



KLINIK FÜR KARDIOLOGIE UND ANGIOLOGIE  
WESTDEUTSCHES HERZ- UND GEFÄßZENTRUM

## Terminale Herzinsuffizienz braucht mindestens zwei Fachleute

Peter Lüdike



**Essener Fachtag**  
**Mehr Leben im Fokus – Palliativversorgung und Spitzenmedizin**  
**Palliativversorgung für Nicht-Tumorpatienten**  
**28. September 2019**  
**RUHRTURM ESSEN**





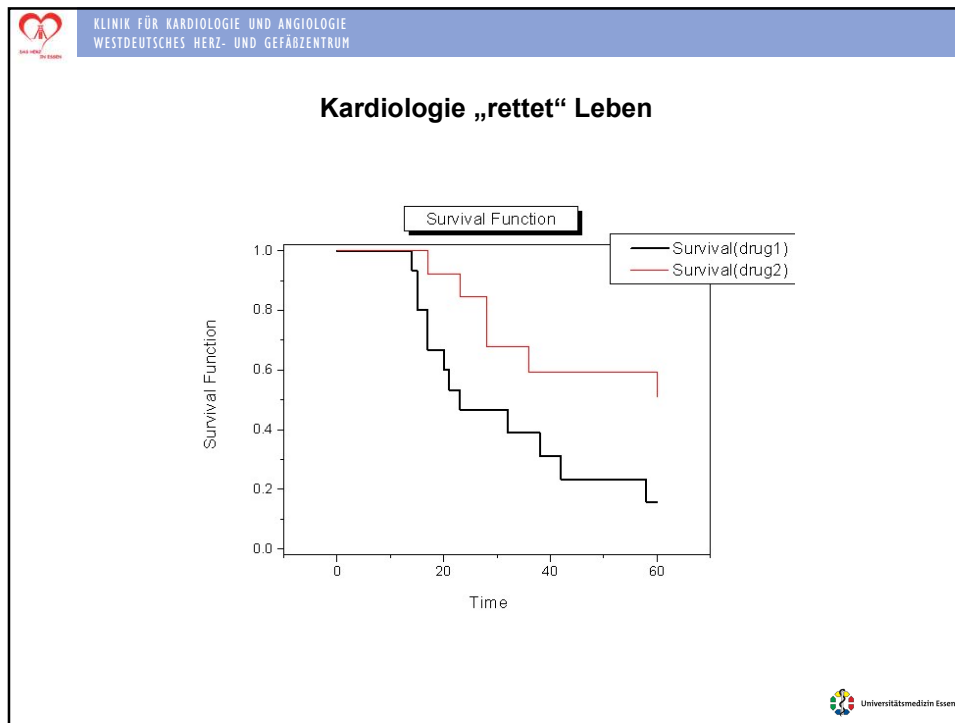
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## Conflict of Interest - Disclosure

**Within the past 12 months, I or my spouse/partner have had a financial interest/arrangement or affiliation with the organization(s) listed below.**

| <u><b>Affiliation/Financial Relationship</b></u> | <u><b>Company</b></u>           |
|--------------------------------------------------|---------------------------------|
| 1. Honoraria for lectures                        | Novartis, Bayer, Alnylam        |
| 2. Honoraria for advisory board activities       | Novartis, Pfizer                |
| 3. Participation in clinical trials              | Novartis, Amgen                 |
| 4. Research funding                              | Deutsche Forschungsgemeinschaft |





**KLINIK FÜR KARDIOLOGIE UND ANGIOLOGIE  
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### The Art of Medicine

#### Medical ethics and the art of cardiovascular medicine

Medical ethics has always played a part in cardiovascular medicine, and yet the two disciplines seem to be rather distinct in the general consciousness. Studies have documented that cardiology journals and textbooks contained the fewest references to ethical issues of any medical subspecialty. Perhaps this finding isn't that surprising. The academic disciplines of medical ethics and cardiology are quite different.

Cardiovascular medicine is one of the most well-studied and evidence-based of the subspecialties. Cardiologists are trained to justify clinical recommendations with hard data from randomized controlled trials (RCT). We are accustomed to the iconoclasm of a new study's outcomes shattering the existing therapeutic paradigm. Take  $\beta$  blockers; once contraindicated for patients with heart failure, they now are a mainstay of therapy. Or the fact that a 50% blockage of the left main coronary artery reflexively produced referral for coronary artery bypass grafting in the not so distant past; now, these lesions are stented with regularity. By contrast, bioethics is far less data-driven and, traditionally, focused on the more reflective and philosophical aspects of patients' care. Instead of data, medical ethics looks to established norms and methods of reasoning to guide decisions. The ultimate evidentiary standard is not a large RCT but instead, perhaps, the decisions of a high judicial court or an indication of societal consensus. Ethics may quote Leon Kass, the one time head of former President Bush's Commission on Bioethics in the USA: "Though originally intended to improve our deeds, the practice of ethics, if truth be told, has, at best, improved our speech." But medical ethics has had a

termonious impact on medical care. Codes of ethics, ethics committees, Institutional Review Boards, advance directives, informed consent, privacy rules, and disclosure of conflicts of interest have changed the practice of cardiology along with the rest of medicine. Medical ethics is a dynamic field, but new discoveries every few years don't usually change practice. And good reasoning, like fine wine, may even improve with age. New York appeals court Justice Benjamin Cardozo's 1914 declaration that "Every human being of adult years and sound mind has a right to determine what shall be done with his own body" can't be matched in its articulation of the basis for informed consent and advance directives.

Some might point to recent headlines detailing conflicts of interest among cardiovascular researchers, cover-ups of defibrillator failures by device companies, criminal oversights of profitable invasive procedures, and ethnic disparities in the provision of cardiovascular care as further proof of a disconnect between cardiovascular medicine and medical ethics. But medical ethics is about more than combating bad behaviour. There seems to be increasing recognition that medical ethics has a crucial role in many aspects of modern cardiovascular medicine. Ethical issues were on the agenda of the first European Meeting of Cardiology Practice held earlier this year in Italy. The HEART group of cardiovascular journal editors recently released a joint statement on ethics "to ensure transparency and honesty in the scientific process that promotes ethical conduct in the performance and publication of research". The 1989 and 1997 American College of Cardiology (ACC) Bethesda Conferences were devoted entirely to the application of ethical standards to cardiovascular practice, and the American Heart Association (AHA) joined the ACC in sponsoring a conference on professionalism and ethics in 2004. Why the apparent increased interest in cardiovascular ethics?

Although the field of medical ethics encompasses a very wide range of perspectives and applications, many involve making a distinction between what "can" be done and what "should" be done, in research and in clinical practice. The technological advances in cardiovascular medicine that have contributed so much to the reduction of cardiac mortality in the past two decades attest to the power of "can". But the practice of modern medicine involves nuances that have taken on greater importance in the face of demographic changes, complexity, and cost. Conflicts between "can" and "should" arise daily, especially in the growing subspecialty of heart failure/heart transplantation. Heart failure is a worldwide epidemic with 22 million cases. In the USA alone, there are 500,000-700,000 new heart failure patients every year. Interestingly, the booming of heart failure can largely be attributed to successful treatment of cardiac disease, at least



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Kirkpatrick JN. *Lancet* 2010

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- Herzinsuffizienz
- Therapieziele
- Zwei Experten
- Zukunft

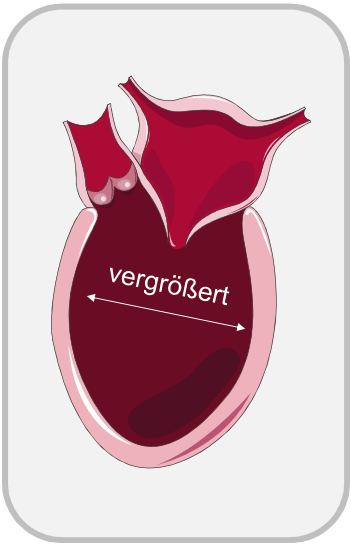


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### Systolische Herzinsuffizienz

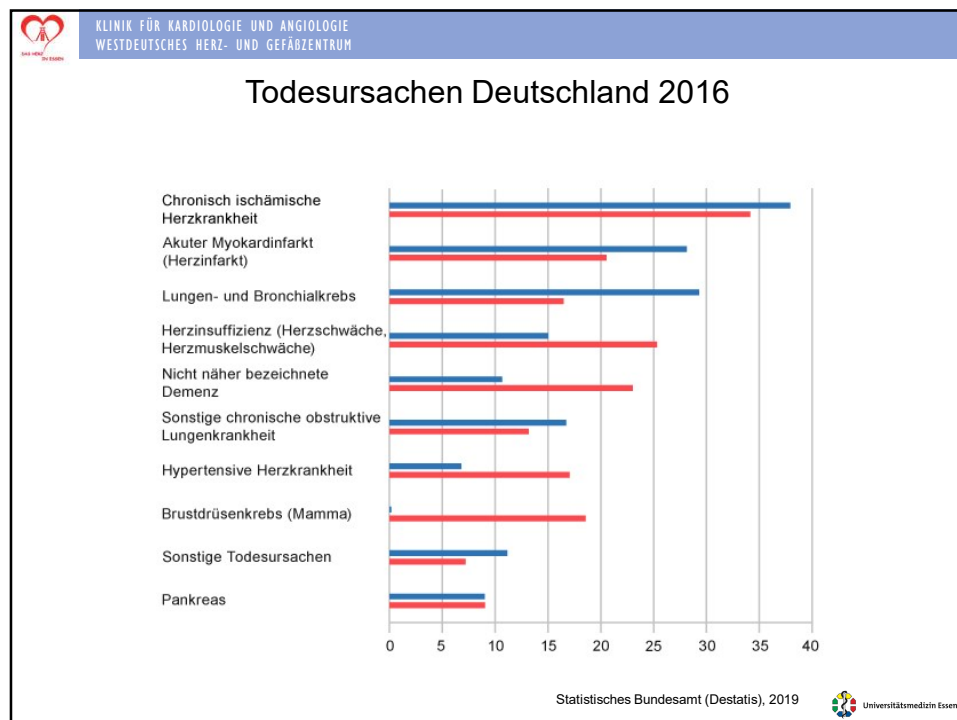
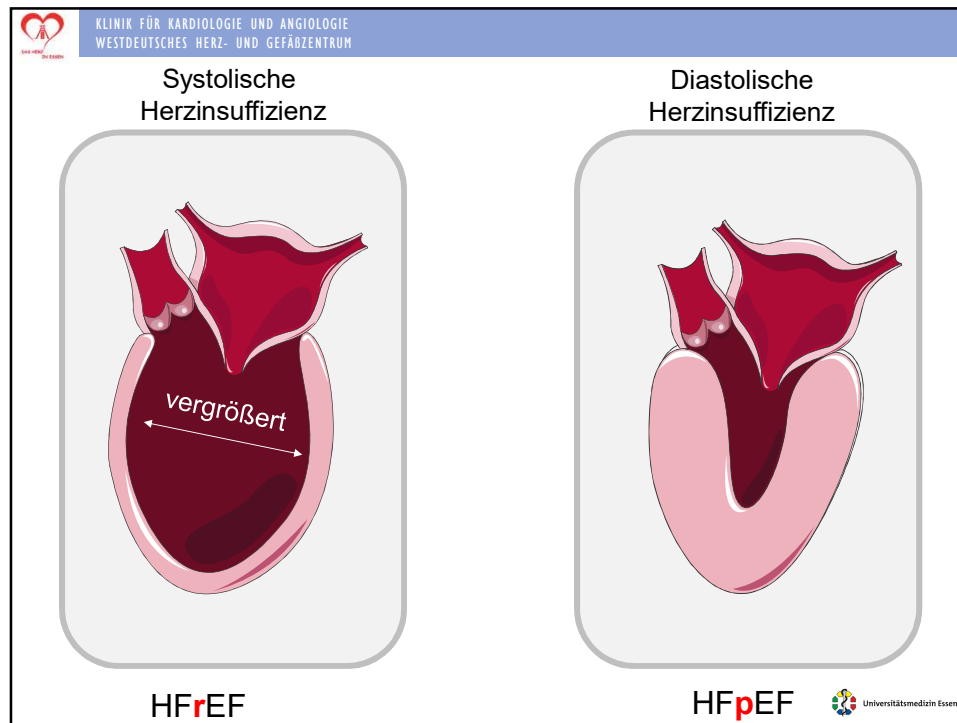


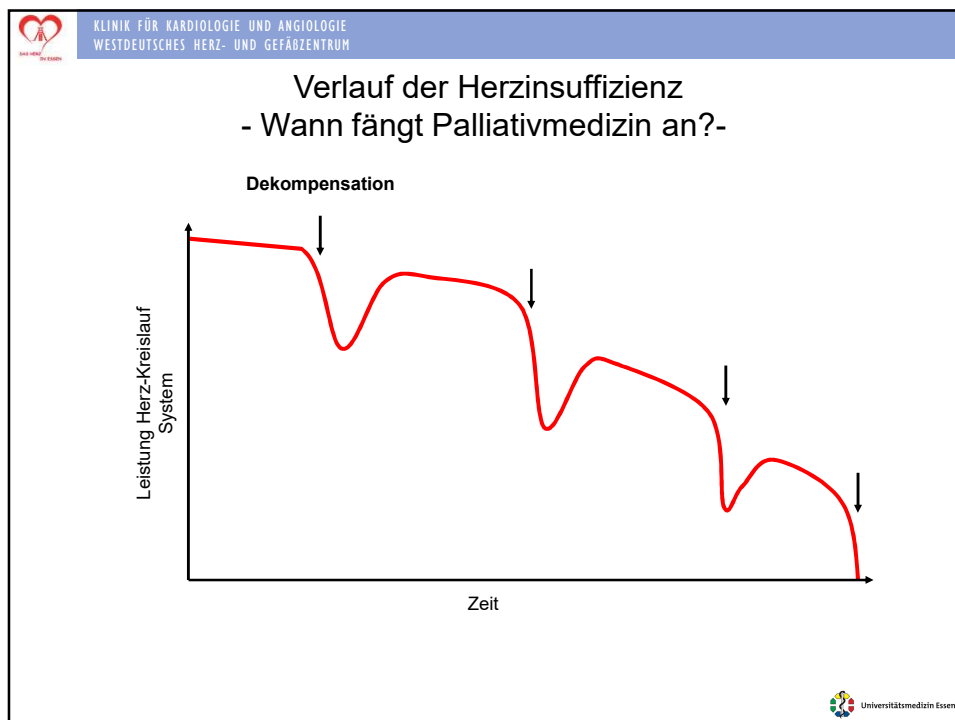
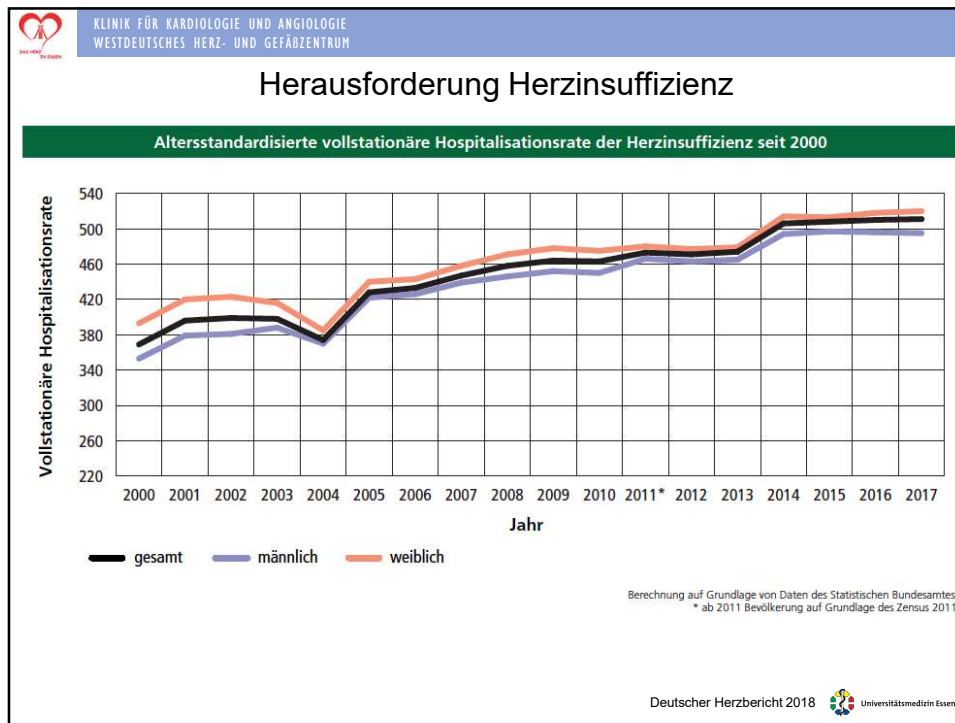
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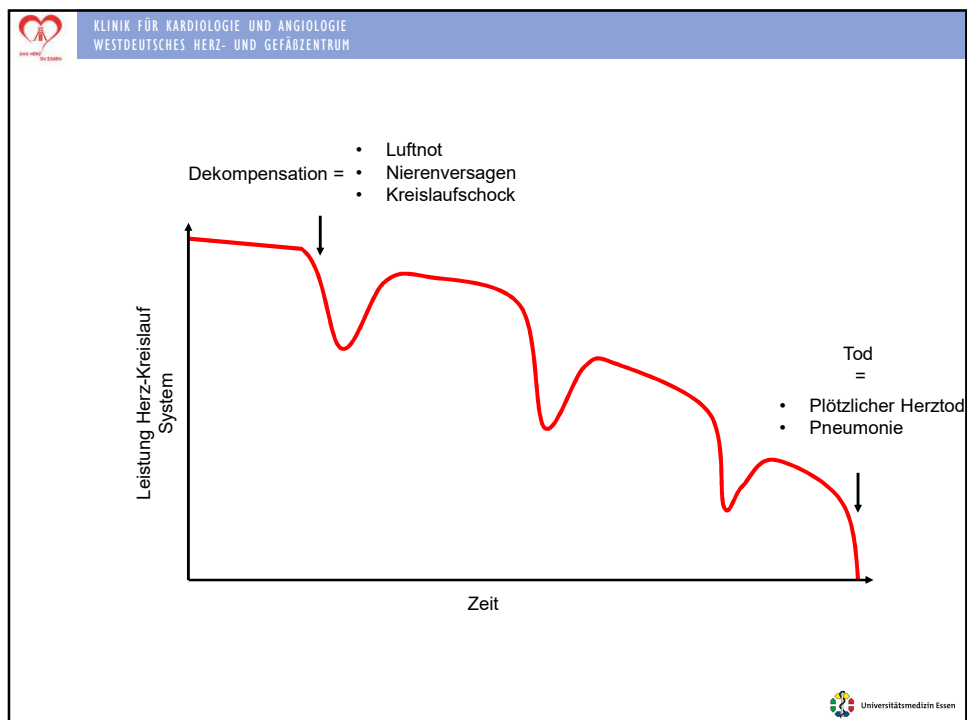
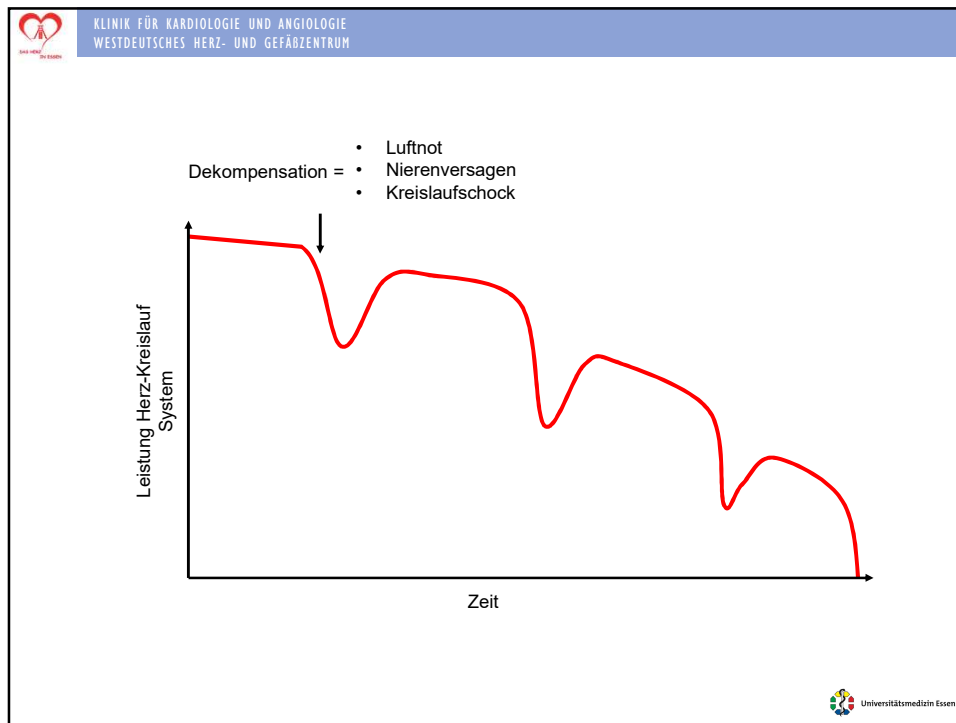
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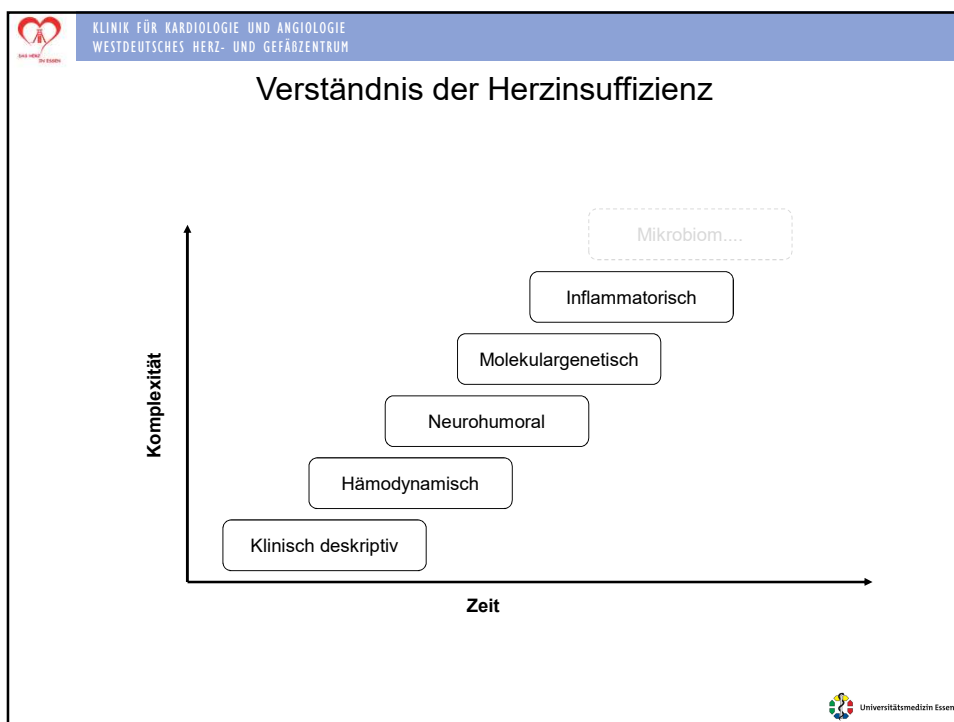




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- Herzinsuffizienz
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## Herzinsuffizienz Therapieprinzip

Medikamentös

Interventionell


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## Herzinsuffizienz Therapieprinzip

Medikamentös

Interventionell

- Diuretikum
- Betablocker
- Aldosteron Antagonist
- „Entresto“ oder ACE-Hemmer
- „SGLT2“ .....


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## Herzinsuffizienz Therapieprinzip

| Medikamentös                                                                                                                                                                | Interventionell                                                                                                                                                                                                                                                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>Diuretikum</li> <li>Betablocker</li> <li>Aldosteron Antagonist</li> <li>„Entresto“ oder ACE-Hemmer</li> <li>„SGLT2“ .....</li> </ul> | <ul style="list-style-type: none"> <li>Herzkatheter/Stent</li> <li>Defibrillator (ICD)</li> <li>Schrittmacher (CRT)</li> <li>MitraClip</li> <li>TAVI</li> <li>Elektrophysiologische Ablation</li> <li>Peritonealdialyse</li> <li>„Kunstherz“ (LVAD)</li> <li>Herztransplantation (HTX)</li> </ul> |


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## Herzinsuffizienz Therapie Nebenwirkungen

| Medikamentös                                                                                                                                                                |
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**+**

- Weniger Dyspnoe
- Verbesserung der Lebensqualität
- Verlängerte Überlebenszeit
- Weniger Hospitalisationen

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- Weniger Hospitalisationen

**-**

- Schwindel
- Elektrolytstörungen
- Nierenversagen
- Hypotonie
- Abgeschlagenheit

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## Herzinsuffizienz Therapie Nebenwirkungen

Interventionell

- Herzkatheter/Stent
- Defibrillator (ICD)
- Schrittmacher (CRT)
- MitraClip
- TAVI
- Elektrophysiologische Ablation
- Peritonealdialyse
- „Kunstherz“ (LVAD)
- Herztransplantation (HTX)



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## Herzinsuffizienz Therapie Nebenwirkungen

Interventionell

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## Herzinsuffizienz Therapie Nebenwirkungen

**+**

- Weniger Dyspnoe
- Verbesserung der Lebensqualität
- Verlängerte Überlebenszeit
- Weniger Hospitalisationen

**-**

- Tod
- Organversagen
- Schlaganfall
- Sepsis
- .....

Interventionell

- Herzkatheter/Stent
- Defibrillator (ICD)
- Schrittmacher (CRT)
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## Interventionelle Kardiologie – DIE Antwort auf alle Fragen?



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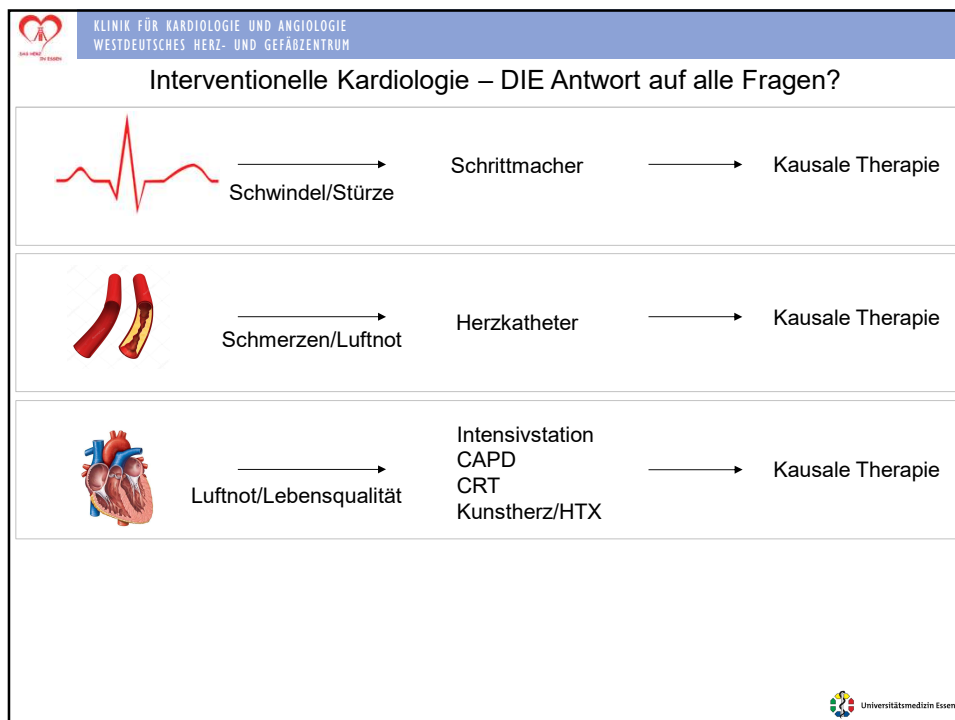
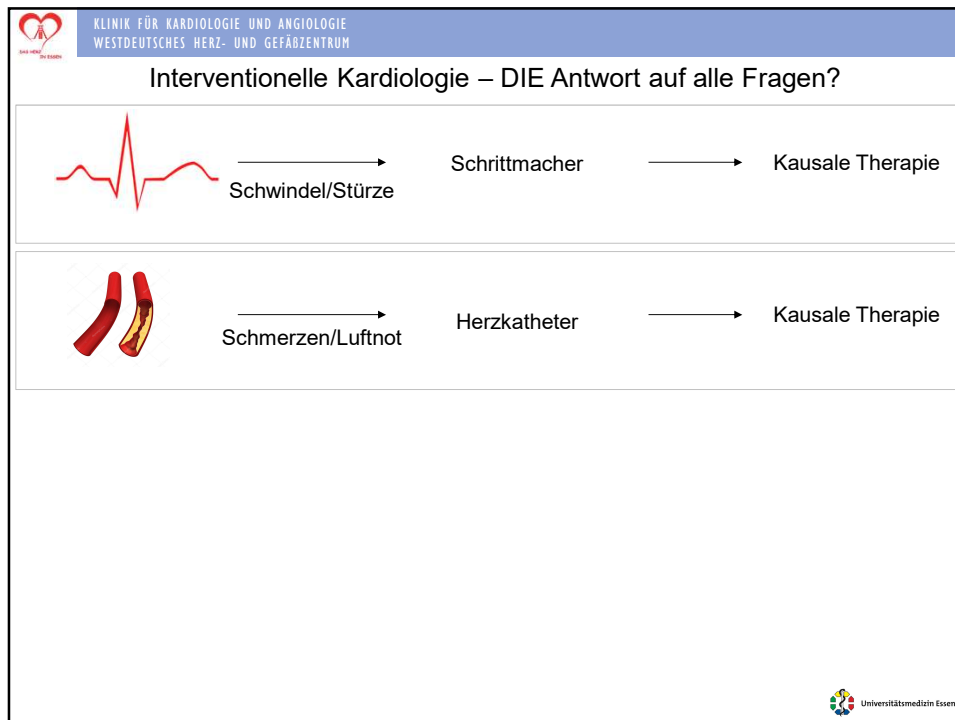
Schwindel/Stürze

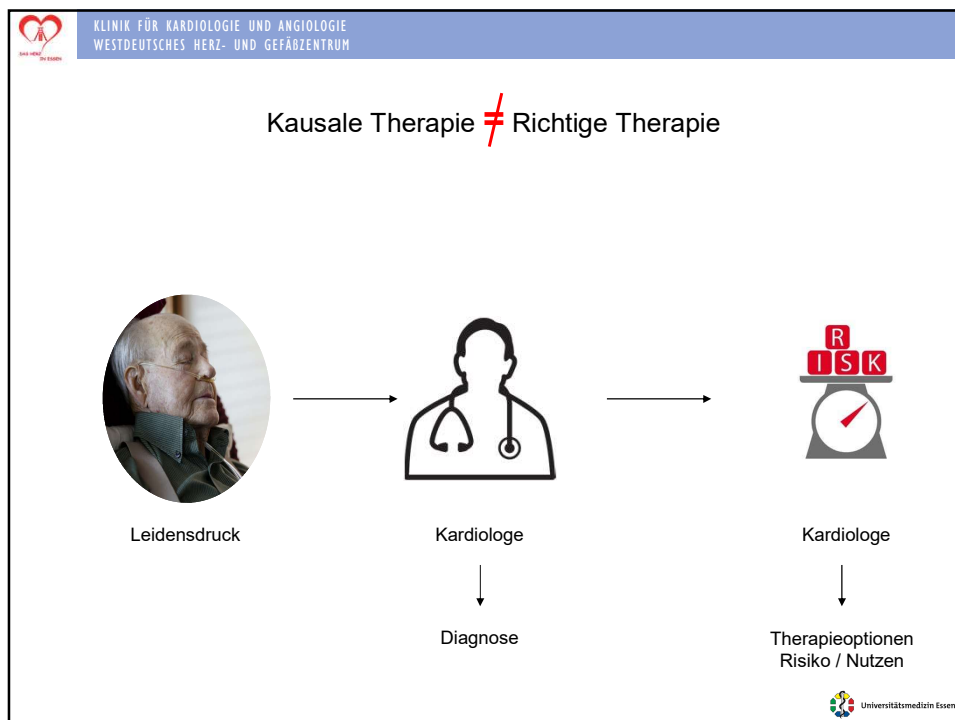
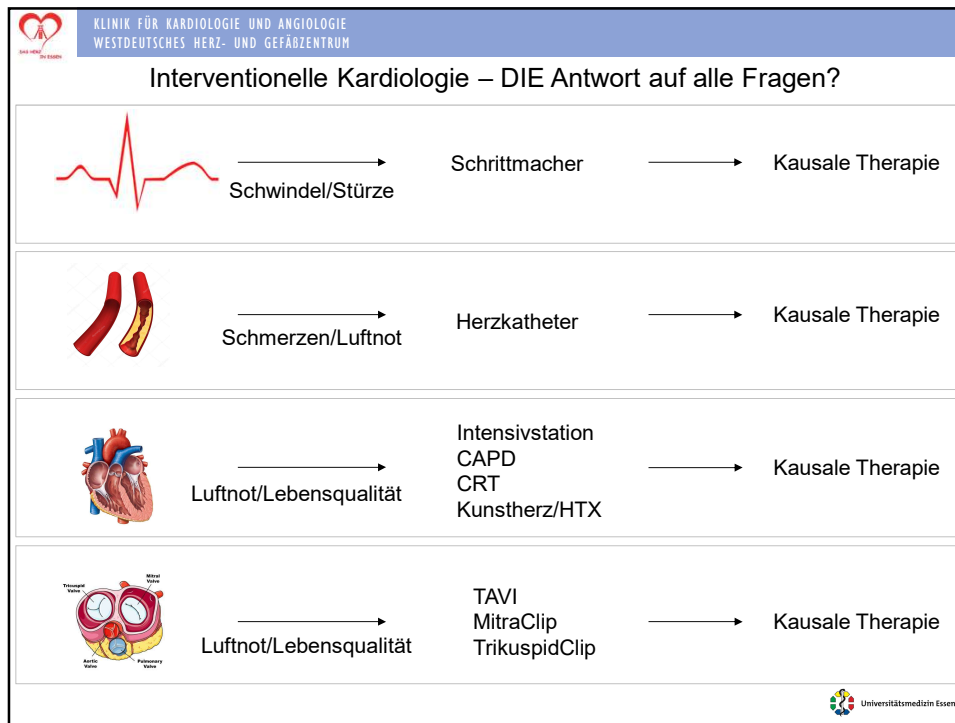
Schrittmacher

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Kausale Therapie

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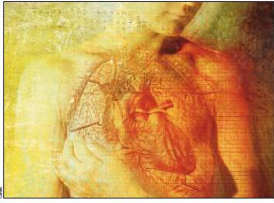
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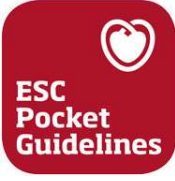
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## Interventionelle Kardiologie – NICHT die Antwort auf alle Fragen?



- Depression
- Dyspepsie
- Obstipation
- Schmerzen
- Gastropathie
- GI Blutungen
- Polypharmazie
- Häusliche Versorgung
- Malignome
- Gicht
- .....etc. !!!





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- Herzinsuffizienz
- Therapieziele
- **Zwei Experten**
- Zukunft



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Terminale Herzinsuffizienz braucht mindestens zwei Fachleute



Leidensdruck



Kardiologe

↓

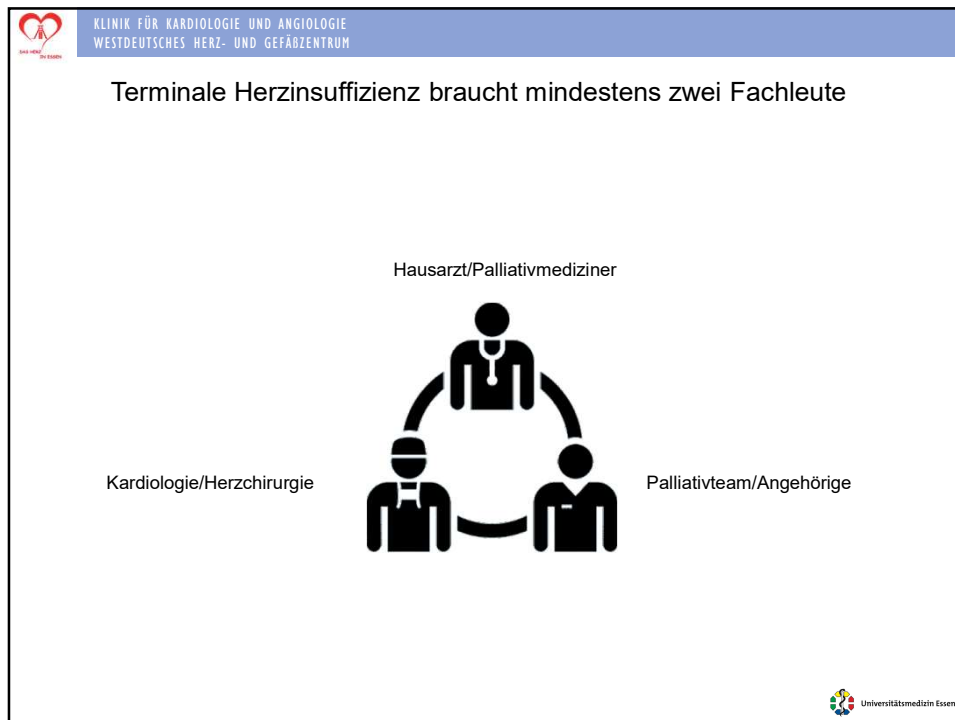
Diagnose



Behandlungsteam



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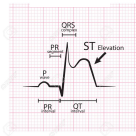
### Konkrete Probleme bei kardiologischen Erkrankungen am Lebensende

| Defi Schrittmacher                                                                | Kunstherz                                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  |  |
| ↓                                                                                 | ↓                                                                                 |
| An/Aus?                                                                           | An/Aus?                                                                           |

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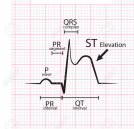
### Konkrete Probleme bei kardiologischen Erkrankungen am Lebensende

| Defi Schrittmacher                                                                  | Kunstherz                                                                           | Infarkt                                                                             |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |
| ↓                                                                                   | ↓                                                                                   | ↓                                                                                   |
| An/Aus?                                                                             | An/Aus?                                                                             | Coro ja/nein?                                                                       |

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### Konkrete Probleme bei kardiologischen Erkrankungen am Lebensende

| Defi Schrittmacher                                                                | Kunstherz                                                                         | Infarkt                                                                           | Lungenödem                                                                          |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |
| An/Aus?                                                                           | An/Aus?                                                                           | Coro ja/nein?                                                                     | ITS ja/nein?                                                                        |

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### Konkrete Probleme bei kardiologischen Erkrankungen am Lebensende

- Polypharmazie -

**Table 2. Primary and Secondary Outcomes.\***

| Outcome                                                                               | LCZ696 (N=4187) | Enalapril (N=4212) | Hazard Ratio or Difference (95% CI) | P Value |
|---------------------------------------------------------------------------------------|-----------------|--------------------|-------------------------------------|---------|
| <b>Primary composite outcome — no. (%)</b>                                            |                 |                    |                                     |         |
| Death from cardiovascular causes or first hospitalization for worsening heart failure | 914 (21.8)      | 1117 (26.5)        | 0.80 (0.73–0.87)                    | <0.001  |
| Death from cardiovascular causes                                                      | 558 (13.3)      | 693 (16.5)         | 0.80 (0.71–0.89)                    | <0.001  |
| First hospitalization for worsening heart failure                                     | 537 (12.8)      | 658 (15.6)         | 0.79 (0.71–0.89)                    | <0.001  |
| <b>Secondary outcomes — no. (%)</b>                                                   |                 |                    |                                     |         |
| Death from any cause                                                                  | 711 (17.0)      | 835 (19.8)         | 0.84 (0.76–0.93)                    | <0.001  |
| Change in KCCQ clinical summary score at 8 mo†                                        | –2.99±0.36      | –4.63±0.36         | 1.64 (0.63–2.65)                    | 0.001   |
| New-onset atrial fibrillation‡                                                        | 84 (3.1)        | 83 (3.1)           | 0.97 (0.72–1.31)                    | 0.83    |
| Decline in renal function§                                                            | 94 (2.2)        | 108 (2.6)          | 0.86 (0.65–1.13)                    | 0.28    |

McMurray NEJM 2015

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- Herzinsuffizienz
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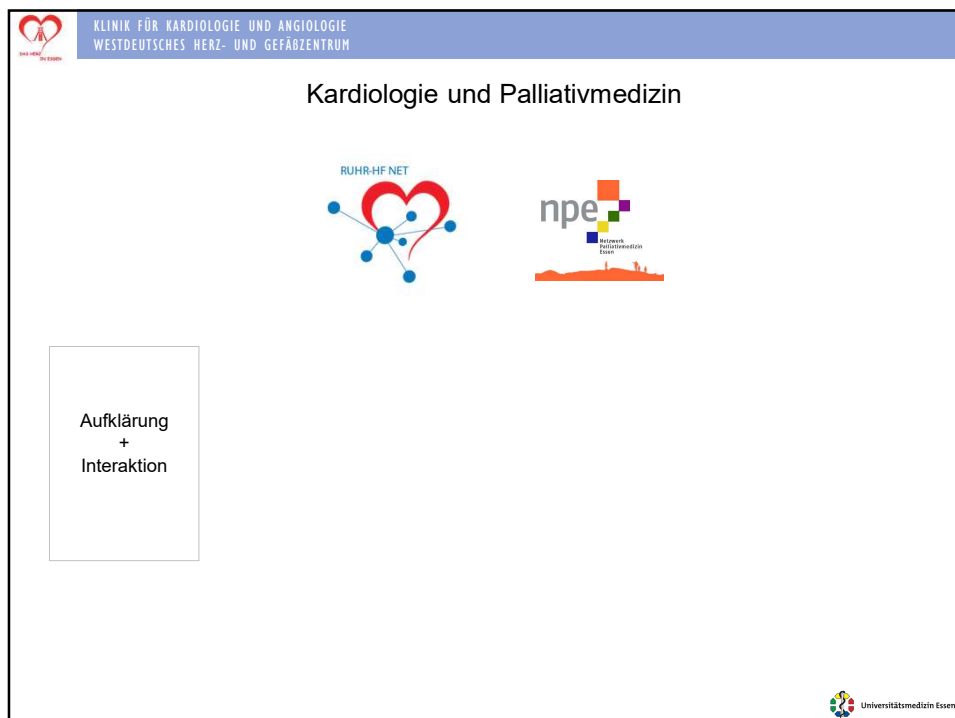
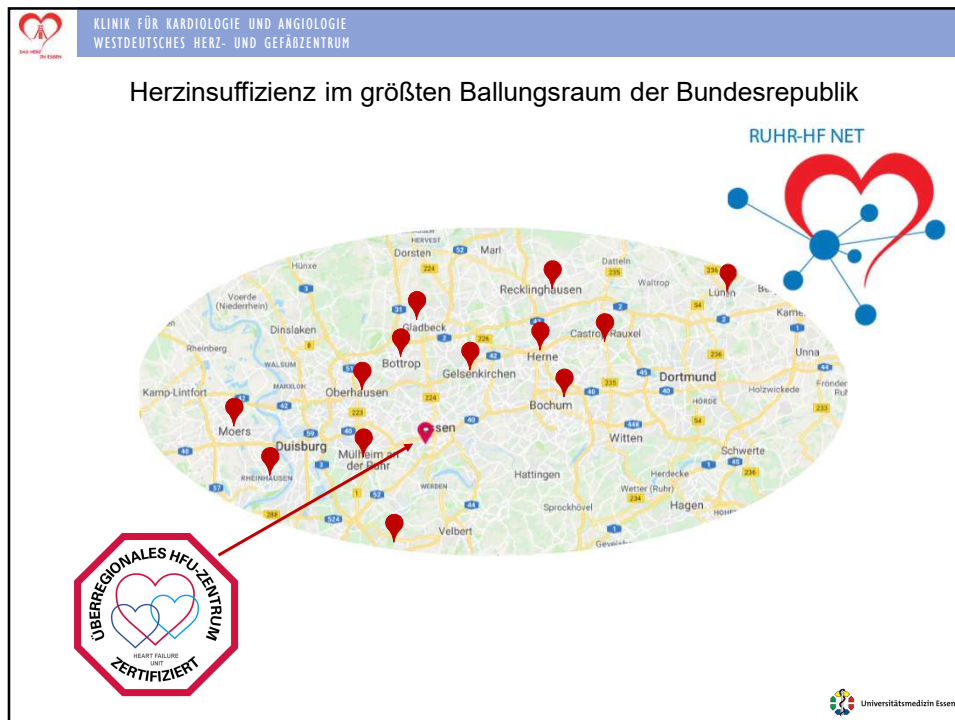
### Herzinsuffizienz im größten Ballungsraum der Bundesrepublik







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## Kardiologie und Palliativmedizin





Aufklärung  
+  
Interaktion

Wissenschaft


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## Kardiologie und Palliativmedizin





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## Kardiologie und Palliativmedizin




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## Kardiologie und Palliativmedizin




Aufklärung  
+  
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Finanzierung

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**Einladung**

**ESSEN HEART FAILURE  
Symposium**

**Samstag, 26.10.2019**  
Deichmann Auditorium  
Universitätsklinikum Essen

Eine gemeinsame Veranstaltung der Kliniken des RUHR-HF Netzwerkes mit dem überregionalen Herzinsuffizienz Zentrum Essen

Wissenschaftliche Leitung:  
PD Dr. med. P. Lüdike  
Univ.-Prof. Dr. med. T. Rassaf



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KLINIK FÜR KARDIOLOGIE UND ANGIOLOGIE  
WESTDEUTSCHES HERZ- UND GEFÄßZENTRUM

**Vielen Dank für die Aufmerksamkeit**







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