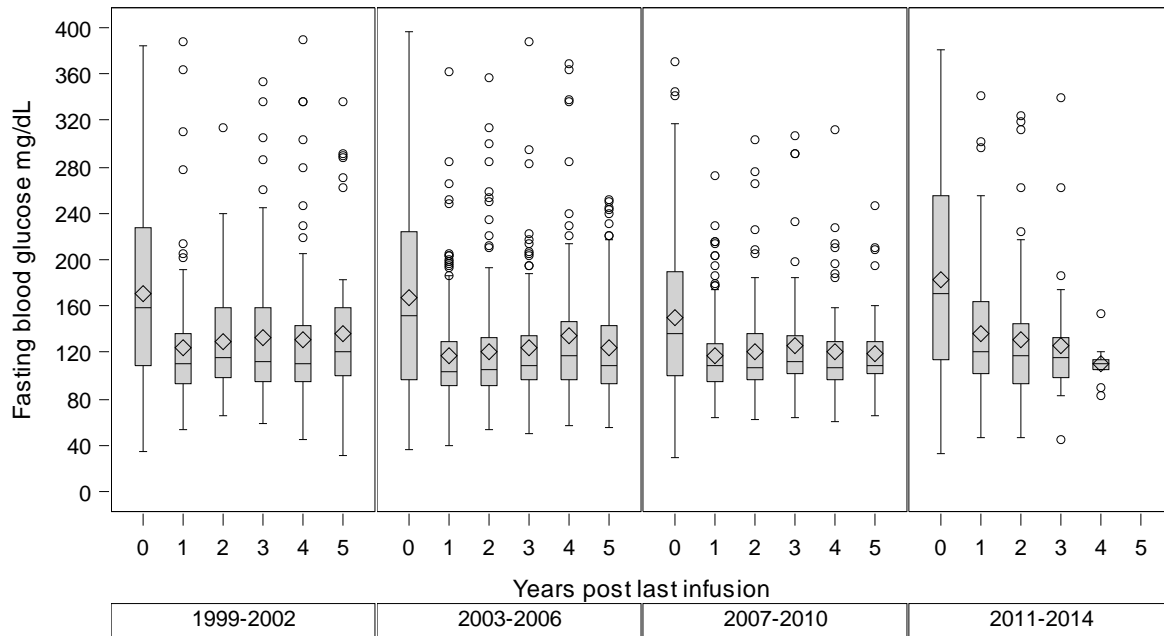


# Exhibit A-12a. ITA Fasting Blood Glucose levels post last infusion (boxplots and generalized estimating equations)

Fasting blood glucose (mg/dL) by Era



CITR Data 17Dec2015

## The GENMOD Procedure

Analysis Of GEE Parameter Estimates

Empirical Standard Error Estimates

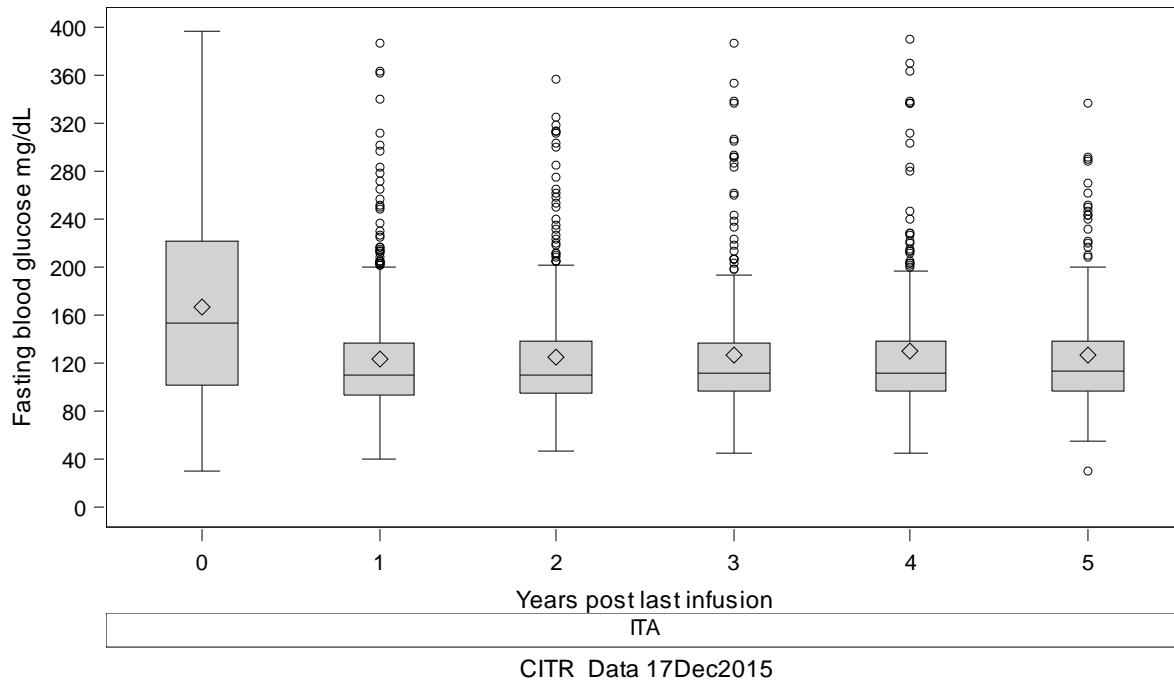
Parameter	Estimate	Standard Error	95% Confidence Limits		Z	Pr >  Z
Intercept	5.0231	0.0385	4.9477	5.0984	130.61	<.0001
era	-0.0124	0.0132	-0.0382	0.0134	-0.94	0.3459
yrspli	-0.0258	0.0057	-0.0370	-0.0146	-4.52	<.0001

	1			2			3			4			5		
	fastbg_			fastbg_			fastbg_			fastbg_			fastbg_		
	N	Mea n	SE	N	Mea n	SE	N	Mea n	SE	N	Mea n	SE	N	Mea n	SE
Era															
1999-2002	111	124	5	91	134	6	77	133	7	68	132	8	62	136	8
2003-2006	169	119	4	139	126	6	117	123	4	106	139	7	88	128	6
2007-2010	130	121	4	108	120	4	81	126	5	63	125	7	43	118	6
2011-2014	110	139	6	67	131	7	32	127	9	10	111	6	.	.	.

CITR Data 17Dec2015

# Exhibit A-12a. ITA Fasting Blood Glucose levels post last infusion (boxplots and generalized estimating equations)

Fasting blood glucose (mg/dL) by Transplant type



## The GENMOD Procedure

Analysis Of GEE Parameter Estimates

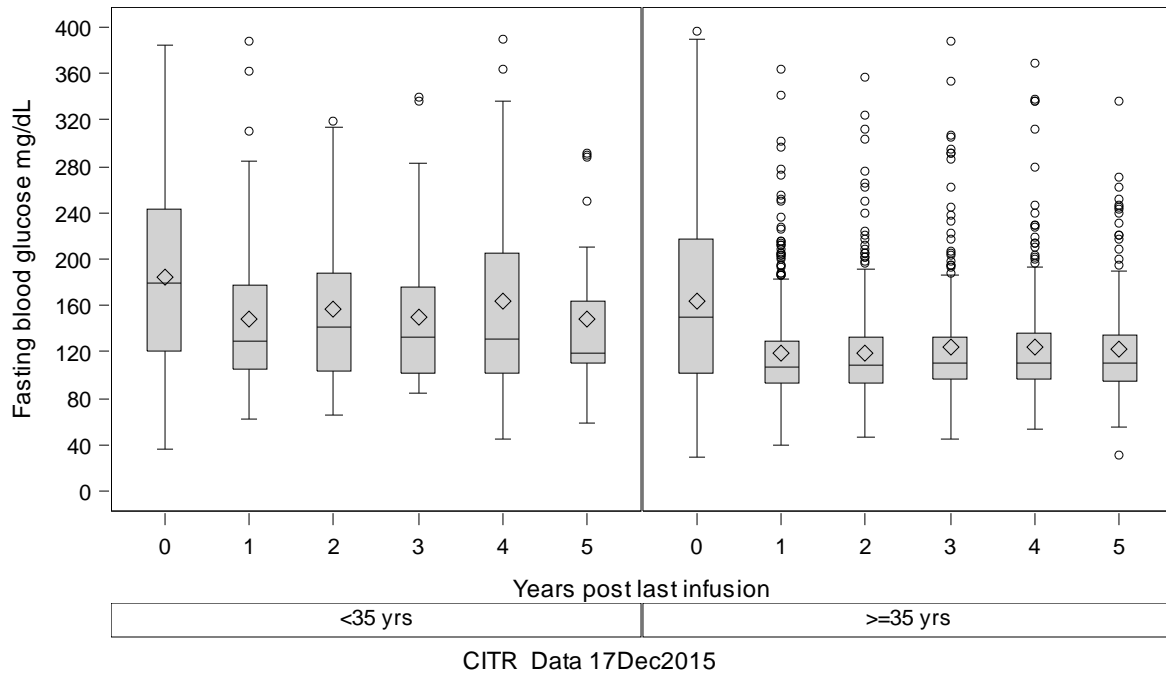
Empirical Standard Error Estimates

Parameter	Estimate	Standard Error	95% Confidence Limits		Z	Pr >  Z
Intercept	4.9920	0.0172	4.9583	5.0256	290.85	<.0001
typeoftran	0.0000	0.0000	0.0000	0.0000	.	.
yrspli	-0.0245	0.0057	-0.0356	-0.0133	-4.30	<.0001

Transplant type	1			2			3			4			5		
	fastbg_			fastbg_			fastbg_			fastbg_			fastbg_		
	N	Mea n	SE	N	Mea n	SE	N	Mea n	SE	N	Mea n	SE	N	Mea n	SE
ITA	520	125	2	405	127	3	307	127	3	247	132	4	193	128	4

# Exhibit A-12a. ITA Fasting Blood Glucose levels post last infusion (boxplots and generalized estimating equations)

Fasting blood glucose (mg/dL) by Recipient age



## The GENMOD Procedure

### Analysis Of GEE Parameter Estimates

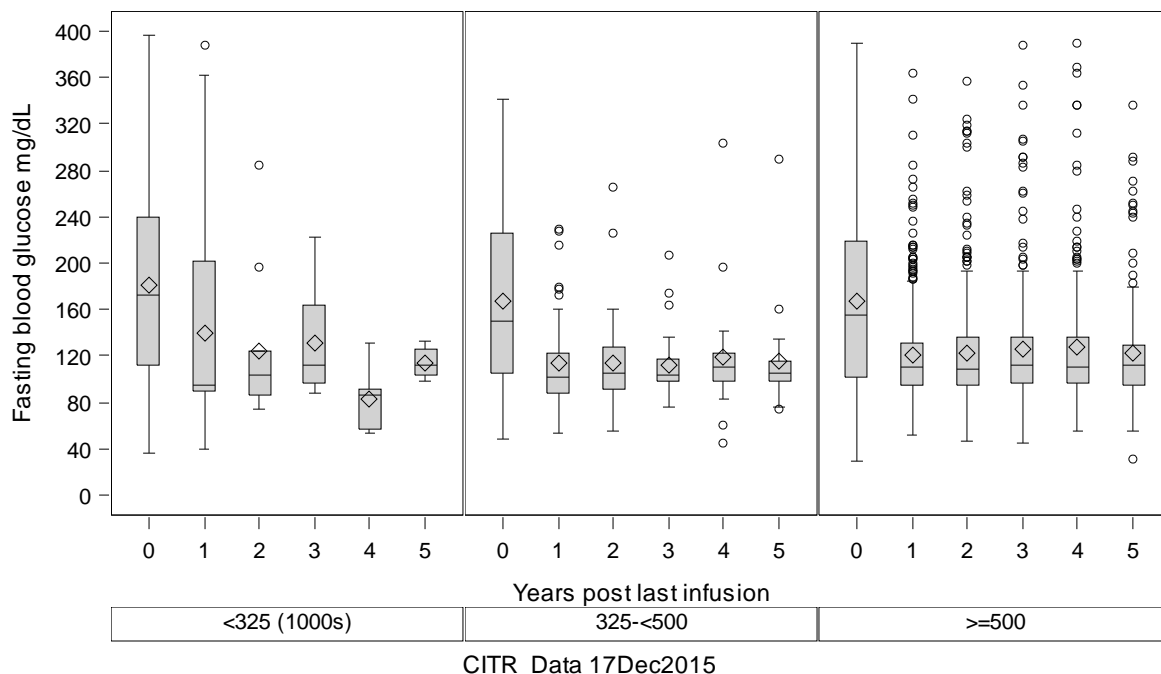
#### Empirical Standard Error Estimates

Parameter	Estimate	Standard Error	95% Confidence Limits		Z	Pr >  Z
Intercept	5.4096	0.0696	5.2731	5.5461	77.68	<.0001
age_c	-0.2305	0.0376	-0.3041	-0.1569	-6.14	<.0001
yrspli	-0.0220	0.0055	-0.0327	-0.0113	-4.02	<.0001

Recipient age	1		2			3			4			5			
	fastbg_		fastbg_			fastbg_			fastbg_			fastbg_			
	N	Mea n	SE	N	Mea n	SE	N	Mea n	SE	N	Mea n	SE	N	Mea n	SE
<35 yrs	80	152	8	57	163	10	41	150	10	31	163	16	27	159	17
>=35 yrs	440	120	2	348	121	3	266	123	3	216	128	4	166	123	4

# Exhibit A-12a. ITA Fasting Blood Glucose levels post last infusion (boxplots and generalized estimating equations)

Fasting blood glucose (mg/dL) by Total IEQs all infusions



## The GENMOD Procedure

### Analysis Of GEE Parameter Estimates

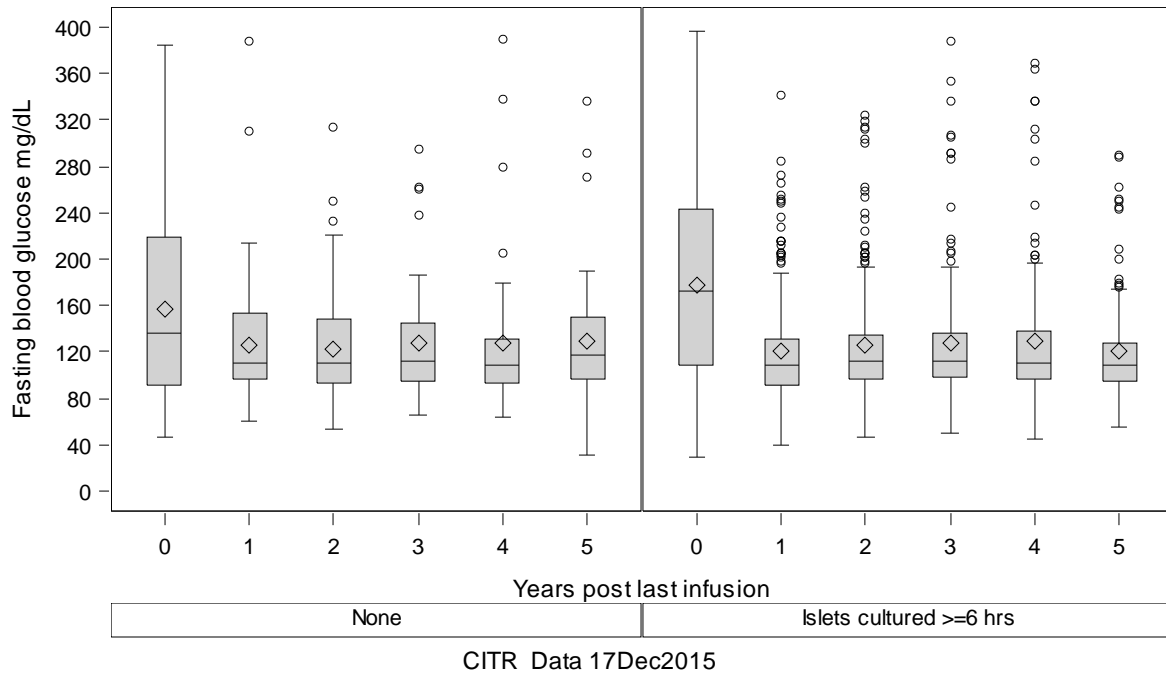
#### Empirical Standard Error Estimates

Parameter	Estimate	Standard Error	95% Confidence Limits		Z	Pr >  Z
Intercept	5.0129	0.0859	4.8447	5.1812	58.39	<.0001
ieqinf_c	-0.0110	0.0299	-0.0697	0.0477	-0.37	0.7130
yrspli	-0.0279	0.0061	-0.0399	-0.0159	-4.56	<.0001

	1		2		3		4		5						
	<i>fastbg_</i>		<i>fastbg_</i>		<i>fastbg_</i>		<i>fastbg_</i>		<i>fastbg_</i>						
	N	Mea n	SE	N	Mea n	SE	N	Mea n	SE	N	Mea n	SE			
Total IEQs all infusions															
<325 (1000s)	23	155	24	11	124	19	8	132	19	5	84	14	5	182	68
325-<500	53	119	8	43	113	6	29	112	5	25	118	9	20	116	10
>=500	400	121	2	320	126	3	246	126	3	198	129	4	152	123	4

# Exhibit A-12a. ITA Fasting Blood Glucose levels post last infusion (boxplots and generalized estimating equations)

Fasting blood glucose (mg/dL) by Cultured>6h



## The GENMOD Procedure

### Analysis Of GEE Parameter Estimates

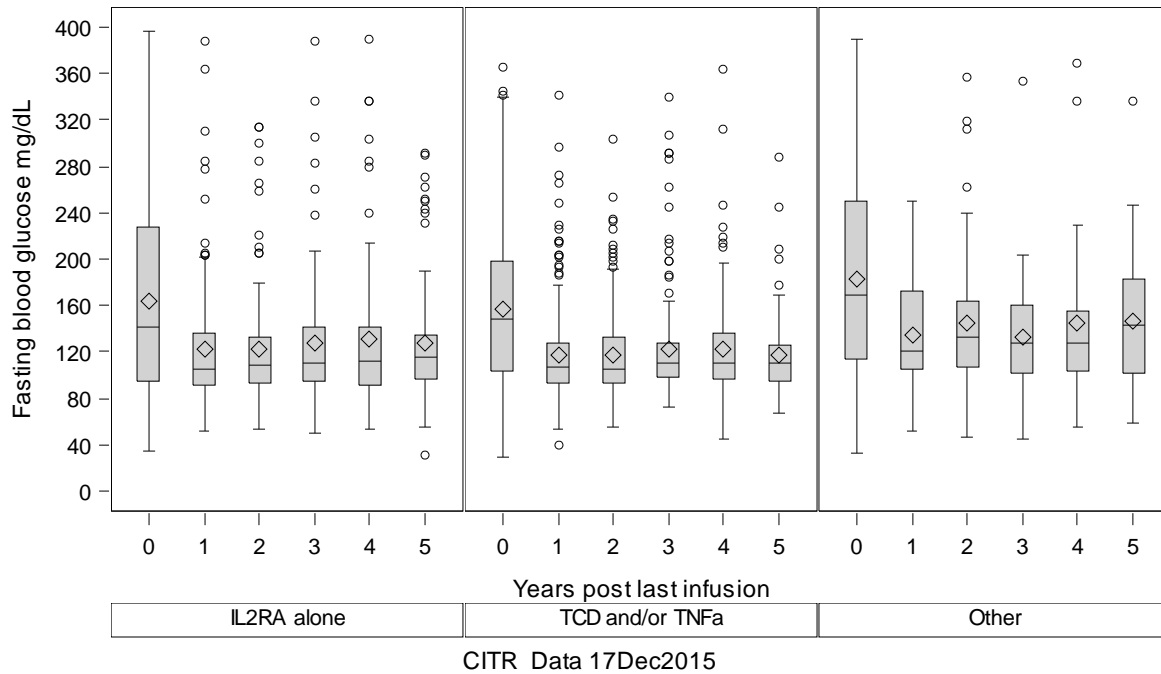
#### Empirical Standard Error Estimates

Parameter	Estimate	Standard Error	95% Confidence Limits		Z	Pr >  Z
Intercept	4.9943	0.0383	4.9194	5.0693	130.56	<.0001
cultured_	0.0268	0.0413	-0.0542	0.1078	0.65	0.5171
yrspli	-0.0306	0.0066	-0.0436	-0.0177	-4.63	<.0001

	1		2		3		4		5	
	fastbg_		fastbg_		fastbg_		fastbg_		fastbg_	
	N	Mea n SE	N	Mea n SE	N	Mea n SE	N	Mea n SE	N	Mea n SE
Cultured>6h										
<b>None</b>	78	126 6	60	129 9	49	127 7	43	127 10	39	129 10
<b>Islets cultured &gt;=6 hrs</b>	288	123 3	223	129 4	164	128 4	135	132 6	111	121 5

# Exhibit A-12a. ITA Fasting Blood Glucose levels post last infusion (boxplots and generalized estimating equations)

Fasting blood glucose (mg/dL) by Induction



## The GENMOD Procedure

Analysis Of GEE Parameter Estimates

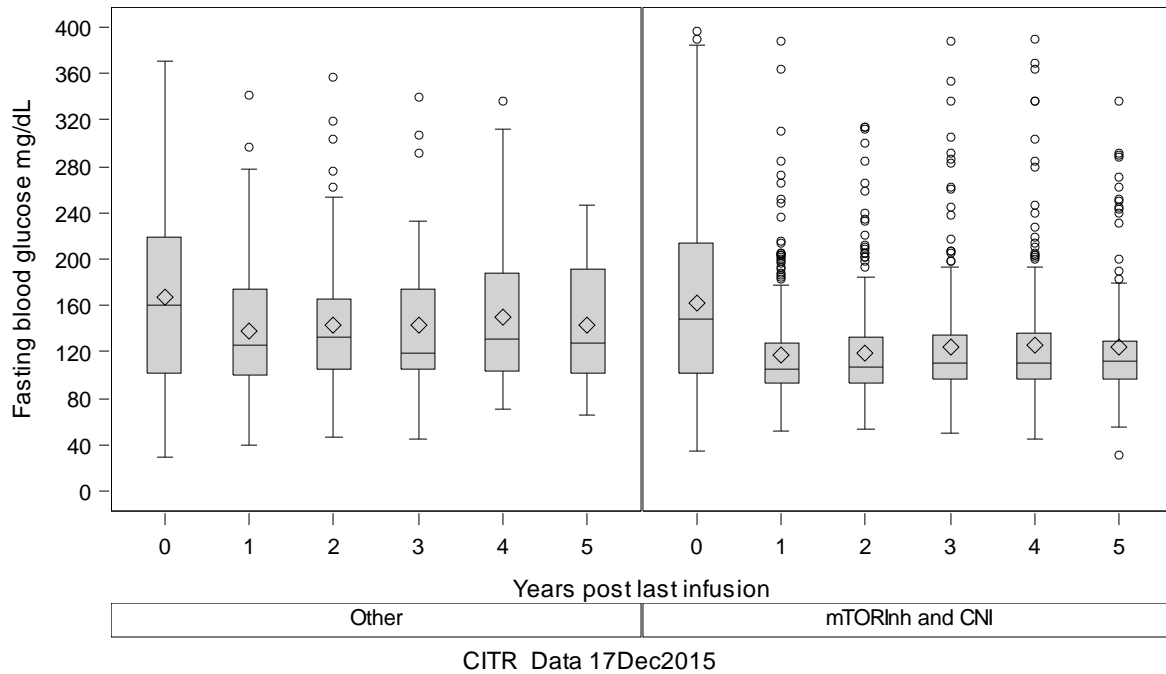
Empirical Standard Error Estimates

Parameter	Estimate	Standard Error	95% Confidence Limits		Z	Pr >  Z
Intercept	4.9371	0.0282	4.8818	4.9923	175.02	<.0001
inducco	0.0427	0.0217	0.0001	0.0853	1.97	0.0492
yrspli	-0.0204	0.0057	-0.0316	-0.0092	-3.57	0.0004

Induction	1			2			3			4			5		
	fastbg_			fastbg_			fastbg_			fastbg_			fastbg_		
	N	Mea n	SE	N	Mea n	SE	N	Mea n	SE	N	Mea n	SE	N	Mea n	SE
<b>IL2RA alone</b>	159	122	4	124	129	6	107	127	5	91	135	8	76	132	8
<b>TCD and/or TNFa</b>	240	121	3	190	117	3	142	123	4	116	125	5	82	117	4
<b>Other</b>	84	138	6	63	150	9	44	133	8	33	145	12	30	146	12

# Exhibit A-12a. ITA Fasting Blood Glucose levels post last infusion (boxplots and generalized estimating equations)

Fasting blood glucose (mg/dL) by Maintenance



## The GENMOD Procedure

### Analysis Of GEE Parameter Estimates

#### Empirical Standard Error Estimates

Parameter	Estimate	Standard Error	95% Confidence Limits		Z	Pr >  Z
Intercept	5.0726	0.0277	5.0182	5.1269	182.95	<.0001
<i>maint</i>	-0.1370	0.0310	-0.1978	-0.0763	-4.42	<.0001
<i>yrspli</i>	-0.0166	0.0056	-0.0275	-0.0057	-2.97	0.0030

Maintenance	1		2		3		4		5						
	<i>fastbg_</i>		<i>fastbg_</i>		<i>fastbg_</i>		<i>fastbg_</i>		<i>fastbg_</i>						
	N	Mea n	SE	N	Mea n	SE	N	Mea n	SE	N	Mea n	SE			
<b>Other</b>	123	145	6	79	143	7	46	143	9	36	157	13	28	143	10
<b>mTORInh and CNI</b>	367	117	2	305	123	3	249	124	3	206	128	4	162	126	4