HEART ALLOCATION SYSTEM DATA UPDATE

Fall 2010 Regional Meetings

Based on OPTN data as of July 16, 2010

OPTN

UNOS DONATE LIFE

Heart Allocation Policy

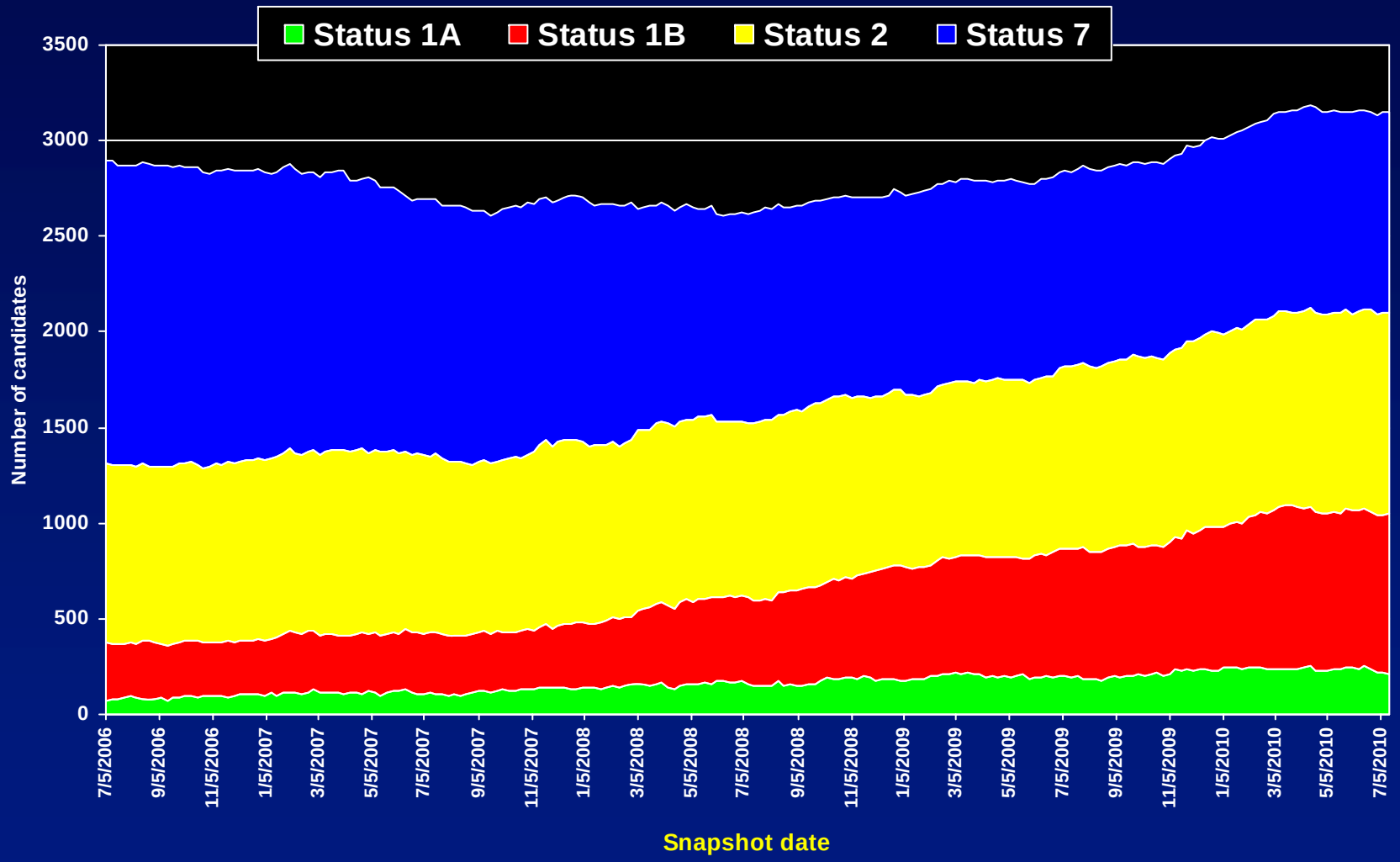
- Modified on July 12, 2006

- Allocation for adult donors:
  - Local Status 1A
  - Local Status 1B
  - Zone A Status 1A
  - Zone A Status 1B
  - Local Status 2
  - Zone B Status 1A
  - Zone B Status 1B
  - Zone A Status 2
  - Etc.

- Allocation for pediatric donors*:
  - Local + Zone A Status 1A ped. cand.
  - Local Status 1A adult cand.
  - Local + Zone A Status 1B ped. cand.
  - Local Status 1B adult cand.
  - Zone A Status 1A adult cand.
  - Zone A Status 1B adult cand.
  - Local Status 2 ped. cand.
  - Local Status 2 adult cand.
  - Zone B Status 1A ped. cand.
  - Zone B Status 1A adult cand.
  - Zone B Status 1B ped. cand.
  - Zone B Status 1B adult cand.
  - Zone A Status 2 ped. cand.
  - Zone A Status 2 adult cand.
  - Etc.

* Modifications to Policy 3.7 for pediatric donors were implemented on May 6, 2009.

HEART CANDIDATE STATUS DISTRIBUTION



OPTN

- On 7/12/06 there were 2896 candidates (1307 active)
- On 7/14/10 there were 3146 candidates (2099 active)

UNOS DONATE LIFE

DEATHS PER 100 PATIENT-YEARS ON THE WAITING LIST:

Stratified by Age Group

Combining Active Statuses with Corresponding Status 7 Groups

Candidate Age Group	Status	Waiting era: 7/12/03-7/11/06				Waiting era: 7/12/06-1/11/10			
		# patients ever waiting	# of deaths *	Patient years (PY) at risk	Deaths/ 100 PY	# patients ever waiting	# of deaths*	Patient years (PY) at risk	Deaths/ 100 PY
Adult	1A	3307	355	294.1	**120.7**	5011	375	577.7	**64.9**
	1B	4574	440	1231.6	**35.7**	6707	429	2015.4	**21.3**
	2	6430	475	7044.5	**6.7**	6146	386	5833.3	**6.6**
	ALL COMBINED	10201	1306	8713.7	**15.0**	11780	1235	8550.3	**14.4**
Pediatric	1A	1088	209	171.1	**122.2**	1521	213	282.2	**75.5**
	1B	397	17	118.5	**14.3**	506	16	162.2	**9.9**
	2	553	31	459.7	**6.7**	521	14	463.5	**3.0**
	ALL COMBINED	1603	258	811.1	**31.8**	2001	244	954.3	**25.6**

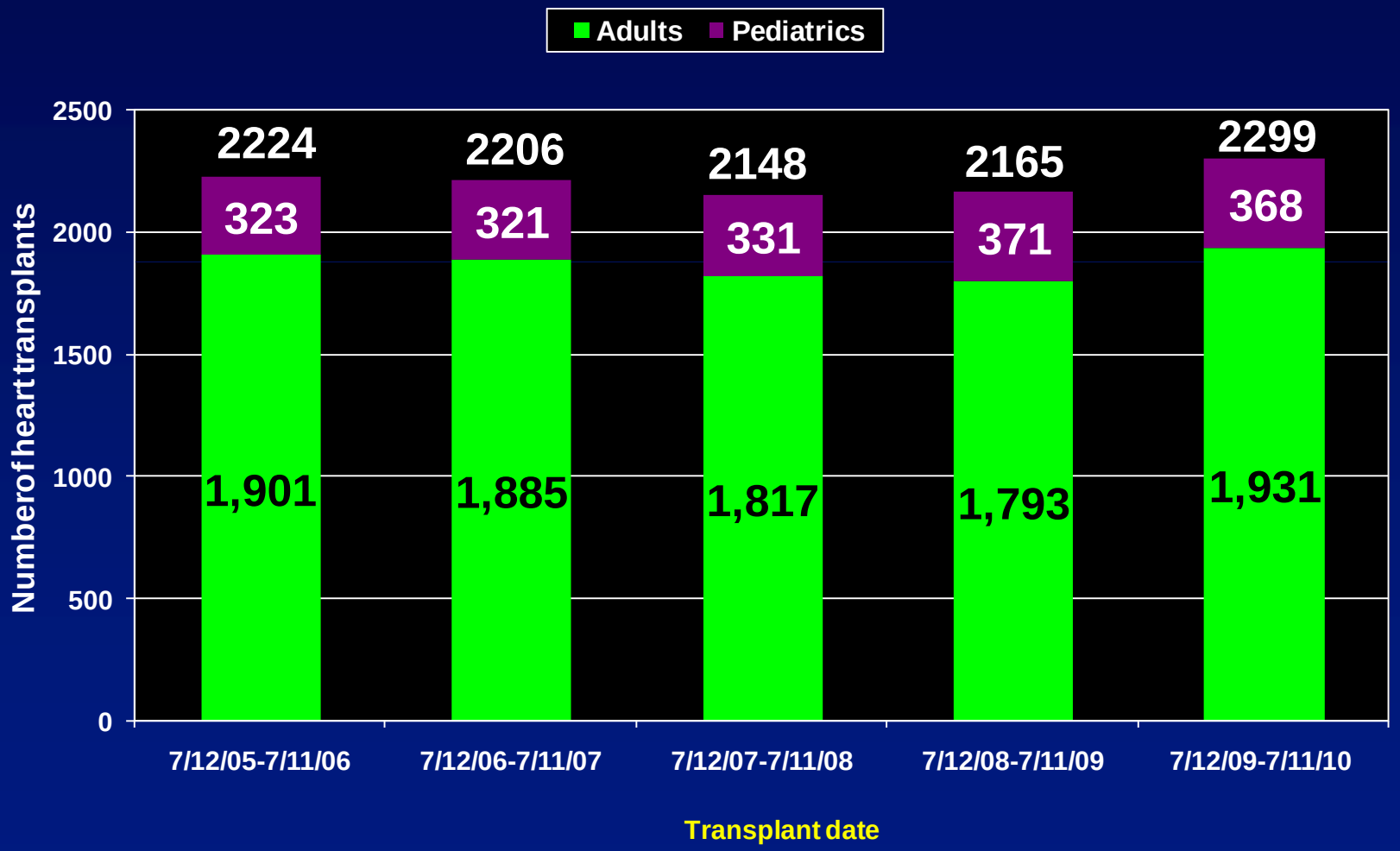
NOTE: Caution should be used in drawing conclusions based on death rates due to differences in patient populations.

OPTN

*** Deaths include those reported to the OPTN or to SSDMF while on waiting list or within 7 days of non-transplant removal.**

UNOS DONATE LIFE

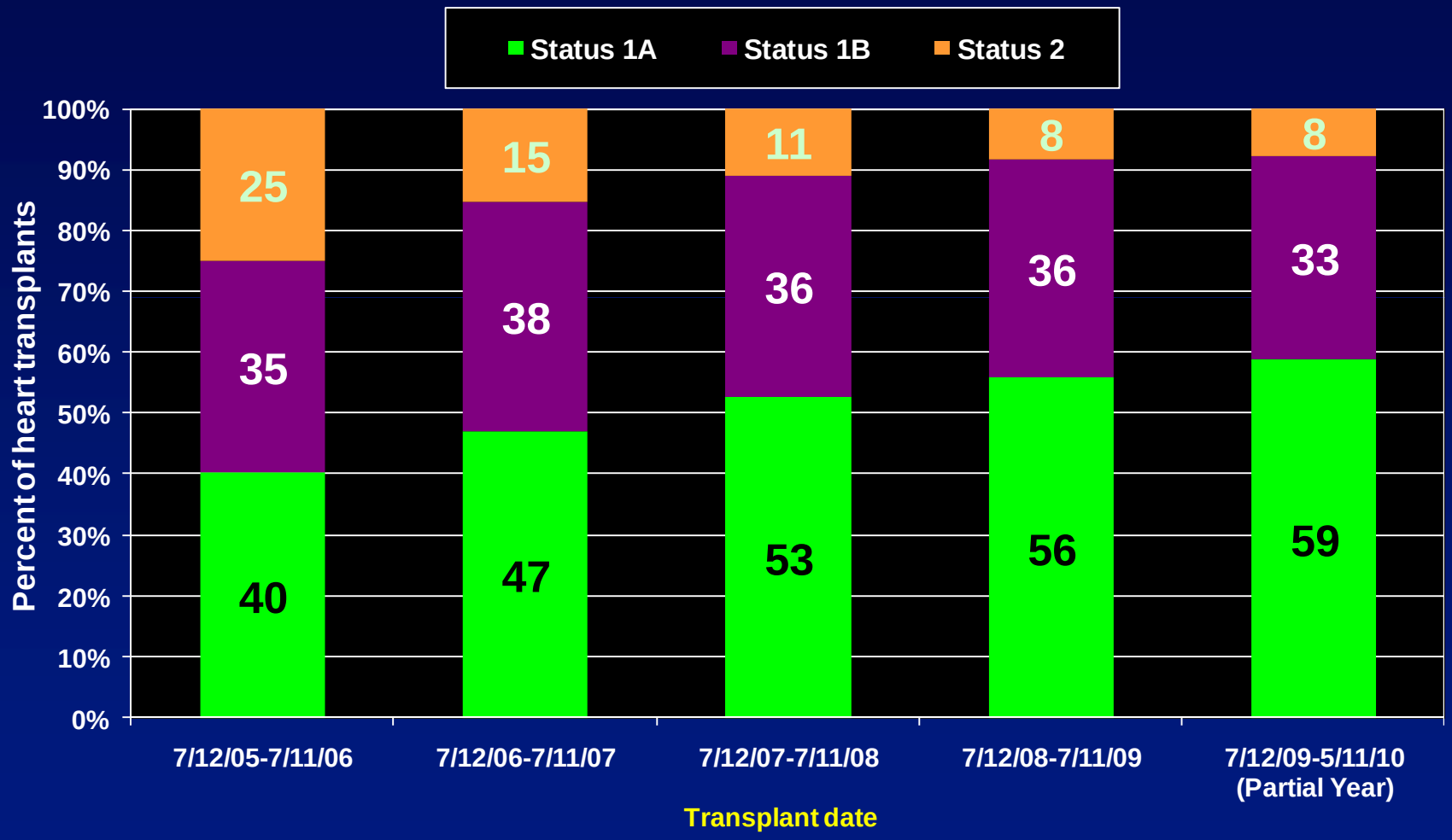
TRANSPLANTS BY ERA AND STATUS:
BY AGE GROUP



OPTN

UNOS DONATE LIFE

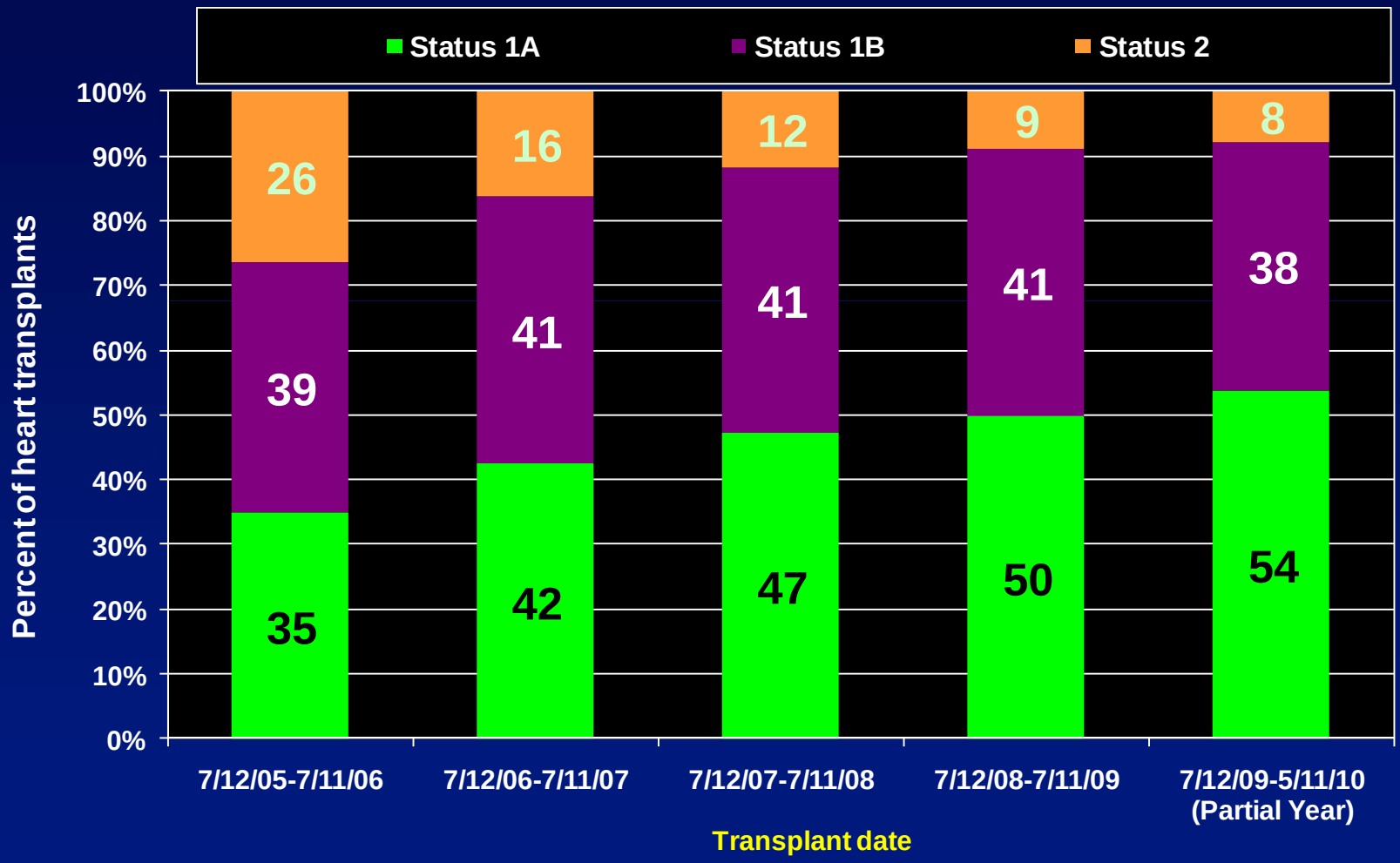
TRANSPLANTS BY ERA AND STATUS:
ALL AGES COMBINED



OPTN

UNOS DONATE LIFE

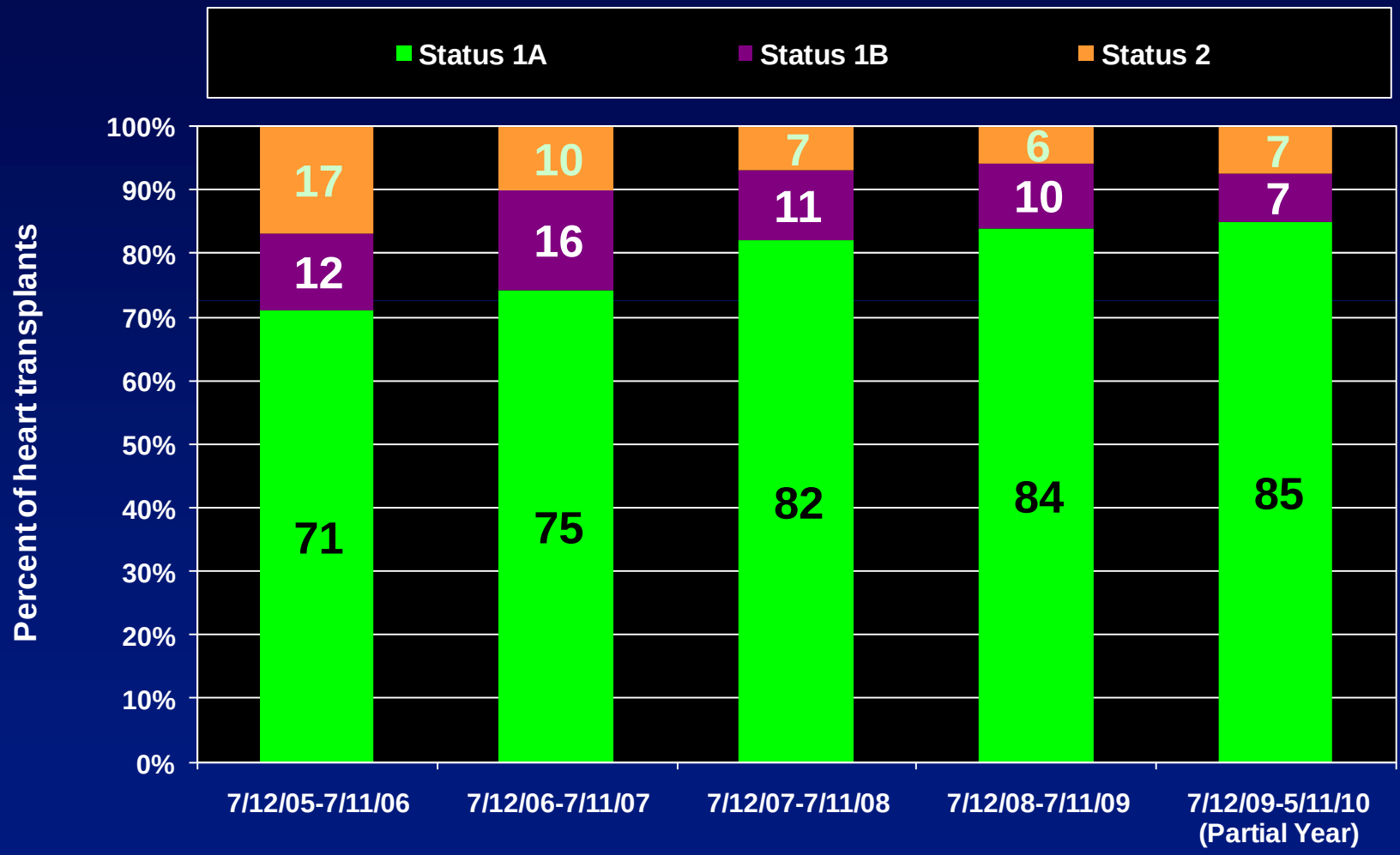
TRANSPLANTS BY ERA AND STATUS:
ADULTS ONLY



OPTN

UNOS DONATE LIFE

TRANSPLANTS BY ERA AND STATUS:
PEDIATRICS ONLY



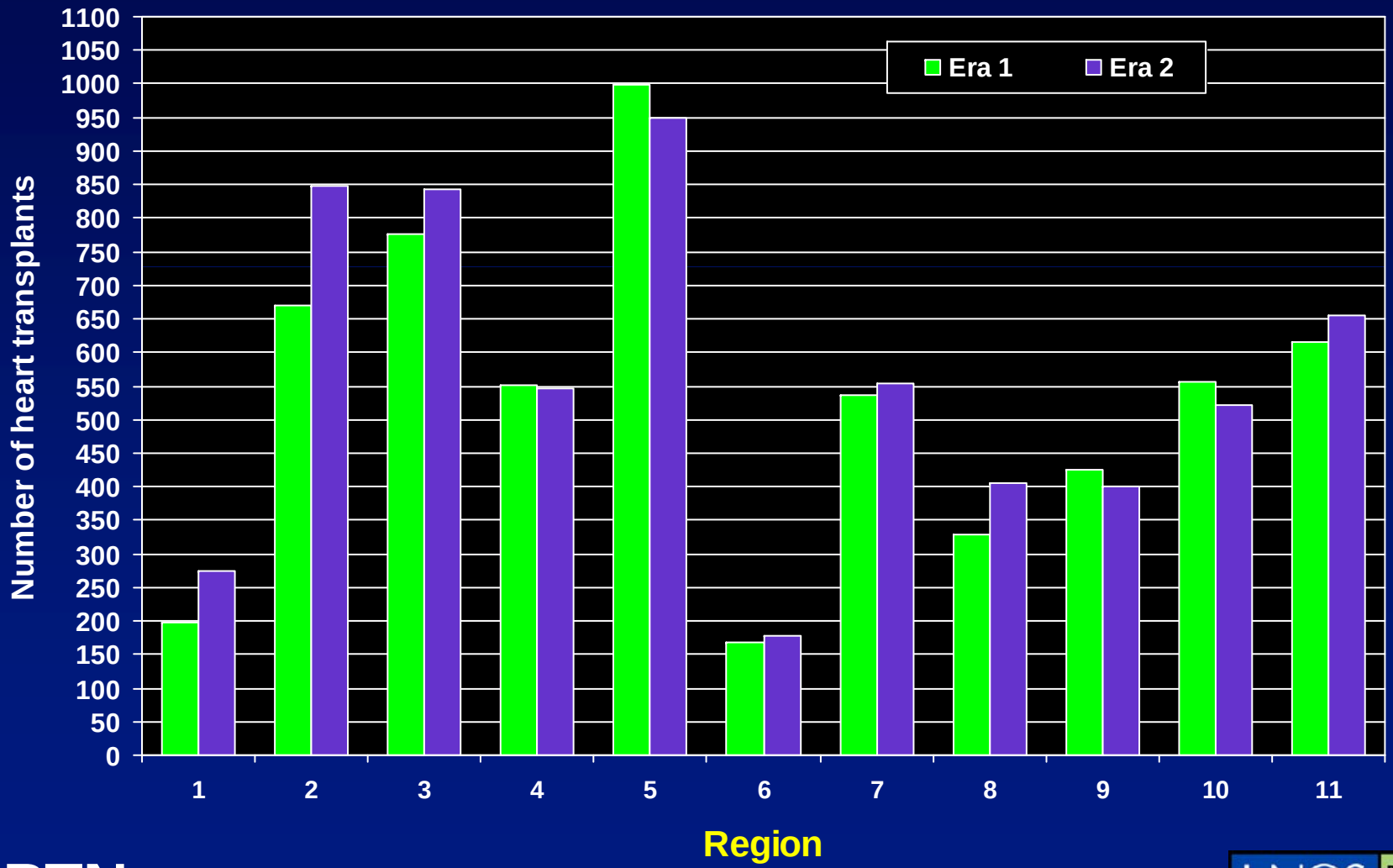
OPTN

Transplant date

UNOS DONATE LIFE

HEART TRANSPLANTS PERFORMED BY REGION

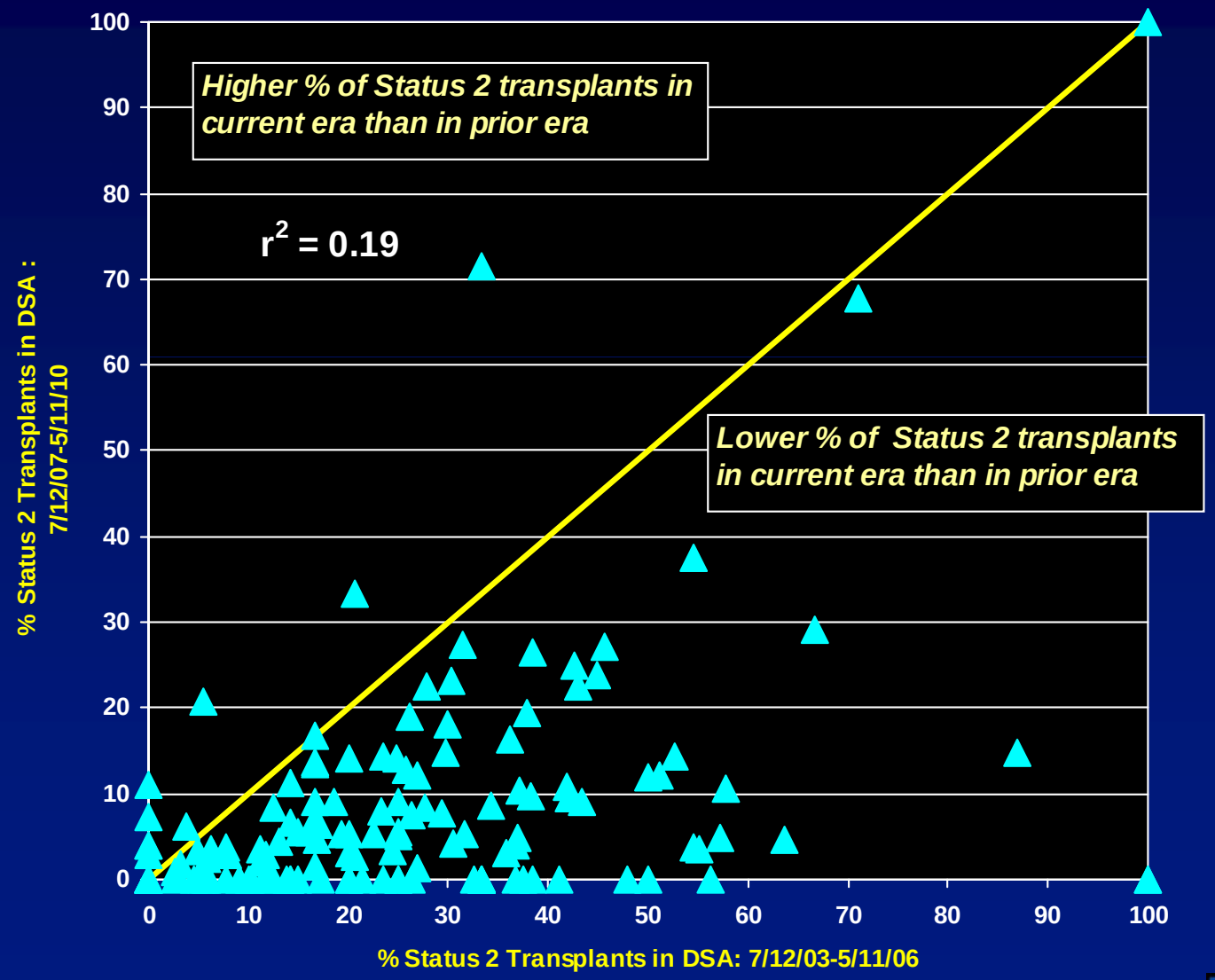
Between 7/12/03-5/11/06 and 7/12/06-5/11/10



OPTN

UNOS DONATE LIFE

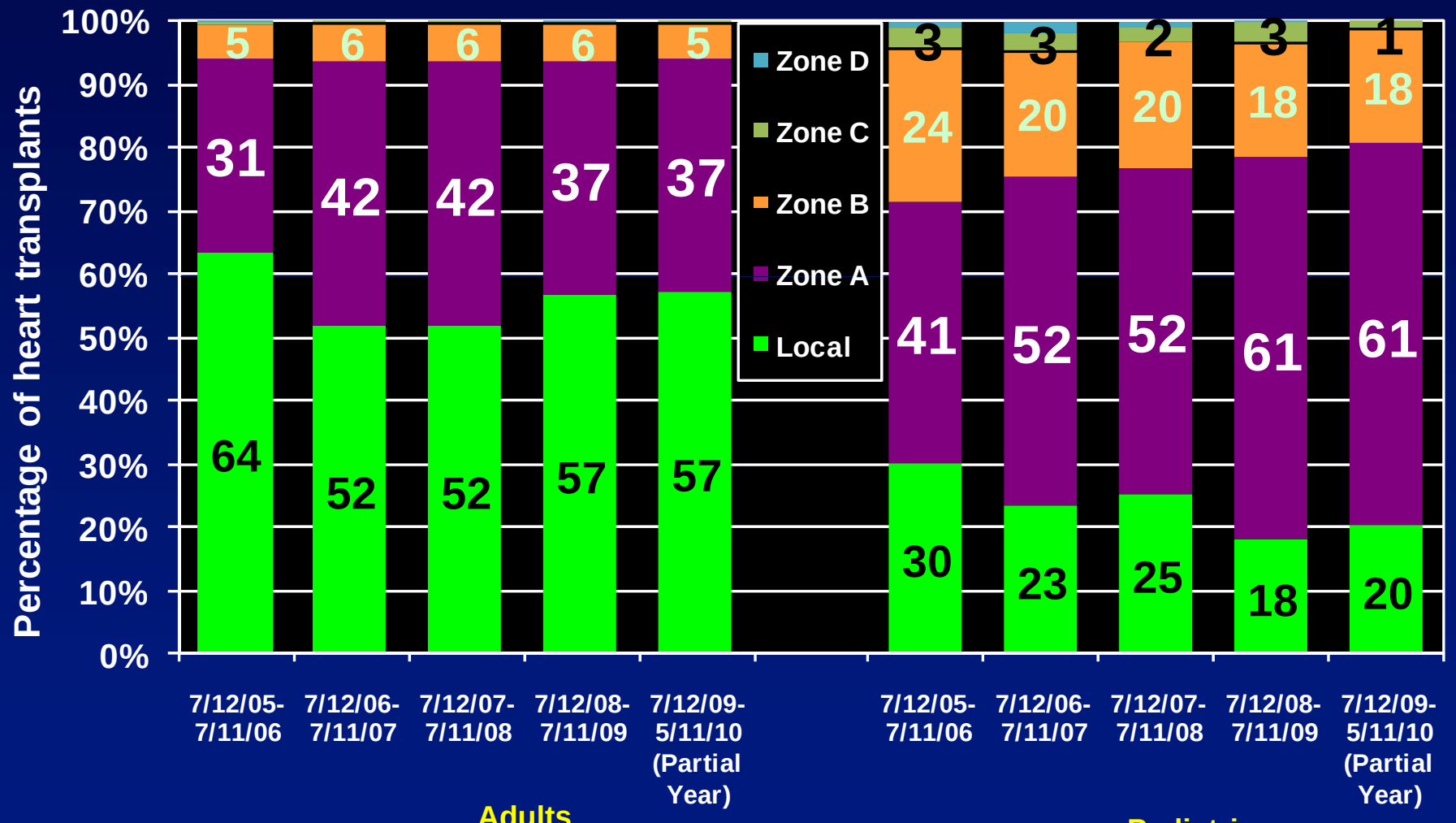
PERCENTAGE OF STATUS 2 HEART TRANSPLANTS PERFORMED AT EACH CENTER



OPTN

UNOS DONATE LIFE

TRANSPLANTS BY ERA AND ZONE:
ADULTS VS. PEDIATRICS

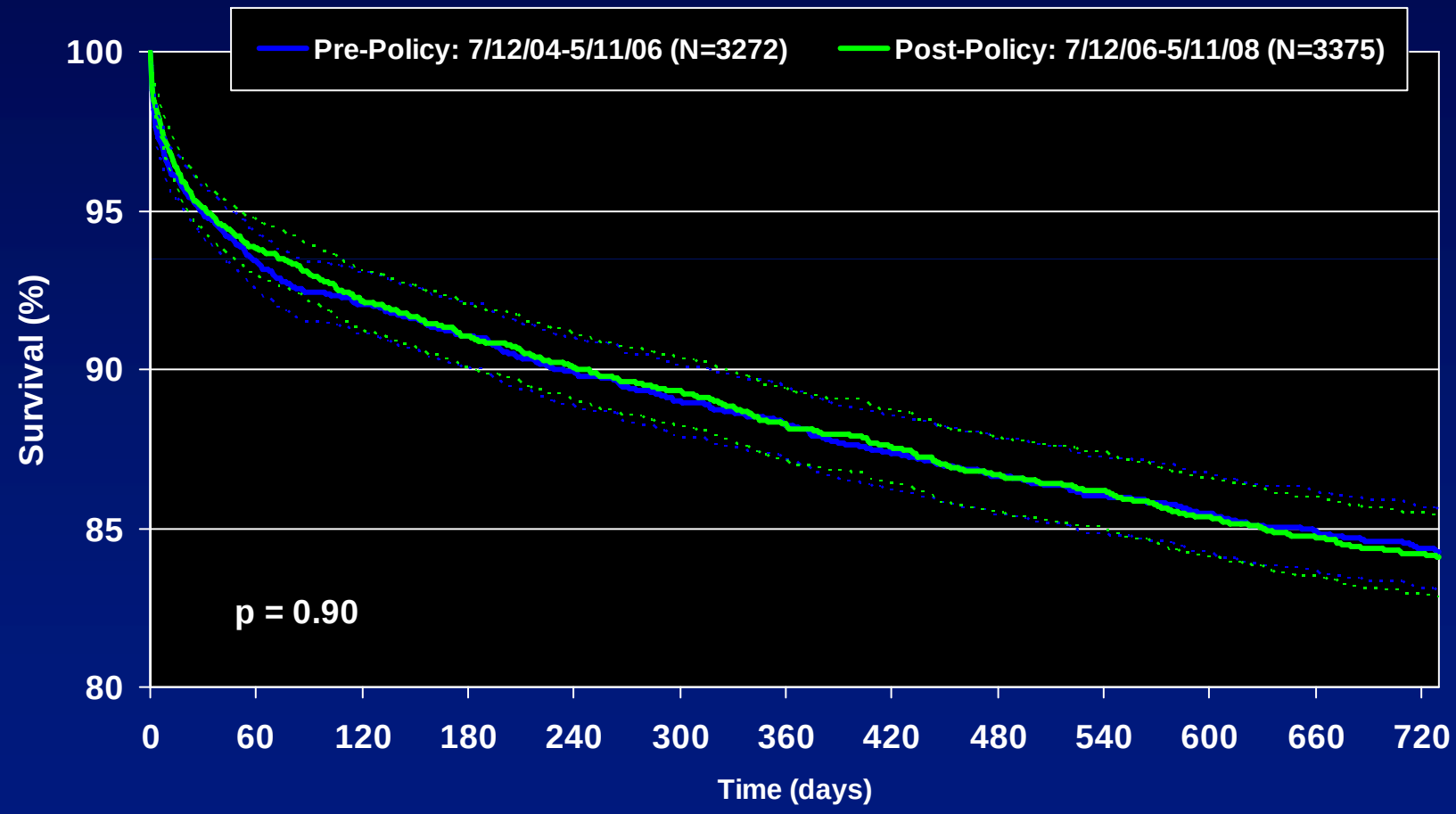


OPTN

UNOS DONATE LIFE

SURVIVAL WITHIN 2 YEARS:

Adult recipients: All statuses combined



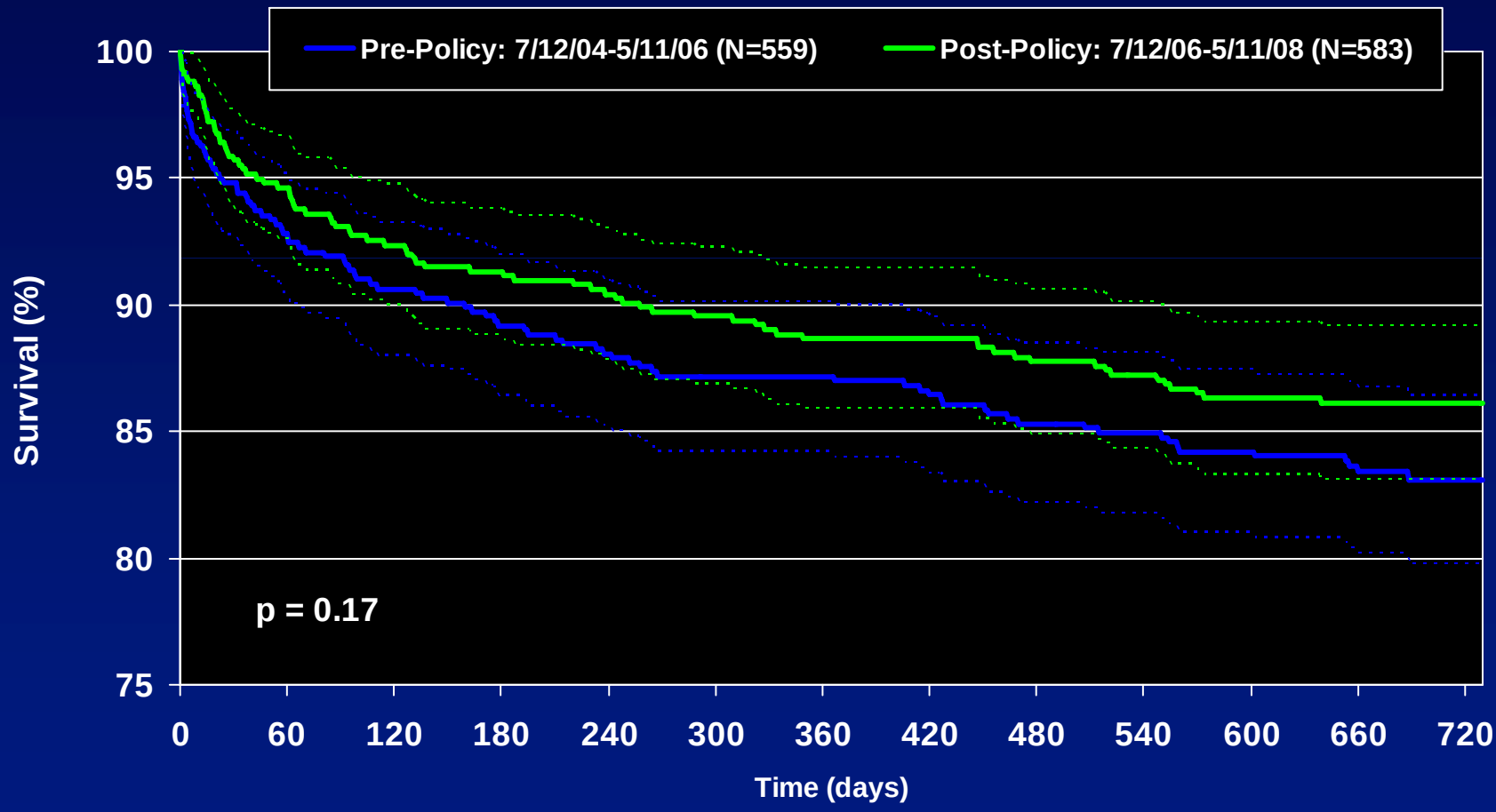
OPTN

NOTE: Scale of survival axis has been expanded.

UNOS DONATE LIFE

SURVIVAL WITHIN 2 YEARS:

Pediatric recipients: All statuses combined



OPTN

NOTE: Scale of survival axis has been expanded.

UNOS DONATE LIFE

SUMMARY – WAITING LIST

- There has been an increase in the number of active waiting list registrations and urgent waiting list registrations
- Waiting list mortality in Status 1A and Status 1B appears to have decreased

SUMMARY – TRANSPLANT

- The number of transplants has remained essentially flat over the past 3 years.
- The distribution of status at transplant has changed: ↑ Status 1A and ↓ Status 2.
- There is no significant change in post-transplant survival within 2 years for adults or pediatrics, overall or by status at transplant.

LUNG ALLOCATION SCORE SYSTEM DATA UPDATE

Fall 2010 Regional Meetings

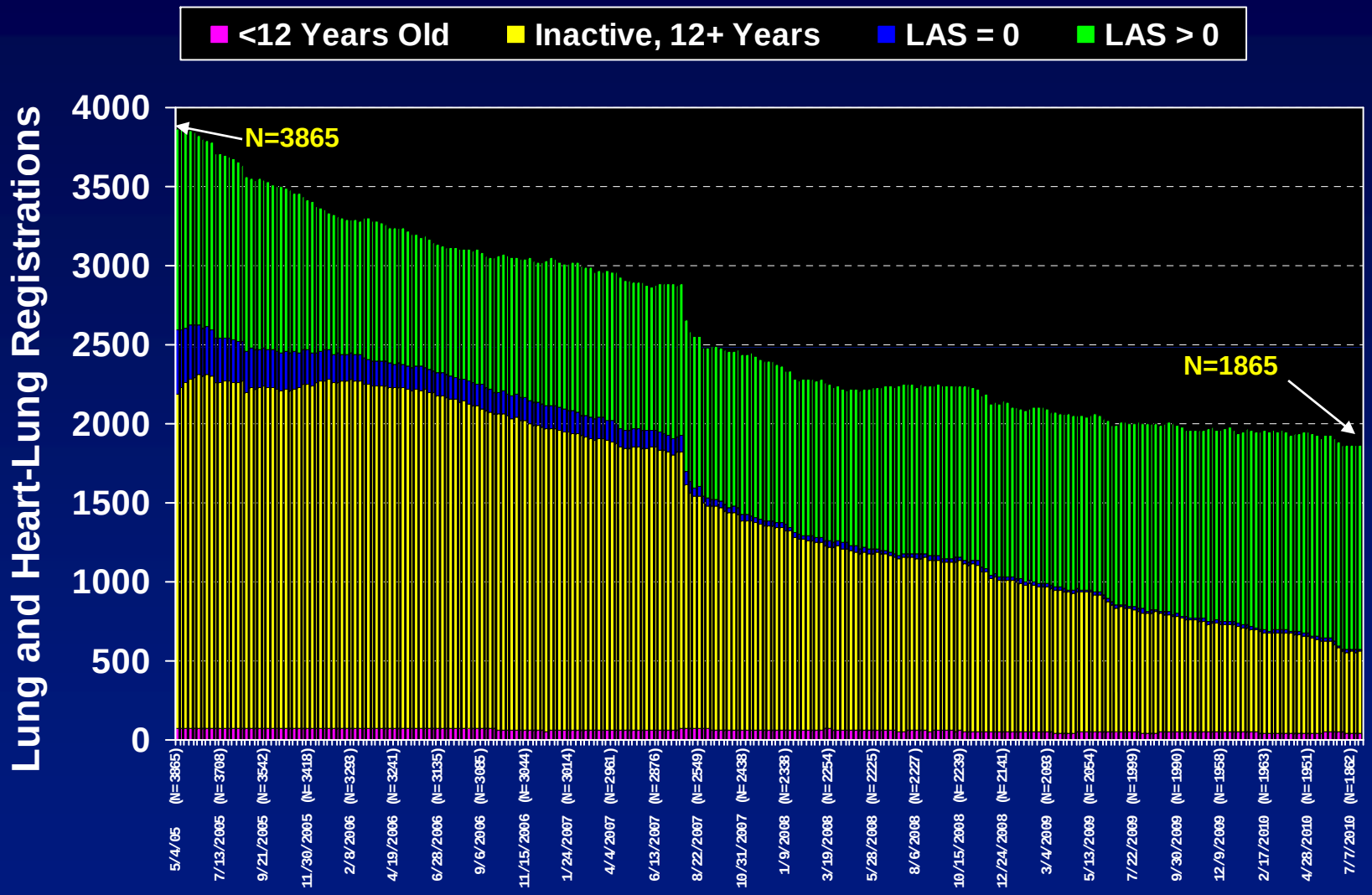
Based on OPTN data as of July 23, 2010

OPTN

UNOS DONATE LIFE

LUNG ALLOCATION SCORE STATUS

For All Registrations



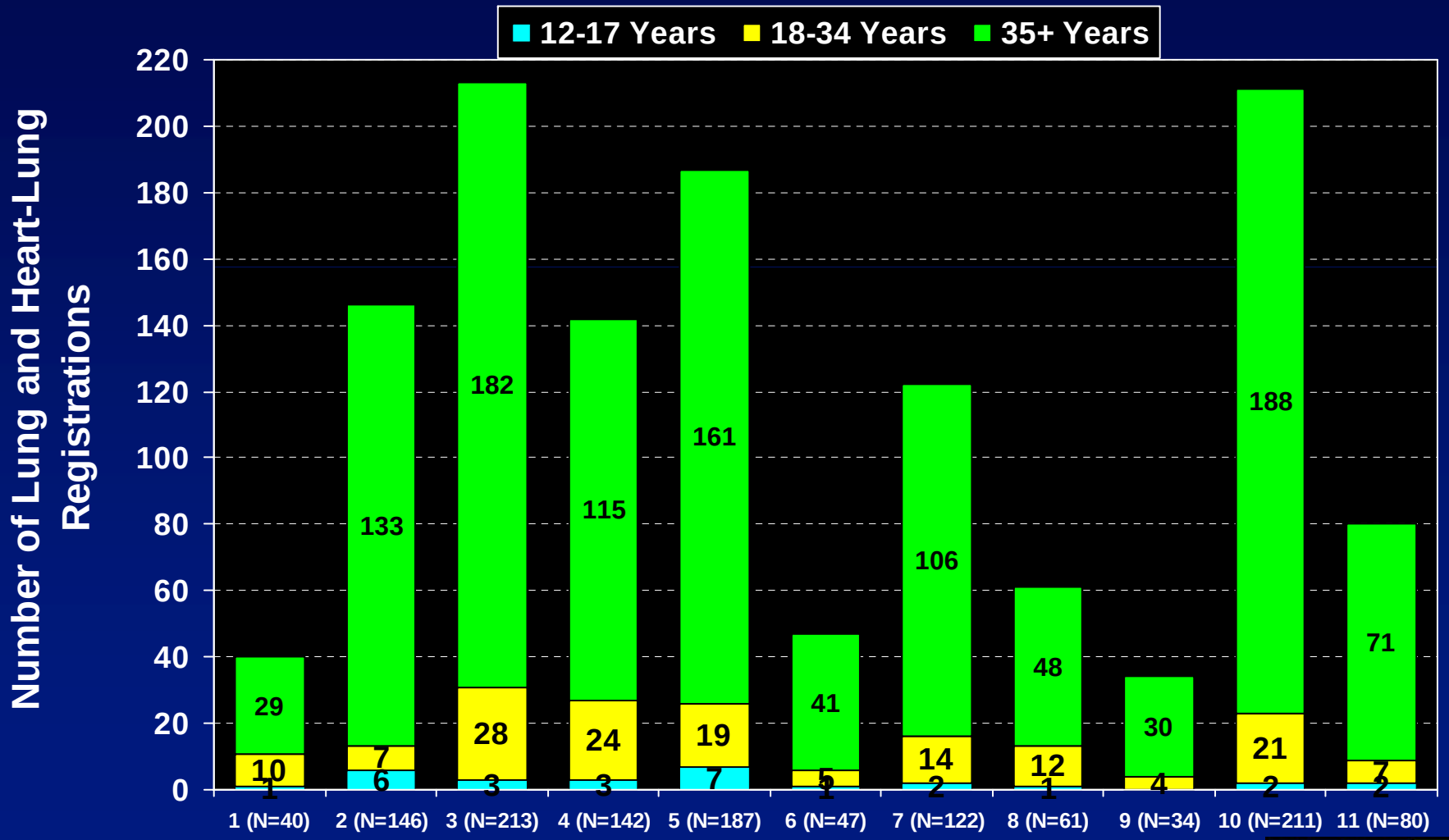
OPTN

NOTE: As of November 2, 2005, candidates with a zero LAS have been screened from match runs.

UNOS DONATE LIFE

ACTIVE LUNG AND HEART-LUNG REGISTRATIONS (12+) WITH NON-ZERO SCORE

On July 23, 2010, by Region and Age Group (1)

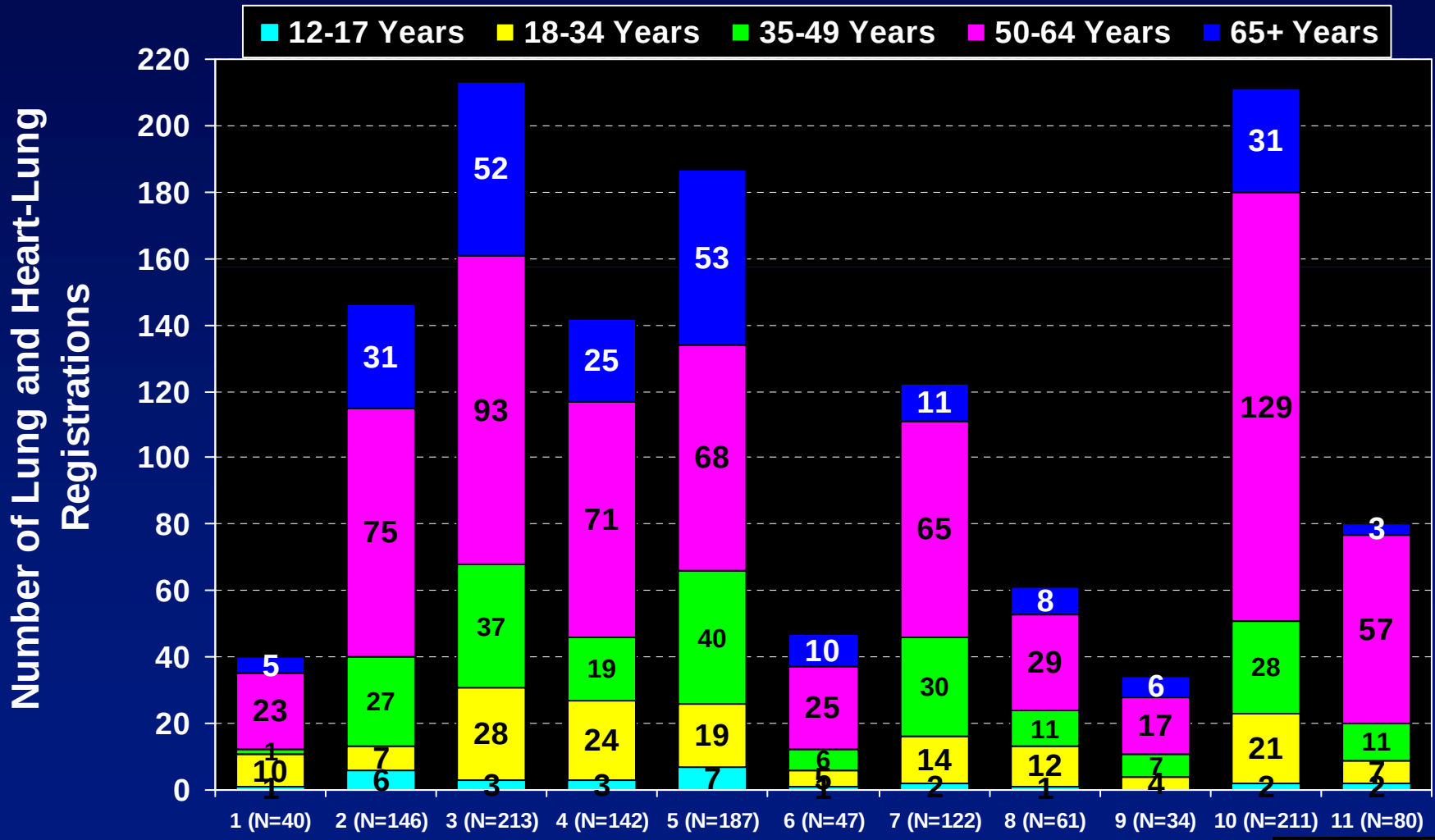


OPTN

UNOS DONATE LIFE

ACTIVE LUNG AND HEART-LUNG REGISTRATIONS (12+) WITH NON-ZERO SCORE

On July 23, 2010, by Region and Age Group (2)

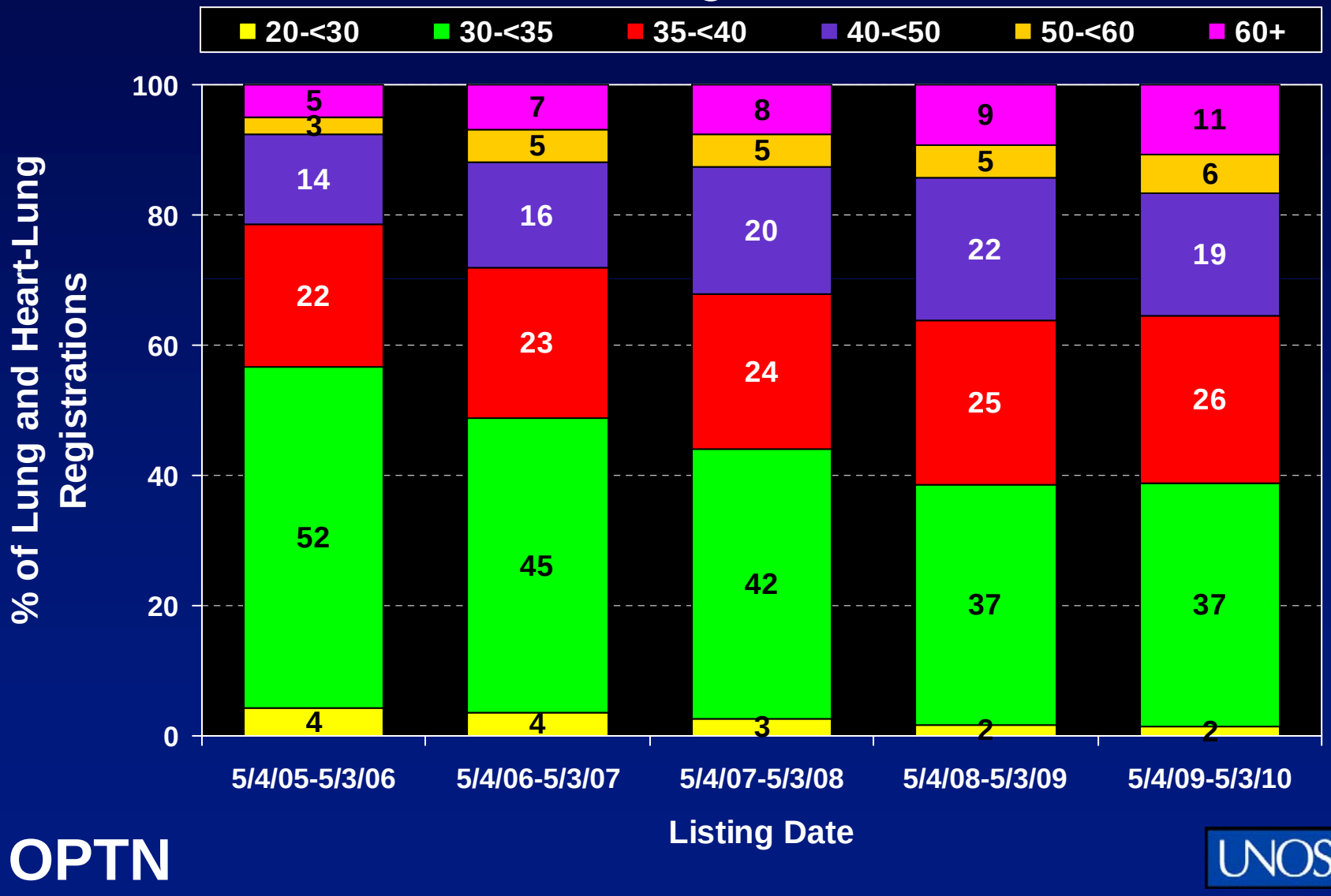


OPTN

UNOS DONATE LIFE

CALCULATED LAS AT TIME OF LISTING FOR LUNG AND HEART-LUNG REGISTRATIONS (12+)

Excluding 0 LAS



OPTN

UNOS DONATE LIFE

DEATHS PER 100 PATIENT YEARS:

LU candidates ever waiting (12+ years at time of listing)

Diagnosis grouping	Ever listed: 5/4/00-11/3/04 (pre-LAS)				Ever listed: 5/4/05-11/3/09 (post-LAS)			
	Patients ever waiting during era	Deaths in period	Patient-years in status (PY)	Death/ 100 PY	Patients ever waiting during era	Deaths in period	Patient-years in status (PY)	Death/ 100 PY
A	5099	701	7408.5	9.5	4219	309	4760.8	6.5
B	1108	251	2353.0	10.7	881	142	1465.1	9.7
C	1626	368	2351.6	15.6	1481	205	1569.9	13.1
D	3360	894	3946.5	22.7	4858	697	3159.3	22.1
ALL	11123	2239	16118	13.9	11307	1353	10956	12.3

NOTE: Caution should be used in drawing conclusions based on death rates due to differences in patient populations and the small number of deaths in some groups.

OPTN

* Deaths include those reported to the OPTN or to SSDMF while on waiting list or ≤ 7 days of non-transplant removal

UNOS DONATE LIFE

TRANSPLANTS

OPTN

UNOS DONATE LIFE

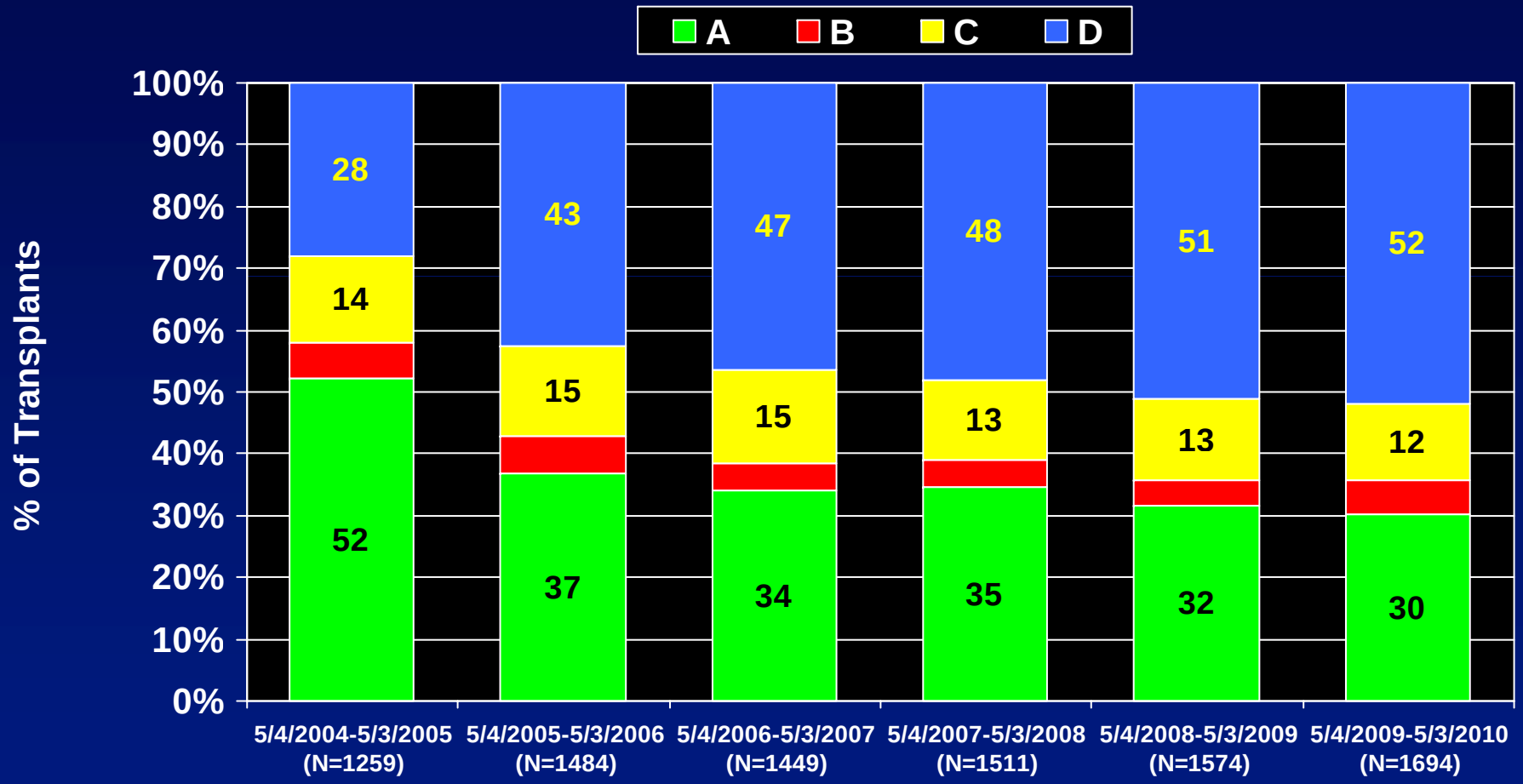
DECEASED DONOR LUNG AND HEART-LUNG TRANSPLANTS: 5/4/04-5/3/10

OPTN

UNOS DONATE LIFE

DECEASED DONOR LUNG AND HEART-LUNG TRANSPLANTS: 5/4/04-5/3/10

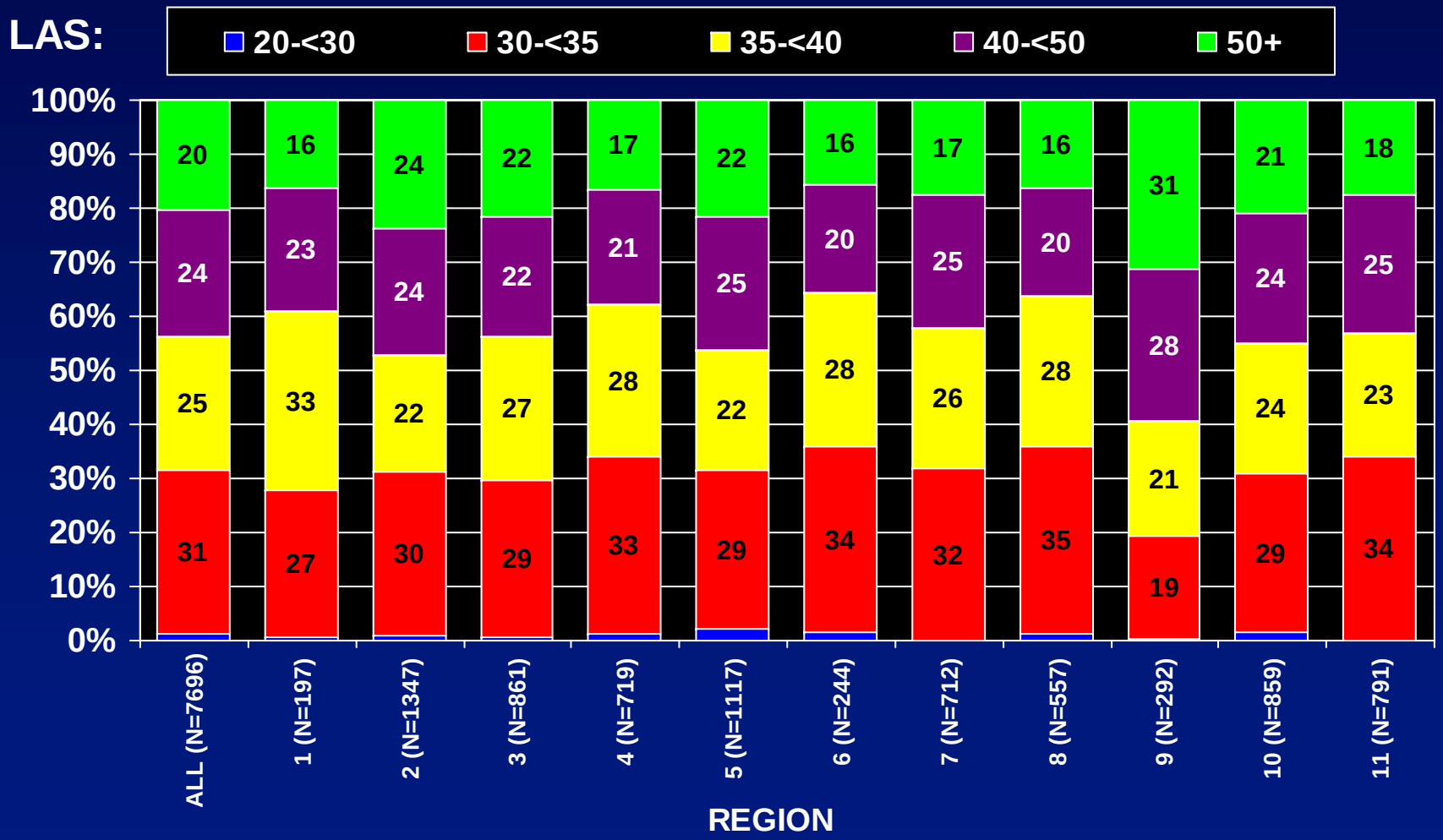
By Diagnosis Grouping



OPTN

UNOS DONATE LIFE

DISTRIBUTION OF LAS AT TRANSPLANT BY REGION: 5/4/2005-5/3/2010

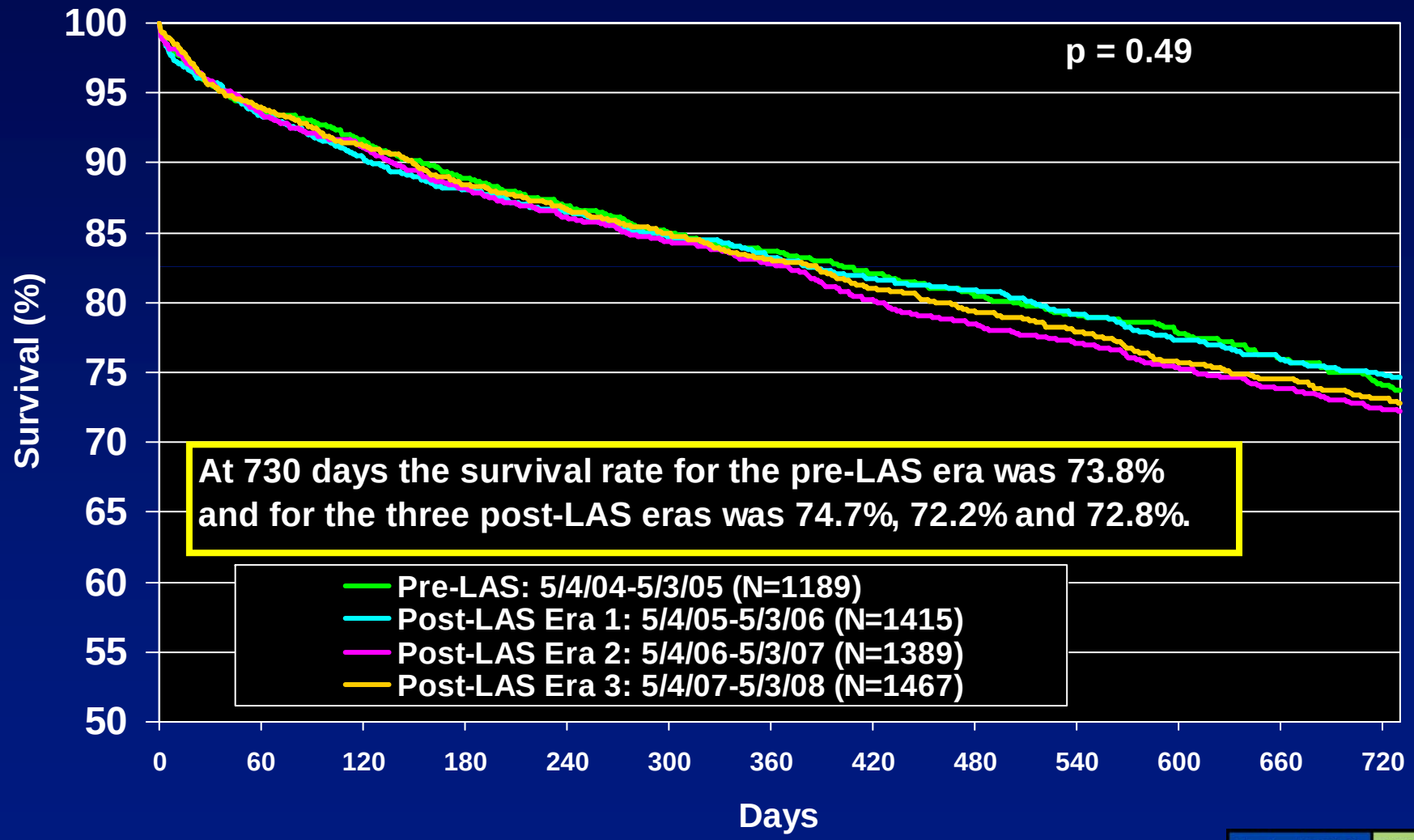


OPTN

UNOS DONATE LIFE

POST-TRANSPLANT SURVIVAL WITHIN 2 YEARS WITHOUT CONFIDENCE LIMITS

For Recipients 12+ Years



OPTN

UNOS DONATE LIFE

SUMMARY – WAITING LIST

- The total number of WL candidates is substantially lower than prior to the implementation of LAS.
- The number of active candidates 12+ years has increased during the most recent two years.
- The distribution of LAS at listing has shifted towards higher scores in the years since implementation
- The waiting list mortality is lower overall in the post-policy era compared to the pre-policy era. This same pattern was seen within all diagnosis groups.

SUMMARY – TRANSPLANT

- The percentage of lungs transplanted has increased from pre- to post-LAS.
- There was a huge increase in the number of transplants from pre-LAS to post-LAS. There was also a large increase in transplants during the most recent complete year.
- There has been a substantial shift in the distribution of diagnosis from pre-LAS (>50% group A) to post-LAS (>50% group D).
- Post-transplant survival is comparable pre- and post-LAS, overall and by diagnosis grouping.