우리나라 신대체 요법의 현황

– 인산 민병석 교수 기념 말기 신부전 환자 등록사업 2011 –

Current Renal Replacement Therapy in Korea

-Insan Memorial Dialysis Registry 2011-

대한신장학회 등록위원회

ESRD Registry Committee, Korean Society of Nephrology

Oct. 2012

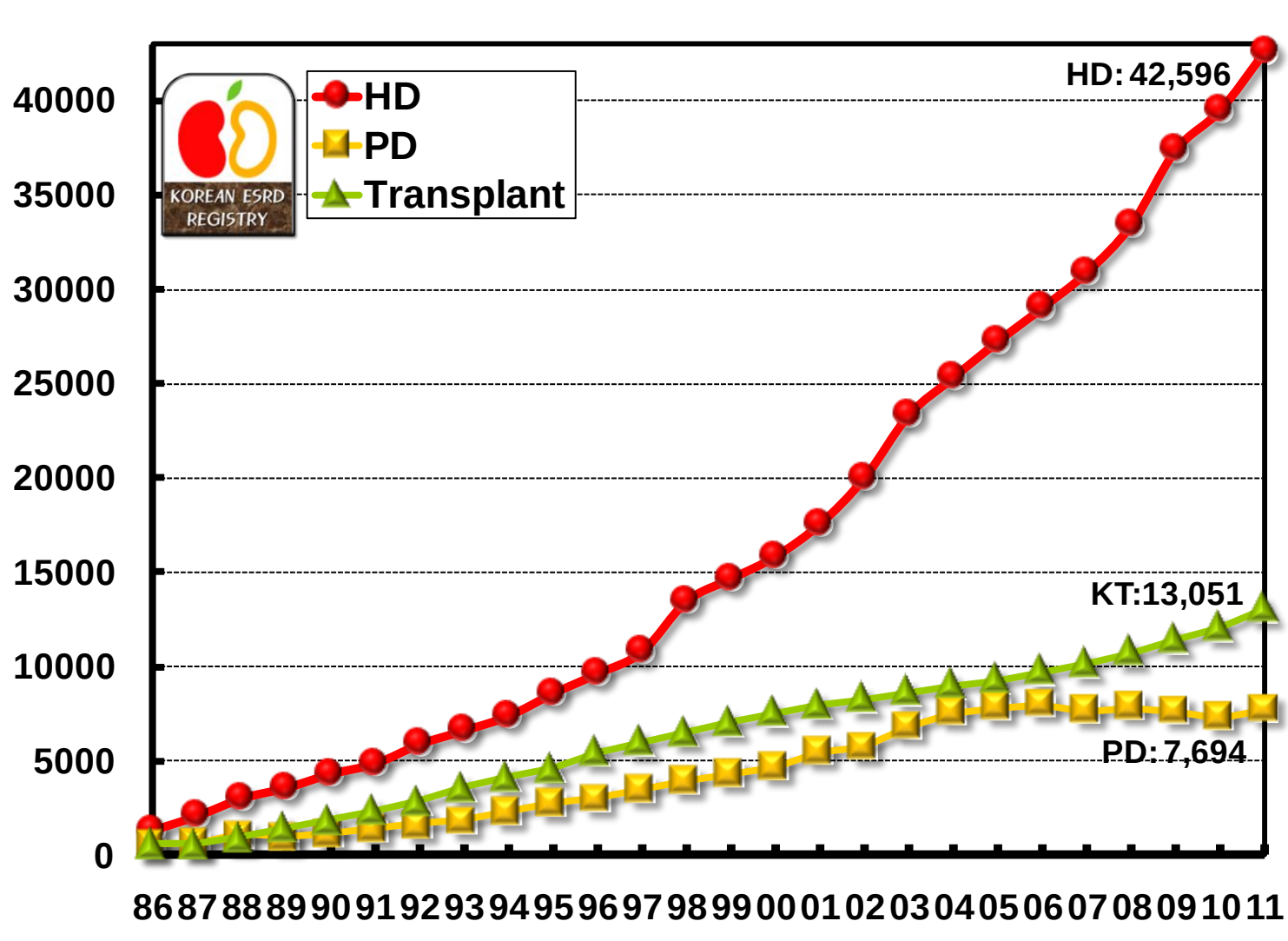
KOREAN ESRD REGISTRY

Prevalence of Renal Replacement Therapy

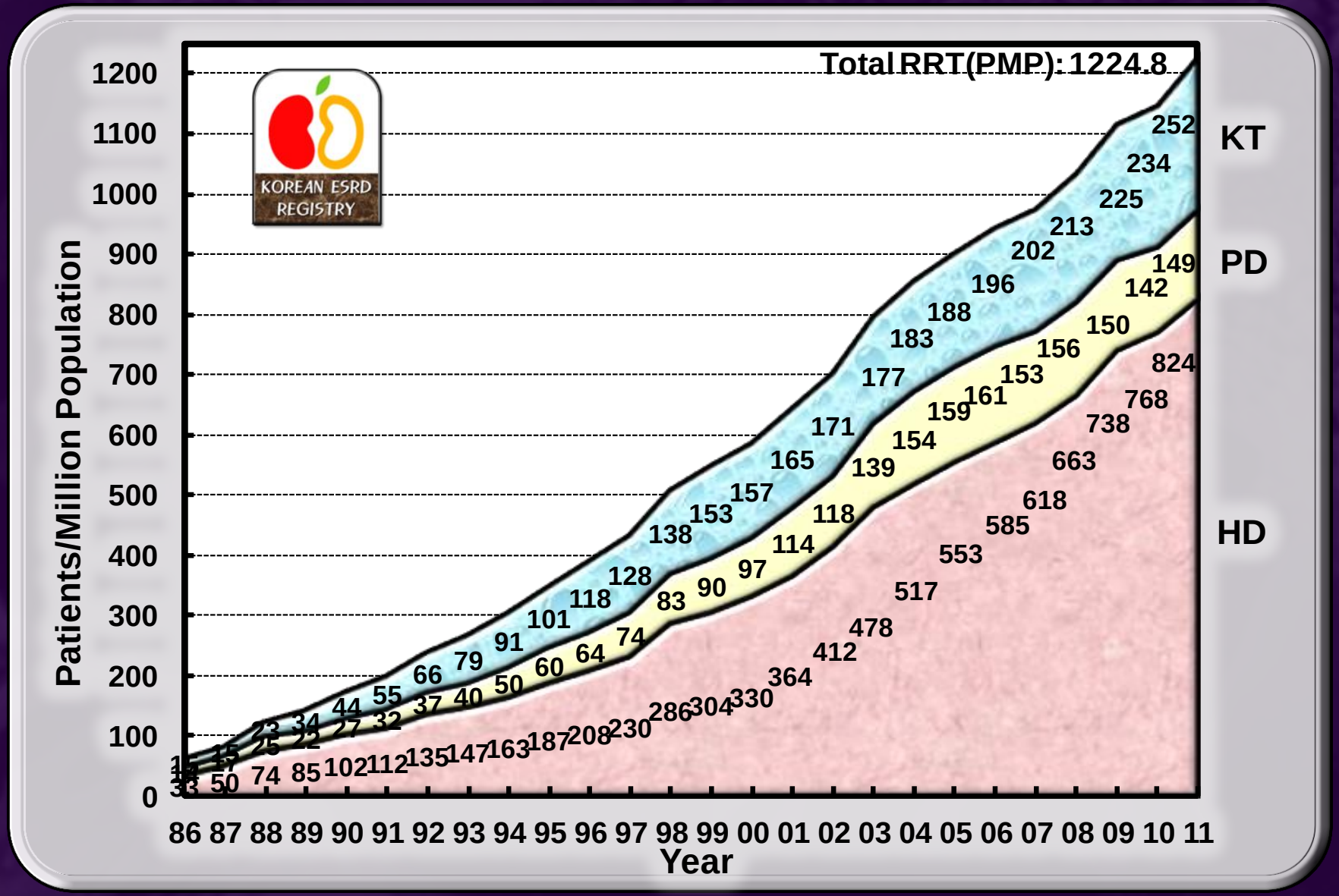
Year	HD		PD		Transplant		Total	
1986	1,335	(32.6)	573	(13.9)	621	(15.1)	2,534	(61.7)
1988	3,012	(74.0)	1,058	(25.2)	982	(23.4)	5,142	(122.7)
1990	4,311	(101.8)	1,130	(26.7)	1,866	(44.1)	7,307	(172.6)
1992	5,890	(135.3)	1,599	(36.7)	2,862	(65.8)	10,351	(237.8)
1994	7,387	(162.7)	2,284	(50.3)	4,116	(90.6)	13,787	(303.6)
1996	9,635	(207.5)	2,976	(64.1)	5,461	(117.6)	18,072	(389.2)
1998	13,473	(285.6)	3,912	(82.9)	6,515	(138.1)	23,900	(506.7)
2000	15,853	(330.4)	4,671	(97.4)	7,522	(156.8)	28,046	(584.5)
2001	17,568	(363.8)	5,489	(113.7)	7,957	(164.8)	31,014	(642.3)
2002	20,010	(412.4)	5,712	(117.7)	8,271	(170.5)	33,993	(700.6)
2003	23,348	(478.2)	6,807	(139.4)	8,635	(176.9)	38,790	(794.5)
2004	25,335	(516.5)	7,569	(154.3)	8,987	(183.2)	41,891	(854.0)
2005	27,246	(553.0)	7,816	(158.6)	9,271	(188.2)	44,333	(899.8)
2006	29,031	(585.0)	7,990	(161.0)	9,709	(195.7)	46,730	(941.7)
2007	30,907	(617.7)	7,649	(152.9)	10,119	(202.2)	48,675	(972.8)
2008	33,427	(663.3)	7,840	(155.6)	10,722	(212.8)	51,989	(1031.6)
2009	37,391	(738.3)	7,618	(150.4)	11,387	(224.8)	56,396	(1113.6)
2010	39,509	(768.1)	7,309	(142.1)	12,042	(234.1)	58,860	(1144.4)
2011	42,596	(823.6)	7,694	(148.8)	13,051	(252.4)	63,341	(1224.8)

( ): number of patients per million population, Population in Korea at the end of 2011: 51,716,745.

Patient Number of RRT



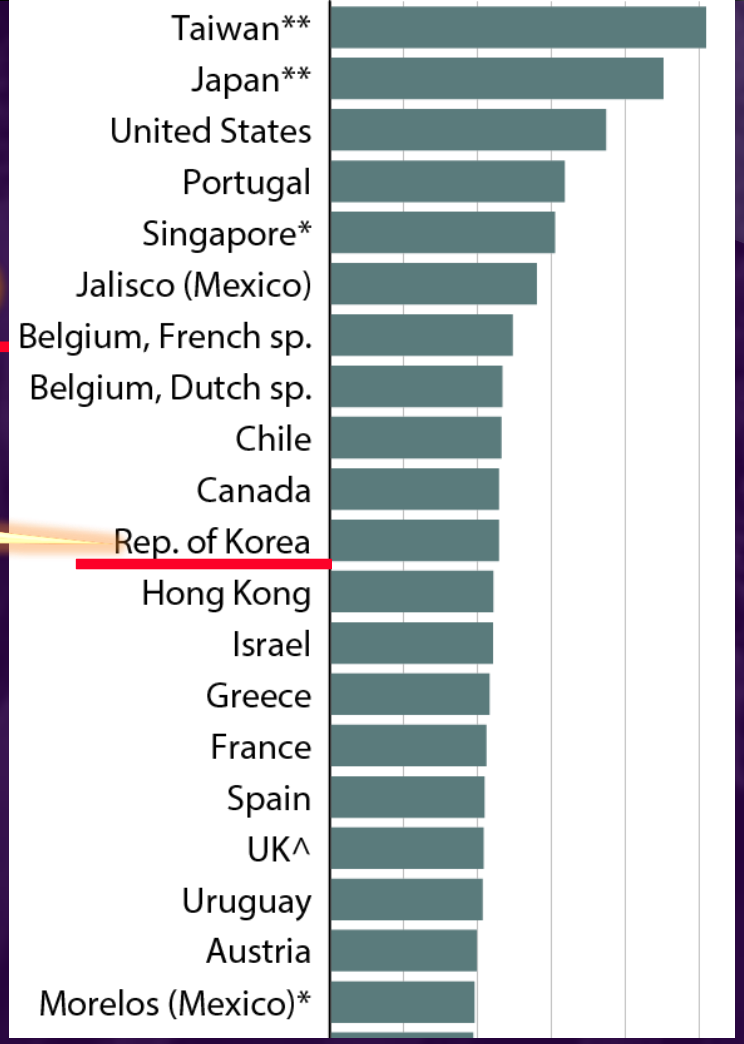
Point Prevalence of RRT



KOREAN ESRD REGISTRY

Prevalence of ESRD

1144.4 PMP
End of 2010



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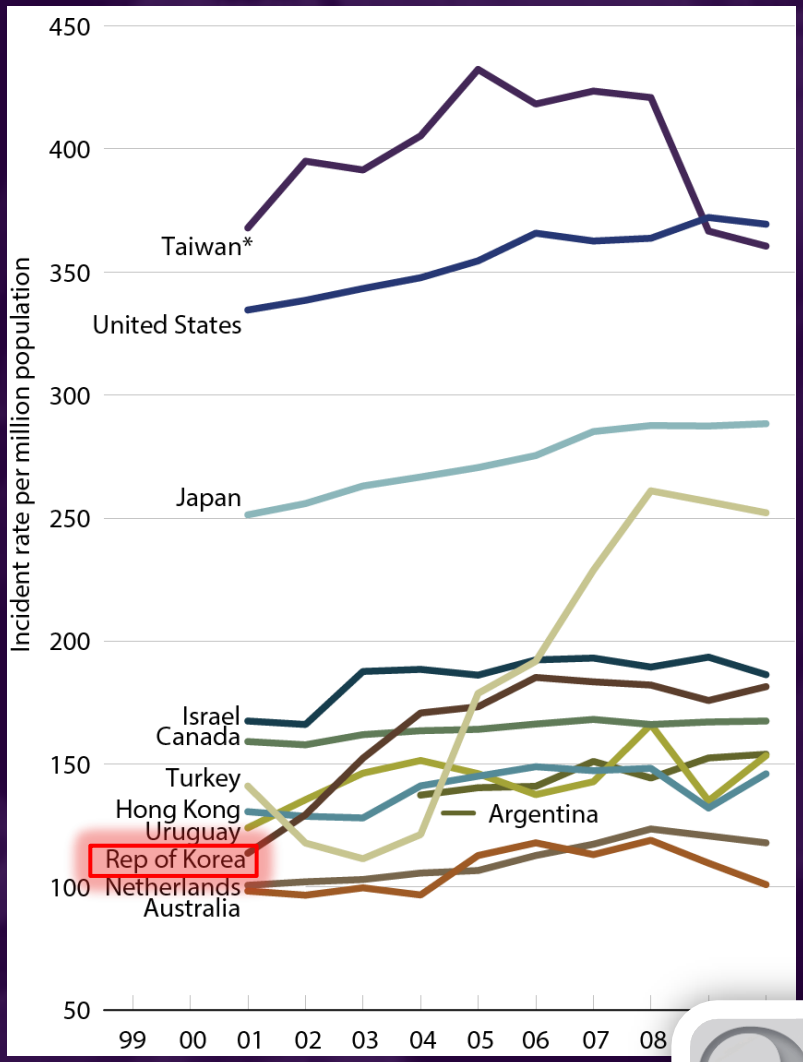
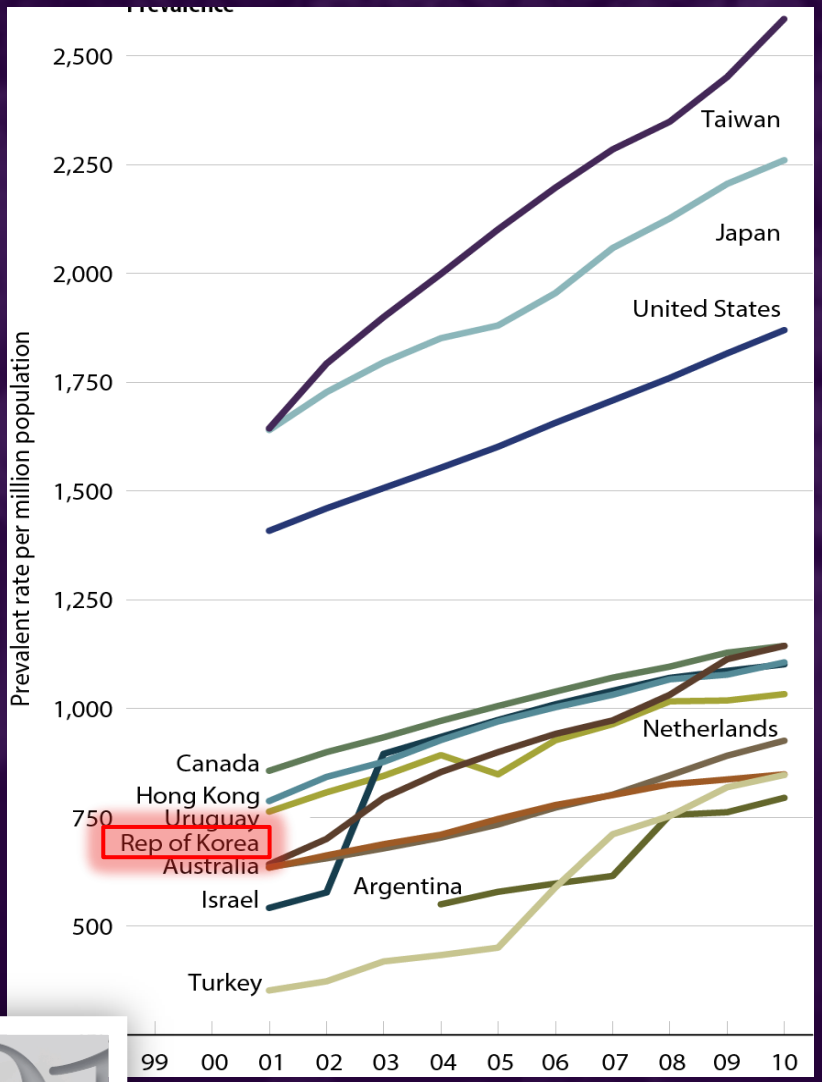
Oct. 2012

KOREAN ESRD REGISTRY

Incidence of ESRD



Prevalence of ESRD



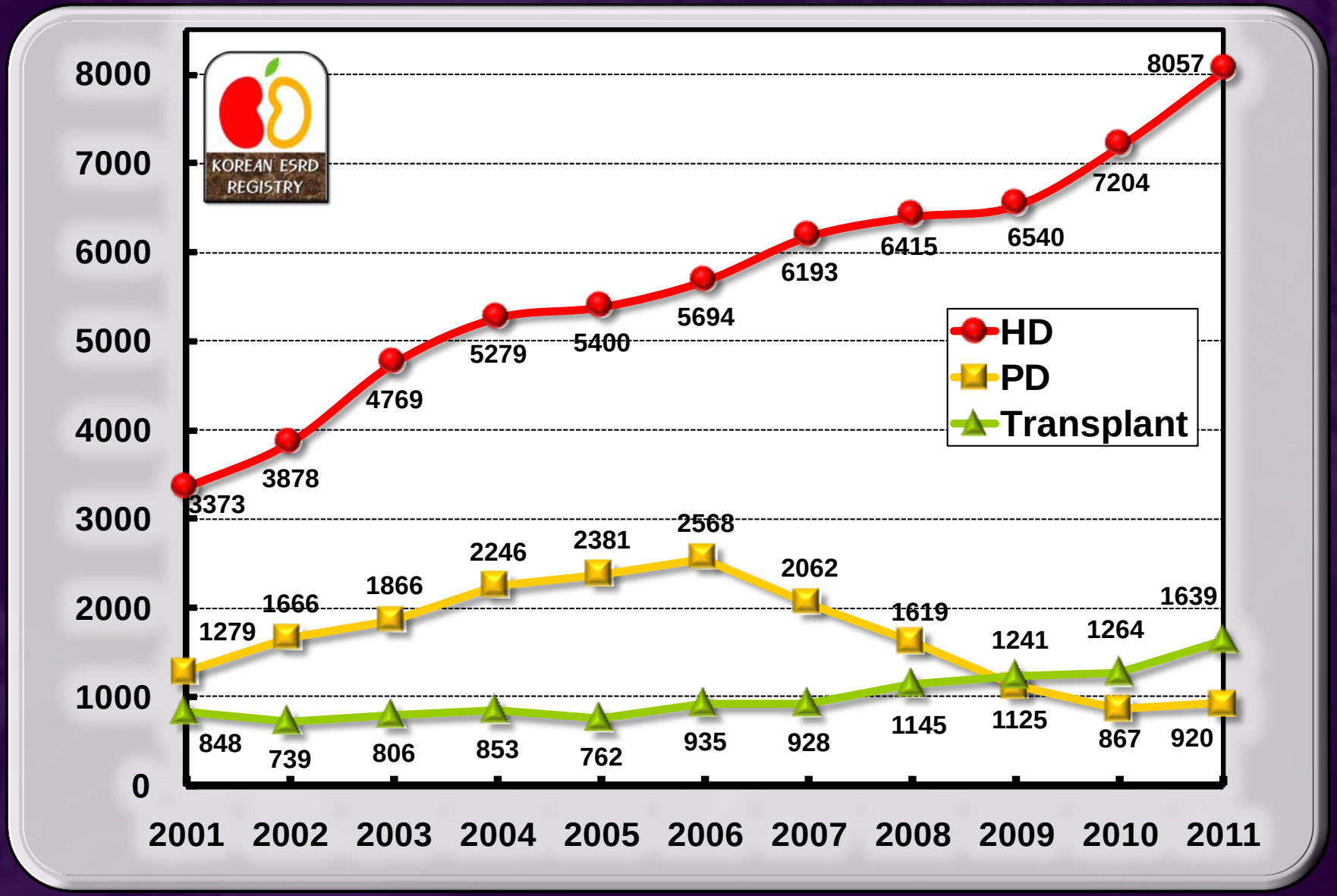
KOREAN ESRD REGISTRY

Number of New RRT Patients

Year	HD		PD		Transplant		Total	
1986	670	(16.3)	287	(7.0)	221	(5.4)	1,173	(28.7)
1988	1,516	(36.2)	375	(8.9)	428	(10.2)	2,319	(55.3)
1990	2,418	(57.1)	530	(12.5)	624	(14.7)	3,572	(84.3)
1992	3,083	(70.8)	705	(16.2)	765	(17.6)	4,553	(104.6)
1994	2,999	(66.0)	907	(19.9)	685	(15.1)	4,591	(101.1)
1996	3,670	(79.0)	1,388	(29.9)	919	(19.8)	5,977	(128.7)
1998	2,463	(52.2)	753	(15.9)	994	(21.1)	4,210	(89.3)
2000	2,736	(57.0)	1,021	(21.3)	683	(14.2)	4,440	(92.5)
2001	3,373	(69.9)	1,279	(26.5)	848	(17.6)	5,500	(113.9)
2002	3,878	(79.9)	1,666	(34.3)	739	(15.2)	6,283	(129.5)
2003	4,769	(97.7)	1,866	(38.2)	806	(16.5)	7,441	(152.4)
2004	5,279	(107.6)	2,246	(45.8)	853	(17.4)	8,378	(170.8)
2005	5,400	(109.6)	2,381	(48.3)	762	(15.5)	8,543	(173.4)
2006	5,694	(114.7)	2,568	(51.7)	935	(18.8)	9,197	(185.3)
2007	6,193	(123.8)	2,062	(41.2)	928	(18.5)	9,183	(183.5)
2008	6,415	(127.3)	1,619	(32.1)	1,145	(22.7)	9,179	(182.1)
2009	6,540	(129.1)	1,125	(22.2)	1,241	(24.5)	8,906	(175.9)
2010	7,204	(140.1)	867	(16.9)	1,264	(24.6)	9,335	(181.5)
2011	8,057	(155.8)	920	(17.8)	1,639	(31.7)	10,616	(205.3)

( ): number of patients per million population. Population in Korea at the end of 2011: 51,716,745.

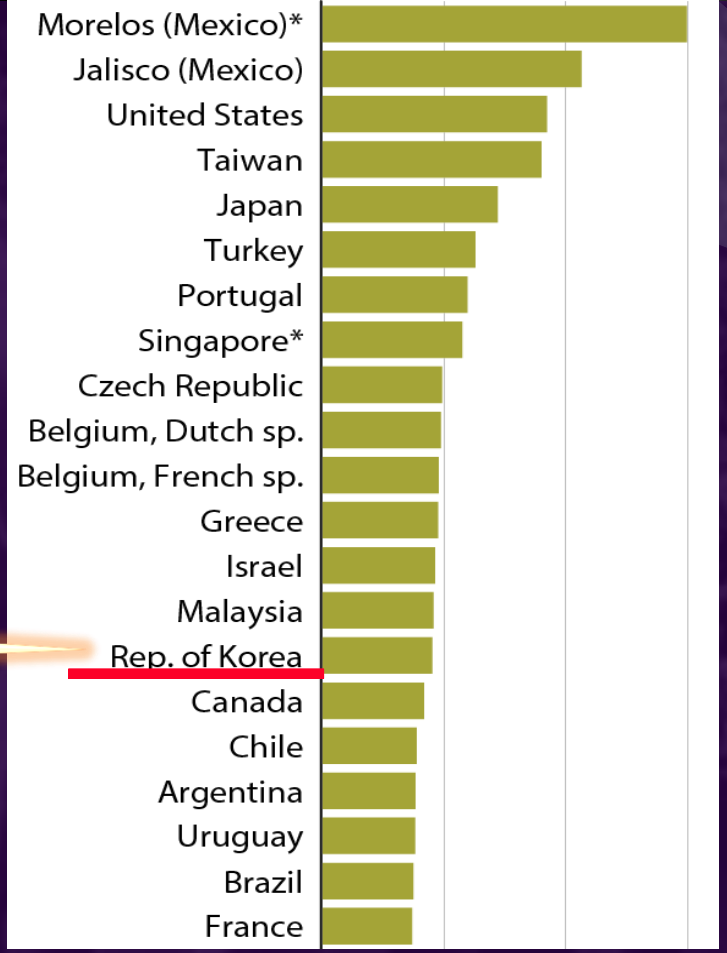
Number of New RRT Patients

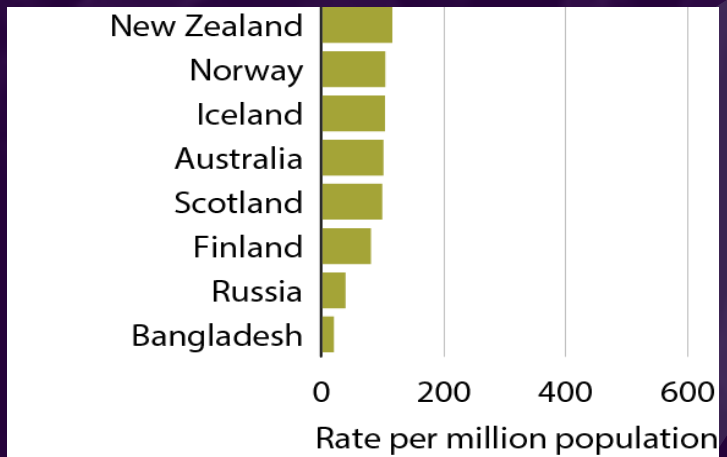


KOREAN ESRD REGISTRY

Incidence of ESRD

181.5 PMP
End of 2010





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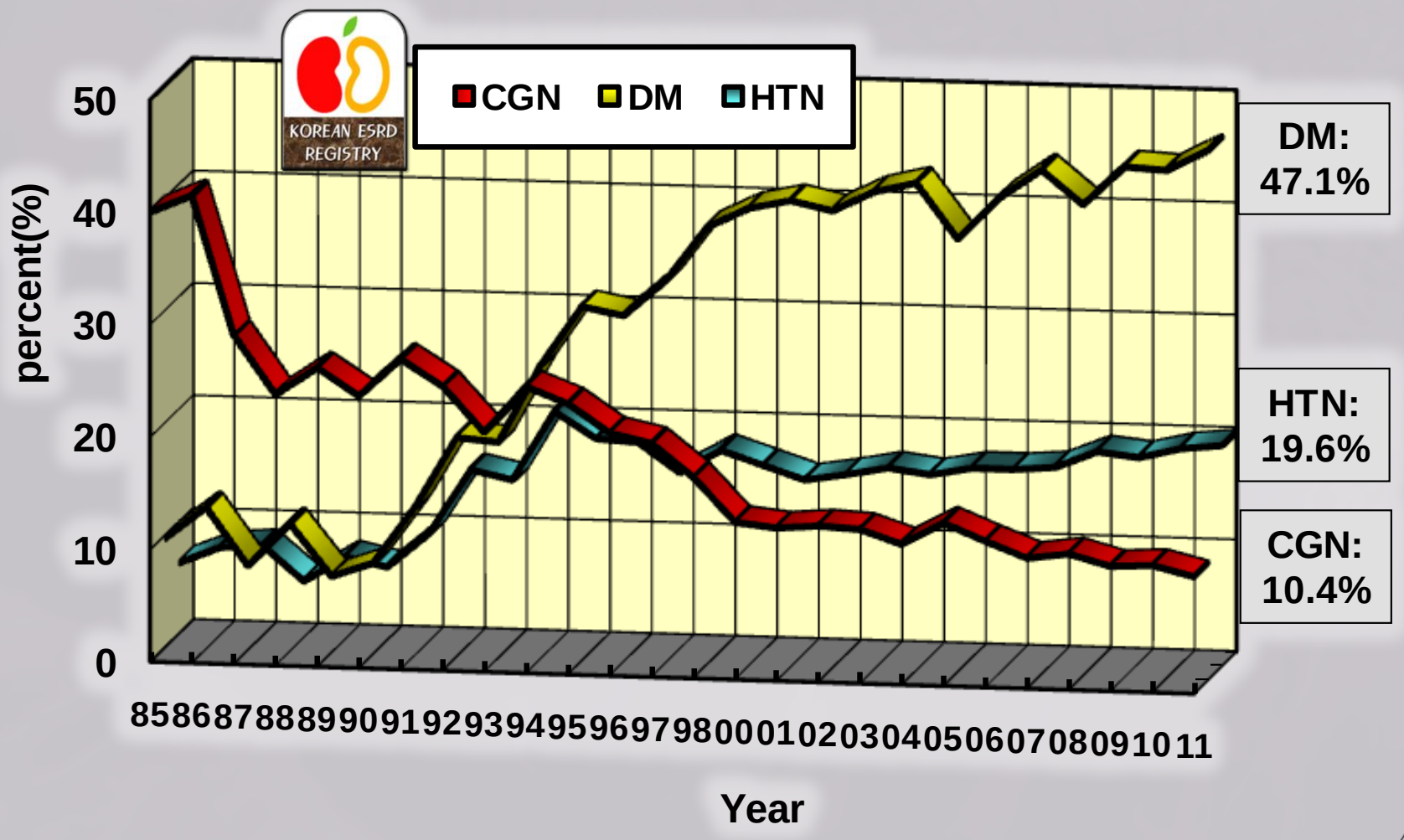
KOREAN ESRD REGISTRY

Causes of ESRD in New Patients

Causes	Percent (%)											
	1992	1994	1996	1998	2000	2002	2004	2007	2008	2009	2010	2011
Chronic Glomerulonephritis	25.3	25.5	21.6	17.9	14	13.9	12.5	11.6	12.1	11.1	11.3	10.4
Not Histologically confirmed	19.7	20.4	16.7	13.6	10.6	10	8.6	8.3	8.2	7.5	7.7	6.9
Histologically confirmed	5.6	5	4.9	4.3	3.4	3.9	3.9	3.3	3.8	3.6	3.6	3.5
Diabetic nephropathy	19.5	26.1	30.8	38.9	40.7	40.7	43.4	44.9	41.9	45.4	45.2	47.1
Hypertensive nephrosclerosis	15.4	20.8	18.3	17.8	16.6	16	16.2	17.2	18.7	18.3	19.2	19.6
Cystic kidney disease	2.1	2.2	1.8	1.7	2.2	1.6	1.4	1.7	1.7	1.8	1.7	1.6
Renal tuberculosis	1.1	1.5	1.2	0.5	0.4	0.5	0.3	0.3	0.2	0.2	0.2	0.2
Pyelo/interstitial nephritis	1.3	1.1	0.7	1	0.8	0.6	0.6	0.5	0.5	0.5	0.4	0.4
Drugs or nephrotoxic agents	1.3	0.1	0.6	0.3	0.3	0.4	0.2	0.2	0.3	0.3	0.3	0.5
Lupus nephritis	0.8	0.7	1	0.5	0.9	0.8	0.6	0.6	0.6	0.6	0.5	0.5
Gouty nephropathy	0.7	0.7	0.6	0.5	0.7	0.4	0.5	0.3	0.3	0.3	0.4	0.2
Hereditary nephropathy	0.3	0.7	0.4	0.2	0.1	0.2	0.3	0.2	0.3	0.2	0.2	0.2
Kidney tumor	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.1	0.2	0.2	0.2	0.3
Other	4.1	2.7	2.8	3.9	3	5.6	5.9	5.1	5.8	5.2	5.1	5.0
Uncertain	28.6	17.8	15.9	16.6	20.2	19	17.8	17.2	17.6	16.0	15.3	14.3

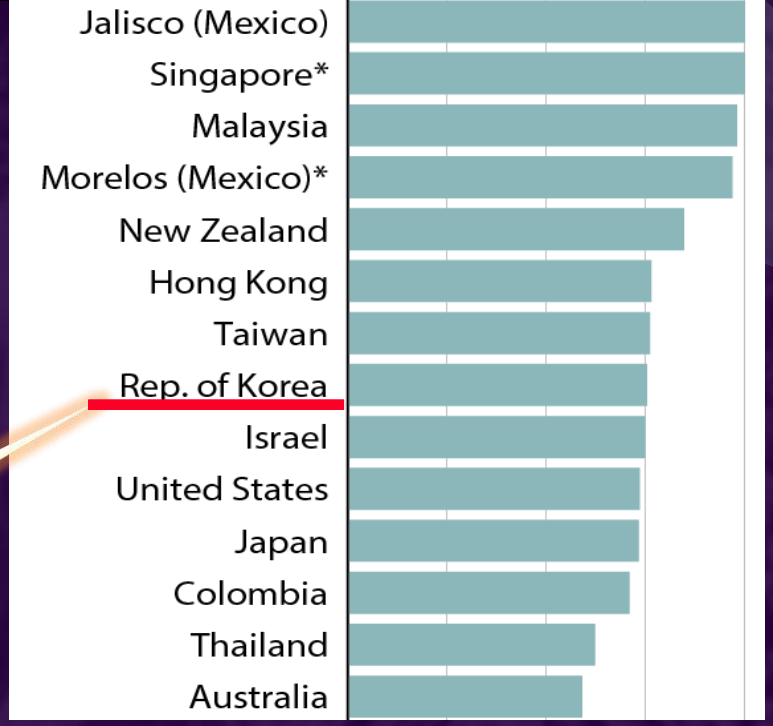
Three Major Causes of ESRD

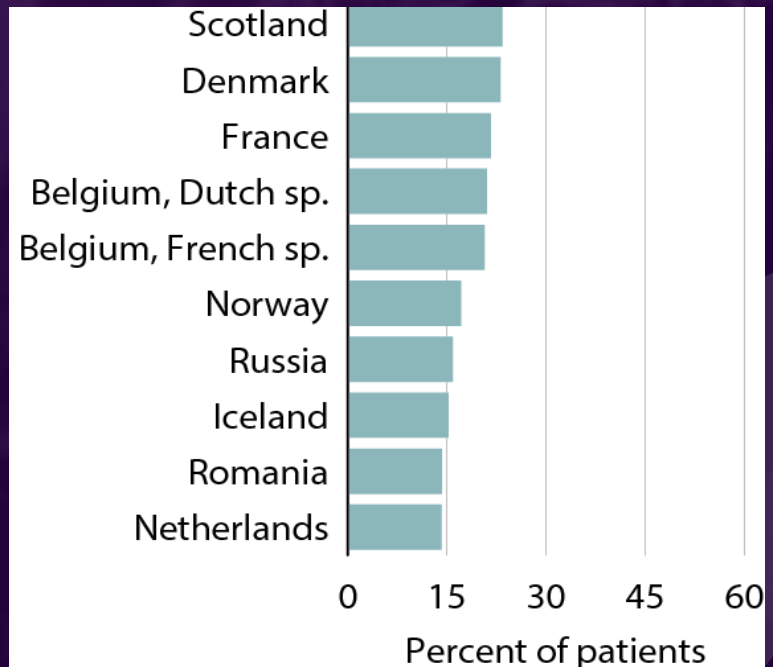


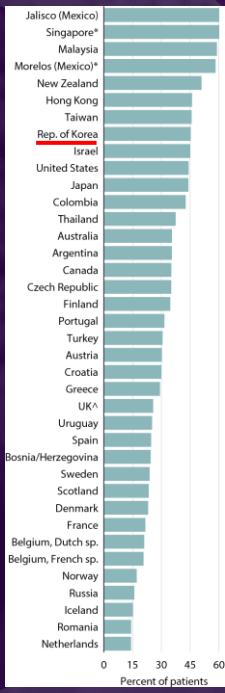
KOREAN ESRD REGISTRY

Diabetic ESRD

45.2%
in 2010







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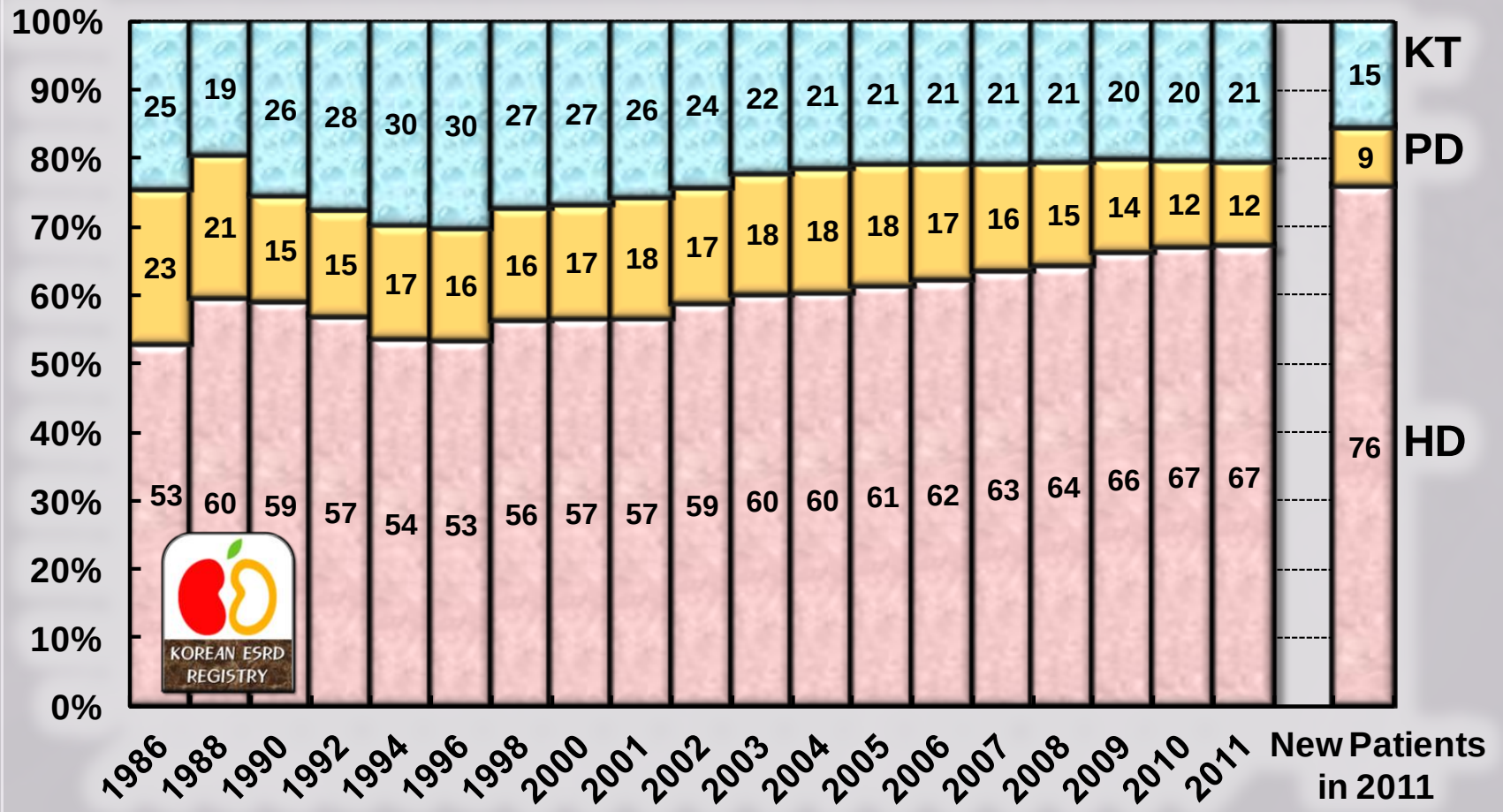
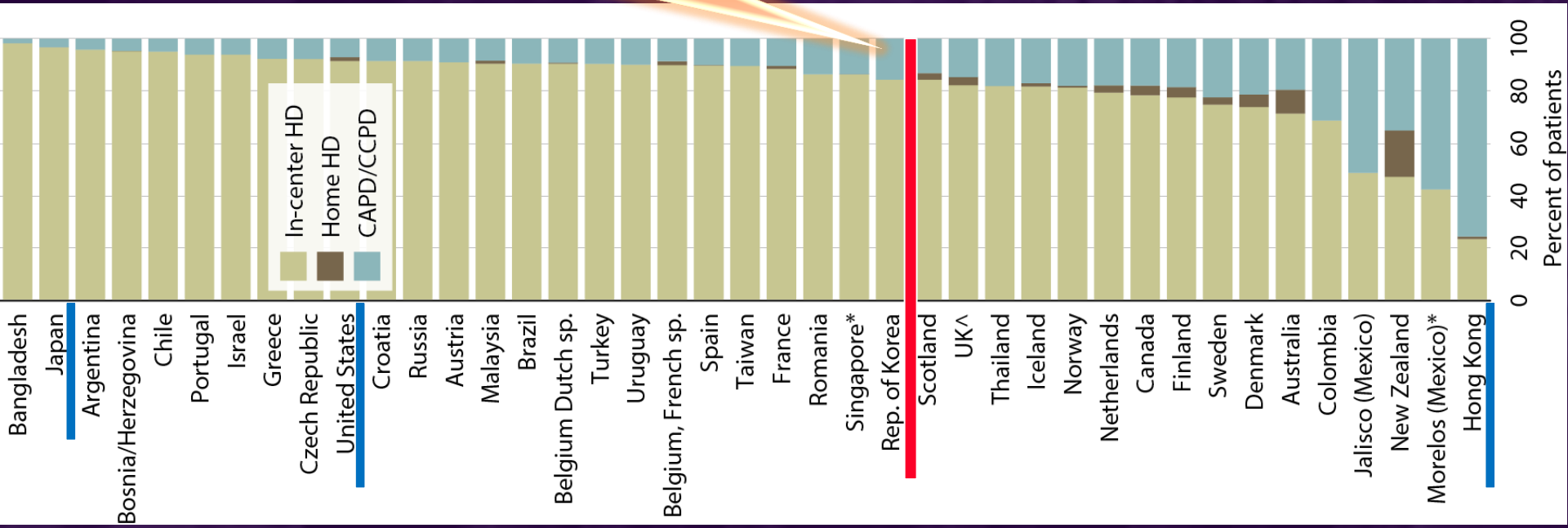
Proportion of RRT Modalities



Percent Distribution of Dialysis Modalities

HD:PD = 84.4% : 15.6%
End of 2010



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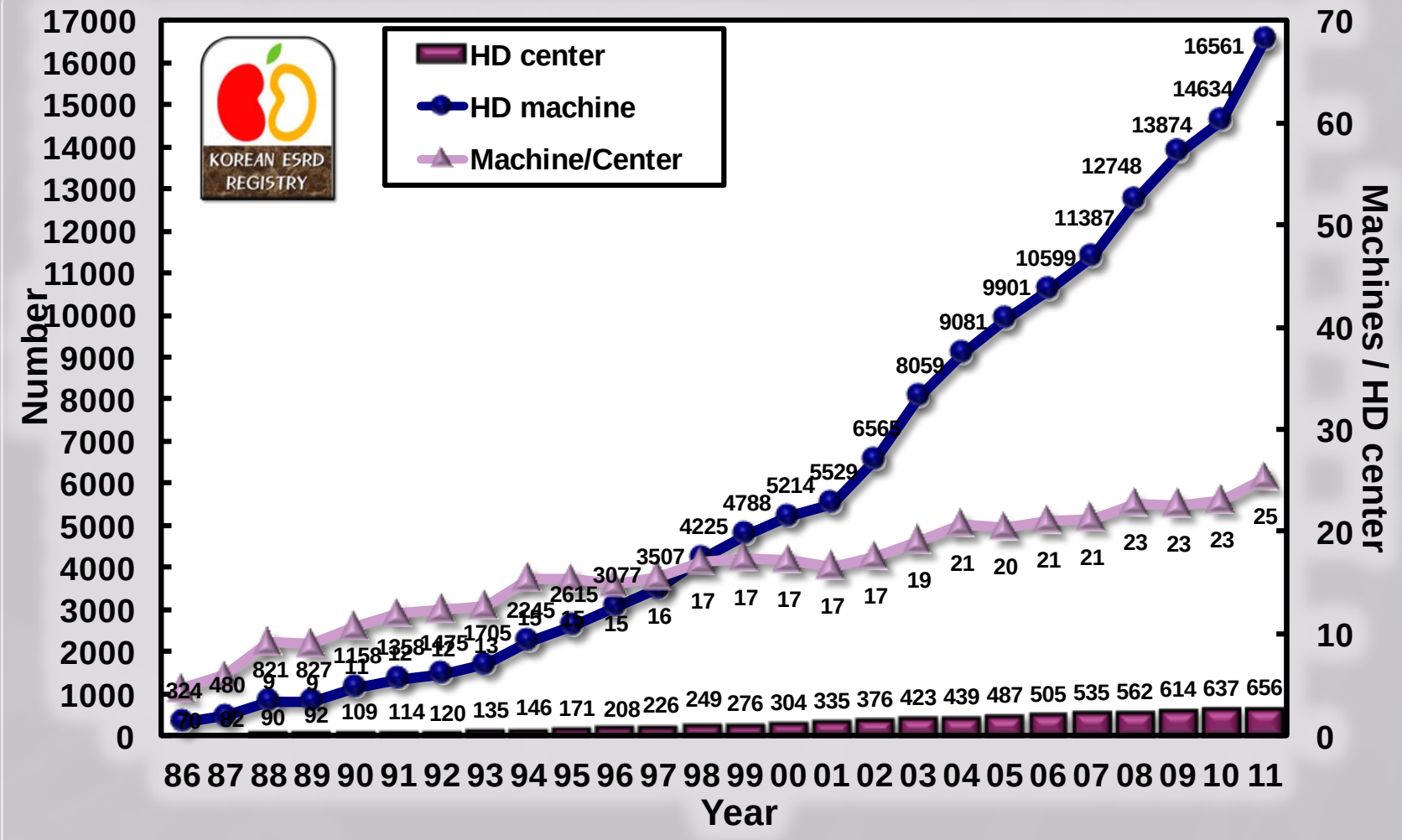
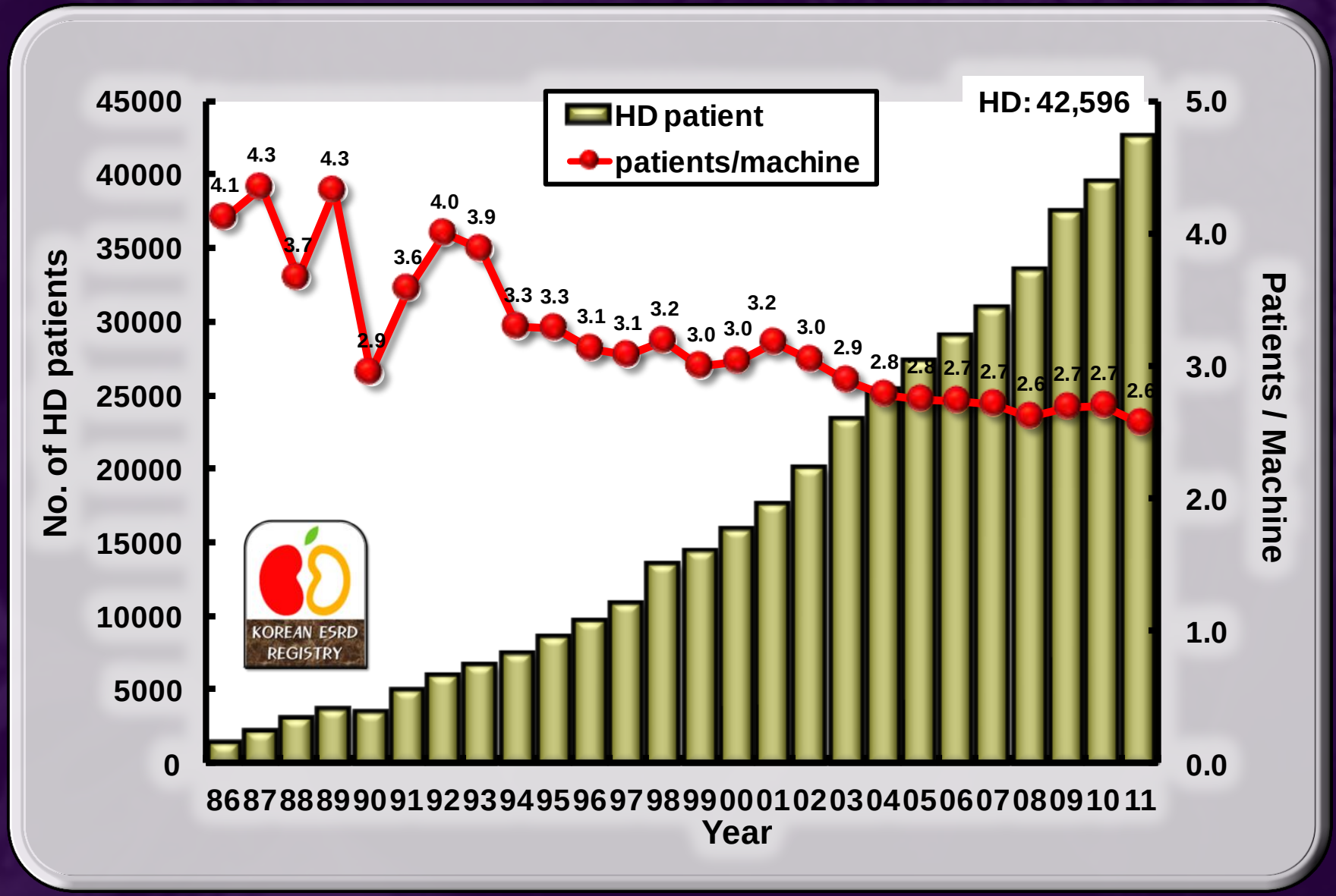
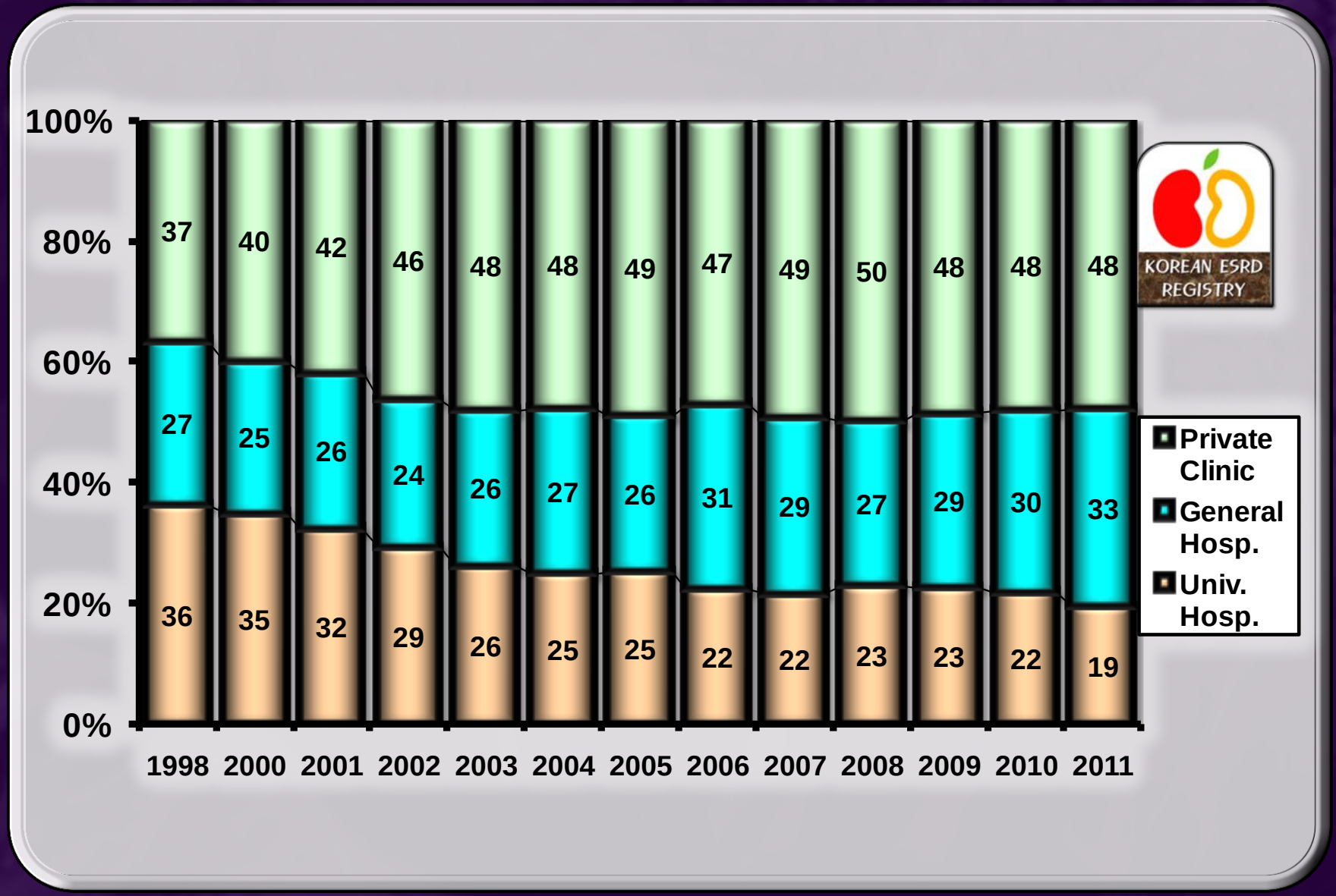
Number of HD Centers & HD Machines



Ratio of HD Machine & HD Patients



HD Pts Proportion of Dialysis Center Type



KOREAN ESRD REGISTRY

행정구역별 투석환자 및 혈액투석기 분포

(2011년 12월말 기준)

	HD pts	PD pts	Total Dialysis pts	Dialysis pts. / Million pop.	Dialysis Centers	HD machines	HD pts./ HD machine
서울 Seoul	9,320	2,438	11,758	1,117	145	3,529	2.6
부산 Busan	3,421	950	4,371	1,219	45	1,325	2.6
대구 Daegu	2,883	749	3,632	1,436	36	941	3.1
인천 Incheon	2,049	318	2,367	830	25	760	2.7
광주 Gwangju	1,348	246	1,594	1,079	31	642	2.1
대전 Daejeon	1,112	364	1,476	964	13	566	2.0
울산 Ulsan	771	82	853	739	14	306	2.5
경기 Gyeonggi	8,746	1,307	10,053	821	133	3,549	2.5
강원 Gangwon	1,340	329	1,669	1,077	25	529	2.5
충북 Chungbuk	1,419	94	1,513	952	26	574	2.5
충남 Chungnam	1,798	81	1,879	874	30	627	2.9
전북 Jeonbuk	1,683	140	1,823	962	21	686	2.5
전남 Jeonnam	1,528	142	1,670	862	29	649	2.4
경북 Gyeongbuk	2,018	196	2,214	808	33	702	2.9
경남 Gyeongnam	2,484	226	2,710	803	41	945	2.6
제주 Jeju	676	32	708	1,214	9	231	2.9
Total	42,596	7,694	50,290	972	656	16,561	2.6

KOREAN ESRD REGISTRY

생활권역별 투석환자 및 혈액투석기 분포

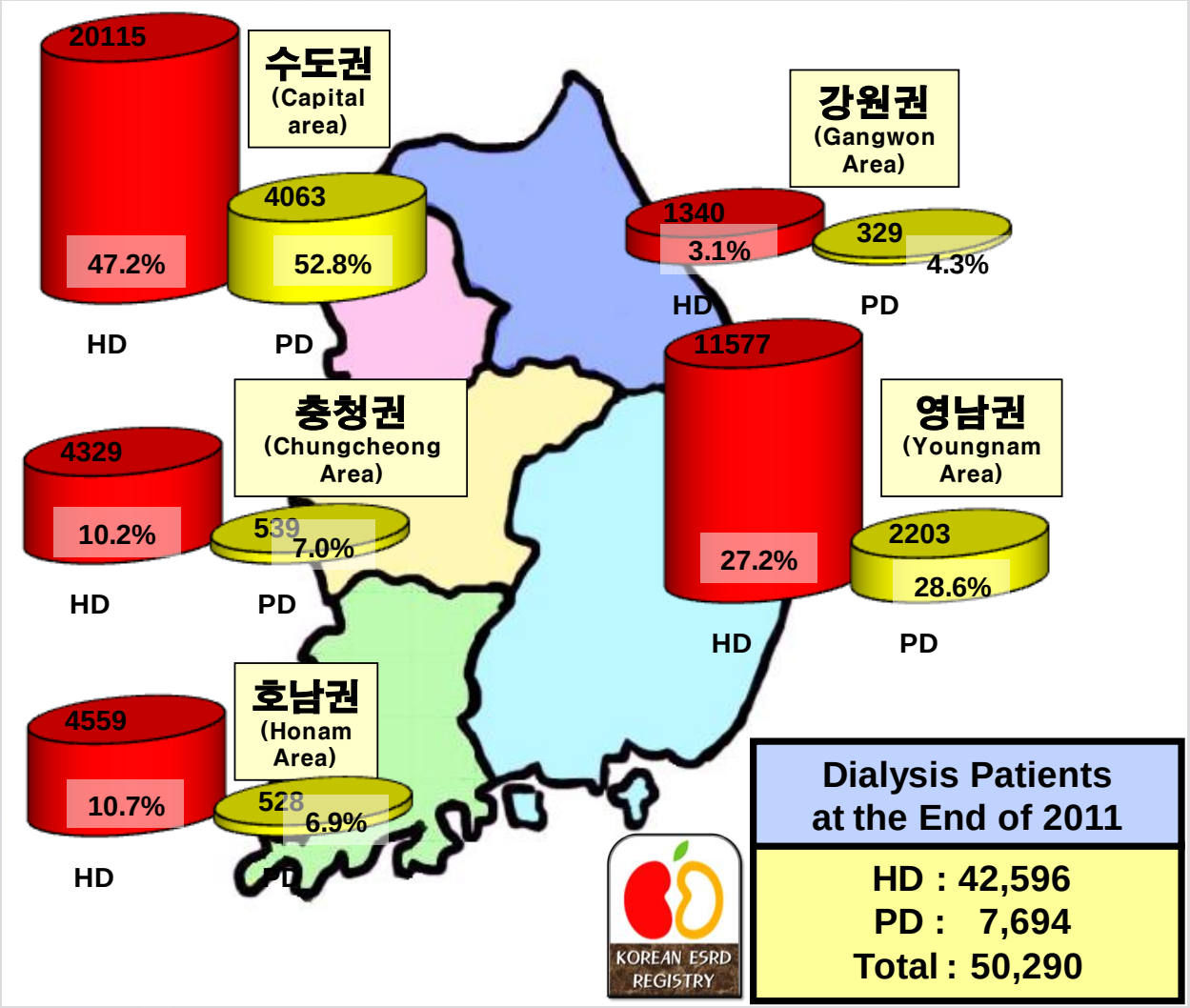
(2011년 12월말 기준)

	Population (%)	HD patients	PD patients	Total Dialysis patients	Dialysis pts /Million pop.	Dialysis centers	Dialysis machine	HD pts / HD machine
수도권 (Capital area)	25,620,252	20,115	4,063	24,178	944	303	7,838	2.6
(Seoul, Incheon, Gyeonggi)	49.5%	47.2%	52.8%	48.1%		46.2%	47.3%	
충청권 (Chungchung)	5,268,658	4,329	539	4,868	924	69	1,767	2.4
(Daejeon, Chungnam, Chungbuk)	10.2%	10.2%	7.0%	9.7%		10.5%	10.7%	
호남권 (Honam)	5,311,588	4,559	528	5,087	958	81	1,977	2.3
(Gwangju, Jeonnam, Jeonbuk)	10.3%	10.7%	6.9%	10.1%		12.3%	11.9%	
영남권 (Youngnam)	13,383,183	11,577	2,203	13,780	1,030	169	4,219	2.7
(Busan, Daegu, Gyeongnam, Gyeongbuk, Ulsan)	25.9%	27.2%	28.6%	27.4%		25.8%	25.5%	
강원권 (Gangwon)	1,549,780	1,340	329	1,669	1,077	25	529	2.5
	3.0%	3.1%	4.3%	3.3%		3.8%	3.2%	
Total	51,716,745	42,596	7,694	50,290	972	656	16,561	2.6

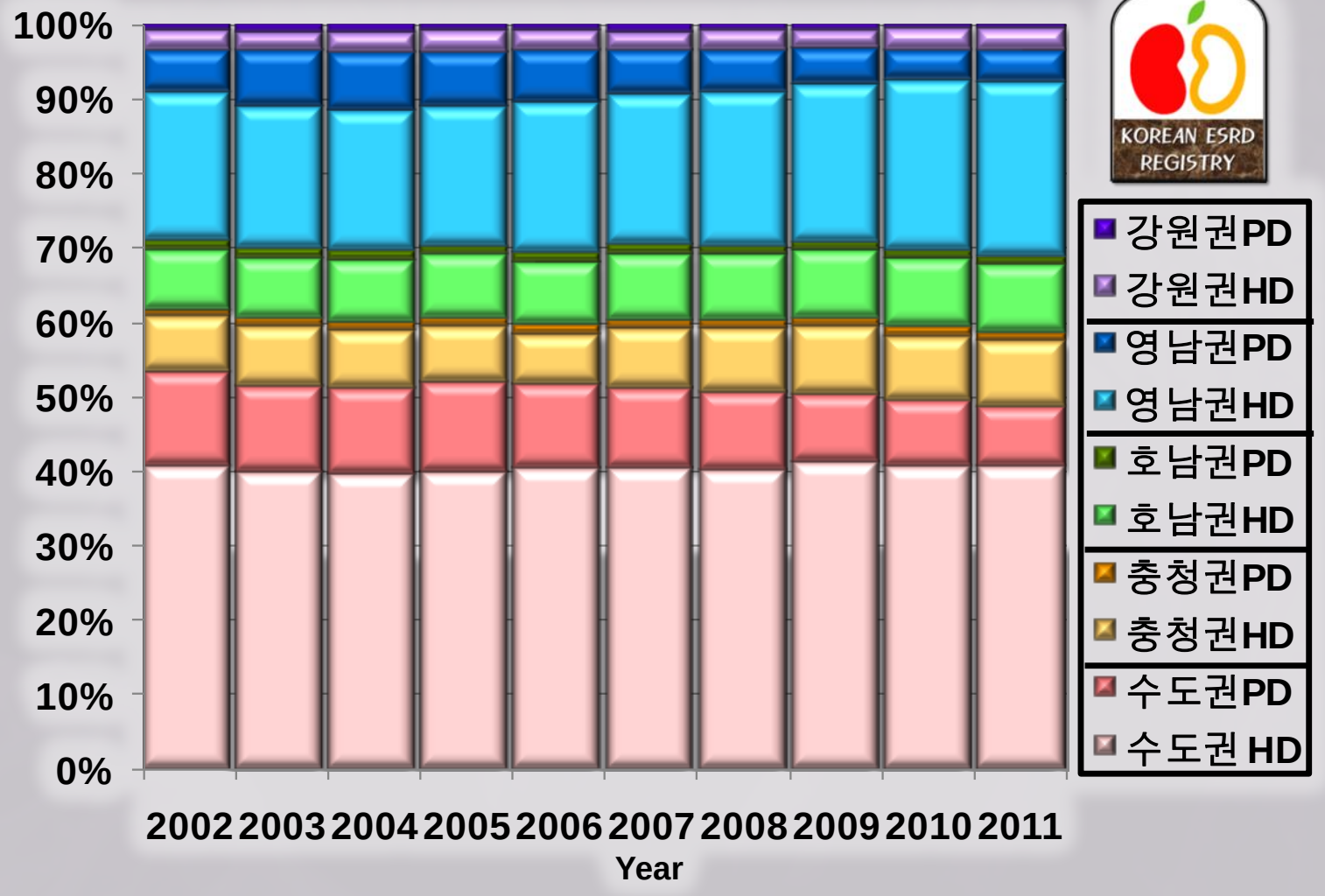
* 제주 표시 제외. Data of Jeju-do is not shown.

생활권역별 투석환자 분포

(2011년 12월말 기준)



생활권역별 투석환자 비율의 연도별 변화



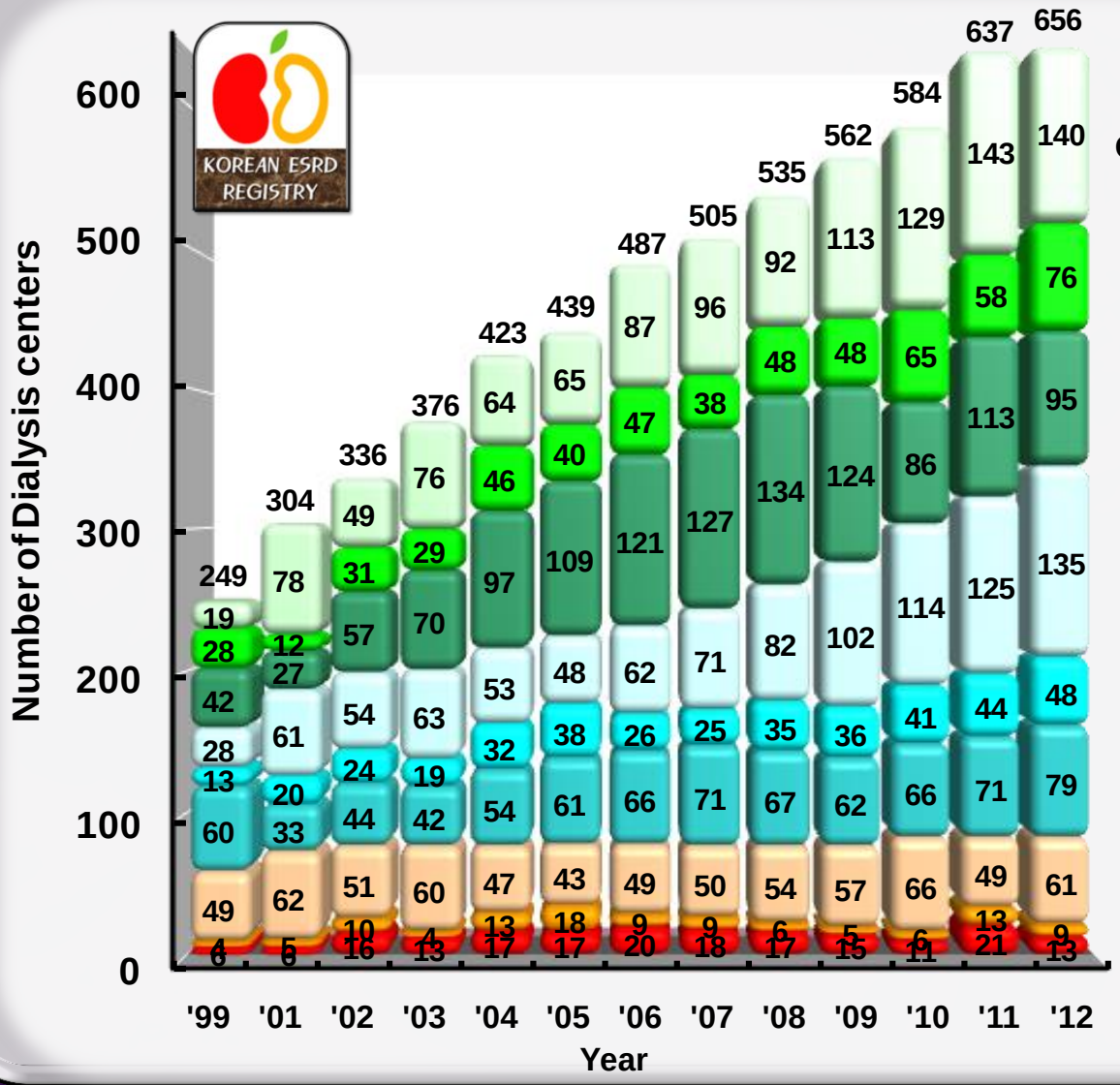
KOREAN ESRD REGISTRY

등록사업에 참여한 의료기관 수 및 응답률

	Dialysis centers*	Internet Input	Paper data	Total contributed center	Contributing rate (%)
서울 Seoul	145	86	28	114	78.6
부산 Busan	45	19	9	28	62.2
대구 Daegu	36	18	6	24	66.7
인천 Incheon	25	12	4	16	64.0
광주 Gwangju	31	13	7	20	64.5
대전 Daejeon	13	8	3	11	84.6
울산 Ulsan	14	5	5	10	71.4
경기 Gyeonggi	133	65	28	93	69.9
강원 Gangwon	25	14	9	23	92.0
충북 Chungbuk	26	12	3	15	57.7
충남 Chungnam	30	10	8	18	60.0
전북 Jeonbuk	21	8	3	11	52.4
전남 Jeonnam	29	15	7	22	75.9
경북 Gyeongbuk	33	21	5	26	78.8
경남 Gyeongnam	41	24	7	31	75.6
제주 Jeju	9	6	1	7	77.8
Total	656	336	133	469	71.5

* 투석의료기관에서 비윤리 의료기관(약35개소)은 제외함.

의료기관의 증가와 의료기관별 등록률



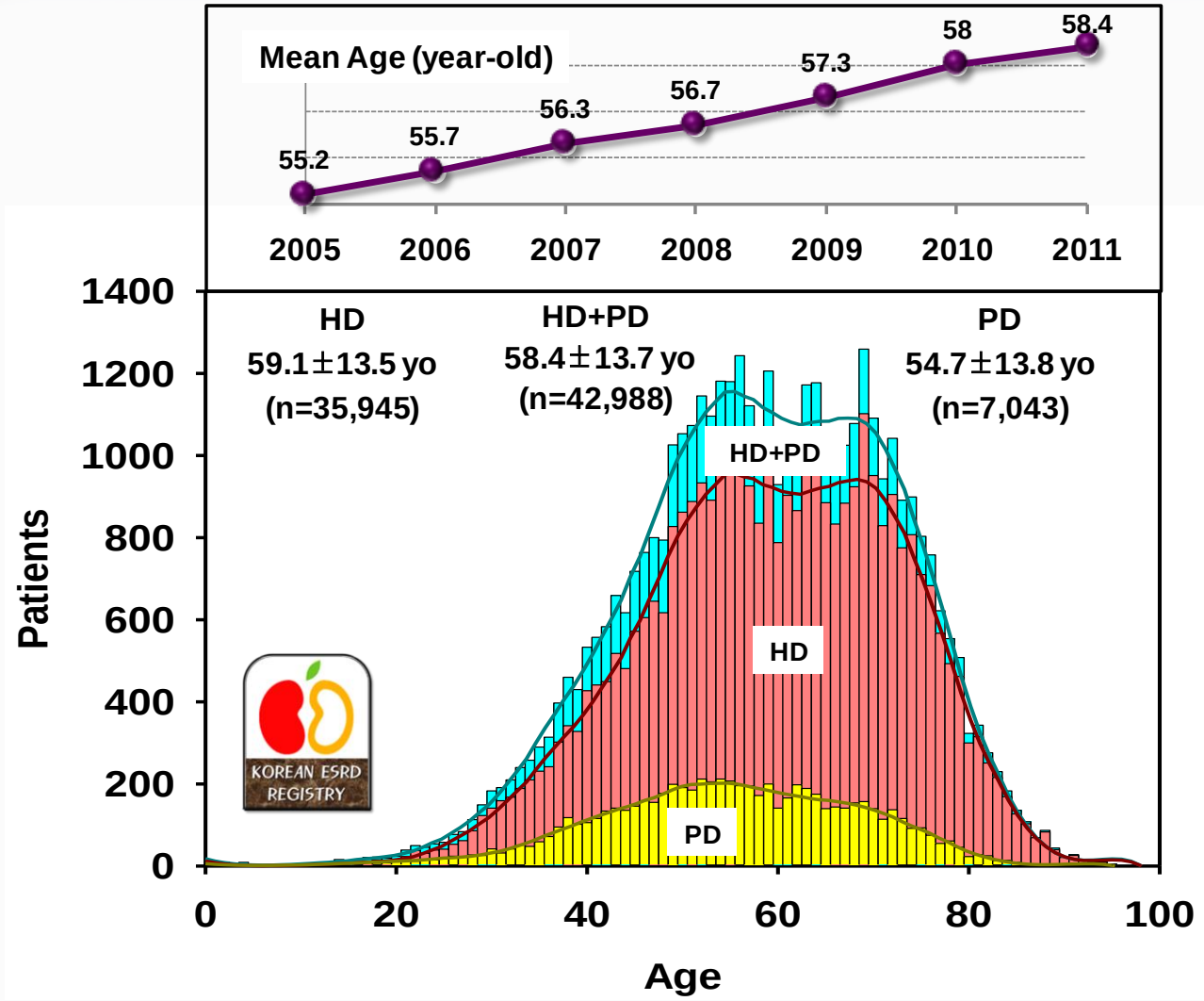
Overall Contrib. Rate : 71.5%
(469/656)

Private Clinic : 69.5%
(216/311)
General Hosp.: 69.8%
(183/262)
Univ. Hosp. : 84.3%
(70/83)

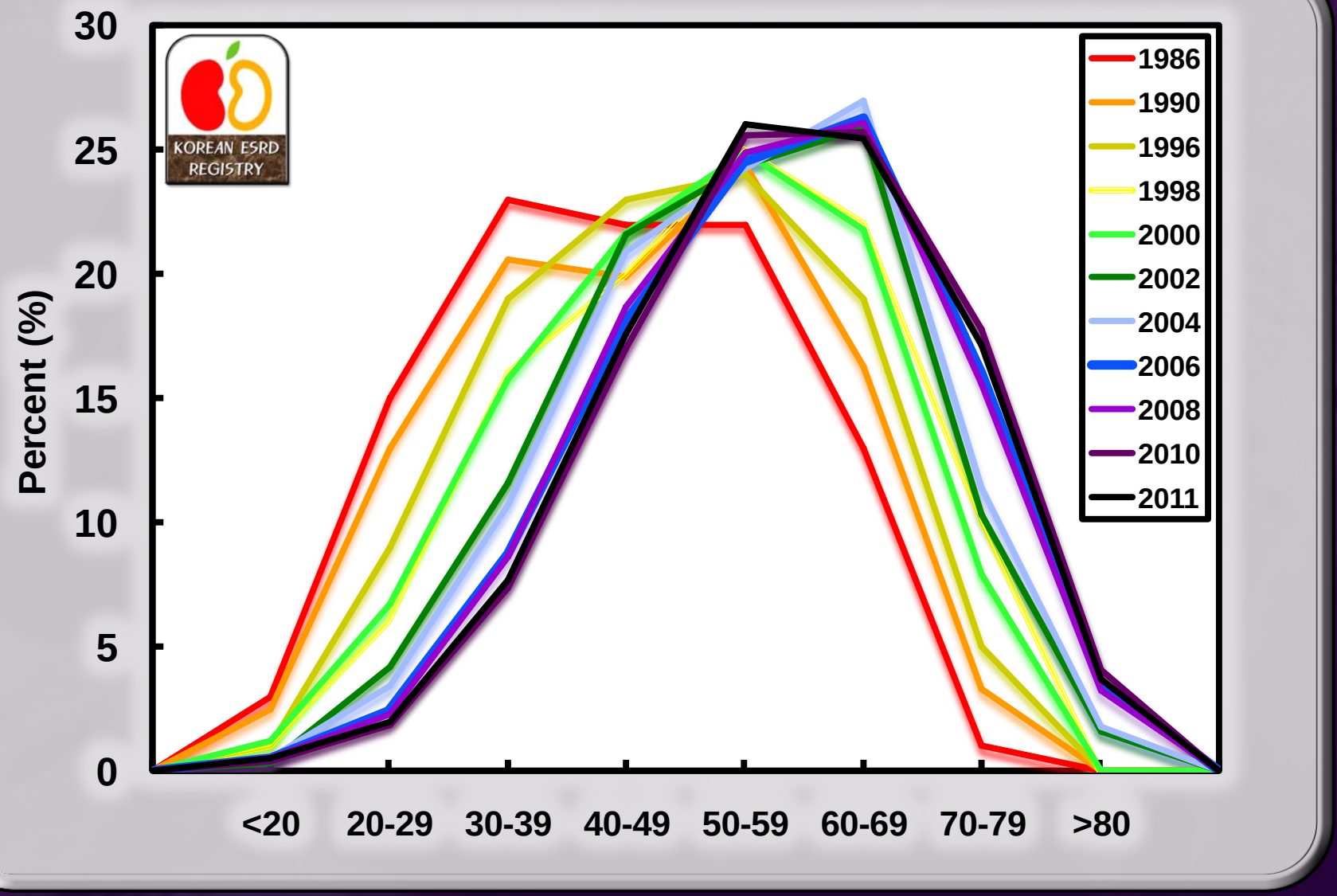
- Internet, Priv. Clinic
- Paper, Priv. Clinic
- No Ans., Priv. Clinic
- Internet, Gen. Hosp.
- Paper, Gen. Hosp.
- No Ans., Gen. Hosp.
- Internet, Univ. Hosp.
- Paper, Univ. Hosp.
- No Ans., Univ. Hosp.

Gender Ratio of Dialysis Patients

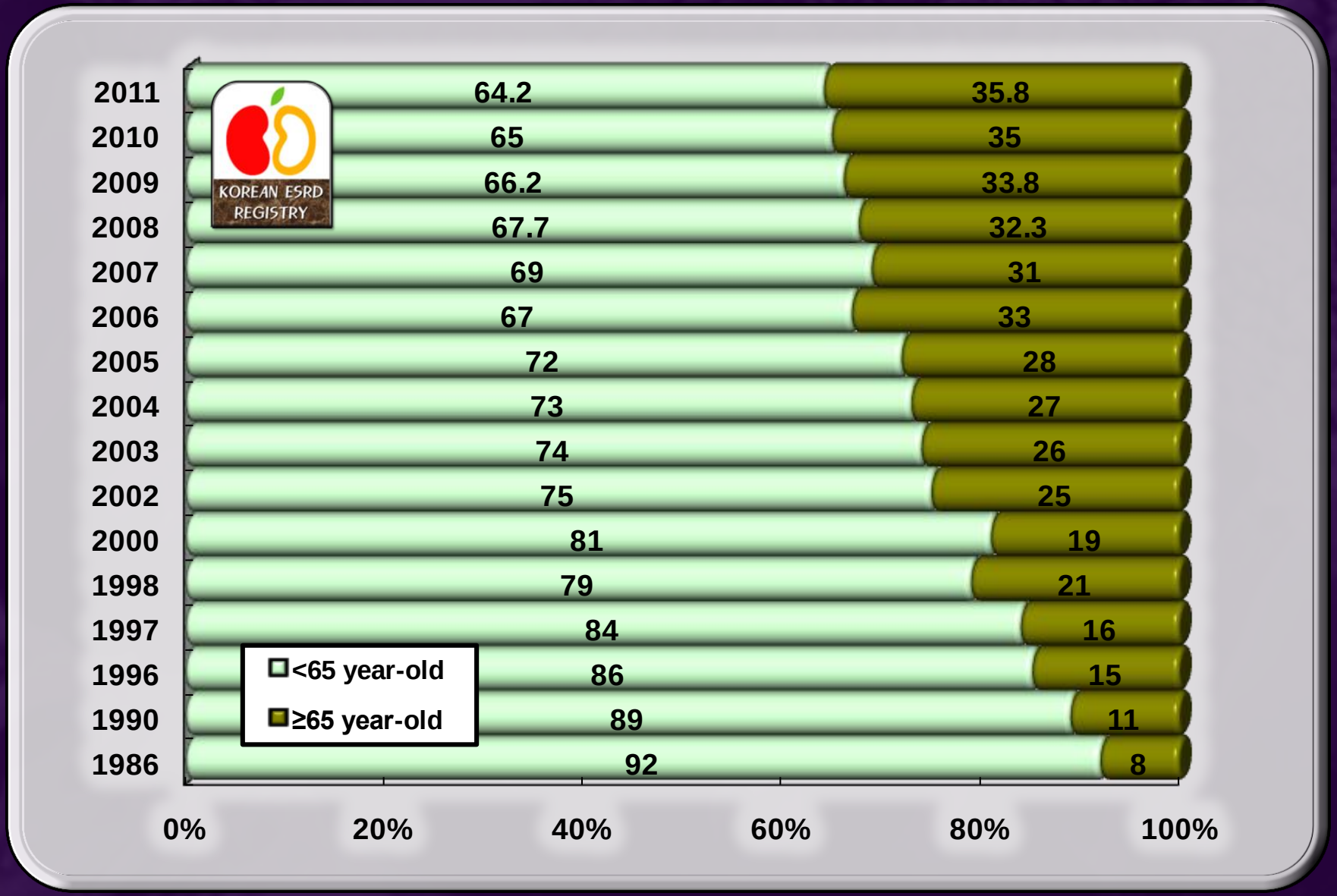
Age Distribution of Dialysis Patients



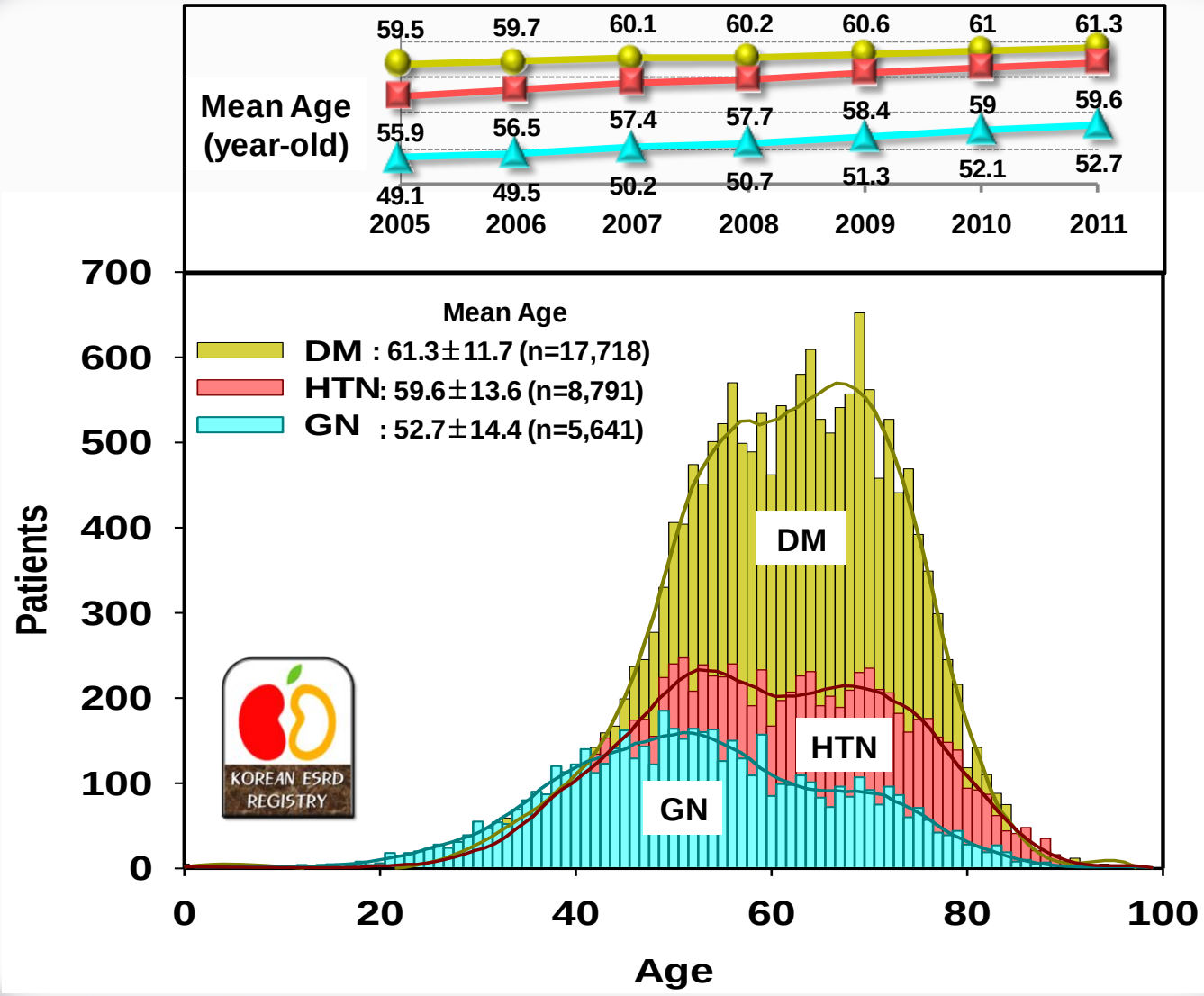
Age Distribution of HD Pts according to Year



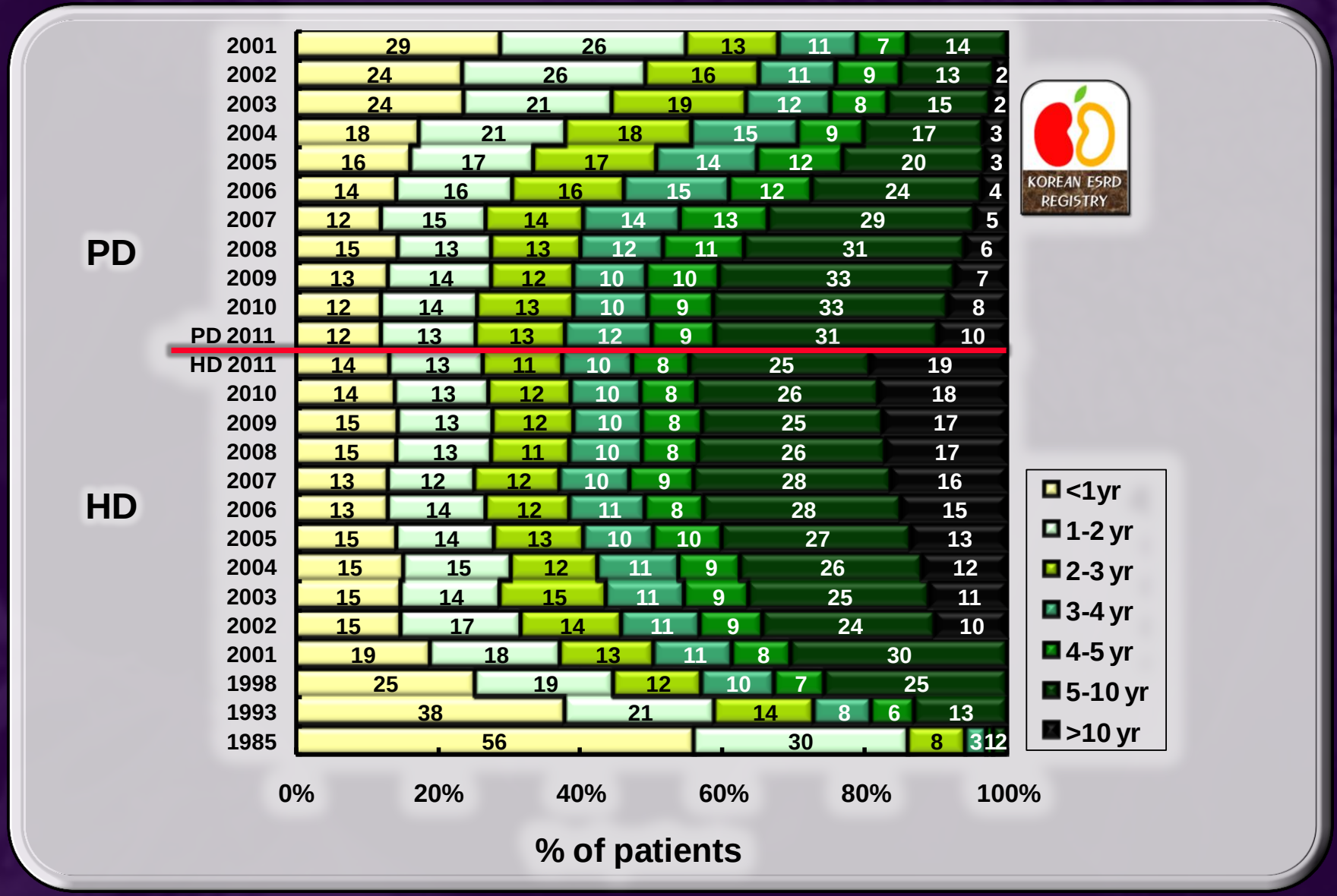
Percent of Elderly Dialysis Patients



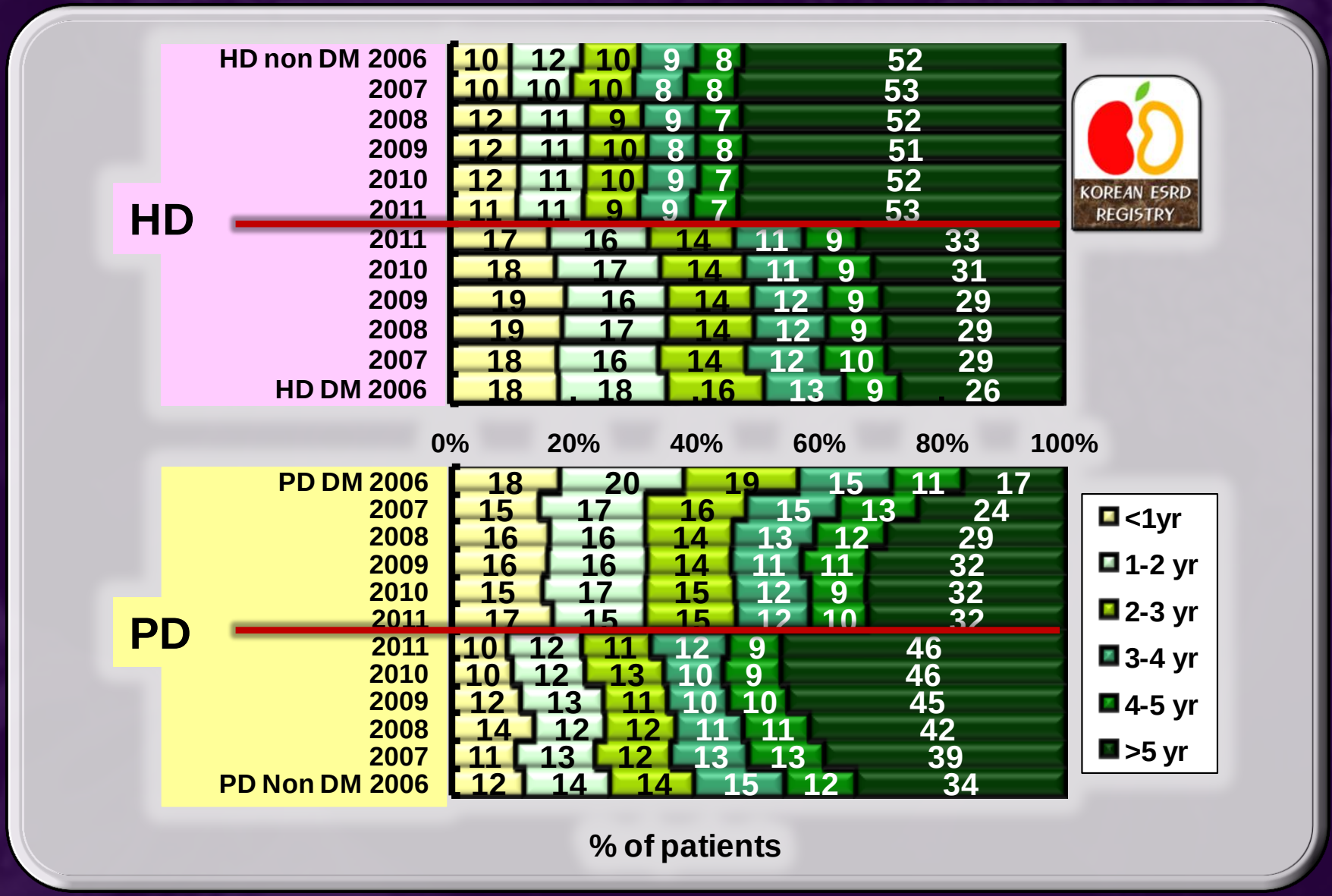
Age Distribution according to ESRD Causes



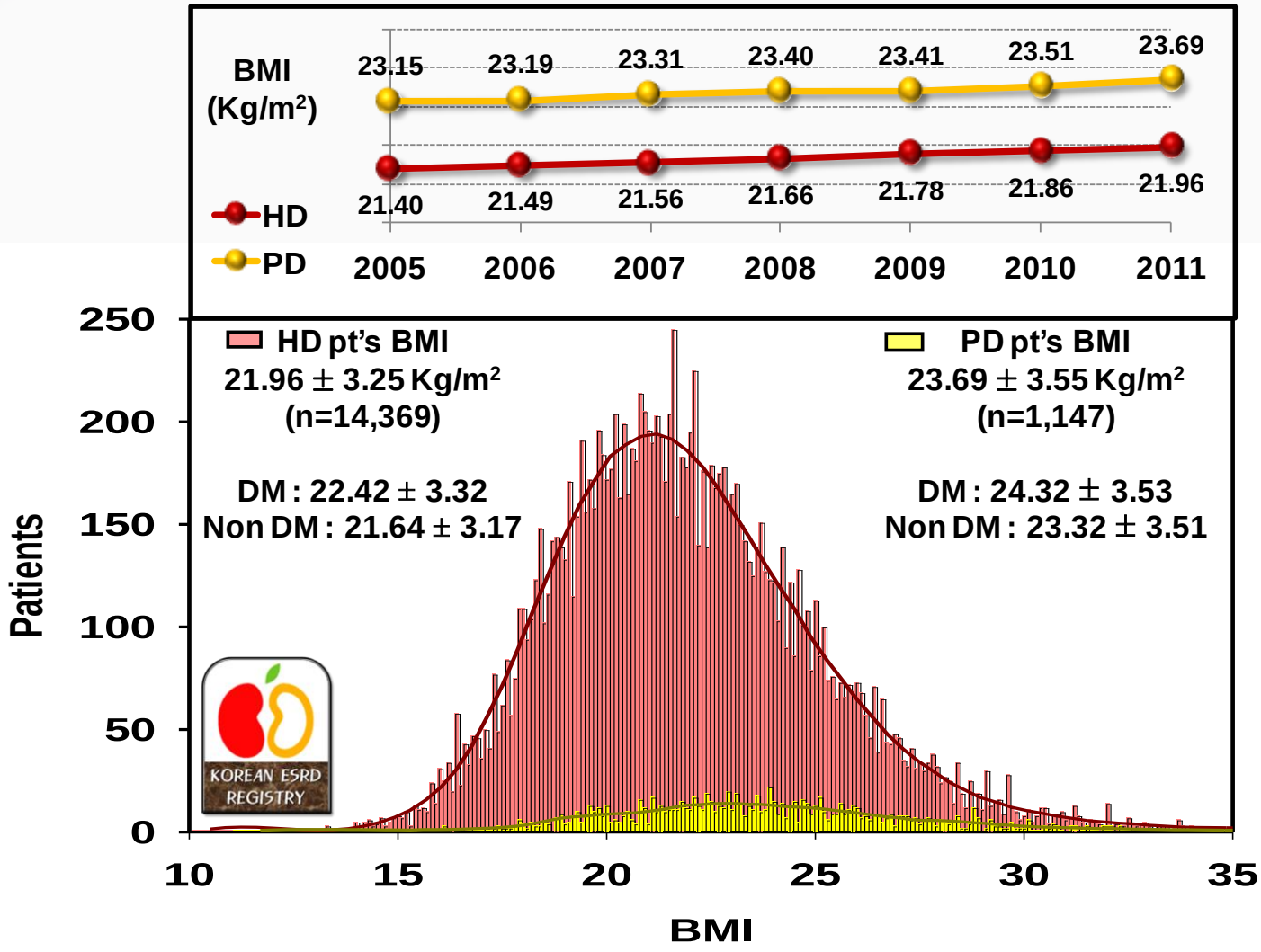
Duration of Dialysis Maintenance



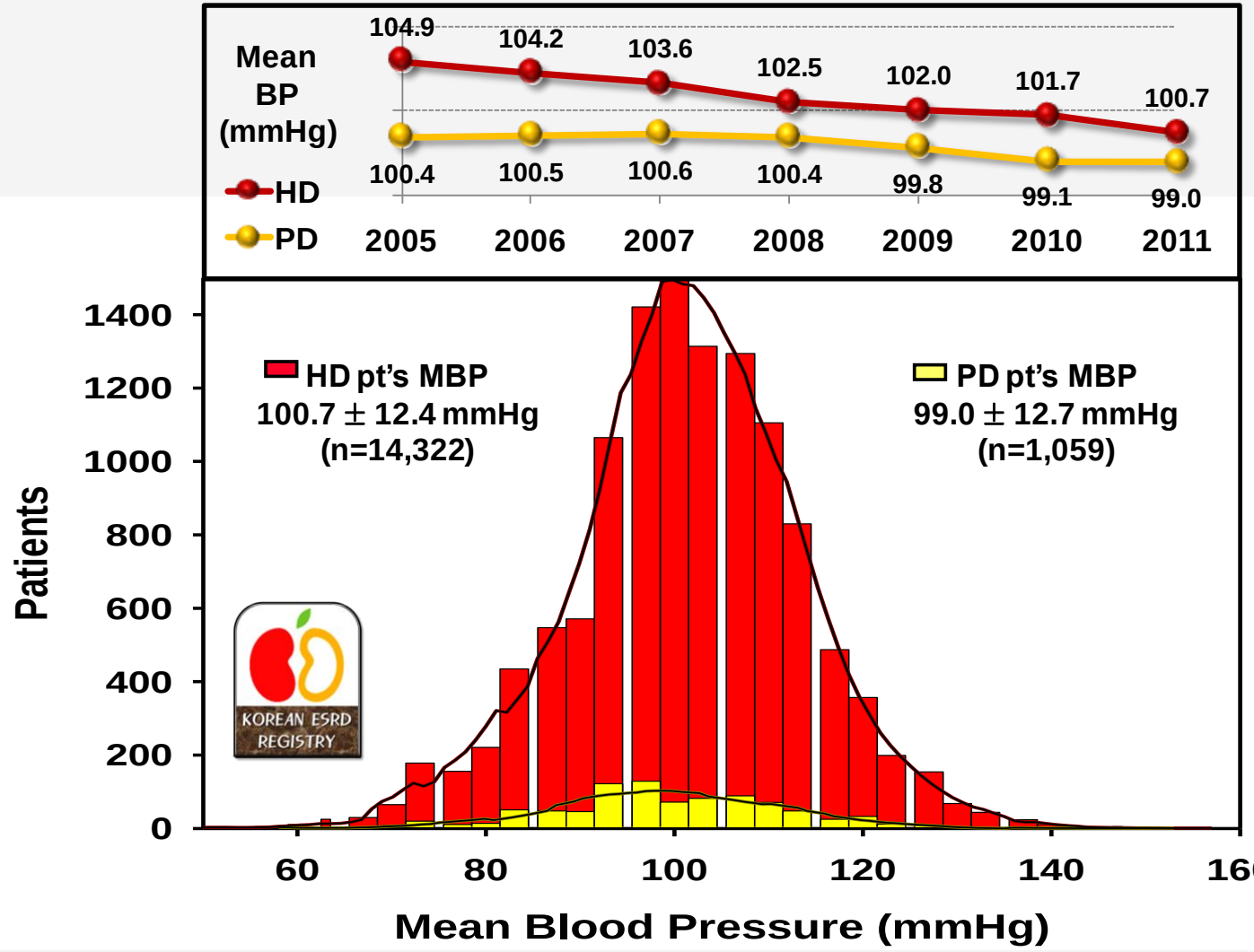
Duration of Dialysis : DM & Non-DM



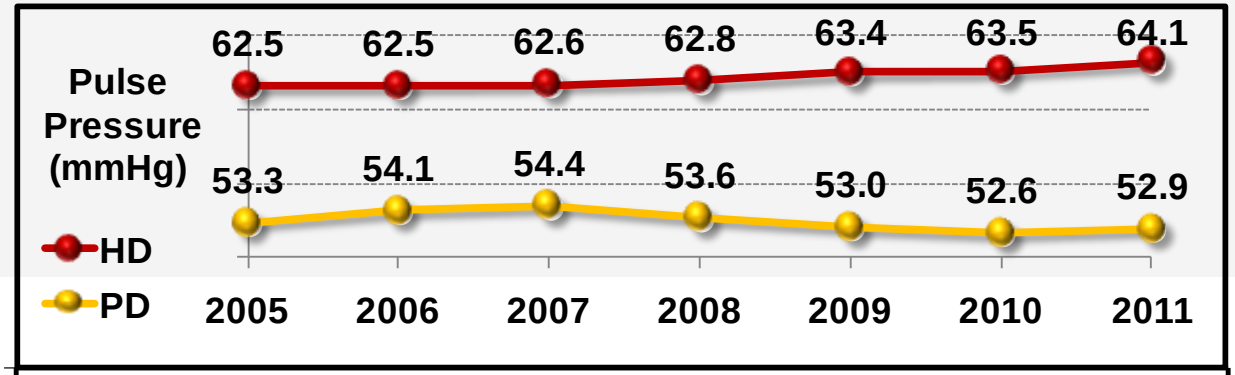
Body Mass Index : HD & PD

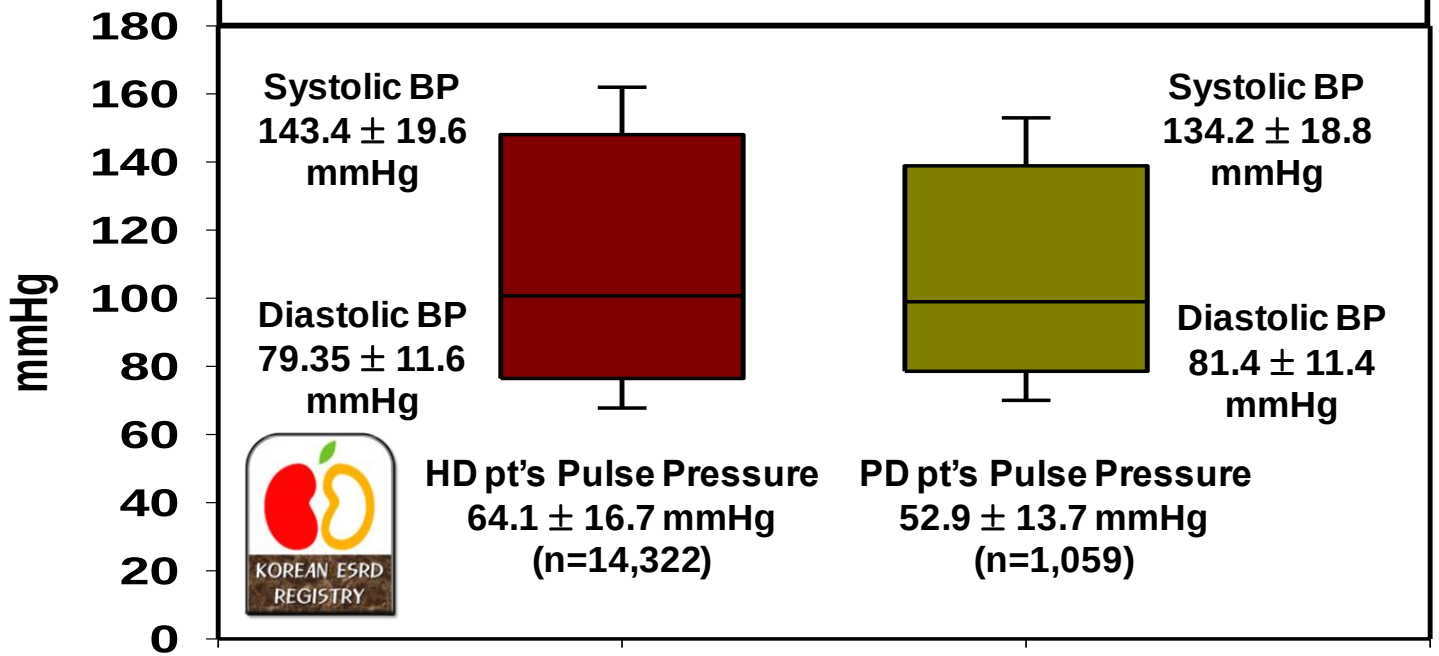


Mean Blood Pressure : HD & PD

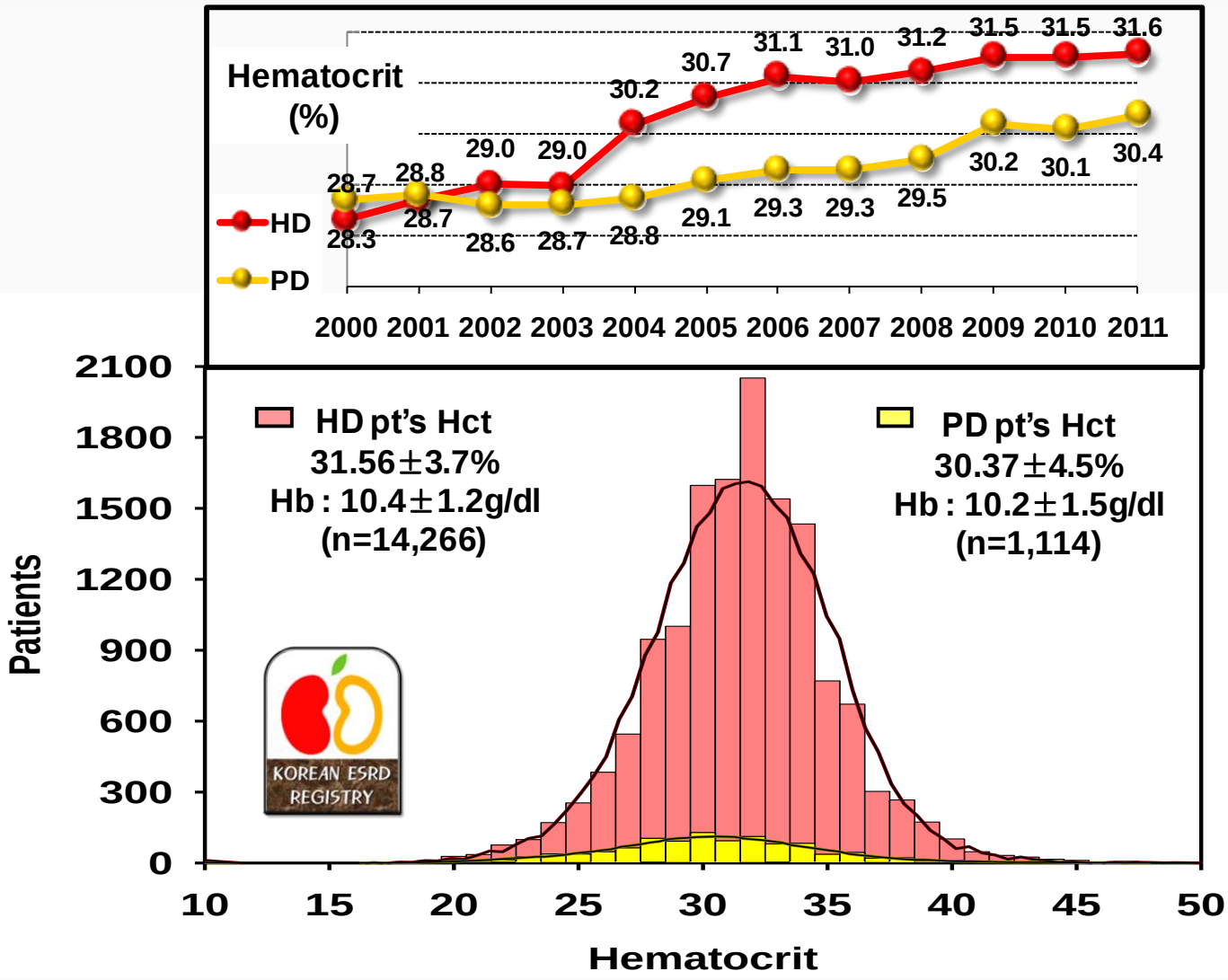


Pulse Pressure : HD & PD

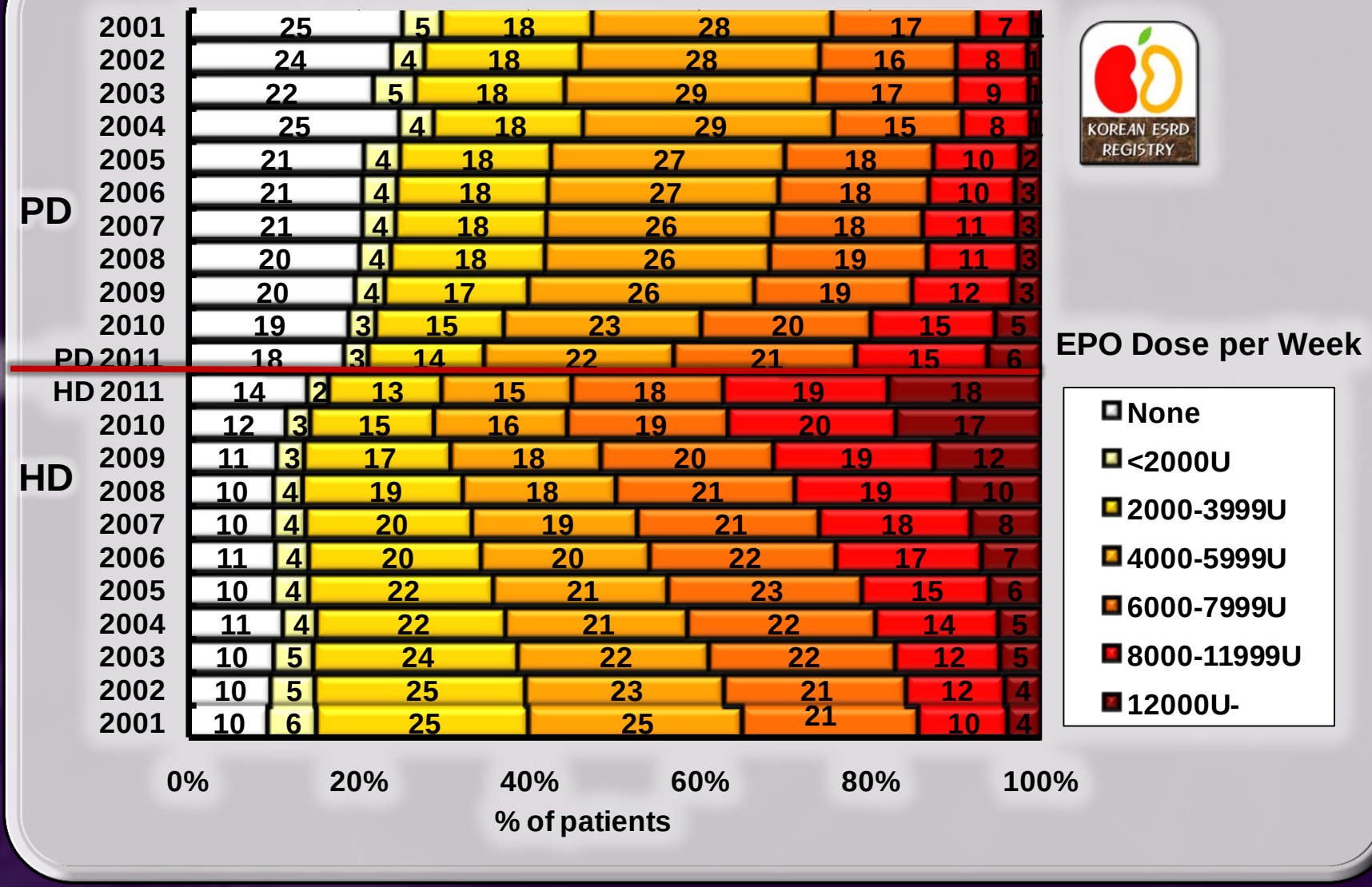




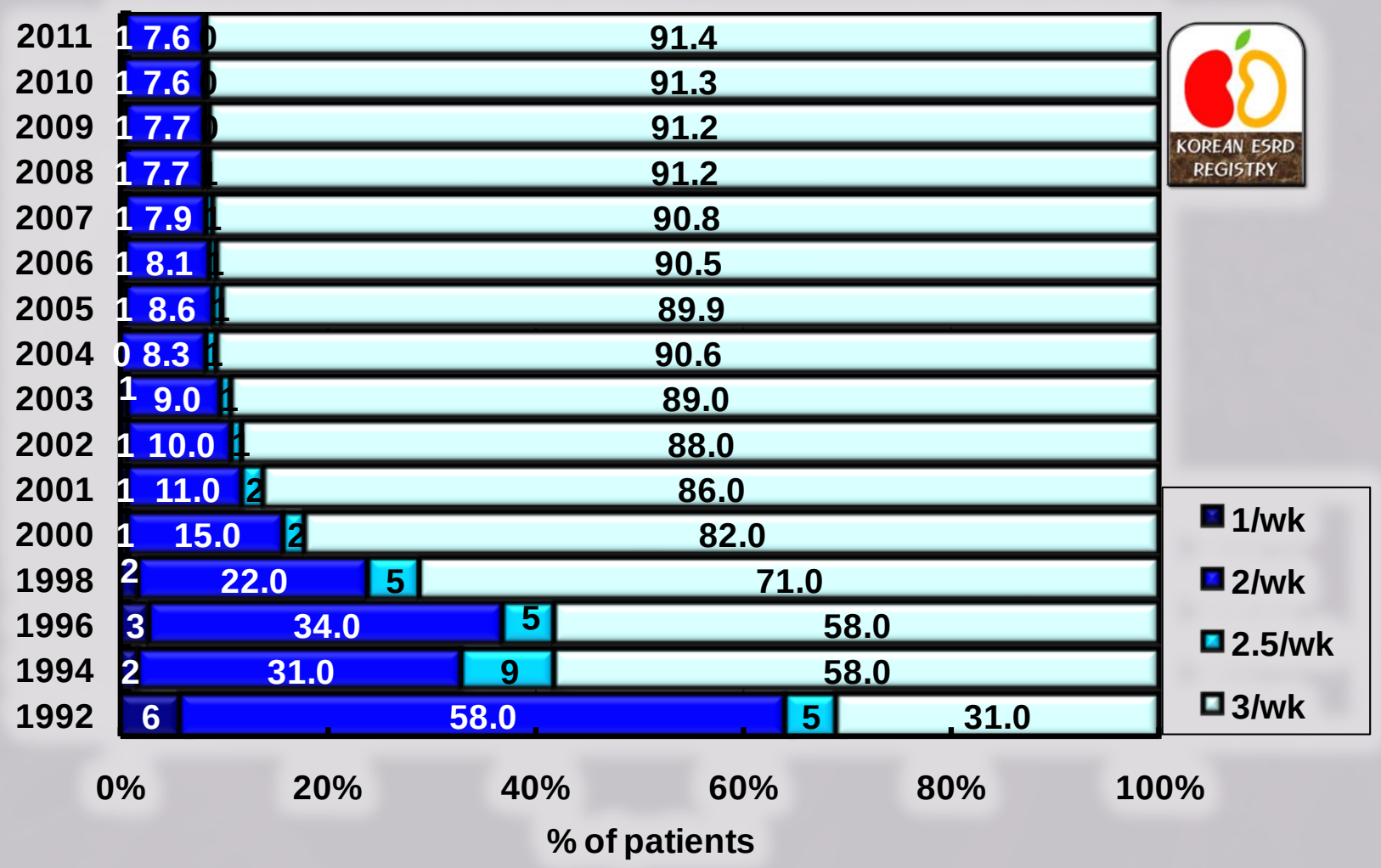
Hematocrit : HD & PD



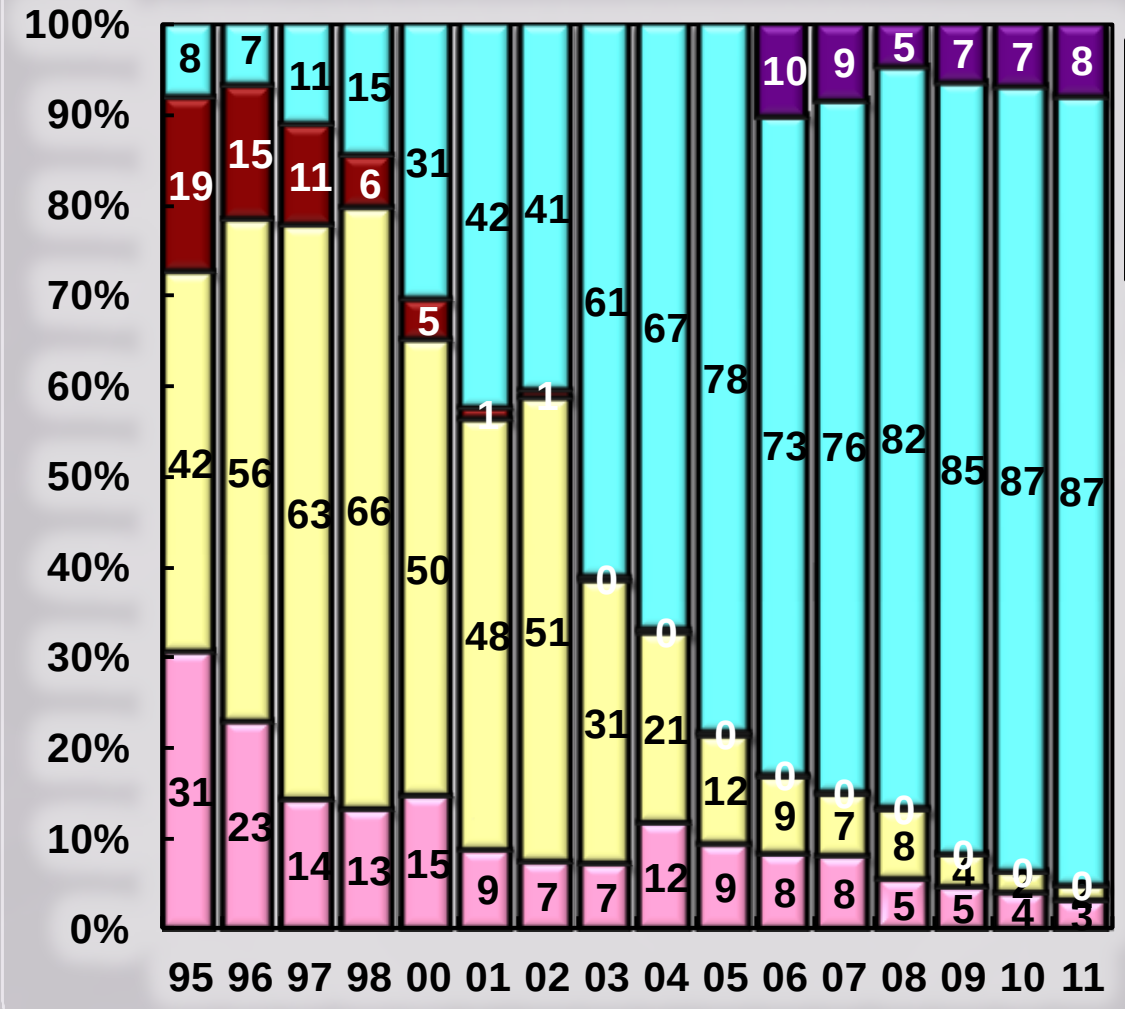
Erythropoietin Doses



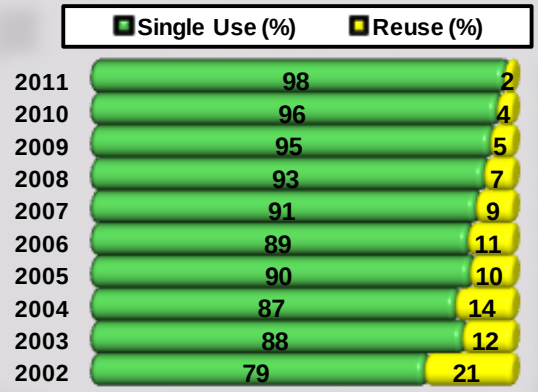
Frequency of HD per Week

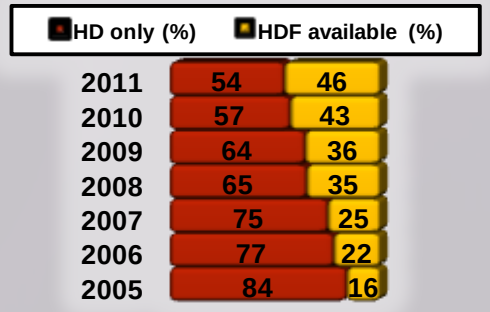


HD Dialyser

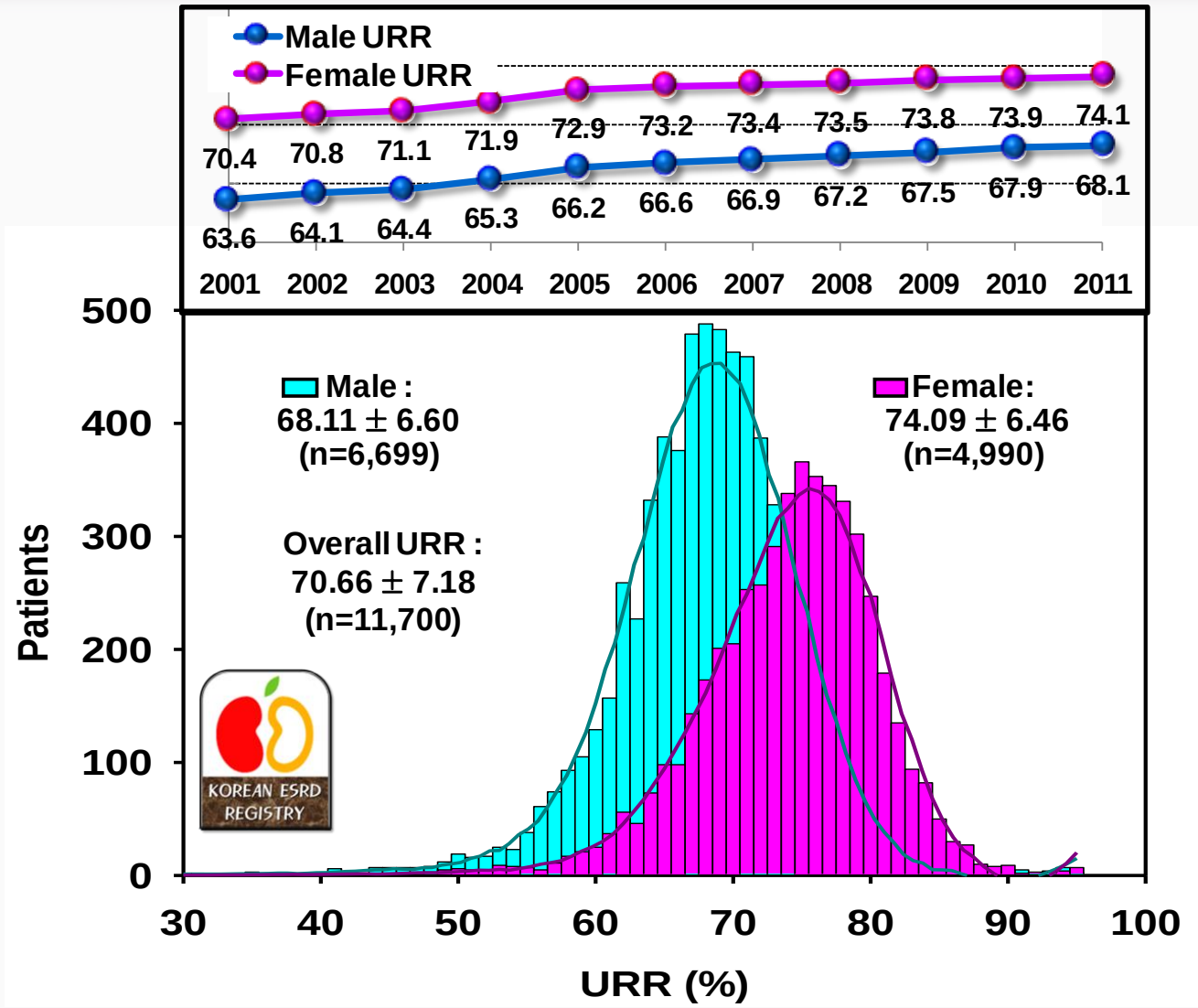

100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
95 96 97 98 00 01 02 03 04 05 06 07 08 09 10 11
8 7 11 15 31 42 41 61 67 78 10 9 5 7 7 8
19 15 11 6 5 1 1 0 0 0 0 0 0 0 0 0
42 56 63 66 50 48 51 31 21 12 9 7 8 4 4 3
31 23 14 13 15 9 7 7 12 9 8 8 5 5 4 3
Polyamide
Polysulfone
Cuprophan
Hemophan
Cellulose


KOREAN ESRD REGISTRY

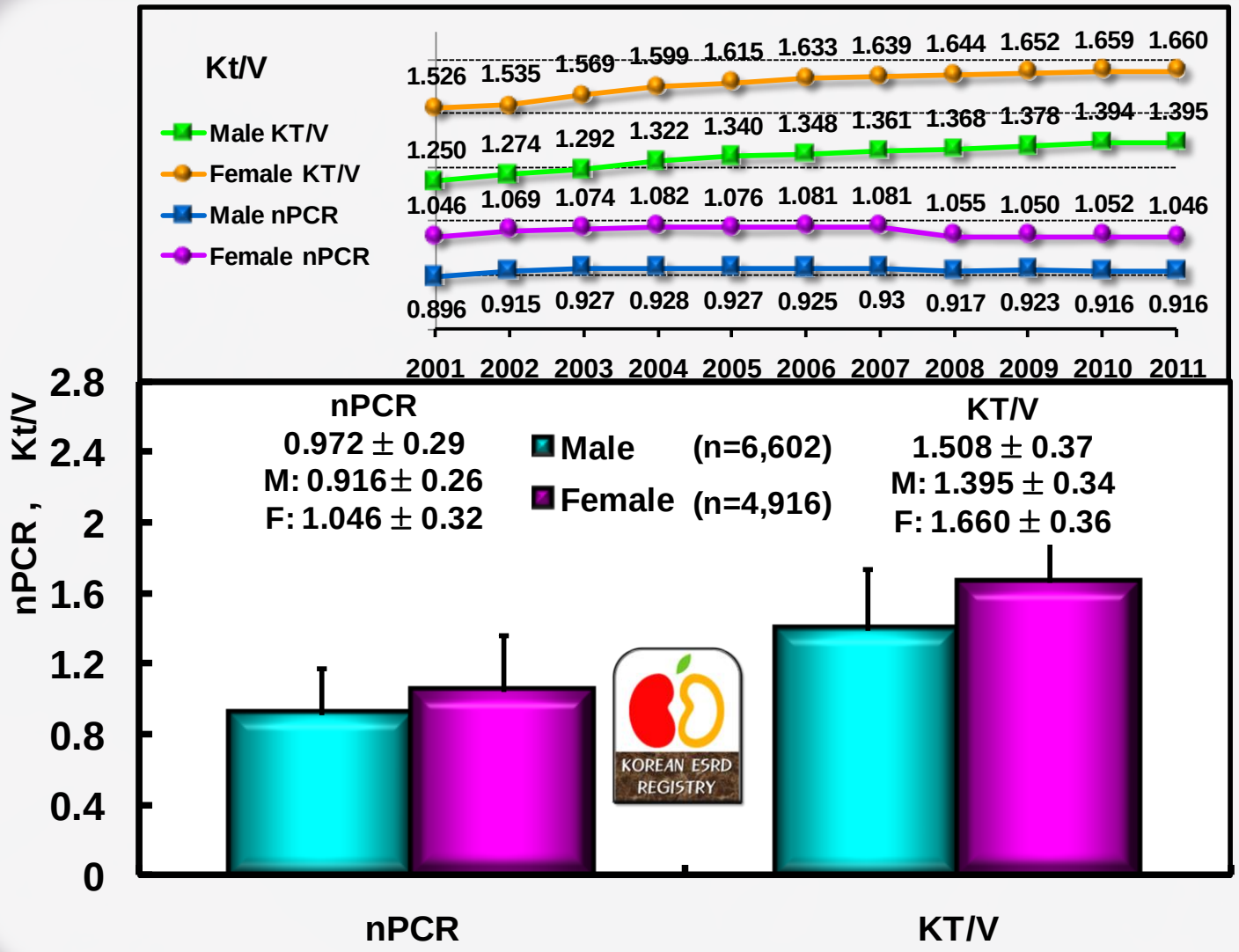

Single Use (%)
Reuse (%)
2011 98 2
2010 96 4
2009 95 5
2008 93 7
2007 91 9
2006 89 11
2005 90 10
2004 87 14
2003 88 12
2002 79 21


HD only (%)
HDF available (%)
2011 54 46
2010 57 43
2009 64 36
2008 65 35
2007 75 25
2006 77 22
2005 84 16

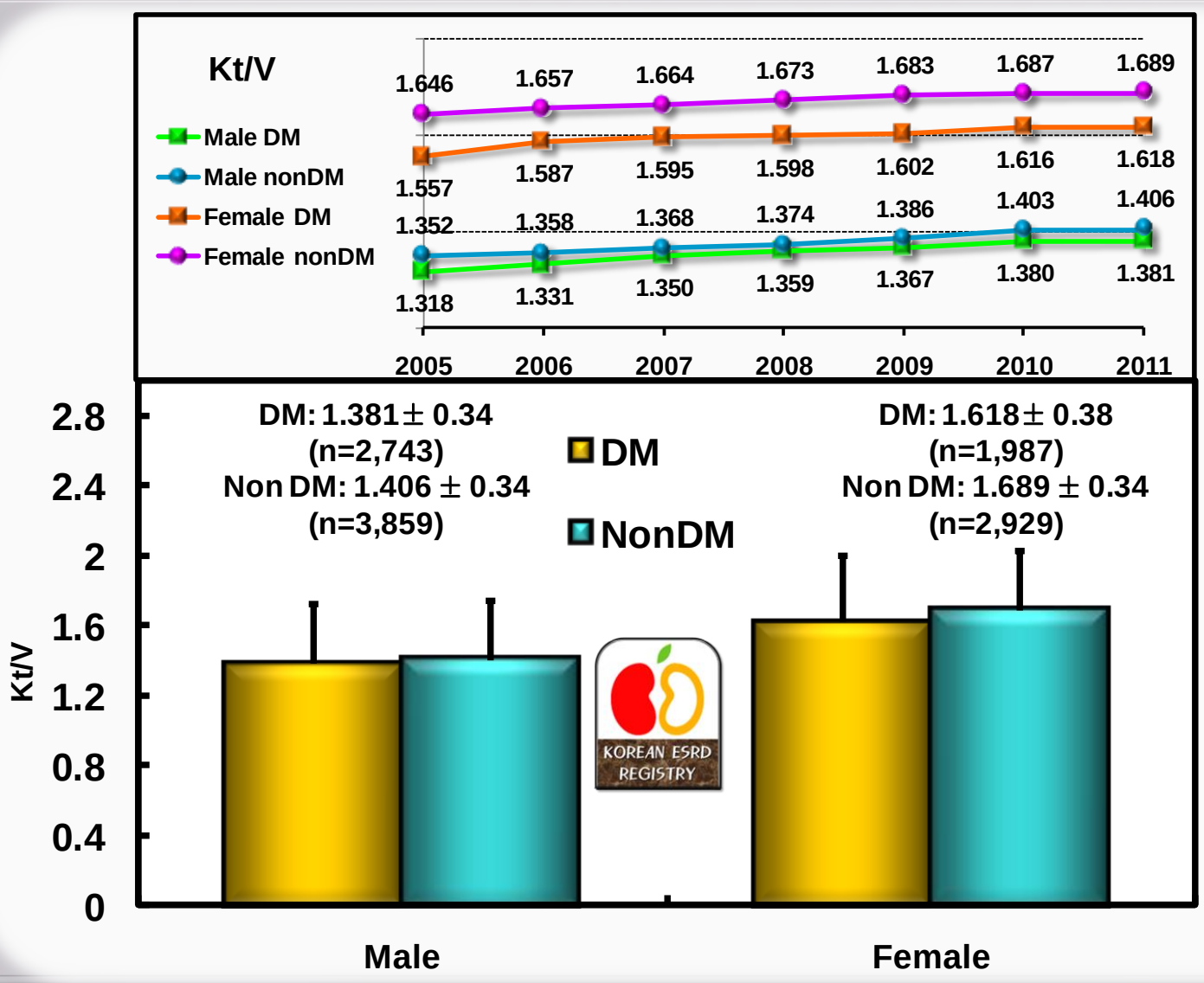
Urea Reduction Ratio



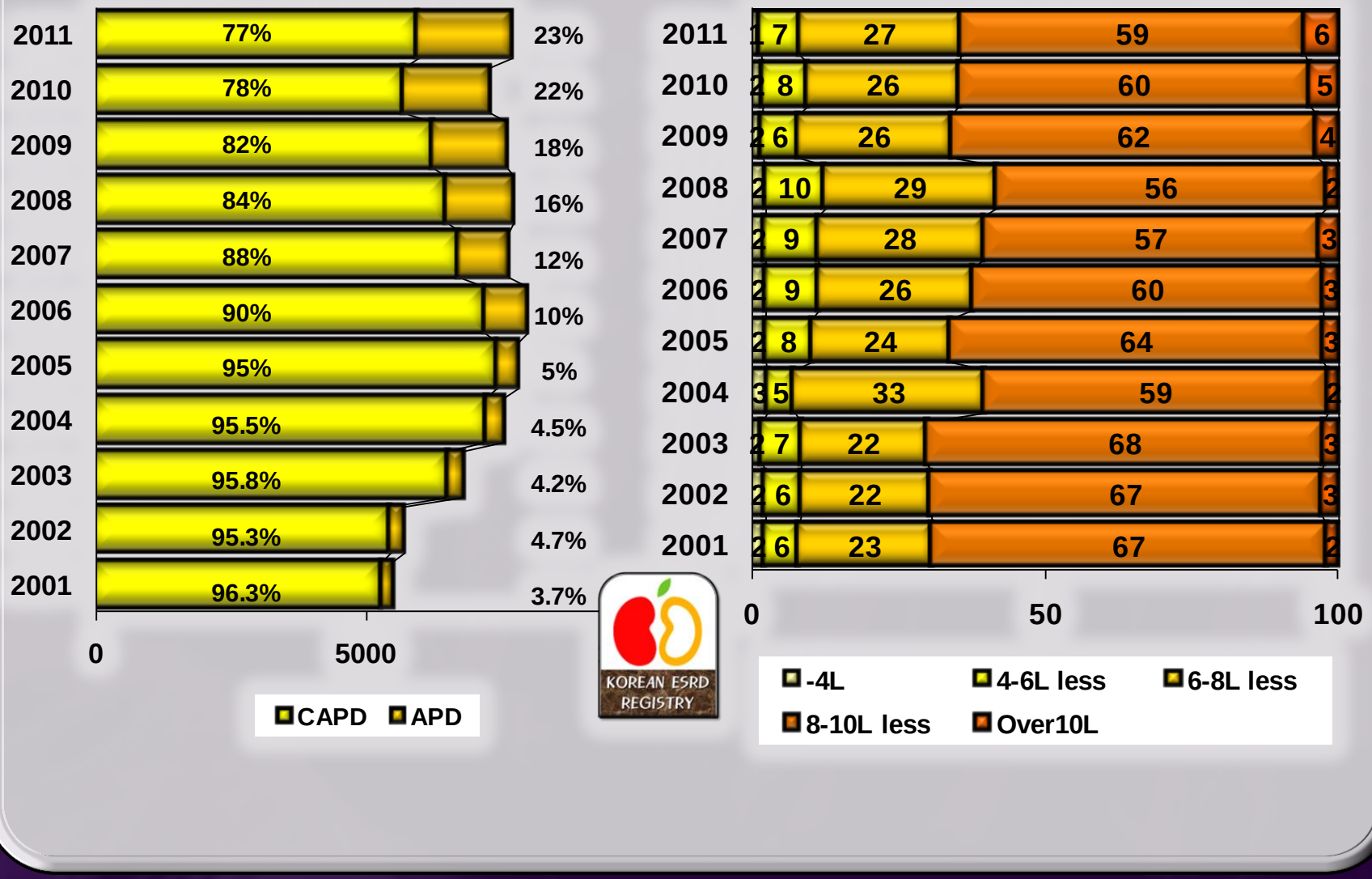
HD Adequacy


Kt/V
Male KT/V
Female KT/V
Male nPCR
Female nPCR
1.526 1.535 1.569 1.599 1.615 1.633 1.639 1.644 1.652 1.659 1.660
1.250 1.274 1.292 1.322 1.340 1.348 1.361 1.368 1.378 1.394 1.395
1.046 1.069 1.074 1.082 1.076 1.081 1.081 1.055 1.050 1.052 1.046
0.896 0.915 0.927 0.928 0.927 0.925 0.93 0.917 0.923 0.916 0.916
2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011
nPCR , Kt/V
2.8
2.4
2
1.6
1.2
0.8
0.4
0
nPCR
0.972 ± 0.29
M: 0.916± 0.26
F: 1.046 ± 0.32
Male (n=6,602)
Female (n=4,916)
KT/V
1.508 ± 0.37
M: 1.395 ± 0.34
F: 1.660 ± 0.36
KOREAN ESRD REGISTRY
nPCR
KT/V

HD Adequacy : DM & Non-DM



PD Type & Doses



KOREAN ESRD REGISTRY

Co-Morbidity of Dialysis Patients

	HD Patients (%)	PD Patients (%)
Cardiac	**15.5**	**17.0**
Coronary Artery Disease	6.7	7.0
Congestive Heart Failure	4.5	7.0
Pericardial Effusion	1.1	2.2
Arrythmia	3.3	0.8
Vascular	**50.4**	**54.4**
Cerebrovascular accident	4.3	2.2
Hypertension	43.0	51.2
Other vascular disease	3.1	1.1
Infection	**5.5**	**13.5**
Pneumonia	1.2	1.9
Tuberculosis	0.9	1.3
Peritonitis	0.9	7.5
Herpes zoster	0.2	0.5
Other Infection	2.3	2.2
Liver disease	**8.2**	**4.3**
Hepatitis B	4.8	2.7
Hepatitis C	3.0	0.3
Congestive Liver	0.2	0.0
Hemochromatosis	0.0	0.0
Other liver diseases	0.2	1.3
Gastrointestinal	**10.6**	**6.7**
Gastric Ulcer	2.3	1.3
Duodenal Ulcer	0.3	1.1
Other Gastrointestinal Diseases	8.0	4.3
Miscellaneous	**9.8**	**4.0**
Malnutrition (Alb<2.5g/dl)	0.5	0.0
Malignancy	1.4	1.1
Hypertensive Retinopathy	1.2	0.3
Uremic Dermatitis	2.8	0.3
Uremic Neuritis	1.9	1.1
Uremic Dementia	0.7	0.8
Uremic Ascites / Pleural Effusion	0.5	0.5
Osteodystrophy	0.8	0.0

* Reported patient number: Hemodialysis = 3,213, Peritoneal dialysis = 371.

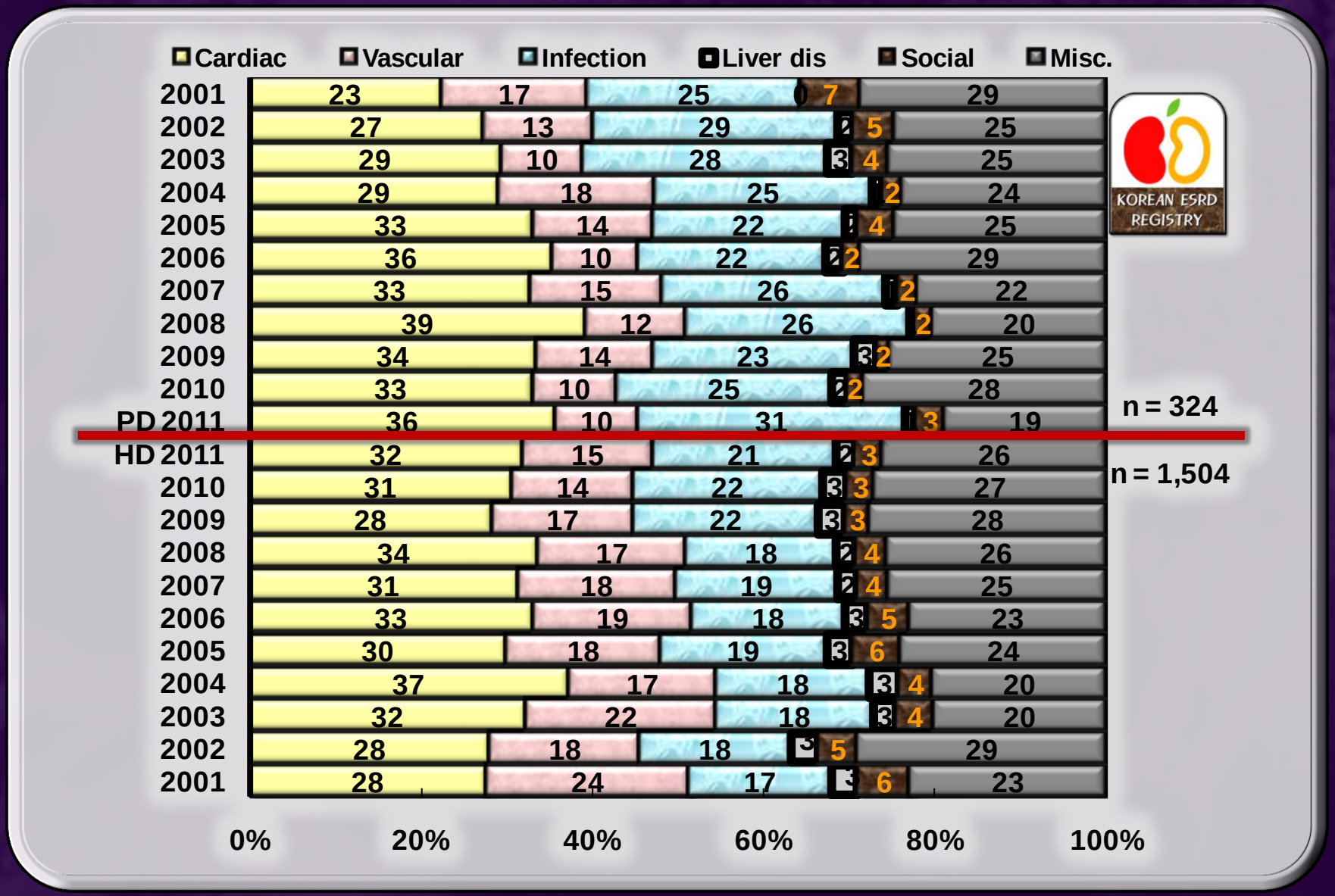
KOREAN ESRD REGISTRY

Causes of Death (%), 1994-2011

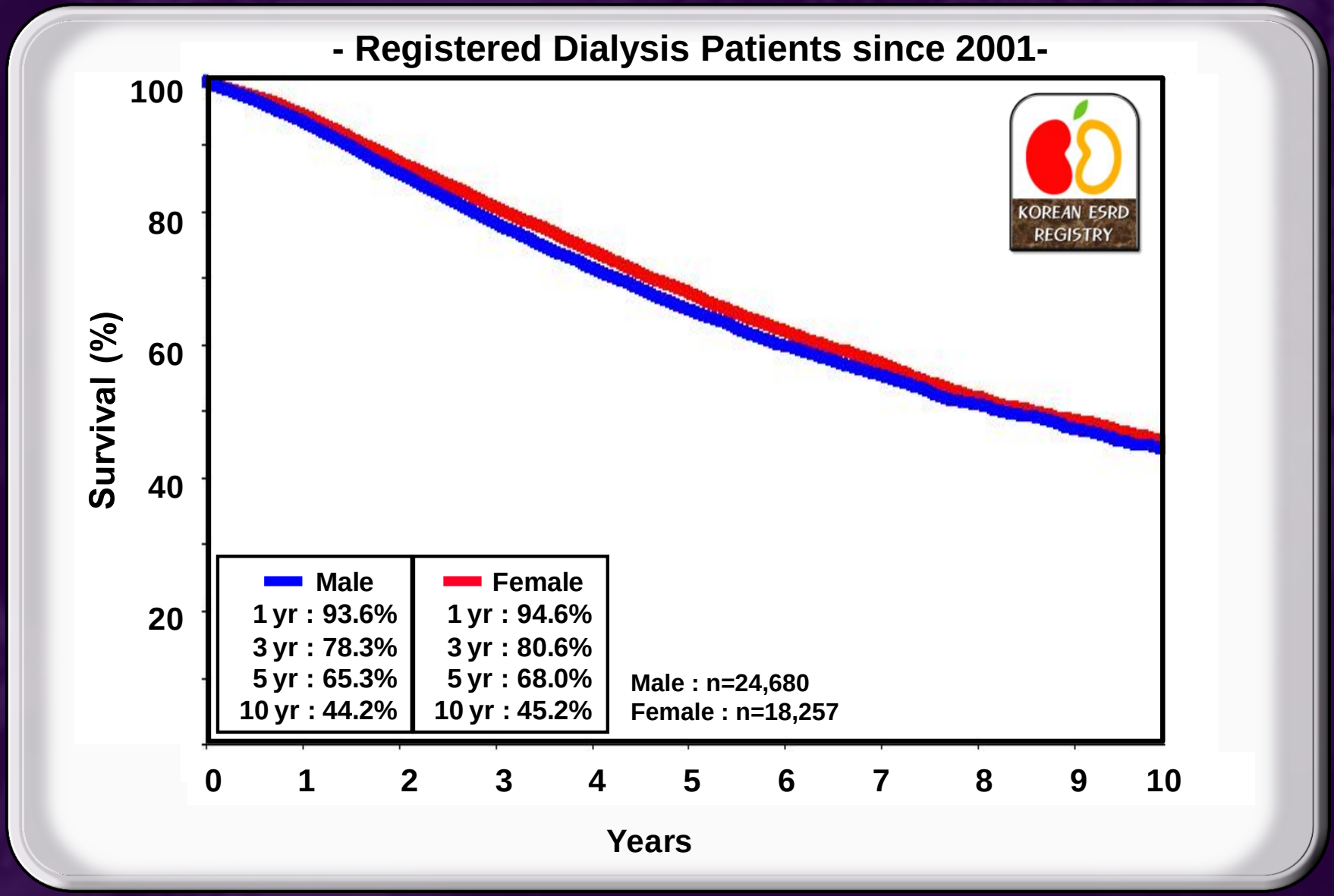
	1994-96	1998	2001	2003	2004	2005	2006	2007	2008	2009	2010	2011
Cardiac	**27.4**	**27.4**	**26.9**	**31.7**	**35.5**	**30.7**	**33.7**	**31.7**	**35.1**	**29.5**	**31.1**	**32.7**
Myocardial infarction	6.4	6.4	7.7	7.4	8.3	8	9.1	7.5	9.7	8.0	8.3	6.6
Cardiac arrest, uremia associated	13.7	13.7	11.2	11.7	13.6	10.4	11.1	10.8	11	8.5	8.7	11.0
Cardiac arrest, other cause	7.2	7.2	8.1	12.5	13.6	12.4	13.5	13.3	14.4	13	14.2	15.0
Vascular	**17.2**	**17.2**	**22.7**	**19.5**	**17.5**	**17**	**16.5**	**17.8**	**16**	**15.9**	**13.3**	**14.1**
Cerebrovascular accident	14.3	14.3	15.1	14.5	12.8	12.3	11.5	13	12.2	11	8.2	8.7
Pulmonary embolus	0.2	0.2	0.5	0.1	0.2	0.6	0.7	0.5	0.1	0.2	0.1	0.2
Gastrointestinal hemorrhage	1.7	1.7	2.7	3.2	2	1.7	1.8	2.7	1.9	2.3	2.6	2.2
Gastrointestinal embolism	0.1	0.1	0.1	0	0.4	0.5	0.5	0.1	0.1	0.5	0.4	0.1
Other vascular disease	0.9	0.9	4.3	1.6	2.1	1.9	2	1.6	1.7	1.9	2.2	3.0
Infection	**13.5**	**13.5**	**17.8**	**20.5**	**19.5**	**20.1**	**18.8**	**20.2**	**19.5**	**21.9**	**22.6**	**23.1**
Pulmonary infection	2.5	2.5	4.5	3.6	3.7	4.5	4.2	4.4	4.4	5.9	7.5	8.4
Septicemia	6.6	6.6	6.9	9.7	9.4	9.6	8.9	11.7	9	10.4	10.7	9.7
Tuberculosis	0.3	0.3	0.8	0.2	0.1	0.3	0.1	0.2	0.1	0.3	0.2	0.1
Peritonitis	2.1	2.1	1.1	2	1.5	1.4	1.1	1.1	2	0.8	1.2	1.0
Other Infection	2	2	4.5	4.9	4.8	4.3	4.5	2.9	4	4.5	2.9	4.0
Liver disease	**3.4**	**3.4**	**2.6**	**2.8**	**2.9**	**2.7**	**2.6**	**2.2**	**1.9**	**3.1**	**2.7**	**2.1**
Liver failure due to hepatitis B	1.8	1.8	1.6	1.8	2.1	1.5	1.4	1.3	1	2.2	1.2	1.0
Liver failure due to other cause	1.6	1.6	1	1	0.9	1.2	1.1	0.8	0.8	0.9	1.6	1.1
Social	**6.2**	**6.2**	**6.3**	**4.4**	**3.6**	**5.4**	**4.2**	**3.3**	**3.3**	**2.5**	**2.9**	**3.3**
Patient refused further treatment	2.9	2.9	2.1	1	1.1	1.1	0.6	1.1	0.6	0.5	0.3	0.4
Suicide	2.5	2.5	3.3	2.3	2	3.3	3	1.5	1.6	1.3	1.9	1.4
Therapy ceased for other reason	0.8	0.8	0.9	1	0.5	1	0.6	0.7	1	0.8	0.7	1.5
Miscellaneous	**32**	**32**	**23.7**	**21.3**	**21**	**24**	**24.2**	**24.8**	**24.3**	**27.1**	**27.3**	**24.7**
Cachexia	2.9	2.9	8.1	6.6	6.1	4	3.9	4.4	3.8	3.3	2.8	2.7
Malignant disease	2.1	2.1	4.4	3.5	3.6	6.4	5.4	5.7	4.6	5.7	5.9	6.0
Accident	1.2	1.2	0.9	1.1	0.9	1.4	1.6	1.2	1	1.3	0.6	1.6
Uncertain	25.8	25.8	10.3	10.1	10.3	12.3	13.2	13.4	14.9	16.8	18	14.5

*Number of patients :1994-1996=981, 1998=911, 2001=761, 2003=894, 2004=1,162, 2005=1,256, 2006=1,248, 2007=1,531, 2008=1,563, 2009=1,727, 2010=1,802, 2011=1,828.

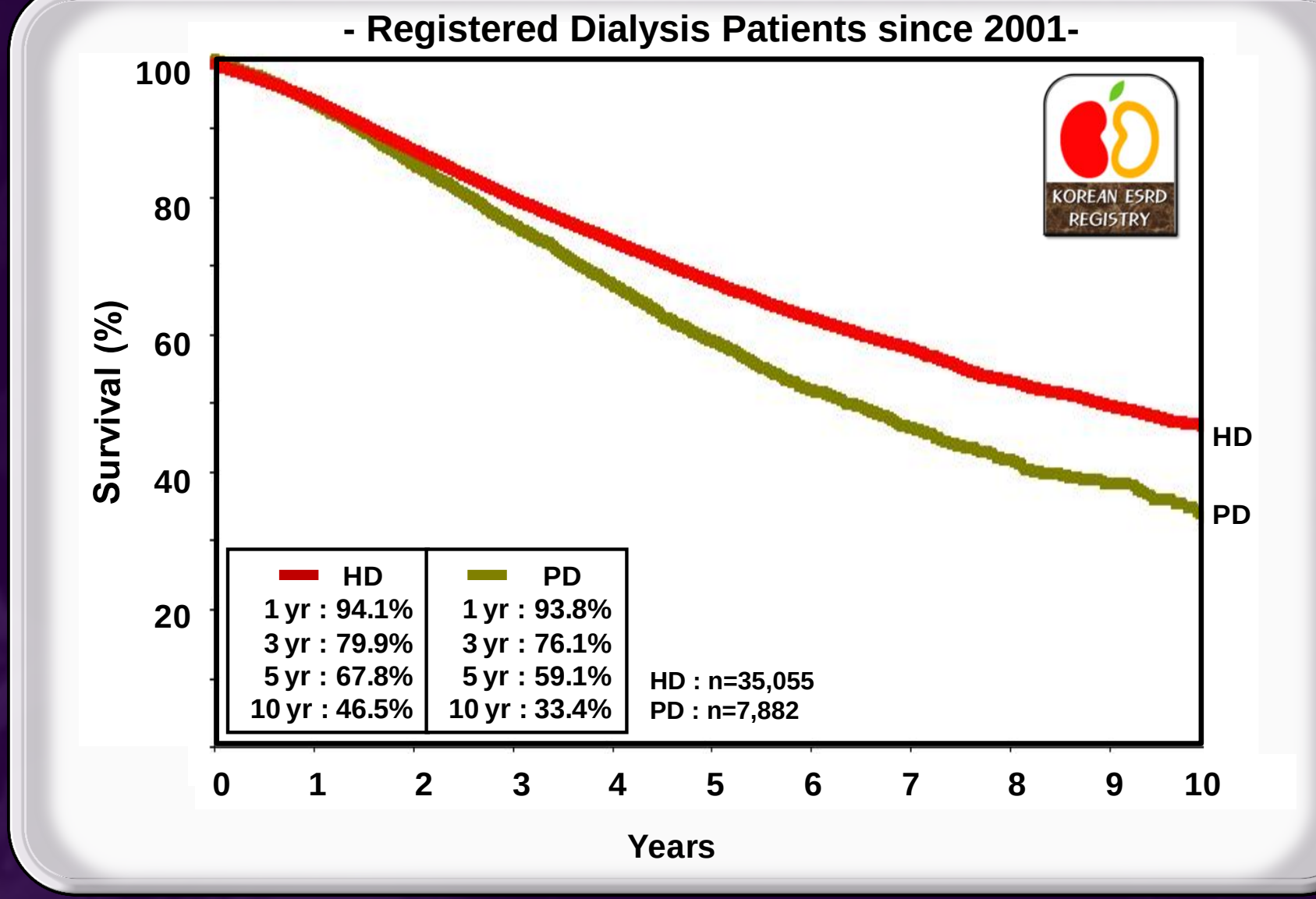
Death Causes, HD & PD



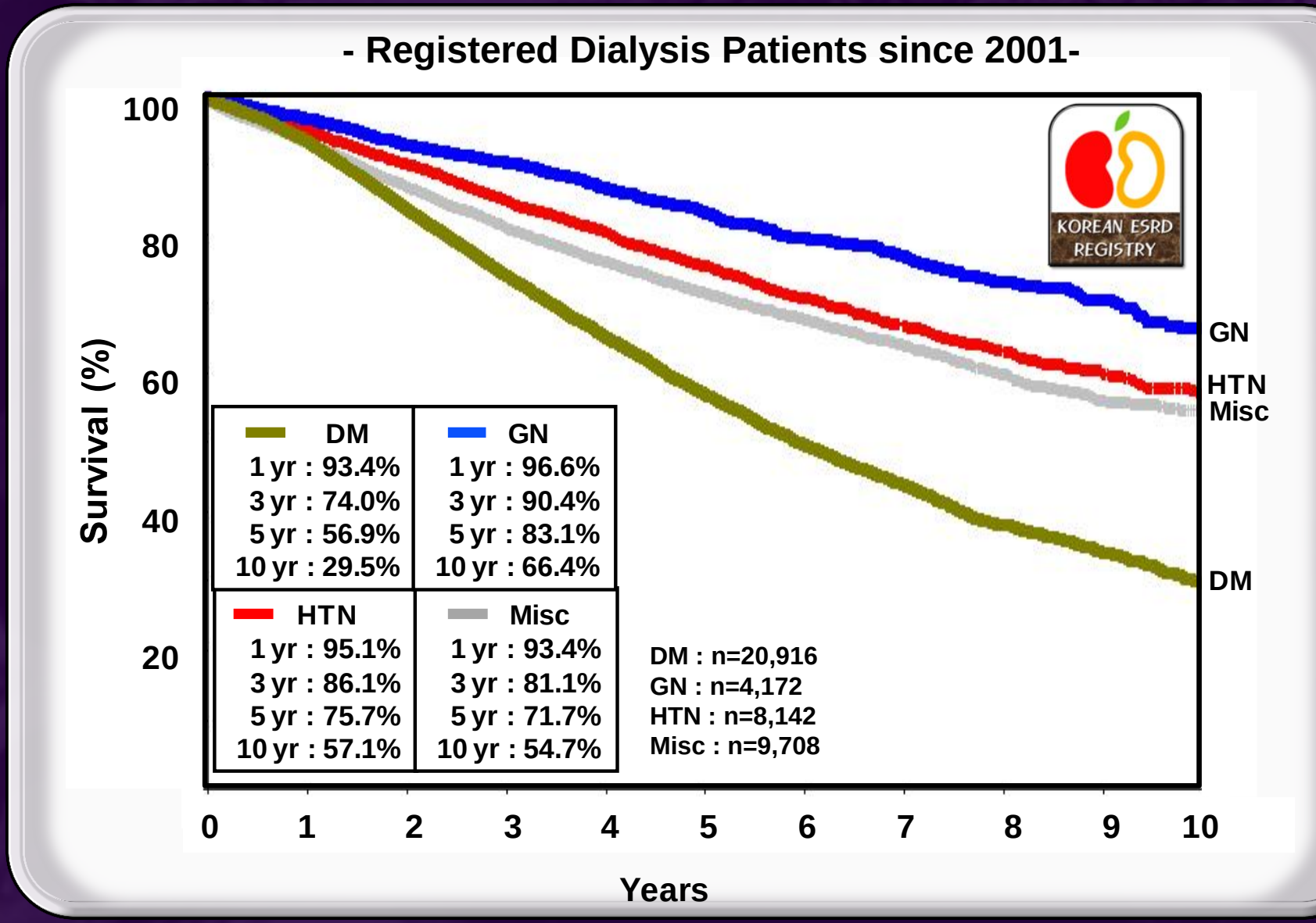
Overall Patient Survival



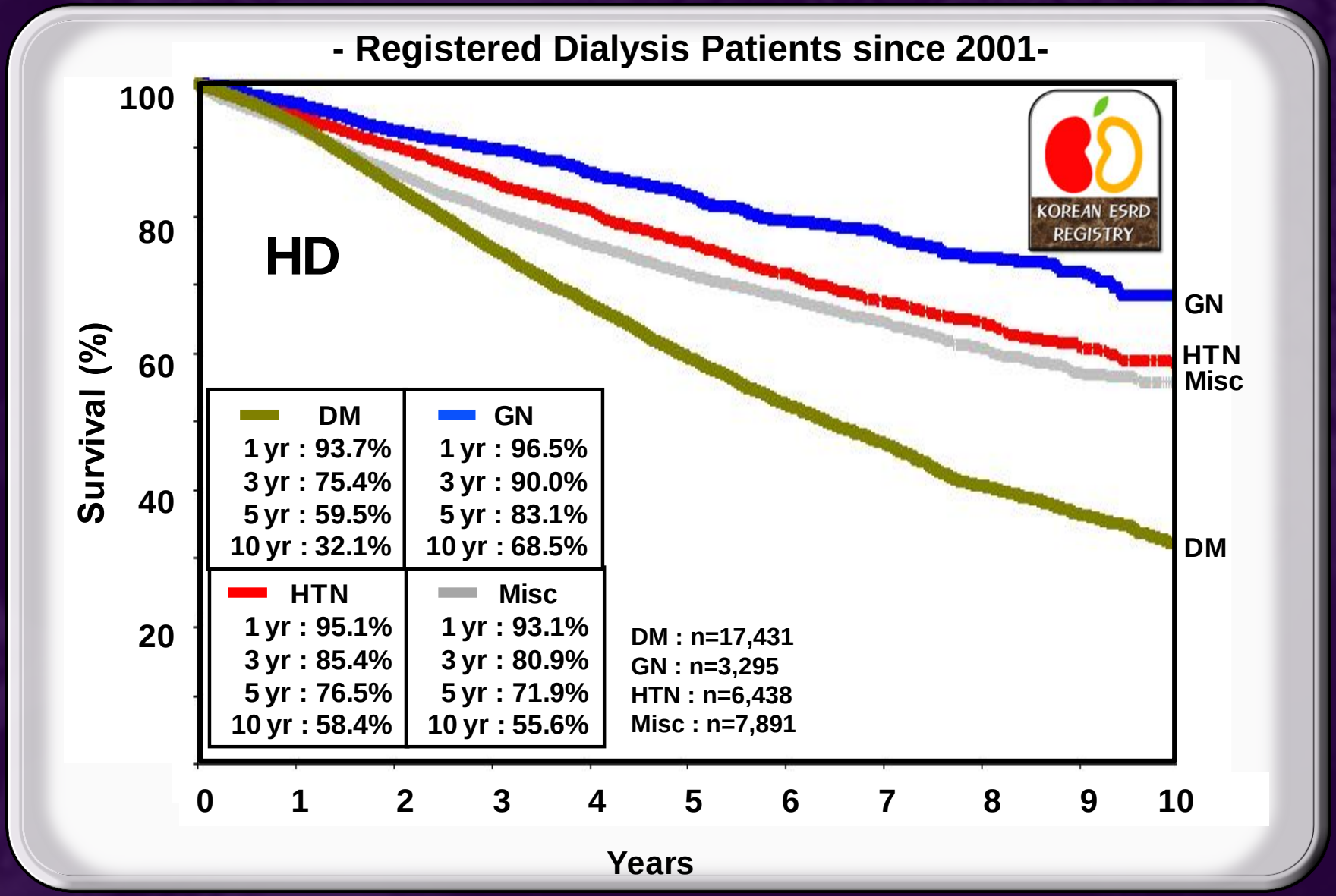
Patient Survival : HD vs PD



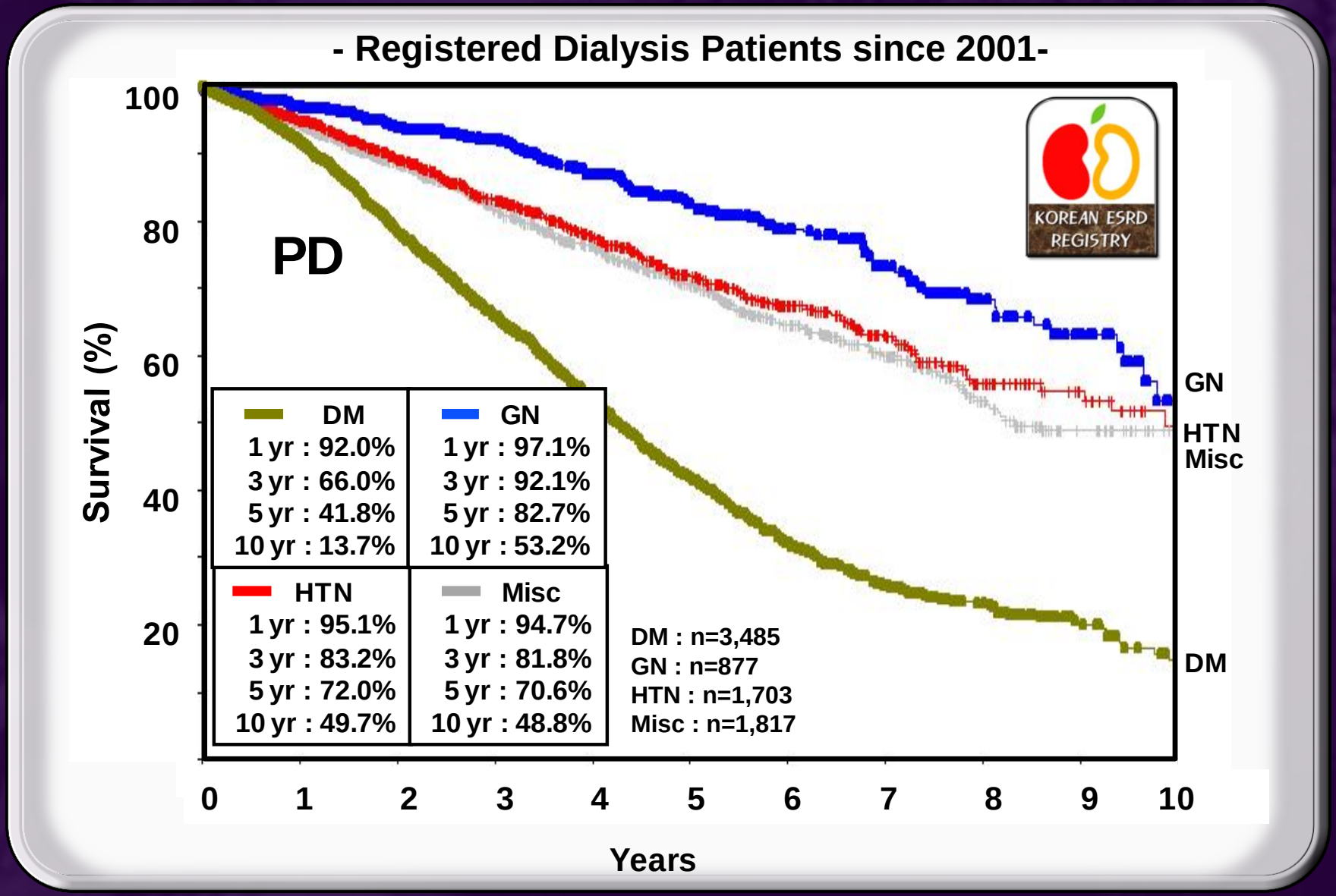
Patients Survival : Cause of ESRD



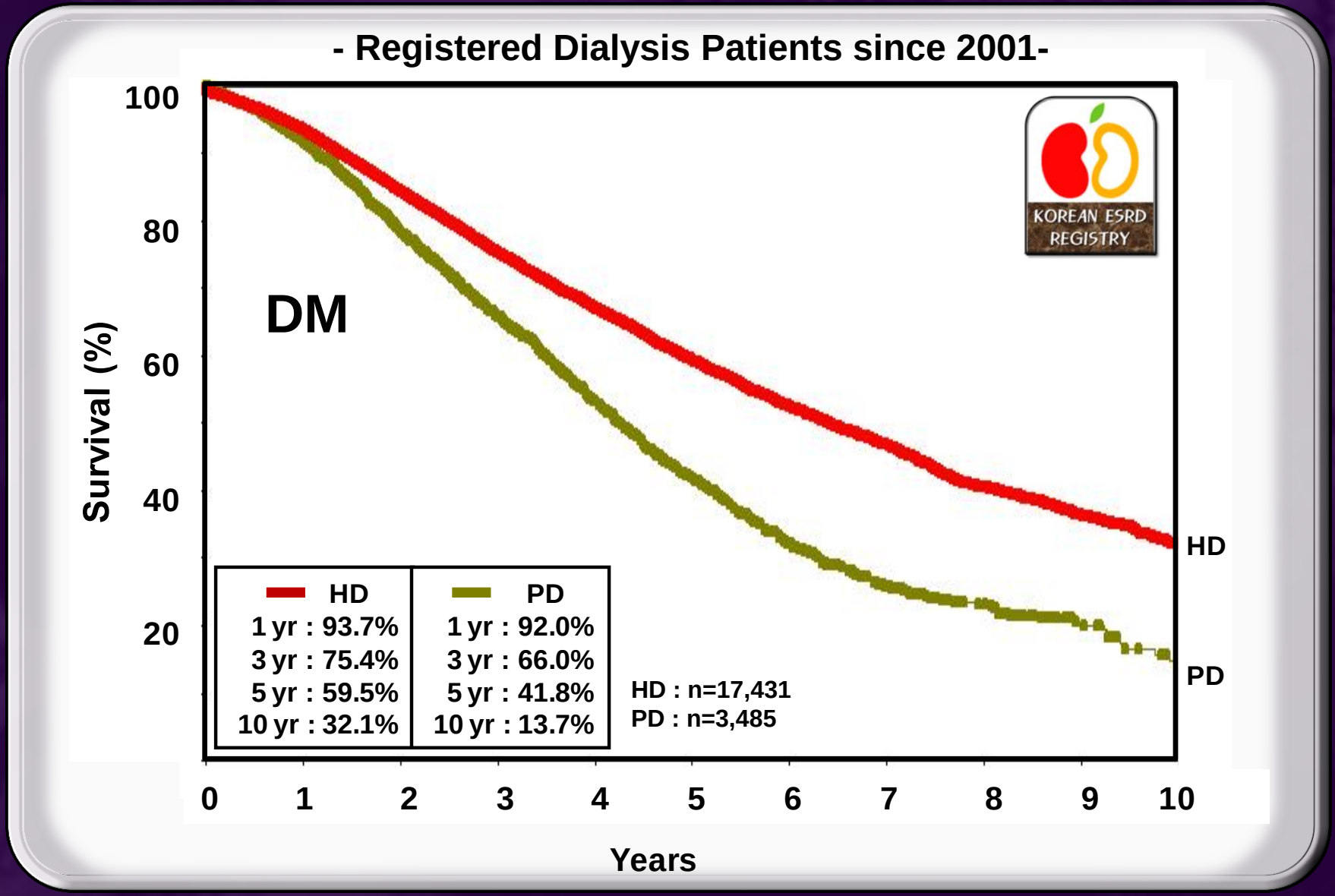
Patients Survival : Cause of ESRD, HD



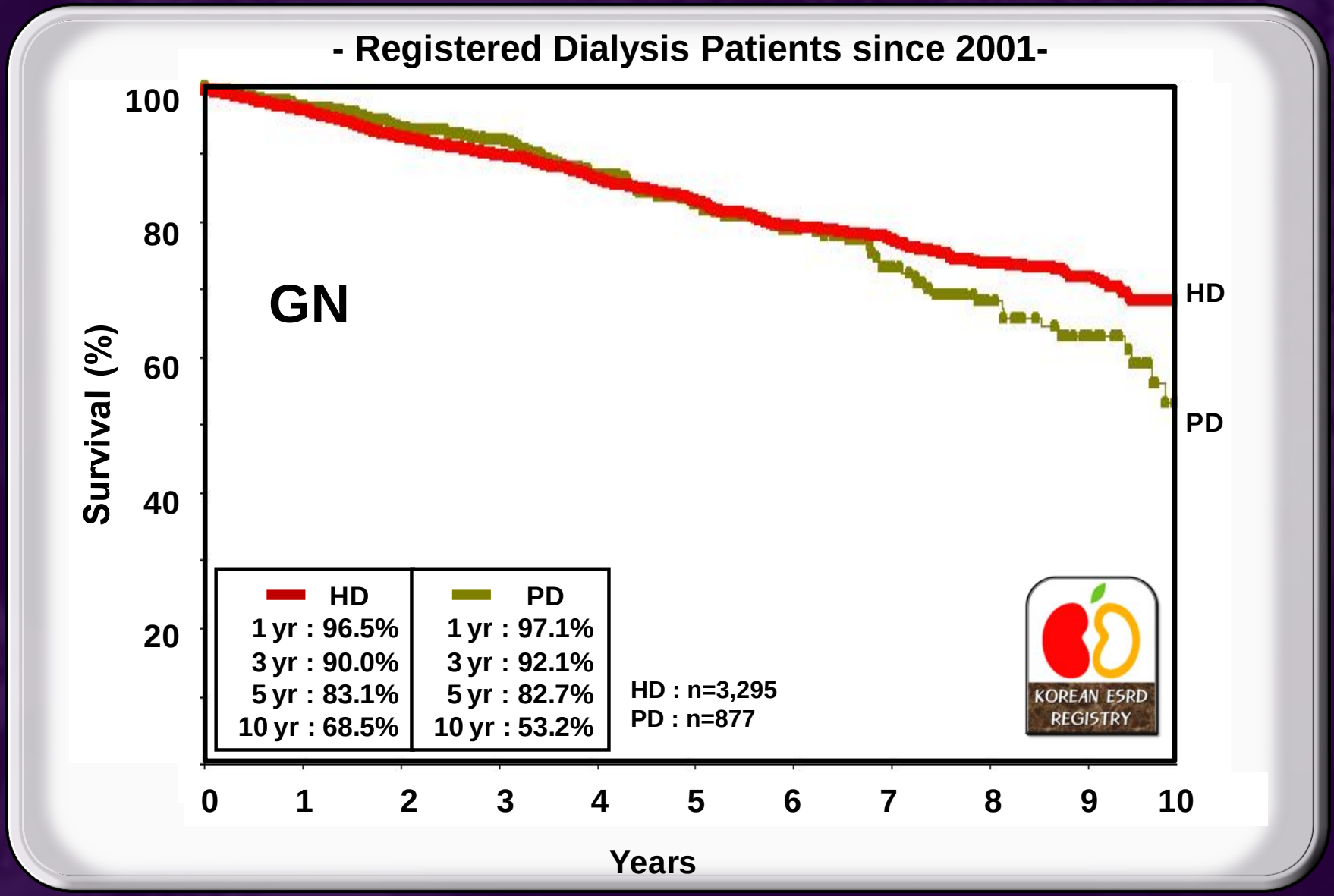
Patients Survival : Cause of ESRD, PD



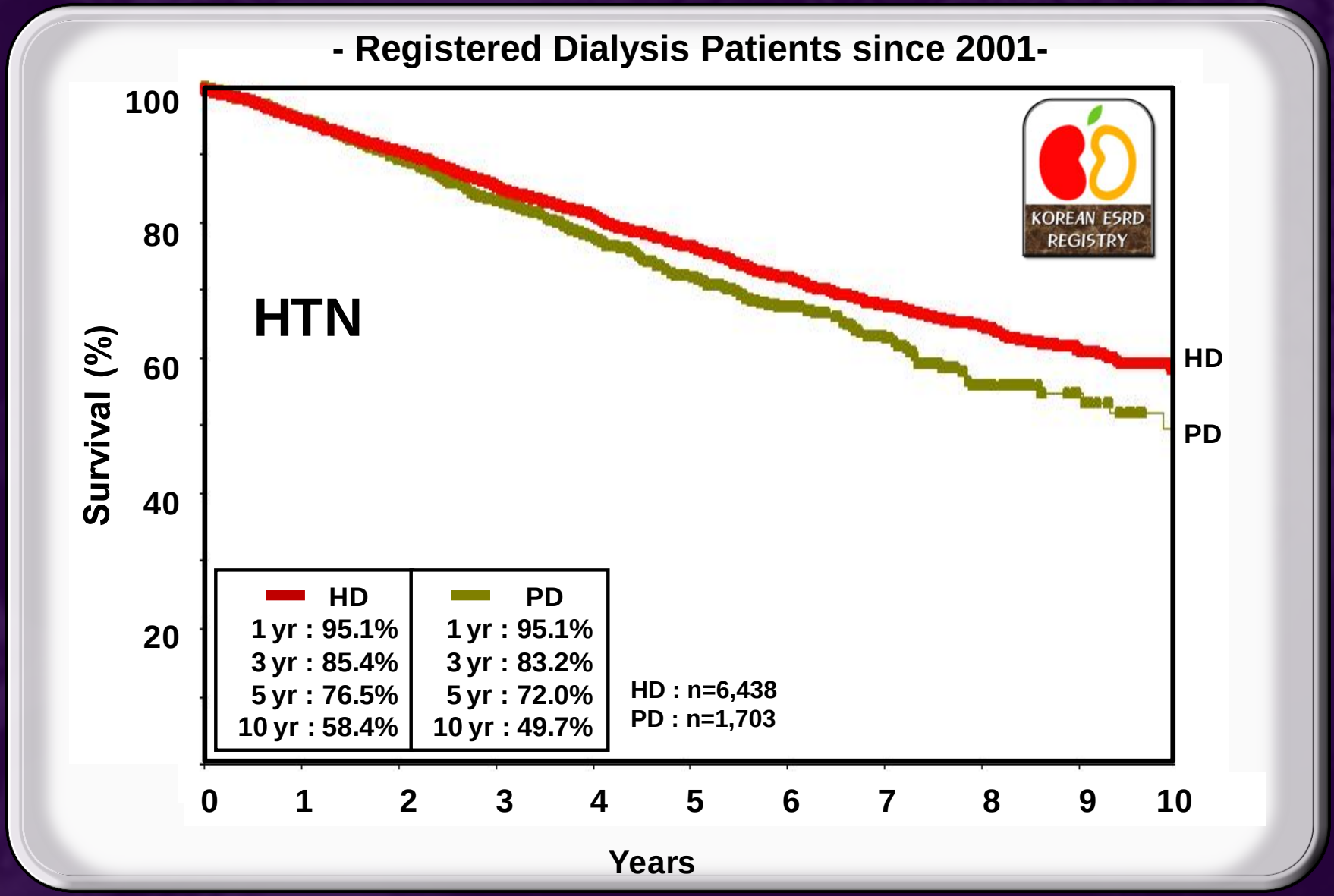
Patients Survival : HD vs PD in DM pts



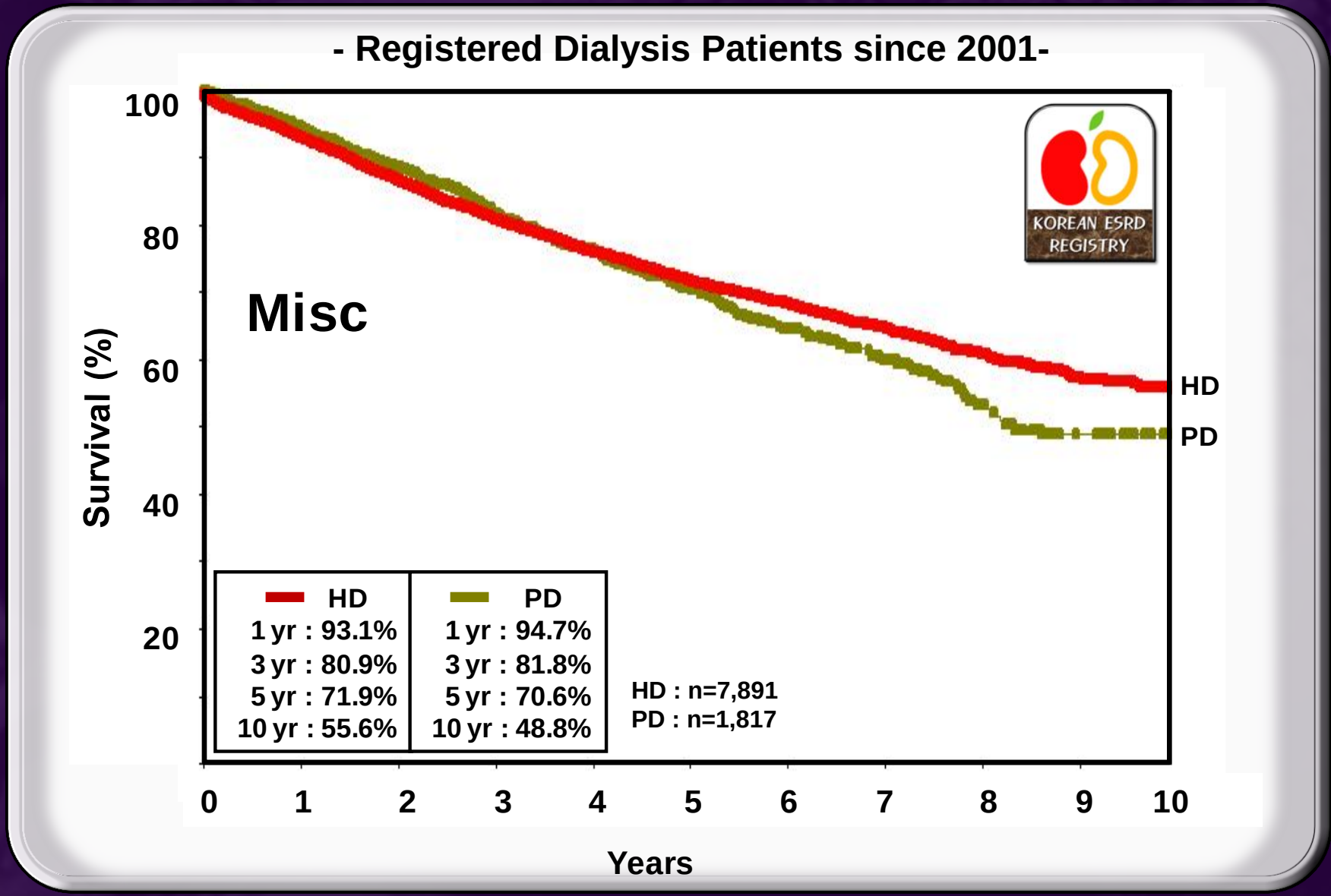
Patients Survival : HD vs PD in GN pts



Patients Survival : HD vs PD in HTN pts



Patients Survival : HD vs PD in Misc pts

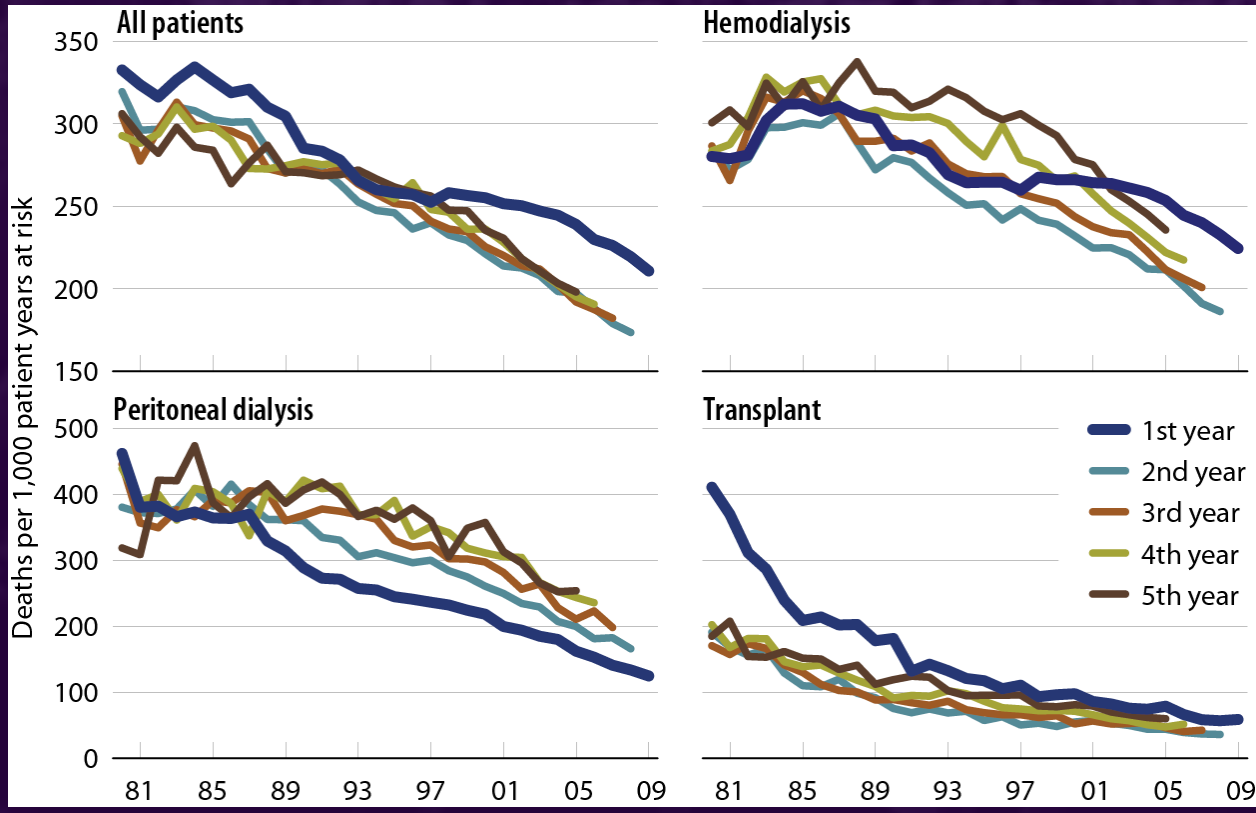


RRT for ESRD in USA

2012 volume two
USRDS Annual Data Report
Atlas of End-Stage Renal Disease in the United States

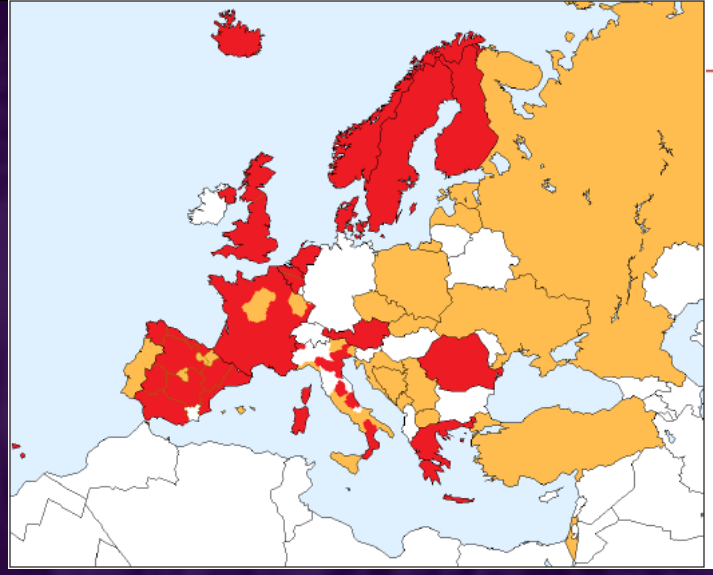
- 2010년 투석환자수 : 41만5천명 (1,218 PMP)
  - 혈액투석 환자수 : 37만 6천명
  - 복막투석 환자수 : 2만 9천명
  - 신장이식 환자수 : 17만 4천명

Adjuested all-cause mortality rates
(from day 90), by modality & year of treatment



- Adjusted 5-year Survival probabilities among incident ESRD pts, 2010 (from day one)
  - Overall dialysis : 0.35
  - HD : 0.35
  - PD : 0.41
  - Transplant : 0.73
  - DM : 0.32
  - HTN : 0.38
  - GN : 0.48

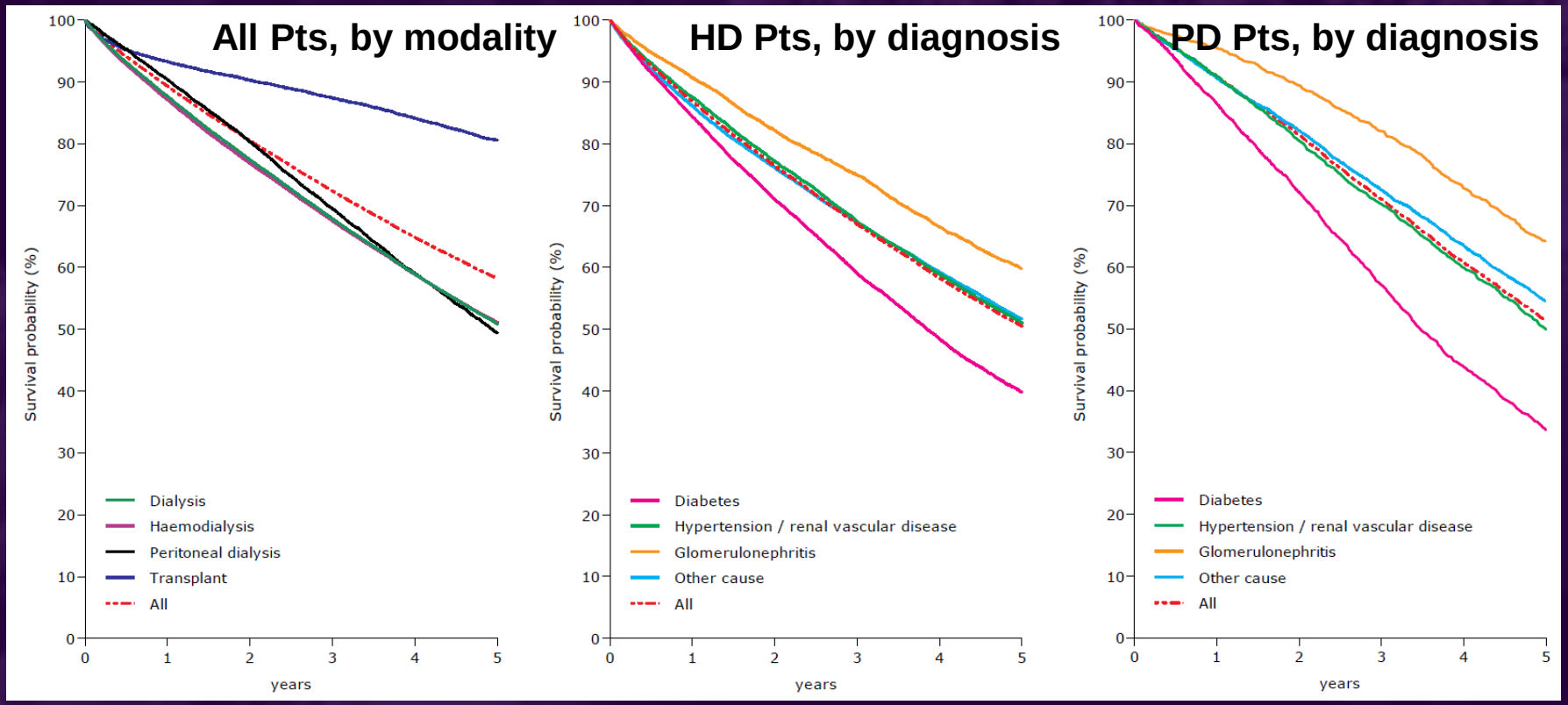
RRT in Europe



ERA-EDTA Registry

Annual Report 2010

- 2010년말 기준 (KT 포함)
  - Prevalence: 752~1262 PMP
  - 영국: 5만천명, 프랑스:4만9천명
  - Dialysis 5 yr survival : 50.9% (KT 포함: 57.1%)

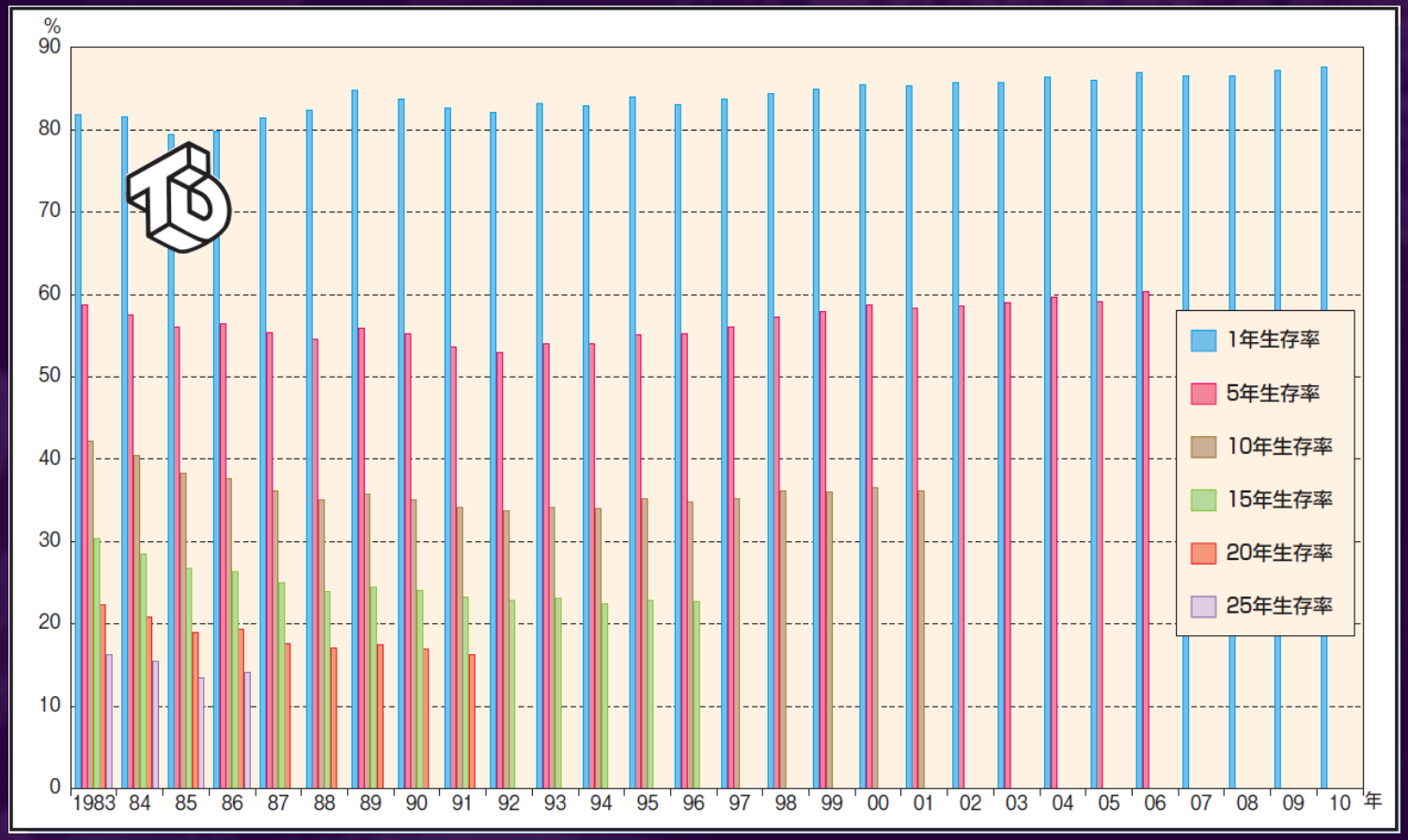


Dialysis in Japan

図　説
わが国の慢性透析療法の現況
2011年12月31日現在
An overview of regular dialysis treatment in Japan as of Dec. 31, 2011

日本透析医学会
Japanese Society for Dialysis Therapy

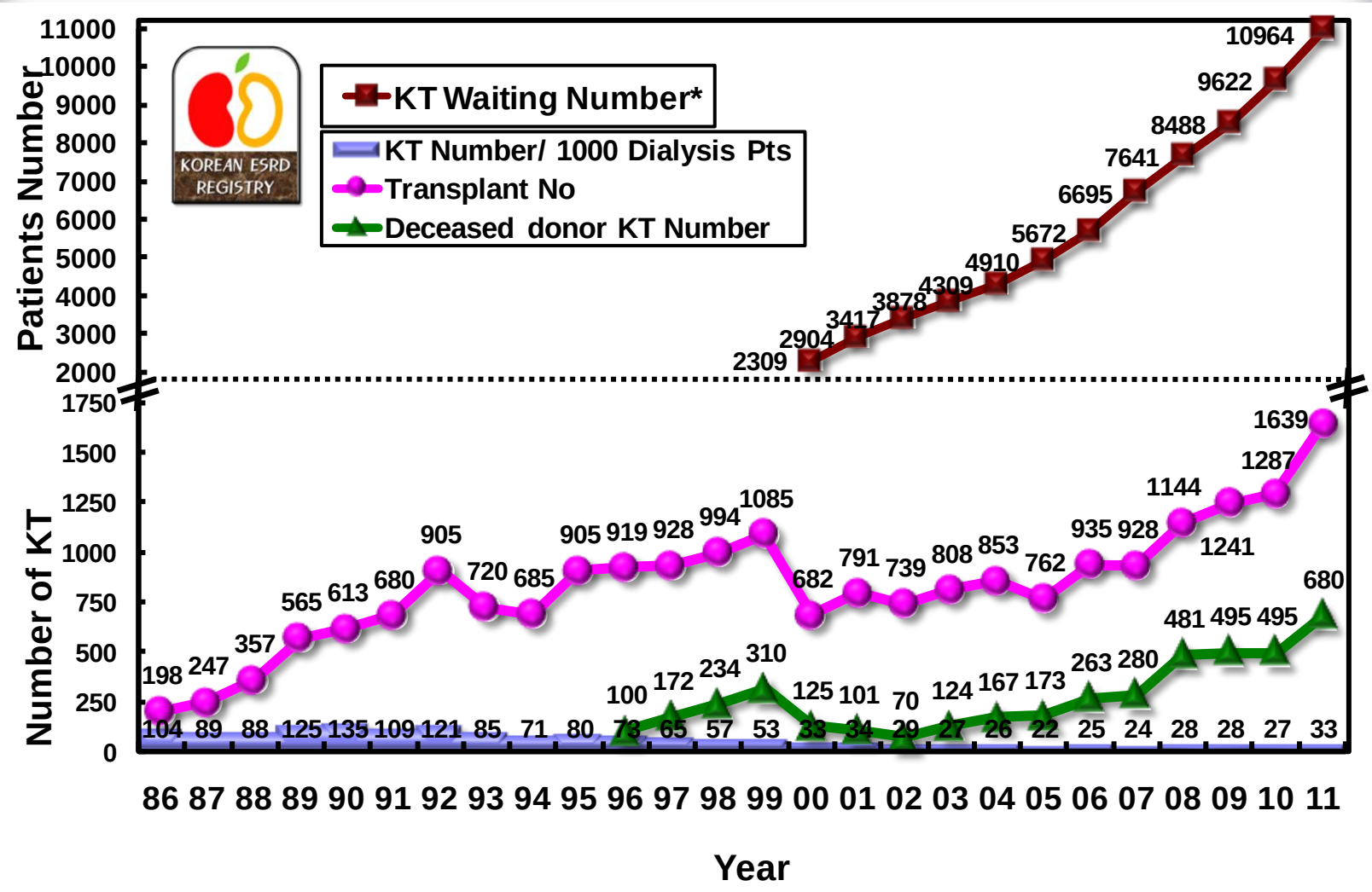
- 2011년 말 기준
  - 투석기관수 : 4,205개소 (혈액투석기 121,835대)
  - 투석 환자수 : 30만5천명 (2,383 PMP) : 20년 이상 투석환자 : 7.6%
  - 혈액투석환자수 : 29만4천명, (주간 25만 4천명 , 야간 4만1천명)
  - 복막투석 환자수: 9,626명 (3.2%)



Survival Rate

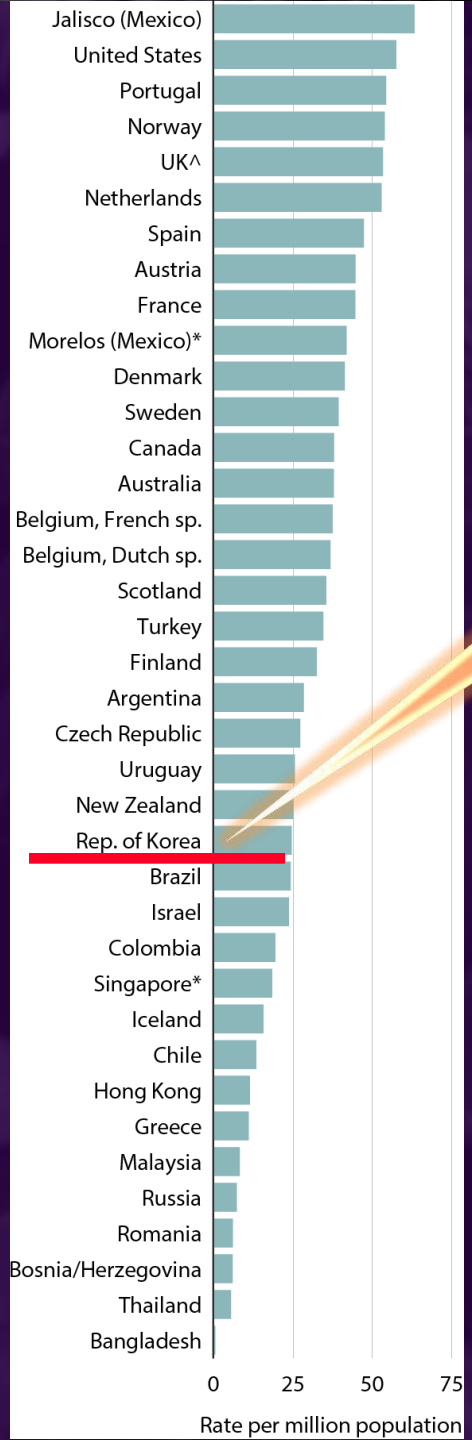
1 yr : 87.7%
5 yr : 60.3%
10 yr: 36.2%
20 yr: 16.3%

Kidney Transplantation



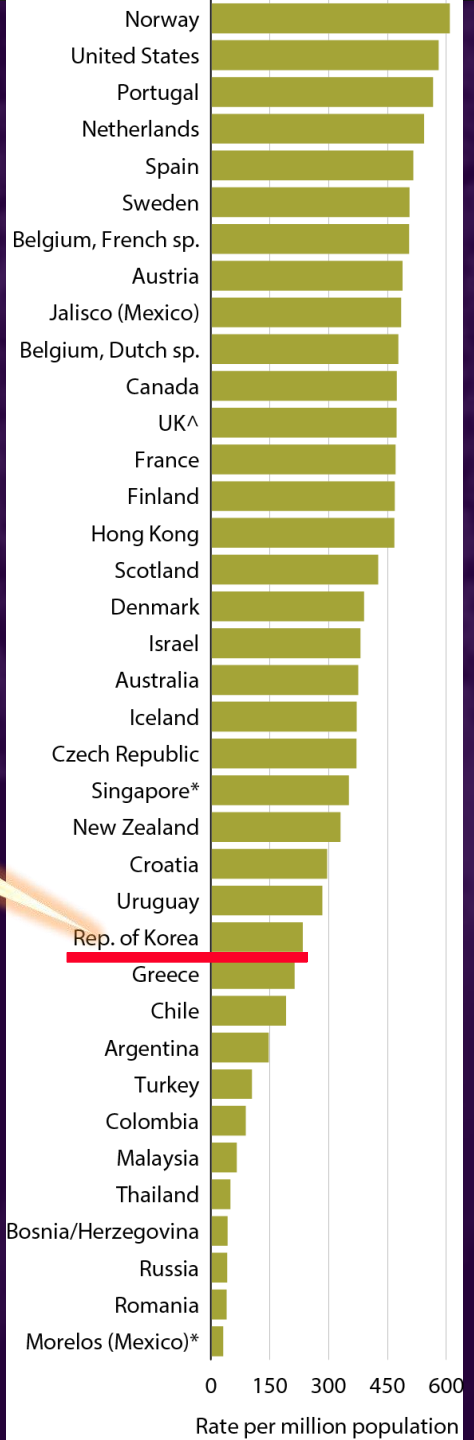
KOREAN ESRD REGISTRY

Kidney Transplantation



Incidence
24.6 PMP
2010

Prevalence
234.1 PMP
2010



2012 volume two
USRDS Annual Data Report
Atlas of End-Stage Renal Disease in the United States

U.S. Renal Data System, USRDS 2012 Annual Data Report: Atlas of Chronic Kidney Disease and End-Stage Renal Disease in the United States, National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases, Bethesda, MD, 2012.

Oct. 2012

KOREAN ESRD REGISTRY

특 징 요 약

- 전체 투석환자 및 혈액투석기관수의 꾸준한 증가
- 비윤리 의료기관 존재, 요양병원 증가
- 복막투석의 유지 및 상대적 혈액투석 비율의 증가
- 원인 신질환에서 당뇨병성 신증의 비율 47%로 증가
- 혈액투석 효율 점진적 향상, 빈혈 개선, 혈압저하
- 신장이식 증가, 특히 뇌사공여 월등한 증가
- 의료보험 심사평가원의 적정성 평가, 대한신장학회의 투석기관 인증제, 개인정보 보호법에 따른 등록사업의 변화 예정

감사의 글

- 전국의 인공신장실 담당의료진
- 대한신장학회 사무국
- 투석용 의료물품 공급업체 :

  (Gambro Korea, FMC Korea, Baxter Korea, 보령제약)