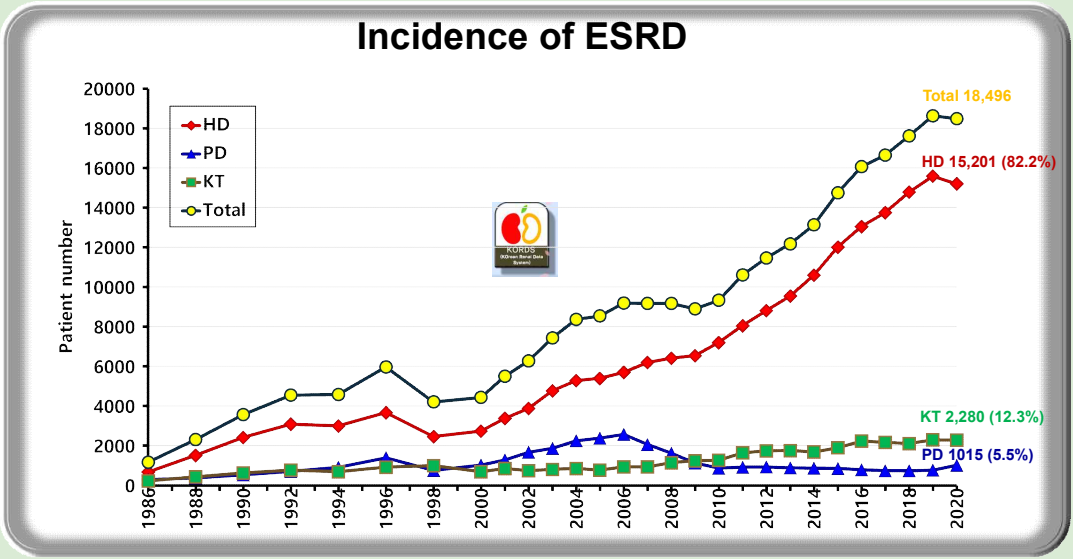
2020년 우리나라 신대체 요법의 현황
– 인산 민병석 교수 기념 말기 신부전 환자 등록 사업 2020 –

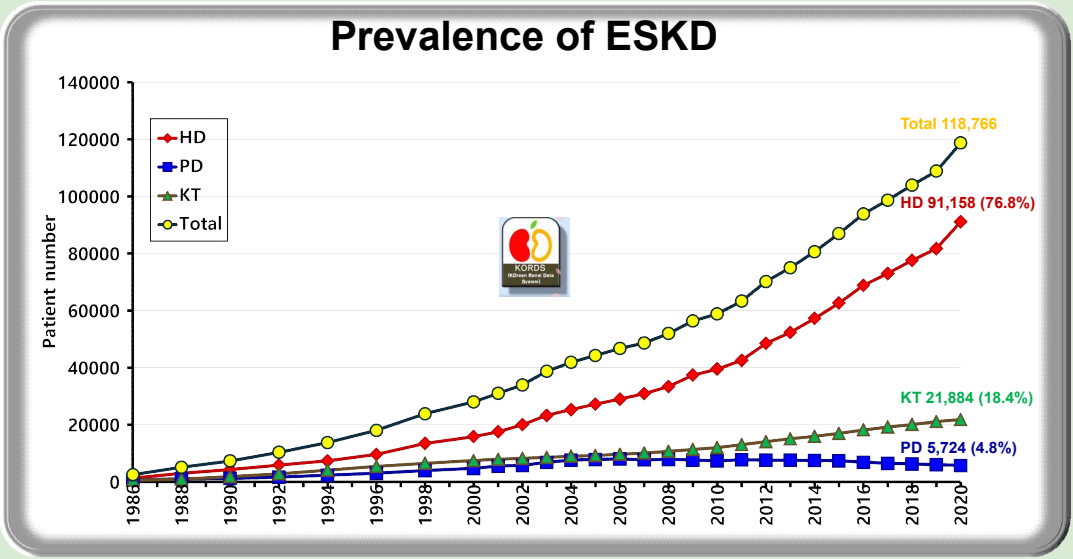
KOREAN RENAL DIALYSIS SYSTEM (KORDS) 2020

대한신장학회 등록위원회
KORDS Committee, Korean Society of Nephrology

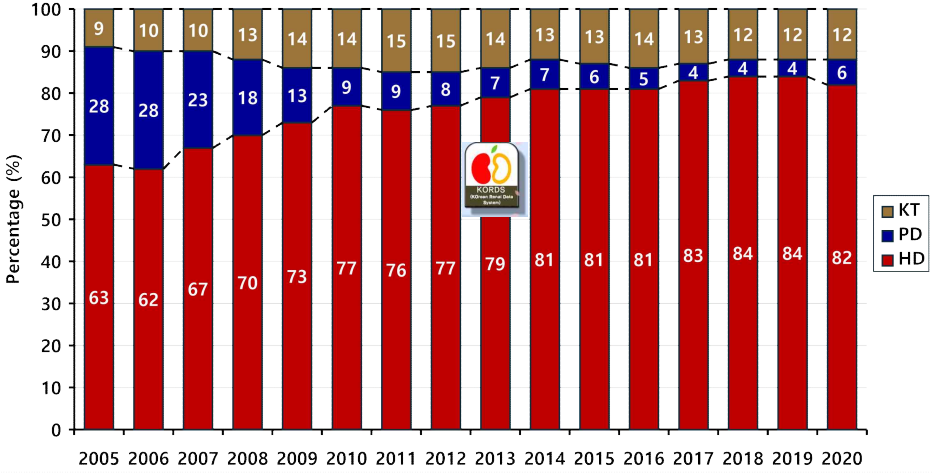
목차 (Contents)

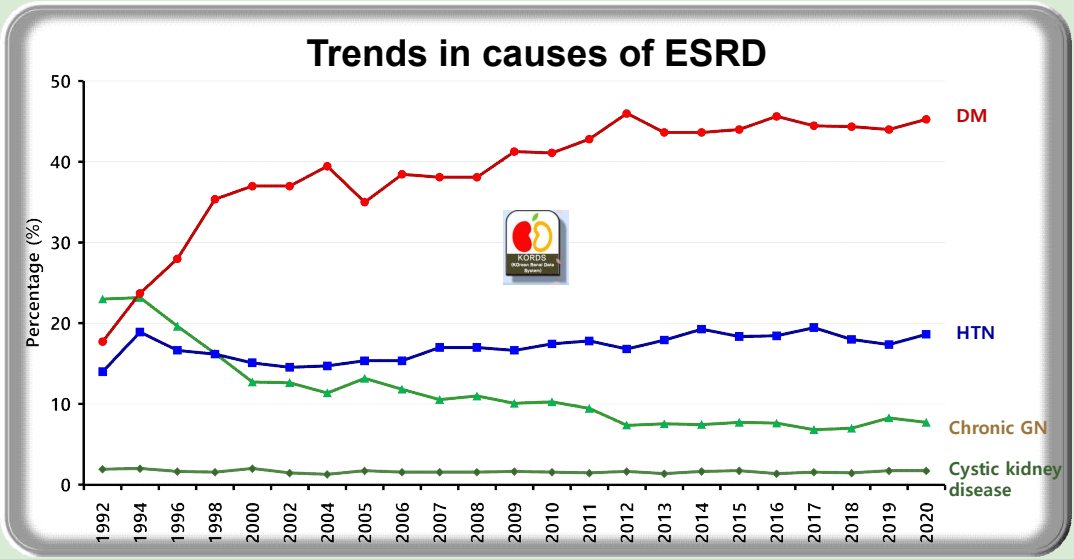
Incidence and Prevalence of ESRD patients in Korea

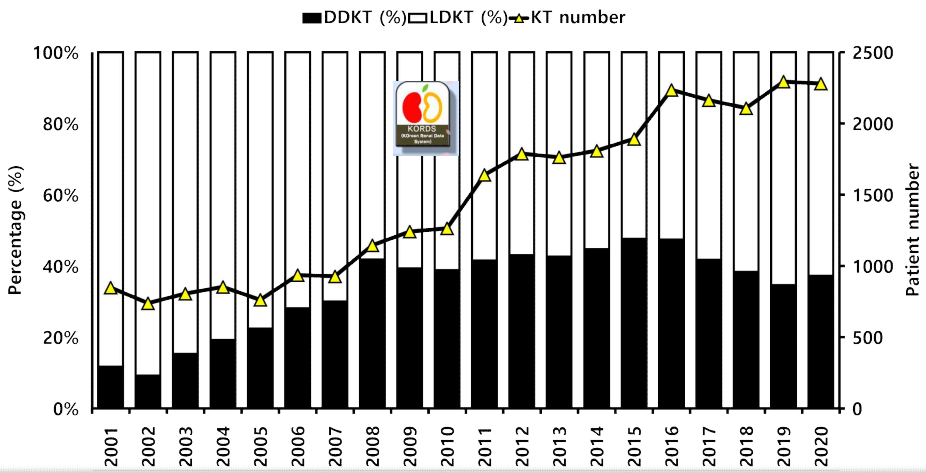

Incidence of ESRD
Patient number
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
2016
2018
2020
HD
PD
KT
Total
Total 18,496
HD 15,201 (82.2%)
KT 2,280 (12.3%)
PD 1015 (5.5%)


Prevalence of ESKD
Patient number
140000
120000
100000
80000
60000
40000
20000
0
HD
PD
KT
Total
Total 118,766
HD 91,158 (76.8%)
KT 21,884 (18.4%)
PD 5,724 (4.8%)
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
2016
2018
2020

Proportion of Annual ESRD Incidence

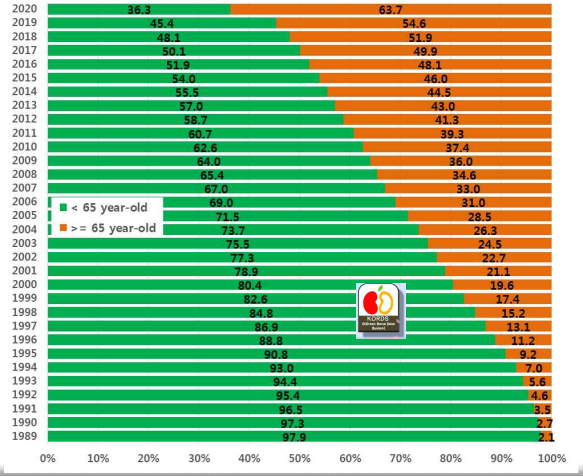



Trends in causes of ESRD
Percentage (%)
50
40
30
20
10
0
1992
1994
1996
1998
2000
2002
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
DM
HTN
Chronic GN
Cystic kidney disease
KORDS

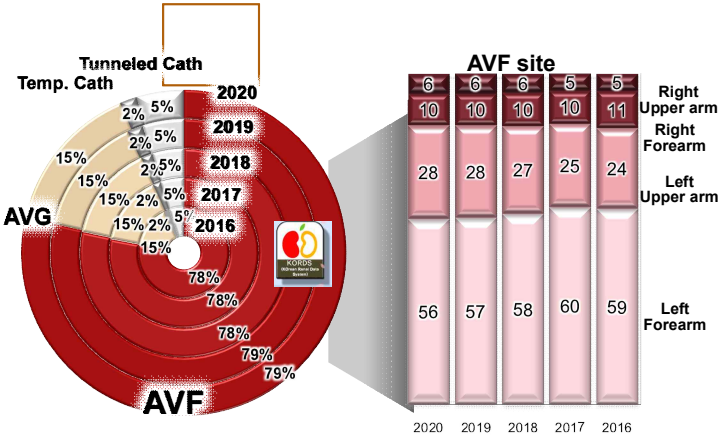

Current Status of Kidney Transplantation (KT)
DDKT (%)
LDKT (%)
KT number
Percentage (%)
Patient number
100%
80%
60%
40%
20%
0%
2500
2000
1500
1000
500
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020

우리나라 말기신부전 환자와 투석 치료의 특징 (Patients and Dialysis Characteristics of ESRD in Korea, 2020)

Trend in proportion of elderly patients with ESRD

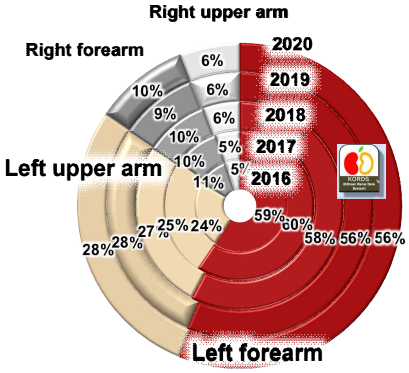


Vascular Access (1)-Distribution of access type

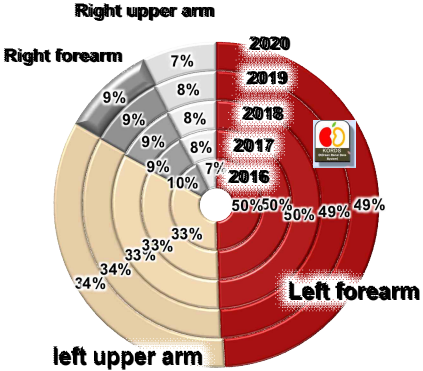


Vascular Access (2)-Distribution of OP site

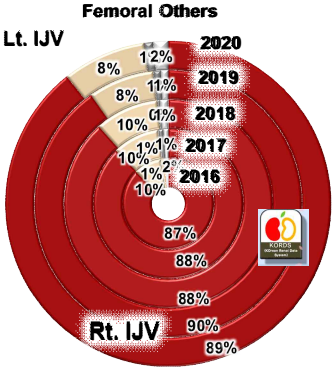
AVF

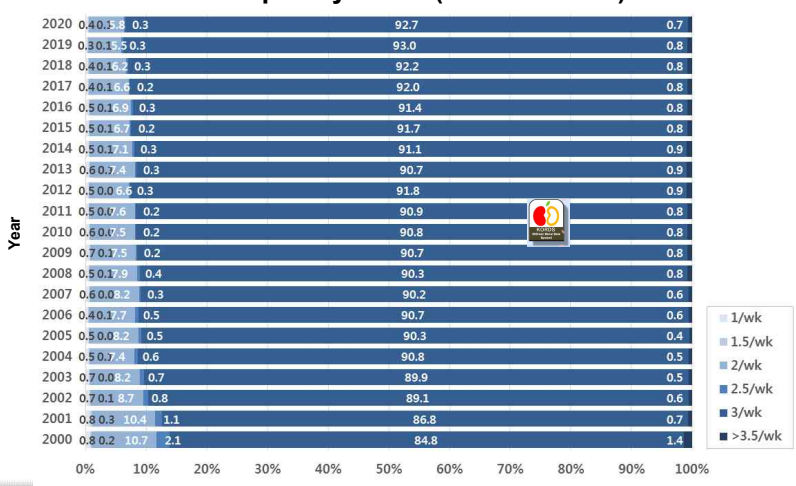


AVG

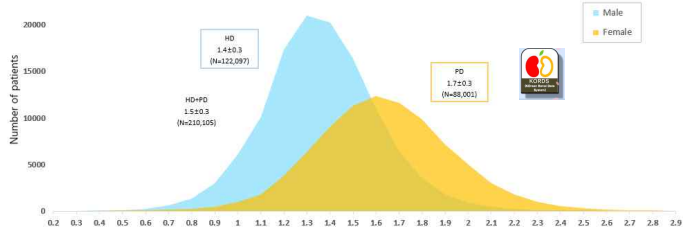


Vascular Access (3)-Location of catheter for HD

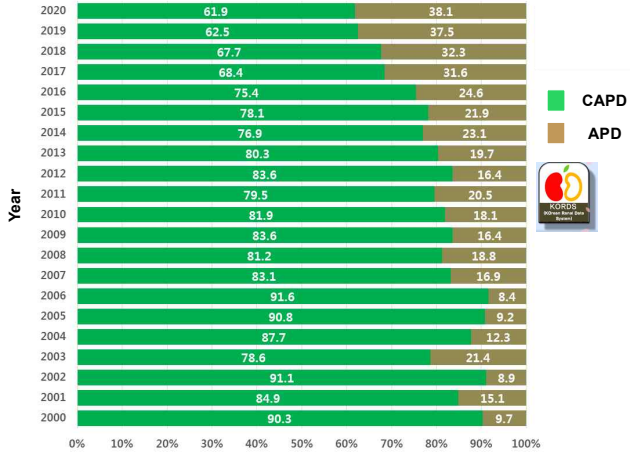



Frequency of HD (session/week)
Year
2020 0.4 0.1 5.8 0.3 92.7 0.7
2019 0.3 0.1 5.5 0.3 93.0 0.8
2018 0.4 0.1 5.2 0.3 92.2 0.8
2017 0.4 0.1 5.6 0.2 92.0 0.8
2016 0.5 0.1 5.9 0.3 91.4 0.8
2015 0.5 0.1 5.7 0.2 91.7 0.8
2014 0.5 0.1 7.1 0.3 91.1 0.9
2013 0.6 0.7 7.4 0.3 90.7 0.9
2012 0.5 0.0 6.6 0.3 91.8 0.9
2011 0.5 0.0 7.6 0.2 90.9 0.8
2010 0.6 0.0 7.5 0.2 90.8 0.8
2009 0.7 0.1 7.5 0.2 90.7 0.8
2008 0.5 0.1 7.9 0.4 90.3 0.8
2007 0.6 0.0 8.2 0.3 90.2 0.6
2006 0.4 0.1 7.7 0.5 90.7 0.6
2005 0.5 0.0 8.2 0.5 90.3 0.4
2004 0.5 0.7 7.4 0.6 90.8 0.5
2003 0.7 0.0 8.2 0.7 89.9 0.5
2002 0.7 0.1 8.7 0.8 89.1 0.6
2001 0.8 0.3 10.4 1.1 86.8 0.7
2000 0.8 0.2 10.7 2.1 84.8 1.4
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
1/wk
1.5/wk
2/wk
2.5/wk
3/wk
>3.5/wk

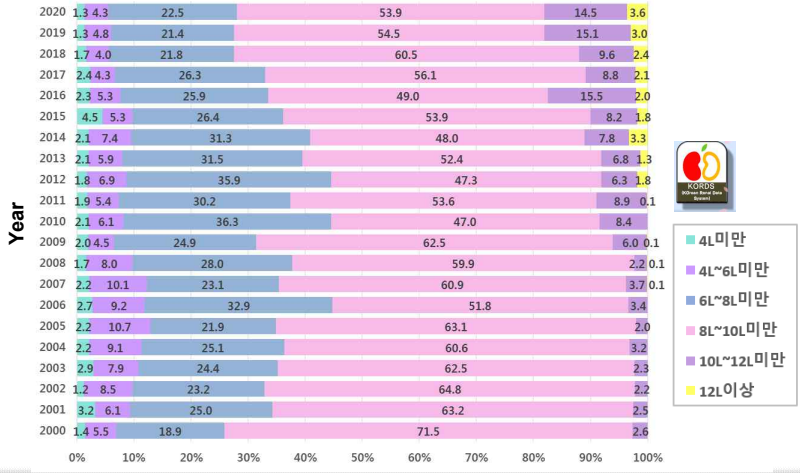
Adequacy of HD (spKt/V)



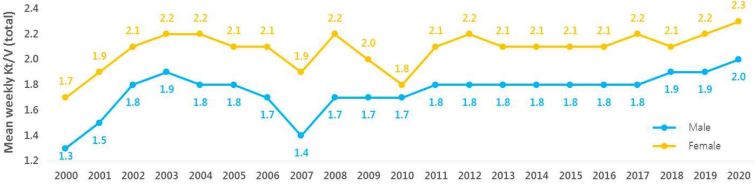
Trends in type of peritoneal dialysis (PD)

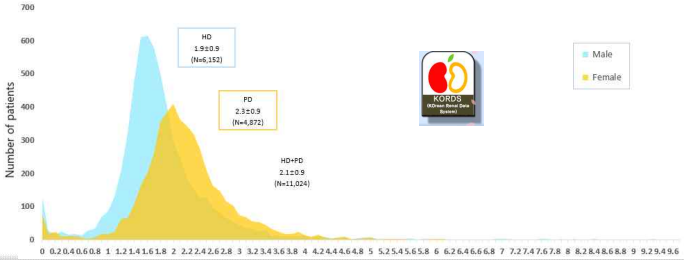


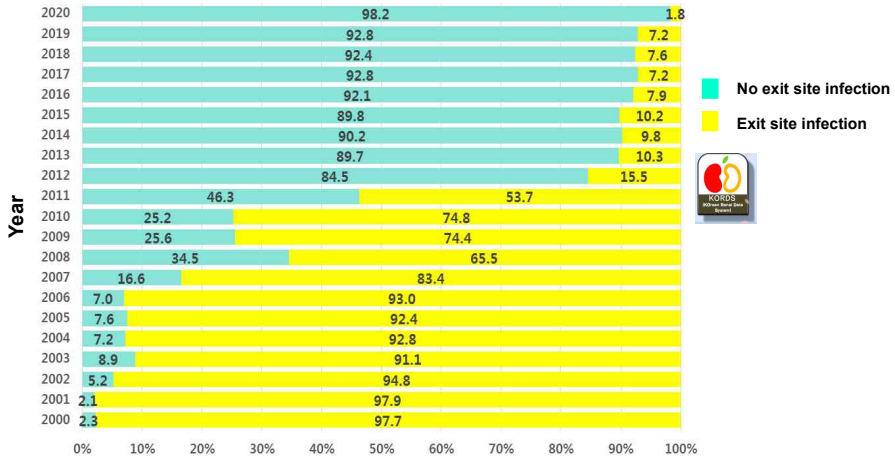
Prescriptions of PD dose per day

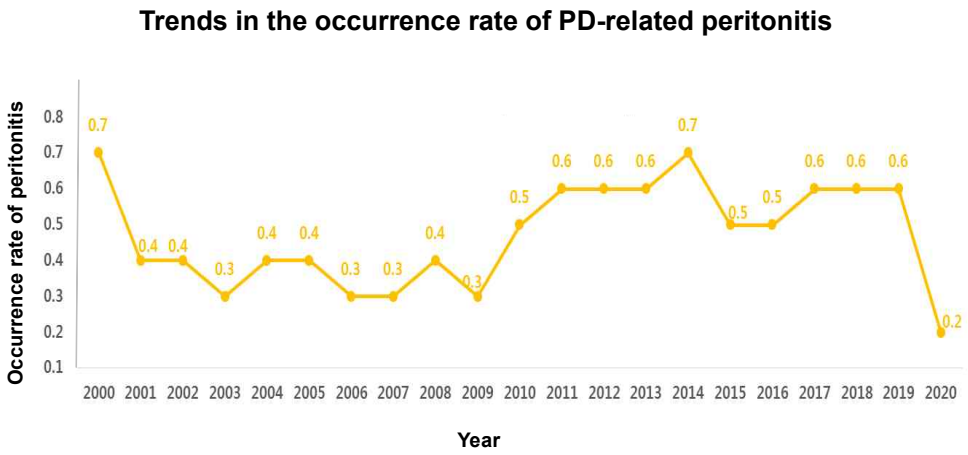


Adequacy of PD (Total weekly Kt/V)

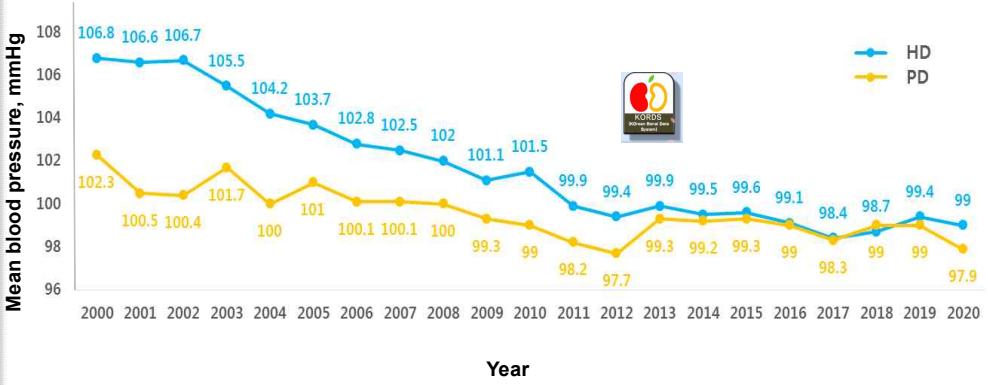


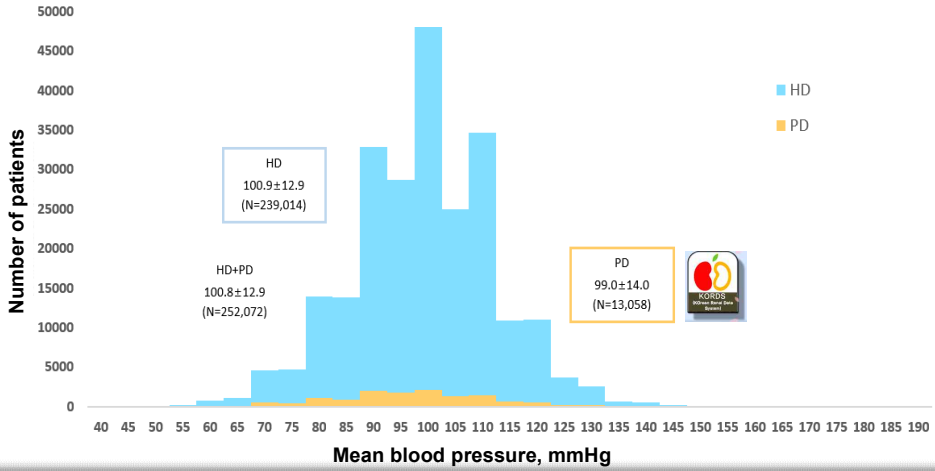


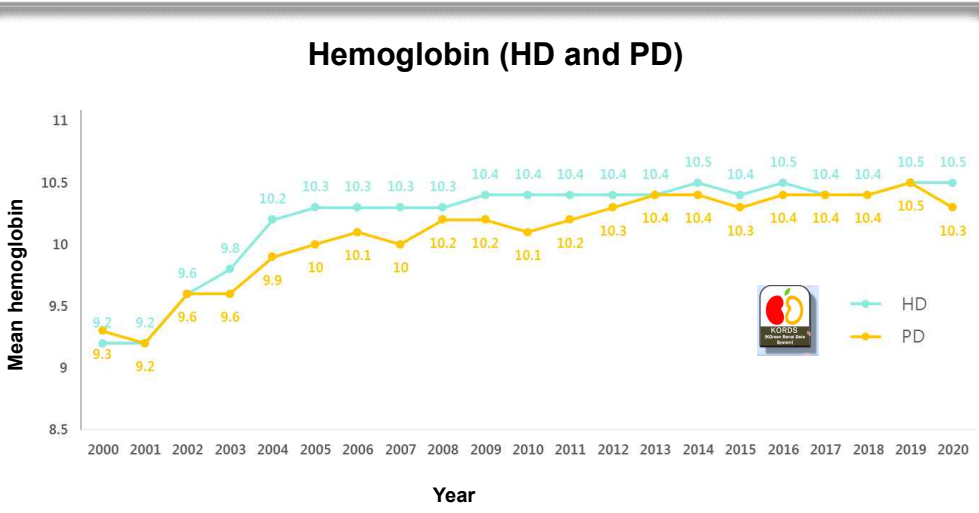

Trends in Exit infection of PD patients (%)
Year
2020 98.2 1.8
2019 92.8 7.2
2018 92.4 7.6
2017 92.8 7.2
2016 92.1 7.9
2015 89.8 10.2
2014 90.2 9.8
2013 89.7 10.3
2012 84.5 15.5
2011 46.3 53.7
2010 25.2 74.8
2009 25.6 74.4
2008 34.5 65.5
2007 16.6 83.4
2006 7.0 93.0
2005 7.6 92.4
2004 7.2 92.8
2003 8.9 91.1
2002 5.2 94.8
2001 2.1 97.9
2000 2.3 97.7
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
No exit site infection
Exit site infection
KORDS

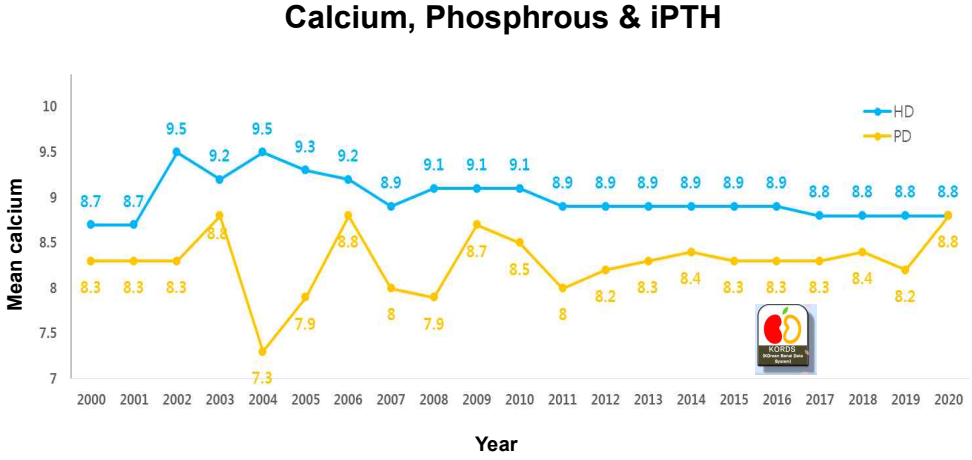

Trends in the occurrence rate of PD-related peritonitis
Occurrence rate of peritonitis
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.7
0.4
0.4
0.3
0.4
0.4
0.3
0.3
0.4
0.3
0.5
0.6
0.6
0.6
0.7
0.5
0.5
0.6
0.6
0.6
0.2
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020
Year

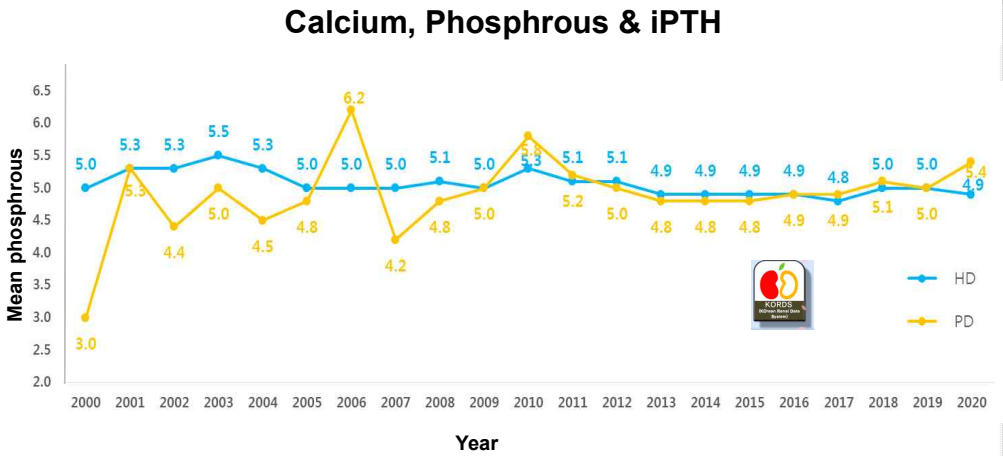
Distribution of mean blood pressure

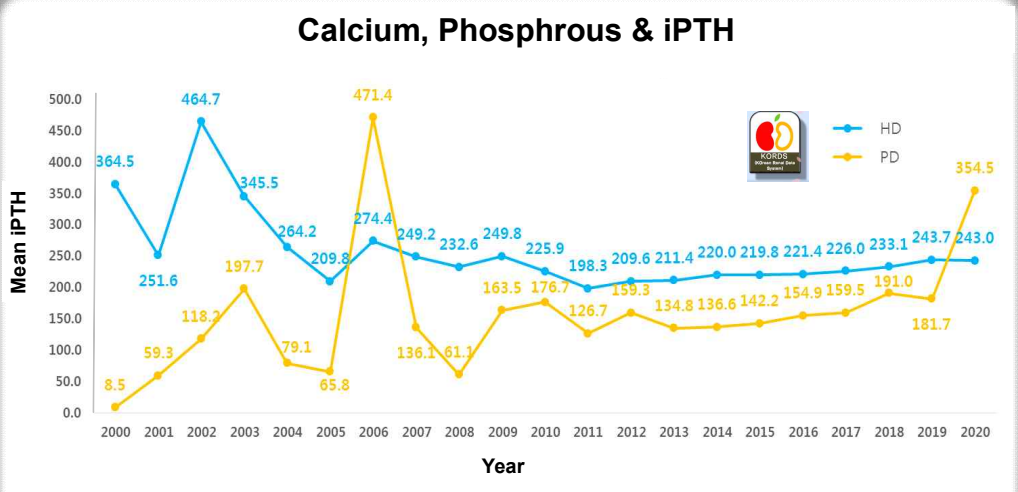



Distribution of mean blood pressure
Number of patients
50000
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
HD
PD
HD
100.9±12.9
(N=239,014)
HD+PD
100.8±12.9
(N=252,072)
PD
99.0±14.0
(N=13,058)
40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 125 130 135 140 145 150 155 160 165 170 175 180 185 190
Mean blood pressure, mmHg

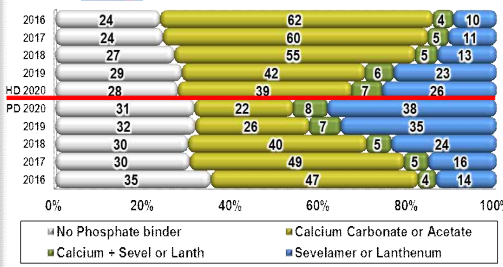

Hemoglobin (HD and PD)
Mean hemoglobin
Year
HD
PD
11
10.5
10
9.5
9
8.5
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020
9.2 9.2 9.6 9.8 10.2 10.3 10.3 10.3 10.3 10.4 10.4 10.4 10.4 10.4 10.5 10.4 10.5 10.4 10.4 10.5 10.5
9.3 9.2 9.6 9.6 9.9 10 10.1 10 10.2 10.2 10.1 10.2 10.3 10.4 10.4 10.3 10.4 10.4 10.4 10.5 10.3

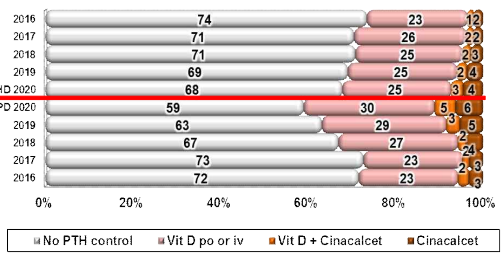

Calcium, Phosphrous & iPTH
Mean calcium
Year
HD
PD
10
9.5
9
8.5
8
7.5
7
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020
8.7 8.7 9.5 9.2 9.5 9.3 9.2 8.9 9.1 9.1 9.1 8.9 8.9 8.9 8.9 8.9 8.9 8.8 8.8 8.8 8.8
8.3 8.3 8.3 8.8 7.3 7.9 8.8 8 7.9 8.7 8.5 8 8.2 8.3 8.4 8.3 8.3 8.3 8.4 8.2 8.8
KORDS


Calcium, Phosphrous & iPTH
Mean phosphrous
Year
HD
PD
KORDS
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020
5.0 5.3 5.3 5.5 5.3 5.0 5.0 5.0 5.1 5.0 5.3 5.1 5.1 4.9 4.9 4.9 4.9 4.8 5.0 5.0 4.9
3.0 5.3 4.4 5.0 4.5 4.8 6.2 4.2 4.8 5.0 5.8 5.2 5.0 4.8 4.8 4.8 4.9 4.9 5.1 5.0 5.4

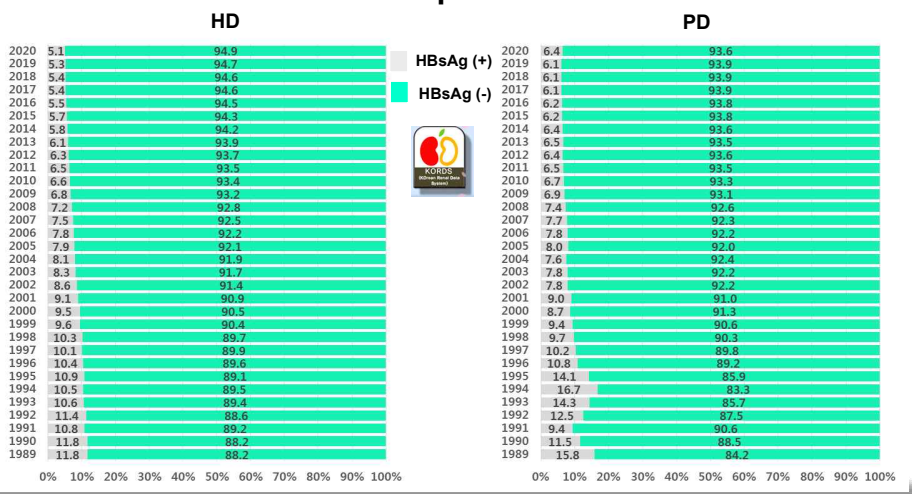

Calcium, Phosphrous & iPTH
Mean iPTH
Year
HD
PD
KORDS
500.0
450.0
400.0
350.0
300.0
250.0
200.0
150.0
100.0
50.0
0.0
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020
364.5 251.6 464.7 345.5 264.2 209.8 274.4 249.2 232.6 249.8 225.9 198.3 209.6 211.4 220.0 219.8 221.4 226.0 233.1 243.7 243.0
8.5 59.3 118.2 197.7 79.1 65.8 471.4 136.1 61.1 163.5 176.7 126.7 159.3 134.8 136.6 142.2 154.9 159.5 191.0 181.7 354.5

Treatment of CKD-MBD

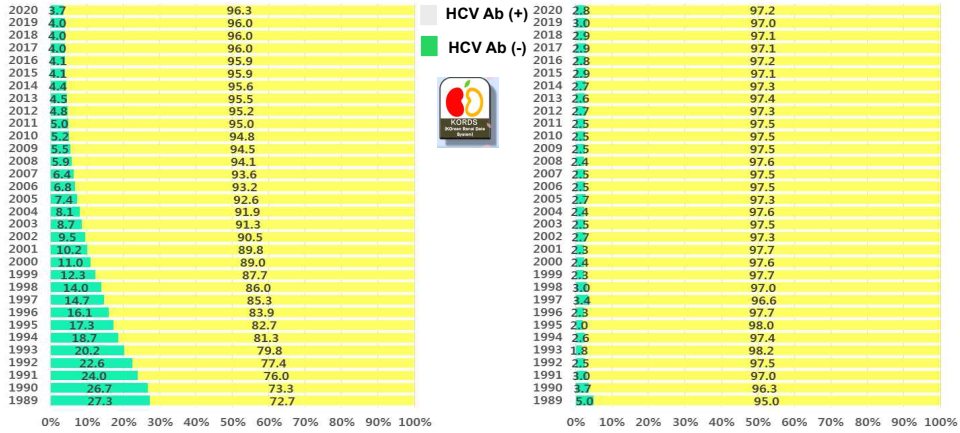




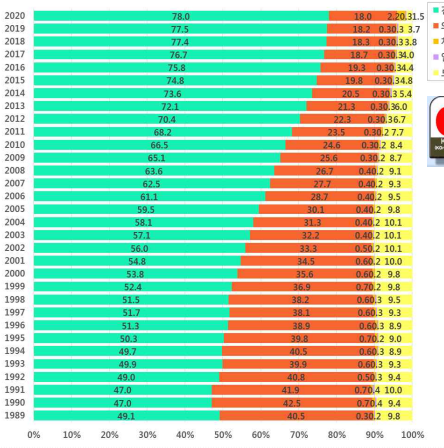
Hepatitis B

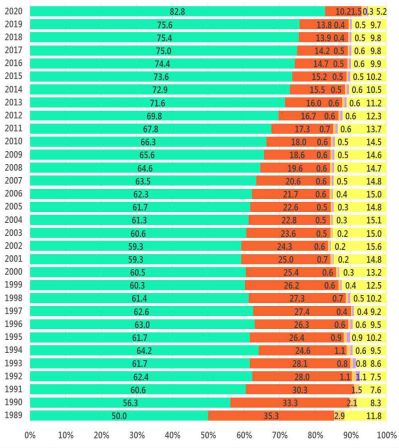

HD
PD
HBsAg (+)
HBsAg (-)
KORDS
2020 5.1 94.9
2019 5.3 94.7
2018 5.4 94.6
2017 5.4 94.6
2016 5.5 94.5
2015 5.7 94.3
2014 5.8 94.2
2013 6.1 93.9
2012 6.3 93.7
2011 6.5 93.5
2010 6.6 93.4
2009 6.8 93.2
2008 7.2 92.8
2007 7.5 92.5
2006 7.8 92.2
2005 7.9 92.1
2004 8.1 91.9
2003 8.3 91.7
2002 8.6 91.4
2001 9.1 90.9
2000 9.5 90.5
1999 9.6 90.4
1998 10.3 89.7
1997 10.1 89.9
1996 10.4 89.6
1995 10.9 89.1
1994 10.5 89.5
1993 10.6 89.4
1992 11.4 88.6
1991 10.8 89.2
1990 11.8 88.2
1989 11.8 88.2
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
2020 6.4 93.6
2019 6.1 93.9
2018 6.1 93.9
2017 6.1 93.9
2016 6.2 93.8
2015 6.2 93.8
2014 6.4 93.6
2013 6.5 93.5
2012 6.4 93.6
2011 6.5 93.5
2010 6.7 93.3
2009 6.9 93.1
2008 7.4 92.6
2007 7.7 92.3
2006 7.8 92.2
2005 8.0 92.0
2004 7.6 92.4
2003 7.8 92.2
2002 7.8 92.2
2001 9.0 91.0
2000 8.7 91.3
1999 9.4 90.6
1998 9.7 90.3
1997 10.2 89.8
1996 10.8 89.2
1995 14.1 85.9
1994 16.7 83.3
1993 14.3 85.7
1992 12.5 87.5
1991 9.4 90.6
1990 11.5 88.5
1989 15.8 84.2
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Hepatitis C

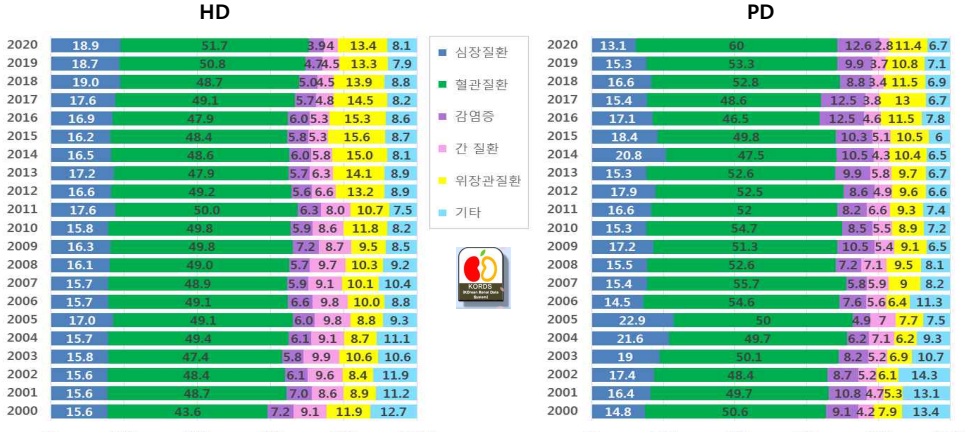

HD
PD
HCV Ab (+)
HCV Ab (-)
KORDS
Kidney Renal Data System
2020 3.7 96.3
2019 4.0 96.0
2018 4.0 96.0
2017 4.0 96.0
2016 4.1 95.9
2015 4.1 95.9
2014 4.4 95.6
2013 4.5 95.5
2012 4.8 95.2
2011 5.0 95.0
2010 5.2 94.8
2009 5.5 94.5
2008 5.9 94.1
2007 6.4 93.6
2006 6.8 93.2
2005 7.4 92.6
2004 8.1 91.9
2003 8.7 91.3
2002 9.5 90.5
2001 10.2 89.8
2000 11.0 89.0
1999 12.3 87.7
1998 14.0 86.0
1997 14.7 85.3
1996 16.1 83.9
1995 17.3 82.7
1994 18.7 81.3
1993 20.2 79.8
1992 22.6 77.4
1991 24.0 76.0
1990 26.7 73.3
1989 27.3 72.7
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
2020 2.8 97.2
2019 3.0 97.0
2018 2.9 97.1
2017 2.9 97.1
2016 2.8 97.2
2015 2.9 97.1
2014 2.7 97.3
2013 2.6 97.4
2012 2.7 97.3
2011 2.5 97.5
2010 2.5 97.5
2009 2.5 97.5
2008 2.4 97.6
2007 2.5 97.5
2006 2.5 97.5
2005 2.7 97.3
2004 2.4 97.6
2003 2.5 97.5
2002 2.7 97.3
2001 2.3 97.7
2000 2.4 97.6
1999 2.3 97.7
1998 3.0 97.0
1997 3.4 96.6
1996 2.3 97.7
1995 2.0 98.0
1994 2.6 97.4
1993 1.8 98.2
1992 2.5 97.5
1991 3.0 97.0
1990 3.7 96.3
1989 5.0 95.0
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Medical insurance





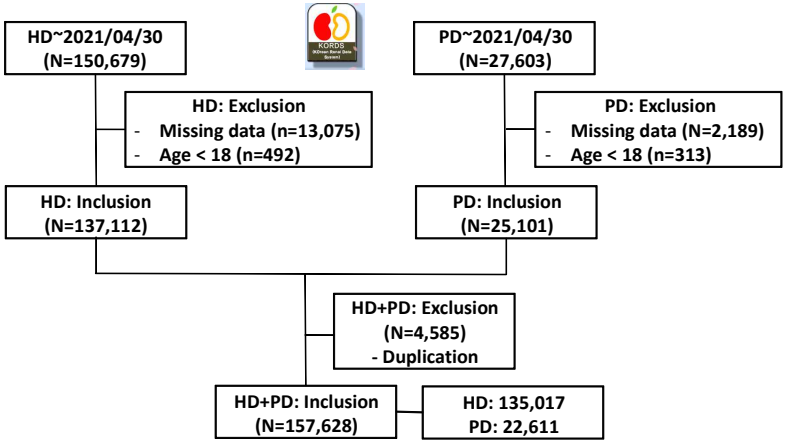
Comorbidity of Dialysis Patients



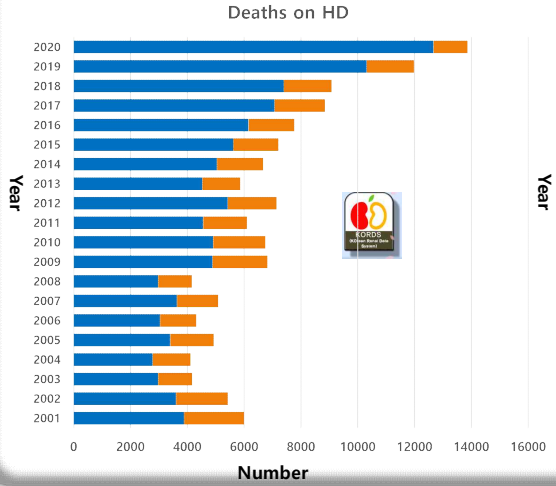
우리나라 말기신부전 환자의 생존율 변화와 위험인자

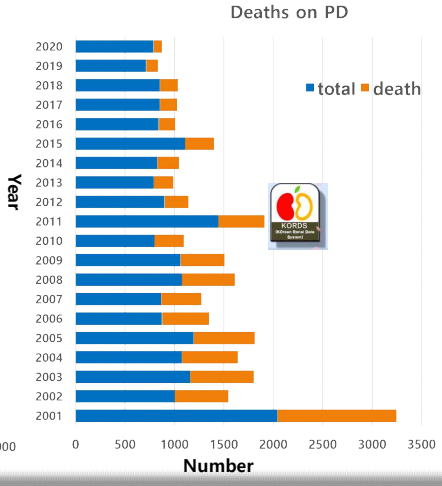
(Mortality analysis of ESRD patients in Korea)

Flow chart of patient selection for the cohort



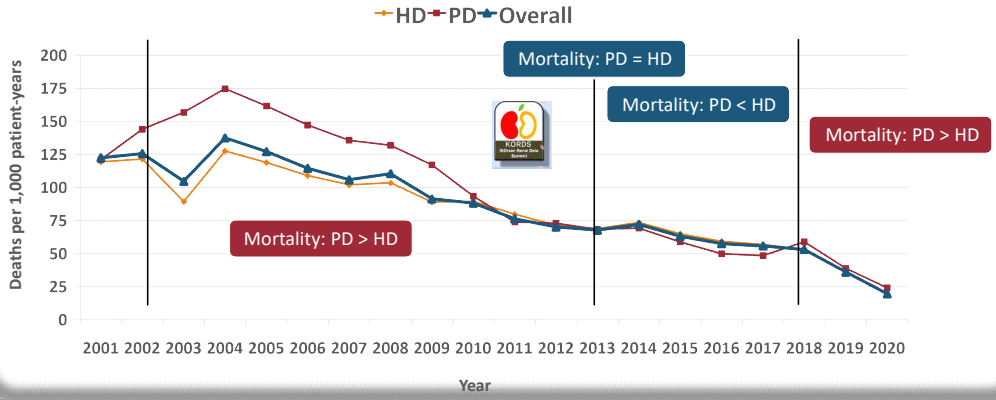
Number of Death by dialysis modality, 2001-2020





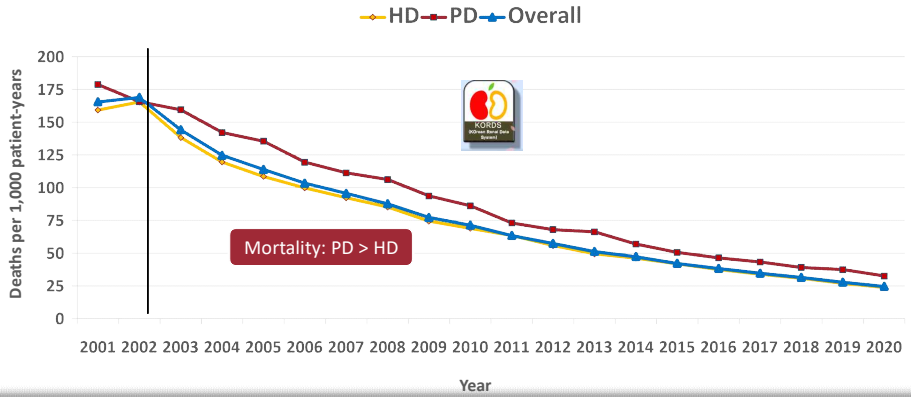
HD vs PD

Unadjusted all-cause mortality by overall and treatment modality (HD vs PD) for prevalent patients, 2001-2020



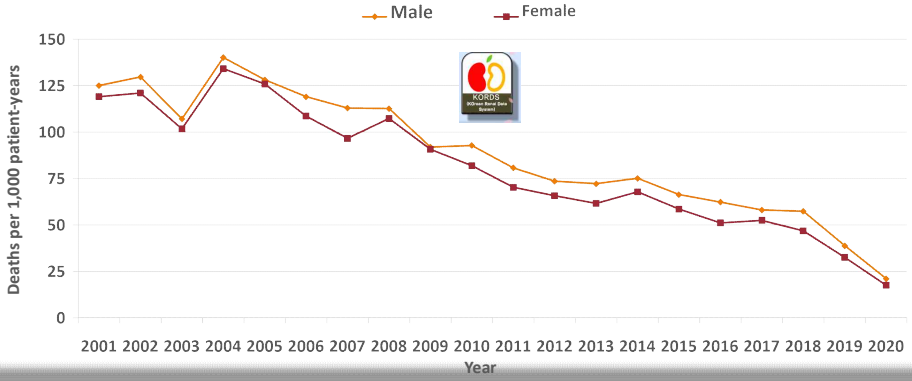
HD vs PD

Adjusted all-cause mortality by overall and treatment modality (HD vs PD) for prevalent patients, 2001-2020



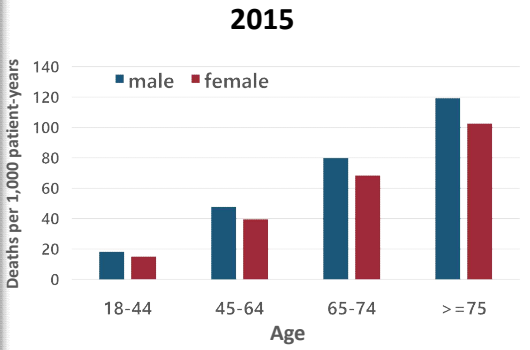
Male vs Female (1)

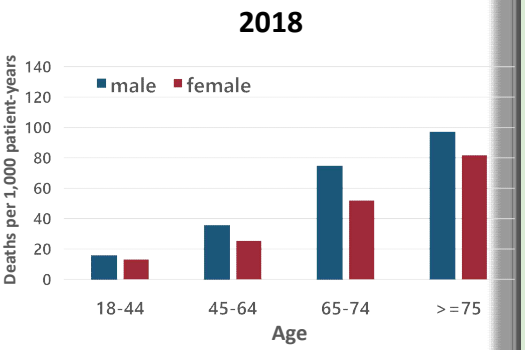
Unadjusted all-cause mortality by sex (male and female) for prevalent patients, 2001-2020



Male vs Female (1)

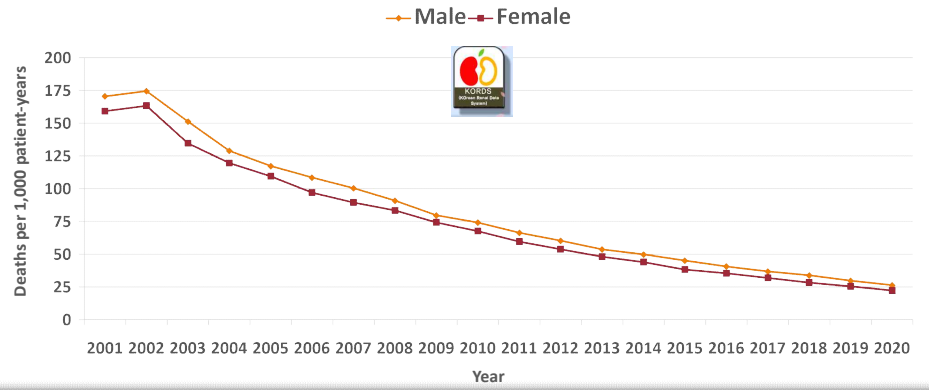
Unadjusted all-cause mortality in prevalent dialysis patients by sex and age, 2015, 2018





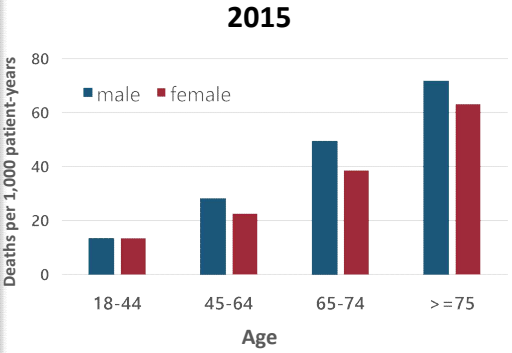
Male vs Female (2)

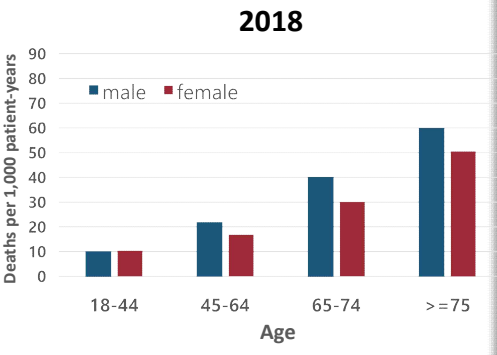
Age-adjusted all-cause mortality by sex (male and female) for prevalent patients, 2001-2020



Male vs Female (3)

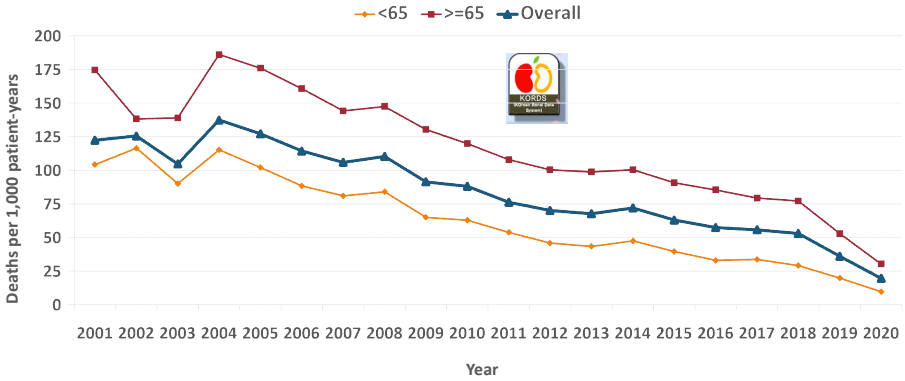
Adjusted (by treatment modality) all-cause mortality in prevalent dialysis patients by sex and age, 2015, 2018





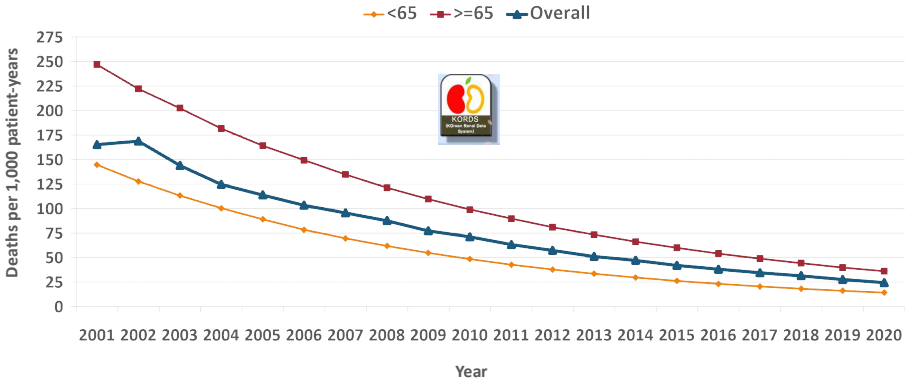
Age (1)

Unadjusted all-cause mortality by age for prevalent patients, 2001-2020



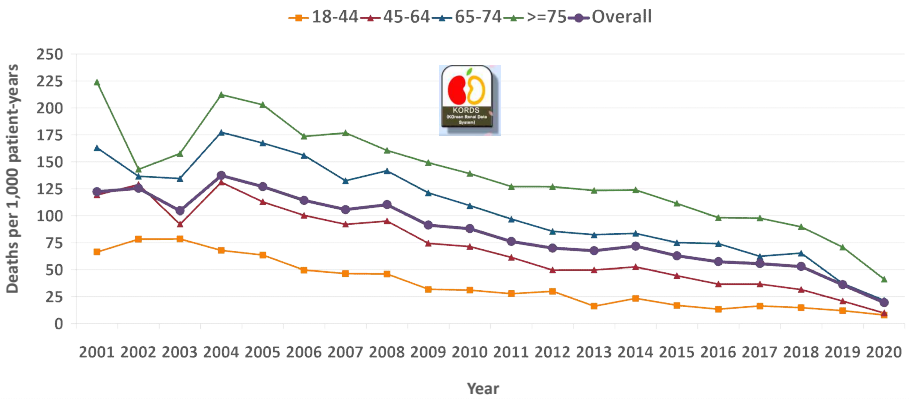
Age (1)

Sex-adjusted all-cause mortality by age for prevalent patients, 2001-2020



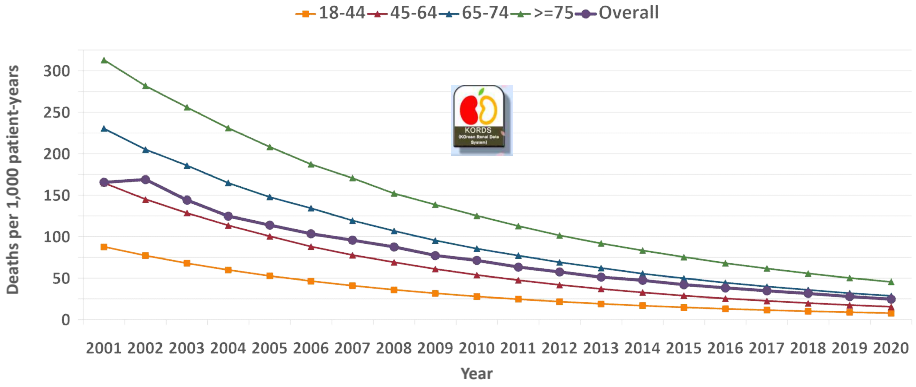
Age (2)

Unadjusted all-cause mortality by age for prevalent patients, 2001-2020



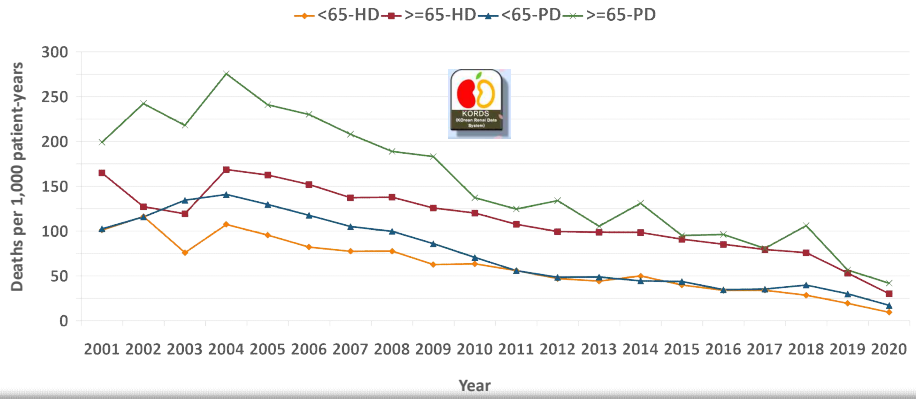
Age (2)

Sex-adjusted all-cause mortality by age for prevalent patients, 2001-2020



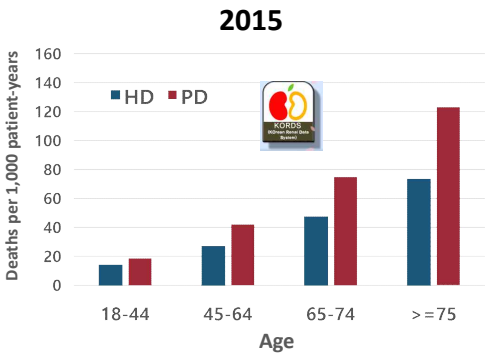
Age (3)

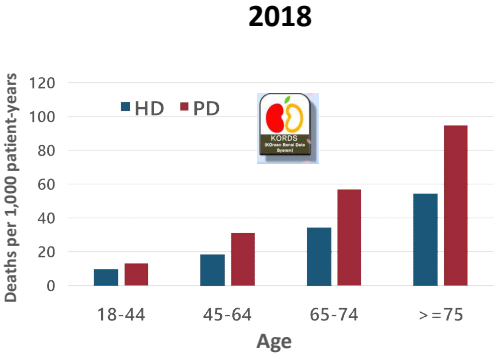
Unadjusted all-cause mortality by age and treatment modality for prevalent patients, 2001-2020



Age (3)

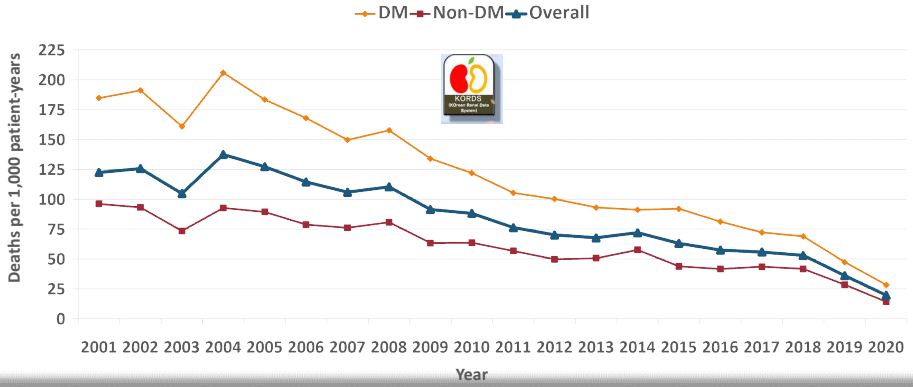
Sex-adjusted all-cause mortality in prevalent dialysis patients by age and treatment modality, 2015, 2018





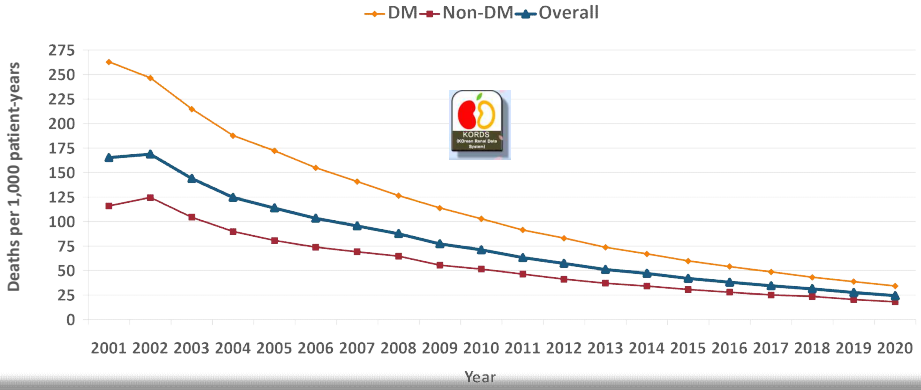
Diabetes Mellitus (DM) vs Non-DM (1)

Unadjusted All-cause mortality according to presence of diabetes mellitus for prevalent patients, 2001-2020



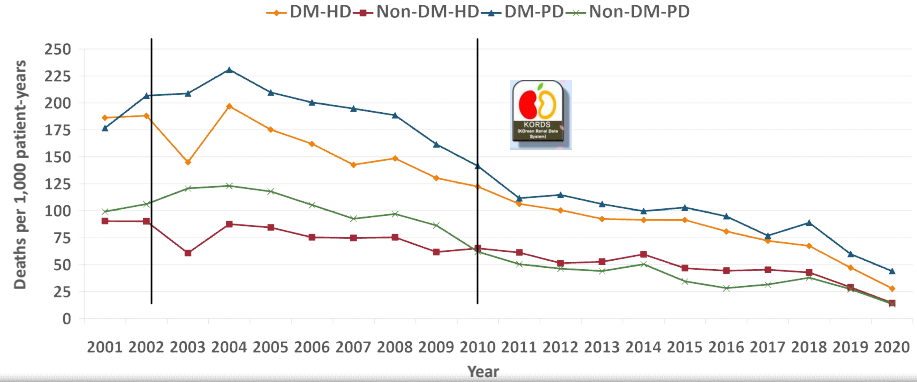
Diabetes Mellitus (DM) vs Non-DM (1)

Adjusted All-cause mortality according to presence of diabetes mellitus for prevalent patients, 2001-2020



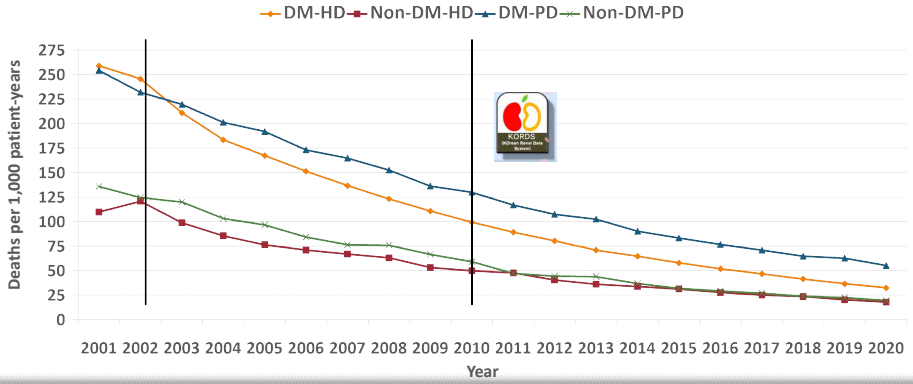
Diabetes Mellitus (DM) vs Non-DM (2)

Unadjusted all-cause mortality according to diabetes mellitus and treatment modality (HD and PD) for prevalent patients, 2001-2020



Diabetes Mellitus (DM) vs Non-DM (2)

Adjusted all-cause mortality according to diabetes mellitus by treatment modality (HD and PD) for prevalent patients, 2001-2020



Survival probability of incident dialysis patients

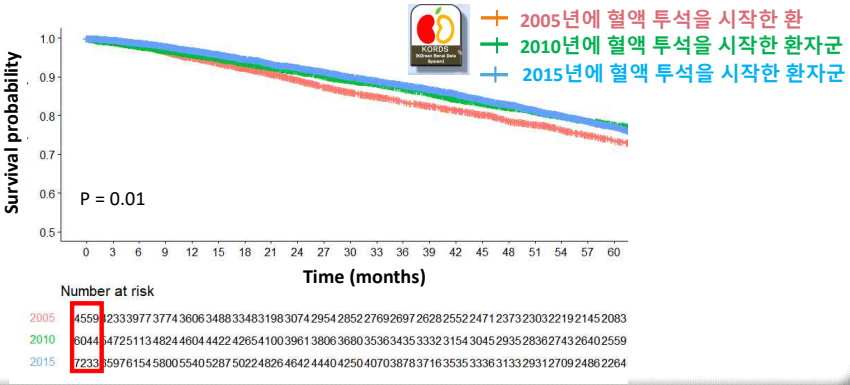
Method

- First 5 years after dialysis: 첫 투석 시작 후 5년간 생존률
- Groups: 2005, 2010, and 2015 각 년도에 첫 투석을 시작한 말기 신부전 환자 (총 3그룹)
- Kaplan-meier estimate for survival analysis
- Adjusted by age and sex
- Number
- SAS version 9.4

	unadjusted	adjusted
2005	4,559	4,559
2010	6,044	6,044
2015	7,233	7,233

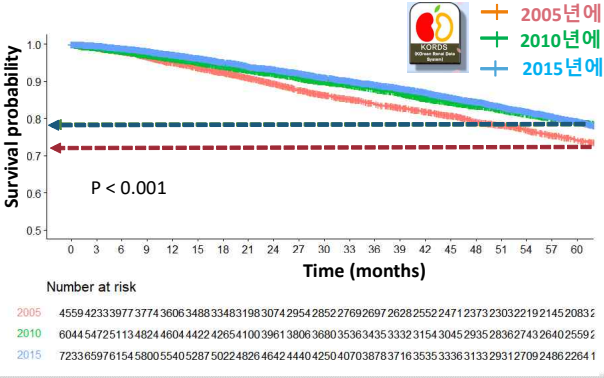
Incident HD patients

Unadjusted survival of incident ESRD patients over the first 5 years after HD treatment, 2005, 2010, and 2015



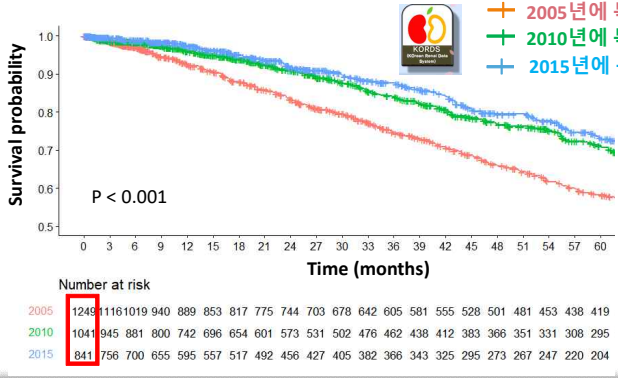
Incident HD patients

Age and sex-adjusted survival of incident ESRD patients over the first 5 years after HD treatment, 2005, 2010, and 2015



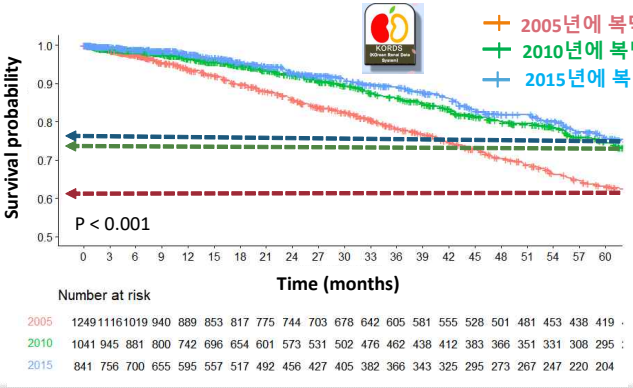
Incident PD patients

Unadjusted survival of incident ESRD patients over the first 5 years after PD treatment, 2005, 2010, and 2015



Incident PD patients

Age and sex-adjusted survival of incident ESRD patients over the first 5 years after PD treatment, 2005, 2010, and 2015



Causes of deaths

Method

- Percentages
- 2001-2020
- SAS version 9.4

Number of deaths

Year	Number
2001	761
2003	894
2005	1256
2007	1531
2009	1827
2011	1828
2013	1604
2014	1534
2015	891
2016	1849
2017	1771
2018	2432
2019	1975
2020	2366

Cause-specific mortality (%) in patients with ESRD receiving dialysis, 2001-2020

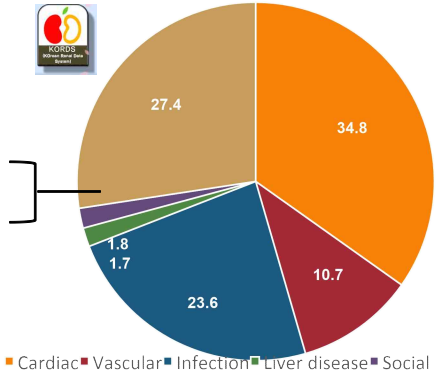
	2001	2003	2005	2007	2009	2011	2013	2014	2015	2016	2017	2018	2019	2020
Cardiac	26.9	31.7	30.7	31.7	29.5	32.7	35.8	32.5	36.1	38.1	33.7	33.7	35.8	34.8
MI	7.7	7.4	8.0	7.5	8.0	6.6	7.5	5.7	8.0	5.5	6.5	6.5	7.6	6.0
cardiac arrest, uremia-associated	11.2	11.7	10.4	10.8	8.5	11.0	14.2	14.1	13.1	13.3	12.7	12.4	12.9	13.9
cardiac arrest, other	8.1	12.5	12.4	13.3	13.0	15.0	14.2	12.6	15.0	19.3	14.5	14.8	15.3	14.9
Vascular	22.7	19.5	17.0	17.8	15.9	14.1	13.3	13.2	11.8	10.8	11.4	11.5	11.2	10.7
cerebrovascular accident	15.1	14.5	12.3	13.0	11.0	8.7	8.7	8.5	6.5	6.2	6.2	5.6	6.5	6.0
pulmonary embolism	0.5	0.1	0.6	0.5	0.2	0.2	0.2	0.2	0.9	0.4	0.3	0.3	0.3	0.3
GI hemorrhage	2.7	3.2	1.7	2.7	2.3	2.2	1.2	1.7	1.4	2.0	0.8	1.7	1.8	1.3
GI embolism	0.1	0.0	0.5	0.1	0.5	0.1	0.2	0.2	0.7	0.3	0.3	0.2	0.2	0.2
others	4.3	1.6	1.9	1.6	1.9	3.0	3.0	2.6	2.4	1.9	3.7	3.7	2.4	3.0
Infection	17.8	20.5	20.1	20.2	21.9	23.1	23.5	26.8	24.6	24.5	25.2	22.6	22.9	23.6
pulmonary	4.5	3.6	4.5	4.4	5.9	8.4	8.4	9.0	8.9	9.3	7.7	8.6	8.2	8.7
septicemia	6.9	9.7	9.6	11.7	10.4	9.7	11.9	13.6	11.0	10.2	12.2	10.6	11.2	11.2
tuberculosis	0.8	0.2	0.3	0.2	0.3	0.1	0.1	0.1	1.1	0.1	0.2	0.0	0.1	0.0
peritonitis	1.1	2.0	1.4	1.1	0.8	1.0	0.5	0.7	1.1	1.2	0.7	0.6	0.6	0.7
others	4.5	4.9	4.3	2.9	4.5	4.0	2.7	3.4	2.4	3.6	4.5	2.7	2.9	2.9
Liver disease	2.6	2.8	2.7	2.2	3.1	2.1	2.4	2.2	2.6	2.3	2.0	1.6	2.3	1.7
hepatic failure d/t HBV	1.6	1.8	1.5	1.3	2.2	1.0	1.3	1.0	1.1	0.9	1.1	0.6	1.0	0.8
hepatic failure d/t others	1.0	1.0	1.2	0.8	0.9	1.1	1.1	1.2	1.5	1.5	1.0	1.0	1.4	0.9
Social	6.3	4.4	5.4	3.3	2.5	3.3	2.8	2.5	2.0	2.5	1.5	1.3	1.5	1.8
patient refused further treatment	2.1	1.0	1.1	1.1	0.5	0.4	0.3	0.3	0.3	0.5	0.1	0.0	0.3	0.2
suicide	3.3	2.3	3.3	1.5	1.3	1.4	1.3	1.6	1.0	1.5	0.8	0.8	0.8	1.1
therapy ceased for other cause	0.9	1.0	1.0	0.7	0.8	1.5	1.2	0.7	0.8	0.5	0.8	0.5	0.5	0.5
Others	23.7	21.3	24.0	24.8	27.1	24.7	22.2	22.9	23.0	21.8	26.2	29.3	26.2	27.4
cachexia	8.1	6.6	4.0	4.4	3.3	2.7	1.6	1.5	1.4	0.9	1.0	1.0	0.6	0.5
malignant	4.4	3.5	6.4	5.7	5.7	6.0	5.7	6.0	5.8	6.5	6.6	6.0	5.0	7.1
accident	0.9	1.1	1.4	1.2	1.3	1.6	1.4	2.0	1.0	1.0	1.1	1.3	1.3	1.5
uncertain	10.3	10.1	12.3	13.4	16.8	14.5	13.4	13.4	14.8	13.4	17.6	21.0	19.3	18.4

Cause-specific mortality (%) in patients with ESRD receiving dialysis, who died in 2020

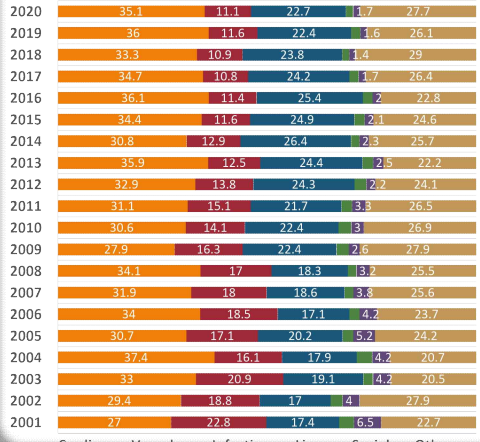
	Overall	HD	PD
Cardiac	34.8	35.1	31.9
MI	6.0	6.0	6.0
cardiac arrest, uremia-associated	13.9	13.9	14.8
cardiac arrest, other	14.9	15.3	11.1
Vascular	10.7	11.1	6.9
cerebrovascular accident	6.0	6.2	3.7
pulmonary embolism	0.3	0.2	0.5
GI hemorrhage	1.3	1.3	1.4
GI embolism	0.2	0.2	0.0
others	3.0	3.1	1.4
Infection	23.6	22.7	32.9
pulmonary	8.7	9.1	5.6
septicemia	11.2	10.2	21.3
tuberculosis	0.0	0.0	0.0
peritonitis	0.7	0.5	3.2
others	2.9	2.9	2.8
Liver disease	1.7	1.7	1.4
hepatic failure d/t HBV	0.8	0.7	0.9
hepatic failure d/t others	0.9	1.0	0.5
Social	1.8	1.7	2.3
patient refused further treatment	0.2	0.2	0.0
suicide	1.1	1.0	1.4
therapy ceased for other cause	0.5	0.5	0.9
Others	27.4	27.7	24.5
cachexia	0.5	0.4	0.9
malignant	7.1	7.5	2.8
accident	1.5	1.4	1.9
uncertain	18.4	18.3	19.0

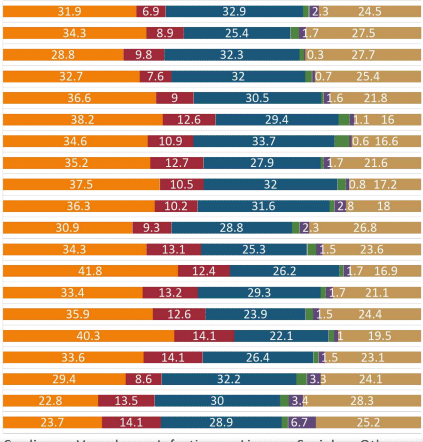
Unadjusted percentages of cause-specific mortality, in overall dialysis patients, who died in 2020

Patient refused further treatment	0.2 %
Suicide	1.1 %
Therapy ceased for other cause	0.5 %



Comparison of cause-specific death, HD versus PD patients





대한 신장학회 등록 사업 등록 현황

등록사업에 참여한 의료기관 수 및 응답률 송기

년도	2019년		2020년	
지역	총의료기관수	응답률	총의료기관수	응답률
서울	185	63.2%	199	70.4%
부산	62	56.5%	65	73.8%
대구	43	58.1%	45	86.7%
인천	45	40.0%	52	73.1%
광주	35	42.9%	35	71.4%
대전	19	68.4%	22	77.3%
경기	185	46.5%	209	69.4%
강원	27	48.1%	29	79.3%
충북	31	54.8%	35	68.6%
충남	42	50.0%	44	75.0%
전북	29	48.3%	29	72.4%
전남	38	39.5%	40	67.5%
경북	47	51.1%	47	76.6%
경남	64	42.2%	69	76.8%
울산	17	58.8%	17	70.6%
제주	13	53.8%	14	85.7%
세종	3	66.7%	4	50.0%
전국	885	51.9%	955	72.8%

요약

- 전체 말기 신부전 환자 유병률의 지속적인 증가.
- 노령 투석 환자의 지속적인 증가.
- 원인 신질환에서 당뇨병성 신증의 비율 절반 유지.
- 투석 환자의 사망률 지속적인 감소 추세. 특히 혈액 투석과 복막투석 신환의 5년 생존률의 지속적인 사망률 감소 추세.
- 당뇨 및 고령 환자에서 복막 투석 사망률이 혈액 투석 사망률보다 높음.
- 복막 투석 연관 복막염 감소.
- 대한신장학회 등록 사업의 전국적 등록률 증가.

감사의 말씀

- 본 연례 보고가 가능할 수 있었던 것은 말기 신부전 환자 등록에 참여해주신 전국의 인공 신장실 담당의료진의 노고 덕분입니다. 등록해주신 자료를 바탕으로 양질의 결과를 만들어 보고 할 수 있도록 저희 등록 위원회는 더욱 열심히 하겠습니다.
- 더불어 보고서 작성에 도움을 주신 신장학회 사무국, 김희준 선생님, 강채영 선생님, 최유정 연구간호사, 투석용 의료물품 공급업체 (Baxter Korea, FMC Korea, 보령, B-braun Korea)에도 감사드립니다.

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