

| НРАР | 001 | UNOS | |
|-------------------------|------------------------------|---|--|
| Recovery OPO | GLDP | Allocation Via | UPENN ⊠ nPOD □ |
| Age (years) | 47 | DCD | YES □ NO ⊠ |
| Race | Caucasian | DBD | YES ⊠ NO □ |
| Sex | M⊠ F□ | Admission to Cross Clamp | Hours 13 Mins. |
| ABO (Rh) | А | Cross Clamp Time | 10/29/2016 @15:13 EST |
| BMI (Kg/m²) | 32.2 | Cold Ischemia Time* | Hours 20 Mins. |
| Cause of Death | CVA/Stroke | Preservation Solution | UW ⊠ HTK□ |
| Mechanism of Injury | ICH | Organs Recovered | Heart □ Kidney ⊠ Lung ⊠ Pancreas ⊠ Liver ⊠ Intestine □ |
| Cardiac Arrest/Downtime | Yes ⊠ 15 mins. No □ | Intraoperative time lapse from liver to pancreas removal from the peritoneal cavity: | Hours 26 Mins. |
| CPR / Time | Yes ⊠ 15 mins. No □ | Organs Discarded >20% glomerulosclerosis on biopsy | Heart |
| Total Est. Downtime | 15 mins. | Blood Culture | ND |
| Date /Time of Admission | 10/27/2016 @ 23:00 EST | PHS High Risk | YES □ NO ⊠ |
| | | Acute Lung Injury | Aspiration pneumonia in bilateral lower lobes. |

Medical History:

| | | Duration | Medications | Compliance |
|--------------------|--------------|---------------------|-------------------------------|------------|
| Type of Diabetes | T2DM | $\simeq 20$ yrs. | Metformin – 2000mg/d | Yes |
| History of cancer | None | | | |
| CAD | Yes | MI in 5/2016 | Coronary Stent | Yes |
| Hypertension | Yes | $\simeq 20$ yrs. | Ramipril and Toprol | Yes |
| Hyperlipidemia | Yes | $\simeq 20$ yrs. | Atorvastatin | Yes |
| Autoimmune disease | None | None | | |
| Family History | CAD ⊠ | Diabetes ⊠ | Auto immune disease \square | Others: |
| | Father MI | Father T2DM | None | |
| Surgical History: | Gastric Bypa | ass 2012 | | |
| | Coronary ar | ngioplasty and sten | t insertion 5/2016 | |
| | | | | |
| | | | | |
| | | | | |
| Comments: | Patient take | es Seroquel | | |

HEMODYNAMIC PROFILE

| Average BP During Hospitalization (mmHg) | 125/89 | |
|--|-------------|---------------------------|
| Average of During nospitalization (Illining) | 123/69 | |
| Average Low BP During Hospitalization (mmHg) | 85/74 | Duration: 60 mins. |
| Average BP in OR (mmHg) | 126/88 | |
| Average Low BP in OR (mmHg) | 82/40 | Duration: 1 min |
| Average HR in OR (bpm) | 88 | |
| ABG-pH range | 7.09 – 7.35 | |

INTERVENTION

Blood Products/Meds Transfused Before Organ Recovery

| Product | Amount (ml) | Units | Total (ml) |
|---------------------------|-------------|-------------------------|------------------------------|
| Fresh Frozen Plasma | None | | |
| PRBCs | None | | |
| Platelets | None | | |
| Norepinephrine (Levophed) | None | | |
| Vasopressin | Yes | Component of T4 Protoco | ol – started d(-1) before OR |
| Neo-Synephrine | None | | |
| Epinephrine | None | | |
| Phenylephrine | Yes | | |
| Dopamine | None | | |



Blood Products/Meds Transfused Intraoperative

| Product | Amount (ml) | Units | Total (ml) |
|--------------------------------|-------------|-------------|------------|
| Fresh Frozen Plasma | None | | |
| PRBCs | None | | |
| Platelets | None | | |
| Norepinephrine (Levophed) | None | | |
| Vasopressin | None | | |
| Neo-Synephrine (phenylephrine) | Yes | 100 mcg/min | |
| Epinephrine | None | | |
| Dopamine | None | | |
| Heparin | | 30,000 | |

Initial Autoantibody Screening (nPOD):

| GAD-65 | IA-2 |
|----------|----------|
| Not Done | Not Done |

Confirmatory results (University of Florida) *

| | GAD-65 (unit/ml) | IA-2 (unit/ml) | Insulin AAB (unit/ml) | ZnT8 (unit/ml) | C-peptide (ng/ml) | Proinsulin |
|-----------------------|---------------------|-------------------|--------------------------|-------------------|----------------------|------------|
| Results | 0 | 0 | 0.003 | 0.000 | 0.43* | ND |
| Cut-off values | 20 | 5 | 0.01 | 0.02 | | ND |

^{*}Sample obtained at time of organ recovery.

HLA (OPO)

| | Α | 2 | 3 | | DR | 1 | 16 | |
|---------|-----|----------|----|----------|------|----------|-------|--|
| | В | 35 | 39 | | DR51 | Positive | | |
| | С | 4 | 12 | | DR52 | Negative | | |
| Class 1 | Bw4 | Negative | | Class II | DR53 | Negative | | |
| | Bw6 | Positive | | Positive | | DQB1 | 5 | |
| | | | | | DQA1 | 01 | | |
| | | | | | DPB1 | 04:01 | 04:02 | |
| | | | | | | | | |

Confirmatory HLA (UPENN)*

| | Λ | 2 | 2 | | DRB1 | 1 | 16 |
|---------|----|----|----|----------|------|-------|-------|
| | A | 2 | 3 | | | 1 | 10 |
| | В | 35 | 39 | | DRW | 51 | |
| | С | 4 | 12 | | DQB | 5 | |
| Class 1 | Bw | 6 | | Class II | DQA | 01 | |
| | | | | | DPB | 04:01 | 04:02 |
| | | | | | DPA | 01:03 | |
| | | | | | | | |

^{*}HLA typing performed using SSO

Confirmatory HLA (UPENN)*



| | Α | 02:01 | 03:01 | | DRB1 | 01:01 | 16:01 |
|---------|---|-------|-------|----------|------|------------------|----------|
| | В | 35:01 | 39:06 | | DRB3 | | |
| Class 1 | С | 04:01 | 12:03 | Class II | DRB4 | | |
| | | | | | DRB5 | 02:02 | |
| | | | | | DQB1 | 05:01 | 05:02 |
| | | | | | DQA1 | 01:01 | 01:02 |
| | | | | | DPB1 | 04:01 G** | 04:02G** |
| | | | | | DPA1 | 01:03 | |

^{*}HLA Typing performed using NGS **G codes when HLA alleles have identical nucleotide sequences across the exons encoding the peptide binding domains.

Infectious Disease Serology

| Test | Result | Hemo/Plasma | Dilution Status |
|-----------------|--------------------|-------------|-----------------|
| | | Qualified | Non-Qualified |
| EBV IgG | Positive | X | |
| EBV IgM | Non-Reactive | X | |
| CMV | Non-Reactive | X | |
| HBcAb | Non-Reactive | Х | |
| HBsAg | Non-Reactive | X | |
| HCV Ab | Non-Reactive | X | |
| HIV I/II | ND | | |
| Syphilis | Non-Reactive | Х | |
| Procleix Ultrio | | | |
| Ultrio HBV | Non-Reactive (NAT) | X | |
| Ultrio HCV | Non-Reactive (NAT) | X | |
| Ultrio HIV | Non-Reactive (NAT) | Х | |
| Toxoplasma Ab | | | |

Laboratory Panel

| | Initial | Peak | Terminal |
|-----------------------------------|---------|------|----------|
| Na (135-145 mEq/L) | 138 | 143 | 141 |
| Creatinine (<1.5) | 1.44 | 2.83 | 2.83 |
| Glucose (65-150 mg/dL) | 342 | 342 | 320 |
| HbA1C% | 5.7 | | |
| Total bilirubin (0-1.0 mg/dl) | 0.5 | 0.5 | 0.3 |
| SGOT (AST) (0-40 u/L) | 199 | 201 | 96 |
| SGPT (ALT) (5-35 u/L) | 112 | 114 | 73 |
| Alkaline phosphatase (45-110 u/L) | 217 | 217 | 84 |
| Serum Amylase (23-851 u/L) | 501 | ND | ND |
| Serum Lipase (0-80 u/L) | 273 | ND | ND |
| WBC (THO/uL) | 10.5 | 16.5 | 16.5 |
| Hgb (g/dL) | 13.3 | 16.3 | 12.2 |
| Platelets (THO/uL) | 213 | 235 | 170 |
| INR | 1.2 | 1.6 | 1.5 |

Urinalysis

| | 1 st | 2 nd | 3 rd | 4th |
|---------|-----------------|-----------------|-----------------|-----|
| Glucose | 100 mg/dl | Negative | ND | ND |

Medications During Hospitalization

| Steroids** | None | | |
|----------------------------|--|---------|--|
| Diuretics | None | | |
| T3 Protocol | None | | |
| T4 Protocol* | Yes - Started d (-1) before organ recovery and continued in OR | | |
| Insulin ** | None | | |
| Antihypertensive | None | | |
| Vasodilators | None | | |
| DDAVP ** | None | | |
| Total parenteral nutrition | None | | |
| Other | | Specify | |

^{*}T4 protocol: Levothyroxine, (20 mcgs), Solumedrol (2 gms,) Dextrose 50%, (1 amp), Regular Insulin (20u), Vasopressin (1 unit)

Mi Z, Novitzky D, Collins JF, Cooper D KC. The optimal hormonal replacement modality selection for multiple organ procurement from brain-dead organ donors. Clinical Epidemiology 2015:7 17-27.

^{**} Excluding T4 Protocol