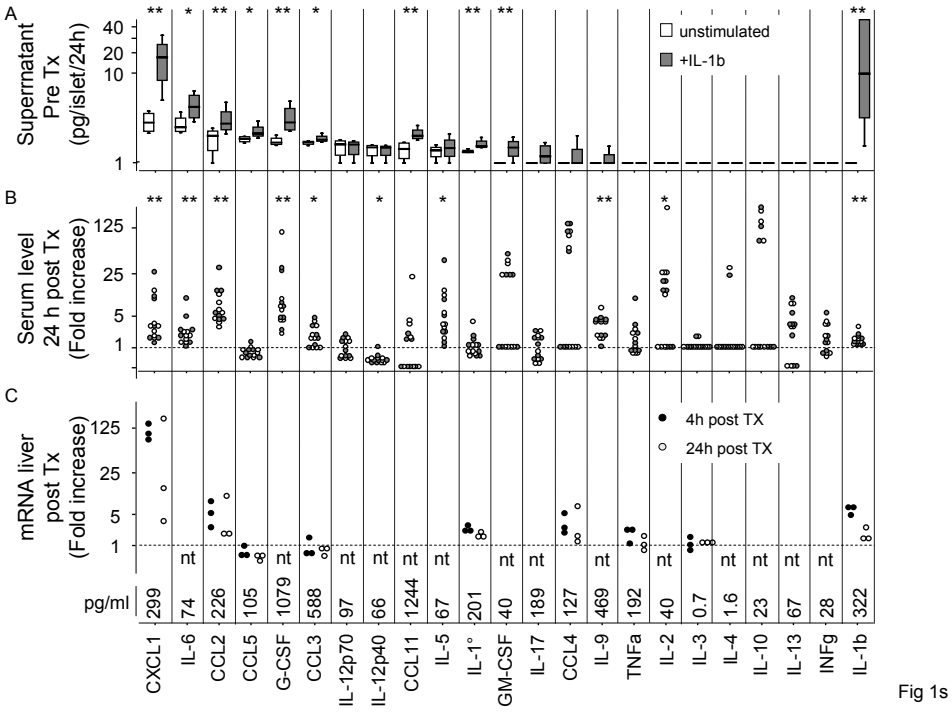

Fig 1s

Figure 1s. Inflammatory status before and after syngeneic islet transplantation in mouse.
Panel A. C57BL/6 islets (500/ml) from seven preparations were cultured for 24 h in the absence (unstimulated, white box) or in the presence (gray box) of 10 ng/ml IL-1β, and the chemokine/cytokine concentrations in the supernatant were measured by a multiplex sandwich ELISA. Data are represented as box plots indicating median, interquartile range (boxed areas), 5 and 95% limits (whiskers). Statistical analysis was performed by Mann Whitney U test. * $p \leq 0.05$; ** $p \leq 0.01$ unstimulated vs. IL-1β treated. *Panel B.* After 24h culture, 350 islets from each preparation (unstimulated, n=7; IL-1β treated, n=7) were infused in 14 syngeneic diabetic C57BL/6 mice through the portal vein. Chemokine and cytokine concentrations in serum before and 24h after islet infusion were measured as above. Data are expressed as fold increase (24h versus basal). The mean basal concentrations (pg/ml)are given in the lower panel. Each point on the scatter plot represents one recipient. Statistical analysis was performed by Mann Whitney U test. * $p \leq 0.05$; ** $p \leq 0.01$ 24h vs. basal. *Panel C.* After 24h culture, 350 unstimulated islets from three of seven preparations were transplanted in 6 diabetic mice and local liver inflammatory status before and 4h-24h after intrahepatic islet infusion was evaluated using RNAse protection-based assays for detecting cytokine and chemokine transcripts. Data are expressed as fold increase versus basal. Each point on the scatter plot represents one recipient. nt=not tested

Supplementary Tables

Table 1s. Intrahepatic leukocyte populations after islet transplantation

	Maximum Fold increase (time)[a]			Delta AUC[b]		
	Vehicle	CXCR1/2 inhibitor	p[c]	Vehicle	CXCR1/2 inhibitor	p[c]
Syngeneic						
PMN	4.9 (1d)	3.2 (1d)	<0.05	1,307	530	0.27
NKT cells	4.8 (1d)	1.9(1d)	0.12	2,259	-1,265	**<0.05**
Allogeneic						
PMN	18.4 (5d)	9.3 (5d)	<0.05	18,314	9,913	**<0.05**
NKT cells	9.9 (7d)	3.4(5d)	<0.05	9,107	2,378	**<0.05**

Data are reported as median

[a] Value and time of the maximum fold increase versus basal after islet infusion

[b] Incremental area under the number of cell time curve after islet transplantation

[c] Mann-Whitney Test

Table 2s. Characteristics of islet preparations, donors and recipients

	ATG/RAPA/MMF + Steroid and IL1Ra (N=8)	ATG/FK506/MMF (N=3)
Donor/islet		
Sex (M/F)	3/5	2/1
Age	56±5	47±11
Pancreas Weight (g)	136±51	162±32
Equivalent islet ($x10^3$)	342,951±50,122	436,961±112,068
Isolation index	0.96±0.26	0.88±0.18
Purification (%)	53±21	48±9
Volume (ml)	2.8±1.12	3.3±1.2
Pre Tx culture (h)	35±12	50±17
Recipient		
Sex (M/F)	3/5	2/1
Age	38.7±5.1	45±4
Diabetes duration (Years)	22±12	31±12
Pre TX Insulin requirement (U/kg/die)	0.50±0.09	0.53±0.17
Pre Tx HbA1c (%)	8.4±1.04	9.56±1.72
Creatinine (mg/dl)	0.74±0.14	0.93±0.22
Weight (kg)	60±9.8	58±10.1
IEQ/kg	5,809±1,199	7,486±1,134

Table 3s. Characteristics of donor and islet preparations transplanted in reparixin islet transplant trial: first infusion

Patient	Donor Age/sex	Donor BMI	Total IEQ[a]	Purity (%)	Viability (% PI negative)	Pre Tx culture time (h)	Pellet volume (ml)	IEQ/kg expected[a]	IEQ/kg infused[b]
CTRL									
#1	19/F	30.1	301,500	50	90	45	2	6,030	4,075
#4	22/M	19.3	244,500	55	90	38	1,5	7,067	4,690
	54/F	25.4	229,000	20	90	15	3		
#6	63/M	34	361,425	55	90	18	3	6,178	4,820
TOT	39.5±11.1	27.2±3	284,106±60,238	45±16	90±0	29±7	2.4±0.4	6,425±323	4,528±229
REPA									
#2	52/M	22.7	89,550	85	90	70	1	6,972	4,176
	50/F	18.4	328,750	40	90	21	3		
#3	58/M	23.4	311,183	50	90	42	2	6,621	4,199
#5	35/F	19	153,102	35	95	25	1	6,506	4,095
	60/F	26	295,549	60	95	22	2		
#7	42/F	22.3	408,341	55	90	18	4	6,586	5,589
TOT	49±4	21.9±1.3	264,412±48,641	54±7.2	91±2.6	33±8	2.2±0.5	6,671±103	4,514±358
After protocol has been amended									
#8	46/F	25	314,799	53	90	24	1.5	7,914	6,251
	48/M	51.4	160,000	60	95	0	0.5		
#9	48M	51.4	386,425	60	90	18	2.5	7,830	5,154

[a] Islet equivalents counted at the end of isolation

[b] Islet equivalents counted after culture immediately before infusion