



ADVANCED FOCUSED TRANSTHORACIC ECHOCARDIOGRAPHY COURSE



Course director: Alejandro Cortès, MD
Theoretical course lead: Damien Tagan, MD

Proficiency in the cardiac views taught in the basic course is a prerequisite for participation in the advanced course.

THEORETICAL PART

REGISTRATION

Registration for the online theoretical part takes place on pocus.academy, no later than 4 weeks before the hands-on day. Choose the intensive care package in the “Offers” menu.

Registration fee: CHF 150.–.

ONLINE COURSE

The theoretical part includes approximately 14 hours of online teaching (excluding clinical cases). The modular design allows participants to work at their own pace and make use of downtime in their professional activity. It is also very easy to find information again after the course.

Heart modules

- Introduction
- Doppler technique
- Left ventricular systolic function
- Ventricular wall motion
- Right ventricular function
- Cardiac output
- Pulmonary arterial pressure
- Right atrial pressure
- Left atrial pressure and diastolic function
- POCUS in cardiogenic shock
- Preload dependence
- Fluid management in septic shock
- Pericardial effusion and tamponade
- Pericardiocentesis
- Massive pulmonary embolism
- Valvular heart disease
- Prosthetic valves
- Endocarditis
- Left ventricular outflow tract obstruction
- Microbubble test
- How to write a report
- Clinical cases (10 cases)

Critical care modules

- Circulatory and respiratory failure
- Lung US for management of ARDS
- POCUS in cardiogenic shock
- ECMO and Impella
- Early septic shock
- Fluid management in septic shock
- POCUS in cardiac arrest
- POCUS in the perioperative period
- POCUS in peripartum

PRACTICAL PART

**The next practical course will take place on 25 November 2026
at Riviera-Chablais Hospital (Rennaz)**

The practical part takes place over one day (approximately 8 hours of teaching) in the form of workshops. Each instructor supervises 3 to 4 participants to ensure close supervision.

In line with the flipped-classroom principle, participants can revisit the online theoretical content completed beforehand and ask all their questions during the workshops.

SCHEDULE

Start at 8:30, end no later than 17:00.

REGISTRATION

Contact: Manuel Alejandro Cortes (manuel.cortes@hopitalrivierachablais.ch)

Registration (click on the link): [POCUS - Advanced echocardiography course for intensivists](#)

Registration fee: 550 Frs for the practical course (online course not included).

DAY PROGRAMME *(Workshops)*

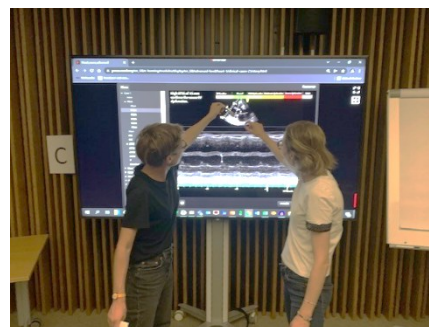
Cardiac output estimation	<i>On volunteer</i>
Left ventricular systolic function	<i>On volunteer</i>
Segmental wall motion	<i>On simulator</i>
Right ventricular function	<i>On volunteer</i>
Pulmonary arterial pressure	<i>On volunteer</i>
Left atrial pressure and diastolic function	<i>On volunteer</i>
Pathologies	<i>On simulator</i>
Interactive clinical cases	<i>Slide show</i>
Review and assessment	<i>On volunteer</i>



On volunteer



On simulator



Interactive slide show

TRAINING CERTIFICATE

At the end of the training, a certificate will be issued to each participant for both the theoretical and practical parts.



TRAINING CERTIFICATE

AWARDED TO

Participant name

for having attended the course

ADVANCED FOCUSED TRANSTHORACIC ECHOCARDIOGRAPHY

THEORETICAL COURSE *(approximately 14 hours of online teaching on [pocus.academy](#))*

- Doppler techniques
- Left ventricular systolic function
- Segmental wall motion of the left ventricle
- Right ventricular function
- Cardiac output
- Pulmonary arterial pressure
- Right atrial pressure
- Left atrial pressure
- Preload dependence
- Fluid management in septic shock
- Tamponade
- Pericardiocentesis
- Massive pulmonary embolism
- Thoracic aorta
- Valvular heart disease
- Prosthetic valves
- Endocarditis
- Obstructive cardiomyopathy and LVOT obstruction effect
- Cardiogenic shock
- Cardiac arrest
- Ultrasound-guided temporary pacemaker insertion
- ECMO and Impella
- Microbubble test
- How to write a report
- Clinical cases (10 cases)

Knowledge assessment was carried out via MCQ.

PRACTICAL COURSE *(Location and date)*

- Doppler techniques
- Assessment of left ventricular systolic function (on volunteers)
- Assessment of left ventricular segmental wall motion (on a Vimedix simulator)
- Estimation of cardiac output (on volunteers)
- Assessment of right ventricular function (on volunteers)
- Estimation of pulmonary arterial pressure (on volunteers)
- Estimation of left atrial pressure (on volunteers)
- Pathologies (on a Vimedix simulator)
- Clinical cases (slides)
- Review (on volunteers)
- Test (on volunteers)

8 hours of supervised hands-on practice. Assessment of knowledge acquisition was performed via a practical test.

 **CONTINUING EDUCATION CREDITS**

European Society of Intensive Medicine:

- 6 points for the European Diploma in Advanced Critical Care Echocardiography (EDEC)

Date

Alejandro Cortés MD

Course director

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TECHNICAL SUPPORT

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