

**Table 2: Review of literature on extrarenal pseudoaneurysms with no clear infectious etiology in the PubMed/MEDLINE and Google Scholar databases (1978 – September 1, 2021).**  
Tx: Transplantectomy, SR: Surgical repair, EVS: Endovascular stenting, EVC: Endovascular coiling, OBS: Observation

Author	Year	N	Interval After Transplant	Intervention	Outcome
Renigers and Spigos	1978	1	28 days	1/Tx	1/graft loss
Benoit	1988	1	6 months	1/Tx	1/graft loss
Koo	1999	3	2-4 months	1/Tx 2/Observation	1/graft loss 2/graft preserved
Reus	2002	1	2 months	1/Thrombin	1/graft loss
Taghavi	2005	1	72 months	1/SR	1/graft preserved
Zavos	2005	2	5 months	2/EVS	2/graft loss
Asztalos	2006	1	6 months	1/SR	1/graft preserved
Fujita	2006	1	5 months	1/EVS	1/graft preserved
Siu	2006	1	3 months	1/EVS + thrombin	1/graft preserved
Fornaro	2007	1	15 months	1/Thrombin	1/graft preserved
Gravante	2008	1	6 months	1/SR	1/graft preserved
Orlic	2008	1	2.5 months	1/Tx	1/graft loss
Sharon	2009	1	3 months	1/SR + Thrombin	1/graft preserved
Al-Wahaibi	2010	1	4 months	1/SR	1/graft preserved
Akgul	2011	1	14 years	1/EVC	1/graft preserved
Favelier	2012	1	36 months	1/EVC and Stent	1/graft preserved
Smets	2013	1	72 months	1/EVS	1/graft preserved
Tshomba	2015	1	9 months	1/EVS	1/graft preserved
Ardita	2015	1	20 days	1/SR	1/graft preserved
Farooqui	2016	1	2 months	1/SR	1/graft preserved
Turunc	2017	1	1 month	1/EVS	1/graft preserved
Marie	2018	1	5 months	1/EVC	1/graft preserved
Sharma	2018	2	14-24 months	1/SR 1/EVS	2/graft preserved
Ugurlucan	2018	1	3 months	1/EVC	1/graft preserved
Hajjic	2020	6	—	6/EVS	3/graft loss 3/graft preserved
Vijayvergiya	2021	1	—	1/EVC and Stent	1/graft preserved
Xu	2021	1	6 months	1/Observation	1/graft preserved

**DISCLOSURE:** L. Anders: None. R. Amarath-Madav: None. R. Stephens: None. A. Mirza: None. M.I. Saeed: None.

**Abstract# P-15**

**8-hour Hypothermic Machine Perfusion using the VP.SENCORE™ Device** Kristina Andrijauskaitė, Rafael Veraza, Riley Lopez, Exal Cisneros, Israel Jessop, Michelle Watt, Leonid Bunegin. *Vascular Perfusion Solutions, Inc, SAN ANTONIO, TX.*

There is a great need for technological innovation that can extend the time of donor organs. We used the VP.S ENCORE™ device to preserve porcine Donor after Brain Death (DBD) hearts for 8 hours and investigated its effect on cardiac function in comparison to hearts preserved using the standard of care. Porcine hearts (n=7 perfused, n=4 cold static storage) were recovered under anesthesia. Hourly flow, pressure, temperature, and blood gas measurements were taken. Cardiac function was assessed by a working heart model. Mean pressure recorded 15.19 ± 4.2 mmHg and flow was 76.66 ± 39.3 ml/min. Perfused hearts weight gain (%) was -0.6667 ± 8. Mean oxygen consumption was 0.67 ± 0.17 ml O<sub>2</sub>/min/100g. Perfused hearts had an average max dp/dT of 1076.41 ± 600.11 mmHg/s and min dp/dT of 816.61 ± 619.81 mmHg/s. Control hearts had an average max dp/dT of 303.98 ± 263.40 mmHg/s and min dp/dT of 331.58 ± 221.42 mmHg/s. Perfused hearts were defibrillated ~2.25 times compared to 4.67 for control hearts. Our gene expression analysis revealed a significant reduction (p<0.005) of inflammation and cell death markers in perfused hearts when compared to control hearts. Our results show that using the VP.S ENCORE™ cardiac preservation device enhances the viability and cardiac function of perfused porcine hearts thereby doubling the standard of care of 4 hours in static cold storage. Our findings imply that the VP.S ENCORE™ device may provide a new paradigm in the organ preservation field.

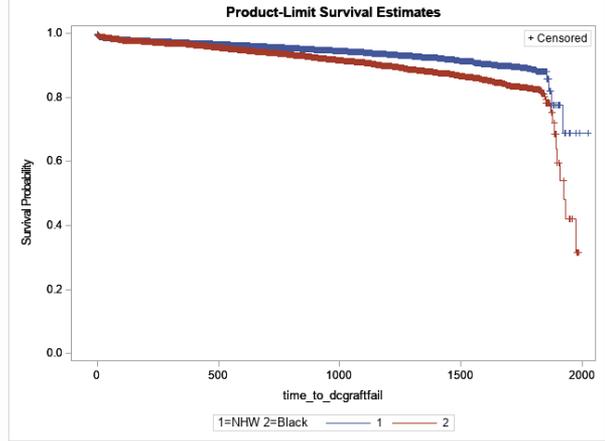
**DISCLOSURE:** K. Andrijauskaitė: None. R.J. Veraza: None. R.P. Lopez: None. E.C. Cisneros: None. I.J. Jessop: None. M.D. Watt: None. L. Bunegin: None.

**Abstract# P-16**

**Does Black Race Modify The Risk of Transplant Failure Associated With HLA Mismatch in First Adult Kidney Allografts From Deceased Donors** kofi atiemo, Amanda Anderson. *Tulane university, New Orleans, LA.*

**Introduction:** Black patients awaiting re-transplantation are more likely to be highly sensitized. Degree of HLA mismatching at first transplant has been suggested as a potential contributor. We examine the association between race, number of HLA mismatches and death censored graft-failure (GF). **Methods:** Using UNOS data, first deceased donor kidney transplants between 1/2015-6/2019 (f/u to 9/2020). Recipients were classified by race Non-HispanicWhite(NHW) vs Black. Cox models adjusting for age, gender, cause of renal failure, education level, insurance, working for income, cpra, BMI, KDRI and cold time. **Results:** 33,234 adults included. 16,400 (49%) were NHW, 16,834 (51%) were Black. Blacks had > proportions of HLA mismatch **Table 1.** For NHW, GF 5 years was 12% vs 18% for Blacks (p 0.001) **Figure 1.** With Zero mismatches as reference, an increased risk of GF was observed for 5 mismatches [HR 1.41 (95% CI 1.08-1.85)]; 6 mismatches [HR 1.38 (95% CI 1.04-1.83)]; and Blacks [HR 1.26 (95% CI 1.15-1.39)]. Black race did not modify the effect of HLA mismatches on GF. **Conclusion:** While an increasing number of HLA mismatches and Black race are associated with a higher risk of GF, for each number of HLA mismatches (zero to six), Blacks do not have poorer outcomes compared to NHW. More highly sensitized Black patients

awaiting re-transplantation is likely due to a greater proportion having been transplanted with greater mismatch than a unique effect specifically related to race.



Number of HLA mismatches by Race N(%)		
	NHW 16,400	Black 16,834
0	1,204 (7)	199 (1)
1	244 (1)	71 (1)
2	959 (6)	425 (3)
3	2,707 (17)	1,733 (10)
4	4,689 (29)	4,640 (28)
5	4,639 (28)	6,396 (40)
6	1,958 (12)	3,370 (20)

**DISCLOSURE:** K. atiemo: None. A. Anderson: None.

**Abstract# P-18**

**Modified approach for improved islet allotransplantation into prevascularized Sernova Cell Pouch™ device - preliminary results of the phase I and II clinical study at University of Chicago** Piotr Bachul, Angelica Perez- Guetierrez, Yaser Al-Salmay, Braden Juengel, Kumar Jayant, Lindsay Basto, Ling-jia Wang, Laurencia Perea, Martin Tibudan, Celeste Thomas, Rolf Barth, John Fung, Piotr Witkowski. *University of Chicago, Chicago, IL.*

**Introduction:** After the pilot study demonstrated safety of the Sernova Cell Pouch (SCP), we modified islet transplantation (ITx) conditions for improved engraftment in the SCP. **Methods:** SCPs are implanted in the abdominal anterior rectus sheath of 7 patients with T1DM and problematic hypoglycemia. Immunosuppression is initiated 1 month after SCP implantation and a marginal dose ITx of highly purified islets 1 month later. A second ITx is scheduled 6 to 12 months later. Sentinel SCPs are explanted for histopathology 3 months after ITx. Graft function is monitored based on glucose control, C-peptide and insulin usage. **Results:** Seven patients underwent 24 study-related surgeries with a wound infection in 2 patients after SCP implantation. One patient discontinued following device excision and the second patient's infection resolved. SCPs are well tolerated with transplant durations exceeding 29 months. Three patients received a 2<sup>nd</sup> ITx. Two presented peak C-peptide >0.3ng/ml for >9 months post-2<sup>nd</sup> ITx, with improved glucose control and lower daily insulin. One patient achieved minimal graft function, with peak C-peptide 0.18ng/ml post-2<sup>nd</sup> ITx. Per protocol, the first patient received an intraportal infusion 1 year post-2<sup>nd</sup> ITx with insulin independence >18 months, HbA1c <5.5 and optimal glucose control. **Conclusion:** ITx with SCP demonstrates long-term safety and efficacy in an early subset of trial patients. Ongoing results for transplanted SCPs have led to procedural adjustments to further optimize clinical outcomes.

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**Abstract# P-19**

**Sars-COV-2 and hepatitis C coinfecting donor organs may be safe to utilize for kidney transplantation** Nicholas Baker, George Rofaiel. *University of Utah, Salt Lake City, UT.*