

CITR 8 th Annual Report Supplemental Exhibit A-1									
Univariate effects of independent predictors (rows) on specified outcomes (columns). Cox proportional hazards; blank entry means NS.	Achieve insulin independence			Lose insulin independence			Complete graft failure		
	N	HR	p	N	HR	p	N	HR	p
Era (1:1999-2002 2:2003-2006 3:2007-2010 4:2011-2014)	476	1.31	0.04	239	0.65	0.007	476	0.59	0.001
Type of transplant (0:ITA 1:IAKSIK)	.	.		239	1.46	0.05	.	.	
Total infusions (1, 2, 3, 4, 5, 6)	476	1.15	0.08	.	.		476	0.66	<0.001
<u>RECIPIENT CHARACTERISTICS</u>									
Recipient age at Tx1 (1:<35 2:35-49 3:≥50)	476	2.11	<0.001	.	.		476	0.55	0.001
Diabetes duration (1: <21 yrs 2: 21-<37 3:≥37)	.	.		.	.		452	0.74	0.01
Days listed (1: <60 2:6-364 3: ≥365)	.	.		.	.		.	.
Recipient BMI at Tx1 (1:<21 2:21-<25 3: ≥25)	.	.		.	.		.	.
Insulin requirement at Tx1 (1: <26 U/day 2:26-<43 3: ≥43)	460	0.75	0.004	.	.		.	.
Insulin requirement at Tx1 (1: <0.42 U/kg/day 2:26-<0.66 3: ≥0.66)	452	0.83	0.05	.	.		.	.
Basal C-peptide at Tx1 (1: <0.3 mg/dL 2:0.3-<0.5 3:≥0.5)	.	.		.	.		.	.
Fasting blood glucose at Tx1 (1:	.	.		.	.		.	.
Recipient HbA1c at Tx1 (1: <	.	.		.	.		.	.
Gender (0: F 1: M)	.	.		238	1.45	0.02	.	.	
Severe hypoglycemic events (0:N 1:Y)	427	1.50	0.009	.	.		.	.
Insulin pump use (0:N 1:Y)	.	.		.	.		.	.
Baseline IA2 autoantibody (0:Neg 1:Pos)	470	0.65	0.02	.	.		.	.
Baseline GAD autoantibody (0:Neg 1:Pos)	.	.		.	.		.	.
Baseline Insulin autoantibody (0:Neg 1:Pos)	470	0.75	0.04	.	.		.	.
Baseline Microinsulin autoantibody (0:Neg 1:Pos)	.	.		239	0.28	0.01	.	.	
Baseline any autoantibody (0:Neg 1:Pos)	470	0.50	0.02	.	.		.	.
Baseline Class I PRA (0:Neg 1:Pos)	.	.		.	.		.	.
Baseline Class I PRA (0:Neg 1:Pos)	179	0.26	0.02	.	.		.	.
Baseline antihyperglycemics (0:N 1:Y)	.	.		.	.		.	.
Baseline hypertension treatment (0:N 1:Y)	.	.		.	.		.	.
Baseline antilipidemics (0:N 1:Y)	.	.		.	.		448	0.55	0.004
Baseline autonomic neuropathy (0:N 1:Y)	422	1.29	0.10	.	.		422	0.63	0.05
Baseline peripheral neuropathy (0:N 1:Y)	.	.		.	.		.	.
Baseline retinopathy (0:N 1:Y)	.	.		227	1.36	0.08	.	.	
Baseline macular edema (0:N 1:Y)	.	.		.	.		.	.
Baseline smoking (0:N 1:Y)	.	.		213	2.14	0.04	387	1.83	0.10
Serum creatinine (1: <1.0 mg/dL 2:1.0-<1.5 3:≥1.5)	

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Total bilirubin (1:<0.8 mg/dL 2:0.8-<1.1 3:≥1.1)	
Baseline CKD-eGFR (1: <50 2: ≥50)	
Baseline HDL (1: <50 mg/dL 2:50-74 3:≥75)	
Baseline LDL (1: <75 mg/dL 2:75-109 3:≥110)		370	1.35	0.03
Baseline Triglycerides (1:<30 mg/dL 2:30-64 3:≥65)	.	.		229	1.44	<0.001	.	.	
Baseline total cholesterol (1:<150 mg/dL 2:150-194 3:≥195)	
<u>DONOR CHARACTERISTICS</u>									
Gender (0: Female 0.5: Mixed 1:Male)	405	0.50	<0.001	.	.		.	.
CMV (0:N 1:Y)		361	0.71	0.09
Blood type A (0:N 1:Y)	
Blood type O (0:N 1:Y)	.	.		218	1.41	0.06	.	.	
Cause of death: trauma (0:N 1:Y)	382	0.77	0.06	.	.		382	1.47	0.03
Cause of death: CVA (0:N 1:Y)	.	.		212	1.57	0.06	.	.	
Hx hypertension (0:N 1:Y)	.	.		197	1.44	0.05	.	.	
Insulin given (0:N 1:Y)	
Steroids given (0:N 1:Y)	
Vasopressors given (0:N 1:Y)	.	.		206	0.09	0.02	.	.	
Intra-operative transfusion (0:N 1:Y)	
Pre-operative transfusion (0:N 1:Y)	.	.		192	0.61	0.008	.	.	
Donor age	.	.		194	1.29	0.08	.	.	
Donor BMI	
Donor ALT	.	.		168	0.59	0.05	.	.	
Donor AST	
Donor BUN	
Donor maximum blood glucose	
Donor pre-insulin blood glucose	
Donor serum amylase	
Donor serum creatinine	
Donor serum lipase	.	.		174	1.35	0.006	.	.	
Donor total bilirubin	

<u>PROCUREMENT/PROCESSING CHARACTERISTICS</u>									
Gradient type	360	1.25	0.09	.	.	.	.	.	.
LIBERASE_	.	.		209	3.06	0.03	376	2.76	0.05
COLLAGENASEP_	.	.		.	.		376	2.35	0.009
SERVANB1_	.	.		209	0.46	0.05	376	0.37	0.03
SIGMA_	.	.		209	8.55	0.04	.	.	
THEMOLYSIN_	.	.		209	0.56	0.07	.	.	
PULMOZYME_	.	.		209	0.69	0.04	376	0.68	0.03
PRESERVATION: : UW solution	465	1.56	0.001	.	.		.	.
PRESERVATION: : 2-layer	465	1.32	0.04	.	.		.	.
PRESERVATION: : Celsius	.	.		.	.		.	.
PRESERVATION: : HTK	.	.		236	0.44	0.008	465	0.40	0.02
PRESERVATION: : Ross	.	.		.	.		.	.
PRESERVATION: : Eurocollins	.	.		236	2.32	0.10	.	.	
PRESERVATION: : Other	459	0.89	<0.001	.	.		459	0.86	<0.001
Processing center related (0:N 1:Y)	.	.		.	.		.	.
Procurement center related (0:N 1:Y)	395	0.71	0.03	.	.		.	.
Islets cultured (0:N 1:Y)	.	.		193	0.73	0.10	344	0.67	0.03
Admission to death (hrs)	.	.		.	.		.	.
Death to crossclamp (hrs)	.	.		.	.		.	.
Death to recovery (hrs)	.	.		.	.		.	.
Death to transplant (hrs)	346	0.81	0.04	.	.		.	.
Recovery to transplant (hrs)	.	.		.	.		.	.
Crossclamp to recovery (hrs)	.	.		.	.		.	.
Cold storage (hrs)	.	.		.	.		.	.
Culture (hrs)	.	.		193	0.81	0.05	344	0.82	0.06
<u>ISLET PRODUCT CHARACTERISTICS</u>									
Viability	327	1.23	0.03	.	.		.	.
Stimulation index	.	.		.	.		.	.
Purity	.	.		.	.		.	.
Total beta cells (1000s)	.	.		.	.		.	.
Total beta cells/kg recipient	.	.		.	.		.	.
Total insulin content	.	.		.	.		.	.
Trapped islets (%)	.	.		.	.		.	.
Total particles (1000s)	.	.		187	0.65	0.05	.	.	

Total IEs / islet count	.	.		.	.		.	.
Packed cell volume	349	1.33	0.03	.	.		349	0.67 0.004
Total DNA content	.	.		98	0.71	0.08	.	.
Total endotoxin	.	.		177	1.24	0.10	.	.
Total endotoxin/kg recipient	.	.		.	.		.	.
Total IEQs at count	335	1.44	0.02	.	.		.	.
IEQs infused (1000s)	397	2.52	<0.001	.	.		397	0.61 <0.001
IEQs infused/kg recipient	387	1.70	<0.001	.	.		.	.
IEQs infused all infusions (1000s)	397	3.22	<0.001	.	.		397	0.56 0.007
<u>IMMUNOSUPPRESSION</u>								
IL2RA	436	1.75	<0.001	.	.		.	.
TCD	.	.		234	0.46	0.006	.	.
TNF-a inhibitor	.	.		.	.		436	0.67 0.08
CNI	.	.		.	.		436	0.16 <0.001
mTOR inhibitor	436	1.94	0.002	.	.		.	.
Belatacept	.	.		.	.		.	.
DSG_	436	2.74	0.03	.	.		.	.
Efalizumab	.	.		.	.		.	.
Steroid	436	0.69	0.06	.	.		436	1.44 0.09
Induction combinations (cumulated over all infusions)	435	0.92	0.003	.	.		.	.
IL2RA only								
TCD +TNF α Inh +-IL2RA								
TNF α Inh +-IL2RA								
Other								
Maintenance combinations (cumulated over all infusions)	435	0.74	0.001	233	1.35	0.04	435	1.25 0.07
mTORInh+CNI+IMPDHInh								
mTORInh+CNI								
CNI+-IMPDHInh								
CNIfree								