

Supplemental Online Content

Fiore M, Baia M, Conti L, et al. Residual adrenal function after multivisceral resection with adrenalectomy in adult patients. *JAMA Surg*. Published online February 23, 2022.
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eFigure 1. Study consort diagram

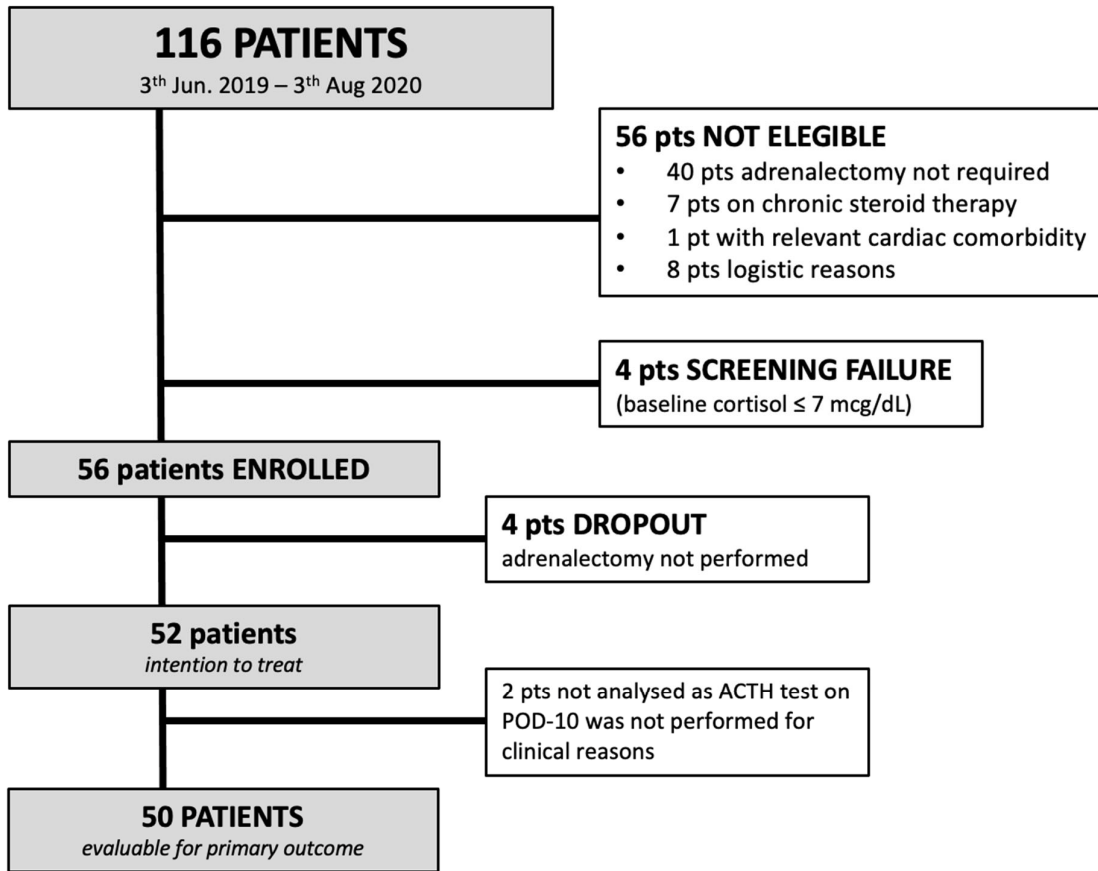
eFigure 2. Detailed hemodynamic algorithm for intraoperative and postoperative management

eTable 1. Quality of life in patients with or without long-term AI after multivisceral retroperitoneal resection

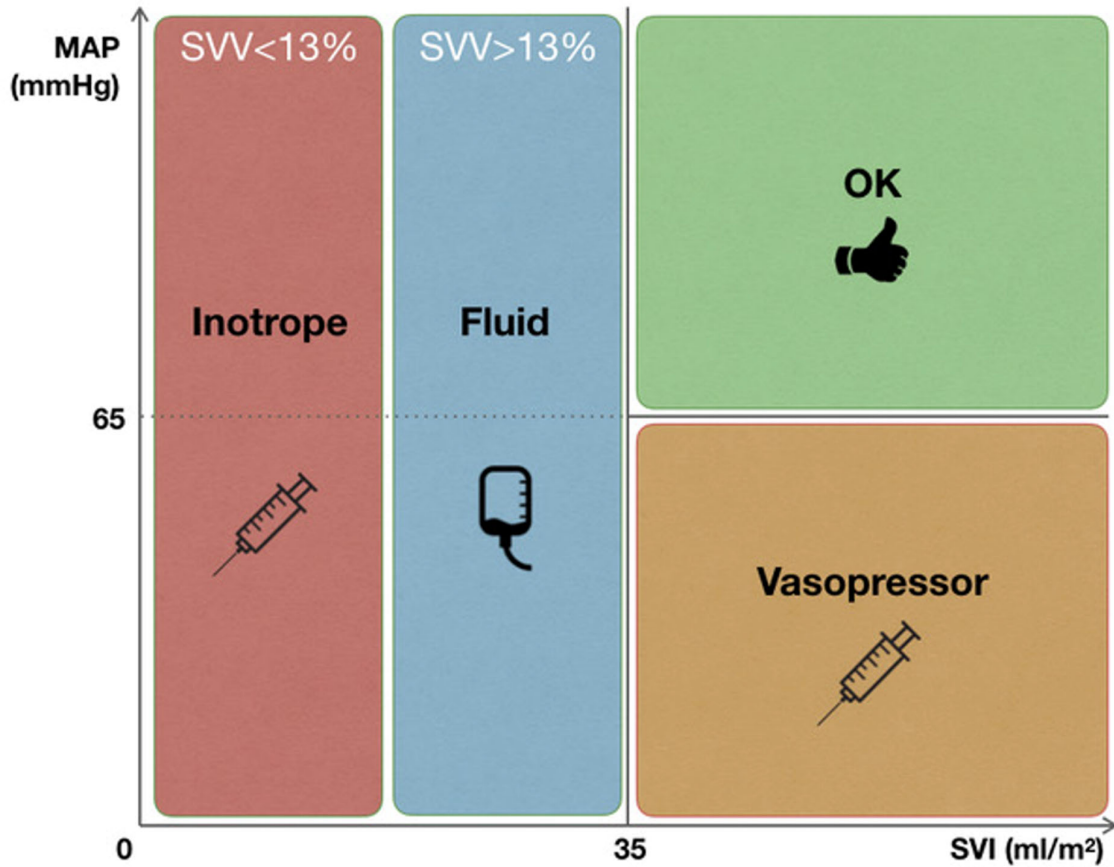
eTable 2. Vasoactive Inotropic Score

This supplemental material has been provided by the authors to give readers additional information about their work.

eFigure 1. Study consort diagram



eFigure 2. Detailed hemodynamic algorithm for intraoperative and postoperative management.



Intraoperatively, the basal crystalloid infusion rate was set at 3 ml/kg/h. In case of hypotension (MAP < 65 mmHg for at least 1 minute) and normal stroke volume index (SVI > 35 ml/m²), a vasopressor administration was started (norepinephrine as first choice). In the event of a decrease of SVI, the intervention was guided by the value of stroke volume variation (SVV). An SVV > 13%, suggesting a state of fluid response, was managed with a fluid challenge bolus of ringer's acetate (3 ml/kg over 10 minutes). The patient was considered a fluid responder in case of a 10% increase in SVI. In this case the fluid challenge could be repeated until SVI was normalized. For SVI < 35 ml/m² and SVV < 13%, dobutamine was started at 3 mcg/kg/min and increased to raise SVI to normal. The hemodynamic status was always analyzed also considering other parameters (heart rate, ScvO₂, serum lactate, base excess, CO₂-gap between arterial and central venous blood), the plan of anesthesia and surgical manipulations. Additionally, colloids and red blood cells could be administered to counteract blood loss. Crystalloids or parenteral nutrition at 1.5 ml/kg/h were provided during the postoperative period until the 5th postoperative day. Thereafter, the infusion rate was set at 0.5 ml/kg/h until adequate oral intake was achieved. Hypotension was treated with supplemental ringer's acetate up to 500 ml/12 h.

eTable 1. Quality of life in patients with or without long-term AI after multivisceral retroperitoneal resection. AddiQoL was administered at least 4 months after surgery to patients alive and disease-free from sarcoma.

ITEM AddiQoL questionnaire	Overall	AI	AI	P
		> 4 months: YES	> 4 months: NO	
1. I feel good about my health	5 (5 – 6)	5 (4 – 5)	5 (5 – 6)	0.06
Evaluable patients	44	15	23	
2. I can keep going during the day without feeling tired	4 (3 – 5)	4 (3 – 5)	5 (4 – 5)	0.11
Evaluable patients	44	15	23	
3. Normal daily activities make me tired	4 (4 – 5)	4 (4 – 4)	4 (4 – 5)	0.09
Evaluable patients	44	15	23	
4. I have to struggle to finish jobs	6 (5 -6)	4 (4 – 5)	5 (4 – 6)	0.04*
Evaluable patients	43	15	22	
5. I have to push myself to do things	5 (4 – 5)	4 (4 – 5)	5 (5 – 6)	0.2
Evaluable patients	44	15	23	
6. I lose track of what I want to say	6 (4 – 6)	6 (5 – 6)	6 (4 – 6)	0.99
Evaluable patients	44	15	23	
7. I sleep well	5 (4 – 5)	5 (4 – 5)	5 (5 – 6)	0.23
Evaluable patients	44	15	23	
8. I feel rested when I wake up in the morning	5 (4 – 6)	5 (4 – 5)	5 (5 – 6)	0.12
Evaluable patients	44	15	23	
9. I feel unwell first thing in the morning	5 (5 – 6)	5 (5 – 6)	5 (5 – 6)	0.42
Evaluable patients	44	15	23	
10. I am satisfied with my sex life	4 (3 – 5)	4 (3 – 5)	4 (3 – 6)	0.84
Evaluable patients	39	15	20	
11. I am relaxed	4 (3 – 5)	4 (4 – 5)	5 (4 – 5)	0.84
Evaluable patients	44	15	23	
12. I feel low or depressed	5 (4 – 6)	5 (4 – 6)	5 (4 – 6)	0.57
Evaluable patients	44	15	23	
13. I am irritable	5 (4 – 5)	5 (4 – 5)	4 (4 – 5)	0.66
Evaluable patients	44	15	23	
14. I find it difficult to think clearly	6 (5 -6)	6 (5 – 6)	6 (6 – 6)	0.26
Evaluable patients	44	15	23	
15. I feel lightheaded	6 (6 – 6)	6 (6 – 6)	6 (6 – 6)	0.37
Evaluable patients	44	15	23	

16. I sweat for no particular reason	6 (5 -6)	6 (5 – 6)	6 (6 – 6)	0.04*
Evaluable patients	44	15	23	
17. I get headaches	6 (5 -6)	5 (4 – 6)	6 (6 – 6)	0.12
Evaluable patients	44	15	23	
18. I get nauseous	6 (6 -6)	6 (5 – 6)	6 (6 – 6)	0.59
Evaluable patients	44	15	23	
19. My joints and/or muscles ache	4 (4 – 5)	4 (4 – 5)	4 (4 – 5)	0.82
Evaluable patients	44	15	23	
20. I have back pain	4 (4 – 5)	4 (4 – 5)	4 (4 – 5)	0.37
Evaluable patients	44	15	23	
21. My legs feel weak	5 (4 – 6)	4 (4 – 5)	5 (4 – 6)	0.15
Evaluable patients	44	15	23	
22. I worry about my health	4 (3 – 4)	4 (4 – 4)	4 (2 – 5)	0.32
Evaluable patients	44	15	23	
23. my ability to work is limited	5 (4 – 5)	4 (4 – 5)	5 (4 – 6)	0.06
Evaluable patients	43	15	23	
24. I can concentrate well	5 (4 – 6)	5 (4 – 6)	6 (5 – 6)	0.03*
Evaluable patients	44	15	23	
25. I am happy	5 (4 – 5)	5 (4 – 5)	5 (5 – 6)	0.18
Evaluable patients	43	15	23	
26. I feel full of energy	4 (3 – 5)	4 (3 – 5)	5 (4 – 5)	0.07
Evaluable patients	44	15	23	
27. I feel physically fit	4 (4 – 5)	4 (3 – 5)	5 (4 – 5)	0.06
Evaluable patients	44	15	23	
28. I get ill more easily than others	5 (5 – 6)	5 (5 – 5)	5 (5 - 6)	0.34
Evaluable patients	41	14	21	
29. I take a long time to recover from illnesses	5 (5 – 6)	5 (5 – 6)	5 (5 – 6)	1
Evaluable patients	39	14	20	
30. I cope well in emotional situations	5 (4 – 5)	5 (4 – 5)	5 (4 – 5)	0.75
Evaluable patients	43	15	23	
AddiQoL Score	79.7 (72.2 – 85.3)	76.1 (72.2 – 81.1)	83.3 (78.1 - 88.1)	0.07
LEGENDA. AddiQoL: health-related Quality of Life in Addison's disease ¹⁰ Each item can be scored on a scale from 1 (worst function) to 6 (best function), overall score may range in a scale from 16.7 to 100. Results are expressed as median (interquartile range)				

eTable 2. Vasoactive Inotropic Score

Inotropic Score (IS) =	dopamine dose	($\mu\text{g}/\text{Kg}/\text{min}$)
	+ dobutamine dose	($\mu\text{g}/\text{Kg}/\text{min}$)
	+ 100 · epinephrine dose	($\mu\text{g}/\text{Kg}/\text{min}$)
Vasoactive-Inotropic Score (VIS) =	IS	
	+ 10 · PDE inhibitor (milrinone or olprinone) dose	($\mu\text{g}/\text{Kg}/\text{min}$)
	+ 100 · norepinephrine dose	($\mu\text{g}/\text{Kg}/\text{min}$)
	+ 10000 · vasopressin dose	(U/Kg/min)
PDE: phosphodiesterase		