



| HPAP                     | 053                  | UNOS                        |  |  |  |
|--------------------------|----------------------|-----------------------------|--|--|--|
| D ODO                    |                      |                             |  |  |  |
| Recovery OPO             | GLDP                 | Allocation Via              | UPENN ⊠ nPOD □   |  |  |
| Age (years)              | 58                   | DCD                         | YES □ NO ⊠   |  |  |
| Race                     | Caucasian            | DBD                         | YES ⊠ NO □   |  |  |
| Sex                      | M □ F⊠               | Admission to Cross<br>Clamp | 119 Hours 54 Mins.                                     |  |  |
| ABO (Rh)                 | A+                   | Cross Clamp Time            | 01/27/2020 02:49 EST                                   |  |  |
| BMI (Kg/m <sup>2</sup> ) | 24.2                 | Cold Ischemia               | 08 Hours 47 Mins.                                      |  |  |
| Weight (kg)              | 68                   | Time*                       |  |  |  |
| Height (cm)              | 167.64               |                             |  |  |  |
| 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          | Unknown              | lapse from liver to         | 0 Hours 31 Mins.                                       |  |  |
|                          | No □                 | pancreas removal            |  |  |  |
|                          |                      | from the peritoneal cavity: |  |  |  |
| CPR / Time               | Yes ⊠                | Organs Discarded            | Heart □ Kidney □                                       |  |  |
|                          | Unknown              |                             | Lung $\square$ Pancreas $\square$                      |  |  |
|                          | No 🗆                 |                             | Liver □ Intestine □                                    |  |  |
|                          |                      |                             |  |  |  |
| Total Est. Downtime      | Unknown              | Blood Culture               | No Growth  |  |  |
| Date /Time of            | 01/22/2020 02:55 EST | PHS High Risk               | YES □ NO ⊠   |  |  |
| Admission                |                      |                             |  |  |  |
|                          |                      | Acute Lung Injury           | Yes  |  |  |
|                          |                      |                             | Pulmonary consolidation                                |  |  |
|                          |                      |                             |  |  |  |

<sup>\*</sup>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   | None                                      |                                       |   |            |  |  |
| History of cancer  |   |                                       |   |            |  |  |
| CAD                | Yes                                       | 13 years                              | Idiopathic cardiomyopathy medicine (amiodarone) | yes        |  |  |
| Hypertension       | yes                                       | 13 years                              | unknown   | Yes        |  |  |
| Hyperlipidemia     | yes                                       | 6 months                              | Lipitor   | Yes        |  |  |
| Autoimmune disease |   |                                       |   |            |  |  |
| Family History     | CAD ⊠                                     | Diabetes 🛚                            | Auto immune disease 🗆                           | Others:    |  |  |
| Surgical History:  | Leg/patella fx ,Tubal Ligation , ORIF hip |                                       |   |            |  |  |
| Comments:          | Father ha                                 | Father had CAD, brothers had diabetes |   |            |  |  |

# **Hemodynamic Profile**

| Average BP During Hospitalization (mmHg) | 139/76      |                             |
|--|-------------|-----------------------------|
| Average Low BP During Hospitalization    | 100/58      | <b>Duration: 15 minutes</b> |
| Average BP in OR (mmHg)                  | 100/60      |                             |
| Average Low BP in OR (mmHg)              | 78/50       | Duration: 1 minute          |
| Average HR in OR (bpm)                   | 80          |                             |
| ABG-pH range                             | 7.17 - 7.47 |                             |

#### **INTERVENTION**

# **Blood Products/Meds Transfused Before Organ Recovery**

| Product                   | Amount (ml) | Units          | Total (ml)                   |
|---------------------------|-------------|----------------|------------------------------|
| Fresh Frozen Plasma       |             |                |                              |
| PRBCs                     |             |                |                              |
| Platelets                 |             |                |                              |
| Norepinephrine (Levophed) |             | 0.2 mcg/kg/min | 2 days before organ recovery |
| Vasopressin               |             |                |                              |
| Neo-Synephrine            |             |                |                              |
| Epinephrine               |             | l unit         | 5 days before organ recovery |
| Phenylephrine             |             |                |                              |
| Dopamine                  |             |                |                              |



## **Blood Products/Meds Transfused Intraoperative**

| Product                        | Amount (ml) | Units      | Total (ml) |
|--------------------------------|-------------|------------|------------|
| Fresh Frozen Plasma            |             |            |            |
| PRBCs                          |             |            |            |
| Platelets                      |             |            |            |
| Norepinephrine (Levophed)      |             |            |            |
| Vasopressin                    |             |            |            |
| Neo-Synephrine (phenylephrine) |             | 70 mcg/min |            |
| Epinephrine                    |             |            |            |
| Dopamine                       |             |            |            |
| Heparin                        |             | 30,000     |            |

# Initial Autoantibody Screening (nPOD): Not performed for T2DM program

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

# Confirmatory results: Radioimmuno Assay (RIA)

|                       | GAD-65<br>(unit/ml) | IA-2<br>(unit/ml) | Insulin AAB<br>(unit/ml) | ZnT8<br>(unit/ml) |
|-----------------------|---------------------|-------------------|--------------------------|-------------------|
| Results               | 0                   | 0                 | 0.001                    | 0.003             |
| <b>Cut-off values</b> | 20                  | 5                 | 0.010                    | 0.02              |

<sup>\*</sup>Sample obtained at time of organ recovery.

|         | C-peptide<br>(ng/ml) | Proinsulin |
|---------|----------------------|------------|
| Results | 13.03                | N/A        |

<sup>\*</sup>Sample obtained at time of organ recovery.

#### HLA (OPO)\*

| Class 1  | Α            | 1        | 25 | Class II            | DR       | 14       | 7        |          |          |
|----------|--------------|----------|----|---------------------|----------|----------|----------|----------|----------|
|          | В            | 18       | 57 |                     | DR51     | Negative | Negative |          |          |
|          | С            | 06       | 12 |                     | DR52     | 52       | Negative |          |          |
|          | Bw4 Positive | Positive |    | <b>Bw4</b> Positive | Positive |          | DR53     | Negative | Negative |
|          | Bw6          | Positive |    |                     | DQB1     | 5        | 9        |          |          |
|          |              |          |    |                     | DQA1     | 01       | 02       |          |          |
|          |              |          |    |                     | DPB1     | 04:01    | 04:02    |          |          |
|          |              |          |    |                     |          |          |          |          |          |
| Comment: |              |          |    |                     |          |          |          |          |          |



# Confirmatory HLA (UPENN)\*

| 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 |

<sup>\*</sup>HLA typing performed using NGS

## **Infectious Disease Serology**

|                 |               | Hemo/Plasma Dilution Statu |  |
|-----------------|---------------|----------------------------|--|
| Test            | Result        | Qualified Non-Quali        |  |
| EBV IgG         | Negative      | ✓                          |  |
| EBV IgM         | Negative      | ✓                          |  |
| CMV             | Negative      | ✓                          |  |
| HBcAb           | Non- Reactive | ✓                          |  |
| HBsAg           | Non- Reactive | ✓                          |  |
| HCV Ab          | Non- Reactive | ✓                          |  |
| HIV I/II        | Non- Reactive | ✓                          |  |
| Syphilis        | Non- Reactive | ✓                          |  |
| Procleix Ultrio |               |                            |  |
| Ultrio HBV      | Non- Reactive | <b>√</b>                   |  |
| Ultrio HCV      | Non- Reactive | <b>√</b>                   |  |
| Ultrio HIV      | Non- Reactive | ✓                          |  |
| Toxoplasma Ab   | Negative      | ✓                          |  |



## **Laboratory Panel**

|                               | Initial | Peak | Terminal |
|-------------------------------|---------|------|----------|
| Na (mEq/L) (135-145)          | 143     | 177  | 151      |
| Creatinine (<1.5)             | 0.63    | 0.66 | 0.63     |
| Glucose (mg/dL) (60-150)      | 105     | 325  | 237      |
| HbA1C%                        | 5.6     |      |          |
| Total bilirubin (0-1.0)       | 0.4     | 0.9  | 0.4      |
| SGOT (AST) (0-40)             | 74      | 125  | 36       |
| SGPT (ALT) (5-35)             | 78      | 96   | 54       |
| Alkaline phosphatase (45-110) | 50      | 50   | 45       |
| Serum Amylase (23-851)        | 42      | 63   | 55       |
| Serum Lipase (0-80)           | 15      | 21   | 8        |
| WBC (THO/uL) (4.5-11.0)       | 15.4    | 15.4 | 11.2     |
| Hgb (g/dL) (12-16)            | 13.8    | 13.8 | 9.4      |
| Platelets (THO/uL) (150-350)  | 201     | 201  | 133      |
| INR (<2.0)                    | 1.1     | 1.1  | 1        |

#### Urinalysis

|         | 1 <sup>st</sup> | 2 <sup>nd</sup> | 3 <sup>rd</sup> | 4 <sup>th</sup> |
|---------|-----------------|-----------------|-----------------|-----------------|
| Glucose | 150             | >=500           |                 |                 |
|         |                 |                 |                 |                 |

## **Medications During Hospitalization**

| Steroids**                 |               |         |  |  |
|----------------------------|---------------|---------|--|--|
| Diuretics                  |               |         |  |  |
| T3 Protocol                |               |         |  |  |
| T4 Protocol*               | Yes 40 mcg/hr |         |  |  |
| Insulin**                  |               |         |  |  |
| Antihypertensive           |               |         |  |  |
| Vasodilators               |               |         |  |  |
| DDAVP**                    |               |         |  |  |
| Total parenteral nutrition |               |         |  |  |
| Other                      |               | Specify |  |  |

<sup>\*</sup>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.

<sup>\*\*</sup> Excluding T4 Protocol