

# Paired Exchange Results Quarterly Report

As of December 31, 2011

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## Message From the Founder

2011 was another record year for the National Kidney Registry with the facilitation of 175 exchange transplants during the year including the successful completion of our longest chain - 30 transplants across 16 member centers. This brings us to 389 transplants since we began organizing swaps 4 years ago.

Our transplanted patient average wait time declined to 5 months in 2011 with 75% of transplanted patients waiting less than 6 months to get matched and transplanted. We are finding an increasing number of matches for highly sensitized patients. During 2011, 49 patients with cPRAs greater than 80% were matched and transplanted including 19 patients with cPRAs greater than 95%.

We continue to rapidly grow our network of Member Centers. During 2011 our network grew to 55 participating centers. In the last few months the following transplant centers joined our program:

- Brigham and Women's Hospital
- Cleveland Clinic
- Indiana University Health (formerly Clarian Health)
- Lucille Packard Children's Hospital (Stanford University)
- Mass General Hospital
- Seattle Children's Hospital
- University of Illinois

These new member centers along with the rapid increase in pair enrollment from our existing centers (enrollments more than doubled in 2011) are increasing the size and diversity of our pool. This growth is improving every patient's chance of finding a well matched donor and getting transplanted quickly.

None of this success would be possible without the effort and dedication of the medical professionals at our Member Centers. Thank you - and keep up the great work.

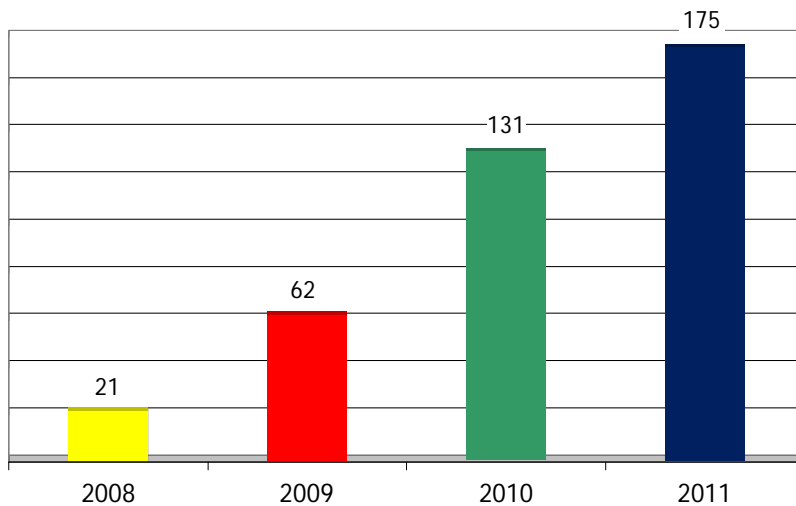
Sincerely

A handwritten signature in blue ink, appearing to read 'G Hil', with a long horizontal flourish extending to the right.

Garet Hil  
Founder & President  
National Kidney Registry

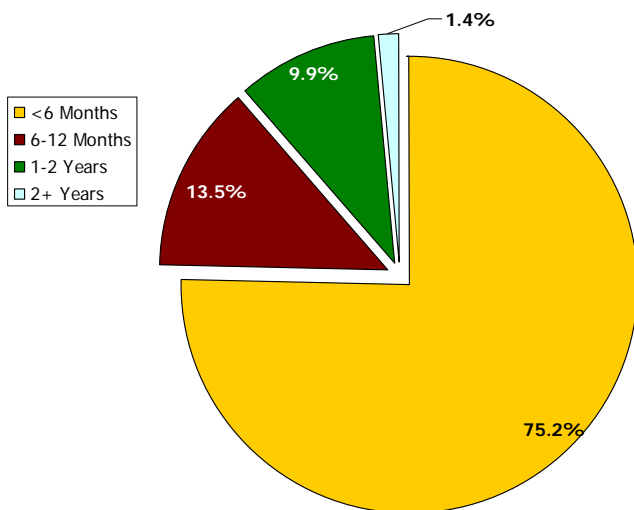
*\*\*Photo courtesy of David Savinski [www.davidsavinski.com](http://www.davidsavinski.com)*

### Transplants Facilitated by Year

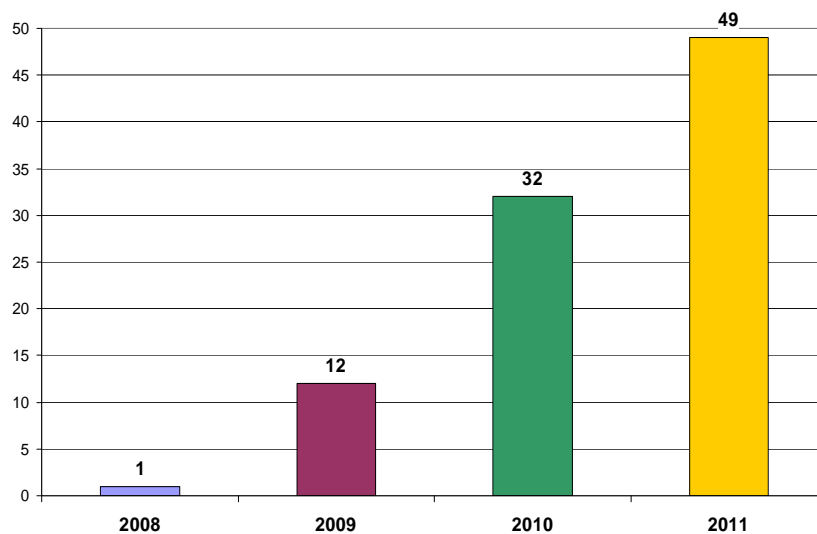


### 2011 Transplants by Wait Time

89% of transplanted patients waited < 12 months

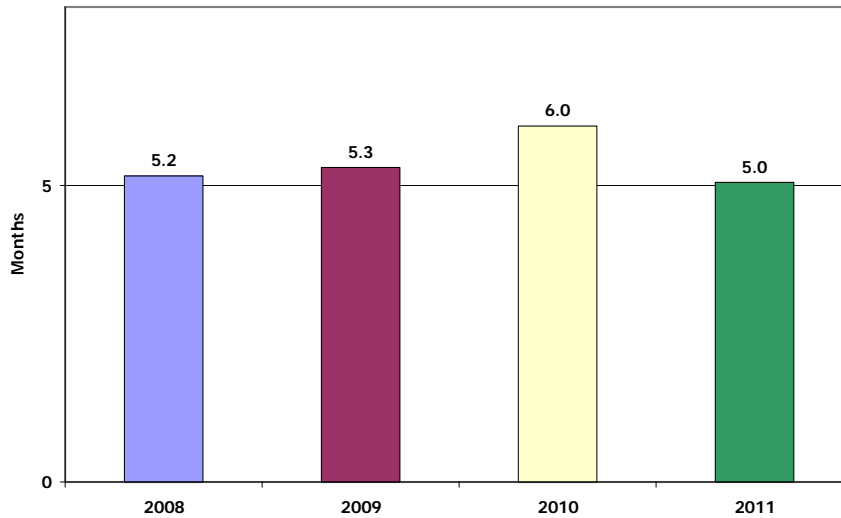


### Number of Transplanted Patients with cPRA >80%



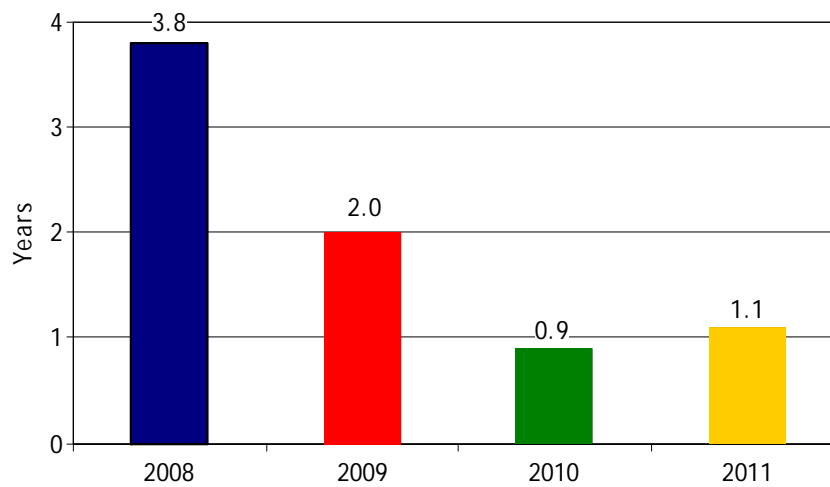
## Transplanted Patient Average Wait Time

The average of the actual wait times of patients transplanted during the year  
(wait time = transplant date - enrollment date)



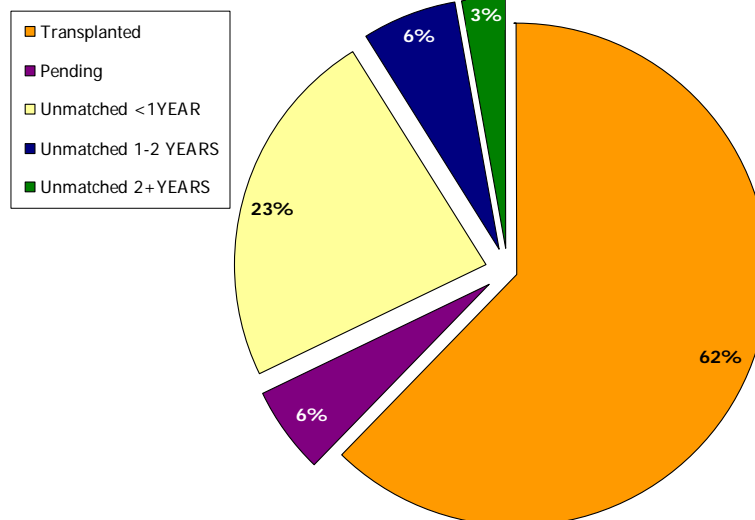
## Enrolled Patient Average Wait Time

Ending unmatched patient pool/annual transplant run rate



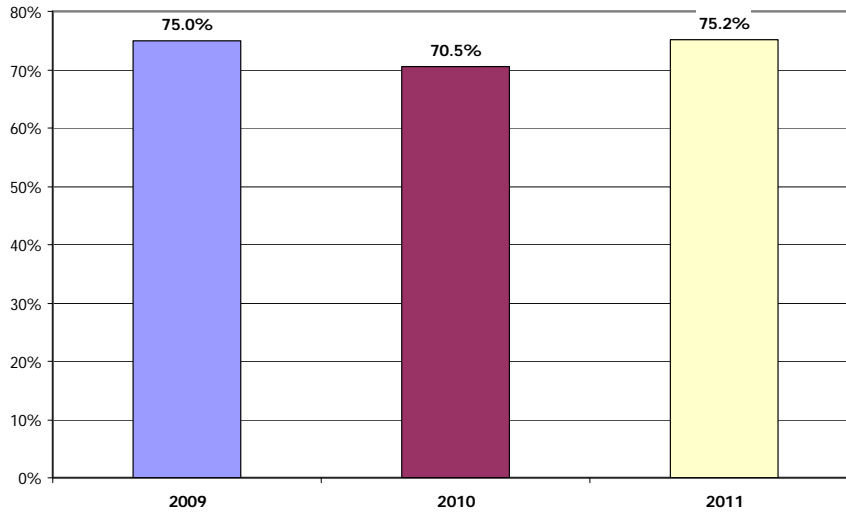
## Cumulative Pool Distribution by Status

As of 12/31/2011



## Percent of Patients Transplanted in < 6 Months

Number of transplants facilitated in < 6 months / Total transplants for same year



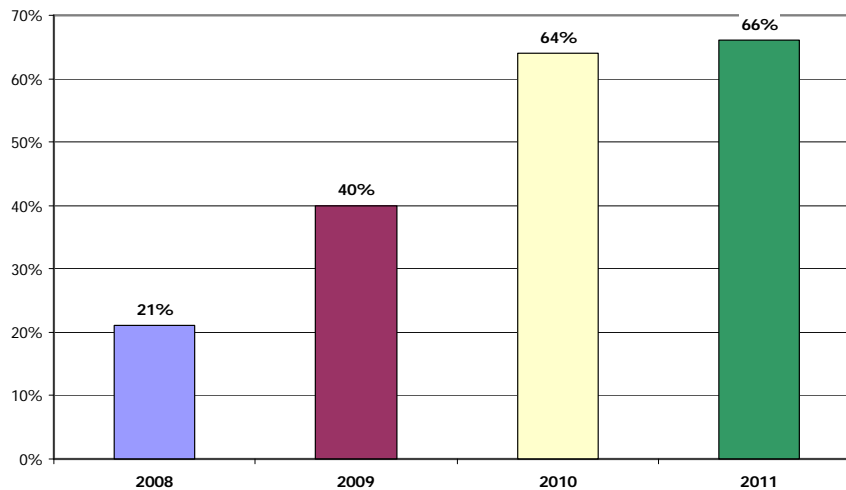
## Forecasted Wait Time by ABO and cPRA

NKR Expected Months Wait Time

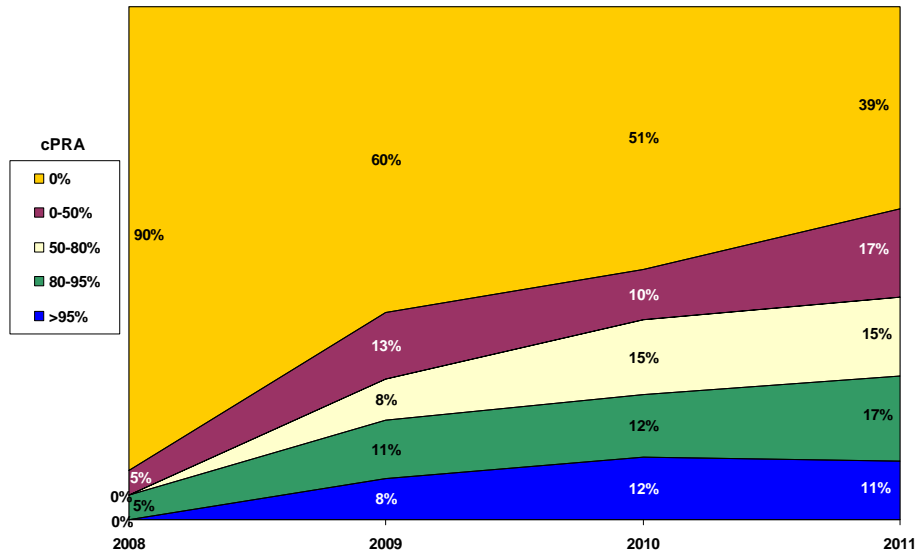
Patient Blood Type	Donor Blood Type	cPRA 0%	cPRA >0 <=50%	cPRA >50 <=80%	cPRA >80 <=95%	cPRA >95%
AB (Easiest)	O	No Data	No Data	No Data	2	15
	B	No Data	No Data	No Data	No Data	No Data
	A	1	No Data	5	No Data	No Data
	AB	No Data	No Data	No Data	3	18
A	O	2	3	3	3	23
	B	4	2	8	2	10
	A	No Data	4	14	3	17
	AB	2	No Data	No Data	No Data	54
B	O	4	No Data	7	72	16
	B	No Data	1	No Data	6	No Data
	A	5	3	5	15	No Data
	AB	4	No Data	No Data	No Data	No Data
O (Hardest)	O	3	4	5	7	84
	B	7	30	No Data	No Data	No Data
	A	12	12	12	40	350
	AB	70	No Data	No Data	8	No Data

## Cumulative Pool Transplanted by Year

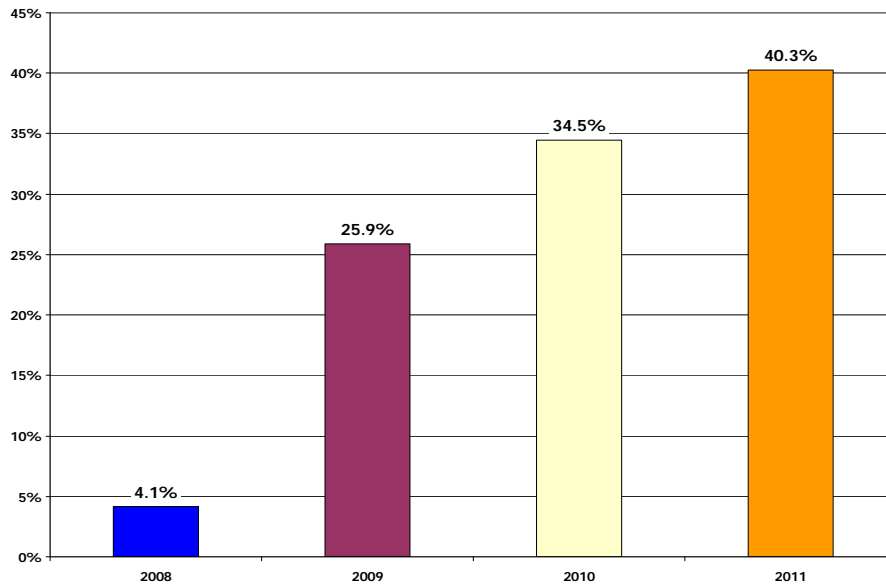
Total transplants program to date / (total transplants + ending unmatched patients)



## Transplanted Patients by Year by cPRA

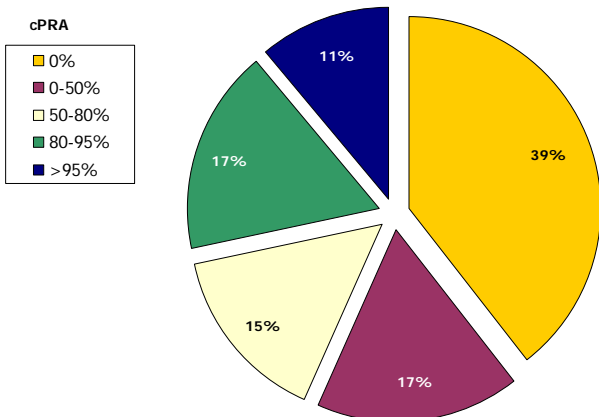


## Average cPRA of Transplanted Patients by Year



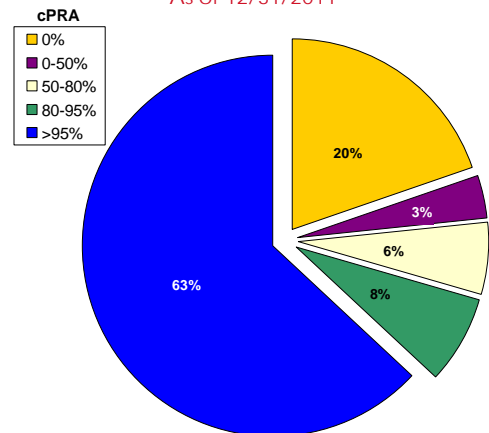
## 2011 Transplants by cPRA

28% of transplanted patients >80% cPRA



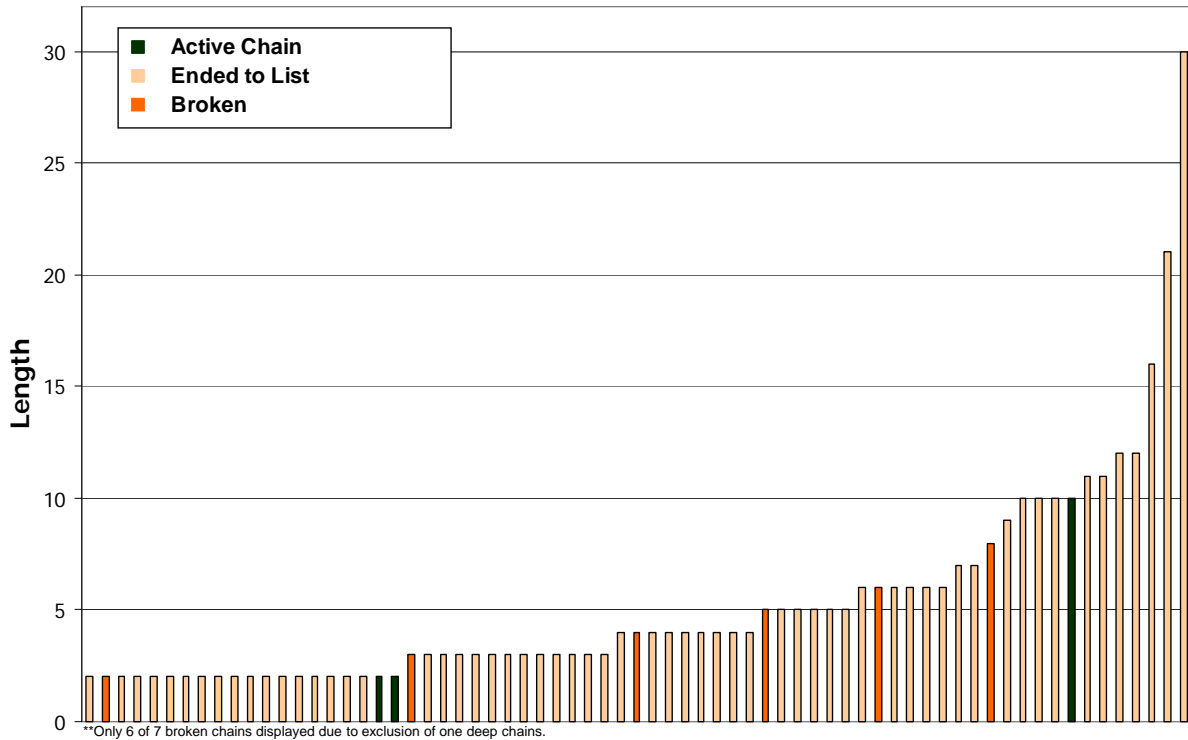
## 2011 Pool Composition by cPRA

As of 12/31/2011



# Chain Lengths

## For Chains Greater Than 1 Deep

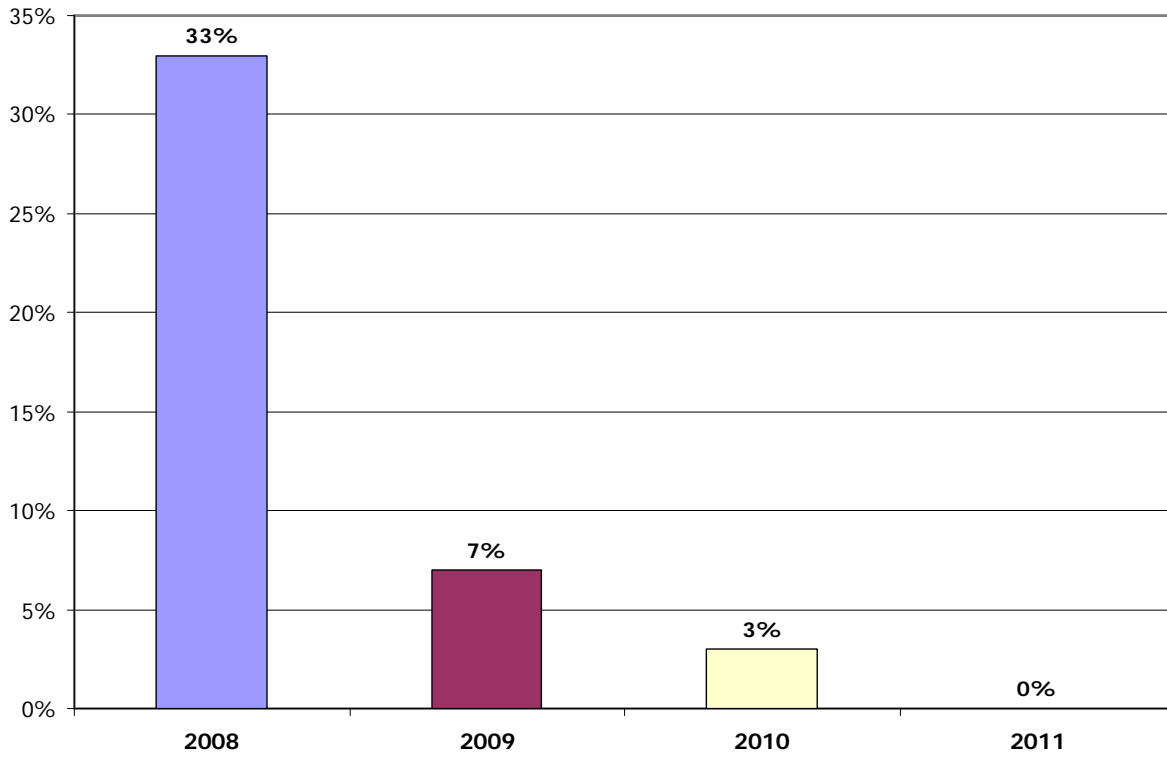


## Summary of Broken Chains

<b><i>Reason Given</i></b>	<b><i>Center</i></b>	<b><i>Date</i></b>
Job Issues/ long wait time/ many failed XMs	Cornell	5/1/2008
No Reason	Cornell	8/21/2008
No Reason	CPMC	11/19/2008
Two cancelled swaps/ long wait time	UTMC	6/9/2009
Medical	UCSF	11/10/2009
Medical	UCLA	3/16/2010
Second nuclear GFR test < 80 (79 down fm 82)	AGH	9/16/2010



## Broken Chains by Year - Summary



## Broken Chains by Year - Detail

<b>Year</b>	<b># Bridge Donors</b>	<b># Broken Chains</b>	<b>% Broken Per Year</b>
2008	9	3	33%
2009	29	2	7%
2010	61	2	3%
2011	75	0	0%
<b>Total Bridge Donors</b>	<b>174</b>	<b>7</b>	

# NKR Program Statistics

		2008	2009	2010	2011
1	Transplants Facilitated	21	62	131	175
2	Ending Unmatched Patient Pool	80	127	120	201
3	Cumulative Transplants	21	83	214	389
4	Cumulative Patient Pool	101	210	334	590
5	Percent of Pool Transplanted	21%	40%	64%	66%
6	Enrolled Patient Average Wait Time	3.8	2.0	0.9	1.1
7	Transplanted Patient Average Wait Time	5.1	5.3	6.0	5.0
8	Average cPRA of Transplanted Patients	4.1%	25.9%	34.5%	40.3%
9	Number of Transplants Completed by cPRA				
10	>95%	0	5	16	20
11	80-95%	1	7	16	29
12	50-80%	0	5	19	27
13	0-50%	1	8	13	30
13	0%	19	37	67	69
14	Sub-total	21	62	131	175
15	Percent of Transplants Completed by cPRA				
16	>95%	0%	8%	12%	11%
17	80-95%	5%	11%	12%	17%
18	50-80%	0%	8%	15%	15%
19	0-50%	5%	13%	10%	17%
20	0%	90%	60%	51%	39%
21	Sub-total	100%	100%	100%	100%
22	Number of Transplanted Patients with cPRA >80%	1	12	32	49
23	Percent of Transplanted Patients with cPRA >80%	5%	19%	24%	28%
24	Number of Unmatched Patients by cPRA at year-end				
25	>95%				152
26	80-95%				15
27	50-80%				14
28	0-50%				14
29	0%				50
30	Sub-total				245

# NKR Program Statistics

		2008	2009	2010	2011
31	Percent of Unmatched Patients by cPRA at year-end				
32	>95%				62%
33	80-95%				6%
34	50-80%				6%
35	0-50%				6%
36	0%				20%
37	Sub-total				100%
38	Number of Transplants Completed by Wait Time				
39	< 6 months	21	42	74	106
40	6-12 months	0	10	14	19
41	1-2 years	0	4	15	14
42	2+ years	0	0	2	2
43	Sub-total	21	56	105	141
44	Percent of Transplants Completed by Wait Time				
45	< 6 months	100.0%	75.0%	70.5%	75.2%
46	6-12 months	0.0%	17.9%	13.3%	13.5%
47	1-2 years	0.0%	7.1%	14.3%	9.9%
48	2+ years	0.0%	0.0%	1.9%	1.4%
49	Sub-total	100%	100%	100%	100%
50	Total Chains Started	3	8	28	38
51	Total Loops Completed	0	3	2	3
53	Number of broken chains	3	2	2	0
54	Bridge donors held	9	29	61	75
55	Percent of broken chains	33%	7%	3%	0%

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