* 1. In your department what is the approximate number of cases of VA-ECMO performed annually? Choose one.

- 0
- 0-5
- 6-15
- 16-50
- >50

* 2. Grade out of 5 the involvement of these services in the care of the ECMO patients at your institution.

<table>
<thead>
<tr>
<th>Service</th>
<th>1</th>
<th>2</th>
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<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiac surgeons</td>
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<td>Intensivists</td>
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<td>Cardiac anesthetists</td>
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<td>Heart failure/transplant physicians</td>
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<tr>
<td>General cardiologists</td>
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* 3. Would you change management of patients based on pulsatility seen on the arterial line trace?

- Yes
- No

* 4. If there was a lack of pulsatility in the arterial line trace assuming there was no technical problems with the arterial line/trace would you: (you may choose more than 1 answer)

- Not care if MAP stable and patient appears unchanged
- Obtain echocardiogram
- Increase the degree of anticoagulation
- Optimize hemodynamics with fluids/inotropes
- Consider venting devices
- Consider turning down ECMO flows if tolerated
5. Do you consider the pulsatility of the arterial line a good indicator of the native cardiac function?

- Extremely accurate
- Generally accurate indicator
- Vaguely related
- Unrelated

6. What would you base the attempt of weaning of VA-ECMO support on? Grade out of 5.

<table>
<thead>
<tr>
<th></th>
<th>1 Has no influence</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 Attempt based solely on this factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improvement in the hemodynamics</td>
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<tr>
<td>Design would depend on underlying condition and treatment of condition</td>
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<td>Echocardiographic parameters of cardiac function</td>
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<td>Biochemical markers of improvement decreasing acidosis, increasing SVO2</td>
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<tr>
<td>End organ function</td>
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<tr>
<td>Every few days if patient is stable not particularly based on any particular parameter</td>
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</tbody>
</table>

7. What LV venting devices are used in your department? (always/sometimes/occasionally/never)

- Intra-aortic balloon pumps
- Impella
- Tandem heart
- Atrial septostomy
- I do not believe that LV venting is ever necessary/not worth the risk
8. How often do you think echocardiographic studies are required in VA-ECMO patients?

- At pre-initiation/weaning only
- Daily
- On average 2-5 days
- Only if there are changes in hemodynamics/deterioration in flows

9. In your department are echocardiograms performed by?

- Exclusively cardiology departments
- Exclusively by intensive care physicians
- Either department depending on availability
- Either department depending on complexity

10. In the patient supported on VA-ECMO how do you deal with inotropic support?

- Inotropes should not be used in order to rest the heart
- Inotropes should be titrated to maintain pulsatility
- Inotropes should be titrated to echocardiographic findings
- Inotropes should be titrated to MAP
- Inotropes should be titrated to end organ function

11. Which echo parameter do you think is the most useful in ECMO weaning decisions?

- Left ventricular ejection fraction (LVEF)
- Left ventricular end diastolic/end systolic volumes
- Stroke volume (SV)
- Tissue doppler imaging at mitral annulus (TDI S')
- Aortic valve velocity time integral (VTI)

12. Which echo parameters are routinely performed on the weaning studies in your institution?

- Left Ventricular Ejection Fraction (LVEF)
- Left ventricular end diastolic/end systolic volumes
- Stroke volume (SV)
- Tissue Doppler imaging at mitral annulus (TDI S')
- Aortic valve velocity time integral (VTI)
* 13. Describe your approach to fluid balance VA-ECMO patient:

- [ ] It depends on the individual patient's pathology
- [ ] I do not care about fluid balance until it is time to wean the patient off support
- [ ] I try and keep a neutral balance
- [ ] I try and keep a negative balance as ECMO flows are not compromised

* 14. Area of practice (in which geographical region is your institution located?):

- [ ] North America
- [ ] Europe
- [ ] Asia
- [ ] South East Asia
- [ ] Australasia
- [ ] Southern Africa
- [ ] Africa
- [ ] South America
- [ ] Central America
Supplemental Figure 1: Attitudes to pulsatility according to case volume

Would you change management of patients based on pulsatility seen on the arterial line trace? (%)
Do you consider the pulsatility of the arterial line a good indicator of the native cardiac function? (%)

All centers (n=244), 0-5 (n=42), 6-15 (n=89), 16-50 (n=90), >50 (n=23)
Supplemental Figure 2: Attitudes to titrating inotropes according to case volume

MAP: mean arterial pressure

All centers (n=244), 0-5 (n=42), 6-15 (n=89), 16-50 (n=90), >50 (n=23)
LV: left ventricular

All centers (n=244), 0-5 (n=42), 6-15 (n=89), 16-50 (n=90), >50 (n=23)
Supplemental Figure 4: Volume of VA-ECMO according to geographical region

All centers (n=244), Asia (n=22), Australasia (n=10), Europe (n=62), North America (n=127), South America (n=17), Other (n=6)
LV: left ventricular All centers (n=244), Asia (n=22), Australasia (n=10), Europe (n=62), North America (n=127), South America (n=17), Other (n=6)
Supplemental Figure 6: Echocardiographic parameters obtained during weaning studies according to geographical region

Which echo parameters are routinely performed on the weaning studies by region (%)

- Aortic valve velocity time integral (VTI)
- Tissue Doppler imaging at mitral annulus (TDI S')
- Stroke volume (SV)
- Left ventricular end diastolic/end systolic volumes
- Left Ventricular Ejection Fraction (LVEF)

Asia (n=22), Australasia (n=10), Europe (n=62), North America (n=127), South America (n=17), Other (n=6)
Supplemental Figure 7: Attitudes to titrating inotropes according to geographical region

How inotropes are titrated by region (%)

MAP: mean arterial pressure Asia (n=22), Australasia (n=10), Europe (n=62), North America (n=127), South America (n=17), Other (n=6)