

| HPAP | T2D-051 | UNOS | |
|---------------------|-------------------------|-----------------------------|--|
| Recovery OPO | GLDP | Allocation Via | UPENN ⊠ nPOD □ |
| Age (years) | 43 | DCD | YES □ NO ⊠ |
| Race | African American | DBD | YES ⊠ NO □ |
| Sex | $M \square F \boxtimes$ | Admission to Cross Clamp | 133 Hours 29 Mins. |
| ABO (Rh) | AB+ | Cross Clamp Time | 01/02/2020 13:59 EST |
| BMI (Kg/m²) | 45.49 | Cold Ischemia | 7 Hours 6 Mins. |
| Weight (kg) | 124 | Time* | |
| Height (cm) | 165.1 | | |
| Cause of Death | Anoxia | Preservation Solution | UW ⊠ HTK□ |
| Mechanism of Injury | Cardiovascular | Organs Recovered | Heart ⊠ Kidney ⊠ |
| | | | Lung □ Pancreas ⊠ |
| | | | Liver ⊠ Intestine □ |
| Cardiac | Yes ⊠ | Intraoperative time | |
| Arrest/Downtime | No ⊠ | lapse from liver to | 0 Hours 7 Mins. |
| | | pancreas removal | |
| | | from the peritoneal | |
| / | | cavity: | |
| CPR / Time | Yes ⊠ | Organs Discarded | Heart □ Kidney □ |
| | 25 minutes | | Lung □ Pancreas □ |
| | No 🗆 | | Liver Intestine Intertine Inter |
| Total Est. Downtime | 25 minutes | Blood Culture | No Growth |
| Date /Time of | 12/28/2019 00:30 EST | PHS High Risk | YES □ NO ⊠ |
| Admission | | | |
| | | Acute Lung Injury | Yes (pulmonary edema, atelectasis or gastric pneumatosis) |
| | | | |

^{*}Cold Ischemia time is calculated from time of cross clamp to start of enzyme perfusion for islet isolation.



Medical History:

| | | Duration | Medications | Compliance | |
|--------------------|---|---------------------------------|--|------------|--|
| Type of Diabetes | T2DM | 5-6 years | Metformin 1000mg 2x day Glimepiride 4 mg 2x day | Yes | |
| | | | Glyxambi 4 mg daily | | |
| History of cancer | | | | | |
| CAD | Yes | Loop recorder implant 1 year | | | |
| Hypertension | Yes | 6 years | Lisinopril (20mg QD) | Yes | |
| Hyperlipidemia | Yes | 6 years | Atorvastatin (40mg QD) | yes | |
| Autoimmune disease | | | | | |
| Family History | CAD | Diabetes | Auto immune disease □ | Others: | |
| | \boxtimes | \boxtimes | | | |
| | | | | | |
| Surgical History: | Loop recorder implant for heart July 2019 | | | | |
| | Knee surgery- 6 pins-pt. fell May 2015 | | | | |
| | Stroke 2019 – on eliquis for one year | | | | |
| Comments: | Pts mater | nal grandmoth | er and paternal aunt had diabe | tes | |

Hemodynamic Profile

| Average BP During Hospitalization (mmHg) | 101.7/64 | |
|--|--------------|---------------------|
| Average Low BP During Hospitalization | 80.7/56.7 | Duration: 15-30 min |
| Average BP in OR (mmHg) | 120/70 | |
| Average Low BP in OR (mmHg) | 103/64 | Duration: 2 min |
| Average HR in OR (bpm) | 90 | |
| ABG-pH range | 6.69 – 7.405 | |

INTERVENTION

Blood Products/Meds Transfused Before Organ Recovery

| Product | Amount (ml) | Units | Total (ml) |
|---------------------------|-------------|-------------|------------------------------|
| Fresh Frozen Plasma | | | |
| PRBCs | | | |
| Platelets | | | |
| Norepinephrine (Levophed) | | 11mcg/min | for the duration of 92 hours |
| Vasopressin | | 0.04 units | 5 days before organ recovery |
| Neo-Synephrine | | | |
| Epinephrine | | 5units | 5 days before organ recovery |
| Phenylephrine | | 100 mcg/min | 5 days before organ recovery |
| Dopamine | | | |



Blood Products/Meds Transfused Intraoperative

| Product | Amount (ml) | Units | Total (ml) |
|--------------------------------|-------------|--------|------------|
| Fresh Frozen Plasma | | | |
| PRBCs | | | |
| Platelets | | | |
| Norepinephrine (Levophed) | | | |
| Vasopressin | | | |
| Neo-Synephrine (phenylephrine) | | | |
| Epinephrine | | | |
| Dopamine | | | |
| Heparin | | 30,000 | |

Initial Autoantibody Screening (nPOD): Not Performed for T2D Donors

| GAD-65 N/A | IA-2 |
|---------------|------|
| N/A | N/A |

Confirmatory results: Radioimmuno Assay (RIA)

| | GAD-65 (unit/ml) | IA-2 (unit/ml) | Insulin AAB (unit/ml) | ZnT8 (unit/ml) |
|-----------------------|---------------------|-------------------|--------------------------|-------------------|
| Results | 0 | 0 | 0.002 | 0.009 |
| Cut-off values | 20 | 5 | 0.010 | 0.020 |

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

| | C-peptide (ng/ml) | Proinsulin |
|---------|----------------------|------------|
| Results | 1.92 | N/A |

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

HLA (OPO)*

| Class 1 | Α | 2 | 23 | Class II | DR | 15 | 15 | | |
|----------|-----|----------|----|-------------------|--------------|------------|------------|---|---|
| | В | 44 | 58 | | DR51 | 51 | 51 | | |
| | С | 05 | 07 | | DR52 | N-Negative | N-Negative | | |
| | Bw4 | Positive | | | DR53 | N-Negative | N-Negative | | |
| | Bw6 | Negative | | Negative Negative | Bw6 Negative | | DQB1 | 6 | 6 |
| | | | | | DQA1 | 01 | 01 | | |
| | | | | | DPB1 | 01:01 | 04:01 | | |
| | | | | | | | | | |
| Comment: | | | | | | | | | |



Confirmatory HLA (UPENN)* Not performed for T2D donors

| Class 1 | Α | N/A | N/A | Class II | DRB1 | N/A | N/A |
|---------|---|-----|-----|----------|------|-----|-----|
| | В | N/A | N/A | | DRB3 | N/A | N/A |
| | С | N/A | N/A | | DRB4 | N/A | N/A |
| | | | | | DRB5 | N/A | N/A |
| | | | | | DQB1 | N/A | N/A |
| | | | | | DQA1 | N/A | N/A |
| | | | | | DPB1 | N/A | N/A |
| | | | | | DPA1 | N/A | N/A |

^{*}HLA typing performed using NGS

Infectious Disease Serology

| | | Hemo/Plasma Dilution Status | | |
|-----------------|---------------|-----------------------------|--|--|
| Test | Result | Qualified Non-Qualif | | |
| EBV IgG | Positive | ✓ | | |
| EBV IgM | Negative | ✓ | | |
| CMV total Ab | Negative | ✓ | | |
| HBcAb | Non- Reactive | ✓ | | |
| HBsAg | Non -Reactive | ✓ | | |
| HCV Ab | Non- Reactive | ✓ | | |
| HIV I/II | Non -Reactive | ✓ | | |
| Syphilis | Non- Reactive | ✓ | | |
| Procleix Ultrio | ND | | | |
| Ultrio HBV | Non -Reactive | √ | | |
| Ultrio HCV | Non -Reactive | √ | | |
| Ultrio HIV | Non -Reactive | √ | | |
| Toxoplasma Ab | Negative | ✓ | | |



Laboratory Panel

| | Initial | Peak | Terminal |
|-------------------------------|---------|------|----------|
| Na (mEq/L) (135-145) | 143 | 152 | 138 |
| Creatinine (<1.5) | 1.13 | 1.69 | 0.77 |
| Glucose (mg/dL) (60-150) | 360 | 440 | 160 |
| HbA1C% | 6.7 | | |
| Total bilirubin (0-1.0) | 0.3 | 0.7 | 0.4 |
| SGOT (AST) (0-40) | 134 | 182 | 52 |
| SGPT (ALT) (5-35) | 131 | 163 | 33 |
| Alkaline phosphatase (45-110) | 129 | 140 | 133 |
| Serum Amylase (23-851) | 58 | 58 | 30 |
| Serum Lipase (0-80) | 147 | 147 | 24 |
| WBC (THO/uL) (4.5-11.0) | 17.9 | 23.7 | 12.3 |
| Hgb (g/dL) (12-16) | 15.1 | 15.9 | 10.9 |
| Platelets (THO/uL) (150-350) | 287 | 296 | 130 |
| INR (<2.0) | 1.1 | 1.5 | 1.5 |

Urinalysis

| | 1 st | 2 nd | 3 rd | 4 th |
|---------|------------------------|-----------------|-----------------|-----------------|
| Glucose | positive | negative | positive | |

Medications During Hospitalization

| Steroids** | | | |
|----------------------------|--|---------|--|
| Diuretics | Mannitol 50 gm | | |
| T3 Protocol | | | |
| T4 Protocol* | Yes – 20 mcg/hr | | |
| Insulin** | 4 unit/hr 5 days before organ recovery | | |
| Antihypertensive | Lisinopriol 40 mg daily | | |
| Vasodilators | | | |
| DDAVP** | | | |
| Total parenteral nutrition | | | |
| 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