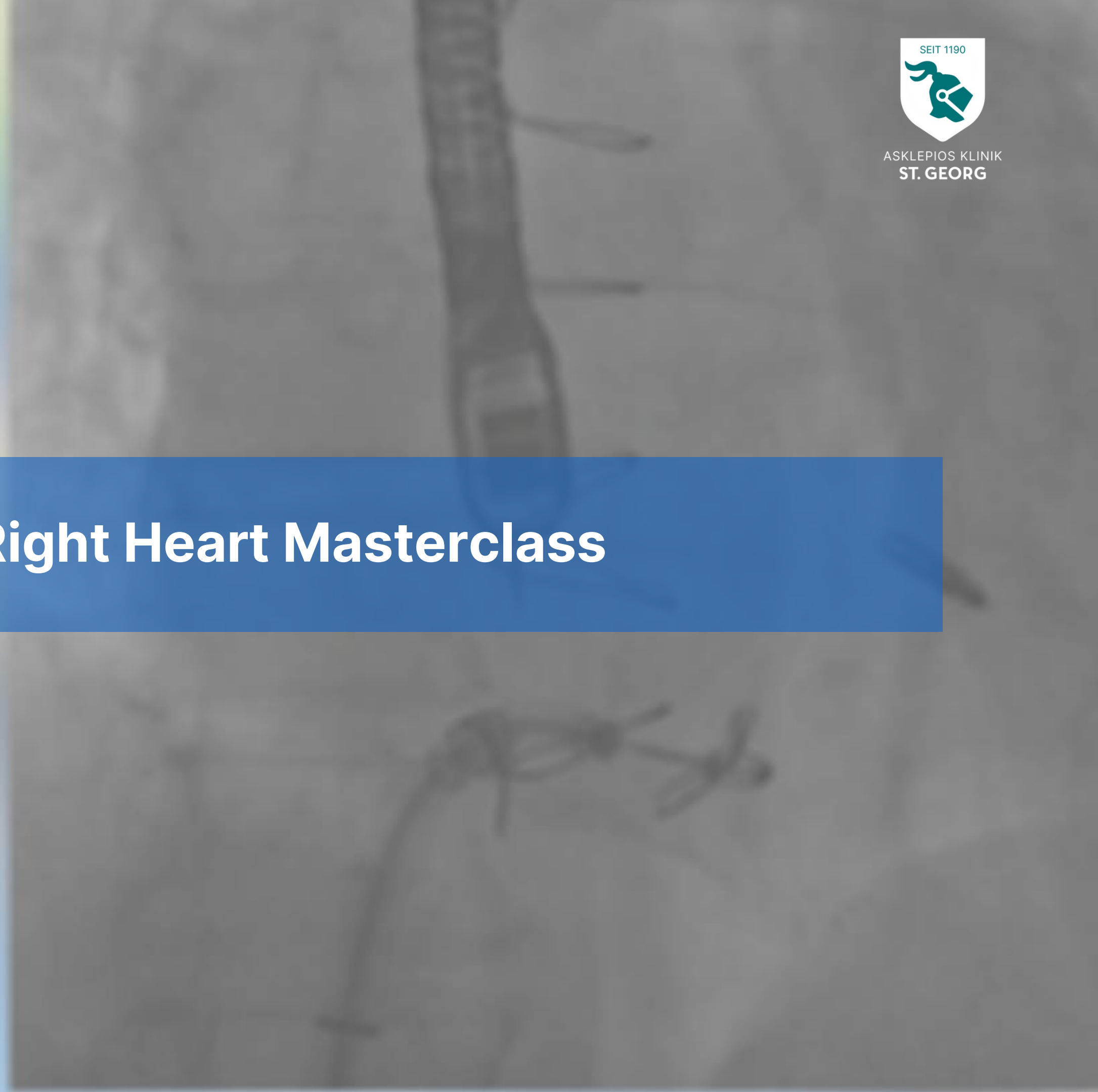
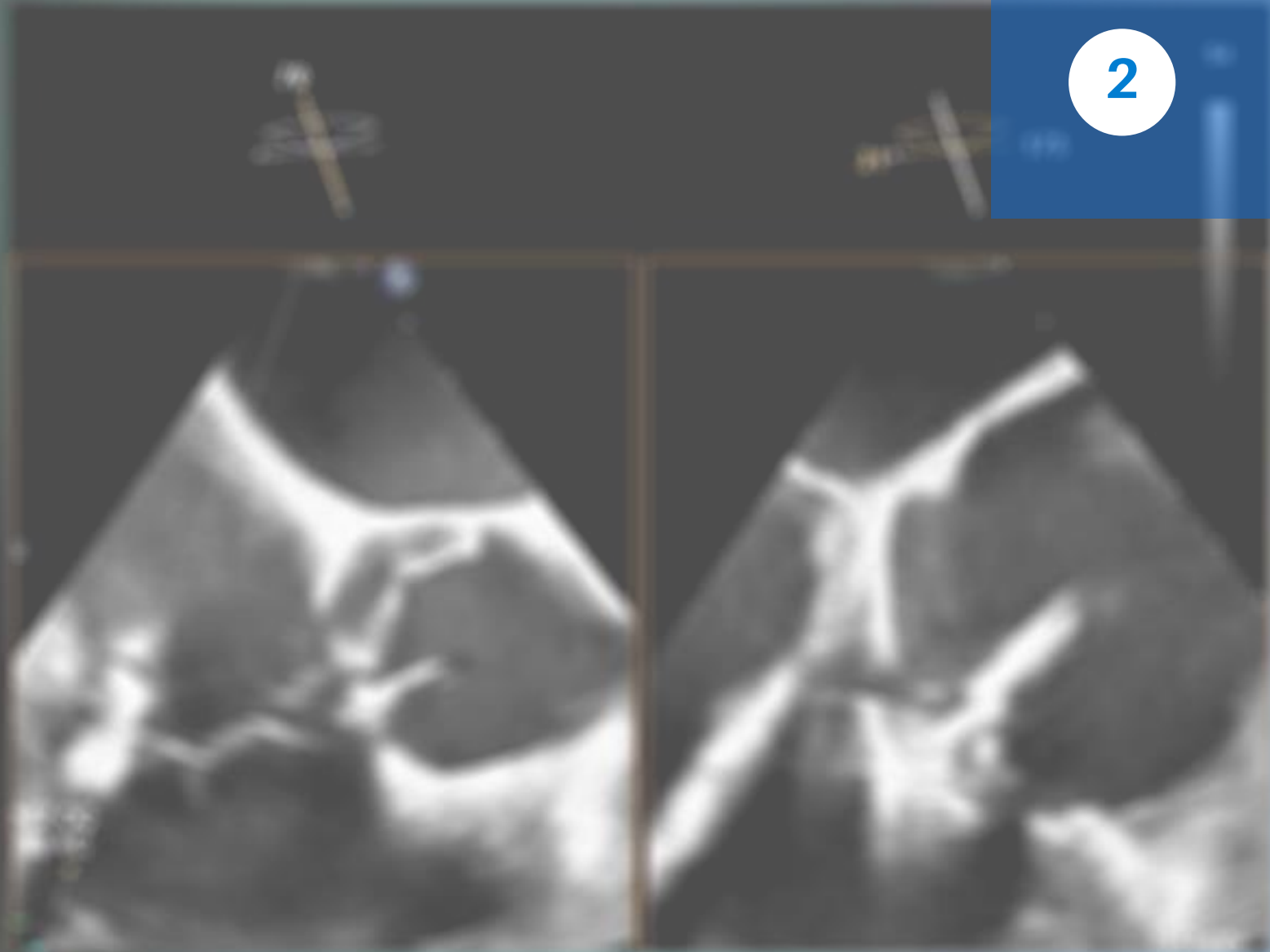
**transmission**

**Transvenous**  
**Lead Studio**   
**Extraction**

„if you want to go fast, go alone.



## 2 Right Heart Masterclass



If you want to go far, go together.“





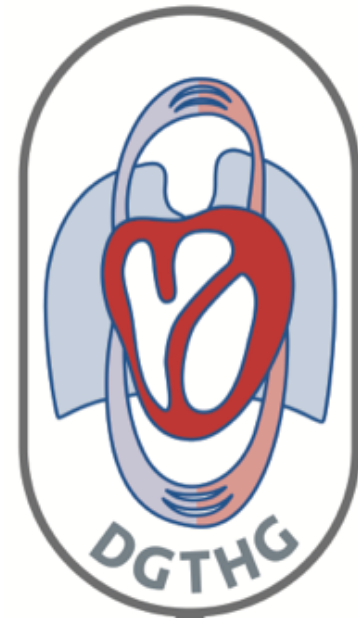
# Right Heart Masterclass

Dynamic/Hybrid Fellowship Programm

# Schirmherrschaft



**DGK.**



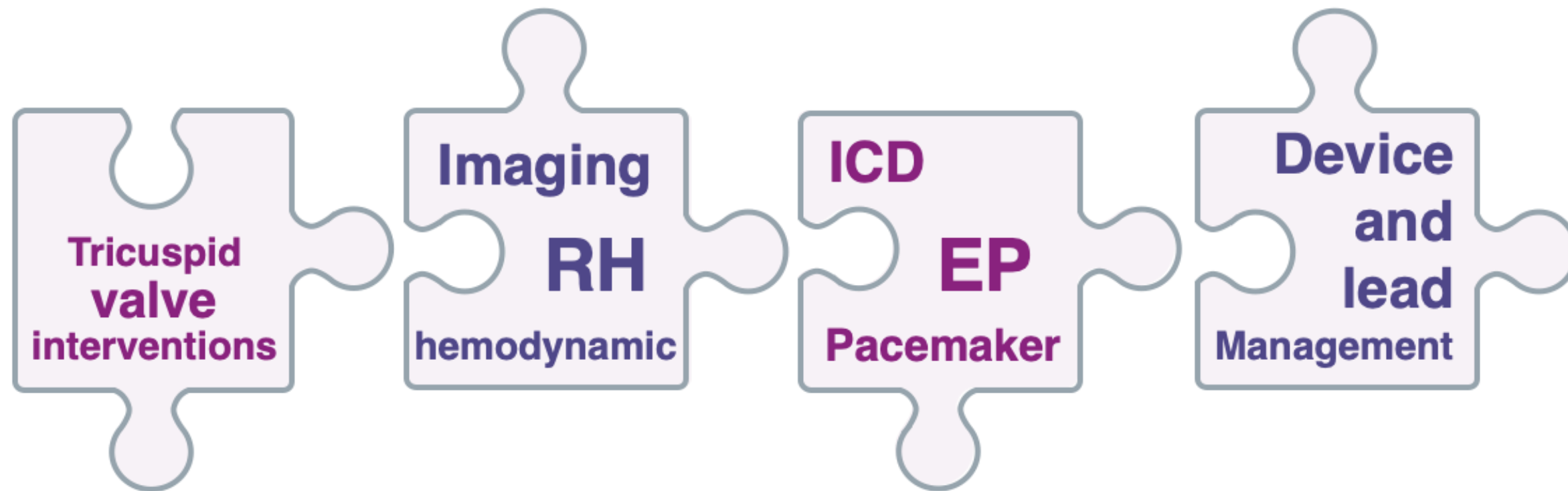
**Right Heart**

Dynamic/Hybrid Fellowship Programm

# Interdisziplinäre Zusammenarbeit



# Learn, interact & research



**Right Heart**



the know-how

transmission

for the upcoming

generation

**3** **Future steps ...**



# The future of data collection

## Traditional data

Gender  
Weight  
Height  
... etc.



## Visual data

Pre-operative venography  
Intra-operative loops  
Post-operative X-Ray  
... etc.

## Missing data

Practical, hands-on, feeling; such as: calcifications of adhesion, ... etc.

# Ideen ... ?

dynamic

living

database





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**9. deutschsprachiges Anwendertreffen**



# Key Question:

- a) Mehr Anwendertreffen!
- b) Mehr klinische Studien und Austausch auf wissenschaftlichen Kongressen
- c) Cloud-basierte Plattformen mit interaktiven Fall-Sammlungen und Expertenkommentaren „living database“