Choc’ Oh là là

APPAC 2018

Session « Sors ton couteau Suisse »

PD Dr. med. Diego Arroyo

Pas de liens d’intérêt à déclarer

Les Suisses et le chocolat…

- Introduction **1697** (Zurich)

➡ **Interdiction** 1722 pour **effet aphrodisiaque**

- **2017**
  - 2 milliards € (exportation)
  - 190’731 tonnes de chocolat vendu

➡ **Consommation de 11kg/habitant/année**

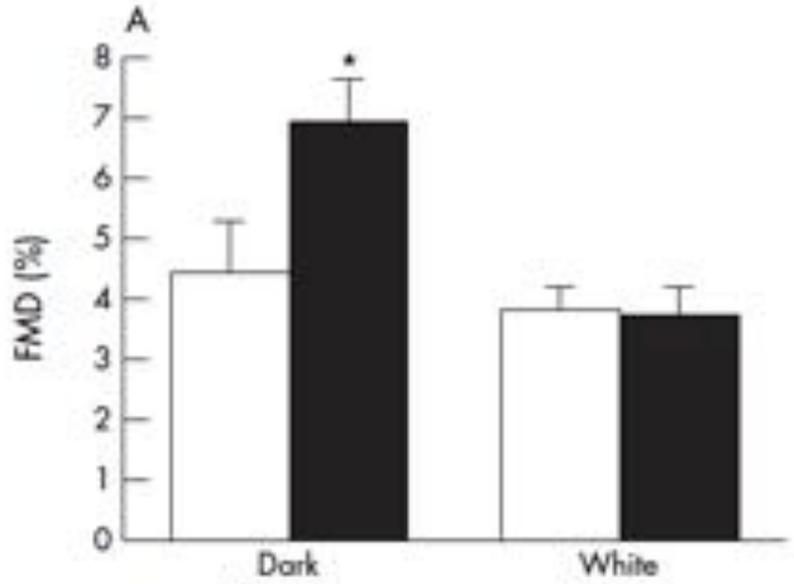
Le chocolat (noir) et les coronaires

SCIENTIFIC LETTER

Dark chocolate improves endothelial and platelet function

F Hermann, L E Spieker, F Ruschitzka, I Sudano, M Hermann, C Binggeli, T F Lüscher, W Riesen, G Noll, R Corti

Heart 2006;92:119–120. doi: 10.1136/hrt.2005.063362



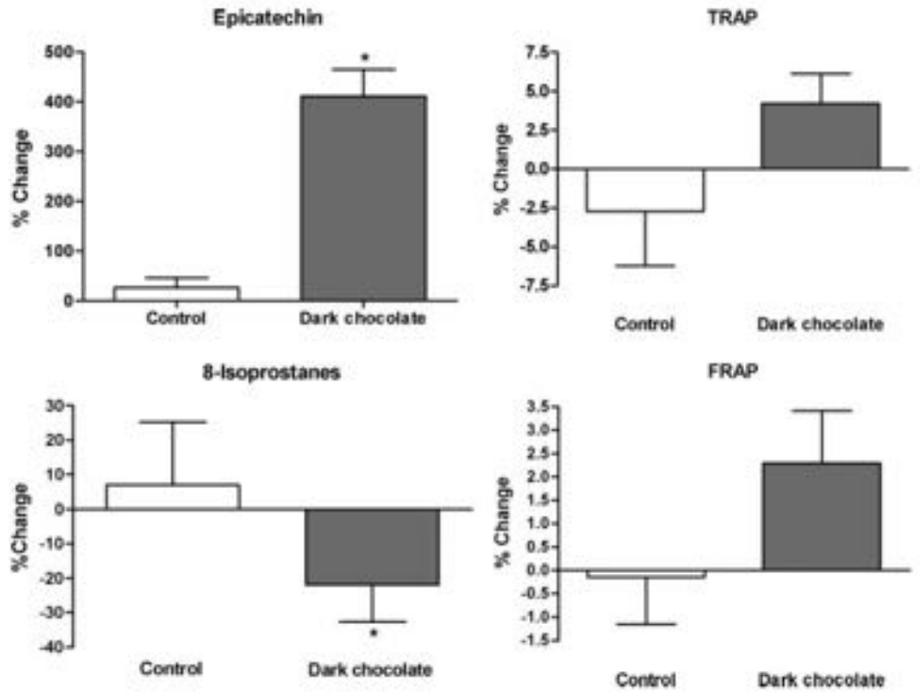
22 patients

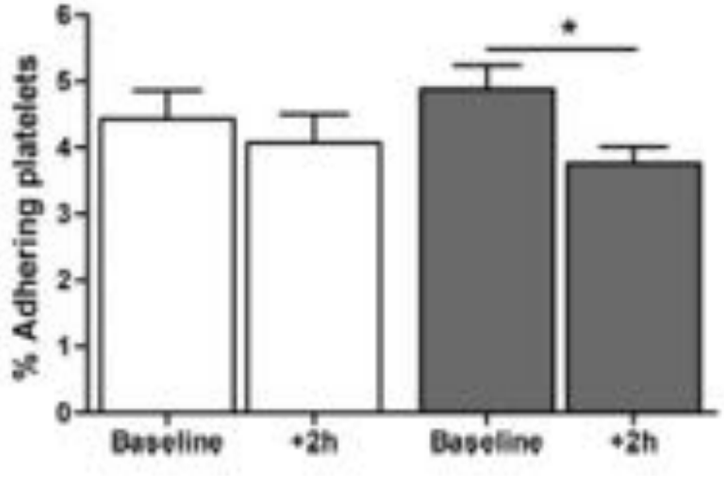
Coronary Heart Disease

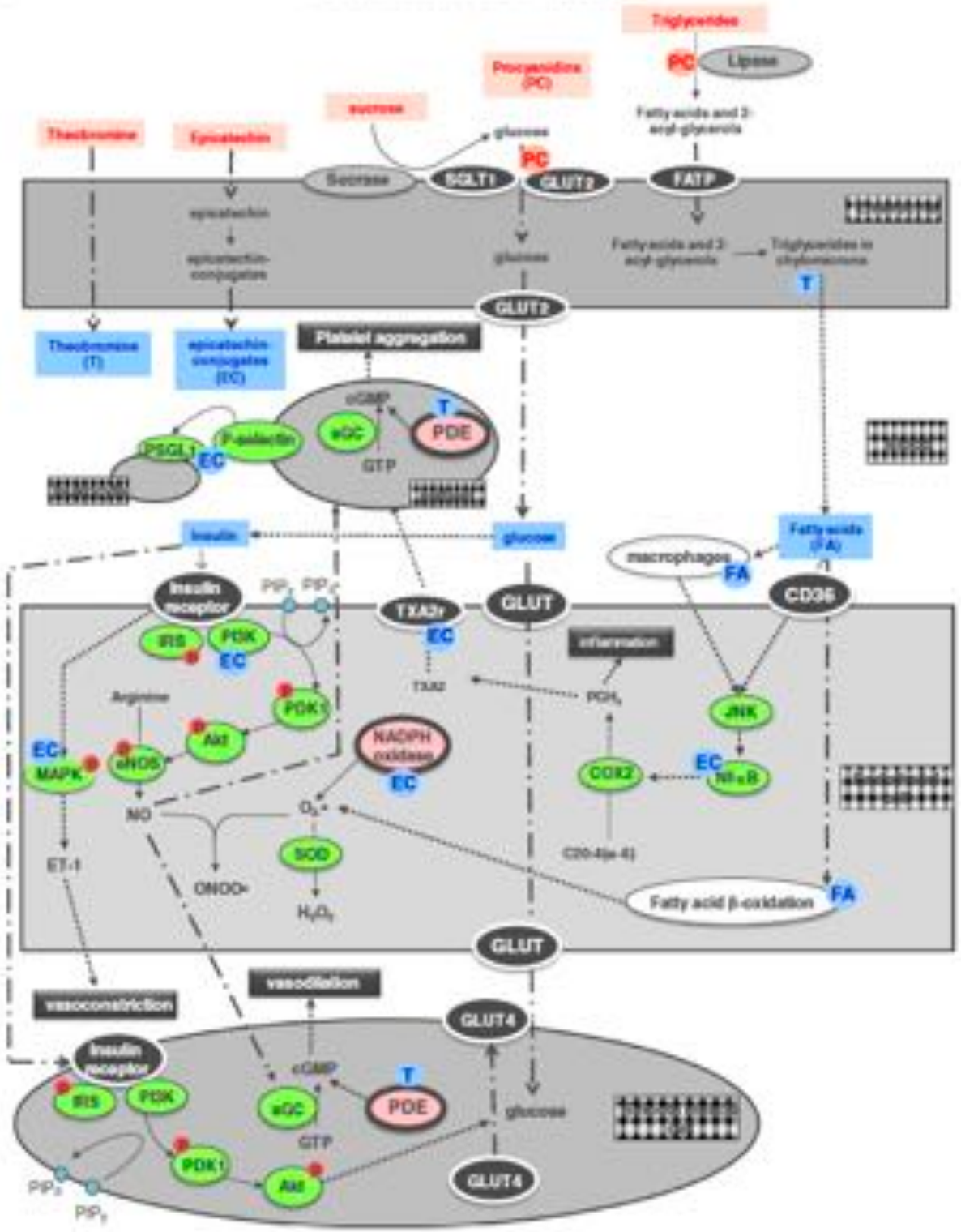
Dark Chocolate Improves Coronary Vasomotion and Reduces Platelet Reactivity

Andreas J. Flammer, MD; Frank Hermann, MD; Isabella Sudano, MD, PhD; Lukas Spieker, MD; Matthias Hermann, MD; Karen A. Cooper, MSc, PhD; Mauro Serafini, PhD; Thomas F. Lüscher, MD; Frank Ruschitzka, MD; Georg Noll, MD; Roberto Corti, MD

Circulation 2007



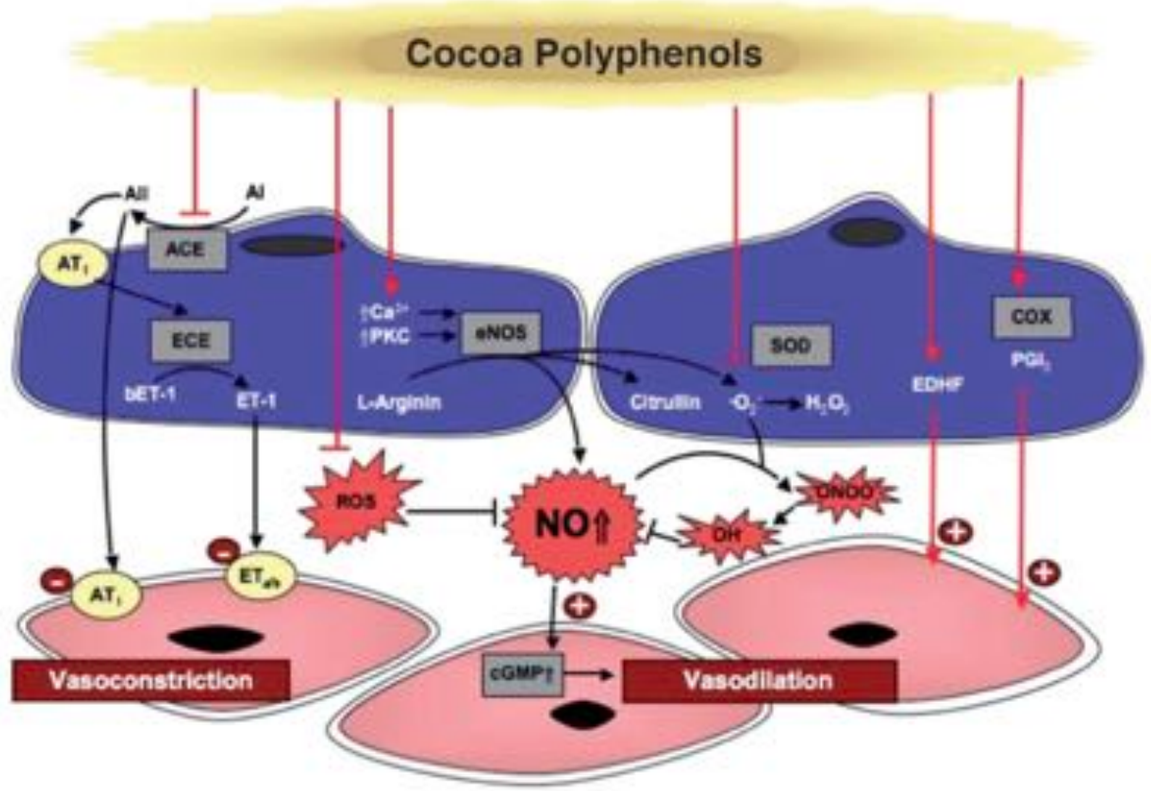




Kerimi et al . Vascular Pharmacology 2015

Table 1 Catechin/epicatechin concentrations found in foods. Modified from [10]

Source	Flavonol content per mg/kg or mg/L
Chocolate	460–610
Beans	350–550
Apricot	100–250
Cherry	50–220
Peach	50–140
Blackberry	130
Apple	20–120
Green tea	100–800
Black tea	60–500
Red wine	80–300
Cider	40



Sudano et al. Current Hypertens Rep 2012

Dark Chocolate Intake Buffers Stress Reactivity in Humans

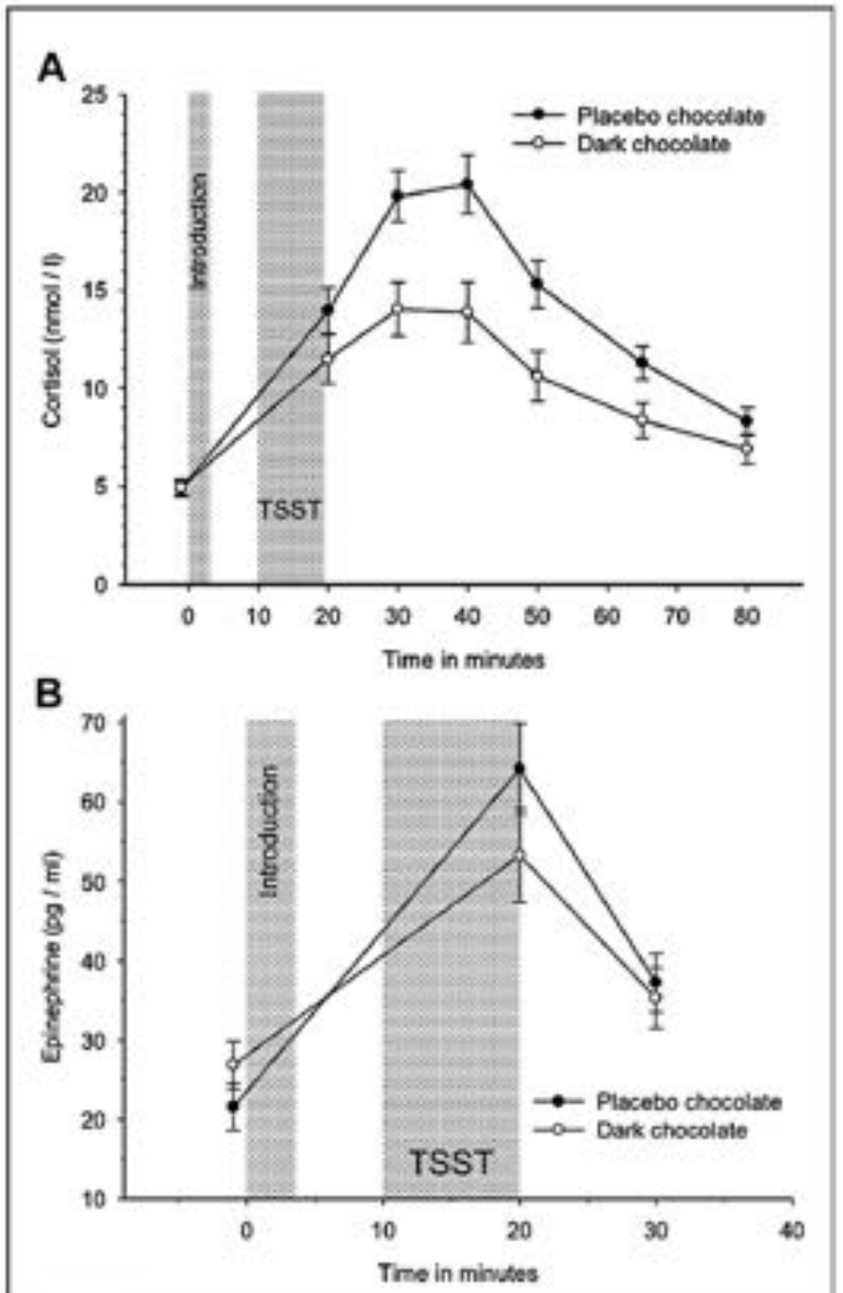


Figure 1 Physiological Reactivity to Psychosocial Stress (TSST) in the Dark Chocolate and the Placebo Chocolate Group

Wirz et al. JACC 2014

EAT
CHOCOLATE
AND
KEEP
CALM

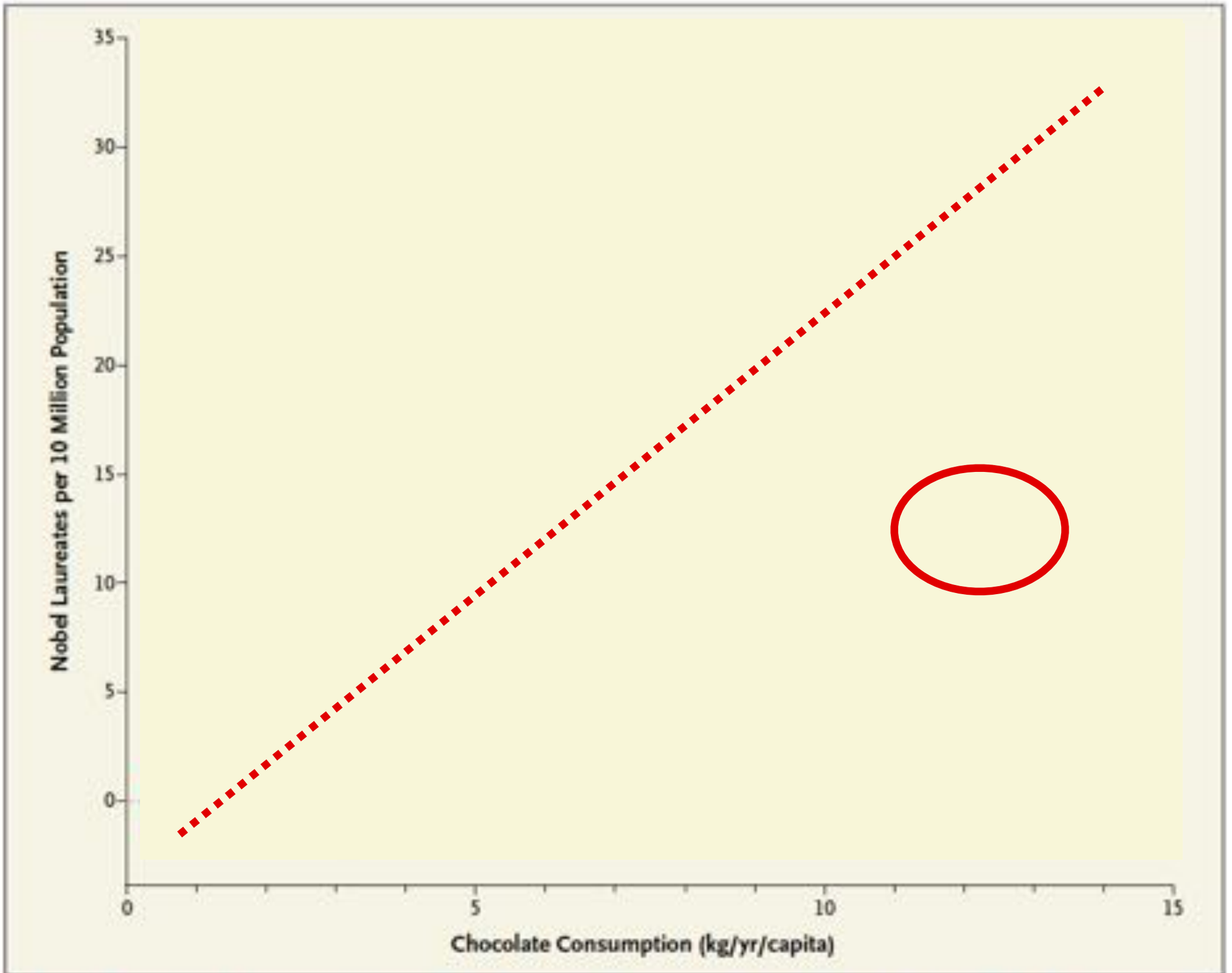


Figure 1. **Correlation between Countries' Annual Per Capita Chocolate Consumption and the Number of Nobel Laureates per 10 Million Population.**

Messerli, NEJM, 2012

Cas n°1: ACR + Choc

Intoxication médicamenteuse

(flurazepam, escitalopram, tramadol, tizanid, eletriptan, paracetamol)

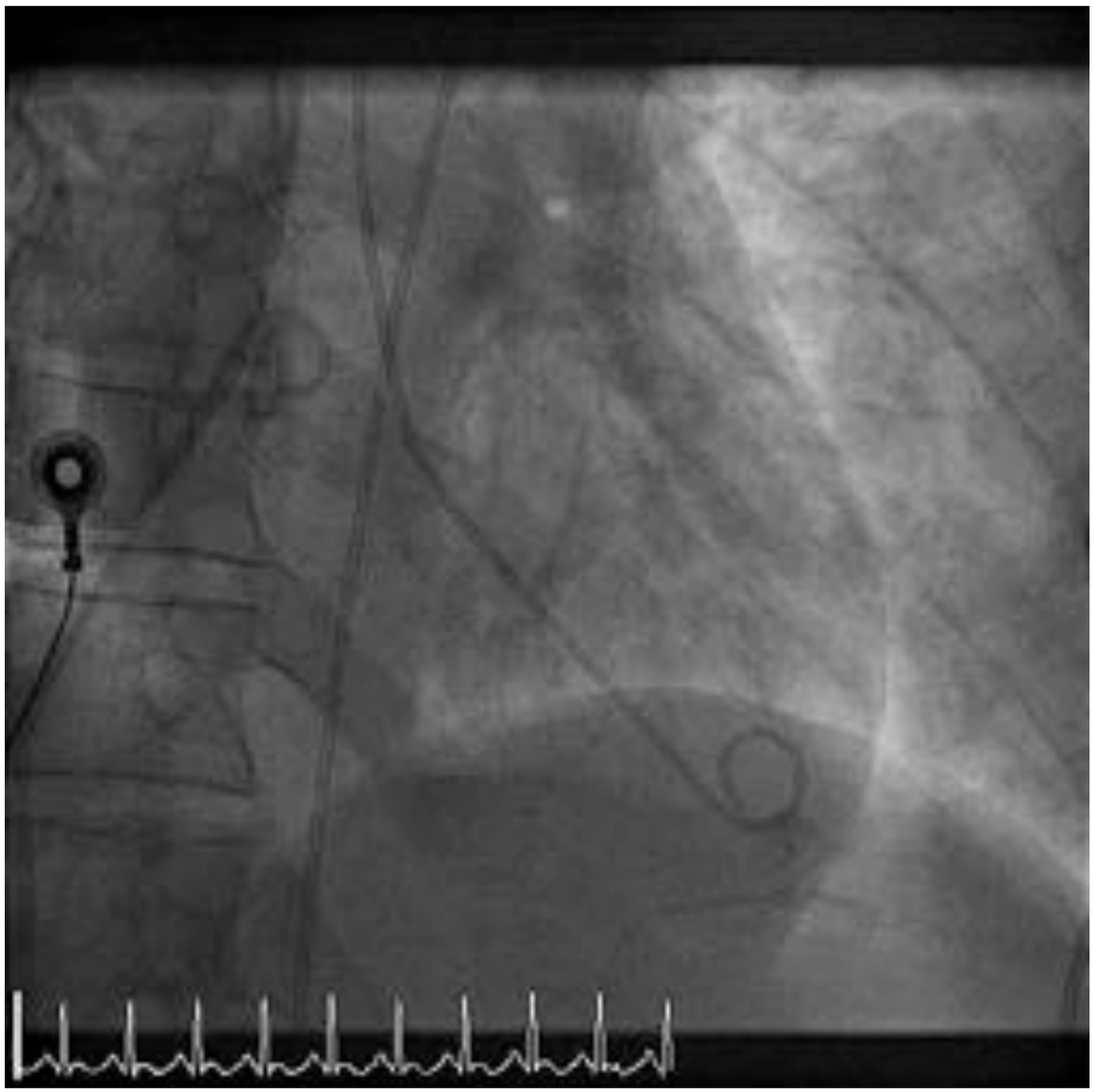
TA: 90/70mmHg, 120bpm

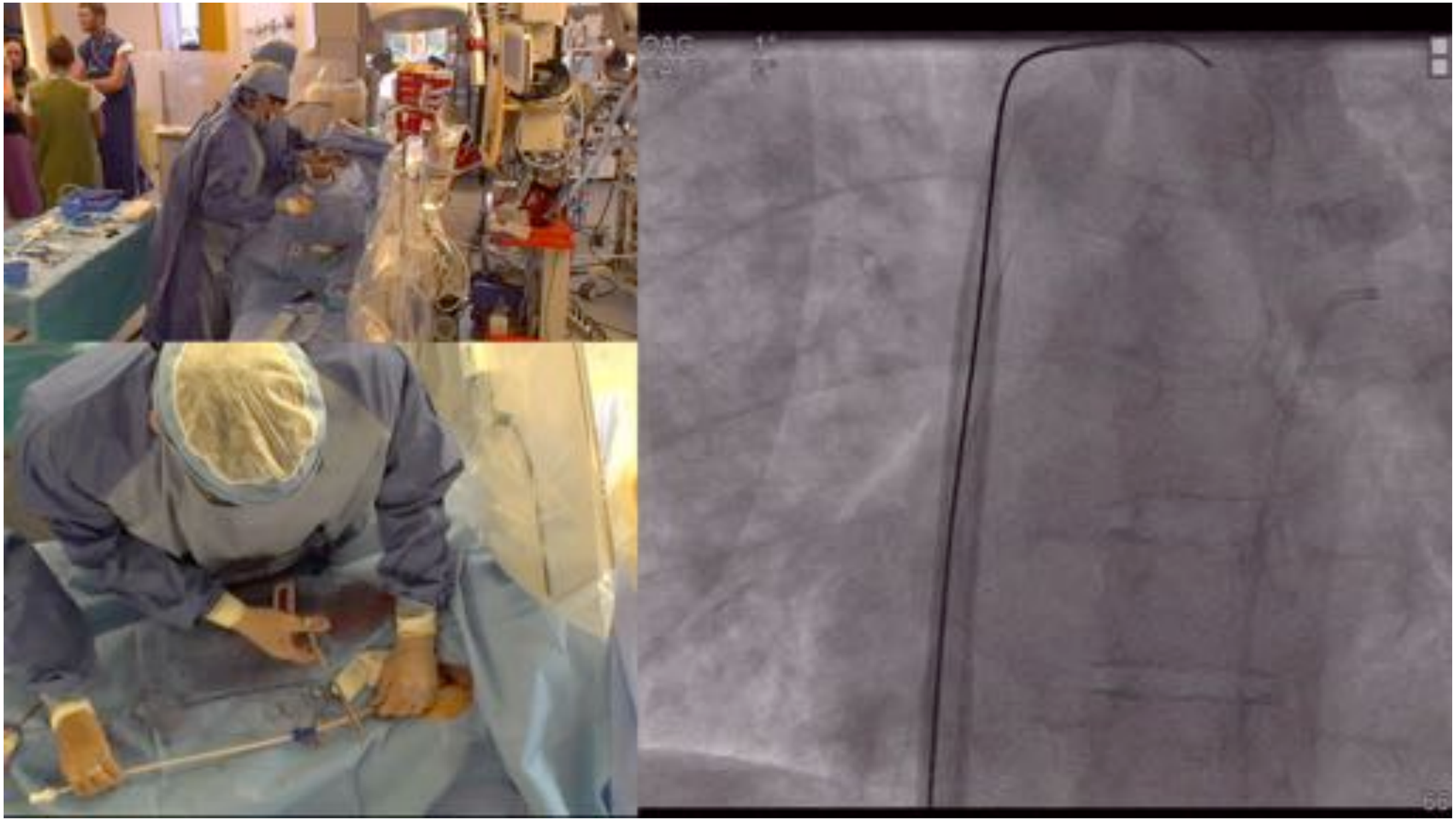
PTDVG 30, PVC 6

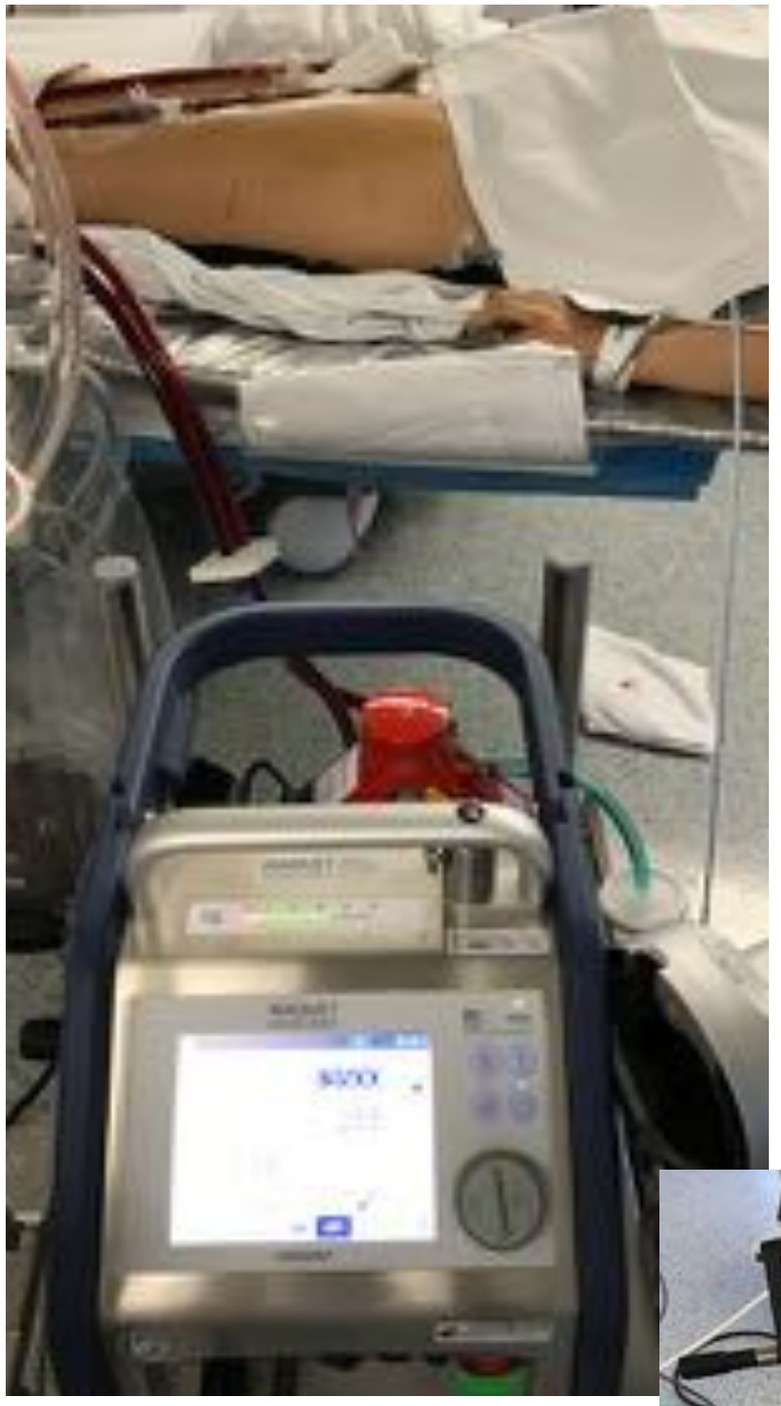
Sat 88% sous FIO2 100%

Dobu 15/y/kg/min,
NA 0.3y/kg/min
pH 7.0, lactates 5.9

2 x ACR (AESP, ROSC 3-4min)
US débrouillage: FEVG 15%, bon VD, valves OK







4-6L/min

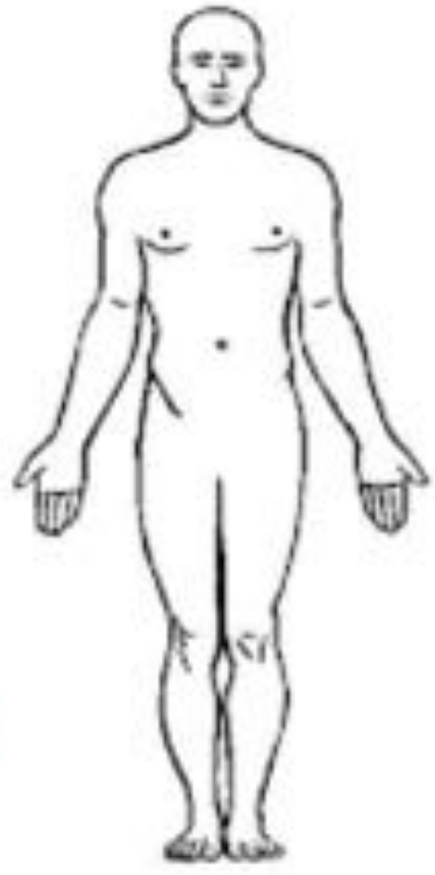
Accès Veineux

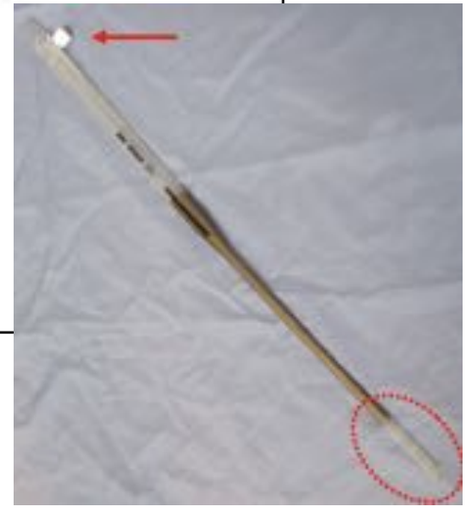
Pompe

Chauffage

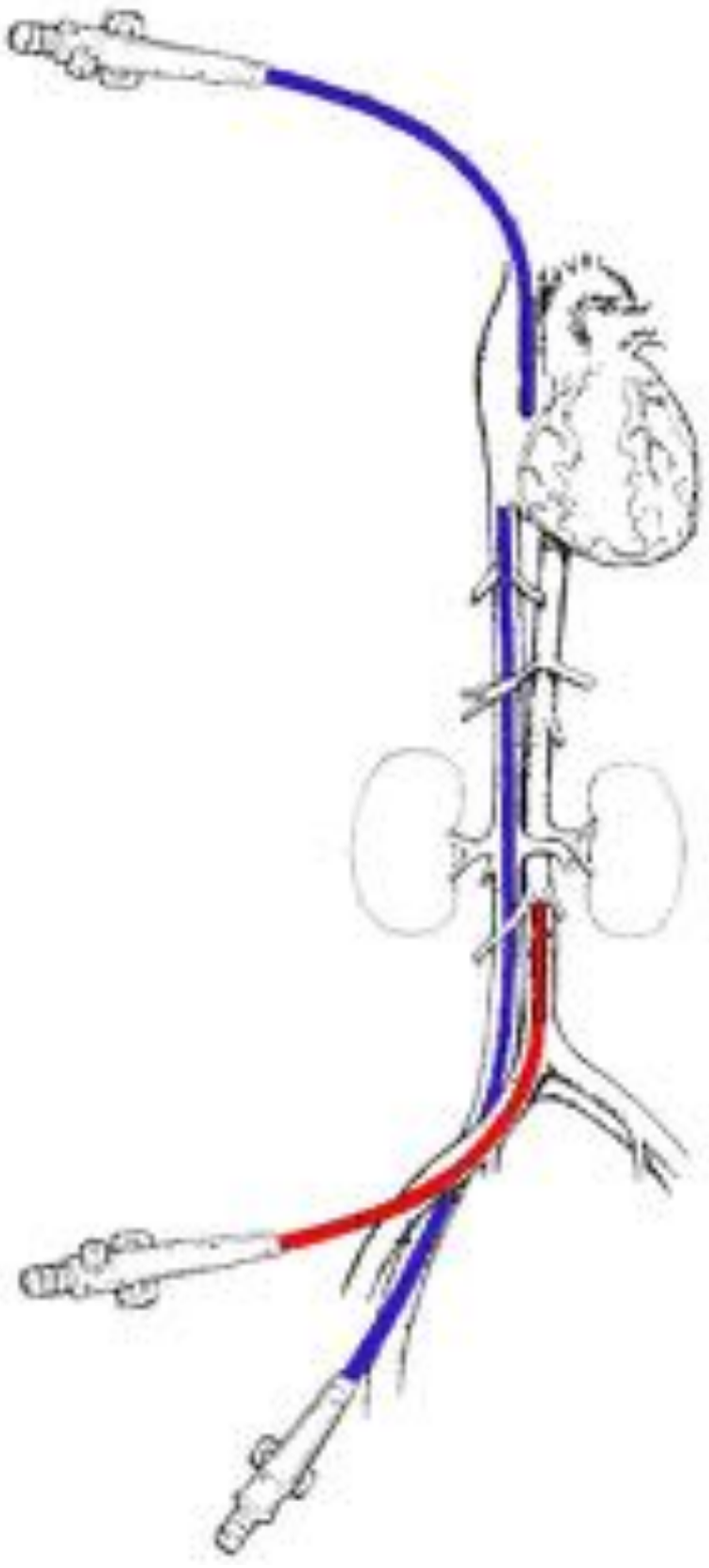
Membrane échangeuse de gaz

Retour

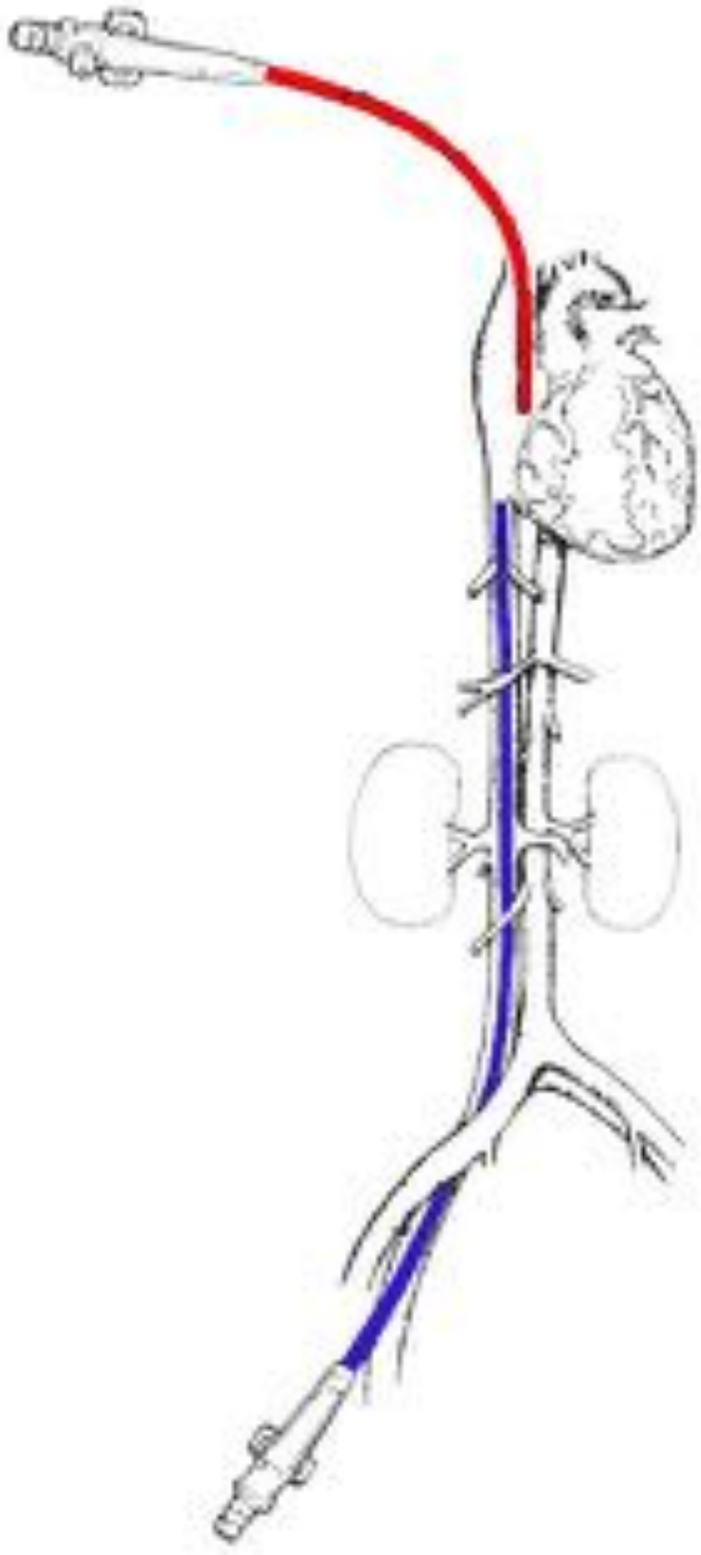




ECMO-VA



ECMO-VV



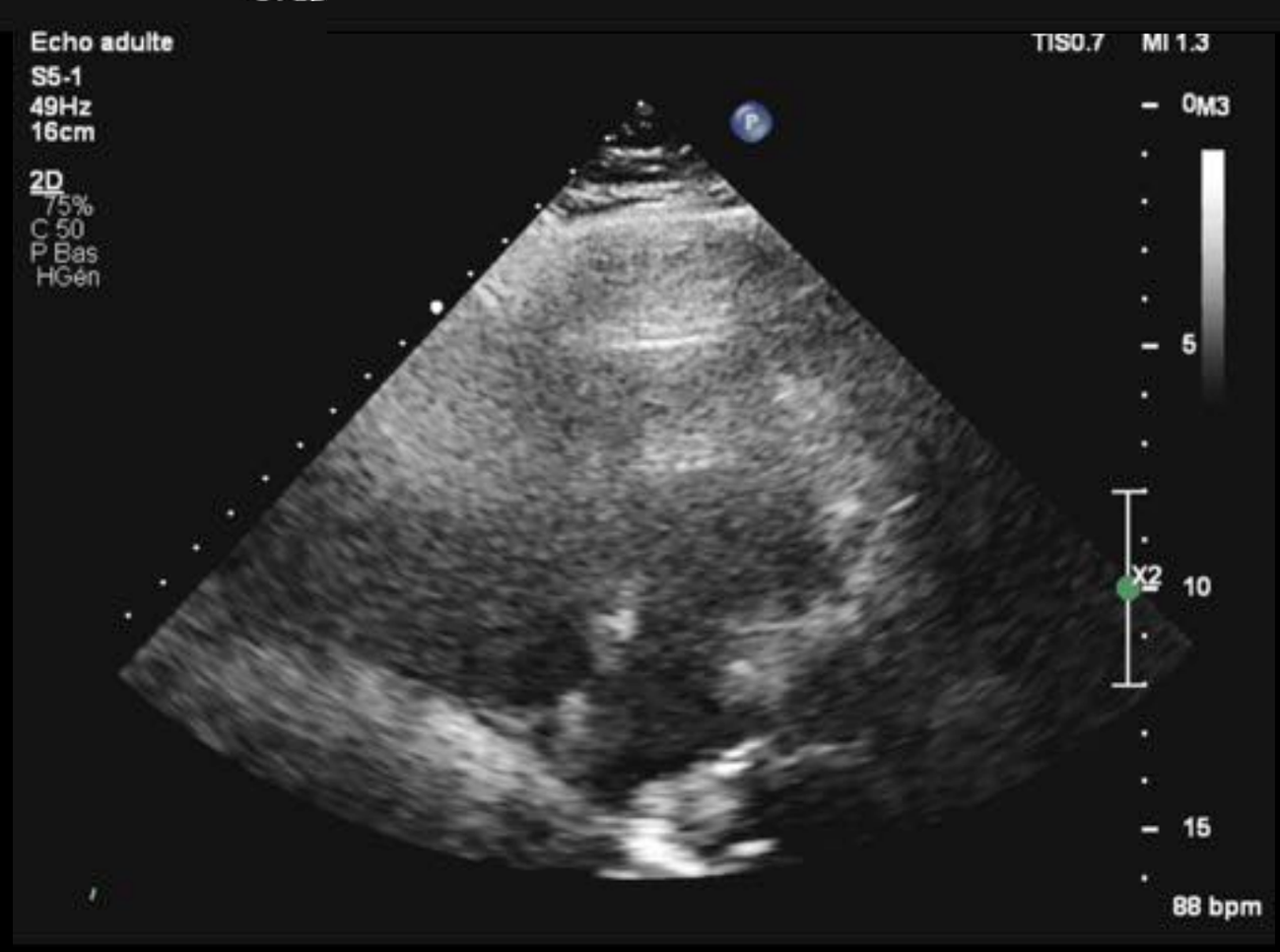
Reperfusion distale

- Généralement 7-8Fr (cannule renforcée)

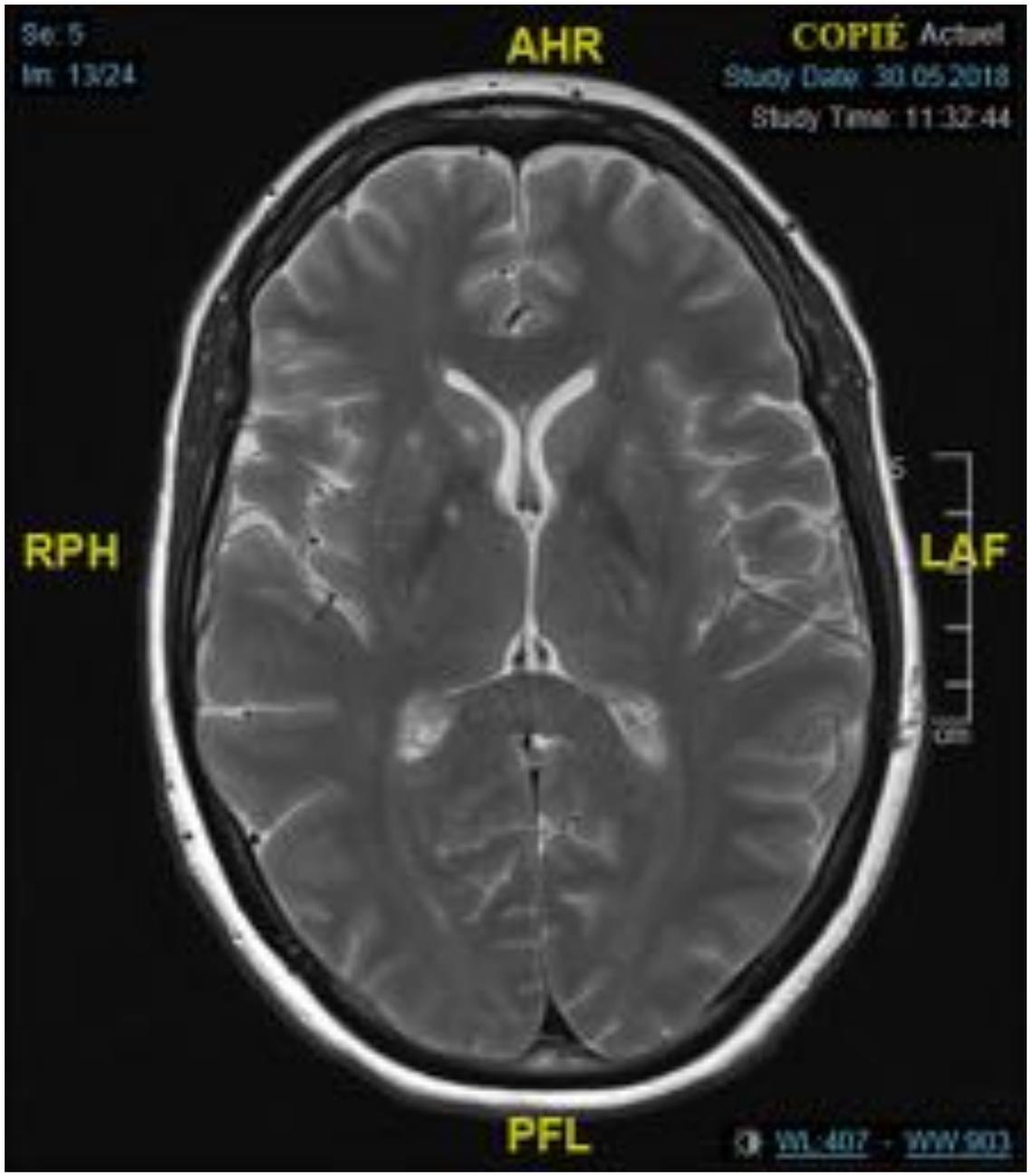
- Le plus proche de canule principale = éviter ischémie partielle

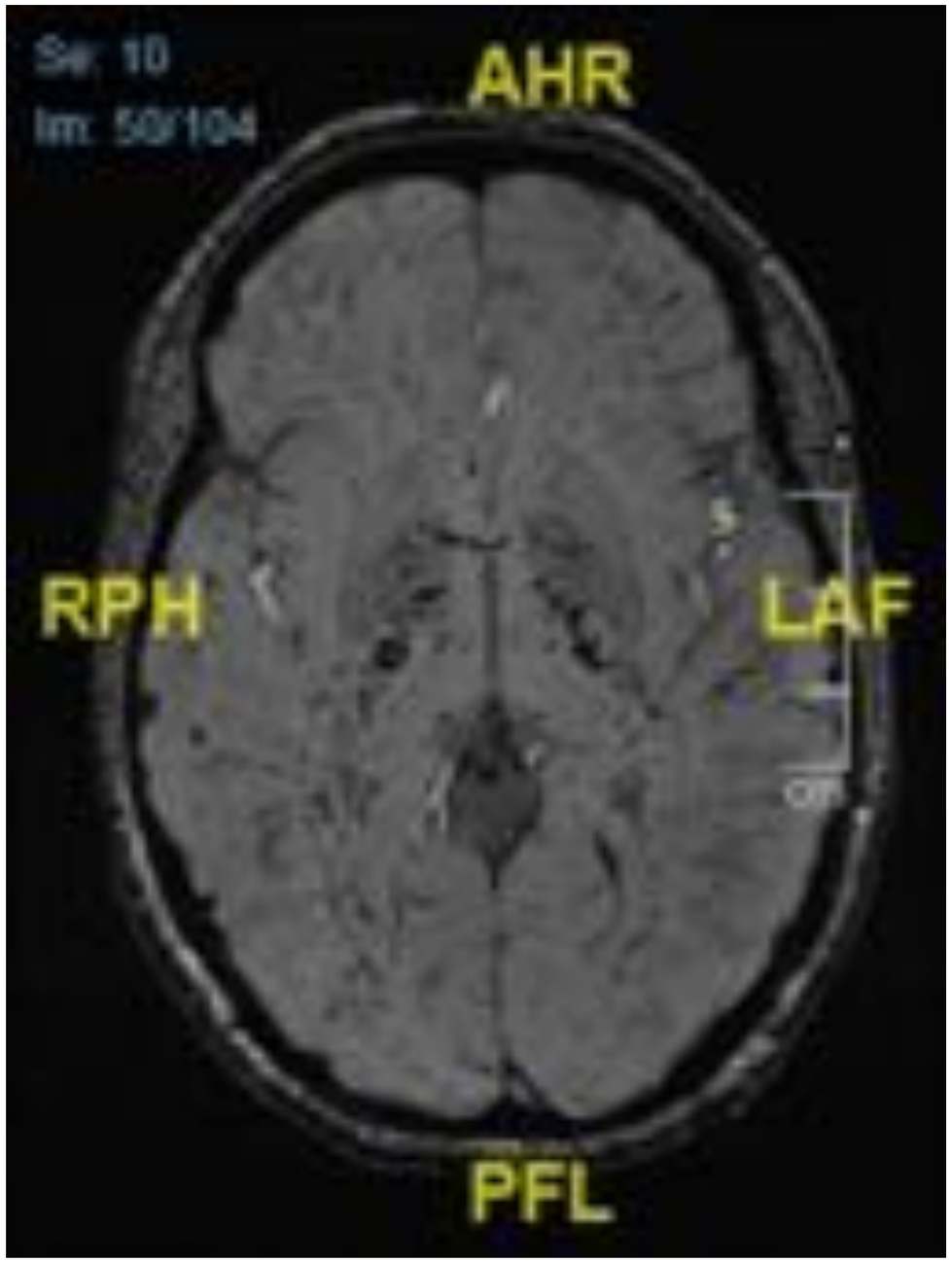
- Seldinger plus facile avant qu'après canulation principale (aide ultrason)

Sevrage ECMO J3



J5


Se: 5
Im: 13/24
AHR
COPIE Actuel
Study Date: 30.05.2018
Study Time: 11:32:44
RPH
LAF
PFL
WL: 407 · WW: 903


Se: 10
Im: 50/104
AHR
RPH
LAF
PFL

« Bons » candidats

- Myocardite
- IDM + choc cardiogène
  - **SANS** défaillance organe multiple
  - **AVEC** revascularisation précoce
- Cardiomyopathie **1ère** manifestation
- Cardiomyopathie (candidat à LVAD ou transplantation)
- Dysfonction primaire greffon post transplantation cardiaque
- Intoxications
- Embolie pulmonaire
- Pre/post transplantation pulmonaire avec HTAP

(Mauvais) candidats

- IDM
  - Avec défaillance multiples d'organe ou sepsis
  - Revascularisation tardive, maladie distale, post pontages
- Cardiomyopathie avec choc septique
- Post cardiotomie (OP maladie ischémique et/ou valvulaire)
- Transplanté avec rejet chronique et IC terminale
- Age > 65ans

Arrêt cardiorespiratoire : E-CPR

- DEFIS +++
- Définition ACR réfractaire : 15min

Critères d'exclusion

Age > 60ans (*débattu*)

Arrêt sans témoins

Tout « no-flow » (*débattu*)

MCE par non professionnel (*débattu*)

MCE > 45min et/ou temps jusqu'à ECMO > 60min

1er rythme : asystolie

Toute comorbidité chronique sévère

Multiples revascularisations coronariennes (*débattu*)

Dissection aortique suspectée

Venoarterial Extracorporeal Membrane Oxygenation for Cardiogenic Shock and Cardiac Arrest: A Meta-Analysis

Ashleigh Xie,*† Kevin Phan, BSc,*¶ Yi-Chin Tsai MBBS,‡ Tristan D. Yan, MD, MS, PhD, FRACS,*§¶ and Paul Forrest, MBChB, FANZCA‖¶

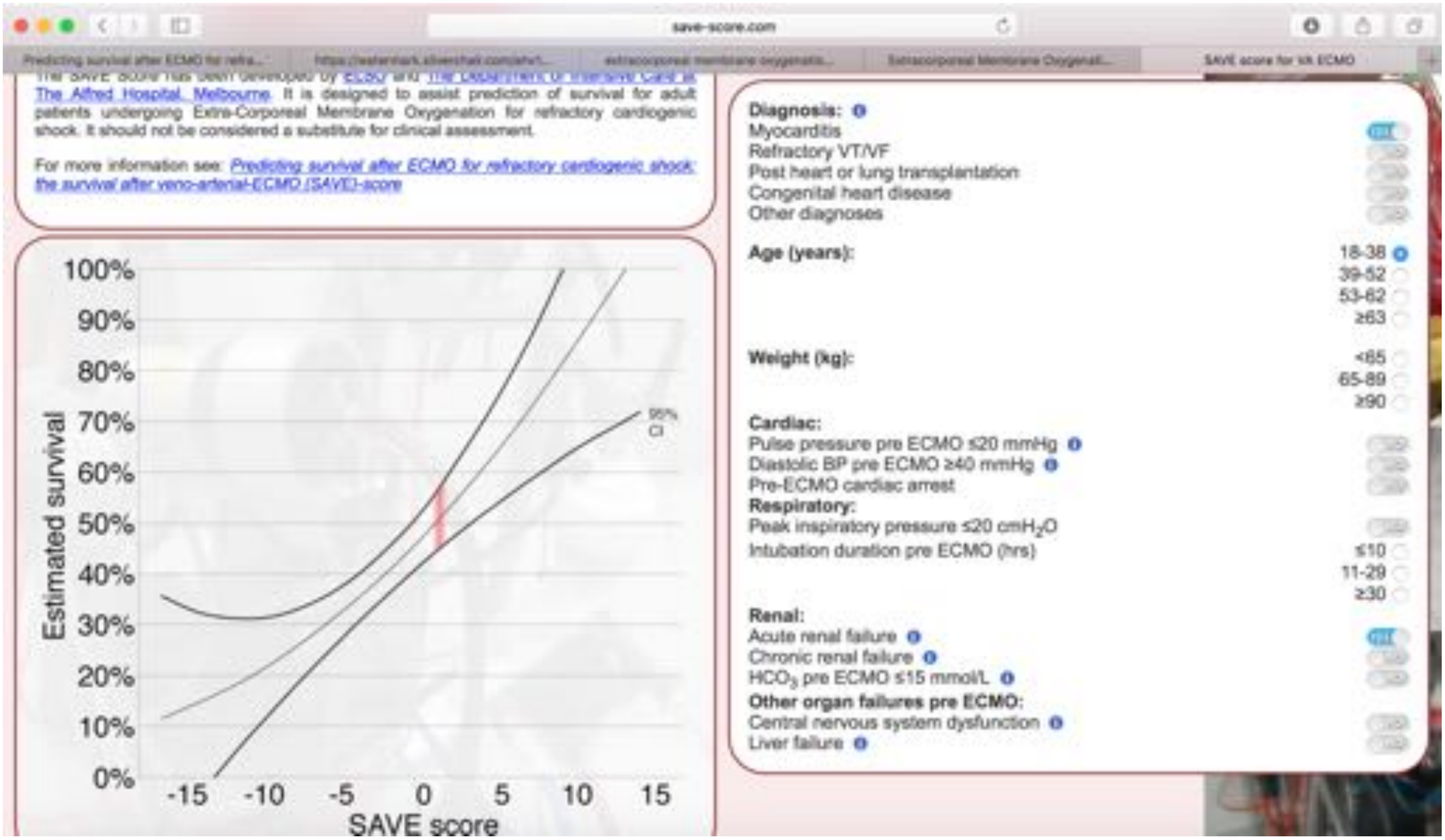
JCVA 2015

- **Survie** à sortie hôpital (tout confondu) : **40%**
  - Cohorte ELSO (42% pour choc cardiogène)
- **Survie à 30 jours:** 52% (choc), **36%** (ACR, 343 patients)
- Complications: **neuro (13%),** infection (25%), IRC (47%)

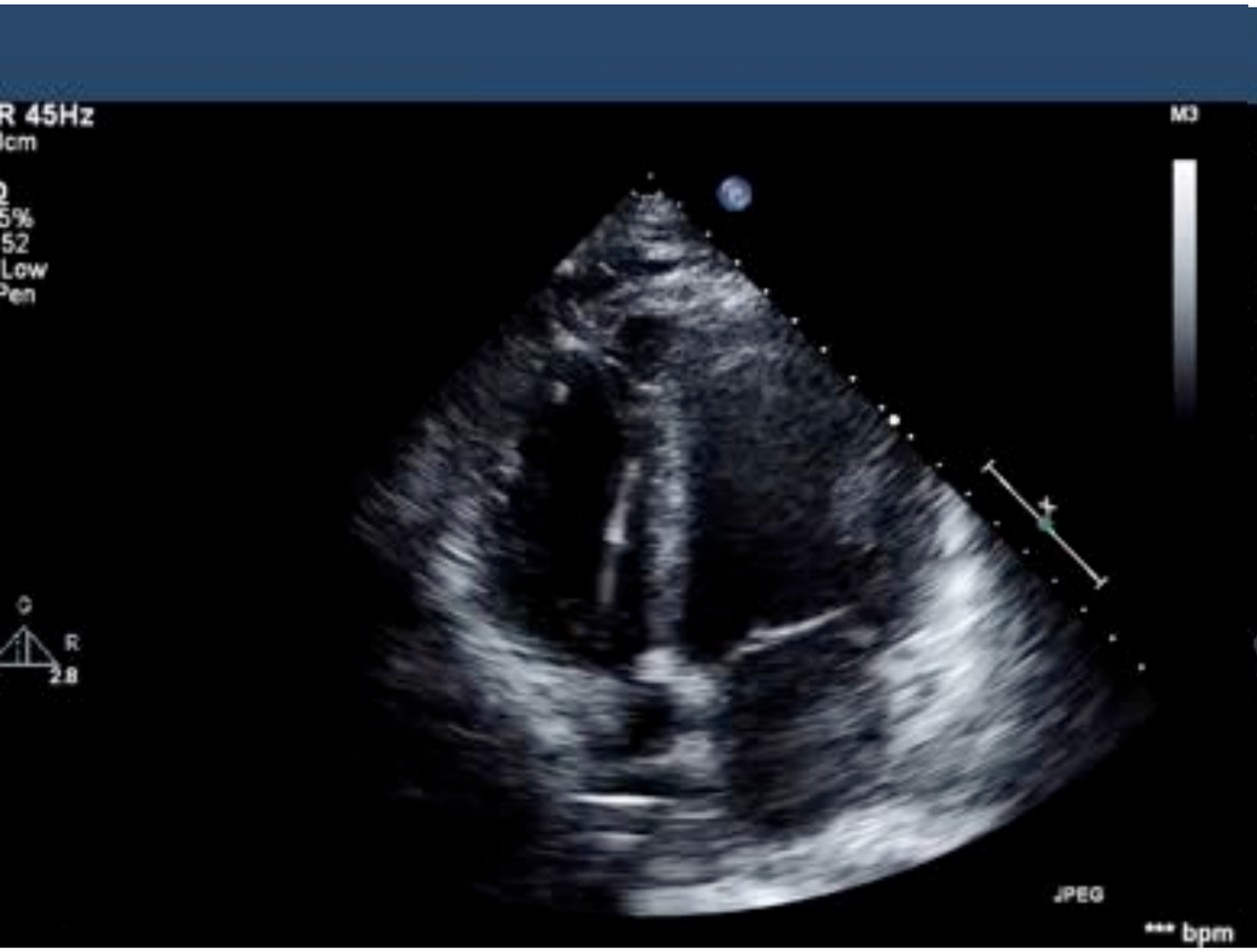
Predicting survival after ECMO for refractory cardiogenic shock: the survival after veno-arterial-ECMO (SAVE)-score

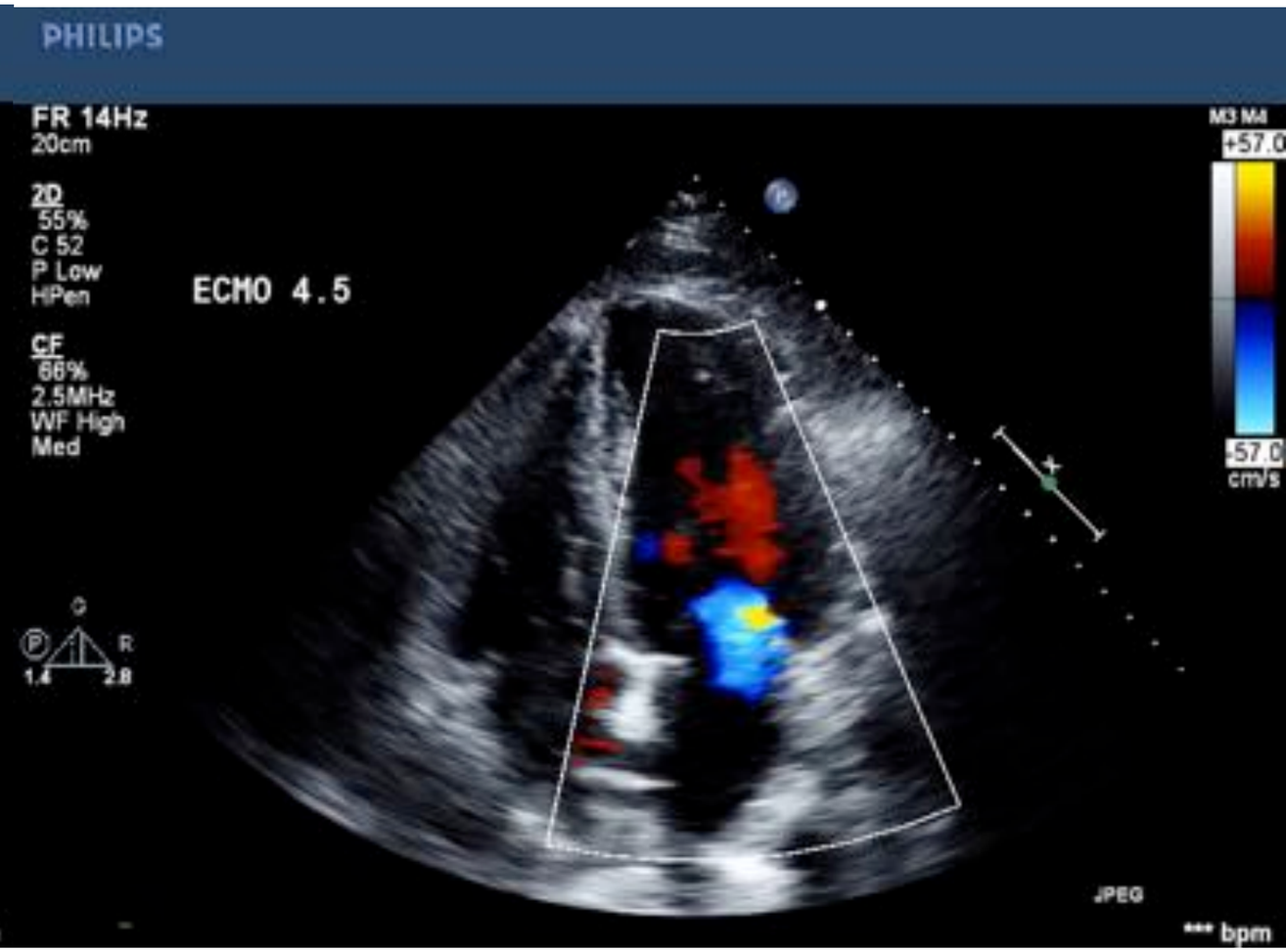
Matthieu Schmidt[1,2*], Aidan Burrell[1,3], Lloyd Roberts[3], Michael Bailey[1,3], Jayne Sheldrake[3], Peter T. Rycus[4], Carol Hodgson[1,3], Carlos Scheinkestel[3], D. Jamie Cooper[1,3], Ravi R. Thiagarajan[4,5,6], Daniel Brodie[7], Vincent Pellegrino[1,3], and David Pilcher[1,3]

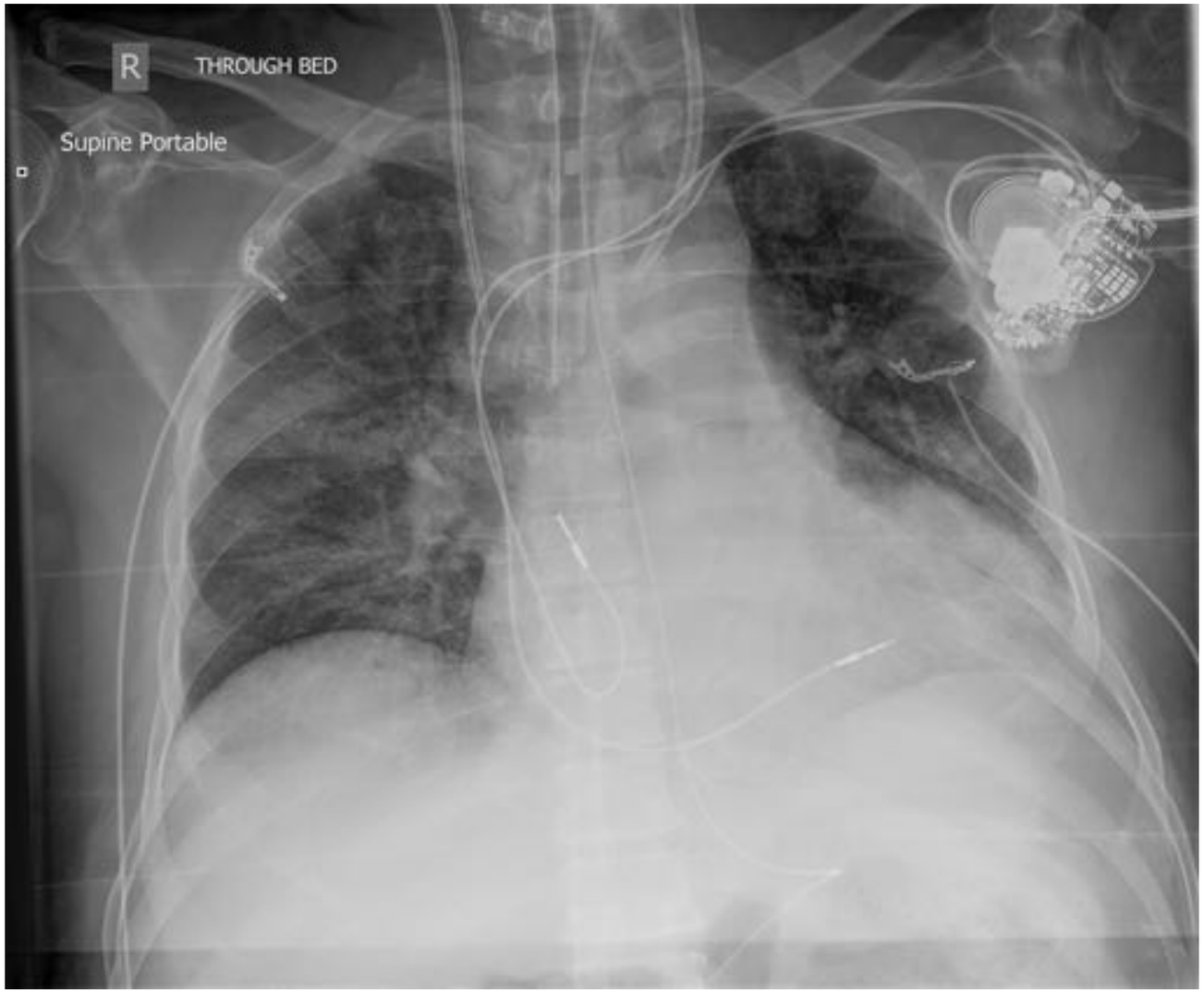
EHJ 2015



Cas n°2: Homme 65ans, Myocardite fulminante



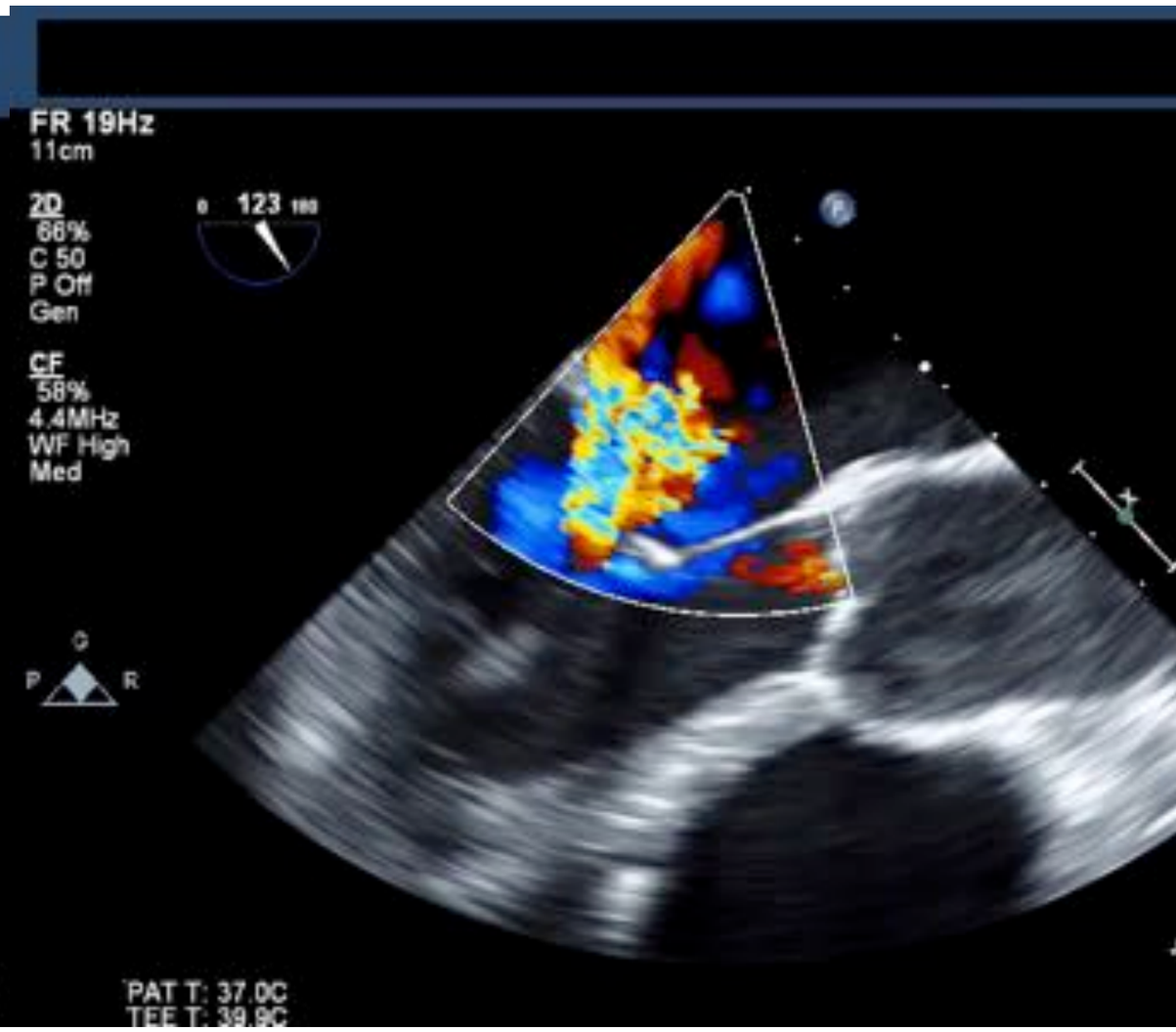


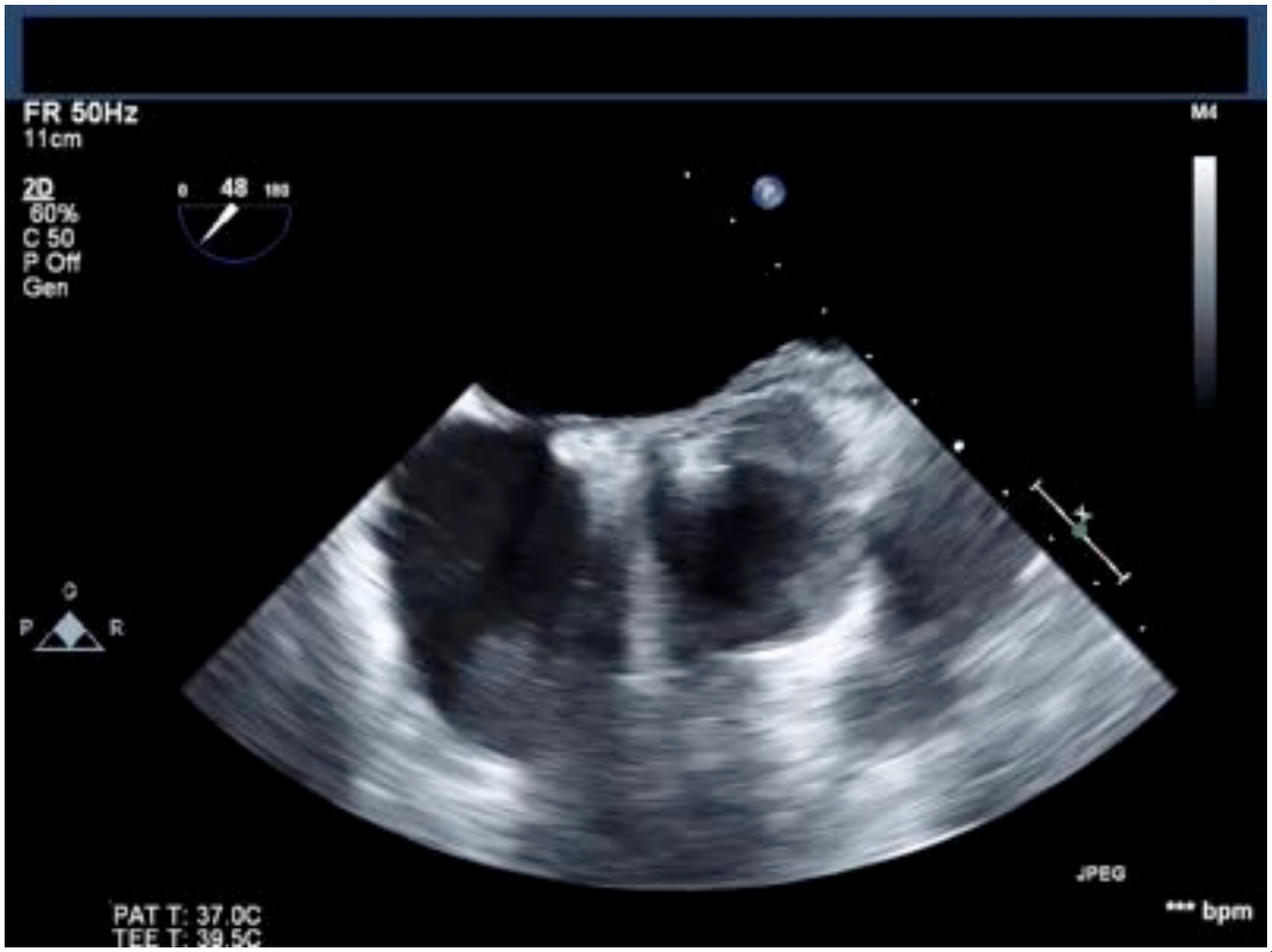


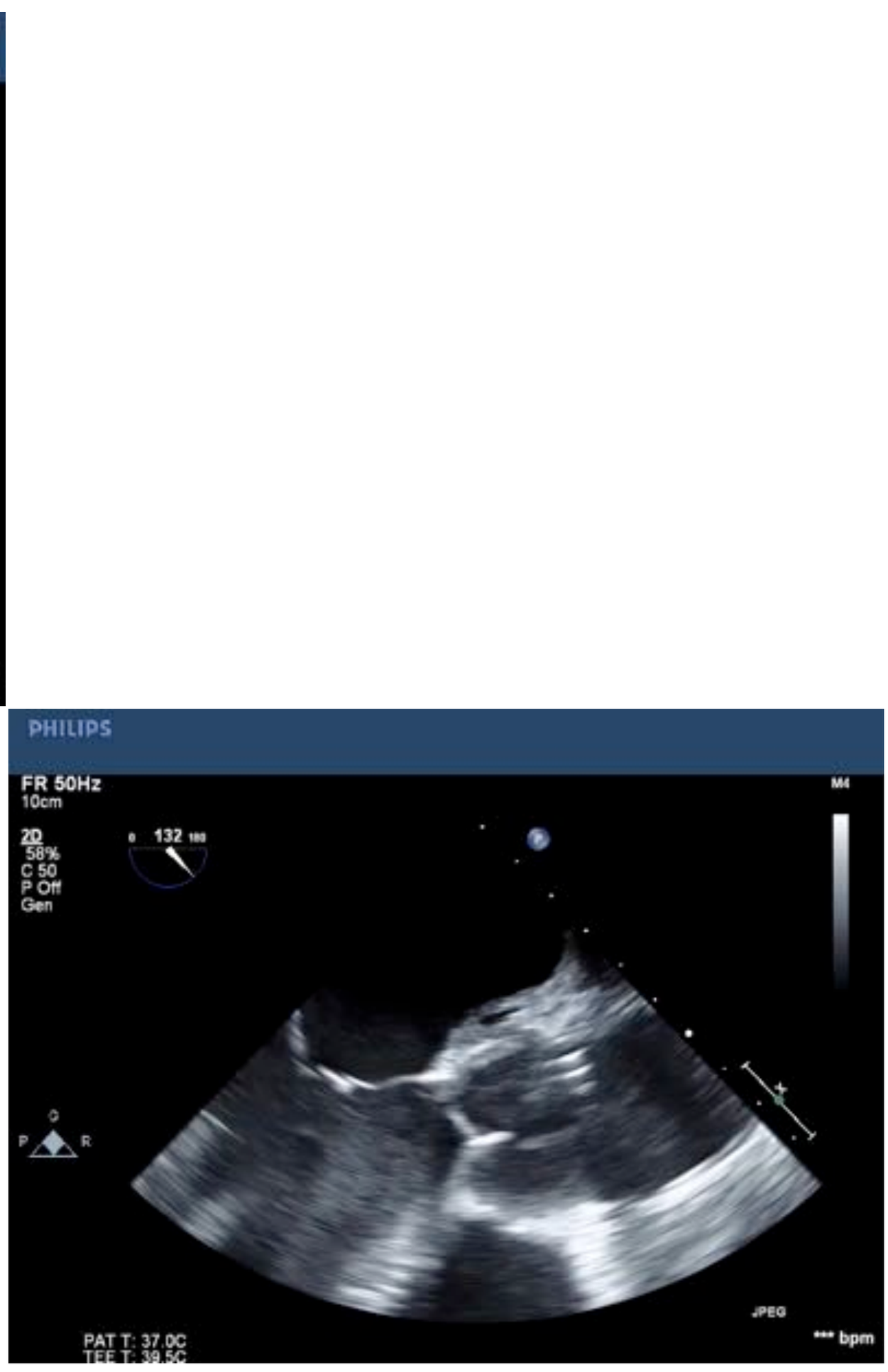
J2 : Oedème pulmonaire, perte de pulsatilité

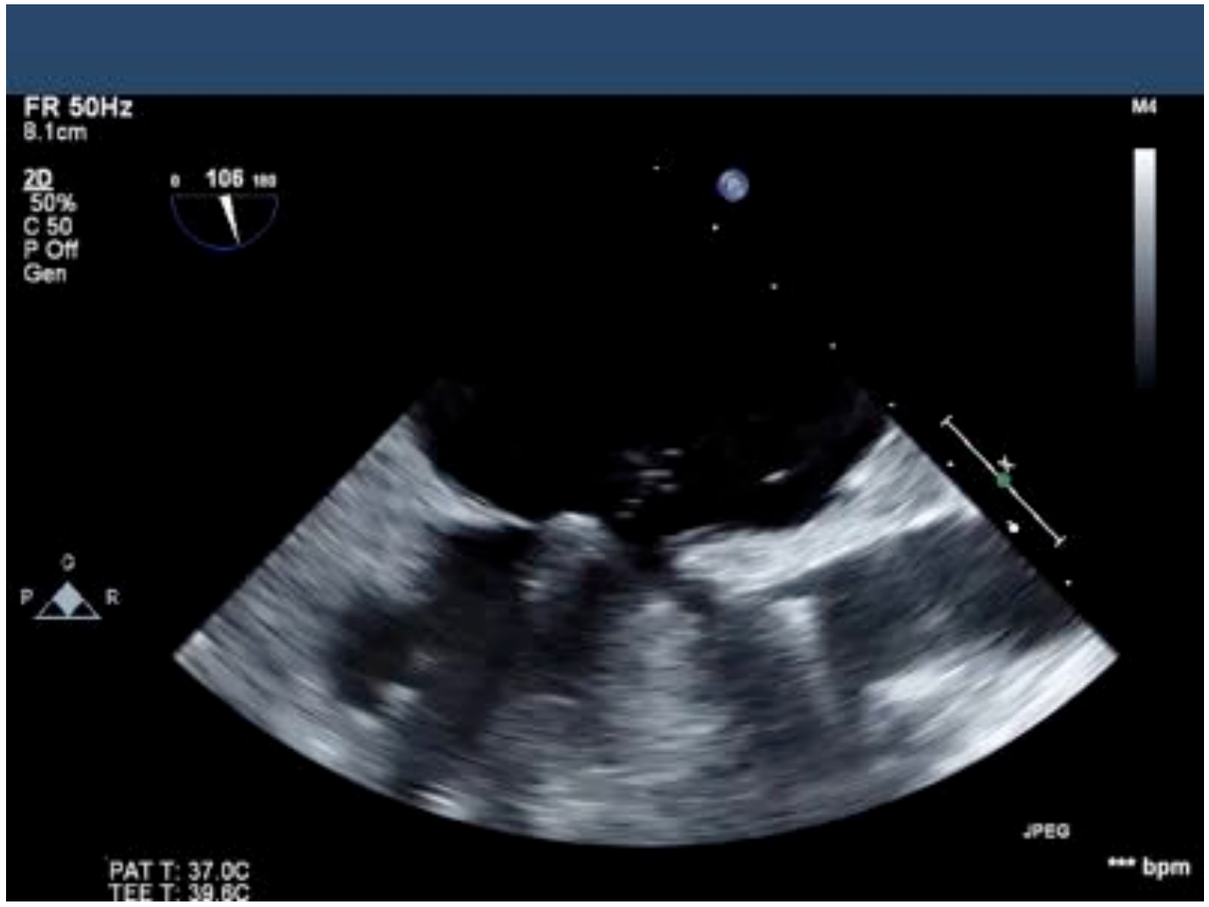
J2


FR 50Hz
14cm
2D
64%
C 50
P Off
Gen
136
M4
JPEG
90 bpm
PAT T: 37.0C
TEE T: 39.9C

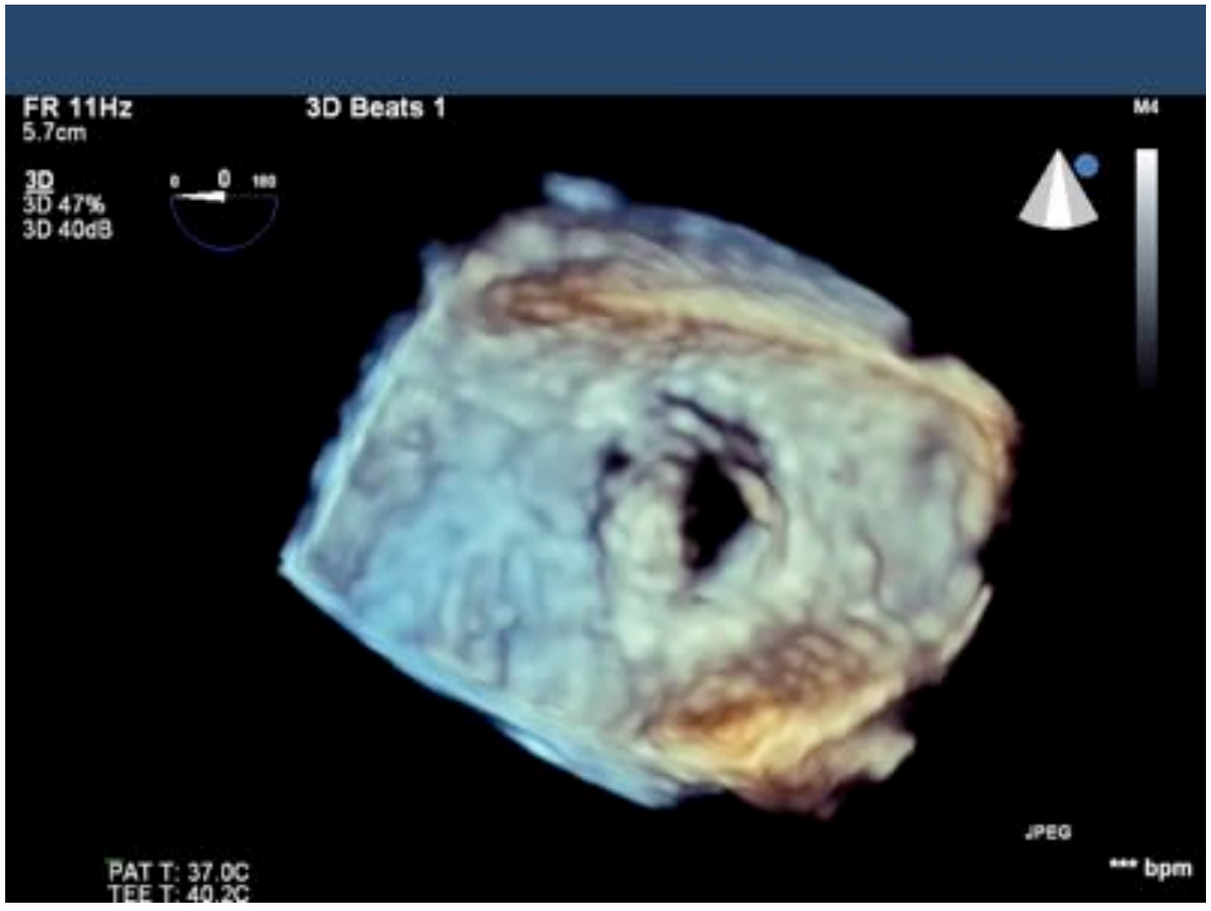

FR 19Hz
11cm
2D
66%
C 50
P Off
Gen
CF
58%
4.4MHz
WF High
Med
123
PAT T: 37.0C
TEE T: 39.9C

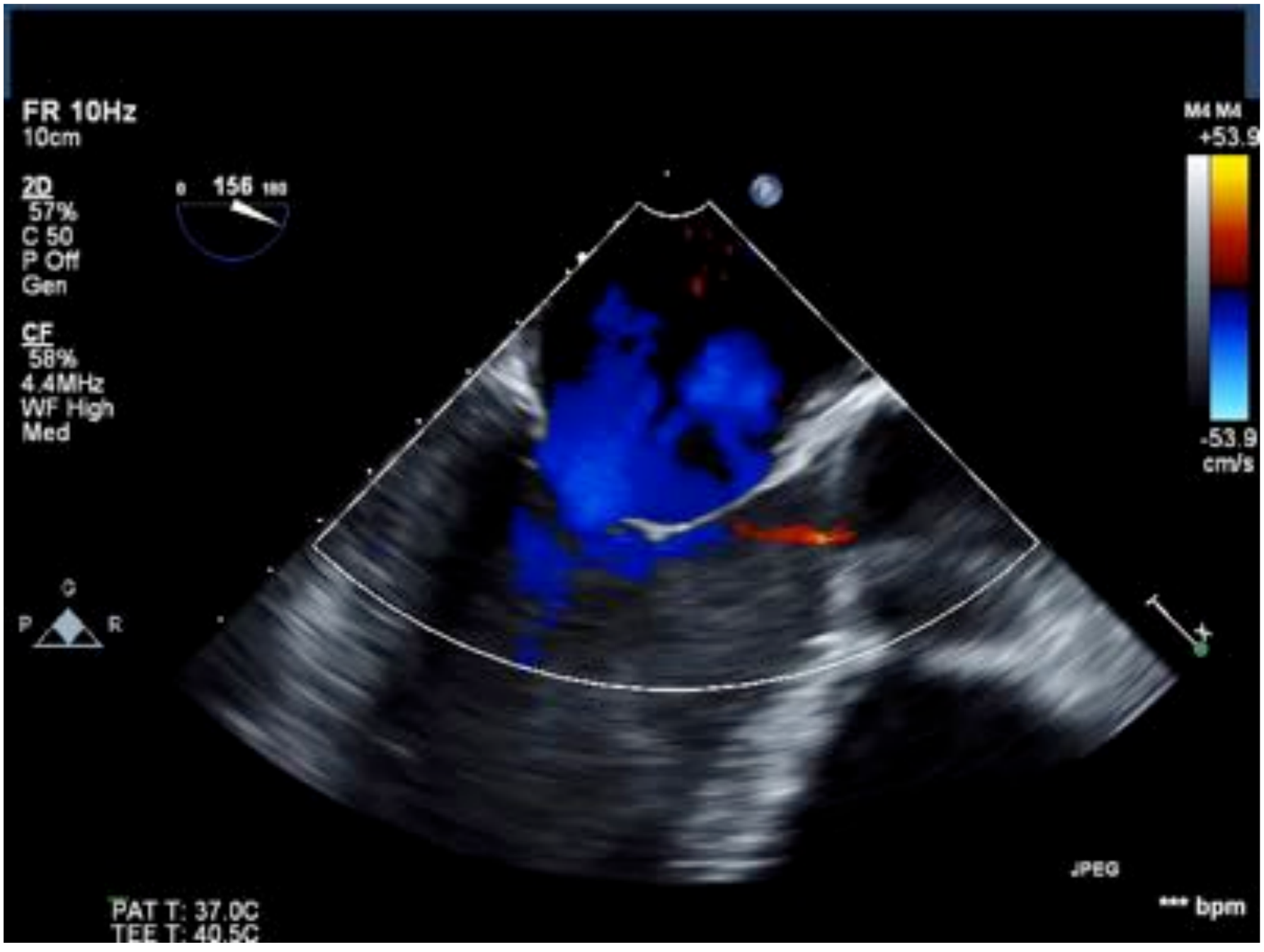

FR 50Hz
11cm
2D
60%
C 50
P Off
Gen
0 48 180
M4
C
P
R
JPEG
*** bpm
PAT T: 37.0C
TEE T: 39.5C


PHILIPS
FR 50Hz
10cm
2D
58%
C 50
P Off
Gen
0 132 180
M4
C
P
R
JPEG
*** bpm
PAT T: 37.0C
TEE T: 39.5C


FR 50Hz
8.1cm
2D
50%
C 50
P Off
Gen
106
M4
JPEG
*** bpm
PAT T: 37.0C
TEE T: 39.6C


FR 14Hz
9.0cm
2D
57%
C 50
P Off
Gen
CF
58%
4.4MHz
WF High
Med
0
M4 M4
+63.8
-63.8
cm/s
JPEG
*** bpm
PAT T: 37.0C
TEE T: 40.7C


FR 11Hz
5.7cm
3D Beats 1
3D
3D 47%
3D 40dB
0
M4
JPEG
*** bpm
PAT T: 37.0C
TEE T: 40.2C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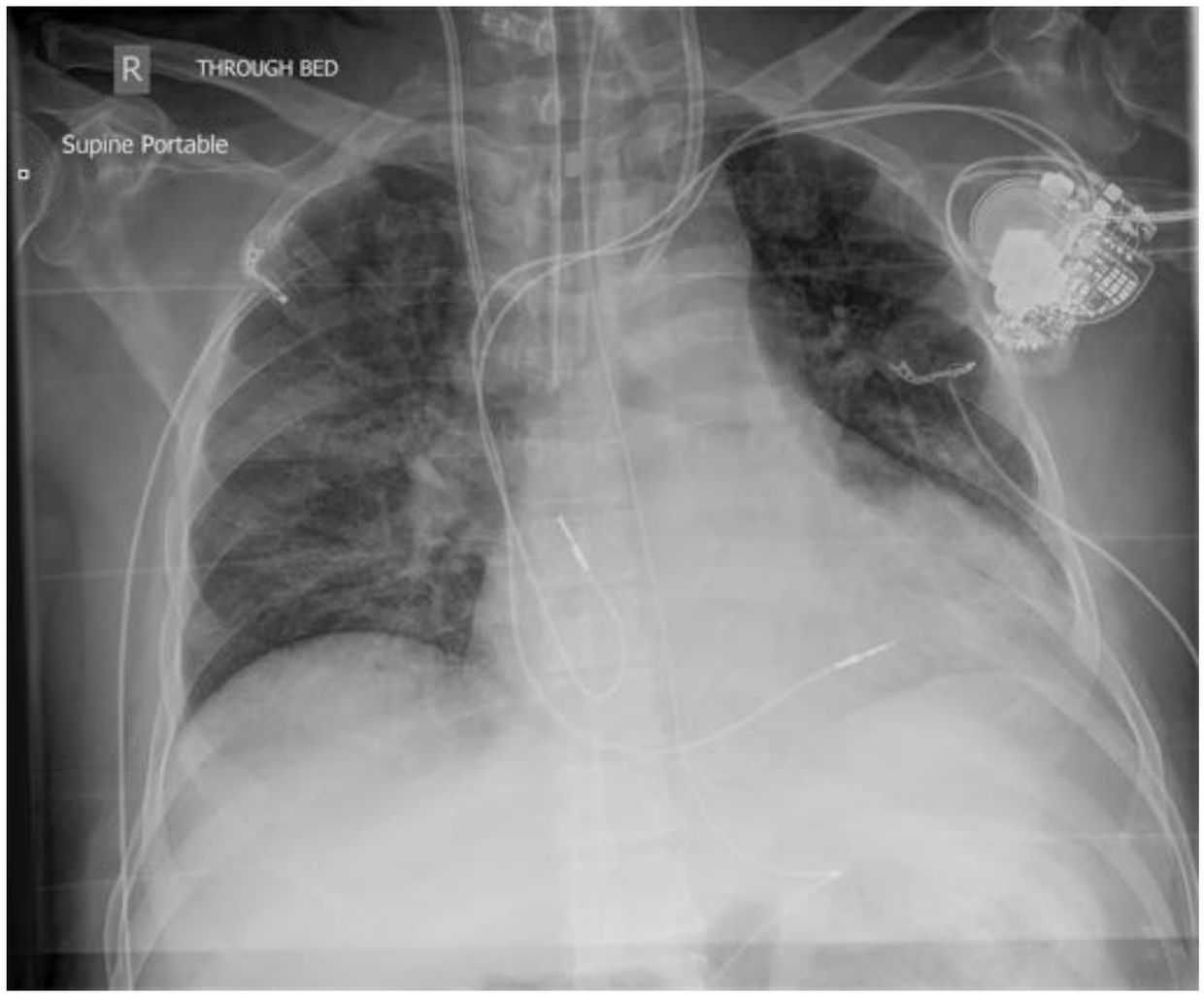
10cm
2D
57%
C 50
P Off
Gen
CF
58%
4.4MHz
WF High
Med
0
156
180
M4 M4
+53.9
-53.9
cm/s
C
P
R
JPEG
*** bpm
PAT T: 37.0C
TEE T: 40.5C



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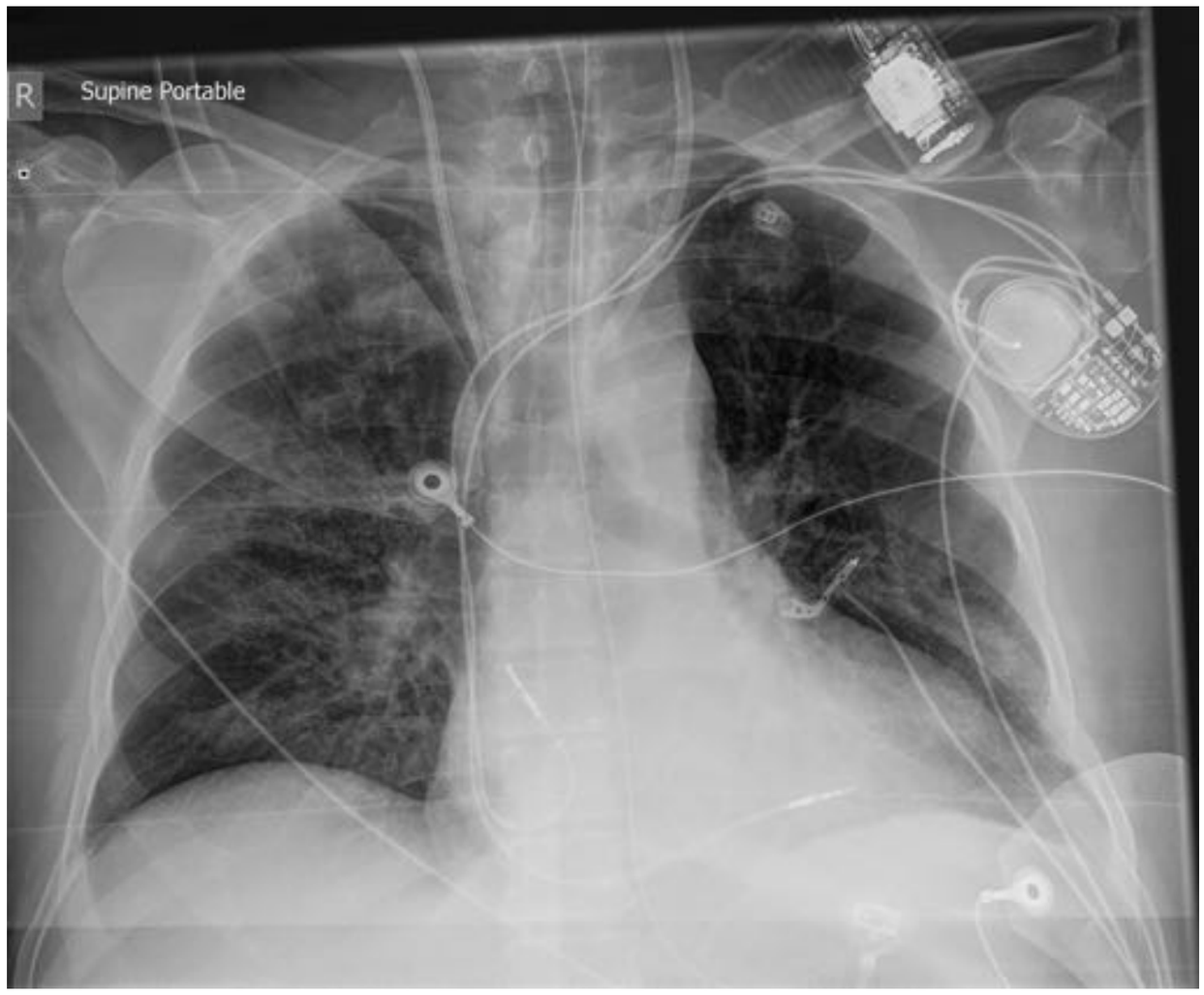
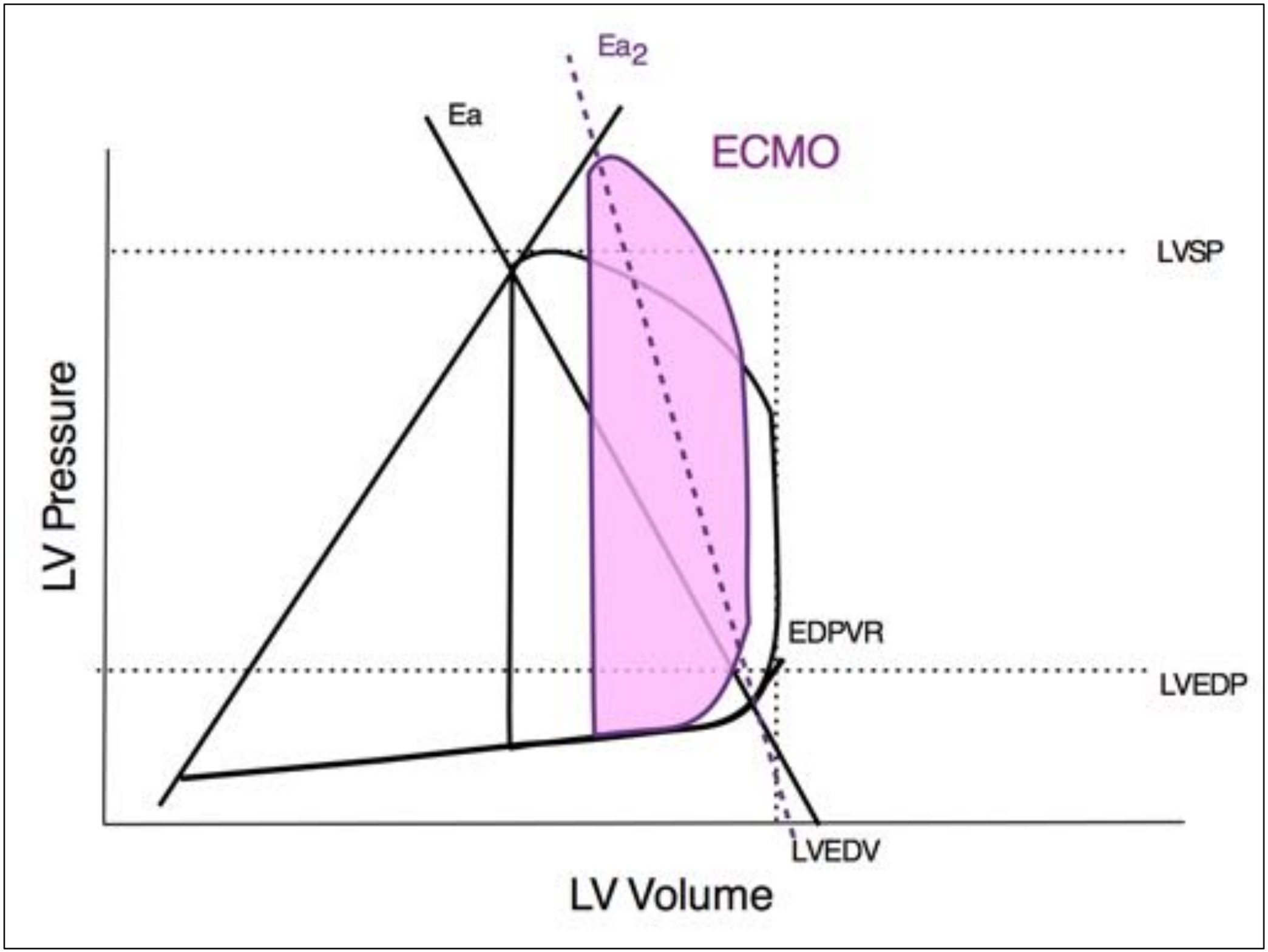
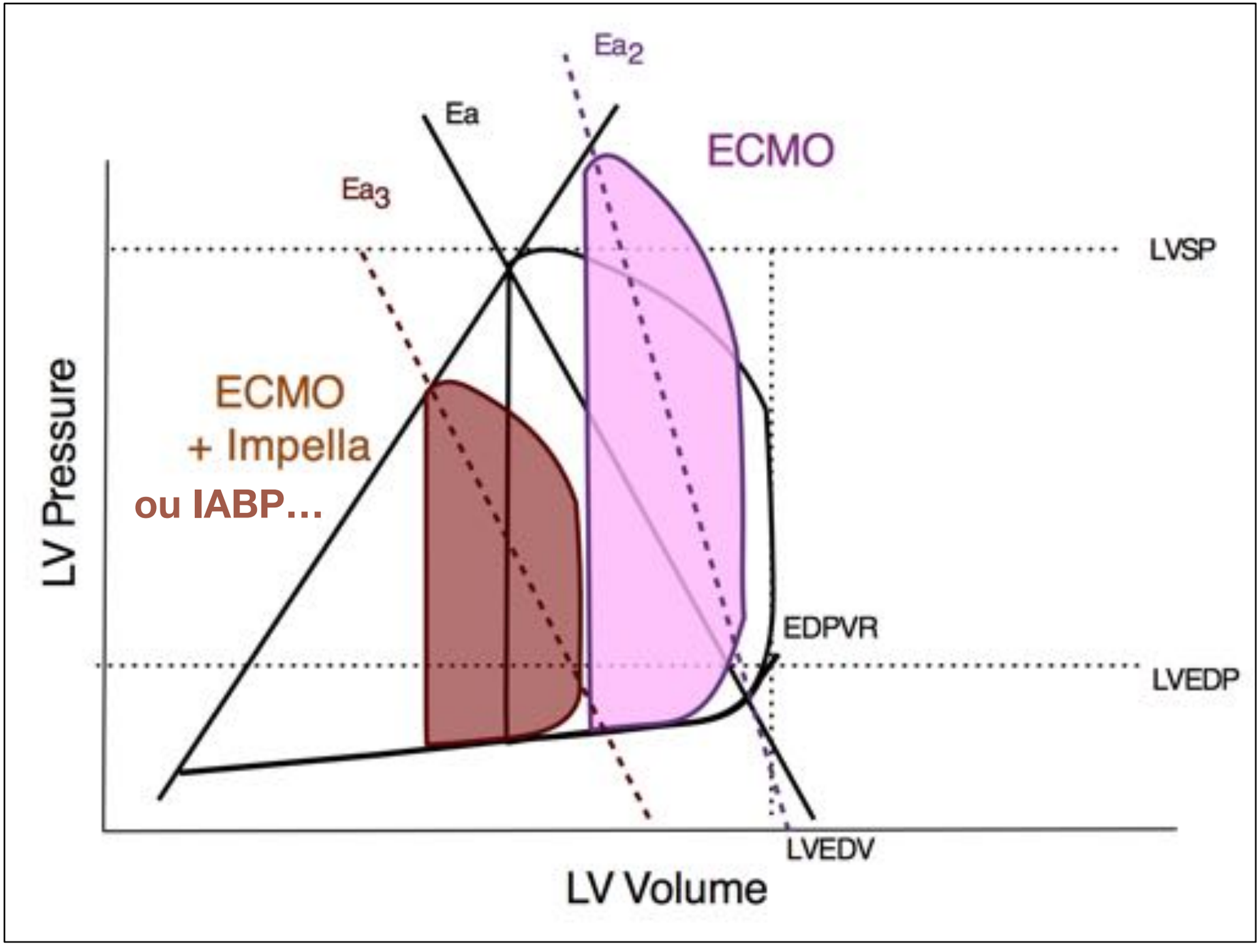


Post

Oedème Pulmonaire



Défaillance VG / Oedème Pulmonaire



Hypoxémie différentielle

- Que dans ECMO périphérique
- Mesurer SaO2 bras droit
- Bonne nouvelle pour le coeur
- Augmenter support respiratoire
- Penser à ECMO VV si coeur assez bon