우리나라 신대체 요법의 현황

– 인산 민병석 교수 기념 말기 신부전 환자 등록사업 2012 –

Current Renal Replacement Therapy in Korea

-Insan Memorial Dialysis Registry 2012-

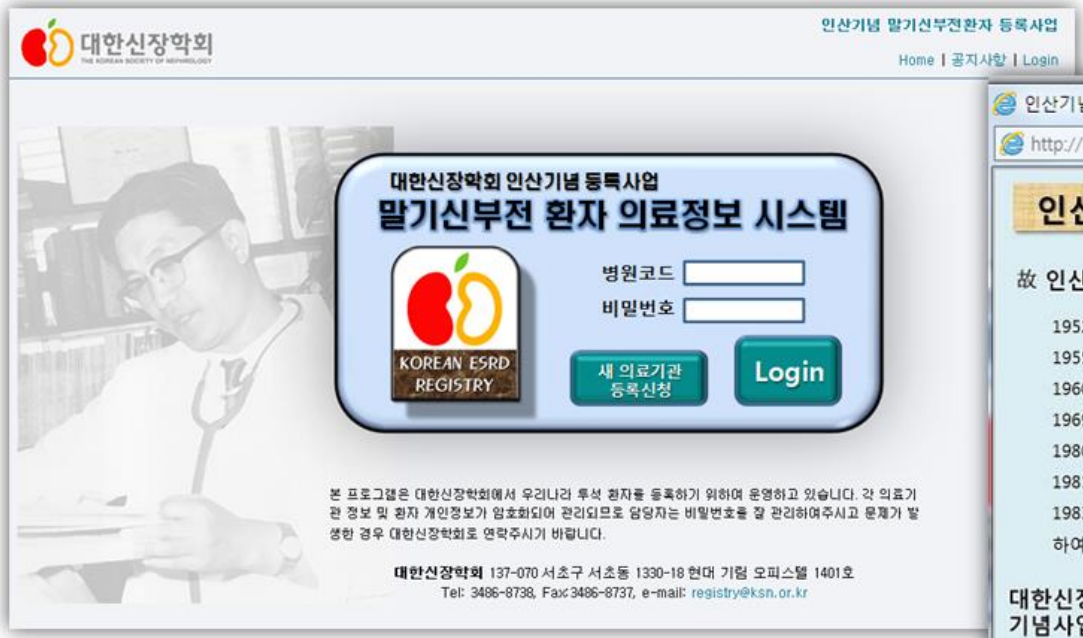
대한신장학회 등록위원회

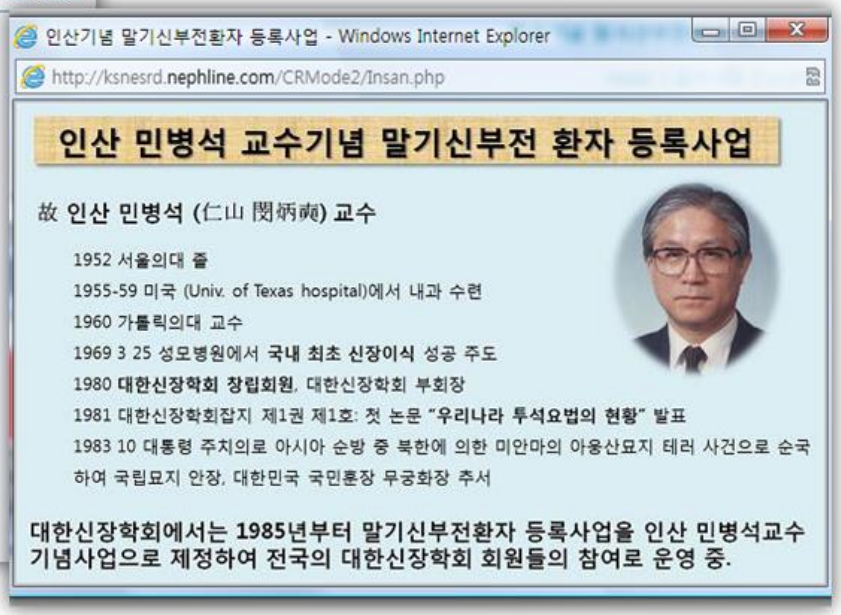
ESRD Registry Committee, Korean Society of Nephrology

Oct. 2013

새 등록사업 프로그램

- 2013년 7월 사용 시작
- 개인 정보 보호법 적용 및 투석 의료기관 인증제 프로그램과 통합
- 추가 항목 : 투석 방법, 합병증, 검사 수치, 재활상태 추가 등재
- 과거 자료 모두 이전



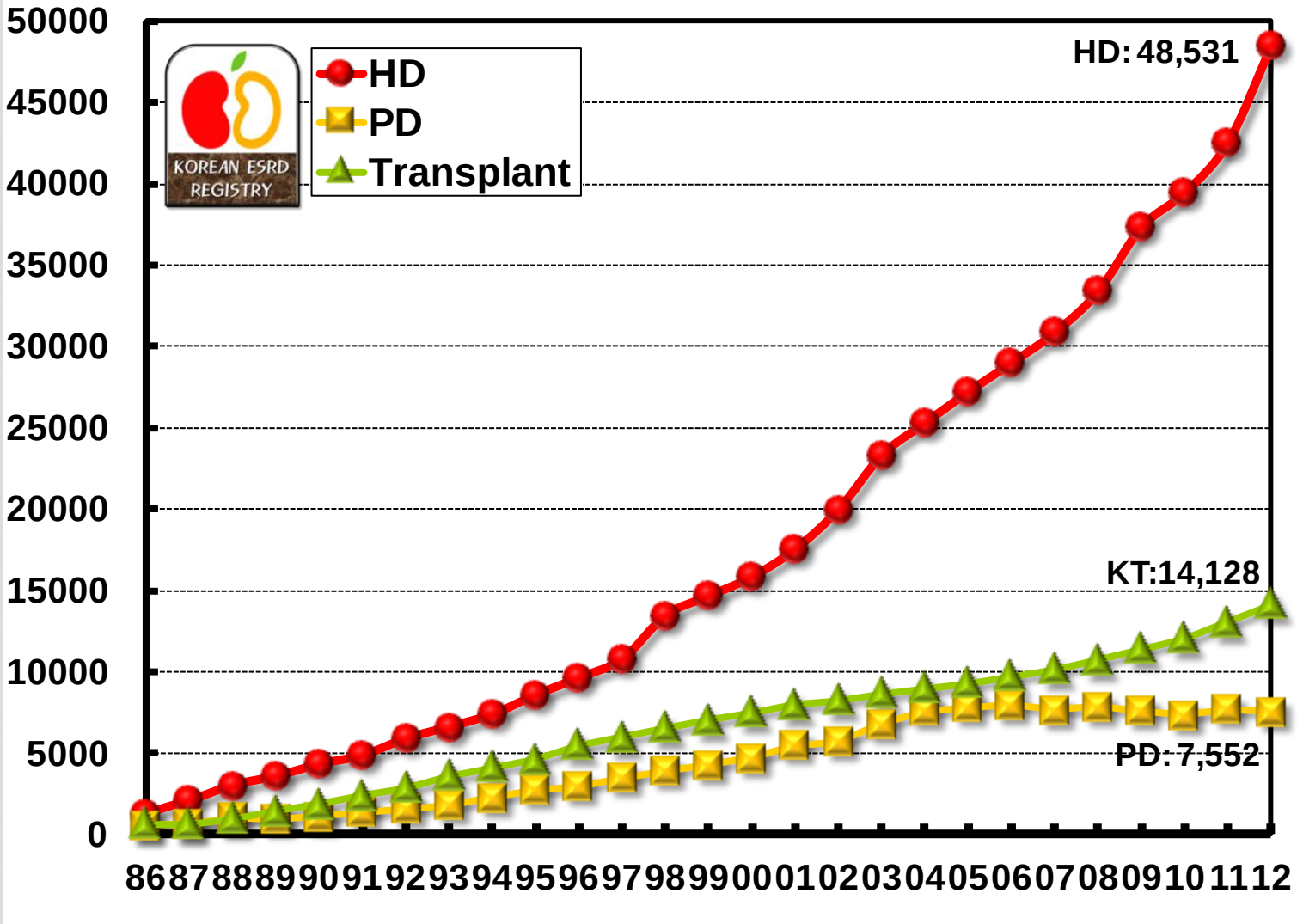


Prevalence of Renal Replacement Therapy

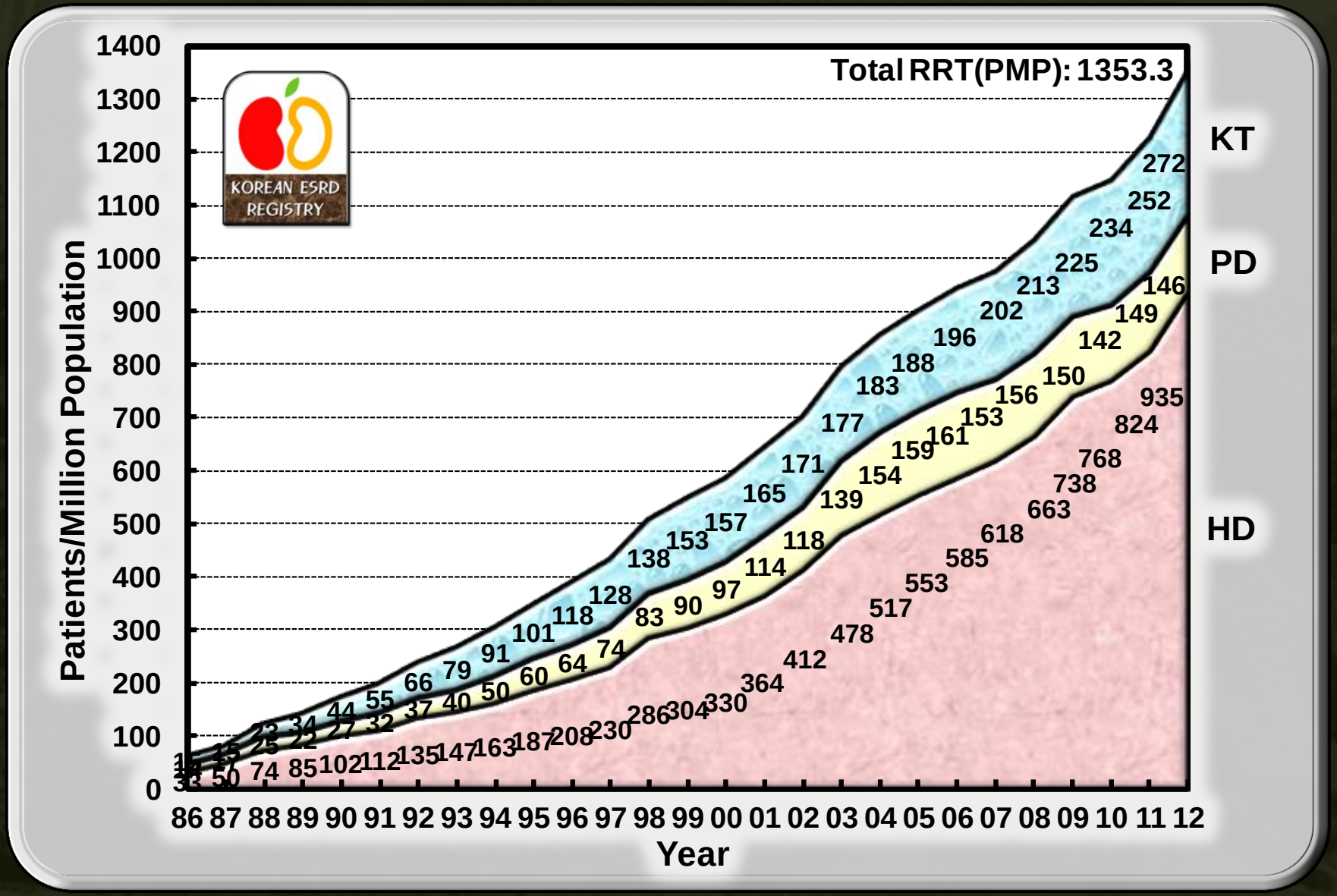
	HD		PD		Transplant		Total	
1986	1,335	(32.6)	573	(13.9)	621	(15.1)	2,534	(61.7)
1988	3,012	(74.0)	1,058	(25.2)	982	(23.4)	5,142	(122.7)
1990	4,311	(101.8)	1,130	(26.7)	1,866	(44.1)	7,307	(172.6)
1992	5,890	(135.3)	1,599	(36.7)	2,862	(65.8)	10,351	(237.8)
1994	7,387	(162.7)	2,284	(50.3)	4,116	(90.6)	13,787	(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)
2012	48,531	(935.4)	7,552	(145.6)	14,128	(272.3)	70,211	(1353.3)

( ): number of patients per million population, Population in Korea at the end of 2012: 51,881,255.

Patient Number of RRT



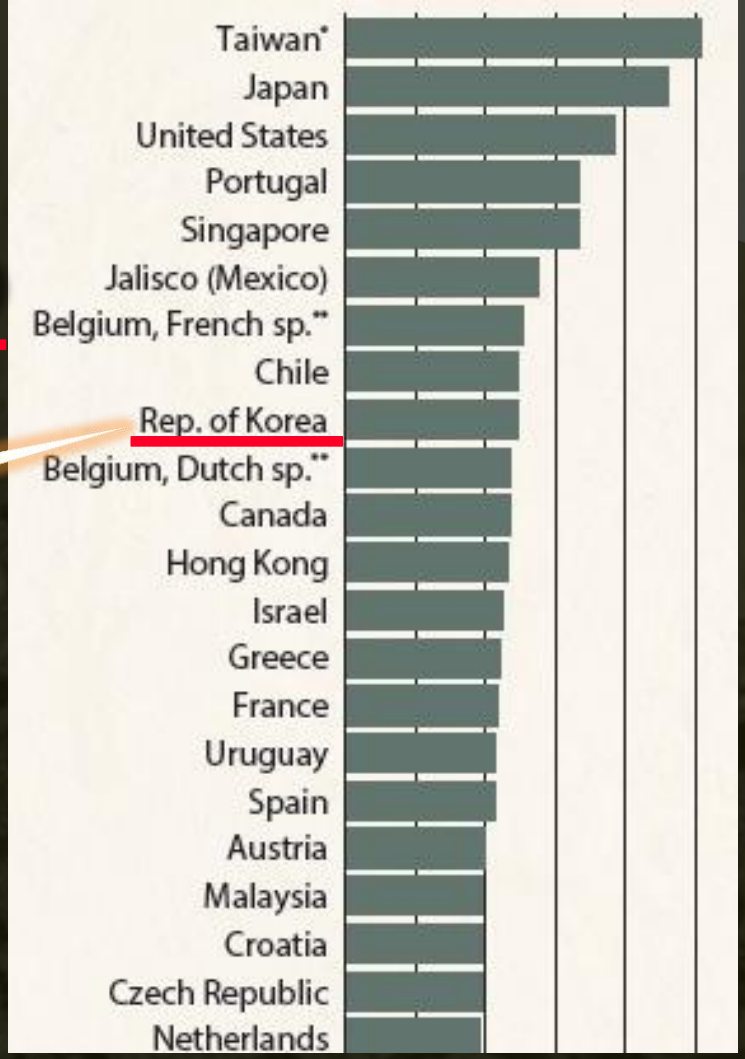
Point Prevalence of RRT

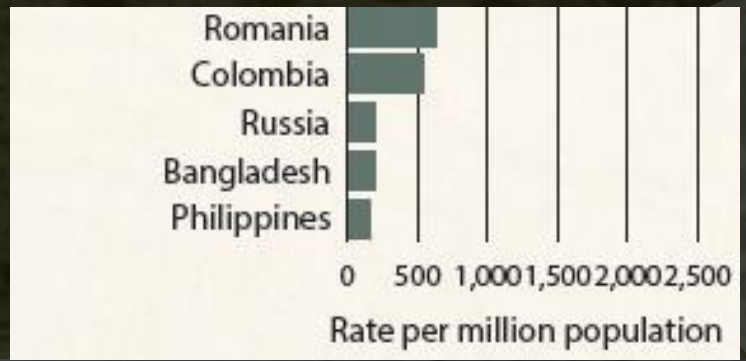


KOREAN ESRD REGISTRY

Prevalence of ESRD

1,225 PMP
End of 2011





2013 USRDS ANNUAL DATA REPORT

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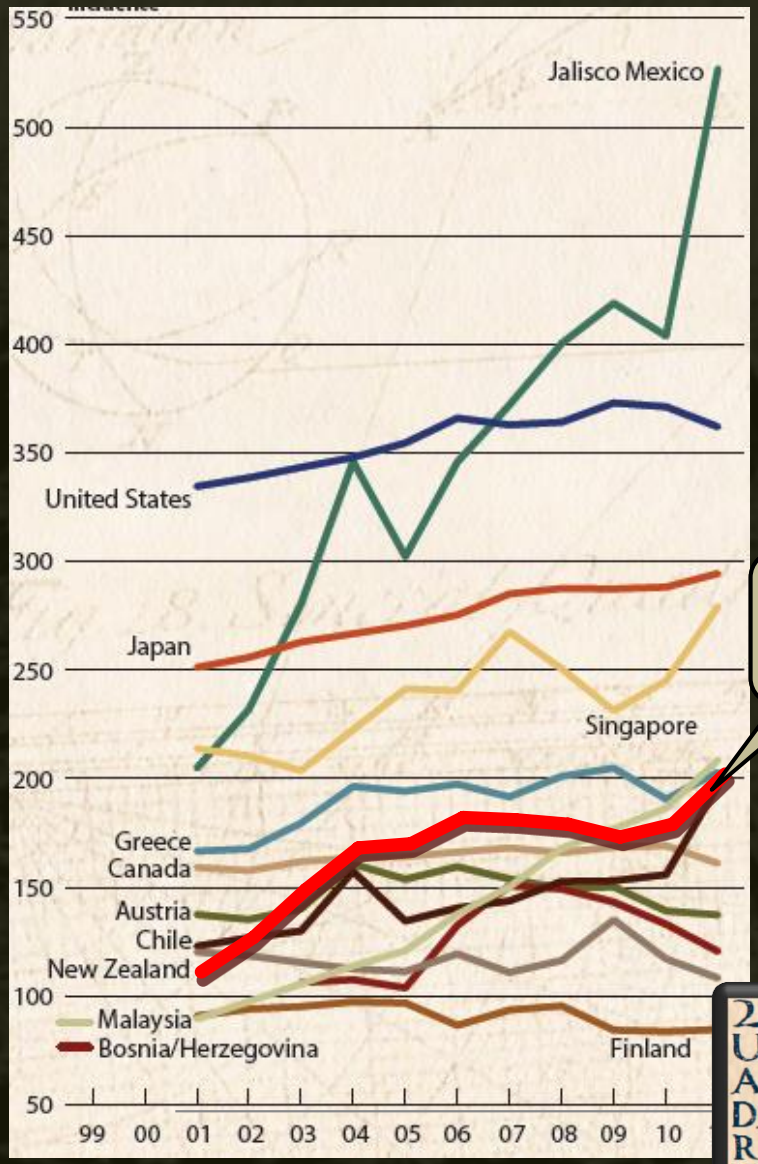
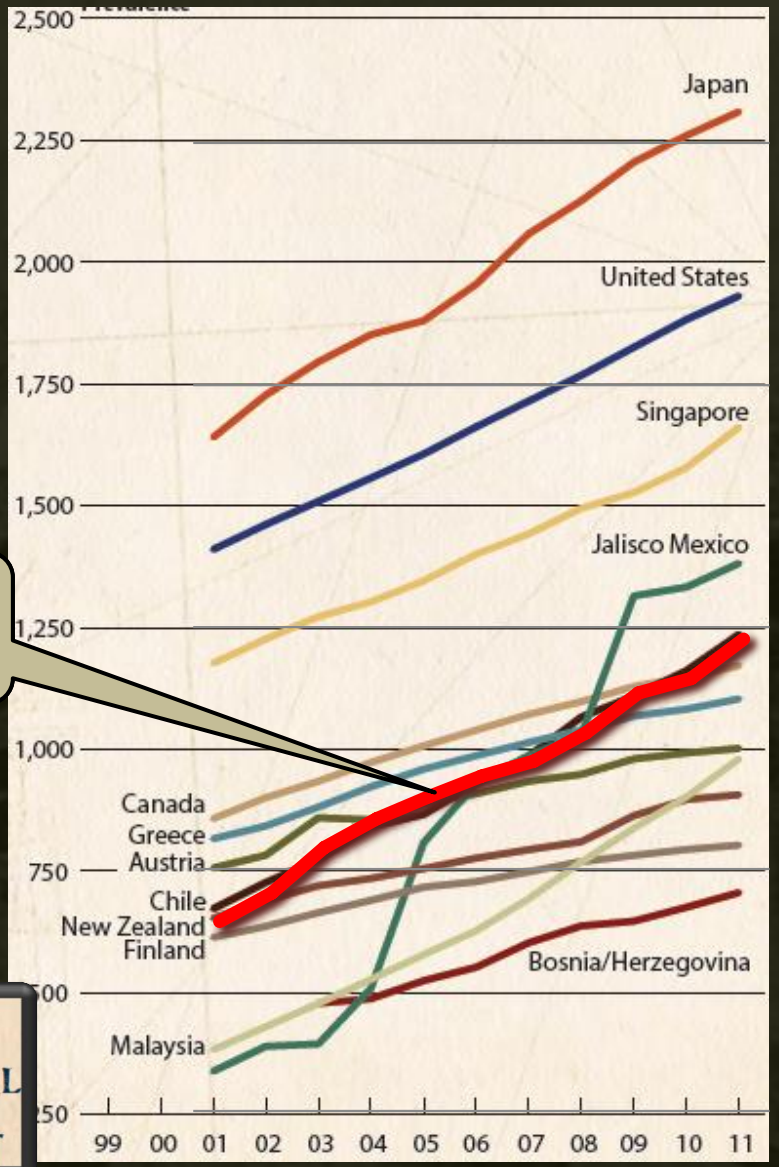
KOREAN ESRD REGISTRY

Incidence of ESRD



Prevalence of ESRD



Rep. of Korea

2013 USRDS ANNUAL DATA REPORT

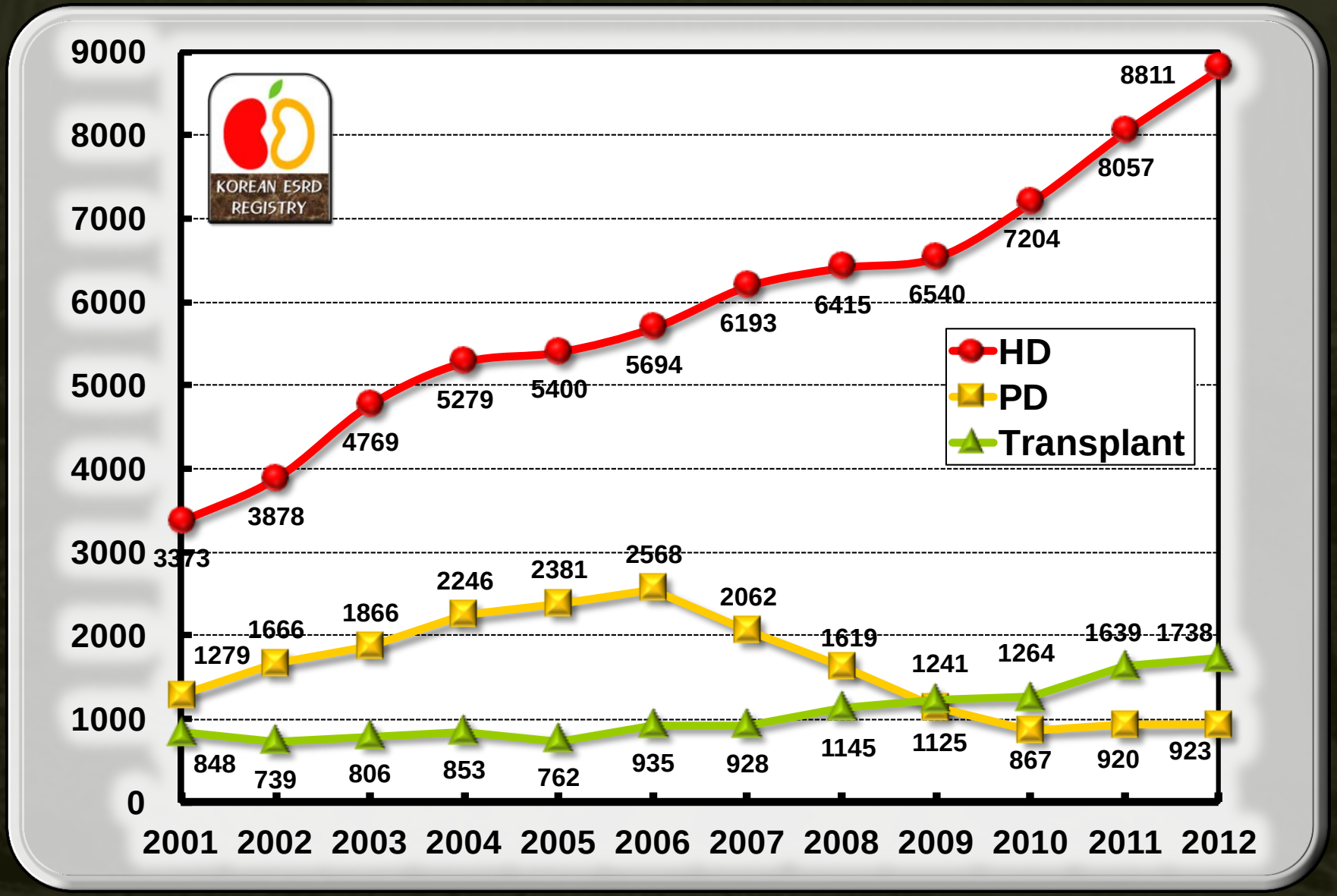
Oct. 2013

Number of New RRT Patients

	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)
2012	8,811	(169.8)	923	(17.8)	1,738	(33.5)	11,472	(221.1)

( ): number of patients per million population. The population of Korea in 2012: 51,881,255.

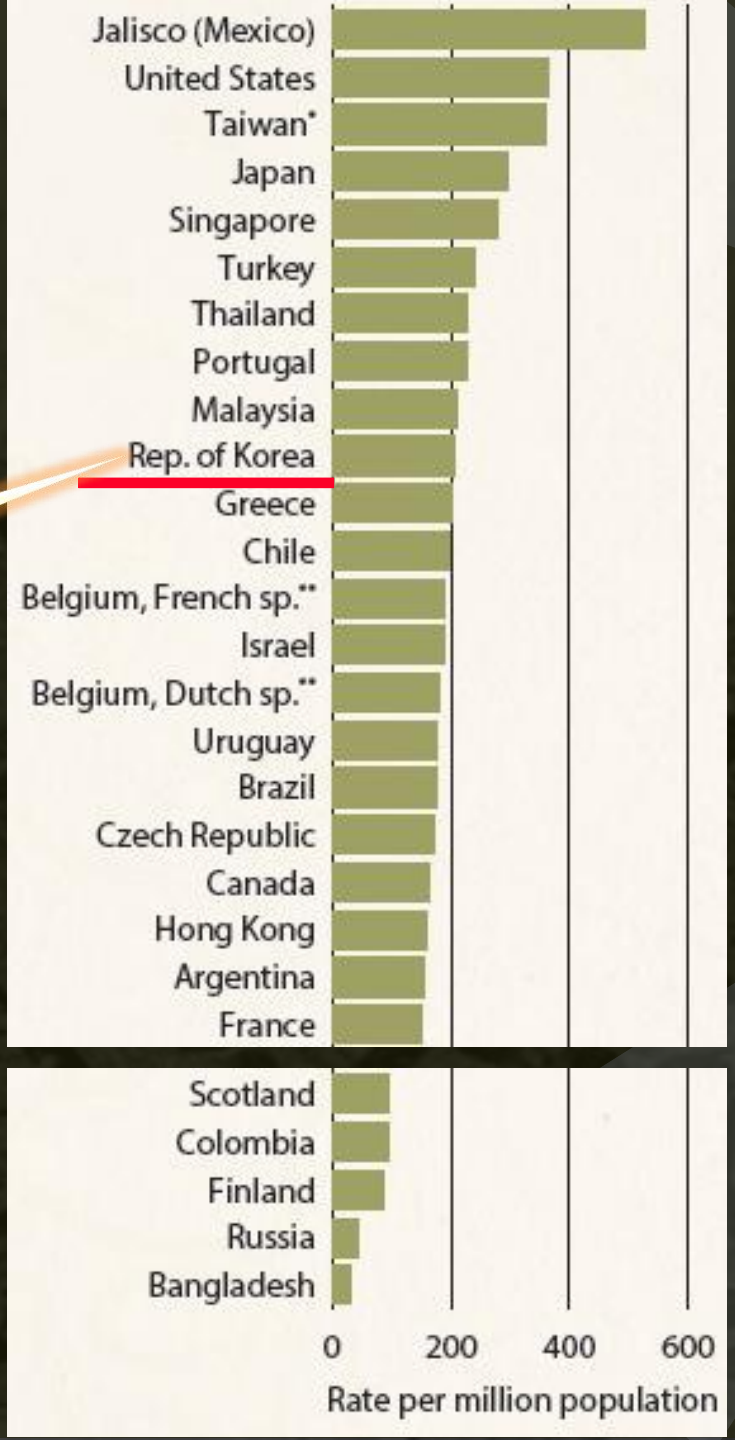
Number of New RRT Patients



KOREAN ESRD REGISTRY

Incidence of ESRD

205 PMP
End of 2011



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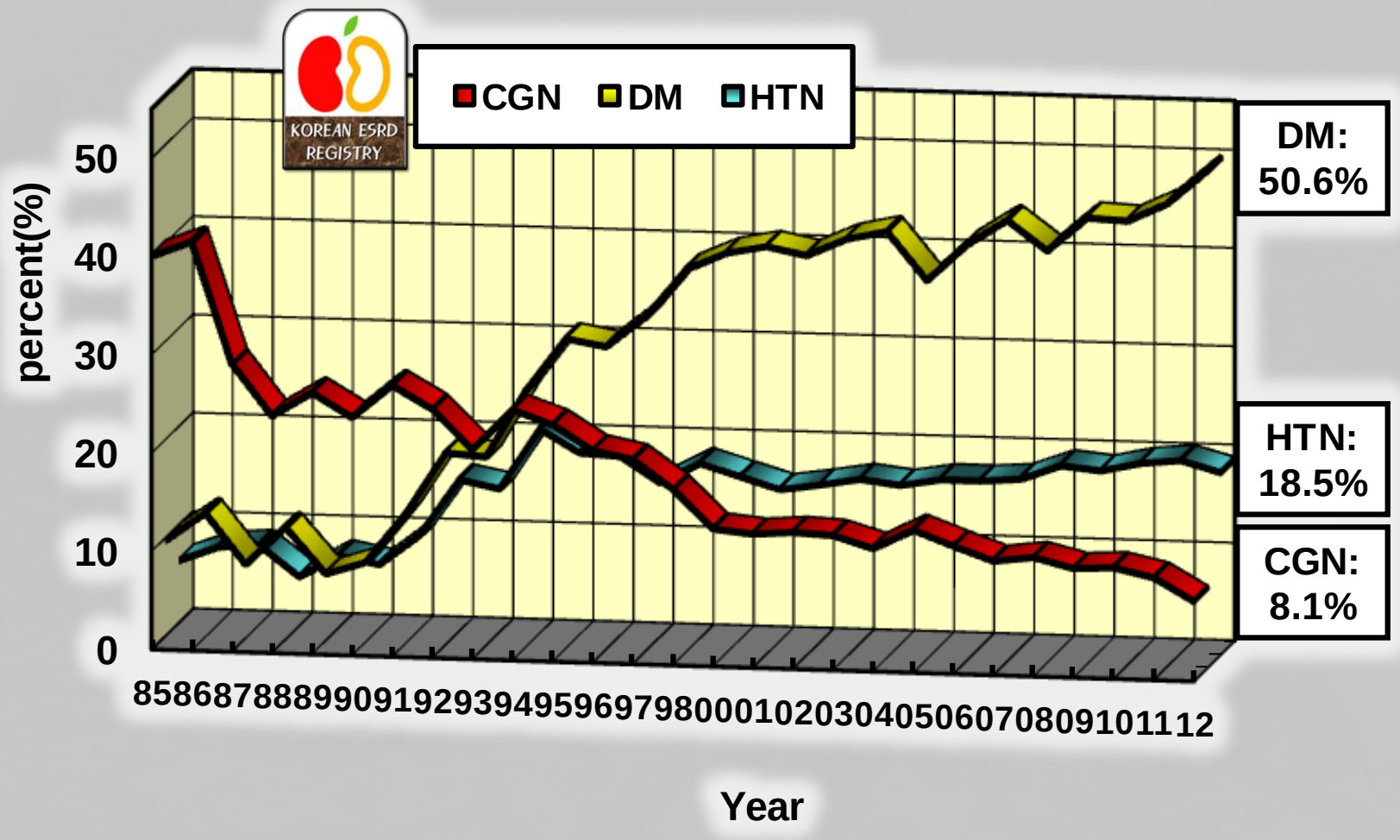
Causes of ESRD in New Patients

Causes	Percent (%)												
	1992	1994	1996	1998	2000	2002	2004	2006	2008	2009	2010	2011	2012
Chronic Glomerulonephritis	25.3	25.5	21.6	17.9	14	13.9	12.5	13.0	12.1	11.1	11.3	10.4	8.1
Not Histologically confirmed	19.7	20.4	16.7	13.6	10.6	10	8.6	9.0	8.2	7.5	7.7	6.9	4.5
Histologically confirmed	5.6	5	4.9	4.3	3.4	3.9	3.9	3.9	3.8	3.6	3.6	3.5	3.6
Diabetic nephropathy	19.5	26.1	30.8	38.9	40.7	40.7	43.4	42.3	41.9	45.4	45.2	47.1	50.6
Hypertensive nephrosclerosis	15.4	20.8	18.3	17.8	16.6	16	16.2	16.9	18.7	18.3	19.2	19.6	18.5
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	1.8
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	0.0
Pyelo/interstitial nephritis	1.3	1.1	0.7	1	0.8	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.5
Drugs or nephrotoxic agents	1.3	0.1	0.6	0.3	0.3	0.4	0.2	0.3	0.3	0.3	0.3	0.5	0.4
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	0.6
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	0.3
Hereditary nephropathy	0.3	0.7	0.4	0.2	0.1	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.5
Kidney tumor	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3
Other	4.1	2.7	2.8	3.9	3	5.6	5.9	6.0	5.8	5.2	5.1	5.0	6.8
Uncertain	28.6	17.8	15.9	16.6	20.2	19	17.8	17.5	17.6	16.0	15.3	14.3	11.4

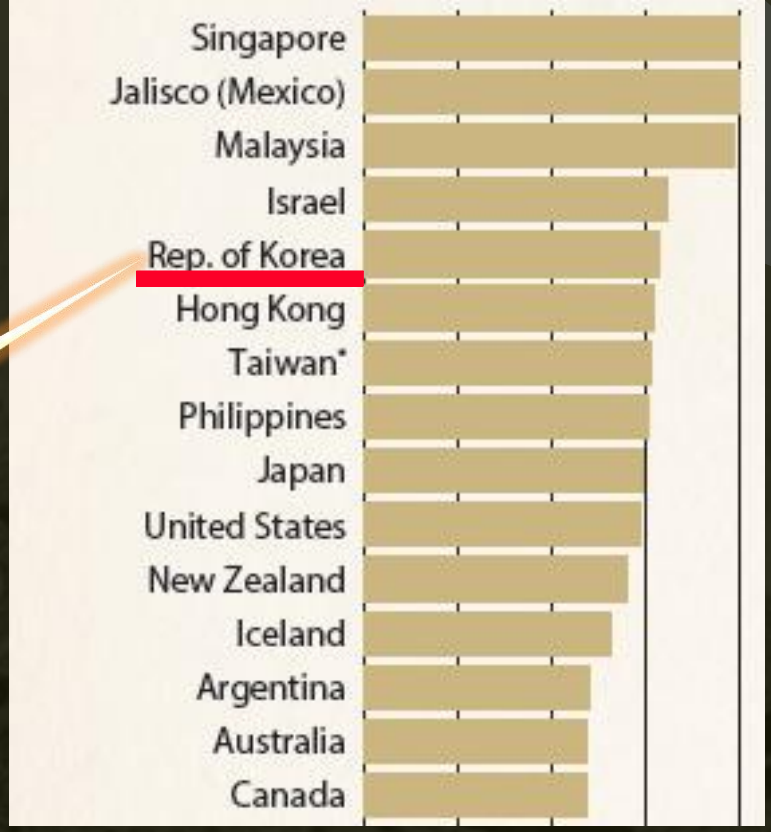
Three Major Causes of ESRD

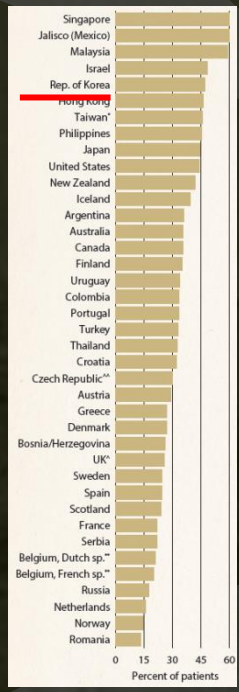


KOREAN ESRD REGISTRY

Diabetic ESRD

47.1%
in 2011





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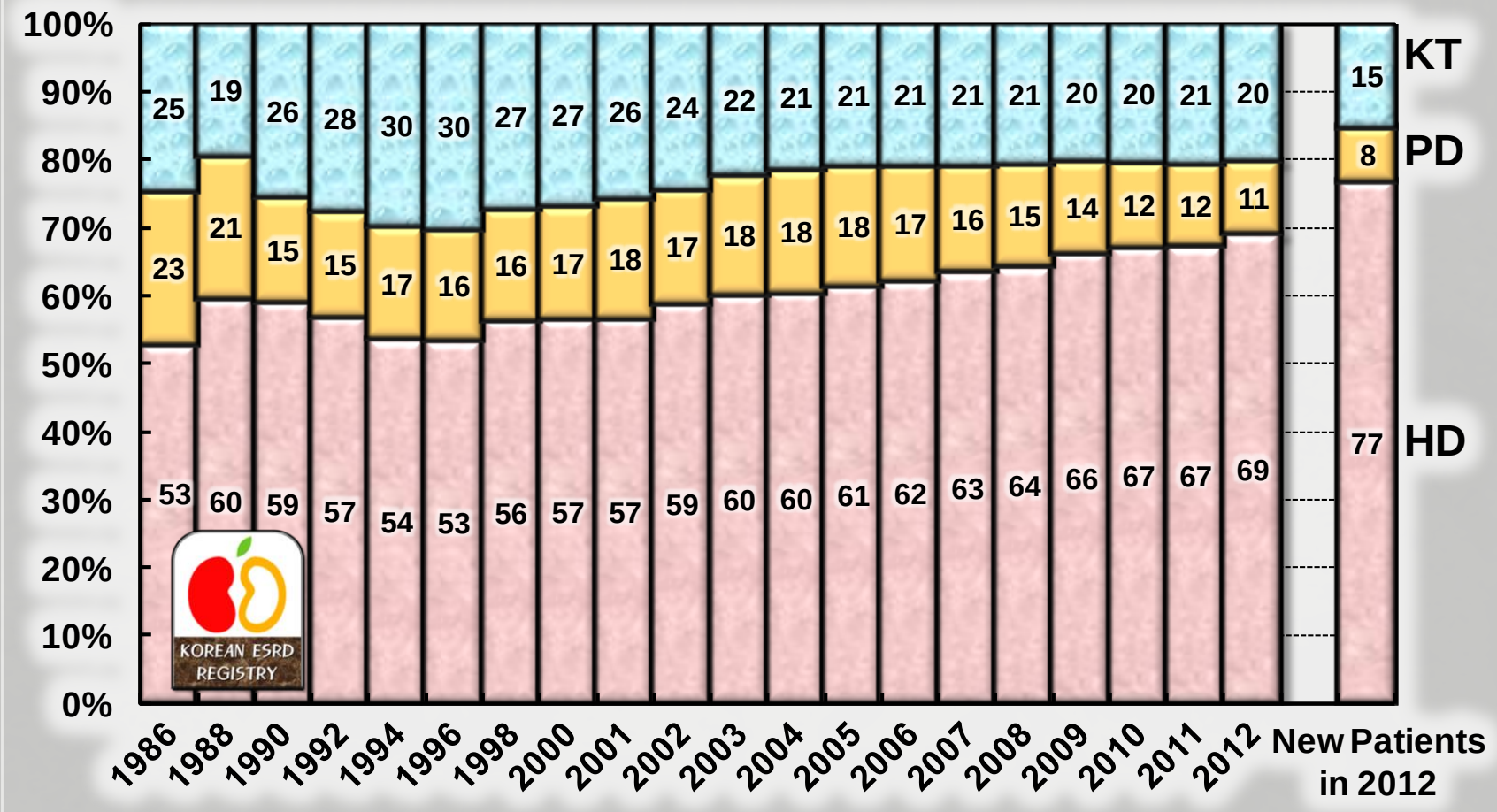
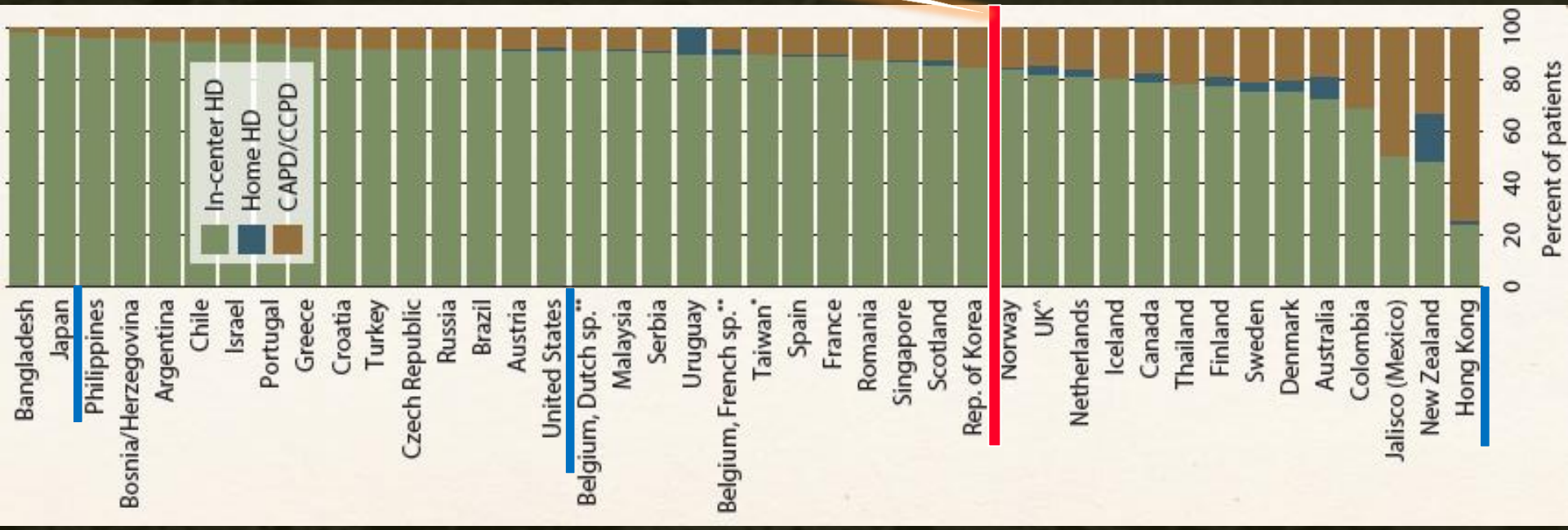
Proportion of RRT Modalities



Percent Distribution of Dialysis Modalities

HD:PD = 84.7% : 15.3%
End of 2011



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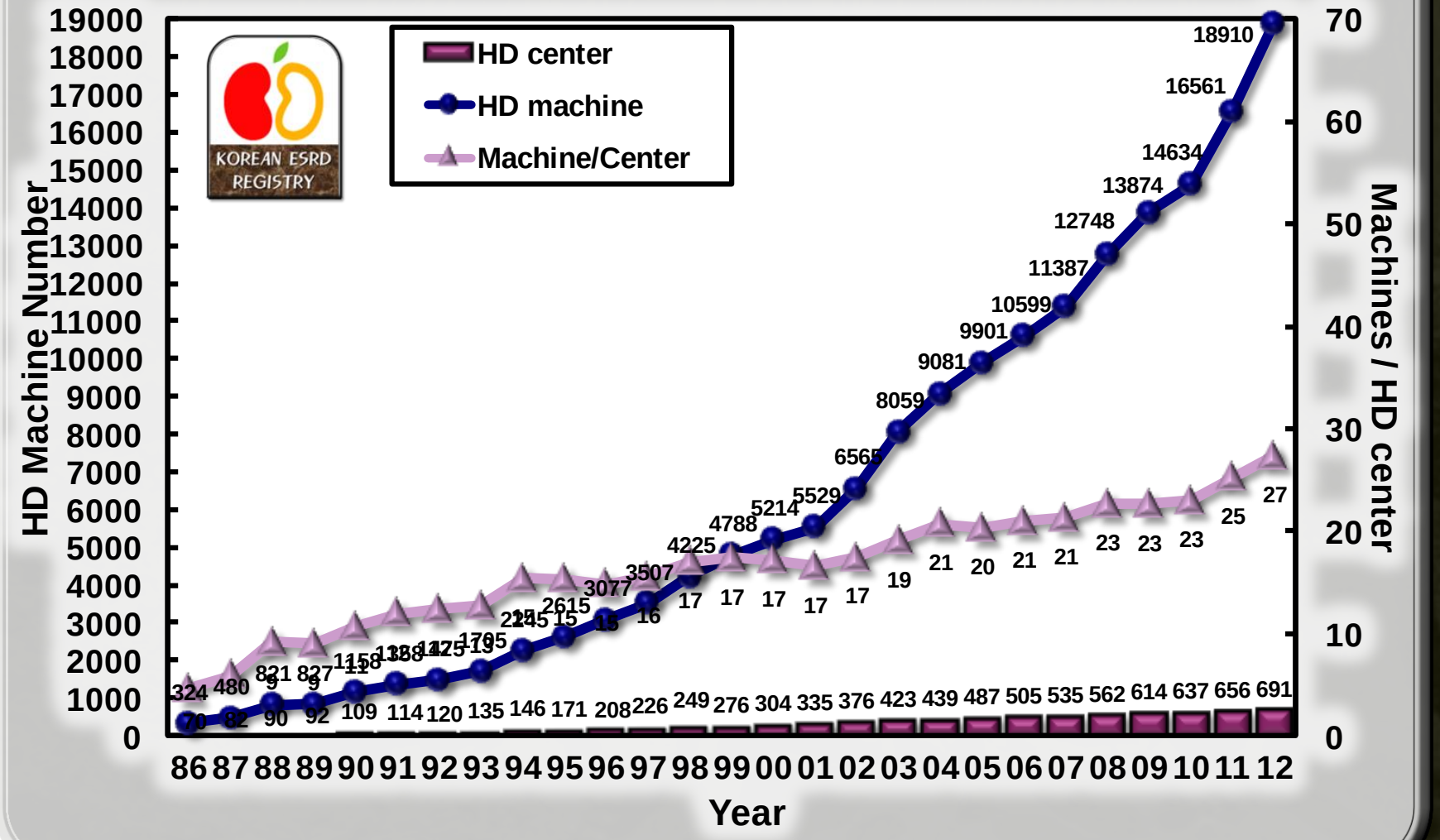
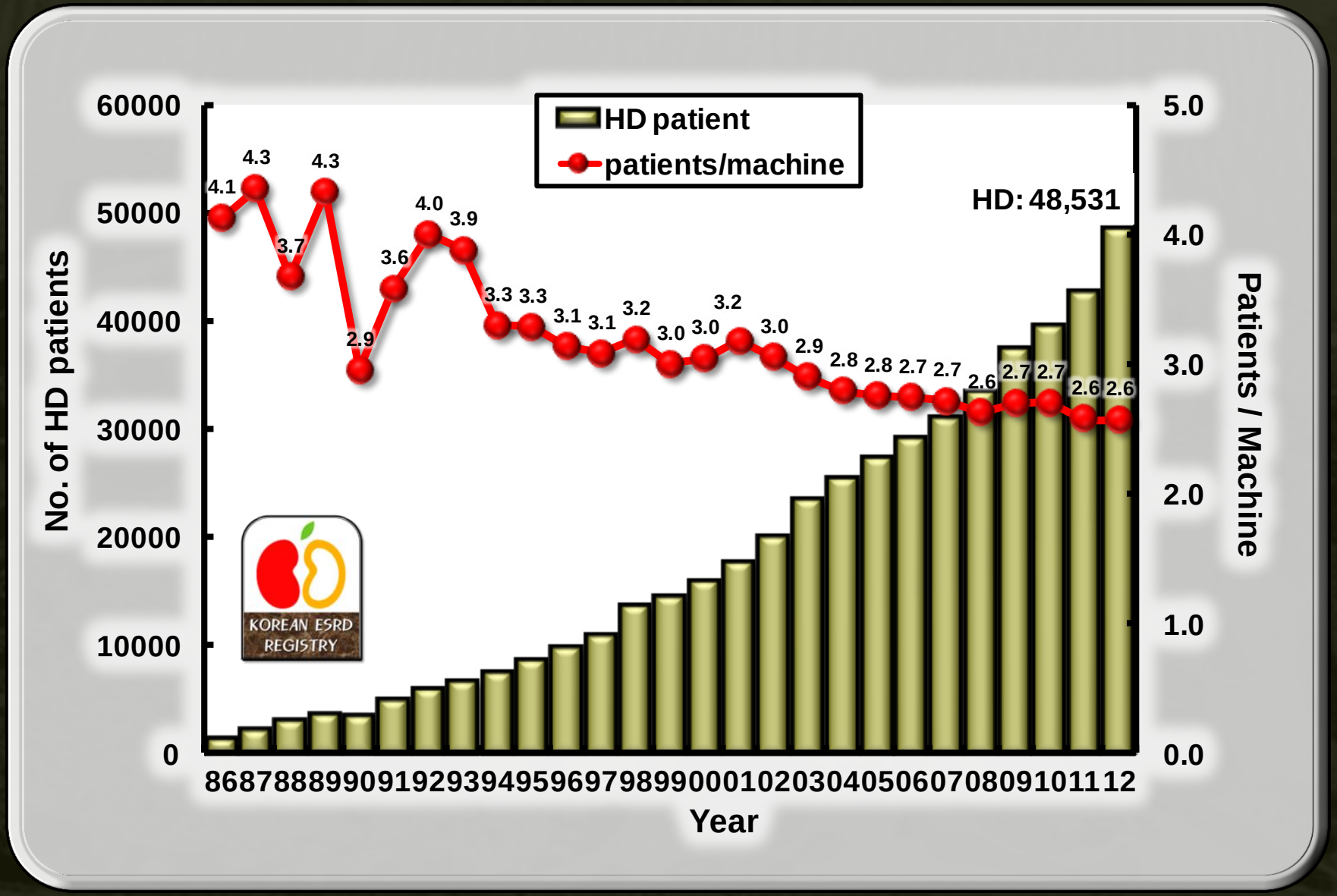
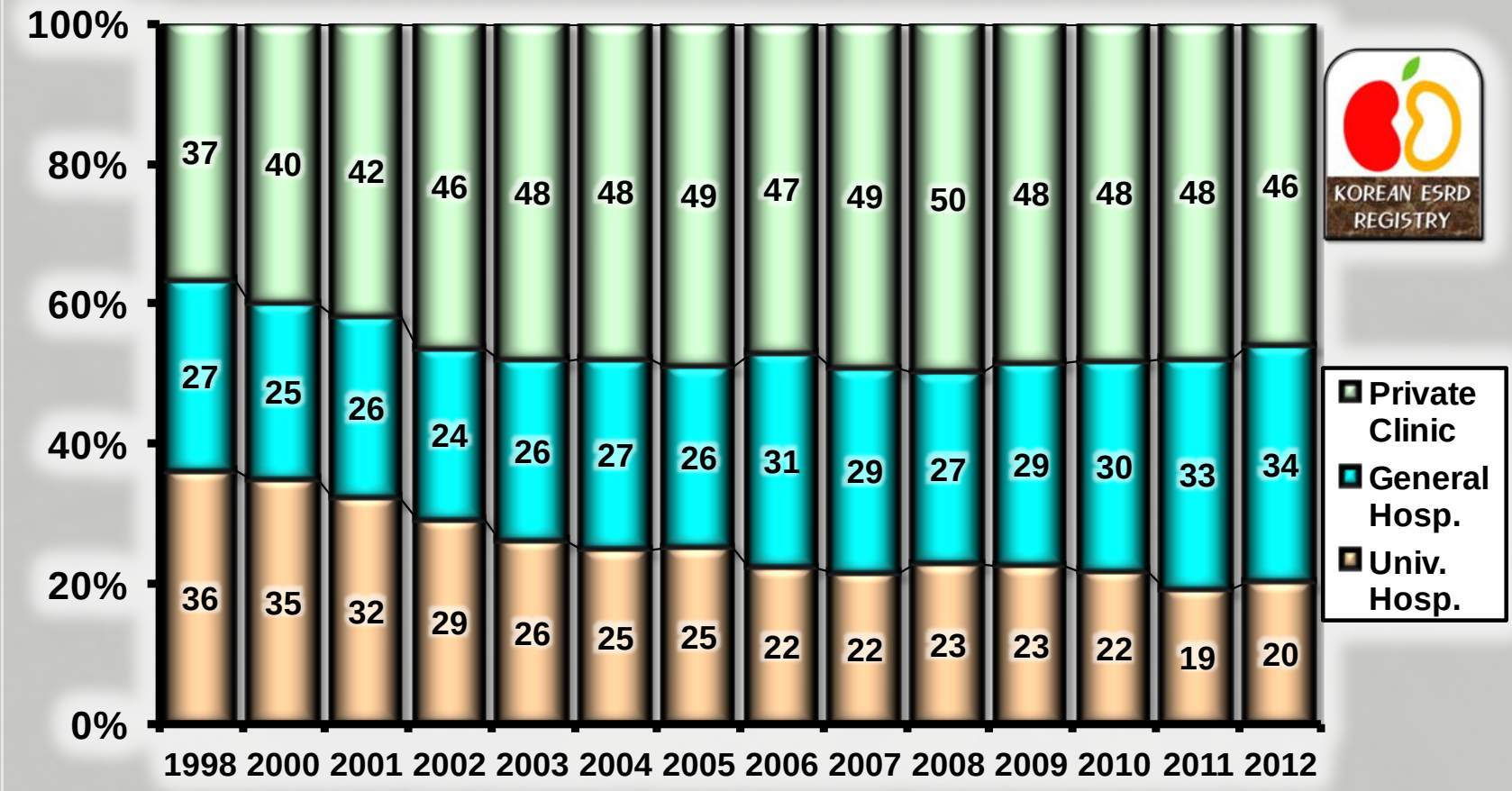
Number of HD Centers & HD Machines



Ratio of HD Machine & HD Patients



HD Pts Proportion by Dialysis Center Type



행정구역별 투석환자 및 혈액투석기 분포

(2012년 12월말 기준)

	HD pts	PD pts	Total Dialysis pts	Dialysis pts. / Million pop.	Dialysis Centers	HD machines	HD pts./ HD machine
서울 Seoul	10,555	2,319	12,874	1,233	155	3,939	2.7
부산 Busan	4,125	778	4,903	1,372	46	1,491	2.8
대구 Daegu	3,257	735	3,992	1,579	36	1,053	3.1
인천 Incheon	2,700	334	3,034	1,049	31	1,007	2.7
광주 Gwangju	1,459	231	1,690	1,139	32	683	2.1
대전 Daejeon	1,310	350	1,660	1,079	13	598	2.2
울산 Ulsan	902	66	968	830	15	330	2.7
경기 Gyeonggi	9,821	1,399	11,220	906	142	4,098	2.4
강원 Gangwon	1,421	341	1,762	1,136	25	610	2.3
충북 Chungbuk	1,584	84	1,668	1,049	26	631	2.5
충남 Chungnam	2,080	147	2,227	1,017	32	751	2.8
전북 Jeonbuk	1,808	130	1,938	1,022	22	815	2.2
전남 Jeonnam	1,733	162	1,895	980	31	777	2.2
경북 Gyeongbuk	2,192	148	2,340	855	33	838	2.6
경남 Gyeongnam	2,911	252	3,163	935	43	1,047	2.8
제주 Jeju	673	76	749	1,264	9	242	2.8
Total	48,531	7,552	56,083	1,081	691	18,910	2.6

생활권역별 투석환자 및 혈액투석기 분포

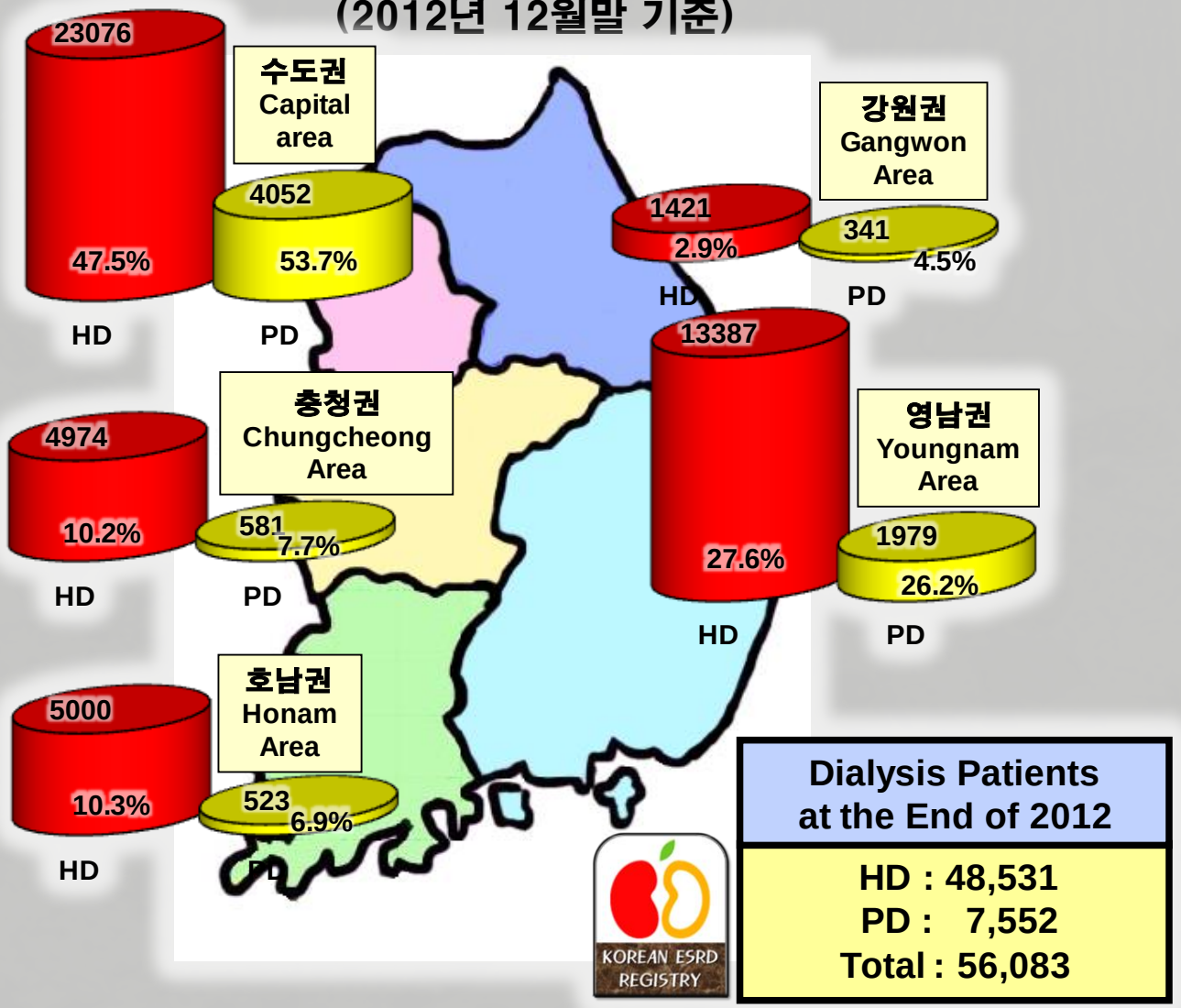
(2012년 12월말 기준)

	Population (%)	HD patients	PD patients	Total Dialysis patients	Dialysis pts /Million pop.	Dialysis centers	Dialysis machine	HD pts / HD machine
수도권 Capital area	25,715,262	23,076	4,052	27,128	1,055	328	9,044	2.6
(Seoul, Incheon, Gyeonggi)	49.6%	47.5%	53.7%	48.4%		47.5%	47.8%	
충청권 Chungchung	5,320,007	4,974	581	5,555	1,044	71	1,980	2.5
(Daejeon, Chungnam, Chungbuk)	10.3%	10.2%	7.7%	9.9%		10.3%	10.5%	
호남권 Honam	5,312,299	5,000	523	5,523	1,040	85	2,275	2.2
(Gwangju, Jeonnam, Jeonbuk)	10.2%	10.3%	6.9%	9.8%		12.3%	12.0%	
영남권 Youngnam	13,389,707	13,387	1,979	15,366	1,148	173	4,759	2.8
(Busan, Daegu, Gyeongnam, Gyeongbuk, Ulsan)	25.8%	27.6%	26.2%	27.4%		25.0%	25.2%	
강원권 Gangwon	1,551,531	1,421	341	1,762	1,136	25	610	2.3
	3.0%	2.9%	4.5%	3.1%		3.6%	3.2%	
Total	51,881,255	48,531	7,552	56,083	1,081	691	18,910	2.6

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

생활권역별 투석환자 분포

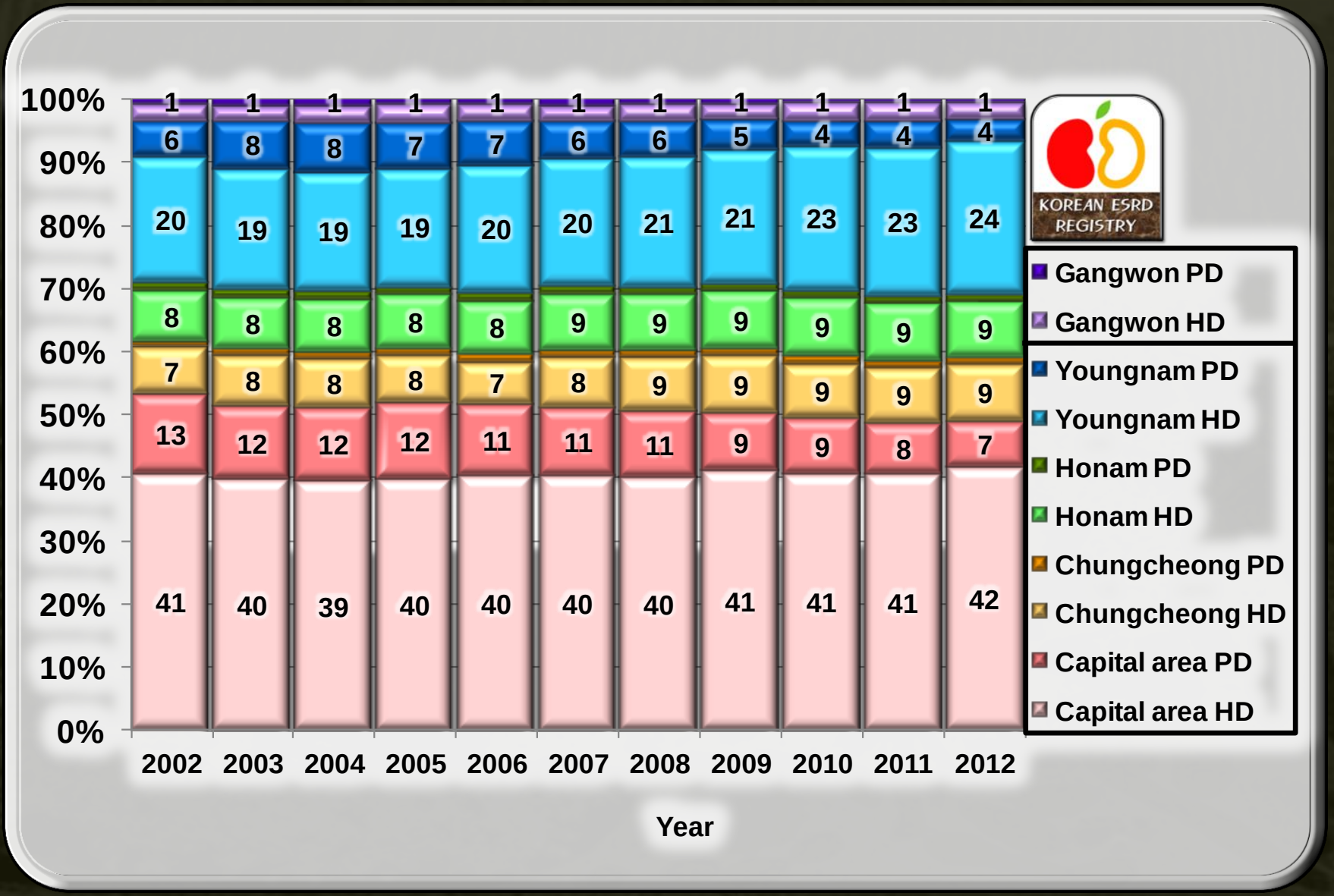
(2012년 12월말 기준)



Dialysis Patients at the End of 2012

HD : 48,531
PD : 7,552
Total : 56,083

생활권역별 투석환자 비율의 연도별 변화

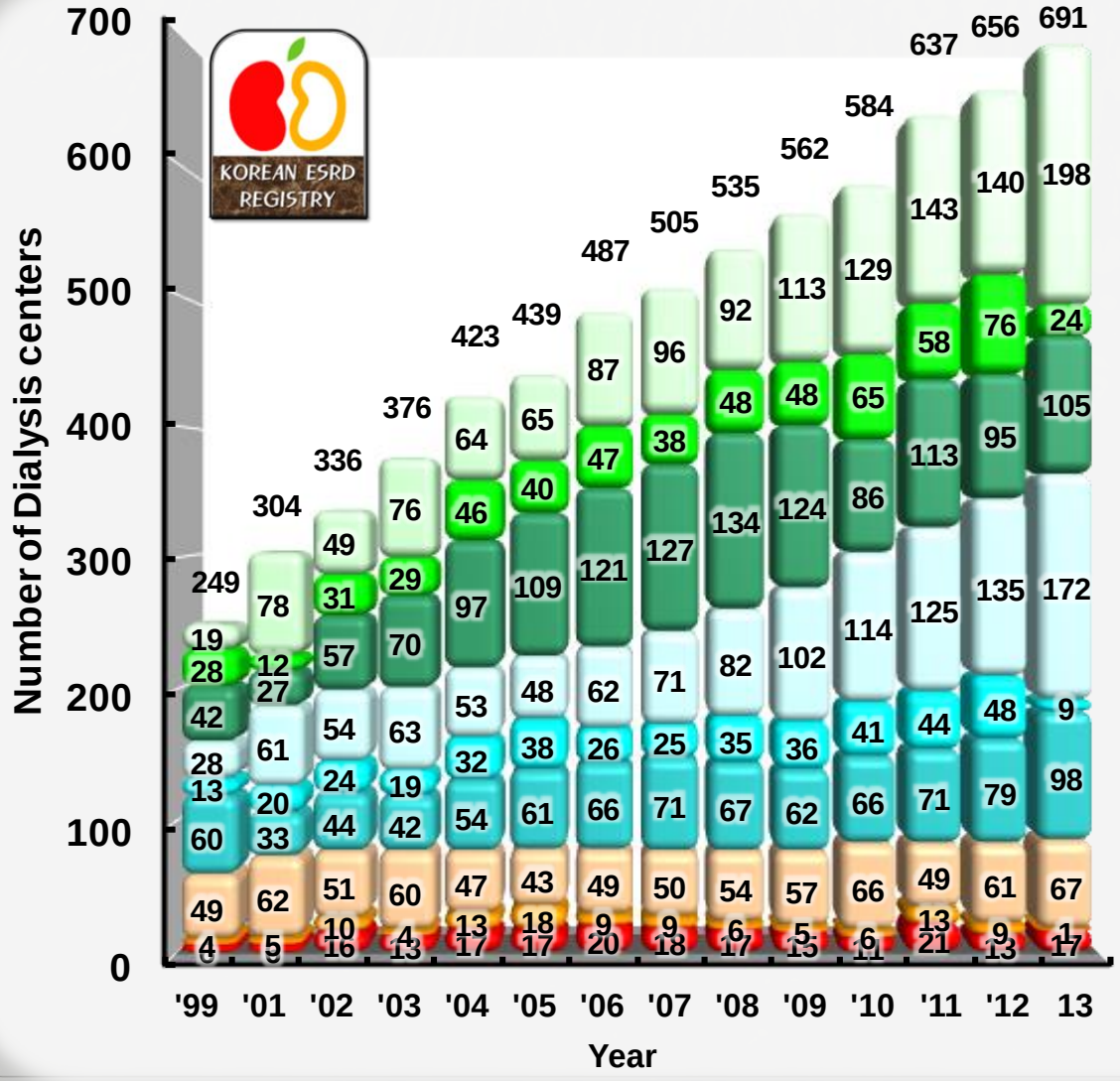


등록사업에 참여한 의료기관 수 및 응답률

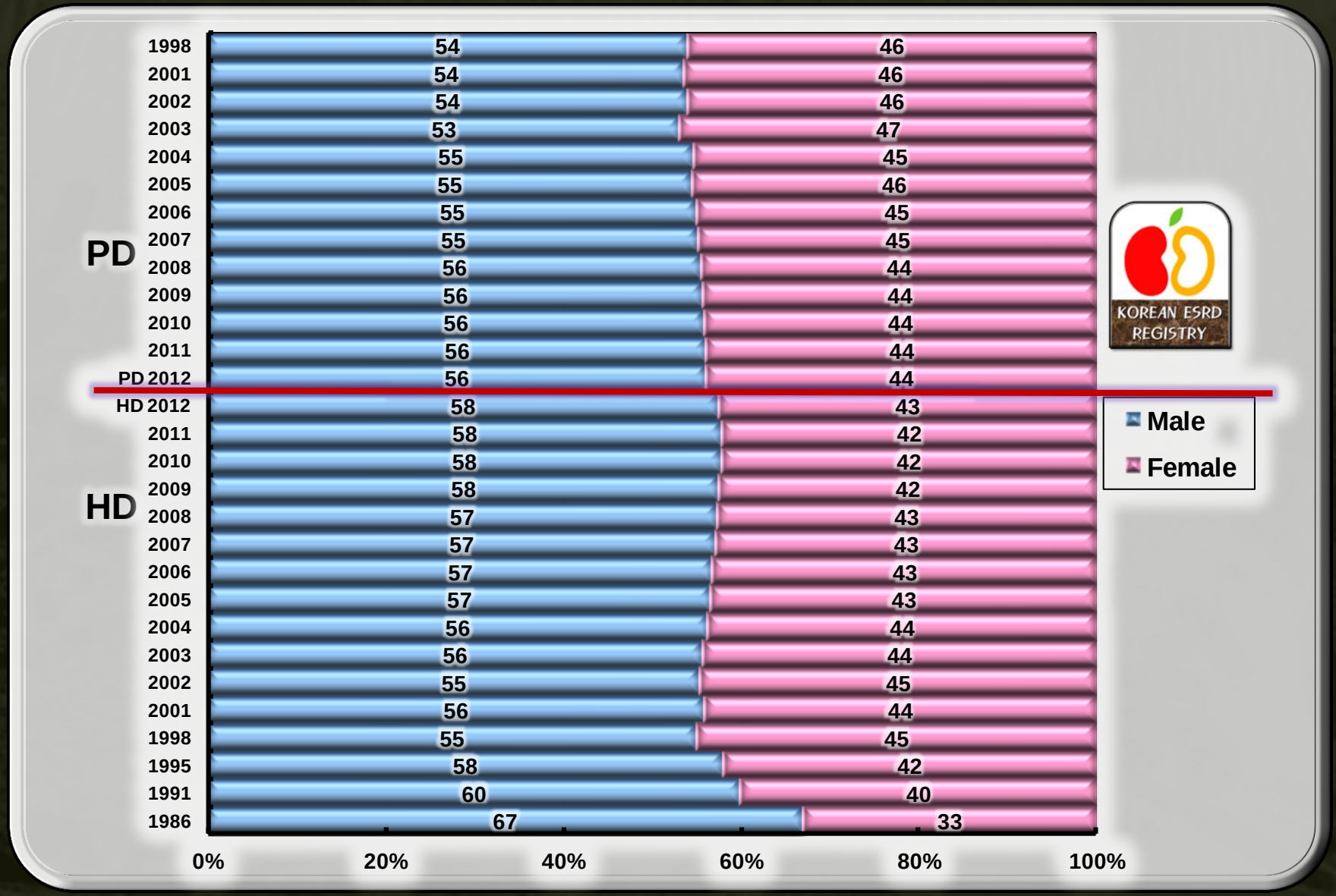
	Dialysis centers*	Internet Input	Paper data	Total contributed center	Contributing rate (%)
서울 Seoul	155	112	7	119	76.8
부산 Busan	46	30	2	32	69.6
대구 Daegu	36	21	1	22	61.1
인천 Incheon	31	16	5	21	67.7
광주 Gwangju	32	19	2	21	65.6
대전 Daejeon	13	7	0	7	53.8
울산 Ulsan	15	6	2	8	53.3
경기 Gyeonggi	142	84	5	89	62.7
강원 Gangwon	25	17	0	17	68.0
충북 Chungbuk	26	17	2	19	73.1
충남 Chungnam	32	19	2	21	65.6
전북 Jeonbuk	22	12	0	12	54.5
전남 Jeonnam	31	20	2	22	71.0
경북 Gyeongbuk	33	20	3	23	69.7
경남 Gyeongnam	43	29	0	29	67.4
제주 Jeju	9	8	1	9	100.0
Total	691	437	34	471	68.2

* 투석의료기관 수에서 비윤리 의료기관(약40개소)은 제외함.

의료기관의 증가와 의료기관별 등록률

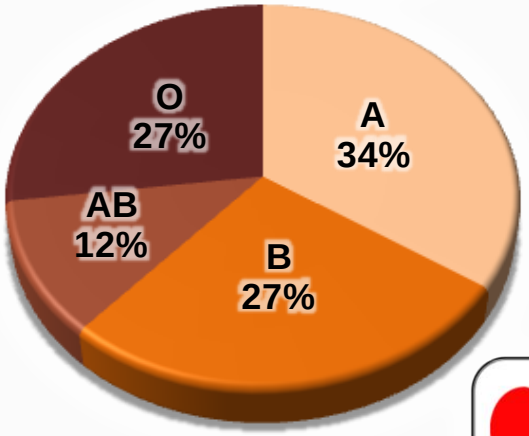


Gender Ratio of Dialysis Patients

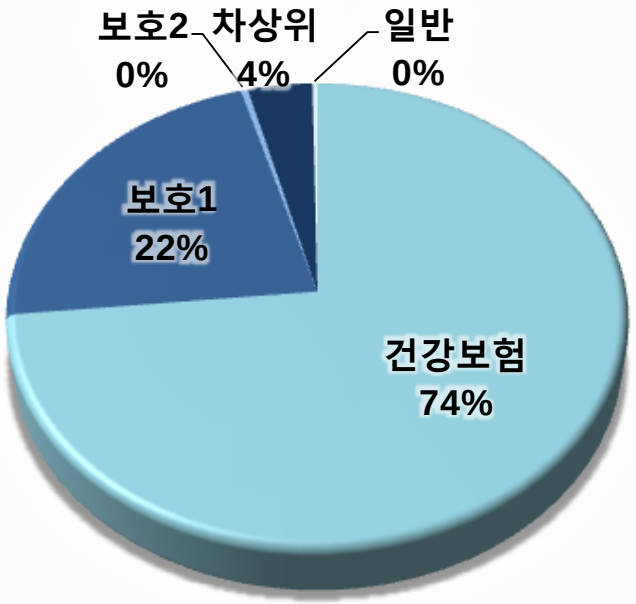


ABO Blood type, Hepatitis virus, Insurance

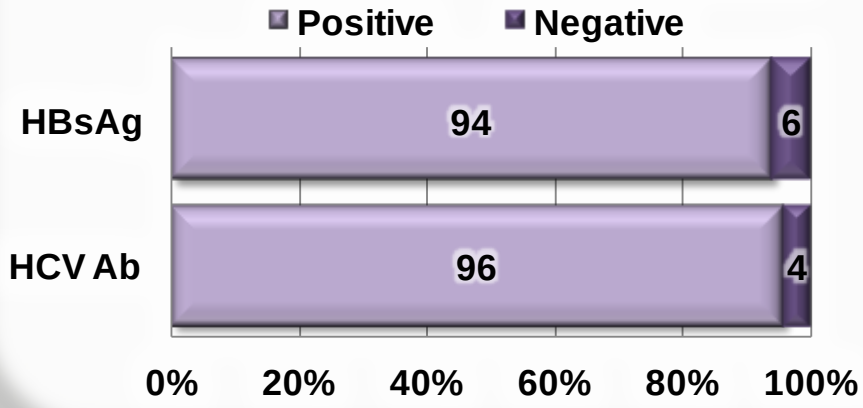
ABO Blood type



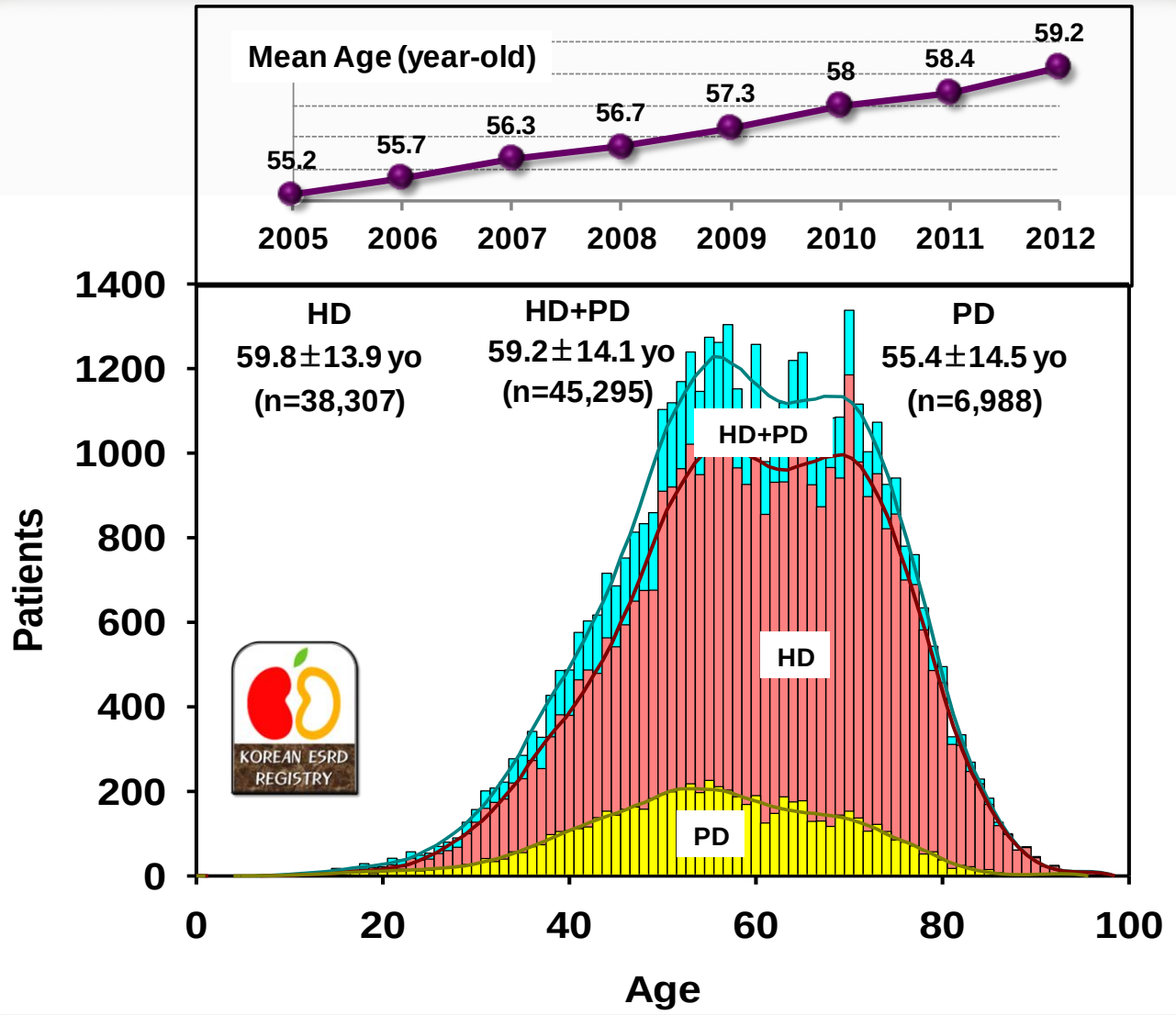
Insurance



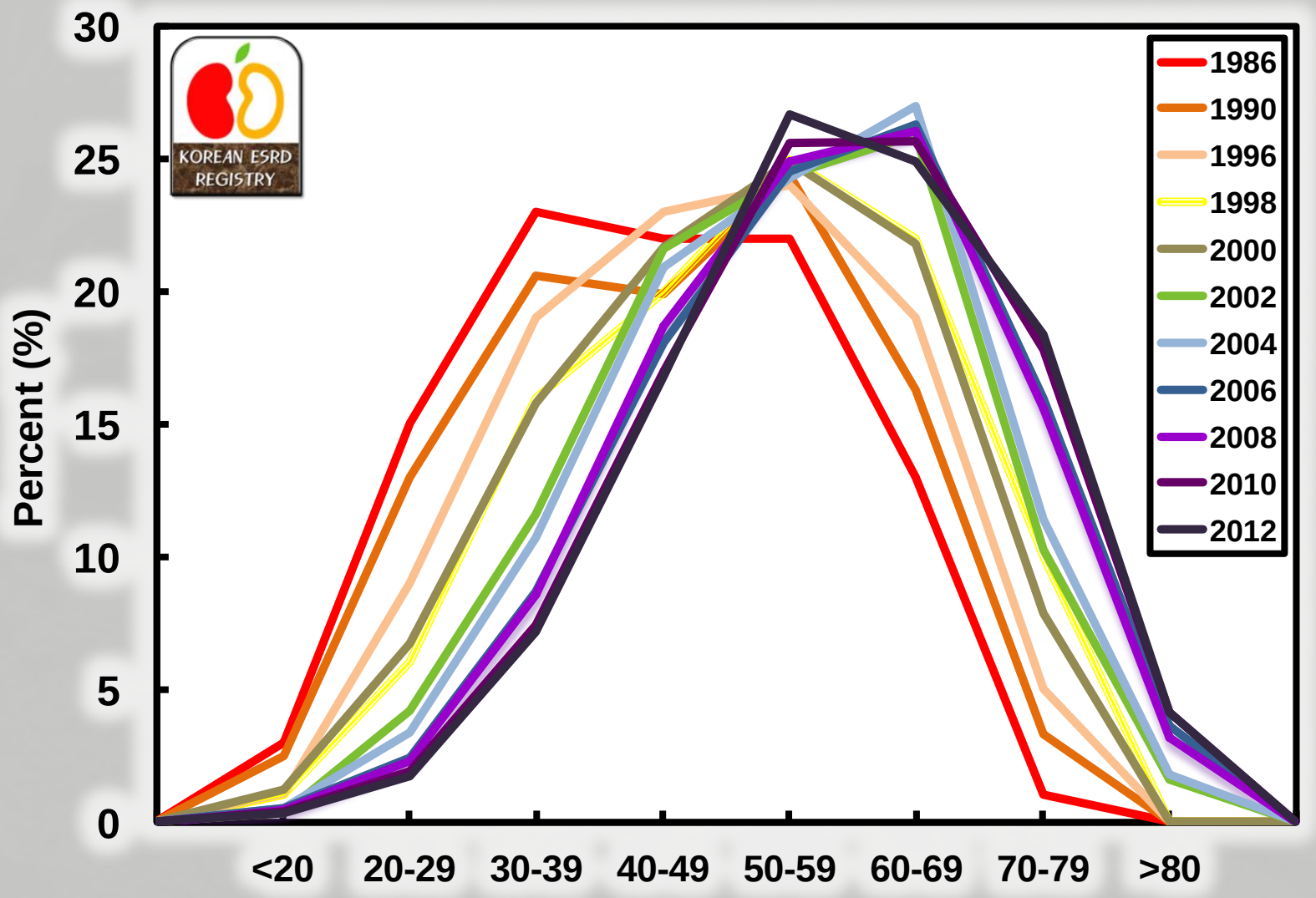
Hepatitis Virus



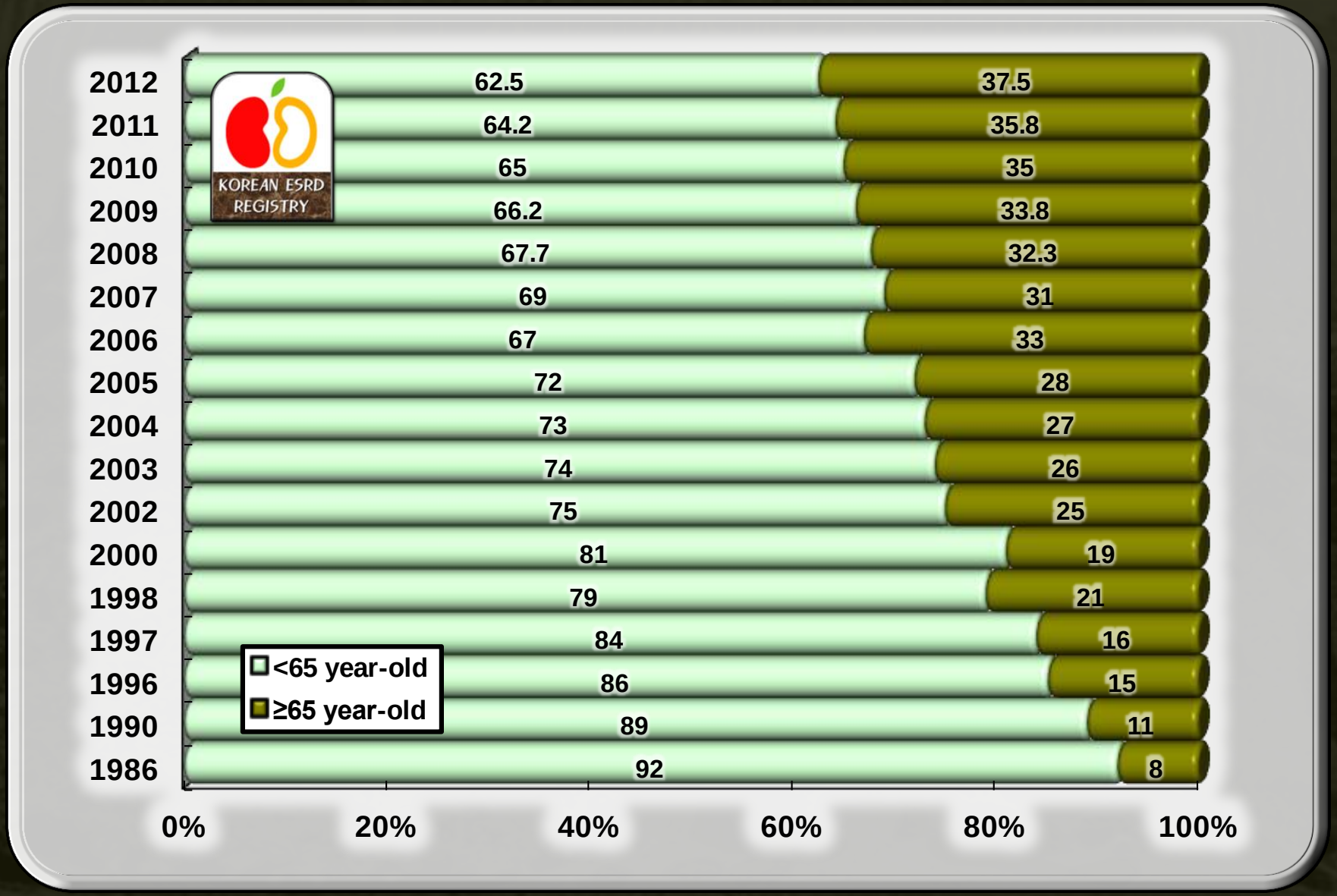
Age Distribution of Dialysis Patients



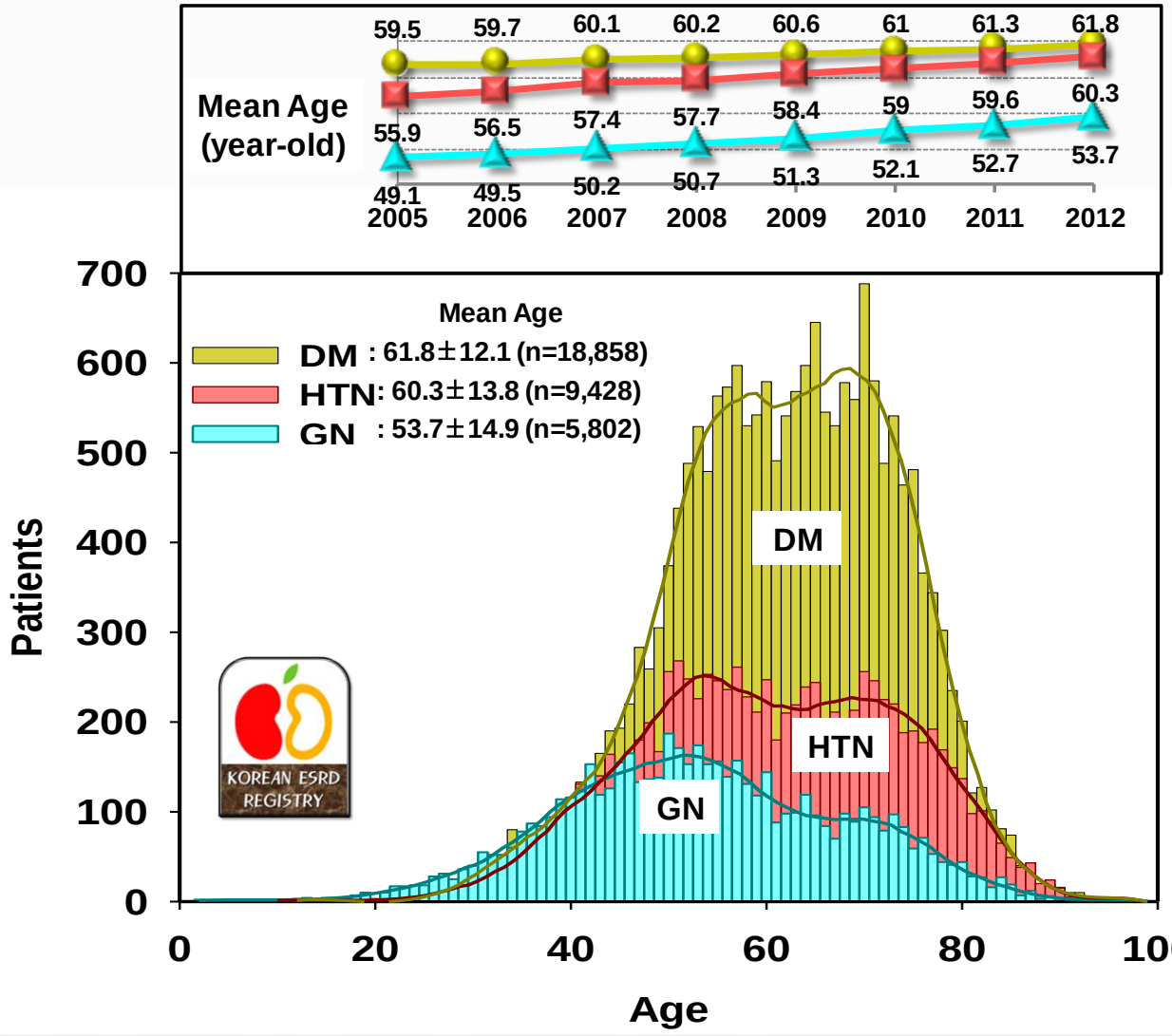
Age Distribution of HD Pts according to Year



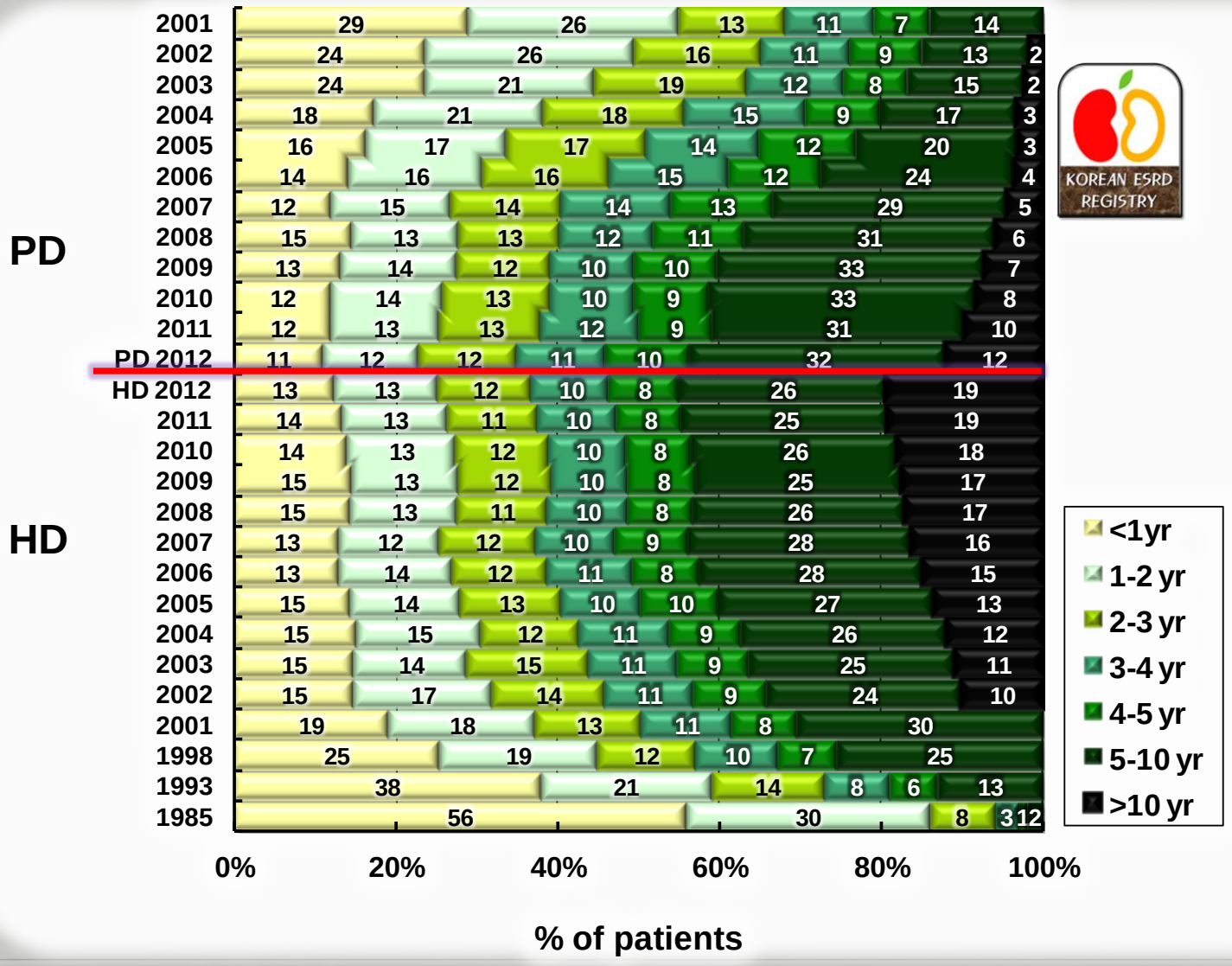
Percent of Elderly Dialysis Patients



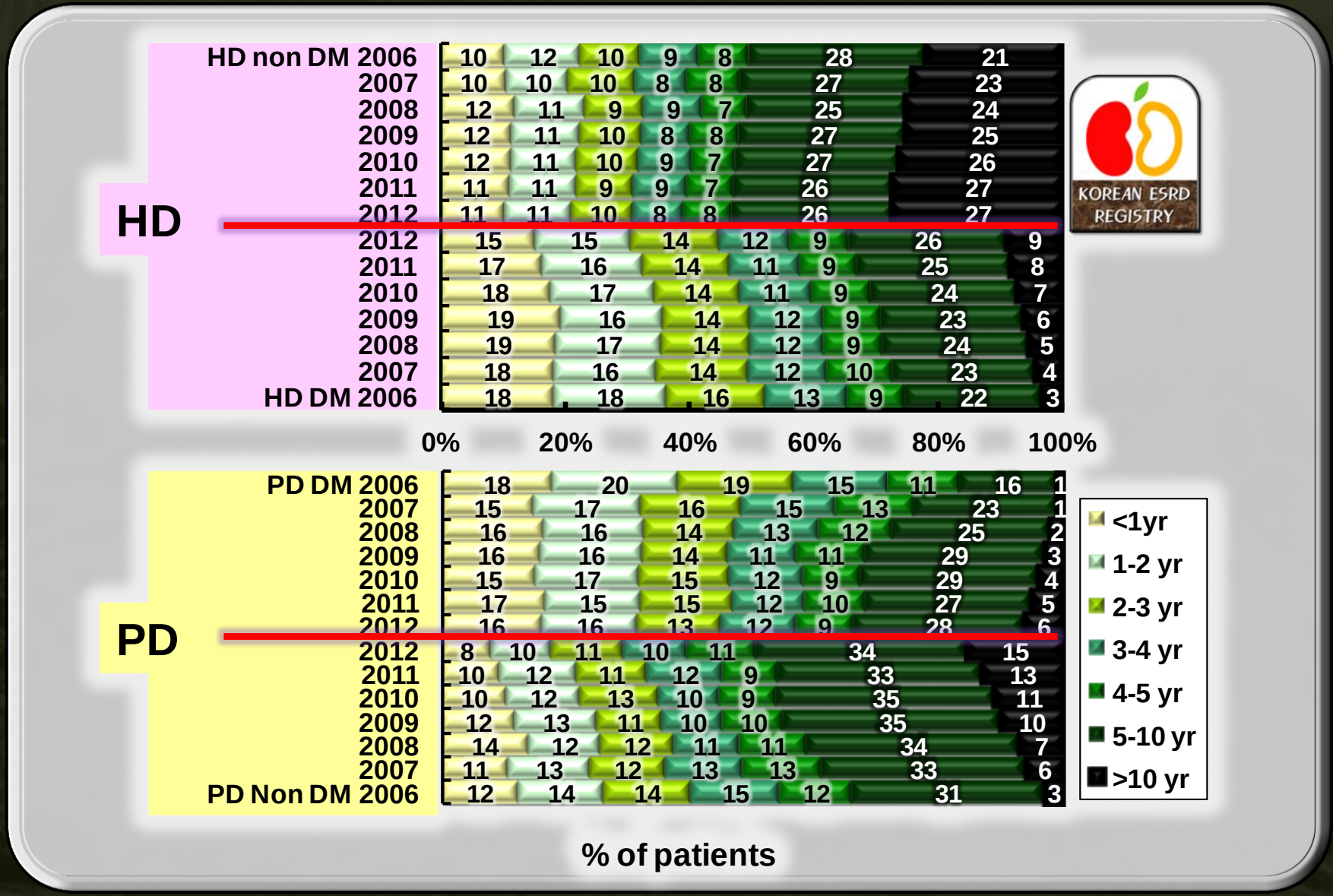
Age Distribution according to ESRD Causes



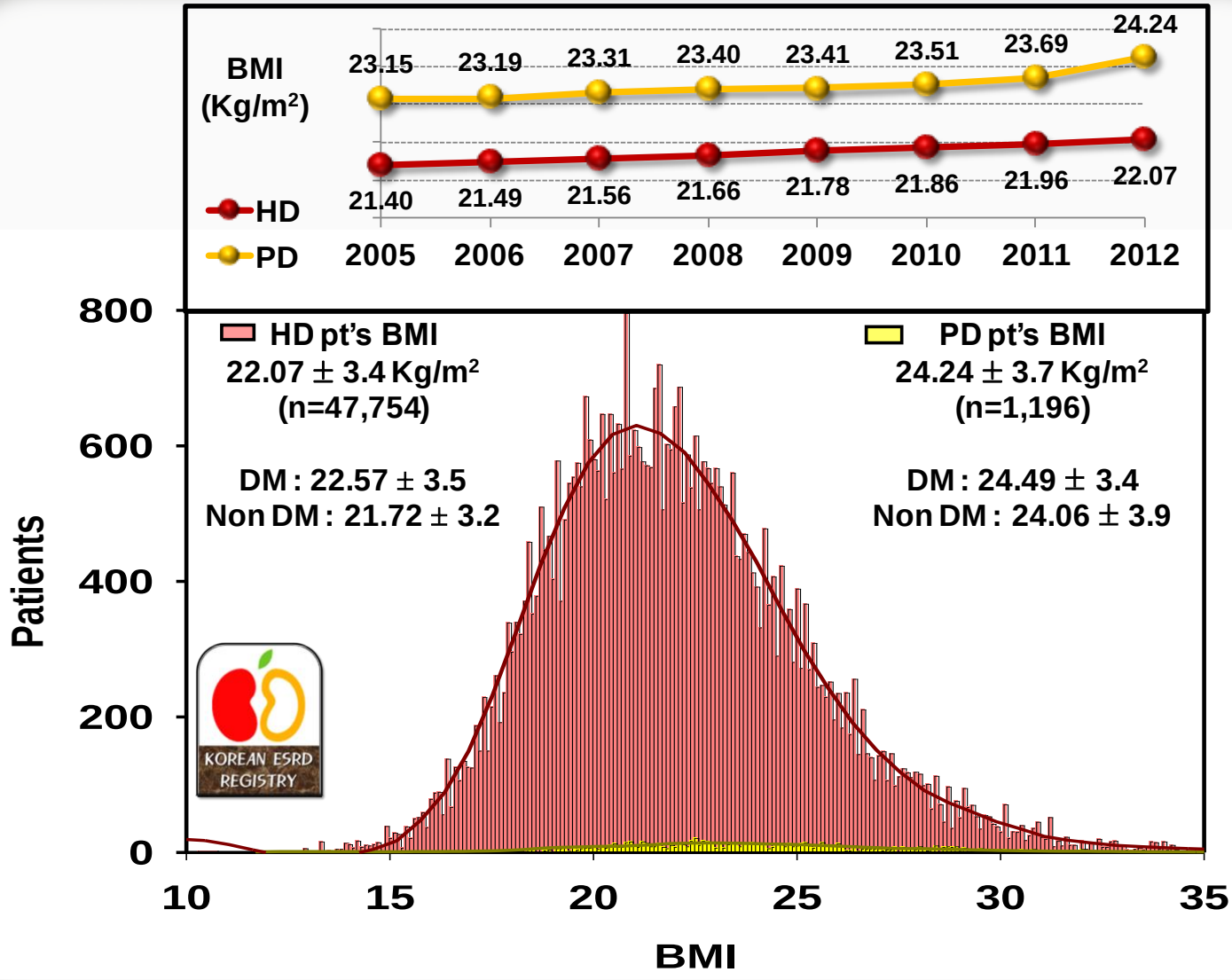
Duration of Dialysis Maintenance



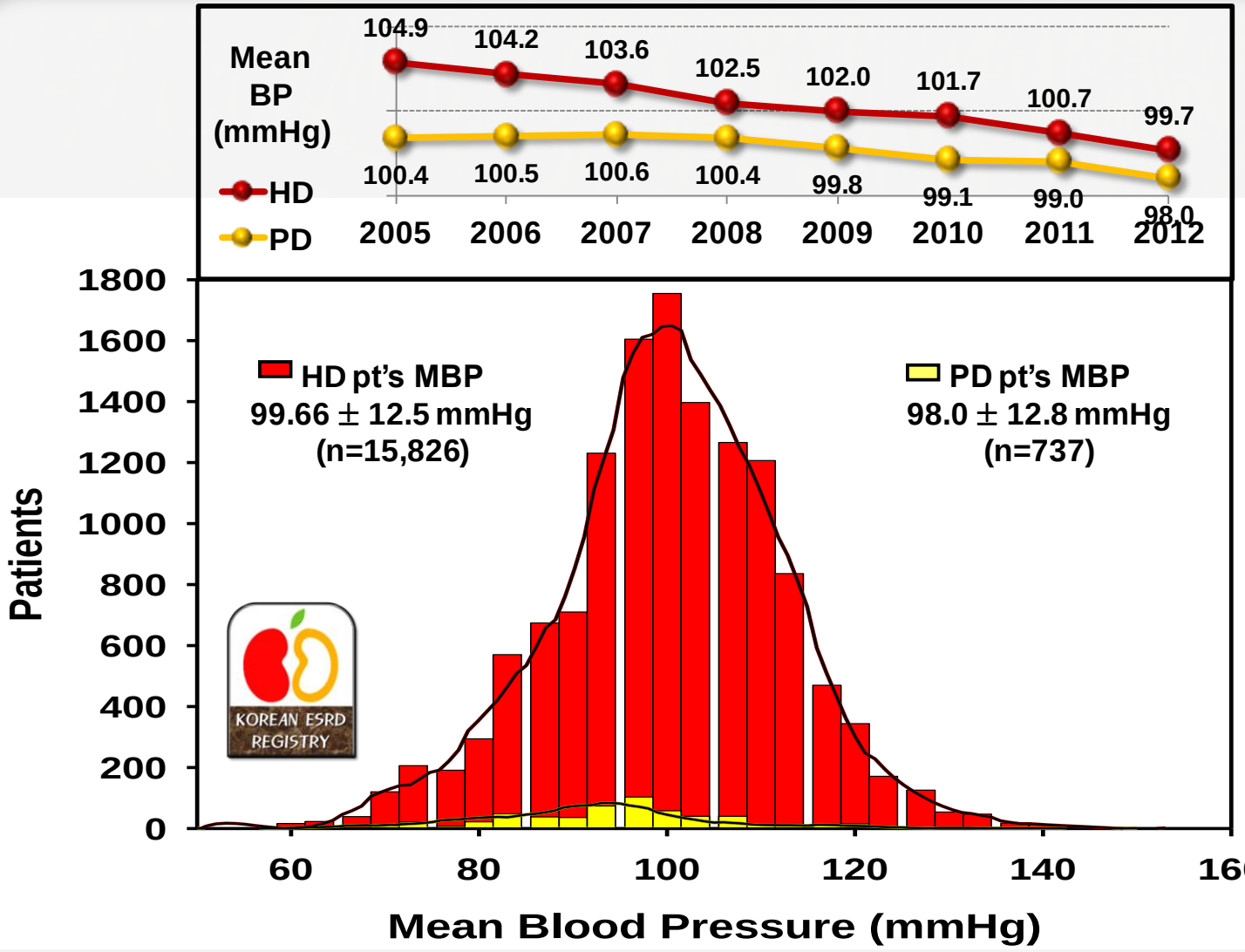
Duration of Dialysis : DM & Non-DM



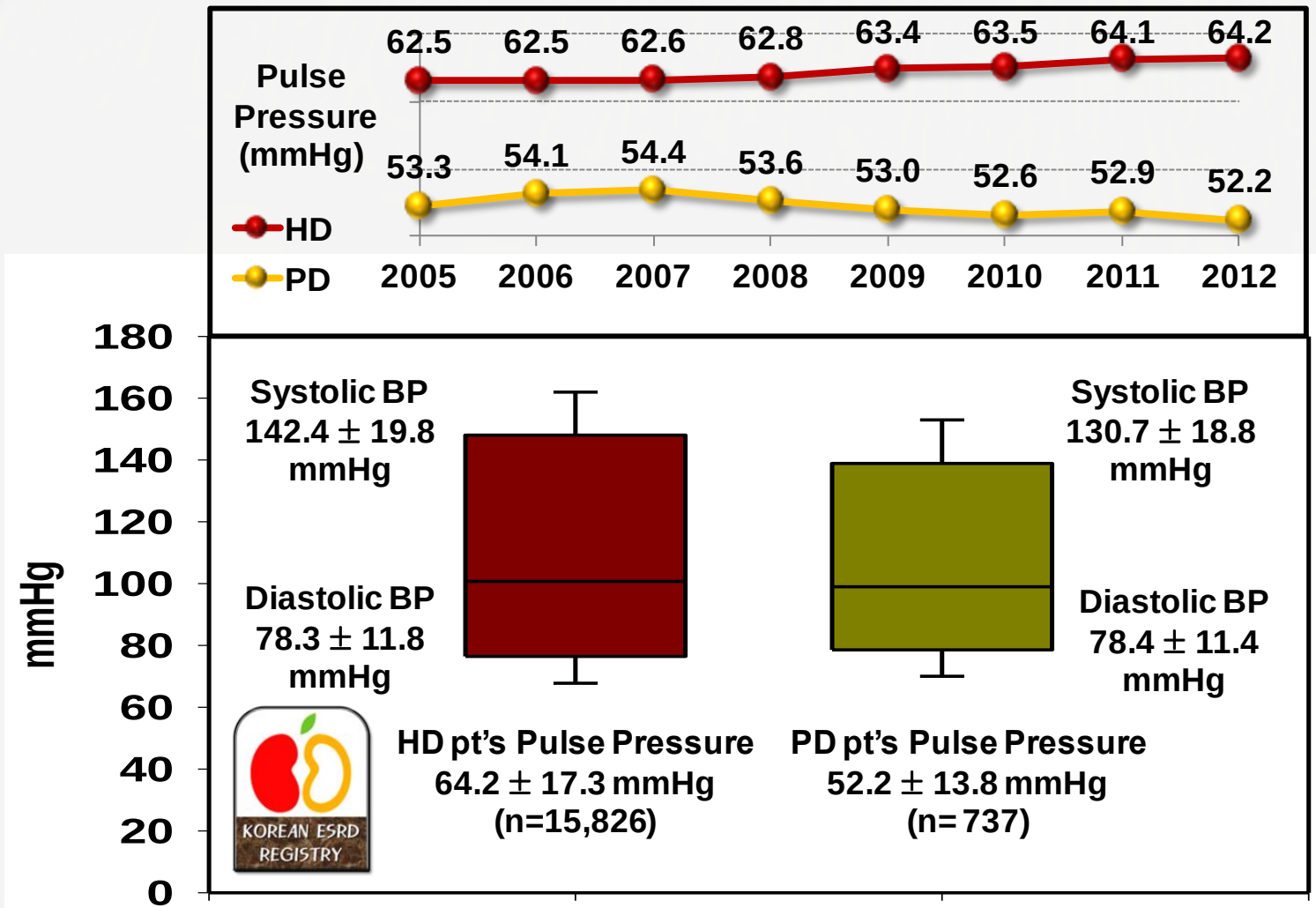
Body Mass Index : HD & PD



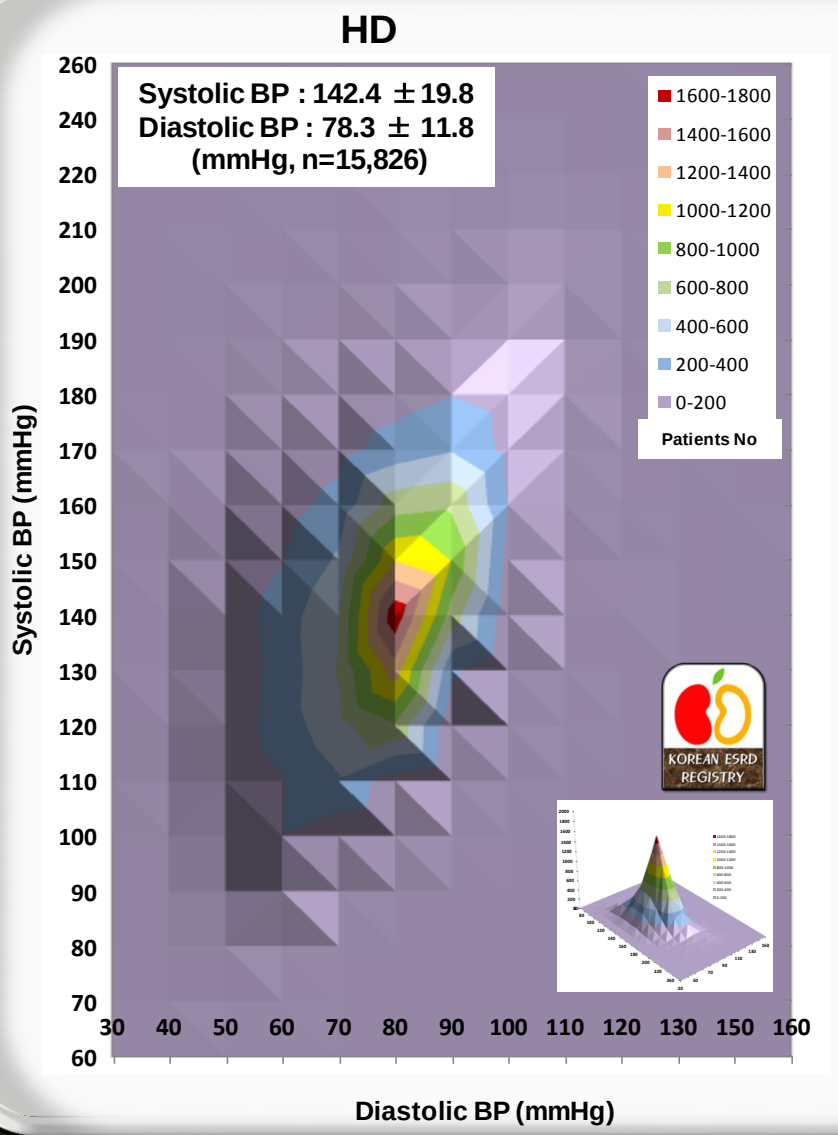
Mean Blood Pressure : HD & PD

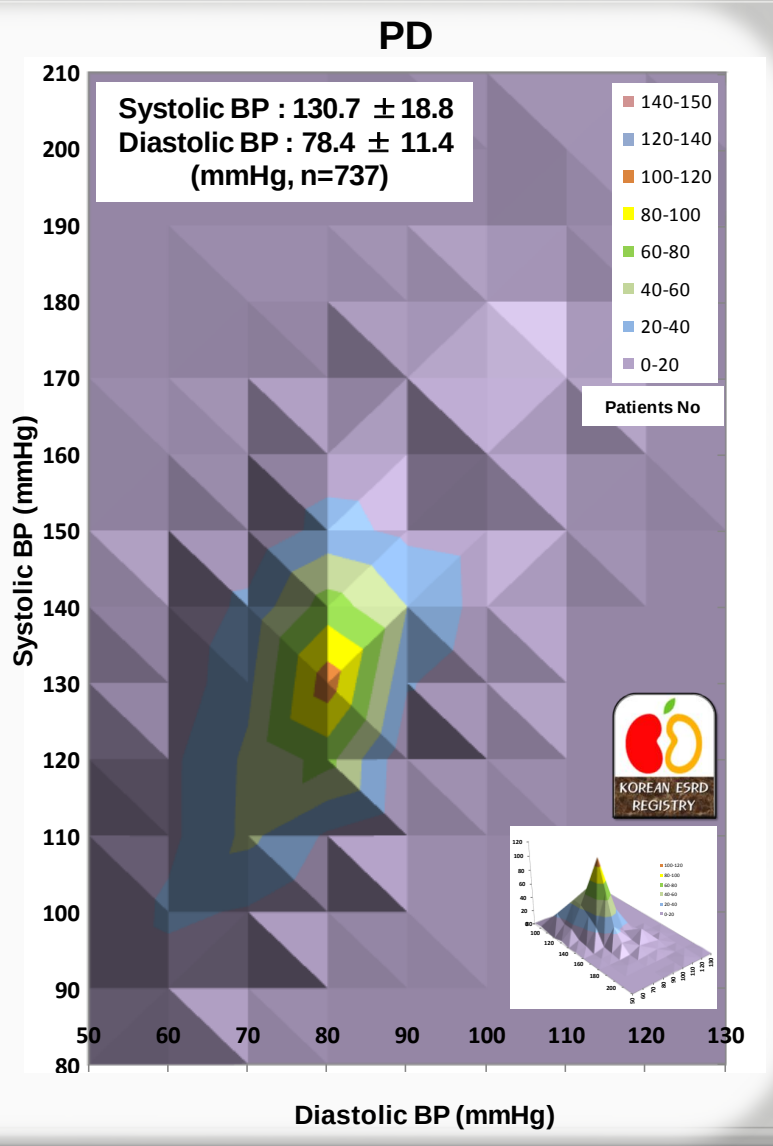


Pulse Pressure : HD & PD

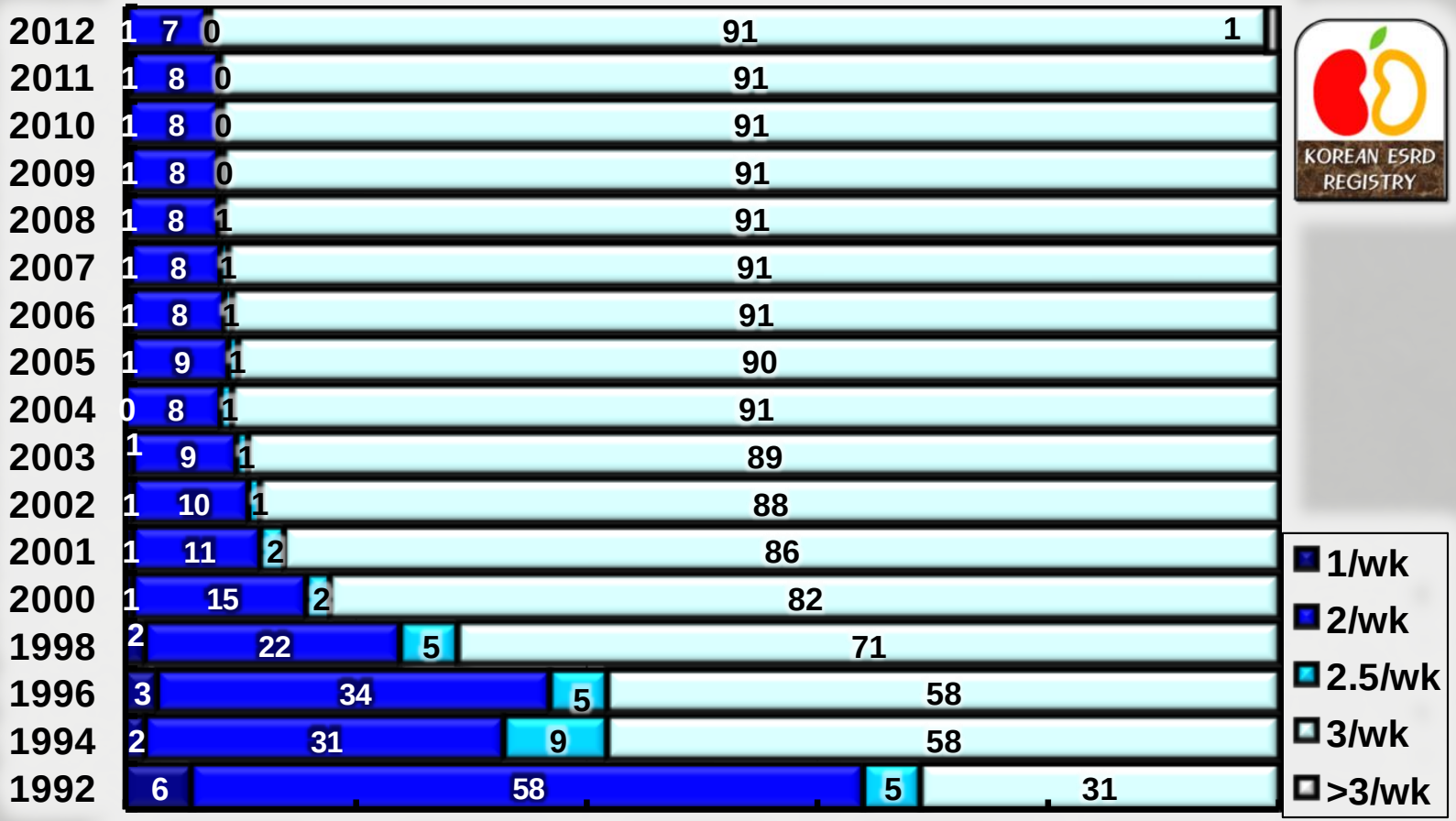


Patients' Distribution according to BP



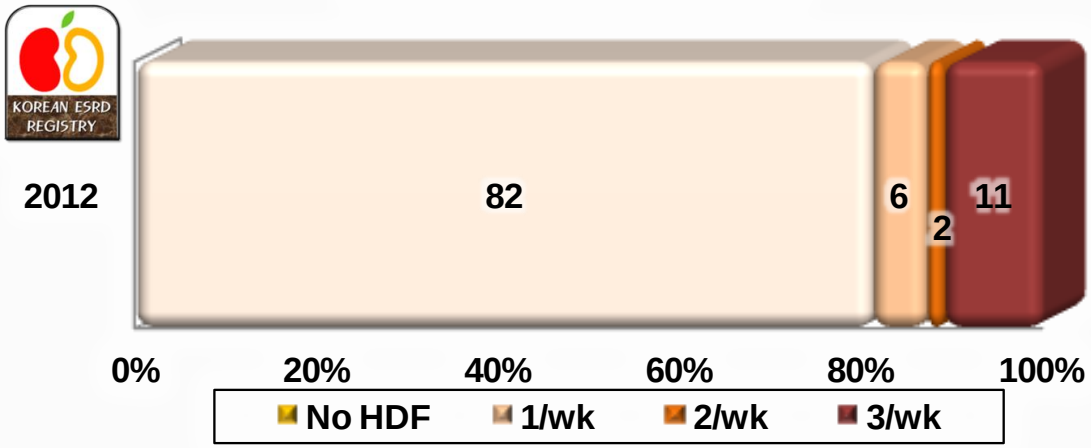


Frequency of HD per Week

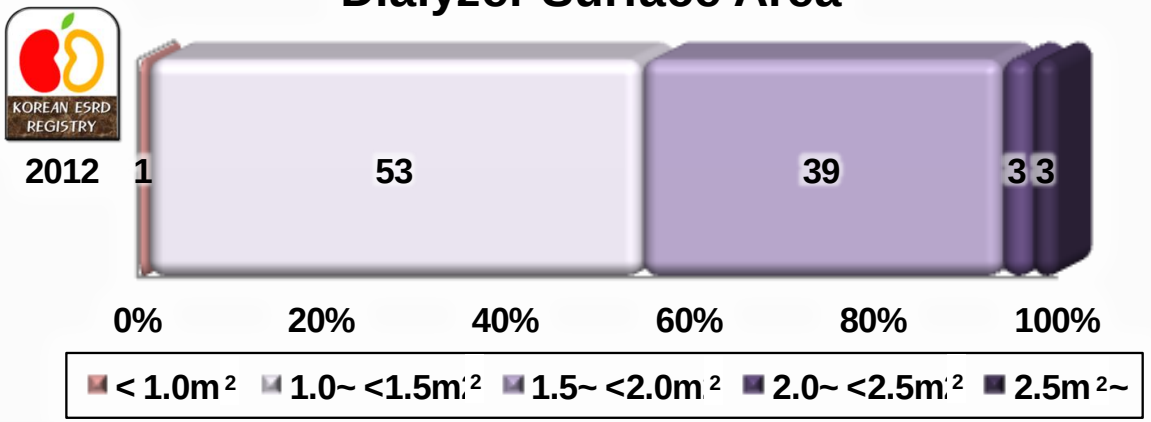


Hemodiafiltration & Dialyzer

Hemodiafiltration

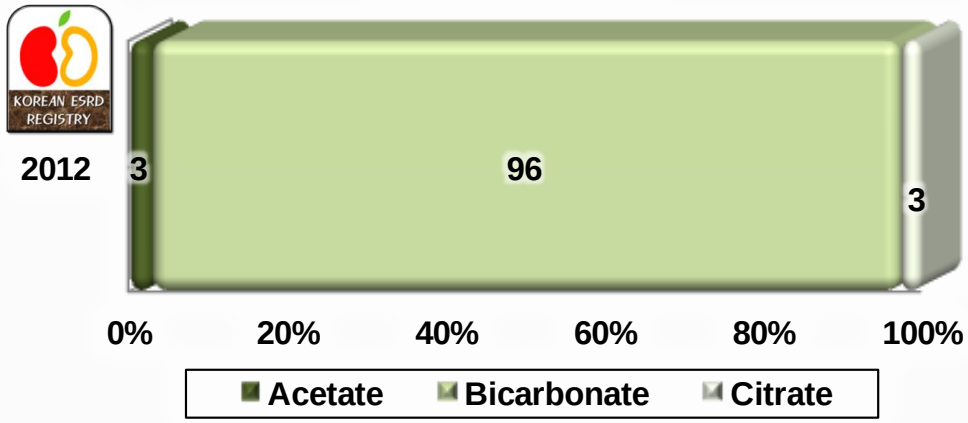


Dialyzer Surface Area

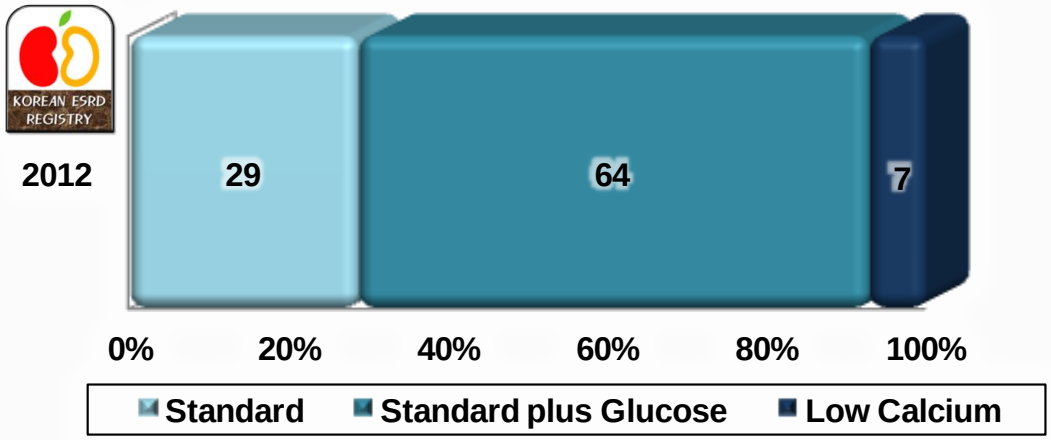


HD Dialysate

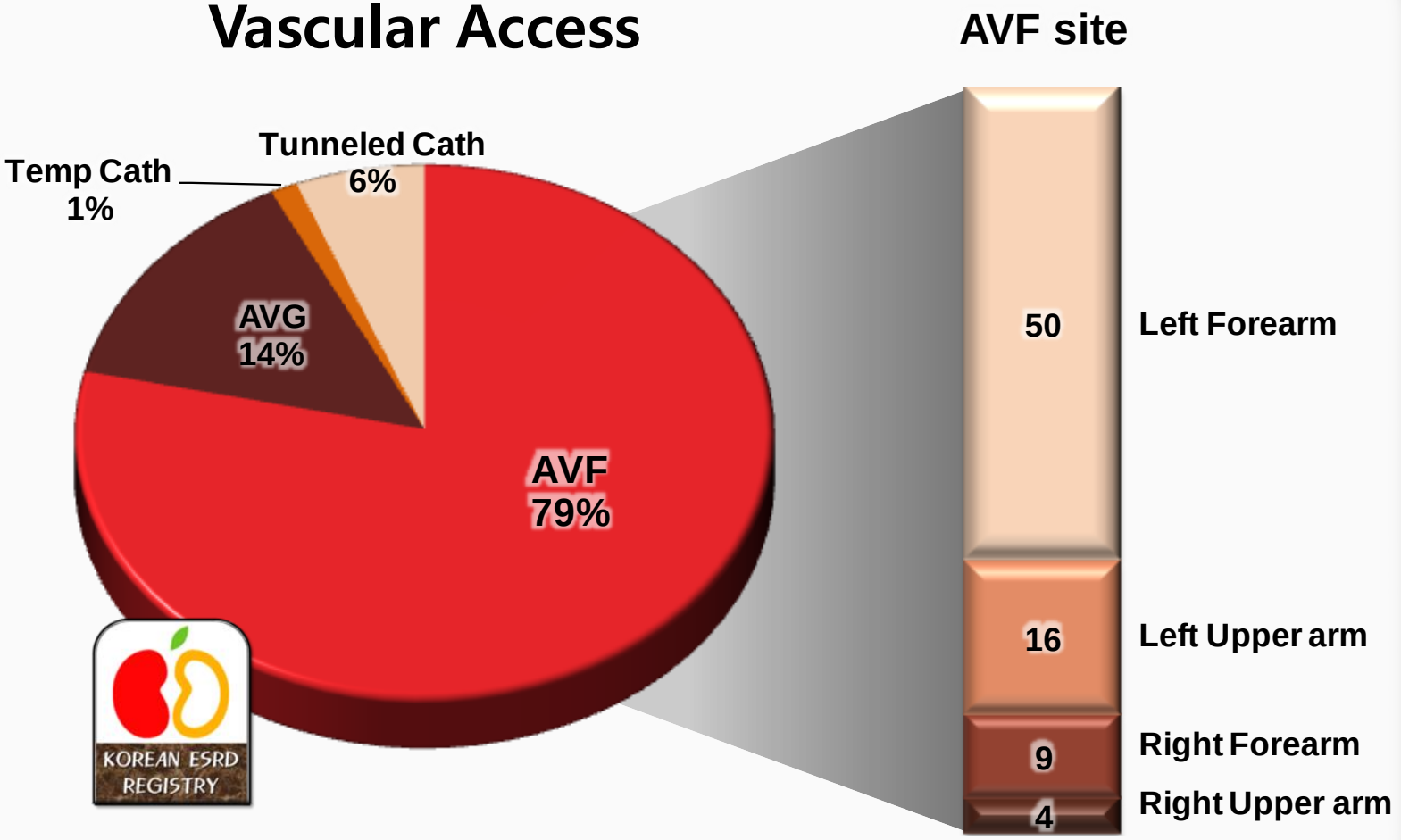
Dialysate (I)



Dialysate (II)

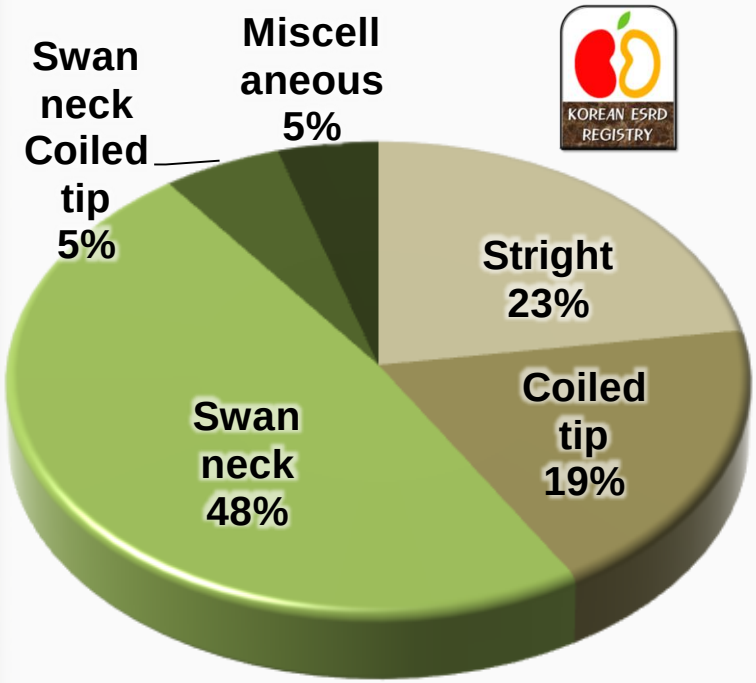


Vascular Access

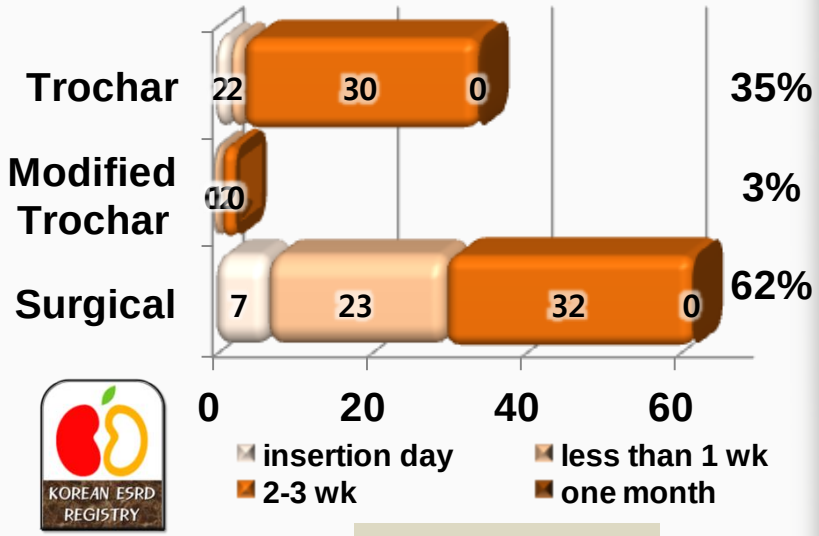


PD Catheter

PD Catheter Type

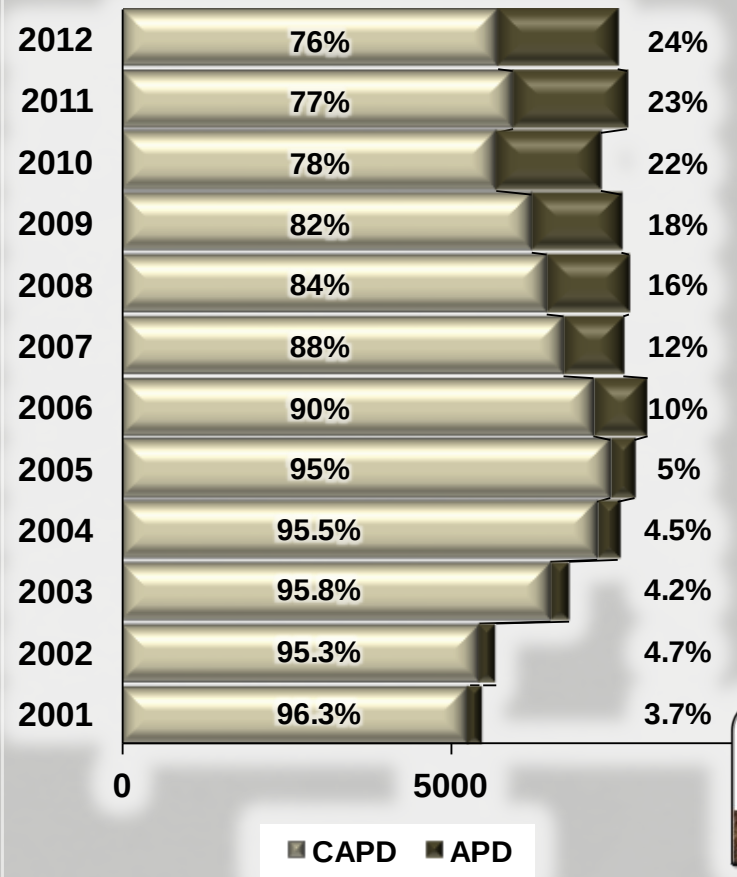


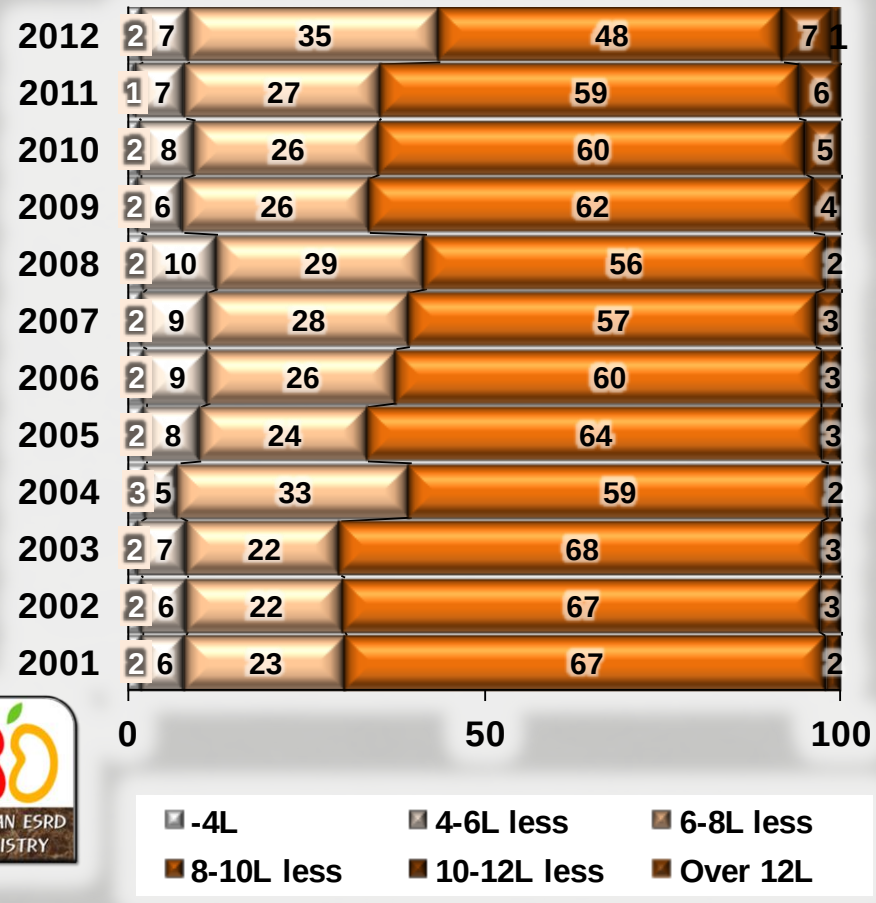
PD Catheter Insertion Method



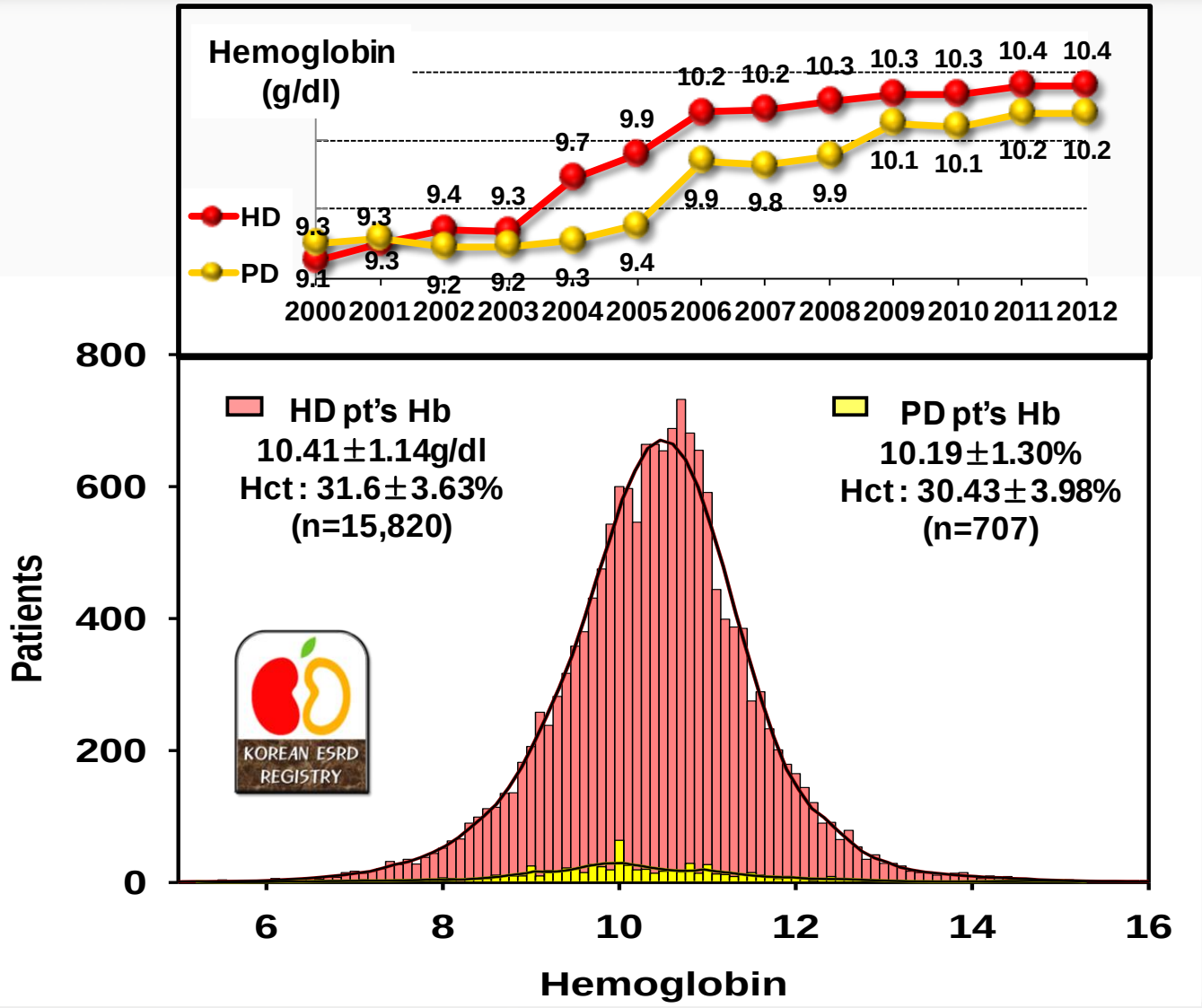
Break-In Period

PD Type & Doses

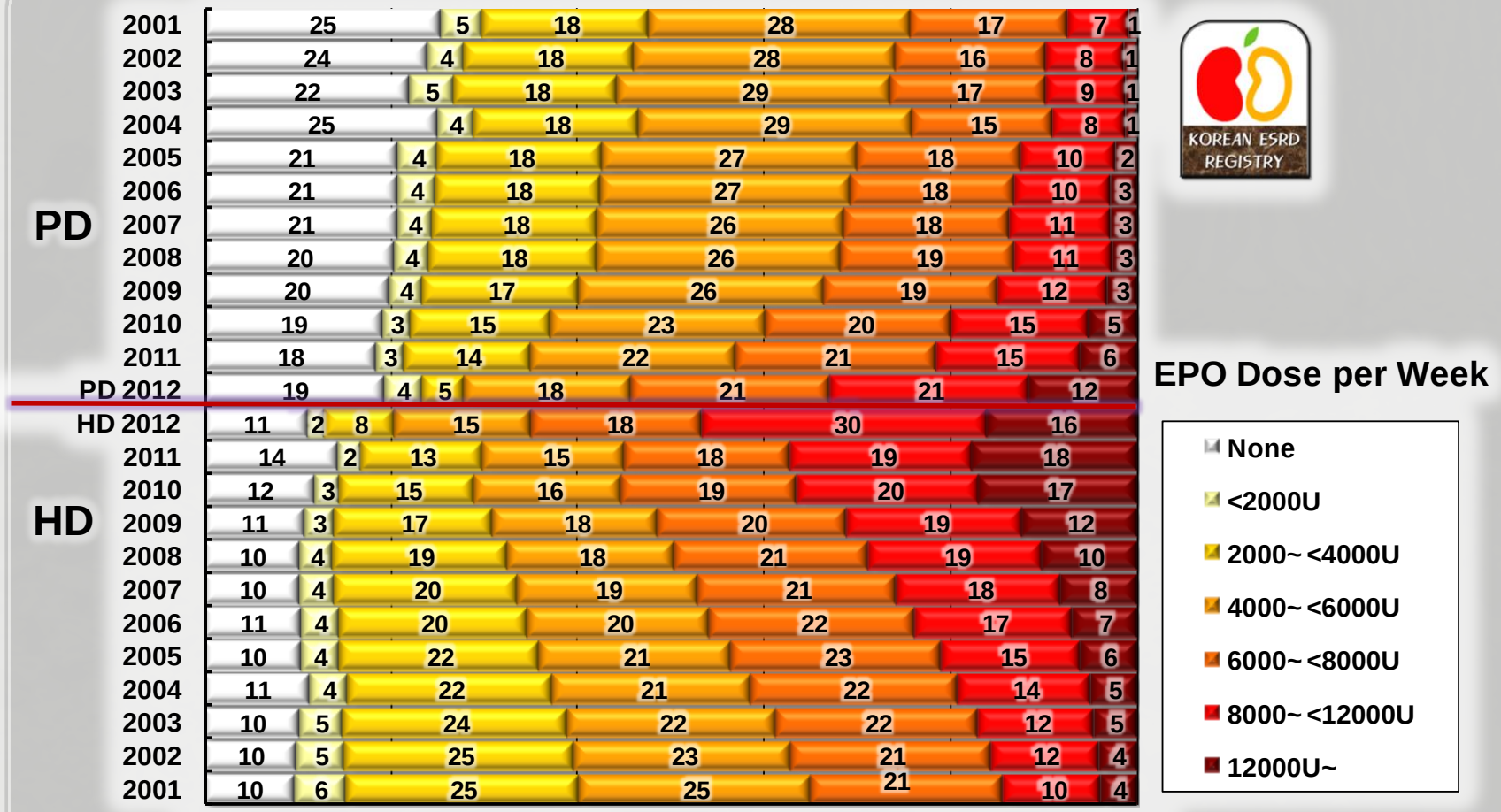




Hemoglobin : HD & PD

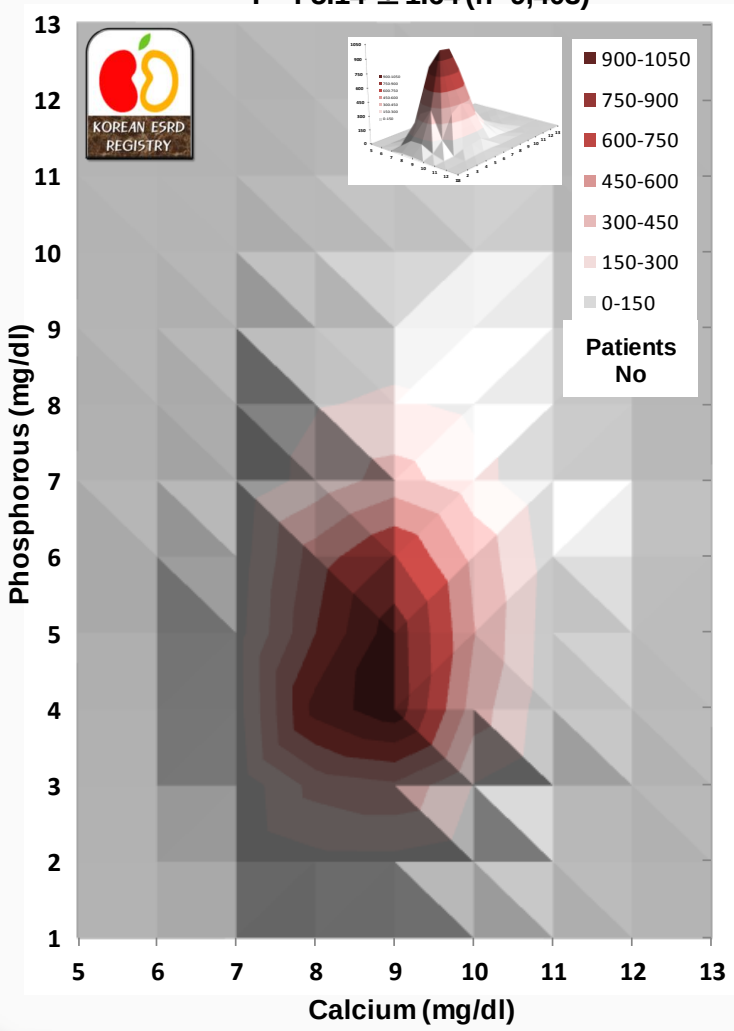


Erythropoietin Doses

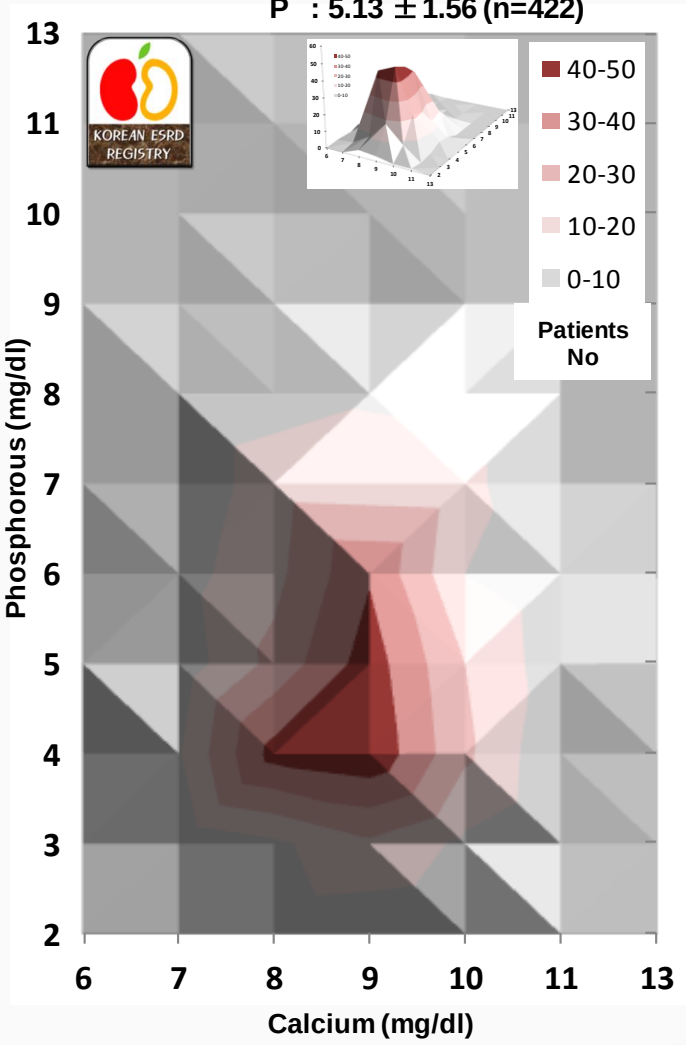


Calcium & Phosphorous

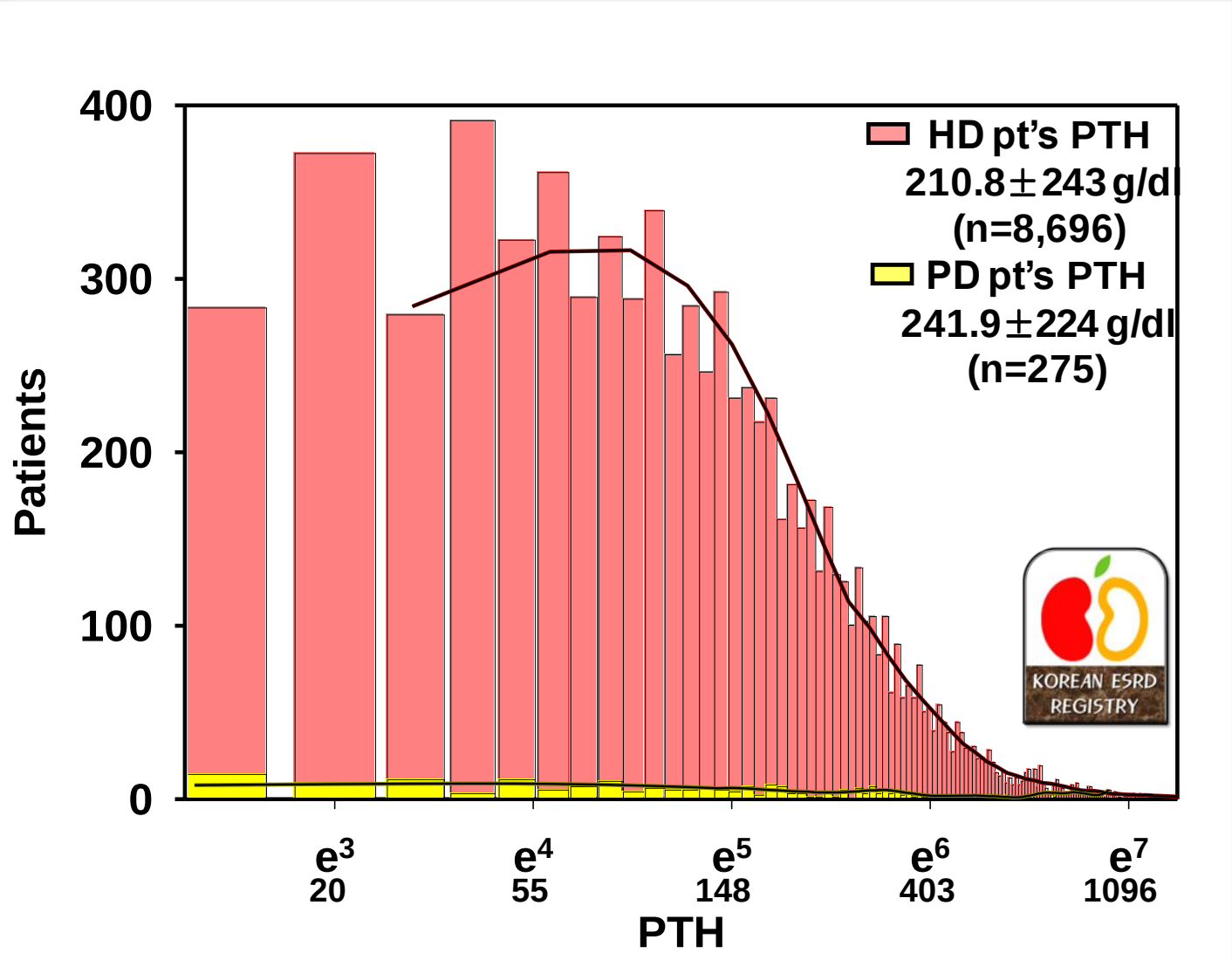
HD Ca : 8.88 ± 0.89 (n=9,413)
P : 5.14 ± 1.64 (n=9,403)



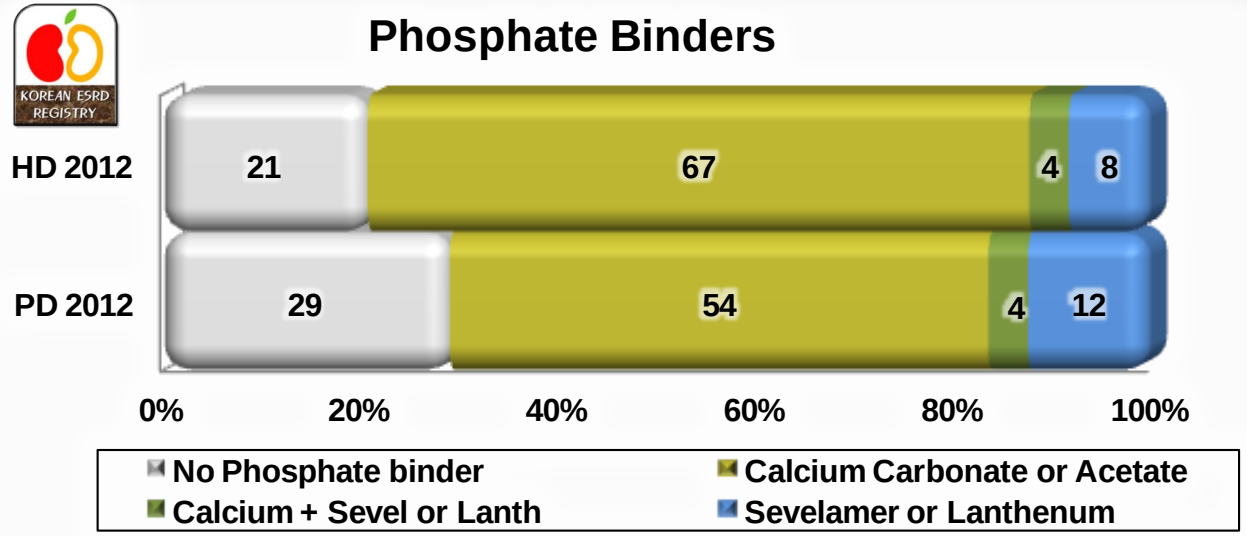
PD Ca : 8.79 ± 0.90 (n=423)
P : 5.13 ± 1.56 (n=422)

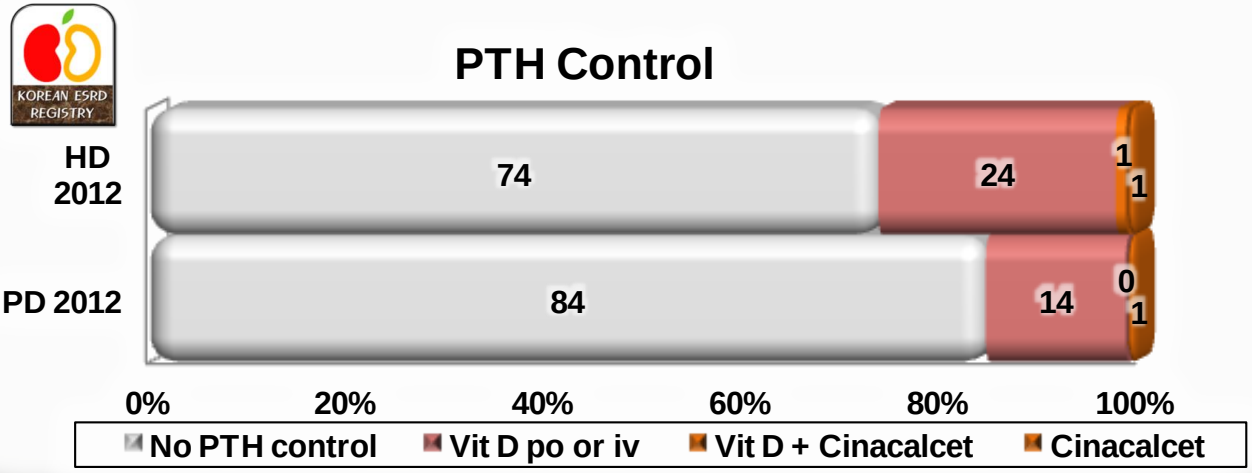


PTH

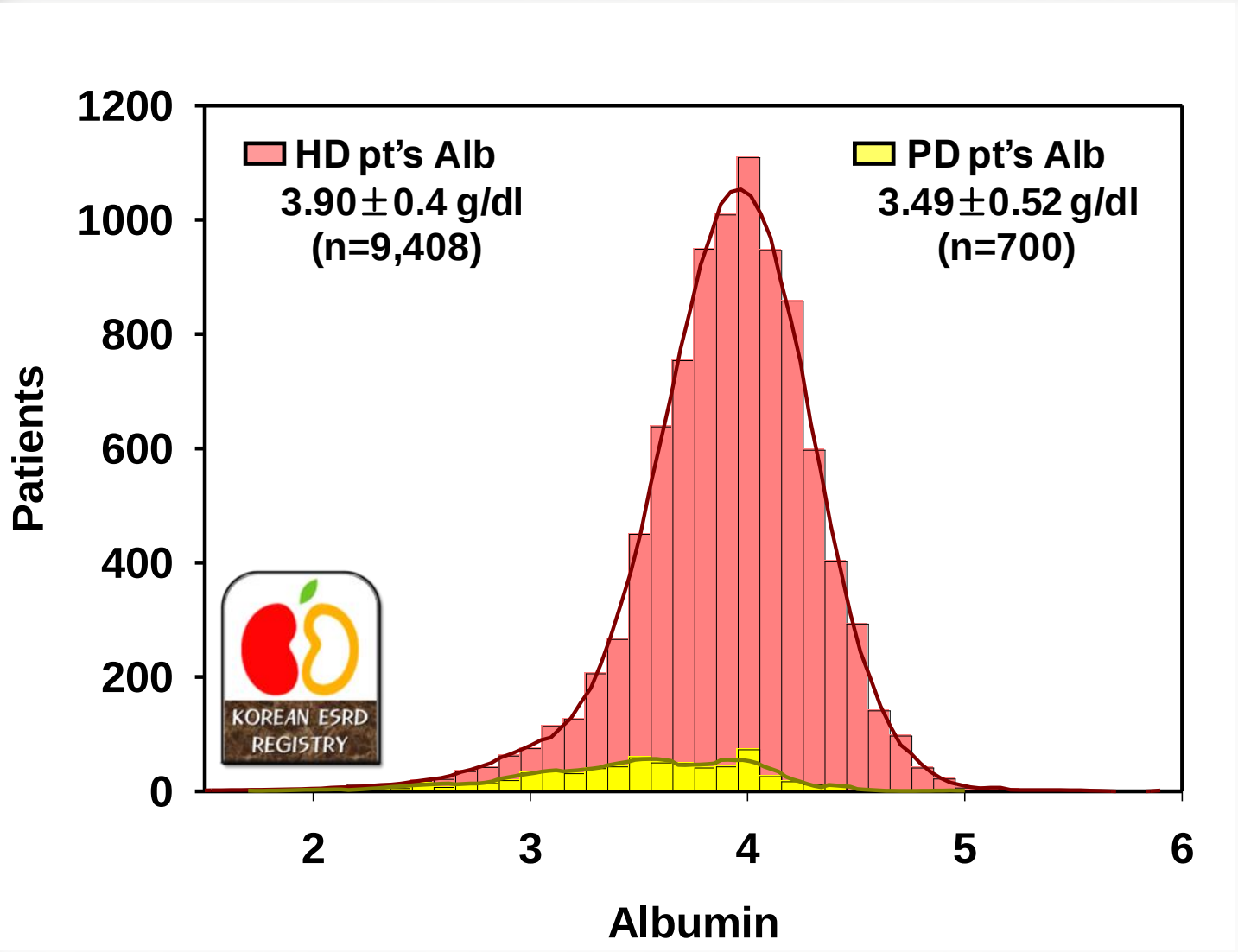

400
300
200
100
0
Patients
HD pt's PTH
210.8±243 g/dl
(n=8,696)
PD pt's PTH
241.9±224 g/dl
(n=275)
KOREAN ESRD REGISTRY
e3
20
e4
55
e5
148
e6
403
e7
1096
PTH

Phosphate Binders & PTH Control

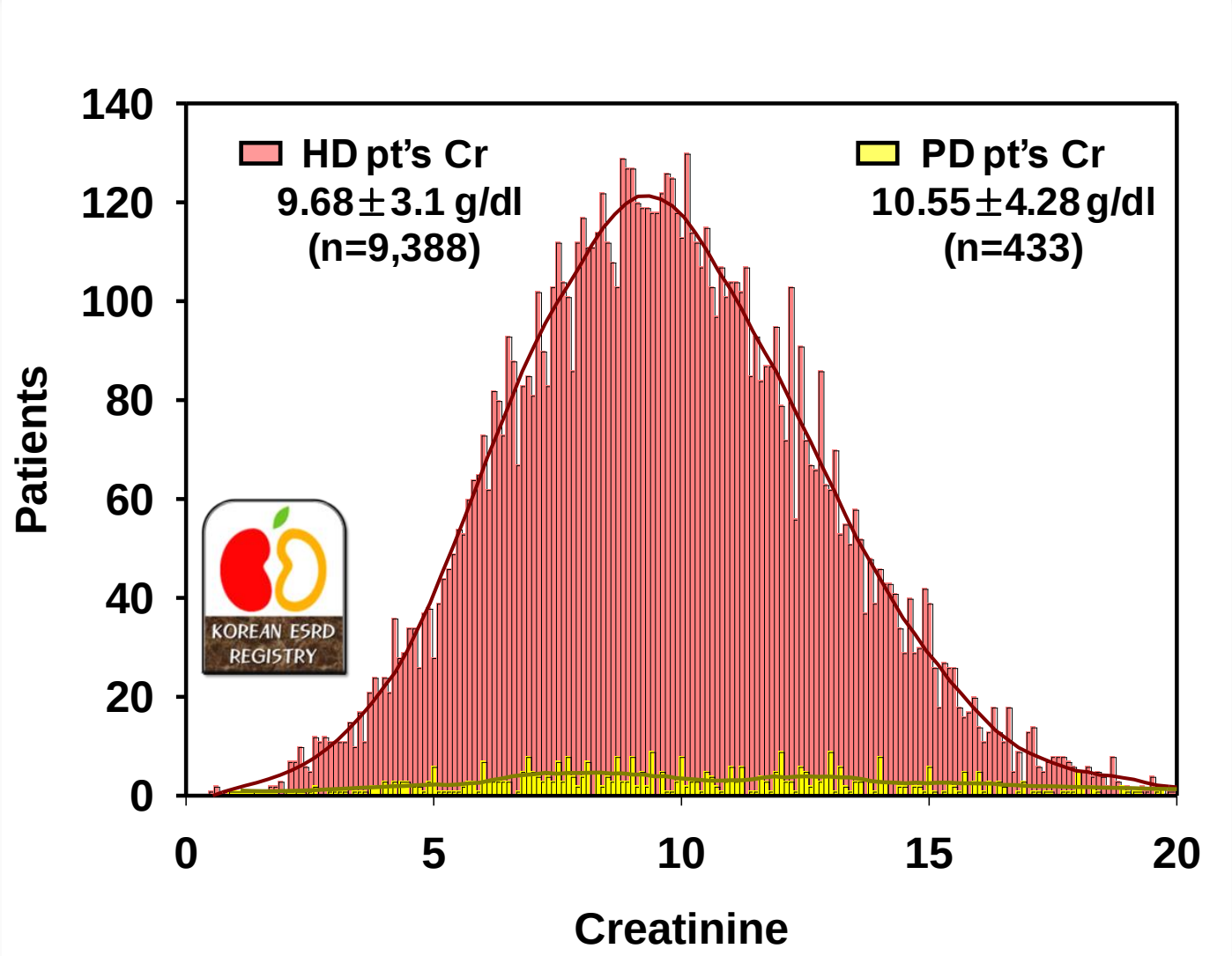




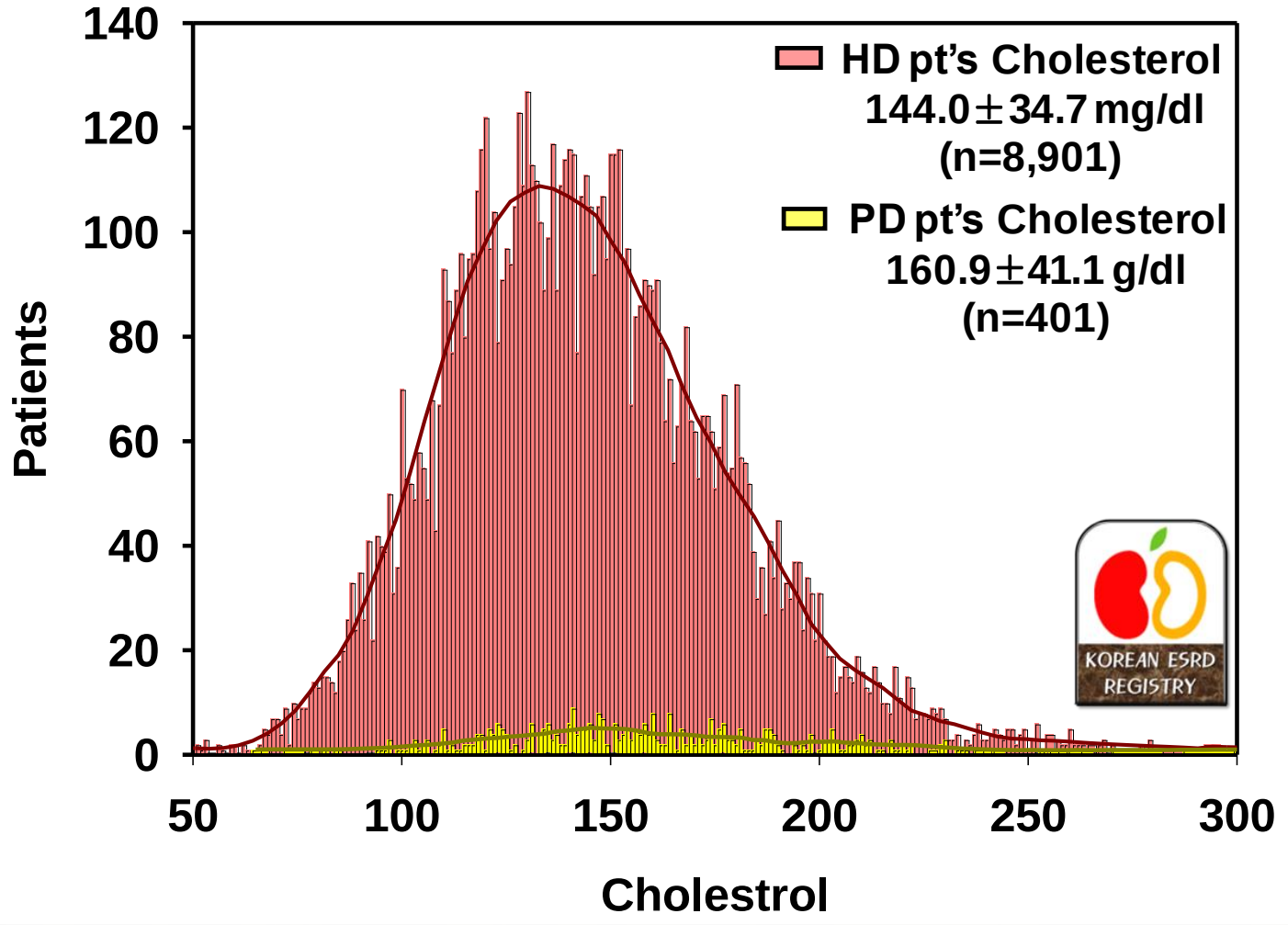
Serum Albumin



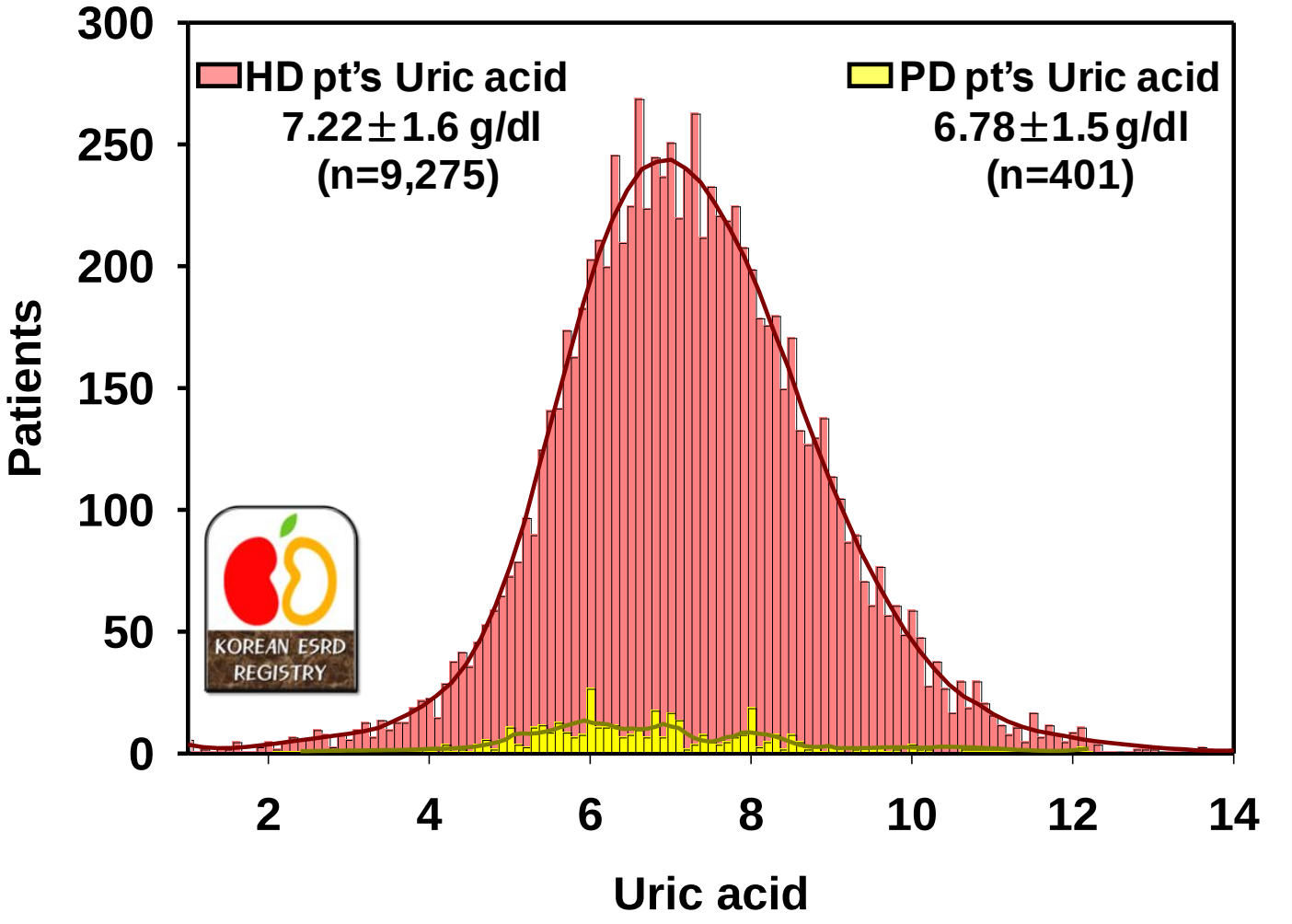
Serum Creatinine



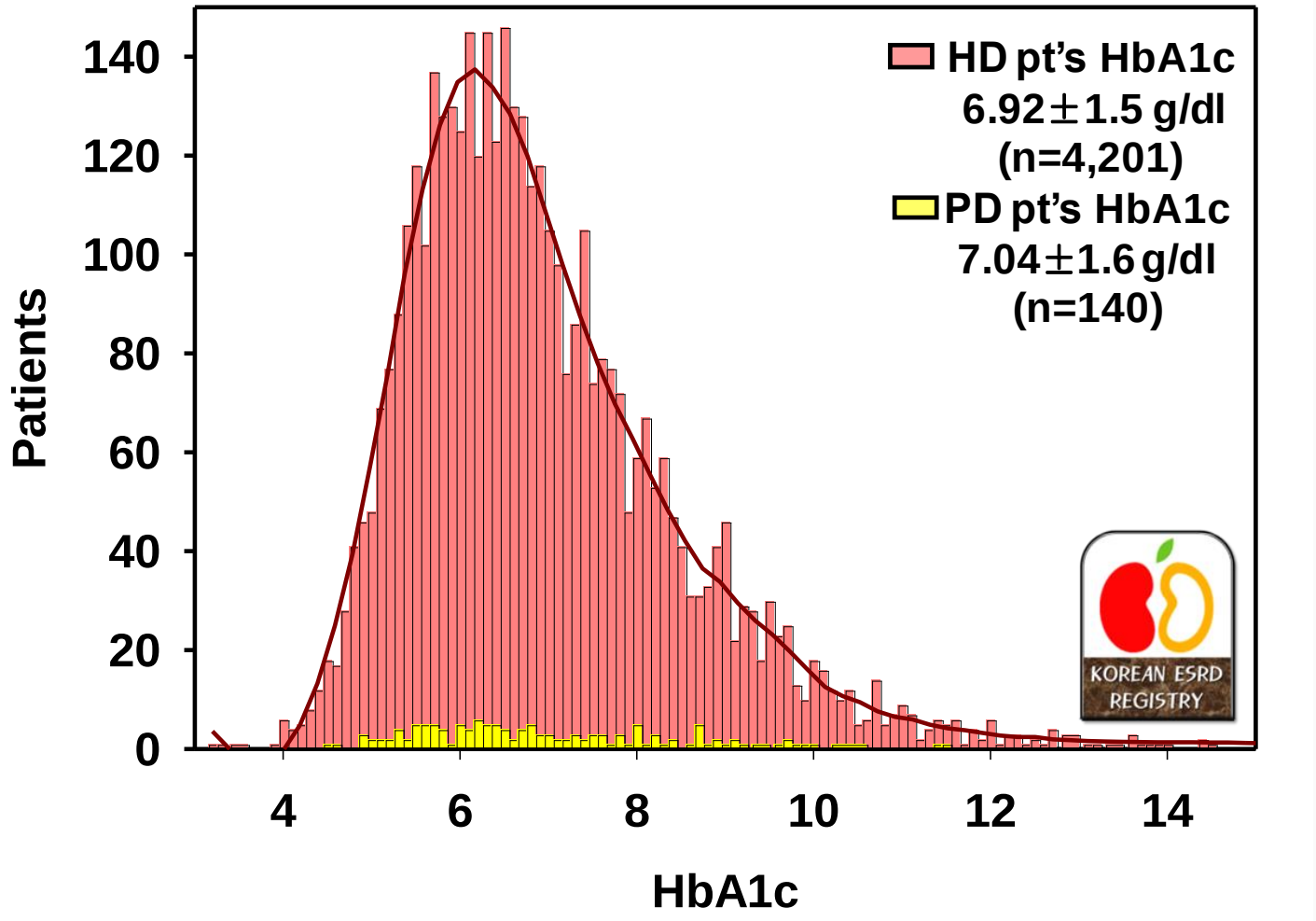
Total Cholesterol



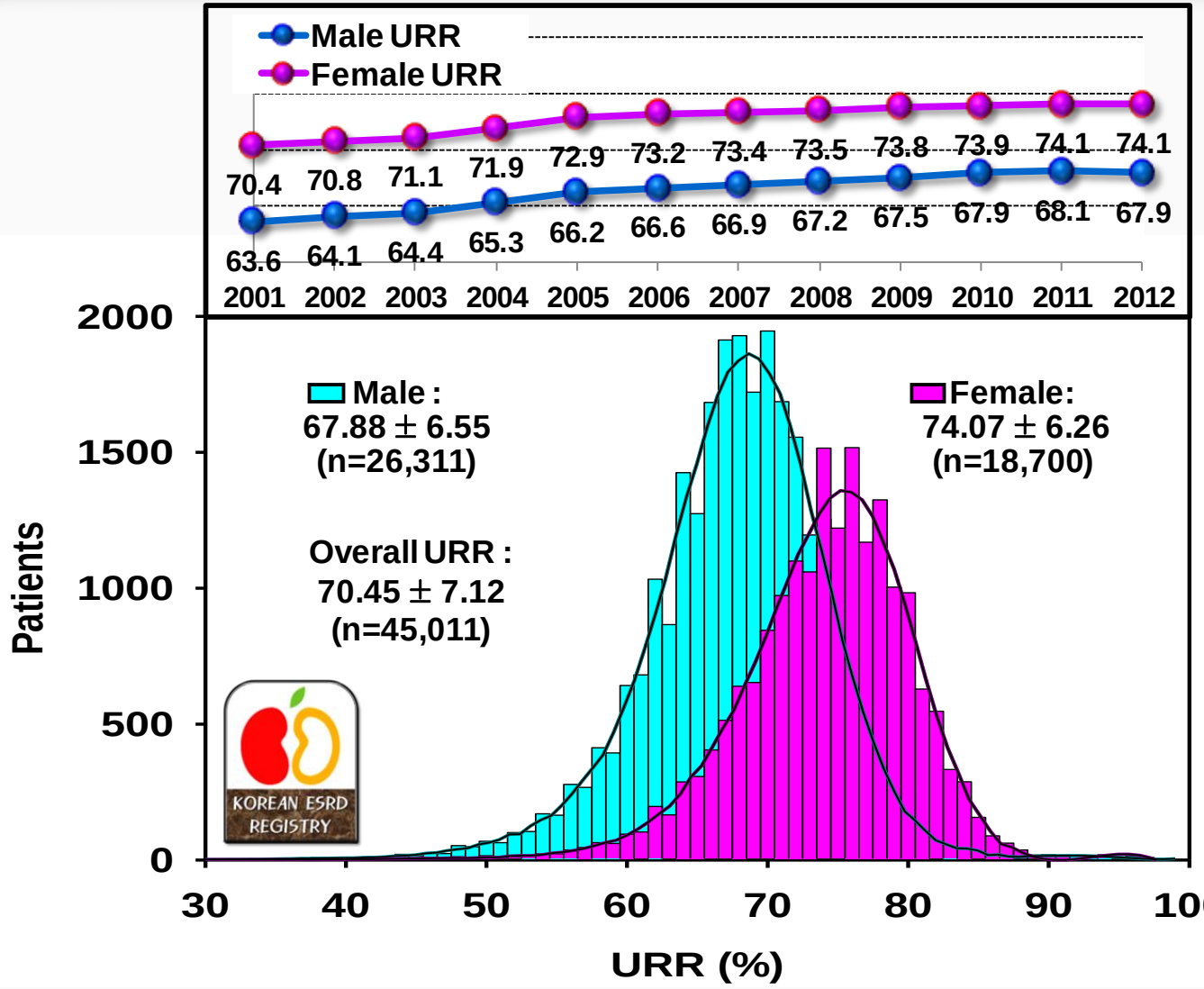
Uric Acid


HD pt's Uric acid
7.22±1.6 g/dl
(n=9,275)
PD pt's Uric acid
6.78±1.5 g/dl
(n=401)
Patients
300
250
200
150
100
50
0
2
4
6
8
10
12
14
Uric acid
KOREAN ESRD REGISTRY

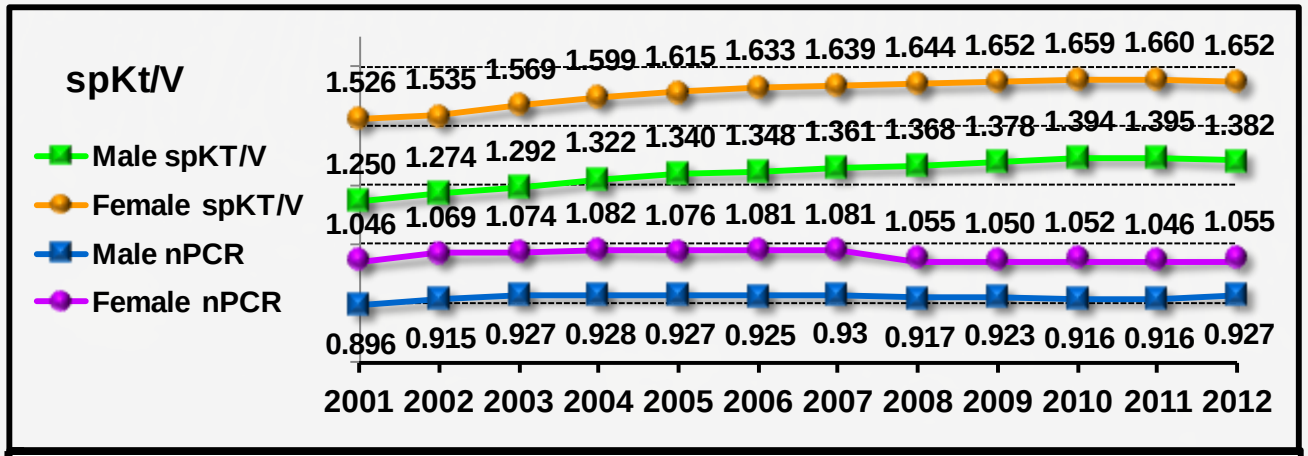
Hb A1c

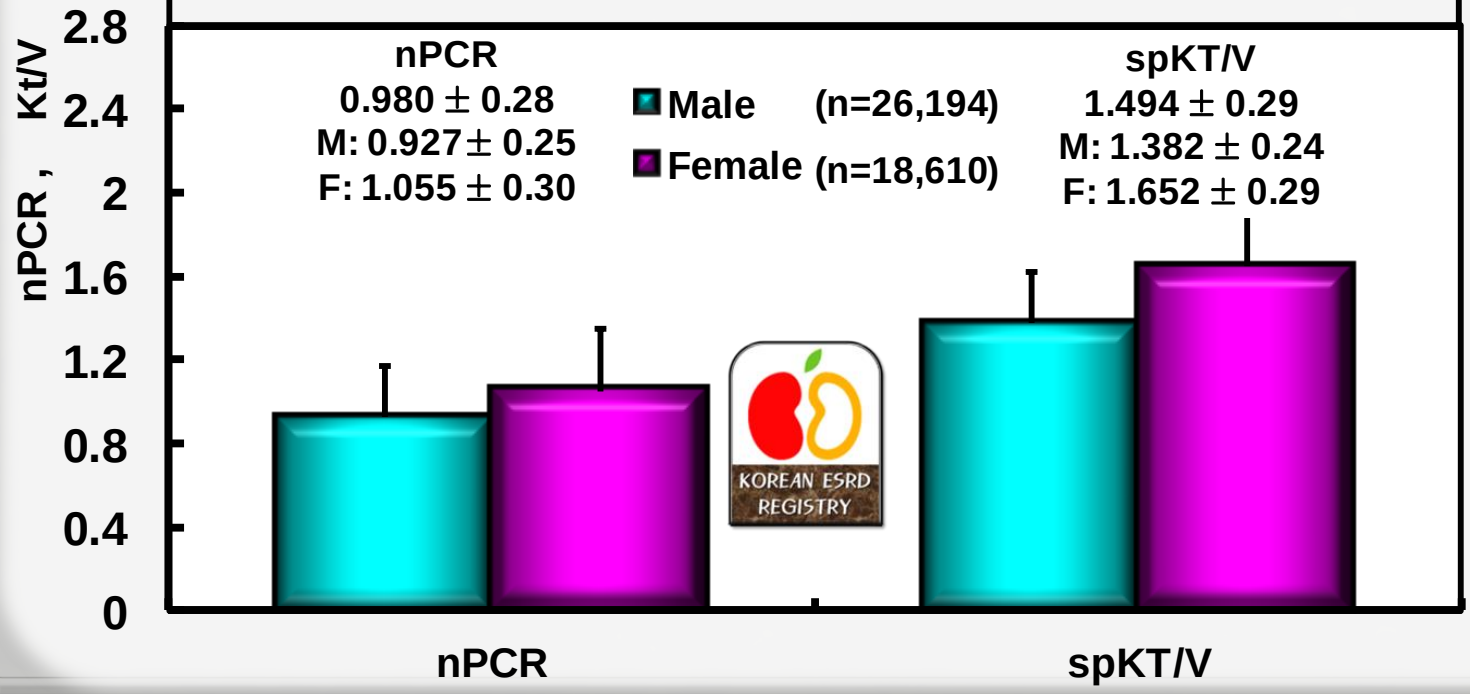

HD pt's HbA1c
6.92±1.5 g/dl
(n=4,201)
PD pt's HbA1c
7.04±1.6 g/dl
(n=140)
Patients
0
20
40
60
80
100
120
140
4
6
8
10
12
14
HbA1c
KOREAN ESRD REGISTRY

Urea Reduction Ratio

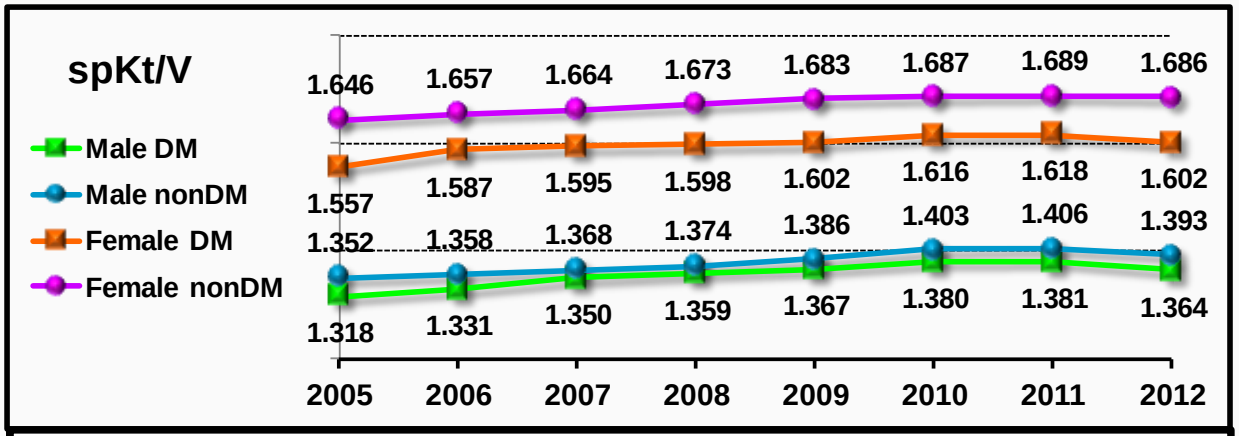


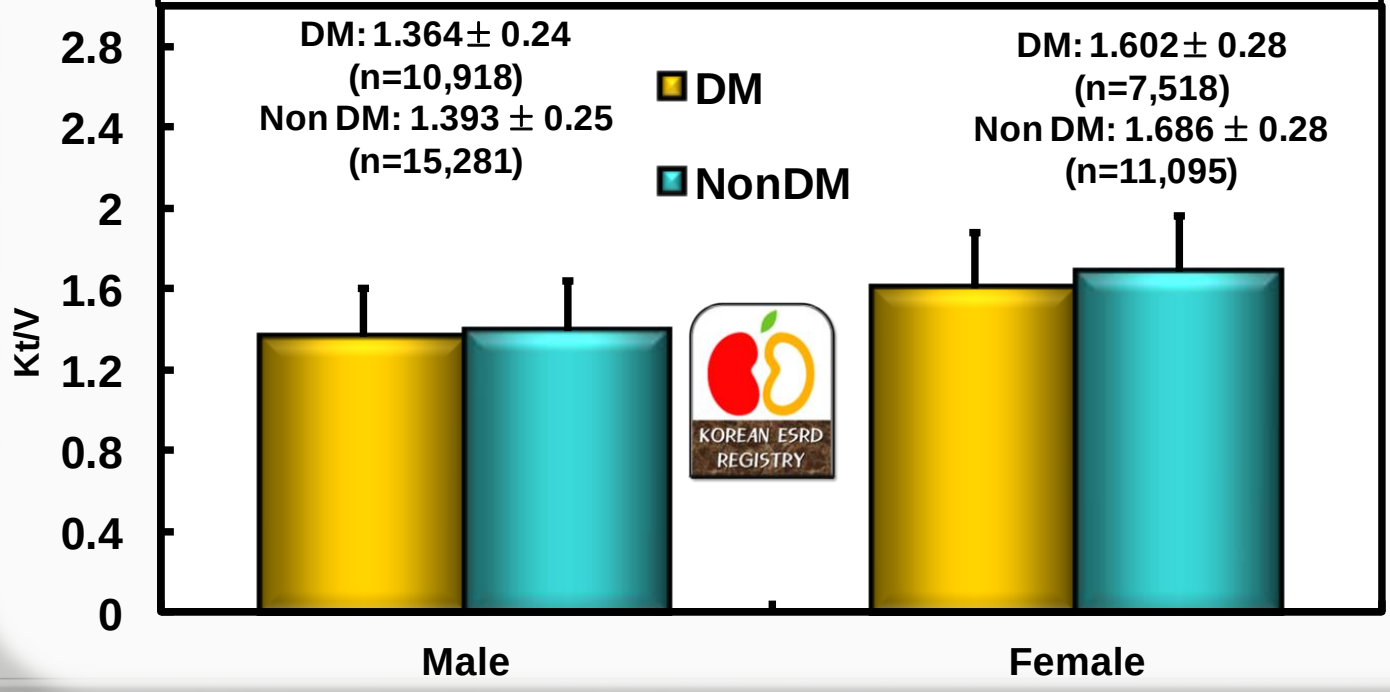
HD Adequacy


spKt/V
Male spKT/V
Female spKT/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 1.652
1.250 1.274 1.292 1.322 1.340 1.348 1.361 1.368 1.378 1.394 1.395 1.382
1.046 1.069 1.074 1.082 1.076 1.081 1.081 1.055 1.050 1.052 1.046 1.055
0.896 0.915 0.927 0.928 0.927 0.925 0.93 0.917 0.923 0.916 0.916 0.927
2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012

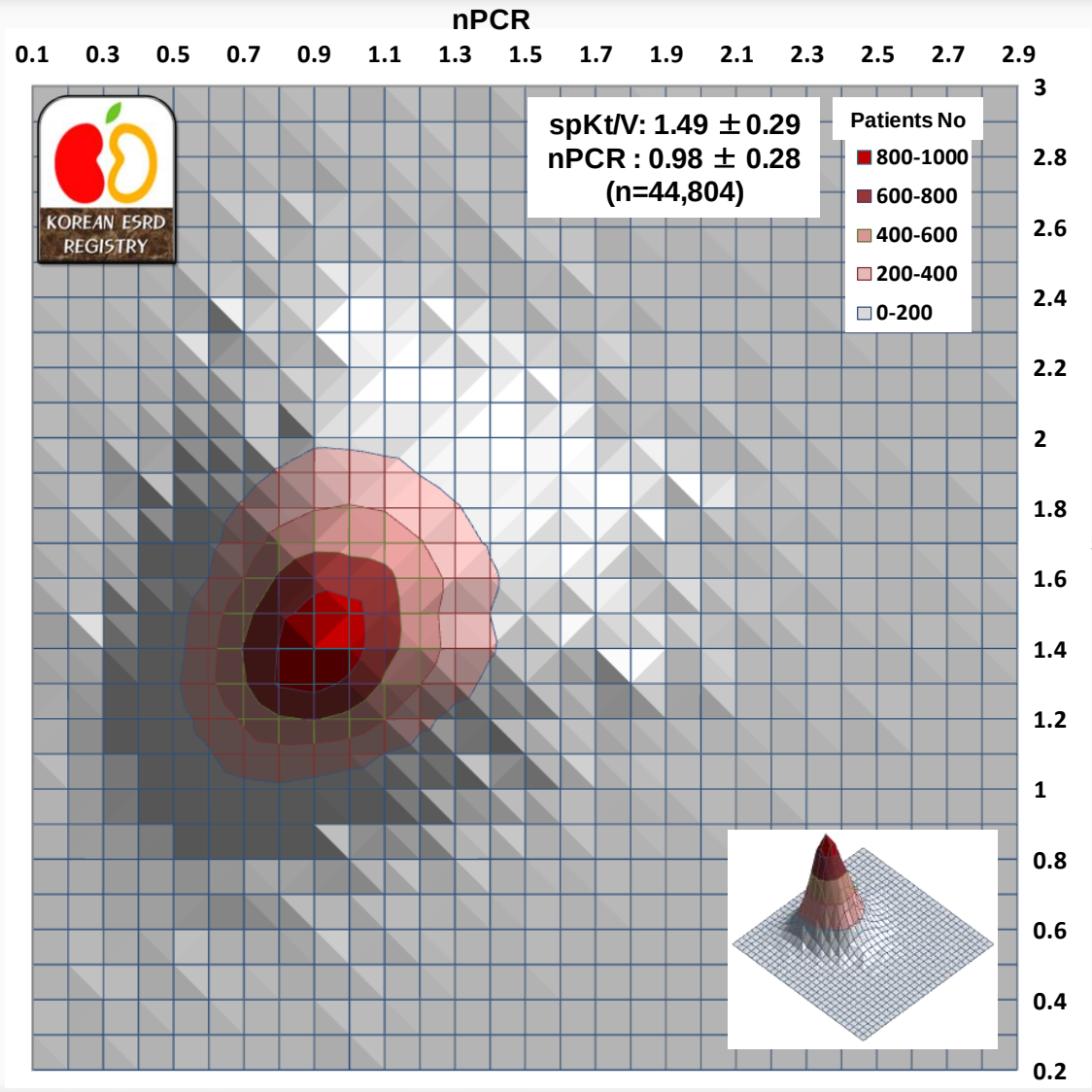

nPCR , Kt/V
2.8
2.4
2
1.6
1.2
0.8
0.4
0
nPCR
0.980 ± 0.28
M: 0.927± 0.25
F: 1.055 ± 0.30
Male (n=26,194)
Female (n=18,610)
spKT/V
1.494 ± 0.29
M: 1.382 ± 0.24
F: 1.652 ± 0.29
nPCR
spKT/V

HD Adequacy : DM & Non-DM

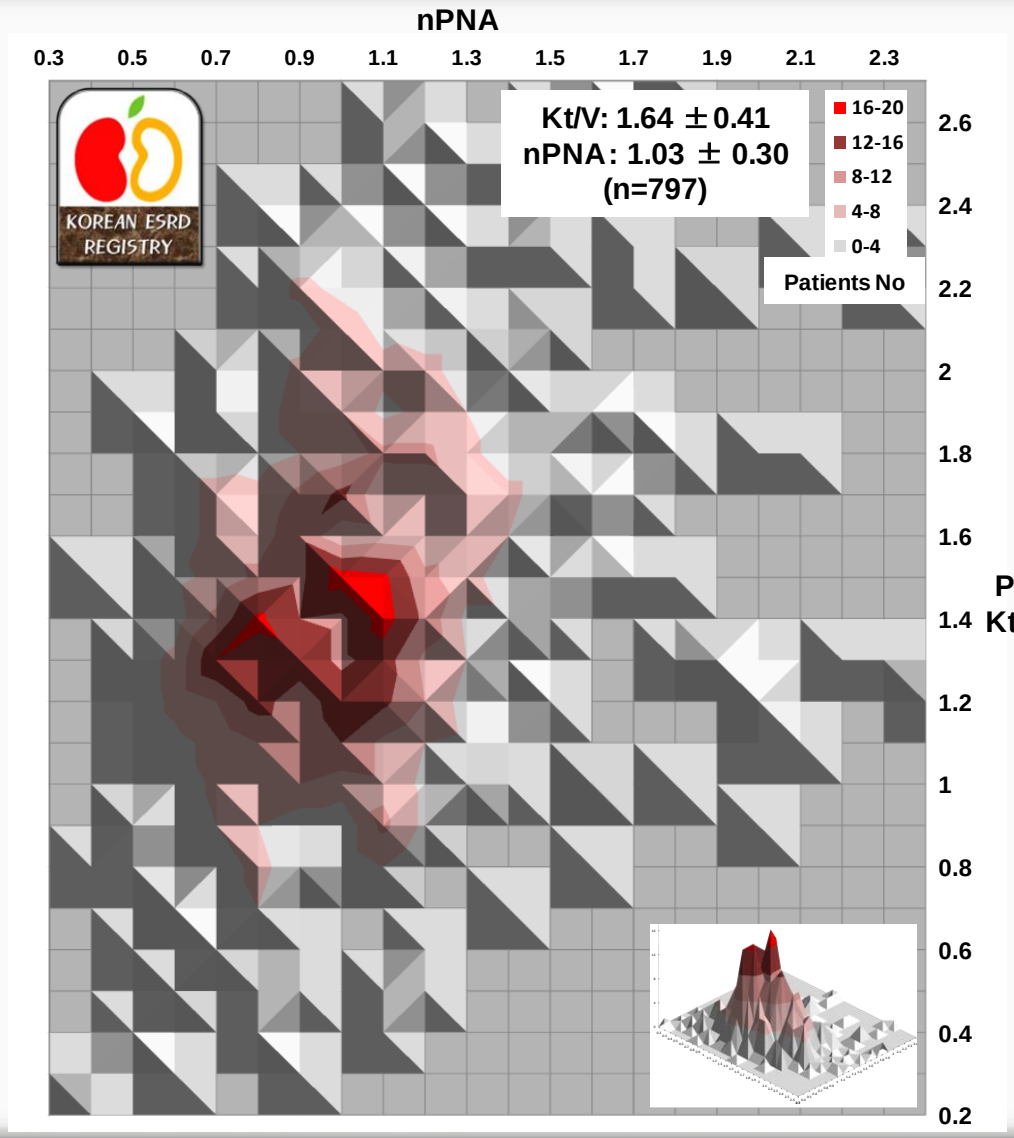




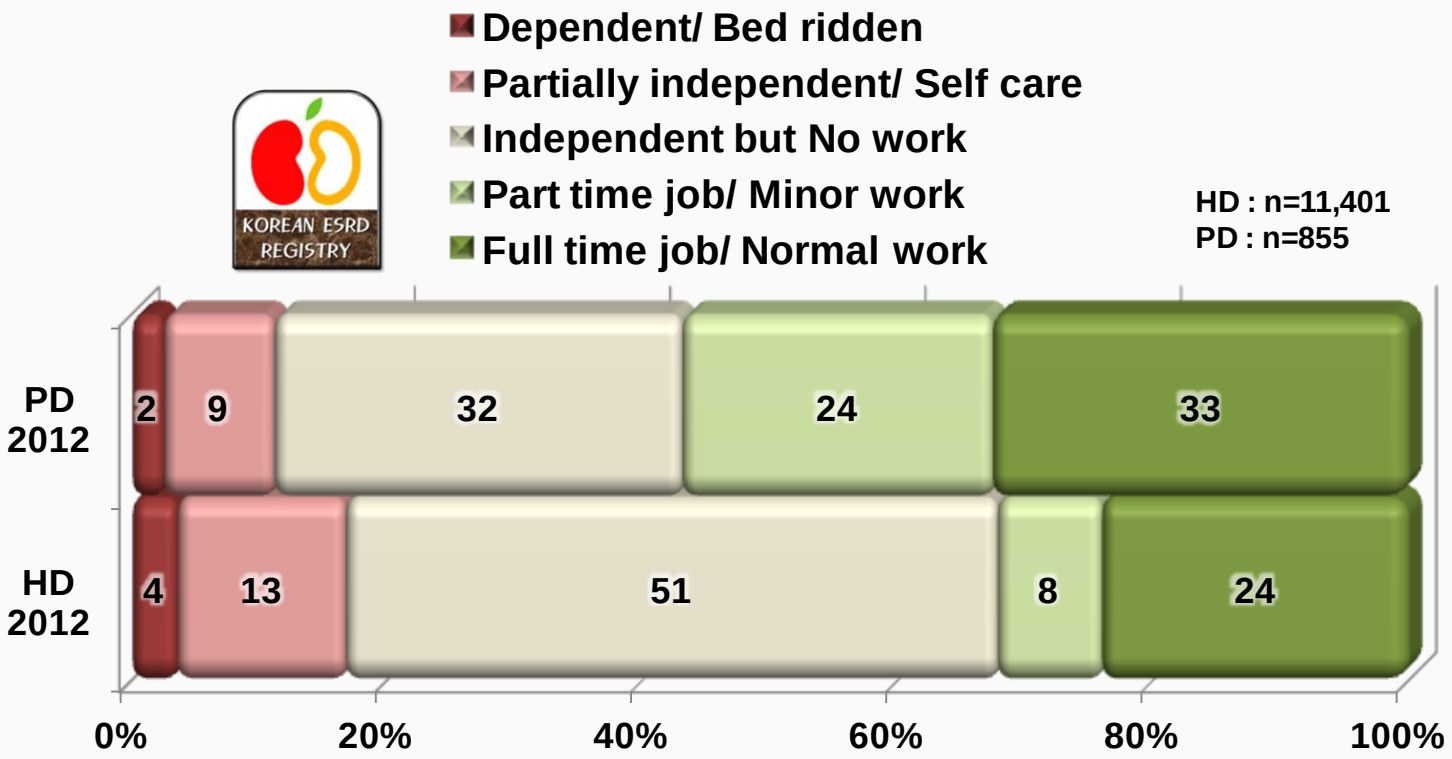
HD Adequacy : spKt/V vs nPCR



PD Adequacy : Kt/V vs nPNA



Rehabilitation of Dialysis Patients



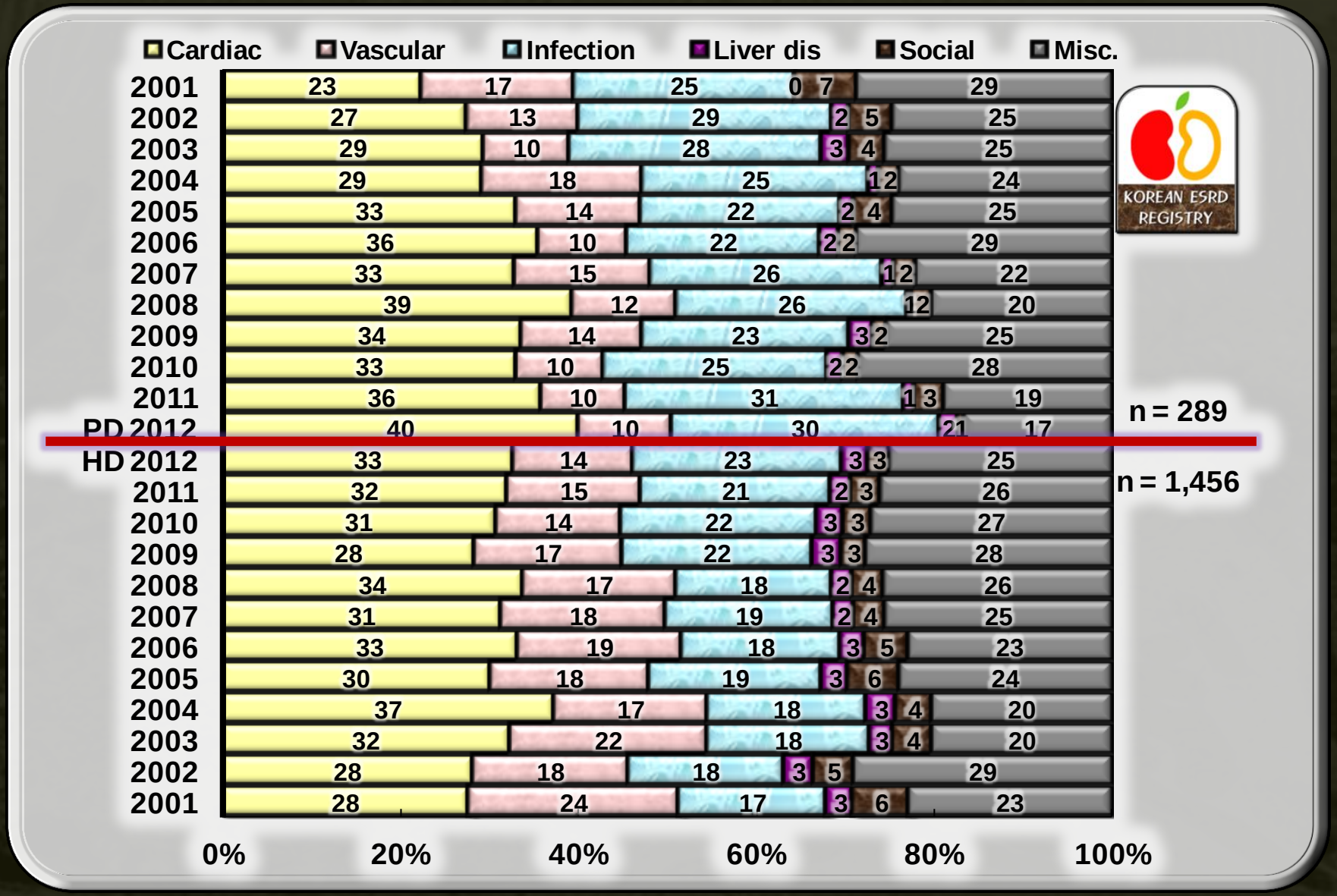
Co-Morbidity of Dialysis Patients

	HD Patients (%)		PD Patients (%)	
Cardiac	**18.0**		**14.2**	
Coronary Artery Disease		9.3		7.6
Congestive Heart Failure		4.3		5.0
Pericardial Effusion		0.5		0.5
Arrythmia		3.8		1.1
Vascular	**51.2**		**60.7**	
Cerebrovascular accident		3.7		4.2
Hypertension		45.9		55.3
Other vascular disease		1.6		1.2
Infection	**5.0**		**8.5**	
Pneumonia		1.3		1.1
Tuberculosis		0.5		1.1
Peritonitis		0.4		3.1
Herpes zoster		0.3		0.4
Access/ exit site infection		0.3		0.6
Other Infection		2.2		2.2
Liver disease	**7.9**		**4.6**	
Hepatitis B		4.6		3.4
Hepatitis C		2.9		0.8
Congestive Liver		0.1		0.0
Hemochromatosis		0.0		0.0
Other liver diseases		0.3		0.4
Gastrointestinal	**10.8**		**6.4**	
Gastric Ulcer		2.3		1.0
Duodenal Ulcer		0.4		0.3
Constipation		1.7		0.2
Other Gastrointestinal Diseases		6.3		4.9
Miscellaneous	**7.0**		**5.6**	
Malnutrition (Alb<2.5g/dl)		0.2		0.4
Malignancy		1.4		1.3
Hypertensive Retinopathy		0.9		0.6
Uremic Dermatitis		0.8		0.5
Uremic Neuritis		1.2		0.7
Uremic Dementia		0.3		0.2
Uremic Ascites / Pleural Effusion		0.4		0.5
Osteodystrophy		0.6		0.3
COPD & other pulm disease		0.2		0.2
Decubitus ulcer/ DM foot		1.0		0.9

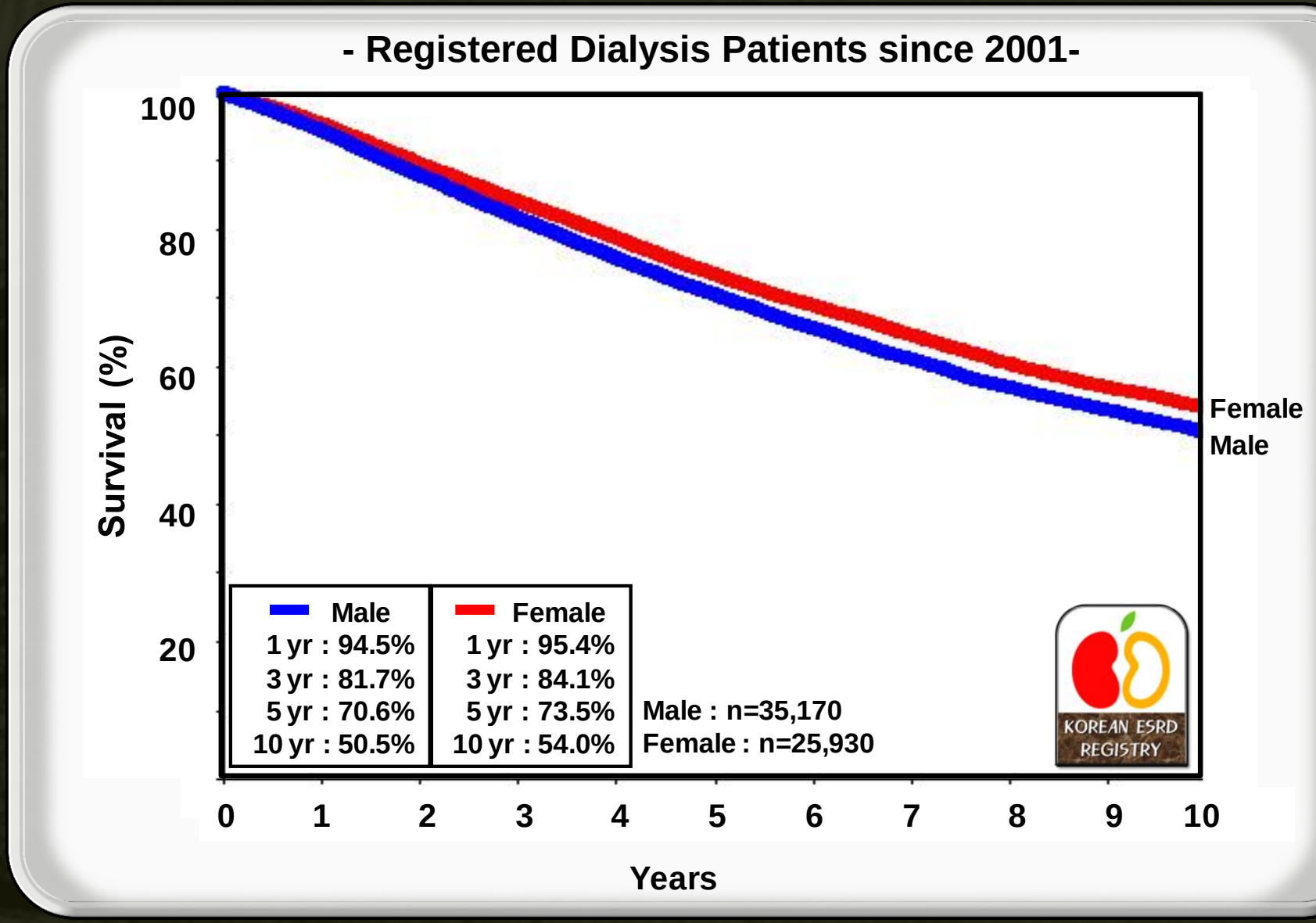
Causes of Death (%), 1994-2012

	1994-96	1998	2001	2003	2005	2006	2007	2008	2009	2010	2011	2012
Cardiac	27.4	27.4	26.9	31.7	30.7	33.7	31.7	35.1	29.5	31.1	32.7	33.9
Myocardial infarction	6.4	6.4	7.7	7.4	8	9.1	7.5	9.7	8.0	8.3	6.6	6.8
Cardiac arrest, uremia associated	13.7	13.7	11.2	11.7	10.4	11.1	10.8	11	8.5	8.7	11.0	11.1
Cardiac arrest, other cause	7.2	7.2	8.1	12.5	12.4	13.5	13.3	14.4	13	14.2	15.0	16.0
Vascular	17.2	17.2	22.7	19.5	17	16.5	17.8	16	15.9	13.3	14.1	13.0
Cerebrovascular accident	14.3	14.3	15.1	14.5	12.3	11.5	13	12.2	11	8.2	8.7	7.9
Pulmonary embolus	0.2	0.2	0.5	0.1	0.6	0.7	0.5	0.1	0.2	0.1	0.2	0.3
Gastrointestinal hemorrhage	1.7	1.7	2.7	3.2	1.7	1.8	2.7	1.9	2.3	2.6	2.2	2.3
Gastrointestinal embolism	0.1	0.1	0.1	0	0.5	0.5	0.1	0.1	0.5	0.4	0.1	0.6
Other vascular disease	0.9	0.9	4.3	1.6	1.9	2	1.6	1.7	1.9	2.2	3.0	1.9
Infection	13.5	13.5	17.8	20.5	20.1	18.8	20.2	19.5	21.9	22.6	23.1	24.5
Pulmonary infection	2.5	2.5	4.5	3.6	4.5	4.2	4.4	4.4	5.9	7.5	8.4	10.8
Septicemia	6.6	6.6	6.9	9.7	9.6	8.9	11.7	9	10.4	10.7	9.7	8.9
Tuberculosis	0.3	0.3	0.8	0.2	0.3	0.1	0.2	0.1	0.3	0.2	0.1	0.7
Peritonitis	2.1	2.1	1.1	2	1.4	1.1	1.1	2	0.8	1.2	1.0	1.0
Other Infection	2	2	4.5	4.9	4.3	4.5	2.9	4	4.5	2.9	4.0	3.0
Liver disease	3.4	3.4	2.6	2.8	2.7	2.6	2.2	1.9	3.1	2.7	2.1	2.8
Liver failure due to hepatitis B	1.8	1.8	1.6	1.8	1.5	1.4	1.3	1	2.2	1.2	1.0	1.4
Liver failure due to other cause	1.6	1.6	1	1	1.2	1.1	0.8	0.8	0.9	1.6	1.1	1.3
Social	6.2	6.2	6.3	4.4	5.4	4.2	3.3	3.3	2.5	2.9	3.3	2.2
Patient refused further treatment	2.9	2.9	2.1	1	1.1	0.6	1.1	0.6	0.5	0.3	0.4	0.6
Suicide	2.5	2.5	3.3	2.3	3.3	3	1.5	1.6	1.3	1.9	1.4	1.4
Therapy ceased for other reason	0.8	0.8	0.9	1	1	0.6	0.7	1	0.8	0.7	1.5	0.3
Miscellaneous	32	32	23.7	21.3	24	24.2	24.8	24.3	27.1	27.3	24.7	23.6
Cachexia	2.9	2.9	8.1	6.6	4	3.9	4.4	3.8	3.3	2.8	2.7	2.1
Malignant disease	2.1	2.1	4.4	3.5	6.4	5.4	5.7	4.6	5.7	5.9	6.0	6.7
Accident	1.2	1.2	0.9	1.1	1.4	1.6	1.2	1	1.3	0.6	1.6	1.4
Uncertain	25.8	25.8	10.3	10.1	12.3	13.2	13.4	14.9	16.8	18	14.5	13.3

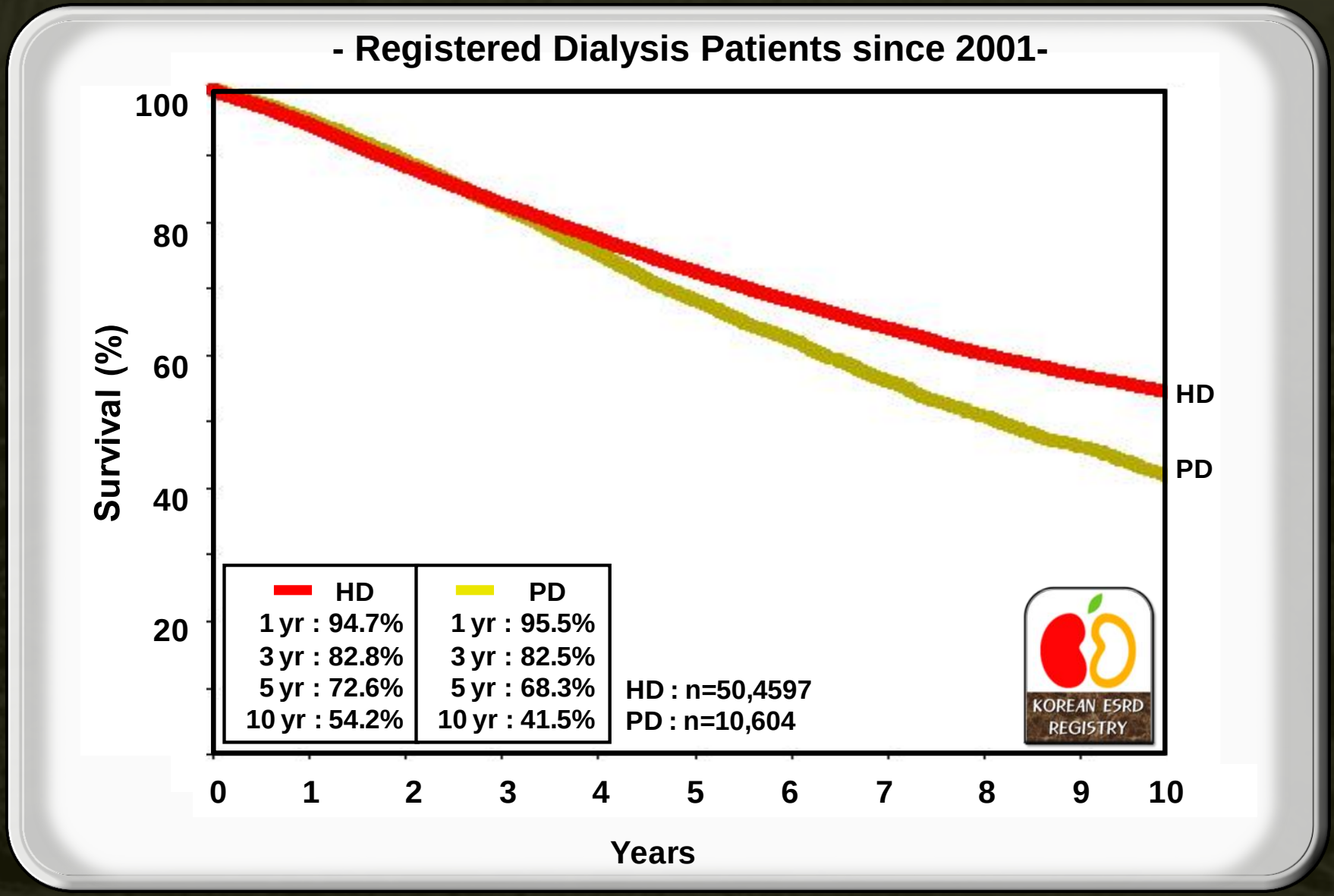
Death Causes, HD & PD



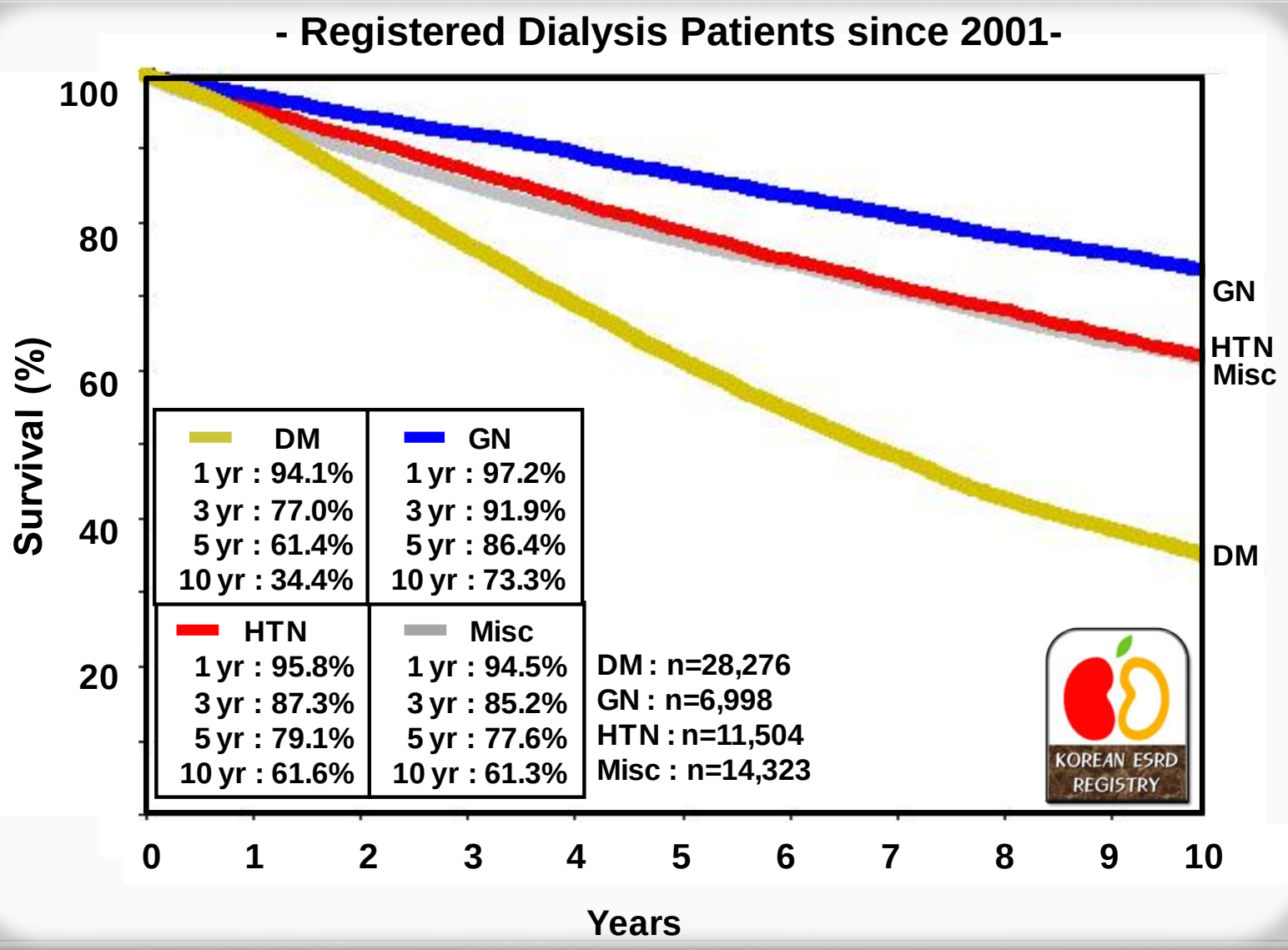
Overall Patient Survival



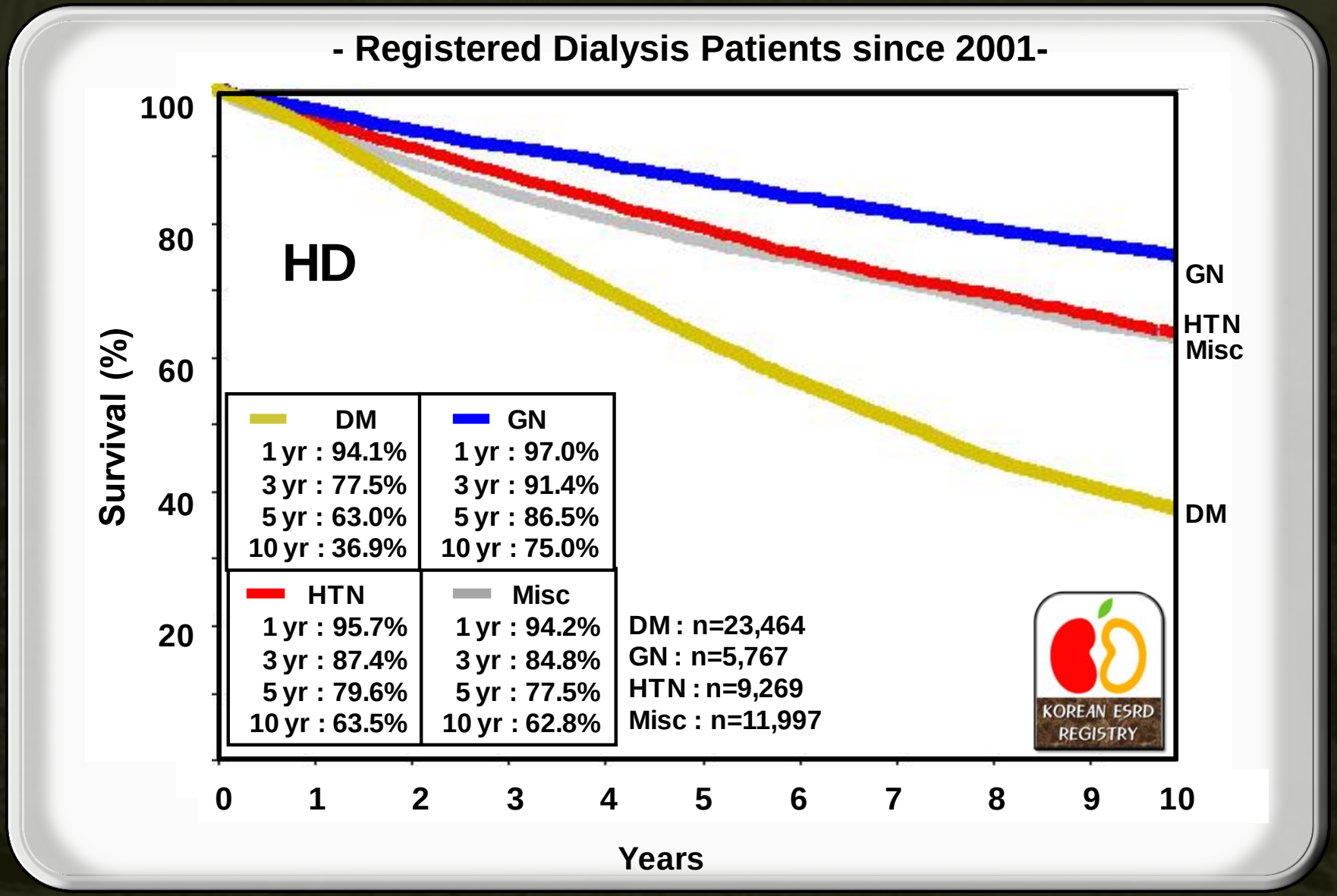
Patient Survival : HD vs PD



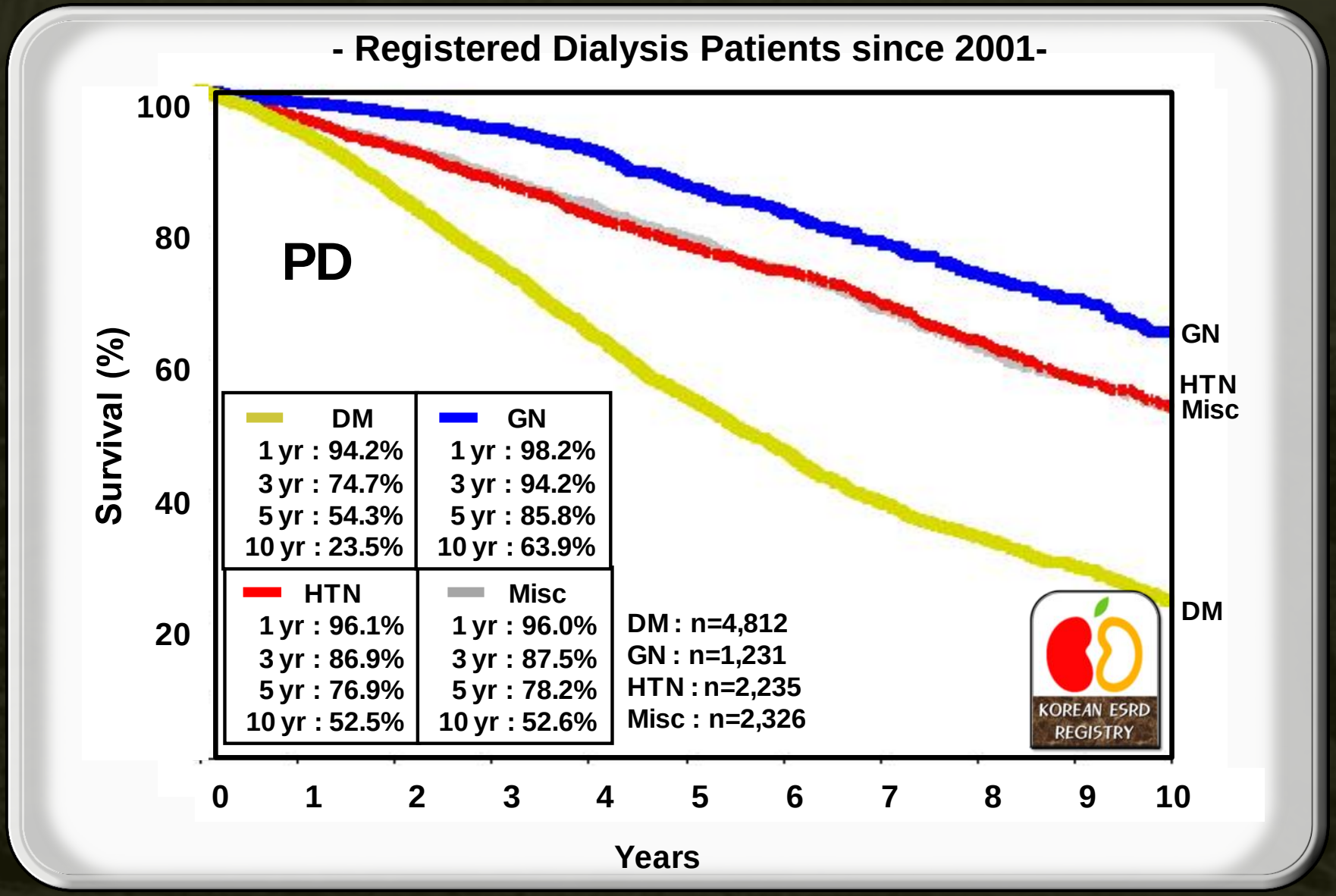
Patients Survival : Cause of ESRD



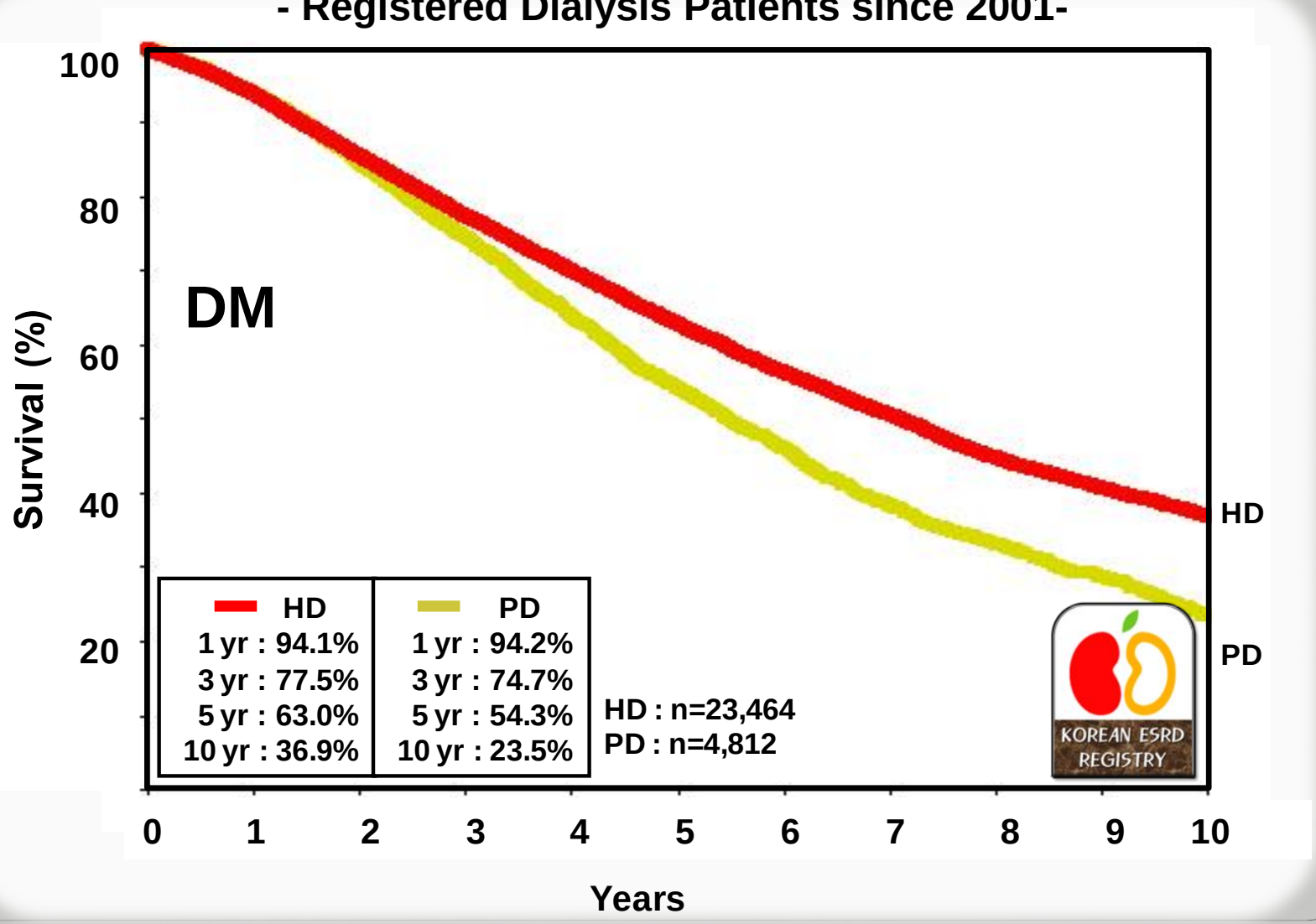
Patients Survival : Cause of ESRD, HD



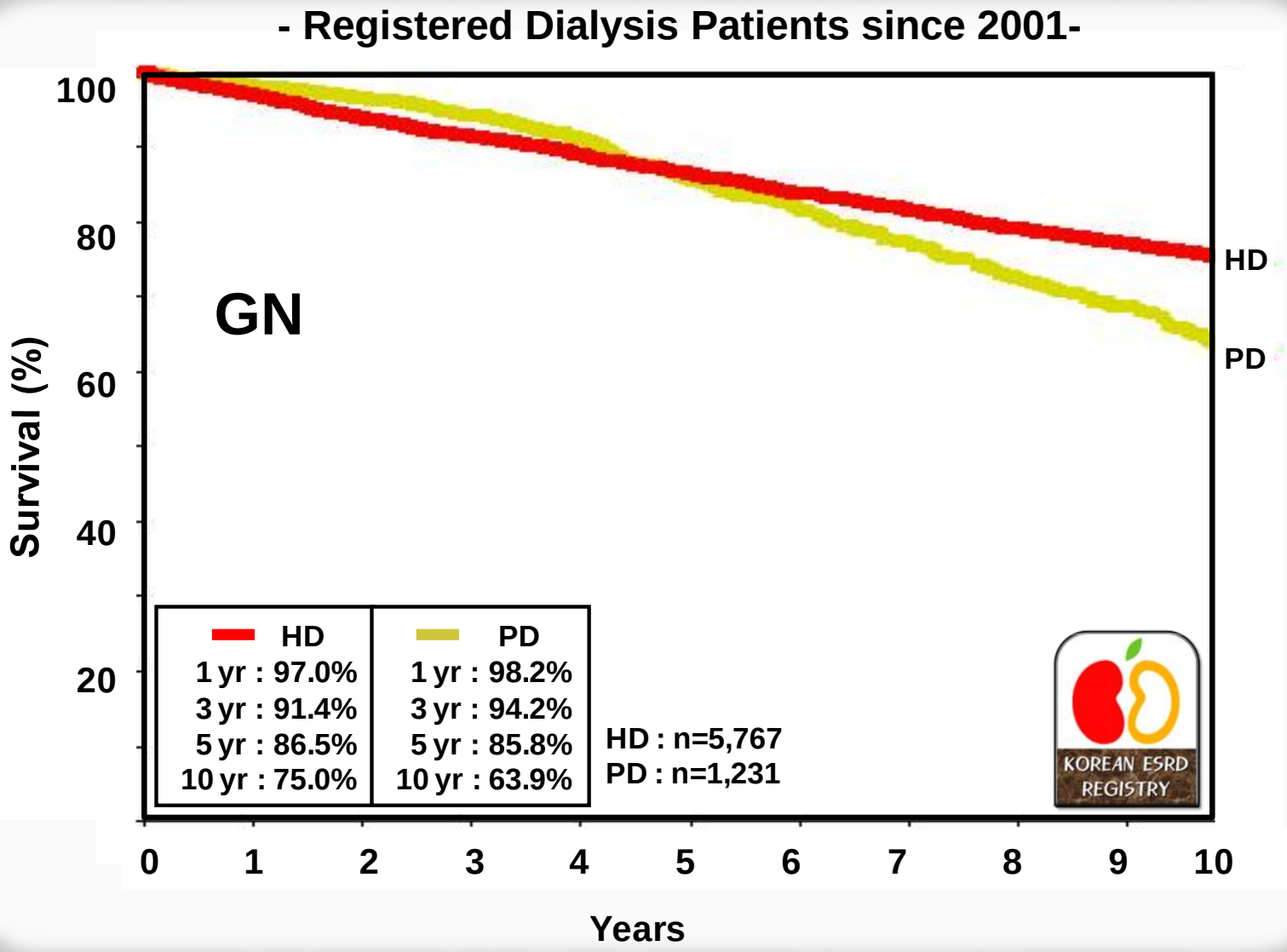
Patients Survival : Cause of ESRD, PD



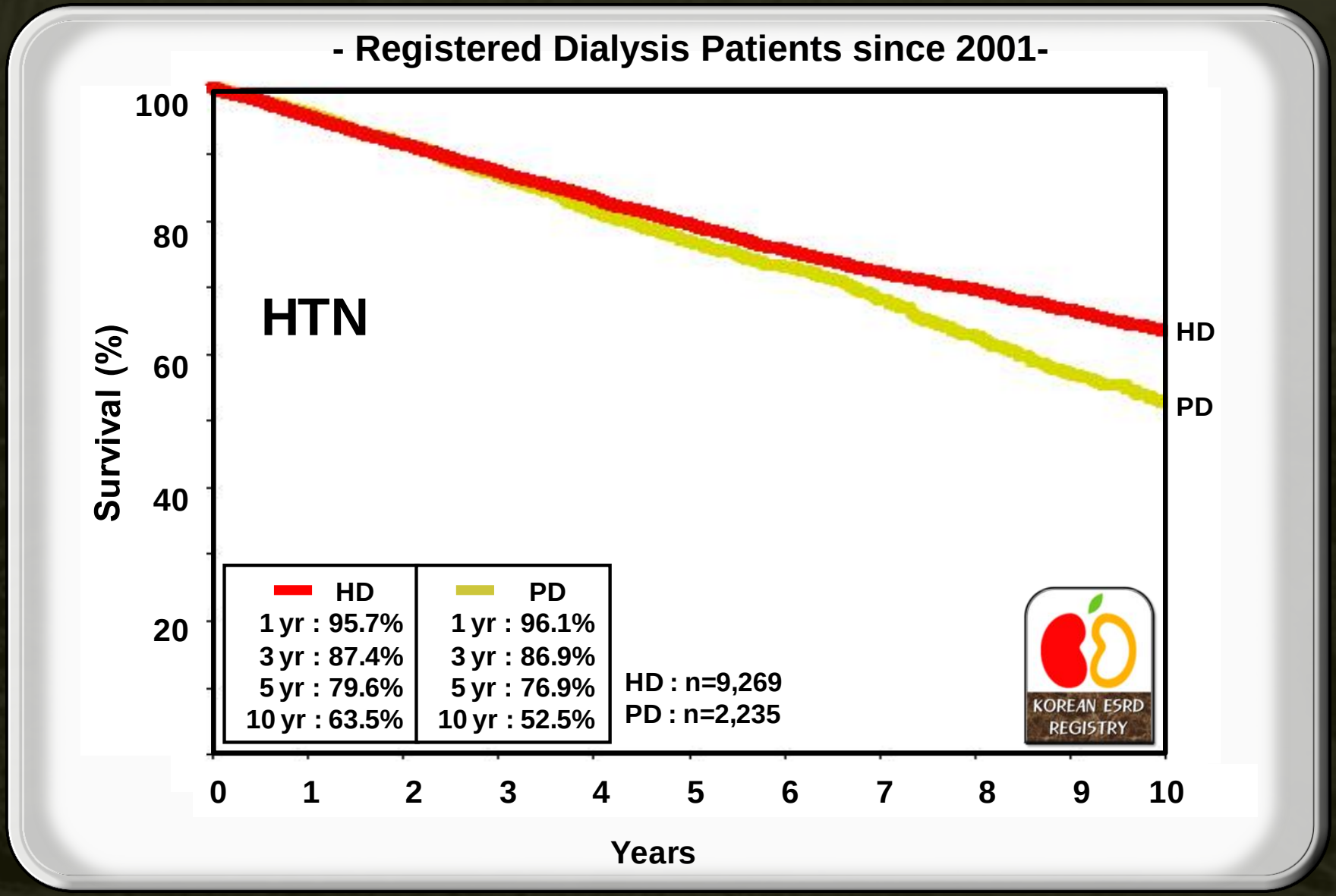
Patients Survival : HD vs PD in DM pts



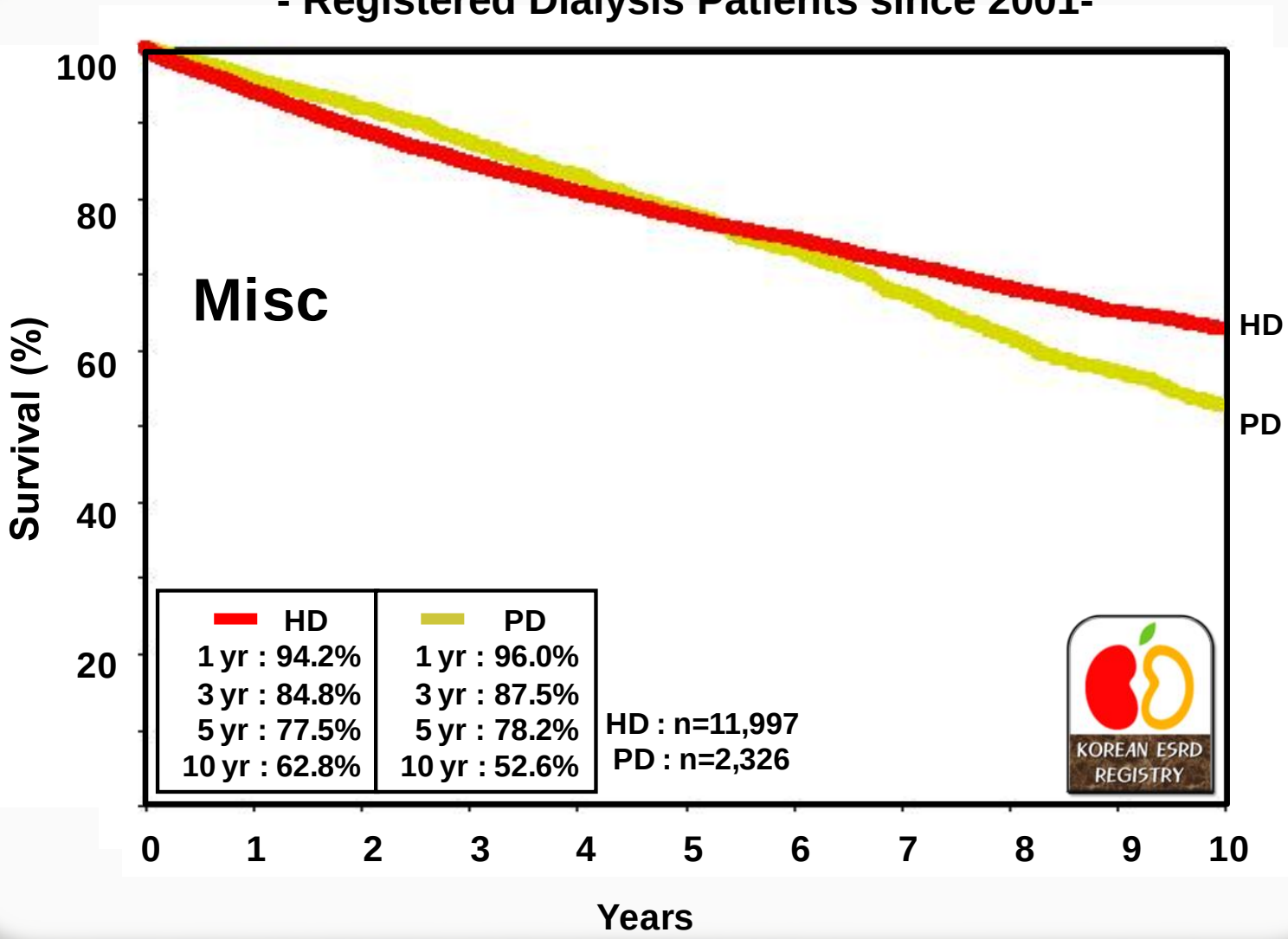
Patients Survival : HD vs PD in GN pts



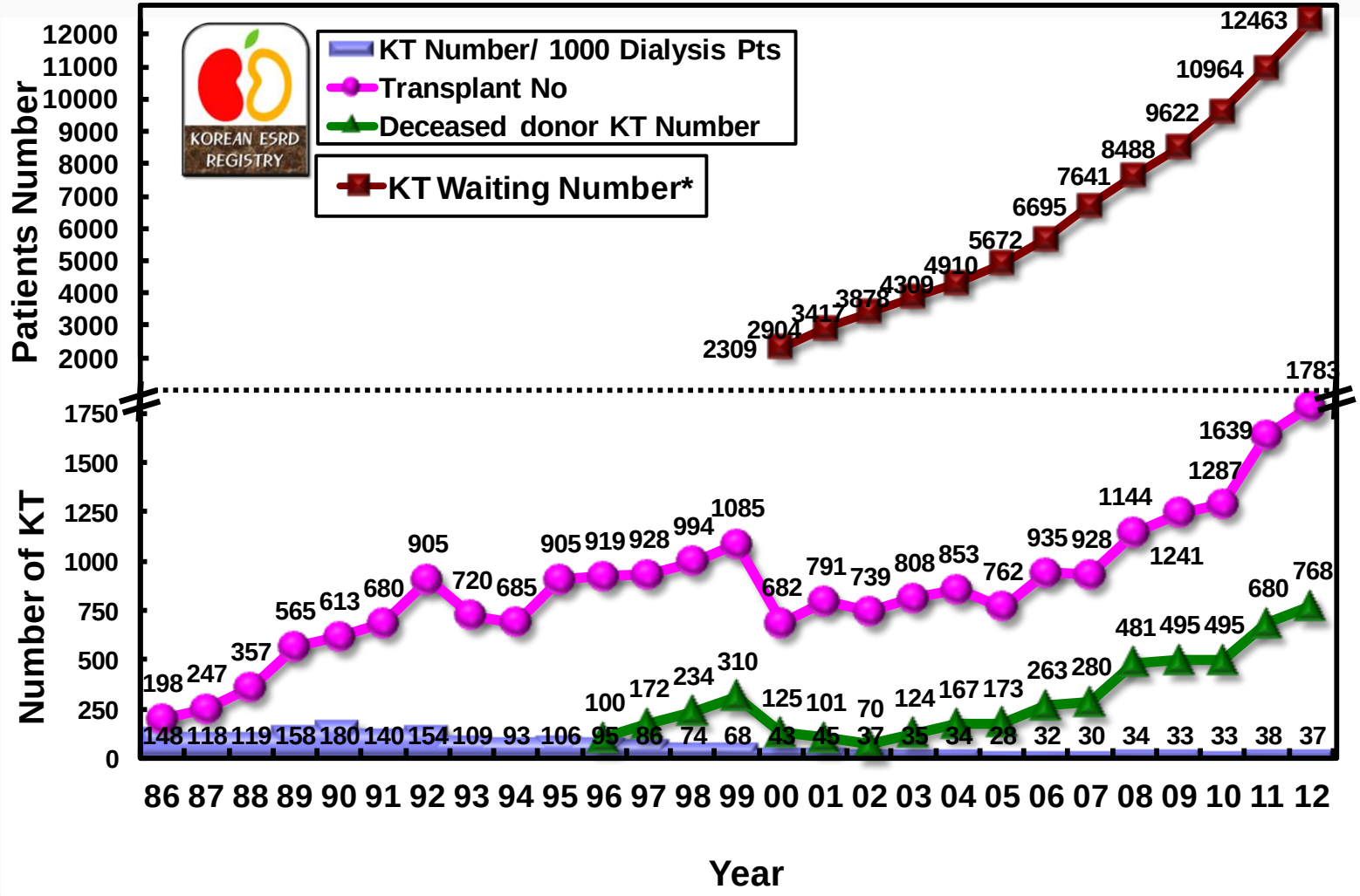
Patients Survival : HD vs PD in HTN pts



Patients Survival : HD vs PD in Misc pts

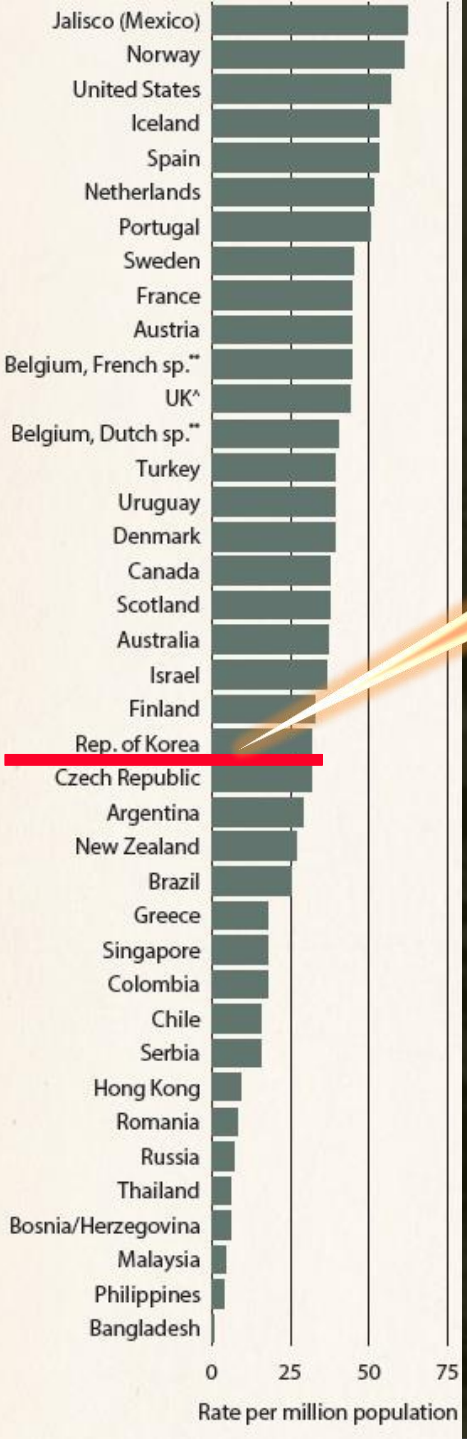


Kidney Transplantation



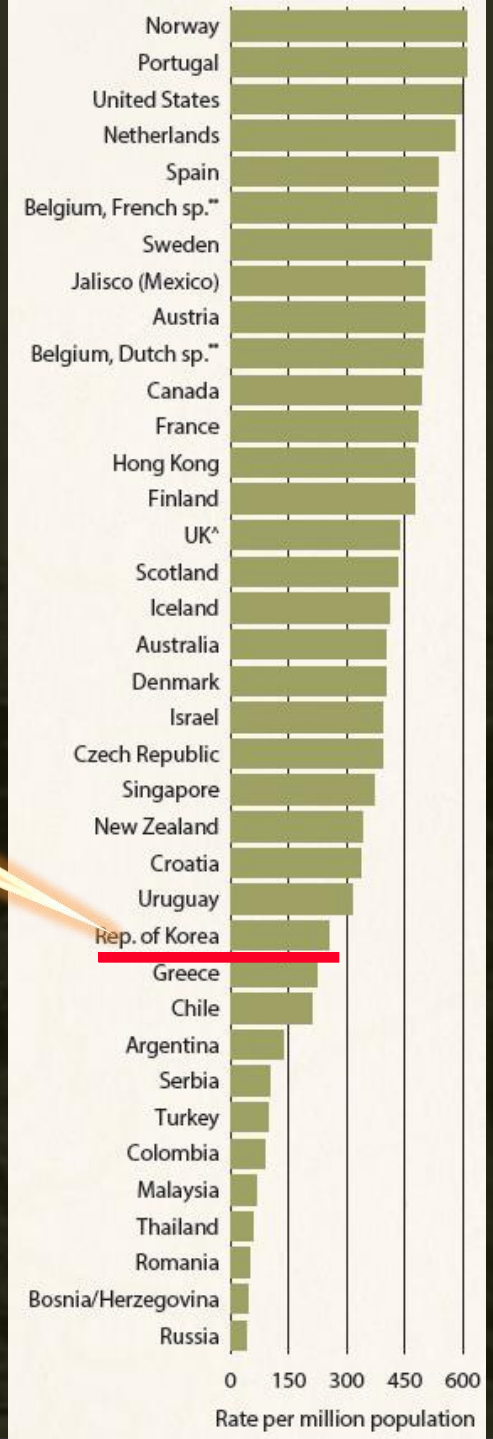
KOREAN ESRD REGISTRY

Kidney Transplantation



Incidence
24.6 PMP
2011

Prevalence
252 PMP
2011



2013 USRDS ANNUAL DATA REPORT

U.S. Renal Data System, USRDS 2013. 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, 2013.

Oct. 2013

특 징 요 약

- 2013년 새로운 등록프로그램 사용시작 : 개인정보 보호
  - 투석 방법, 합병증, 검사 수치, 재활상태 추가 등재
- 전체 투석환자 및 혈액투석기관수의 꾸준한 증가
- 비윤리 의료기관 존재, 요양병원 증가
- 복막투석의 정체 및 상대적 혈액투석 비율의 증가
- 원인 신질환에서 당뇨병성 신증의 비율 51%로 증가
- 혈액투석 효율 점진적 향상, 빈혈 개선, 혈압저하
- 신장이식 증가, 특히 뇌사공여 지속적 증가
- 의료보험 심사평가원의 적정성 평가, 대한신장학회의 투석기관 인증제와 약제 비용에 따른 투석 치료의 변화

감사의 글

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

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