



# Guidelines in Focus: Echo Essentials for Clinical Practice

This course delivers the latest evidence- and consensus-based guidelines from leading cardiology associations including the EACVI, ESC, ASE, ACC, and AHA. You'll gain up-to-date insights into key echocardiography topics such as endocarditis, aortic disease, hypertension, hypertrophic cardiomyopathy, atrial fibrillation, coronary artery disease, and valvular heart disease aligned with current guidelines and recommendations. Our content is designed to save you time: essential updates are presented in a clear, structured way to support your daily practice. Through theoretical lectures, webinars, and FAQ sessions with Prof. Thomas Binder, you'll deepen your knowledge and refine your diagnostic and management skills with confidence. This course follows a drip content approach, meaning new videos are released weekly and become accessible step by step.

10  
CME credits

22  
Chapters

105  
Lectures

9  
Quizzes

## Chapter 1 | CME

### Free lectures

This free chapter provides a concise overview of key updates in the 2023 guidelines on endocarditis, including diagnostic criteria, surgical indications, and management considerations for aortic disease without a defined syndrome. It serves as an introduction to critical changes in clinical decision-making.

#### Lectures & Quizzes:

- What Are the Updated Major and Minor Diagnostic Duke Criteria in the 2023 Guidelines?
- Indication for Surgery - What is New?
- What If the Aorta Is Diseased - But There's No Syndrome?

## Chapter 2 | 0.75 CME

### Endocarditis

Comprehensive chapter including diagnosis through echocardiography & other imaging modalities, prosthetic valve endocarditis, indications for surgery, and antibiotic management.

#### Lectures & Quizzes:

- Role of Echocardiography
- Other imaging modalities
- Indications fo Surgery
- Antibiotics

- Diagnostic Challenges
- TAVI Endocarditis

- Management of IE - Surgery Guidelines
- Echo Guidelines - Endocarditis Quiz

### Chapter 3 | CME

## Endocarditis - FAQ

This section covers diagnostic strategies based on the latest 2023 Duke Criteria, tailored approaches for native, prosthetic, and device-related endocarditis, and the timing of imaging and surgery. Key: when to repeat TEE, how to handle blood culture-negative cases, and how echo supports decision-making.

### Lectures & Quizzes:

- How Should the Diagnosis Be Tailored to the Type of Endocarditis?
- When Should a Repeat TEE Be Performed in IE?
- What Are the Updated Major and Minor Diagnostic Duke Criteria in the 2023 Guidelines?
- Indication for Surgery - What is New?

### Chapter 4 | 0.5 CME

## Aortic Disease

Covering measurements of the aorta, non-syndromic & syndromic heritable aortic diseases, and indications for surgery.

### Lectures & Quizzes:

- Measurements
- Indications for surgery
- Echo and follow up
- Echo Guidelines - Aortic Disease Quiz

### Chapter 5 | CME

## Aortic Disease - FAQ

Understand how to classify aortic disease (syndromic, non-syndromic, degenerative), when to operate, and how to follow patients over time. Learn how to assess aortic dilation, including which segments to measure and how to interpret growth, thresholds, and red flags across different patient groups.

### Lectures & Quizzes:

- How is Aortic Disease Classified?
- What If the Aorta Is Diseased - But There's No Syndrome?
- When is surgery of the aorta recommended?

### Chapter 6 | 1 CME

# Webinar: Hypertension - Guidelines Update and FAQs

This webinar highlights the role of echocardiography in hypertension management, focusing on the 2024 ESC Guidelines. It covers when to perform imaging, how to assess organ damage, and includes key updates on left atrial and ventricular strain measurements and more...

## Lectures & Quizzes:

- Webinar: Hypertension - Guidelines Update and FAQs.
- Echo Guidelines - Webinar #1 Quiz

## Chapter 7 | CME

# Hypertension - FAQ

This chapter discusses why echocardiography is important in hypertension, when it should be performed, and what to look for in hypertensive patients.

## Lectures & Quizzes:

- Why Is Echocardiography Important In Hypertension?
- When Should You Perform Echocardiography in Hypertension?
- What Should You Look For With Echo in Hypertensive Patients?

## Chapter 8 | 1.5 CME

# Diastolic Dysfunction

Physiology, assessment guidelines, including a simple approach to understanding diastolic function.

## Lectures & Quizzes:

- Assessment of Diastolic Dysfunction - Guidelines
- Diastolic function - A simple approach
- Echo Guidelines - Diastolic Dysfunction Quiz

## Chapter 9 | CME

# Diastolic Dysfunction - FAQ

Focus on the updated guideline recommendations for diastolic function assessment. We discuss the 2016 guidelines and explore the clinical relevance of diastolic dysfunction in hypertension, restrictive cardiomyopathy, and HFpEF. Echo remains central to assessment, but interpretation requires nuance.

## Lectures & Quizzes:

- Which Diastolic Parameters Should Routinely be Measured?
- Can We Still Use the Terms "Pseudonormal" and "Impaired Relaxation"?
- What are the Main Criticisms of the 2016 Guidelines?
- What is the Clinical Significance of Diastolic Dysfunction in Patients with Hypertension?
- What is the Clinical Significance of Diastolic Dysfunction in Patients with Restrictive CMP?
- What is the role of Echo in HFpEF?

Chapter 10 | 2 CME

## Coronary Artery Disease

The role of echocardiography in diagnosis and follow-up, as well as management of complications.

### Lectures & Quizzes:

- Segmental approach
- Remodeling
- Complications - Part 1
- Complications - Part 2
- Echo Guidelines - Coronary Artery Disease Quiz

Chapter 11 | 1 CME

## Aortic Valve Disease

Aortic Valve disease and Mitral valve disease including updates on assessment of left ventricular function, measurements, indications for surgery, and the usage of strain imaging.

### Lectures & Quizzes:

- Global Longitudinal Function in AS
- AVA and the continuity equation
- Low-flow low-gradient AS
- Paradoxical low-flow low-gradient AS
- High-flow states and aortic stenosis
- Volumetric calculations
- Quantification summary
- Indication for surgery
- Echo Guidelines - Aortic Valve Disease Quiz

Chapter 12 | 1 CME

## Webinar: Cardiomyopathy - what is new? Hot Topics and FAQ

This chapter highlights key ACC/AHA 2024 updates on HCM, focusing on echocardiographic diagnosis, phenotyping, obstruction assessment, and SCD risk stratification using echo imaging techniques with provocative maneuvers.

### Lectures & Quizzes:

- Webinar: Cardiomyopathy - what is new? Hot Topics and FAQ
- Echo Guidelines - Cardiomyopathy

## Cardiomyopathy - FAQ

### Lectures & Quizzes:

- How are Cardiomyopathies Classified in the New Guidelines?
- What is Non Dilated Cardiomyopathy?

## Coronary Artery Disease - FAQ

This chapter reviews the role of echocardiography in CAD diagnosis, risk stratification, and management, covering timing, stress modalities, GLS, post-revascularization imaging, therapeutic guidance, and differentiation of ischemic vs. non-ischemic cardiomyopathy, and more...

### Lectures & Quizzes:

- What is new in the ACS and chronic CAD GL?
- Should echo be performed in all patients with ACS? - Part 1
- Should echo be performed in all patients with ACS? - Part 2
- Why is LVF important in the setting of STEMI
- Is stress echo dead?
- What is new with MINOCA and co?
- Beyond wall motion abnormalities and LVF

## Webinar: Aortic Valve Disease and Q&A

In this webinar, we are unpacking key updates on valvular heart disease from the ESC 2025 conference in Madrid. From new thresholds in aortic stenosis to advances in MR, AR, and TR.

### Lectures & Quizzes:

- Webinar #3: Aortic Valve Disease and Q&A
- Echo Guidelines - Aortic Valve Disease (Webinar Quiz)

## Mitral Regurgitation

This chapter explains mechanisms of mitral regurgitation, integrating anatomy and color Doppler to distinguish structural vs functional MR, highlighting commissural prolapse and perforation, and its role in multivalvular disease and hemodynamic impact.

### Lectures & Quizzes:

- MR and MS
- MR and AS
- MR and AR
- MR and TR
- Structural MR
- Functional MR
- Specific Topics
- Follow Up
- Echo Guidelines - Mitral Regurgitation

## Chapter 17 | CME

# Aortic Valve Disease - FAQ

This chapter covers the burning questions around aortic valve disease. It discusses the assessment of aortic stenosis using echo, CT calcium scoring, MRI and strain imaging, the criteria for TAVR/SAVR, the assessment and management of aortic regurgitation as well as specifics tied to a bicuspid valve.

### Lectures & Quizzes:

- What is the role of CT calcium scoring in AS severity assessment?
- What is the role of longitudinal strain and MRI?
- What to do when echo parameters disagree?
- TAVR or SAVR: What Do the Guidelines Say?
- How should you follow up patients with AR?
- Aortic Valve Disease Beyond Guidelines: Future Directions
- How to Intervene in Aortic Regurgitation
- Why Are Bicuspid Valves Different?
- Aortic Valve Disease: Role of AI

## Chapter 18 | CME

# Tricuspid Valve Disease - FAQs

Integrating the latest guidelines, this chapter provides a deep dive into Tricuspid Regurgitation (TR). You will master multi-parametric echocardiographic protocols for precise anatomical and functional assessment, including TR grading of recently classified phenotypes. The chapter also clarifies the pathophysiology and assessment of Atrial Functional TR before concluding on the main management aspects.

### Lectures & Quizzes:

- How Do You Approach Tricuspid Regurgitation With Echocardiography (Step-By-Step)?
- What is the Correct Approach to Grading TR?
- What is Torrential TR?
- What is Functional Atrial TR?
- How Should We Image the Tricuspid Valve?
- How Should We Manage Severe TR?

## Chapter 19 | CME

# Right Heart Disease - FAQs

This chapter focuses on pulmonary hypertension and right ventricular function, including screening strategies, diagnostic

criteria, and practical methods to quantify RV performance, with a focused look at the role of RV strain in clinical assessment.

#### Lectures & Quizzes:

- How Do We Screen for Pulmonary Hypertension?
- How Is Pulmonary Hypertension Defined?
- How To Quantify RV-Function
- RV Strain, When Why and How

### Chapter 20 | CME

## Atrial Fibrillation - FAQs

This chapter explores the role of echocardiography in the context of atrial fibrillation: diagnostic challenges, thrombus detection, LA strain assessment, and treatment decisions (including cardioversion, rate control, and anticoagulation regimens).

#### Lectures & Quizzes:

- What Is the Role of Echocardiography in Atrial Fibrillation (AF)?
- How Does Atrial fibrillation Affect Echo Assessment?
- What is Tachycardia Induced CMP?
- Treatment Decision: Cardioversion vs Rate Control
- What is The Role of Transesophageal Echo (TOE) in Atrial Fibrillation
- What Are Common Problems, When Assessing Thrombus with Echo?
- Can Echocardiography Guide Anticoagulation Therapy in Atrial Fibrillation?
- What Is The Role of LA Strain in Afib?

### Chapter 21 | CME

## Echo and Pregnancy - FAQs

#### Lectures & Quizzes:

- Cardiovascular Disease in Pregnancy. What are the Facts?
- Hemodynamics During Pregnancy What You Need to Know.
- How Do We Define Risk? The Role of Echo
- When Should We Worry – And When Is Pregnancy Contraindicated?
- Peripartal Cardiomyopathy - What Do Echocardiographers need to know?
- Valvular Heart Disease During Pregnancy - What Do You Need To Know?
- HCMP, ASD and Aortic Disease During Pregnancy - What Do You Need To Know?

### Chapter 22 | CME

## Myocarditis and Pericarditis - FAQs

## Lectures & Quizzes:

- Myocarditis & Pericarditis – What's New - Top 10 Takeaways From the Guidelines
- Myopericardial Syndromes - What is the Cause and How Do they Evolve
- What Is the Diagnostic Algorithm for Myocarditis?
- Myocarditis. What Should I Look For On the Echo?
- Key Take Aways from Pericarditis and Pericardial Effusion
- Exercise After Myopericardial Disease: What Echo Tells Us About Safe Exercise
- COVID Myocarditis - What Do You Need to Know?
- Constrictive Pericarditis: What Echocardiographers Need to Recognize