Ein Unternehmen der LUKS Gruppe

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LUZERN SURSEE WOLHUSEN

how to upgrade in cardiogenic shock: Impella 5.5 or ECMO?

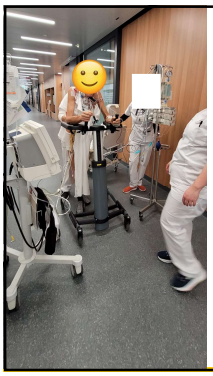
LUCCA – Lucerne Complex and Calcified PCI Meeting 3.0

Zentrum für Intensivmedizin – ICU

PD Dr. med. Andreas Bloch – Zentrum für Intensivmedizin – ICU – Luzerner Kantonsspital
23.02.2024

herzlich, kompetent, vernetzt

1



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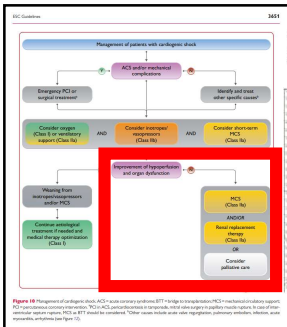

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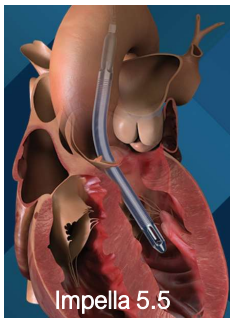
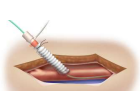
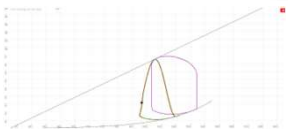
3







filling pressures
flow up to 5.5 l/min

RV failure
venous return failure
oxygenation failure
costs

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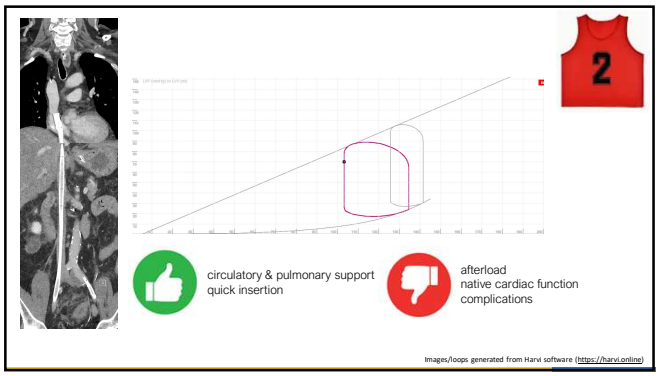
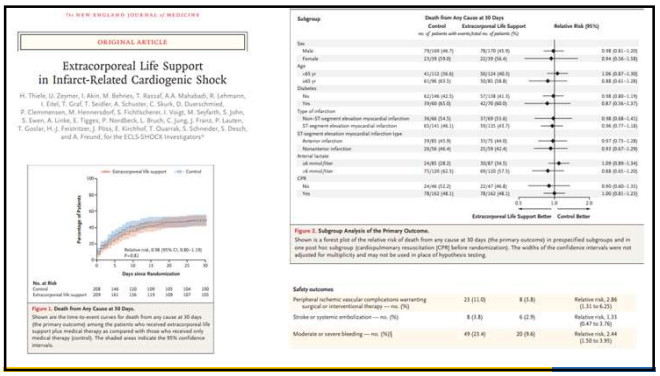
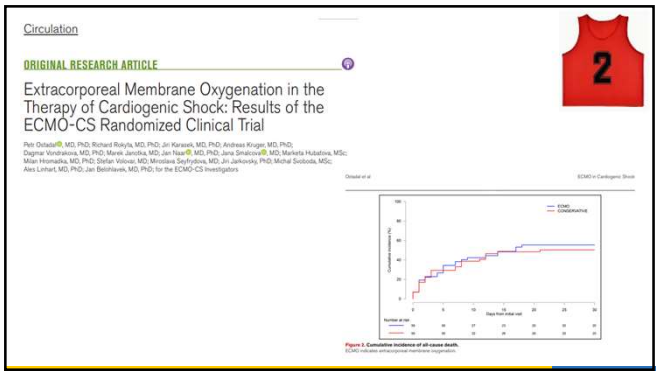
4


2
circulatory & pulmonary support
quick insertion
afterload
native cardiac function
complications
Images/loops generated from Harvi software (https://harvi.online)

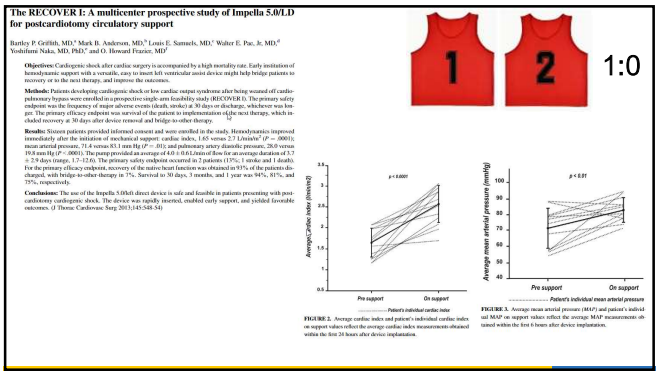
5


ORIGINAL ARTICLE
Extracorporeal Life Support
in Infarct-Related Cardiogenic Shock
Subgroup
Death from Any Cause at 30 Days
Control
Extracorporeal Life Support
Relative Risk (95%)
Extracorporeal Life Support Better
Control Better
Safety outcomes

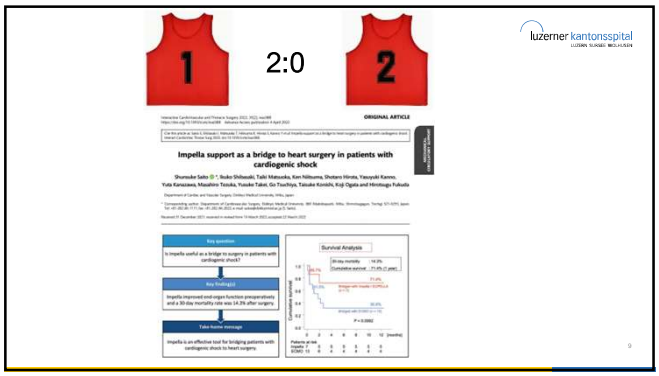
6


Circulation
ORIGINAL RESEARCH ARTICLE
Extracorporeal Membrane Oxygenation in the Therapy of Cardiogenic Shock: Results of the ECMO-CS Randomized Clinical Trial
2

7


The RECOVER I: A multicenter prospective study of Impella 5.0/LD for postcardiotomy circulatory support
1
2
1:0
Pre support
On support
Patient's individual cardiac index
Patient's individual mean arterial pressure

8



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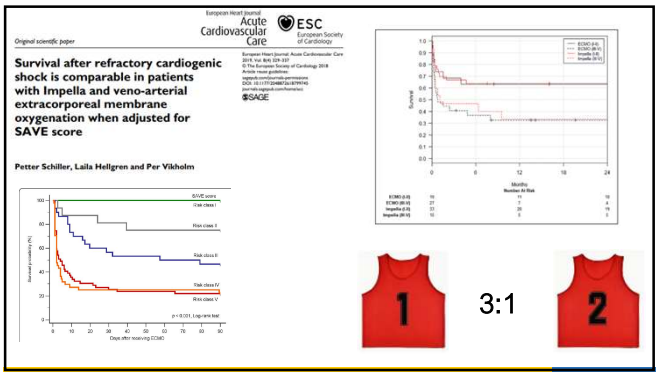

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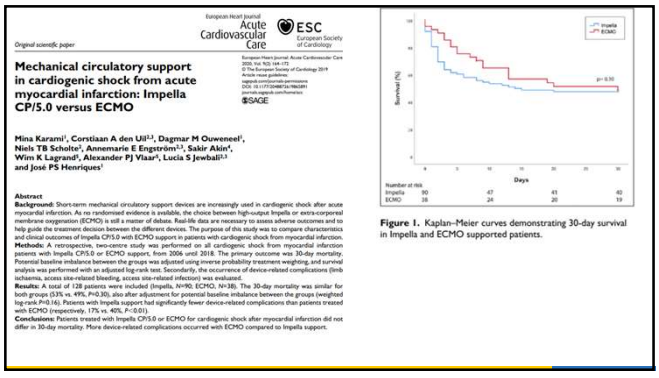

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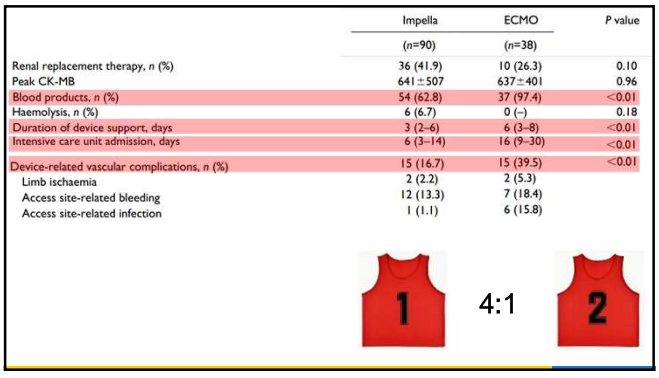
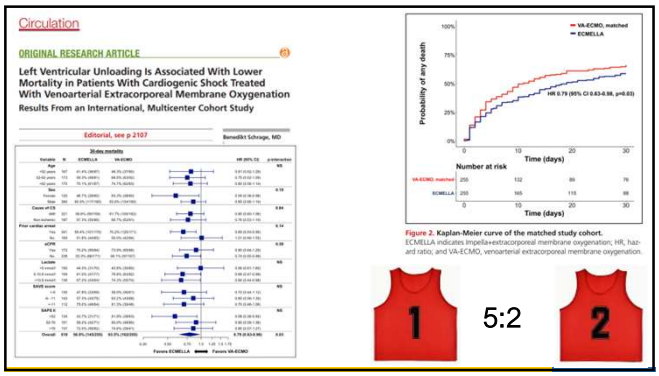
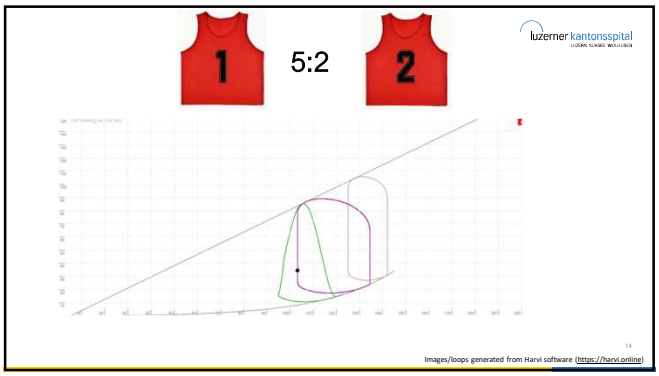


	Impella (n=90)	ECMO (n=38)	P value
Renal replacement therapy, n (%)	36 (41.9)	10 (26.3)	0.10
Peak CK-MB	641±507	637±401	0.96
Blood products, n (%)	54 (62.8)	37 (97.4)	<0.01
Haemolysis, n (%)	6 (6.7)	0 (–)	0.18
Duration of device support, days	3 (2–6)	6 (3–8)	<0.01
Intensive care unit admission, days	6 (3–14)	16 (9–30)	<0.01
Device-related vascular complications, n (%)	15 (16.7)	15 (39.5)	<0.01
Limb ischaemia	2 (2.2)	2 (5.3)	
Access site-related bleeding	12 (13.3)	7 (18.4)	
Access site-related infection	1 (1.1)	6 (15.8)	

12


Circulation
ORIGINAL RESEARCH ARTICLE
Left Ventricular Unloading Is Associated With Lower Mortality in Patients With Cardiogenic Shock Treated With Venoarterial Extracorporeal Membrane Oxygenation
Results From an International, Multicenter Cohort Study
Editorial, see p 2107
Benedikt Schrage, MD
Probability of any death
Time (days)
Number at risk
Figure 2. Kaplan-Meier curve of the matched study cohort.
1
5:2
2

13


1
5:2
2
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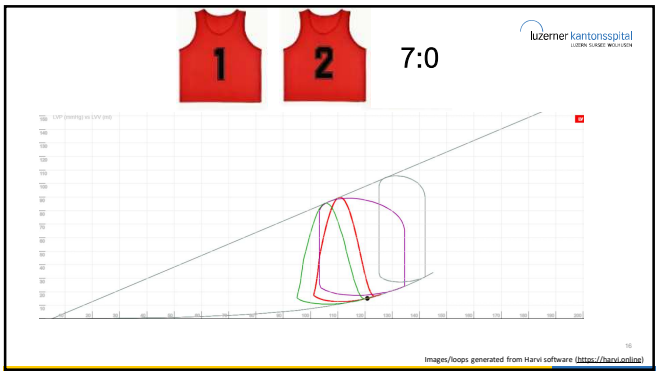
14


ALL IN

15


1
2
7:0
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16


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thank you for your attention
-
questions?
17

17