

2024년 우리나라 신대체 요법의 현황
Current Renal Replacement Therapy in Korea
-KORDS 2024 Annual Report-



대한신장학회 등록위원회
KORDS committee (Korean Renal Data System)

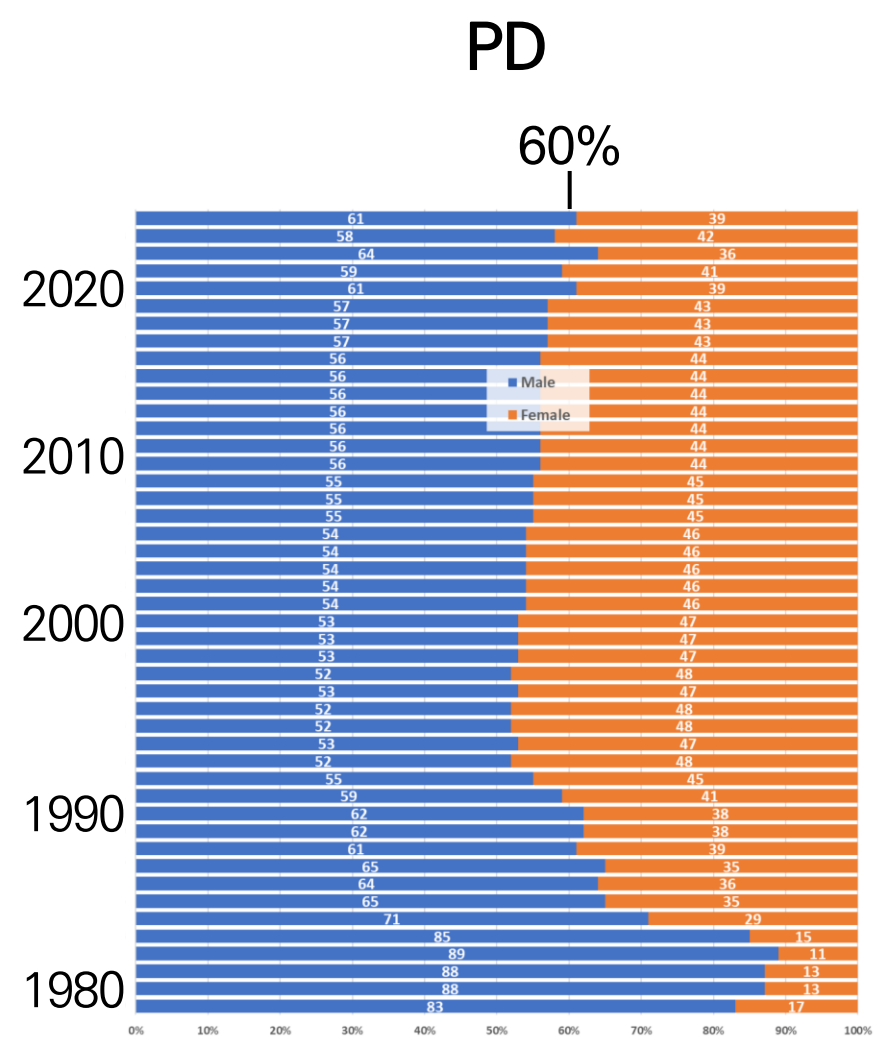
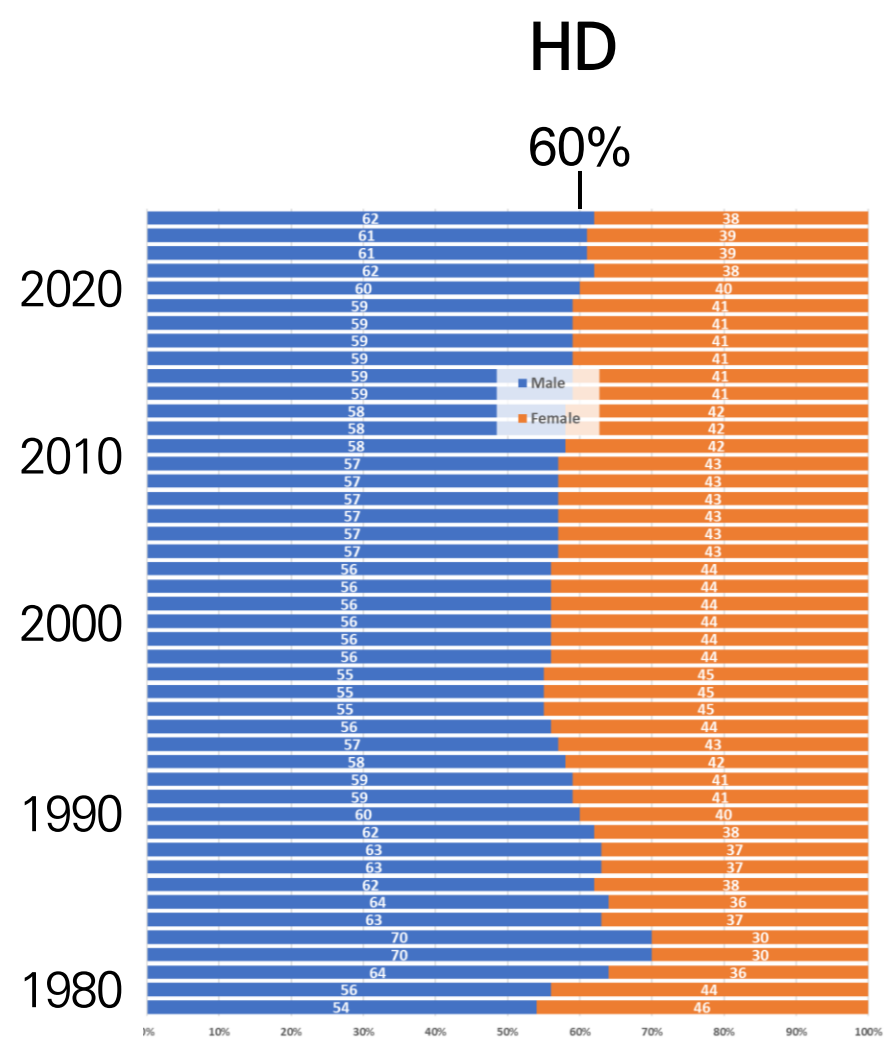
목차 (Contents)

- I. 2024년 우리나라 말기 신부전 환자의 투석 치료 특징 분석
(Patients and Dialysis Characteristics of ESKD in Korea)**
- II. 2024년 우리나라 말기 신부전 환자 사망률 분석
(Mortality analysis of ESKD patients in Korea)**
- III. 요약 (Summary)**

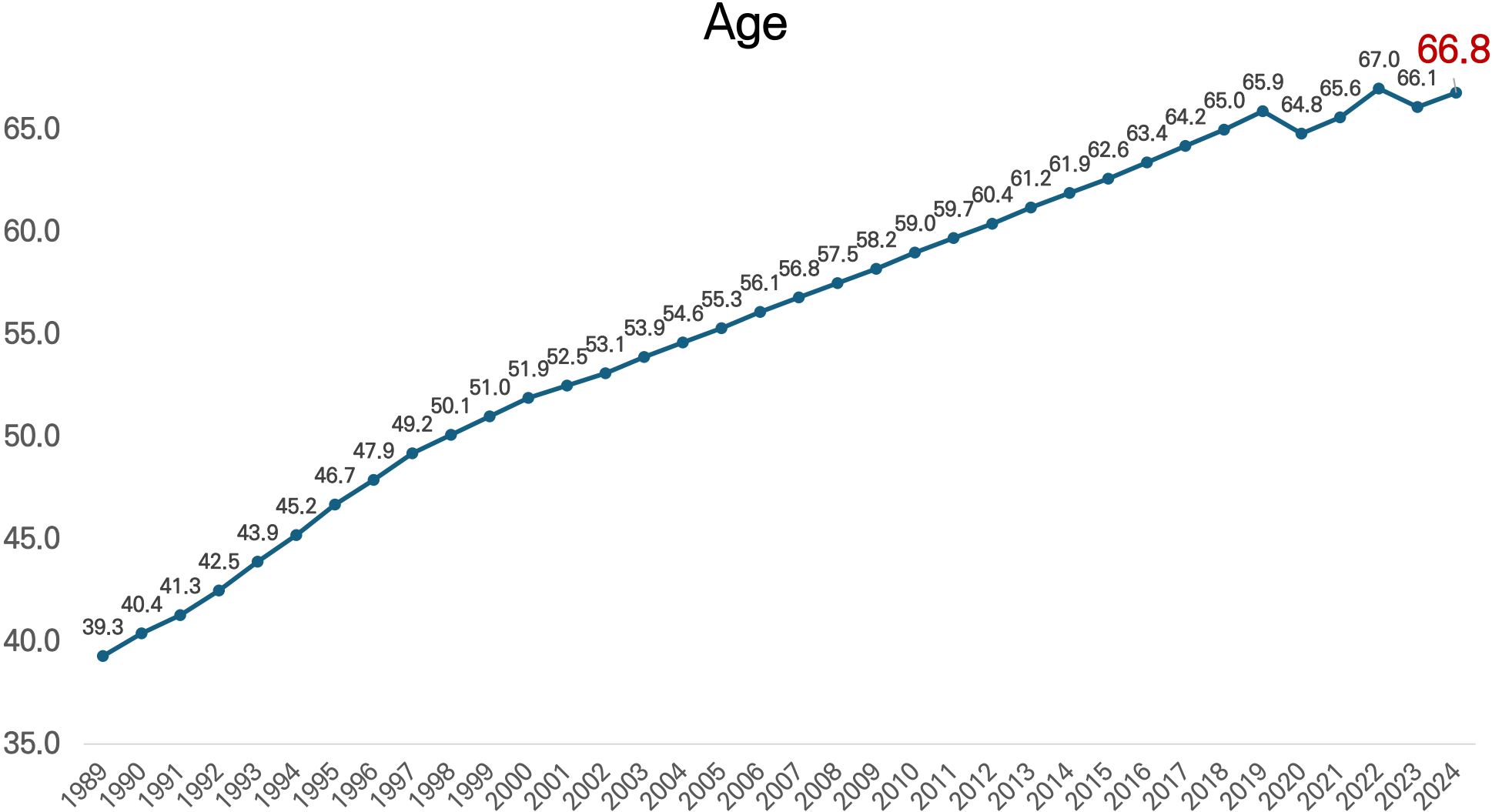
I. 2024년 우리나라 말기 신부전 환자의 투석 치료 특징 분석 (Patients and Dialysis Characteristics of ESKD in Korea, 2024)

Sex Distribution in Dialysis Patients

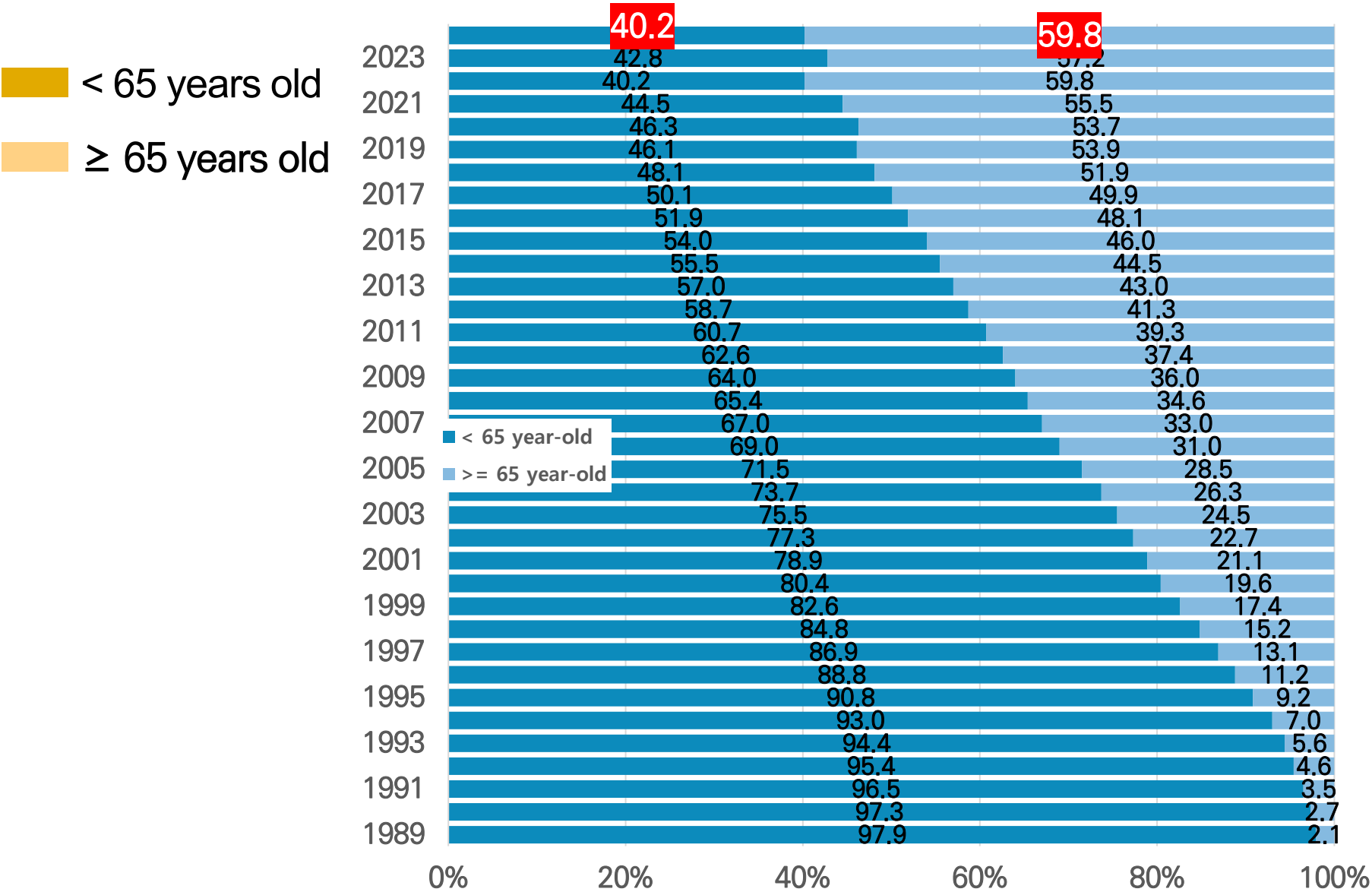
Male
Female



Trend of Age in patients with ESKD

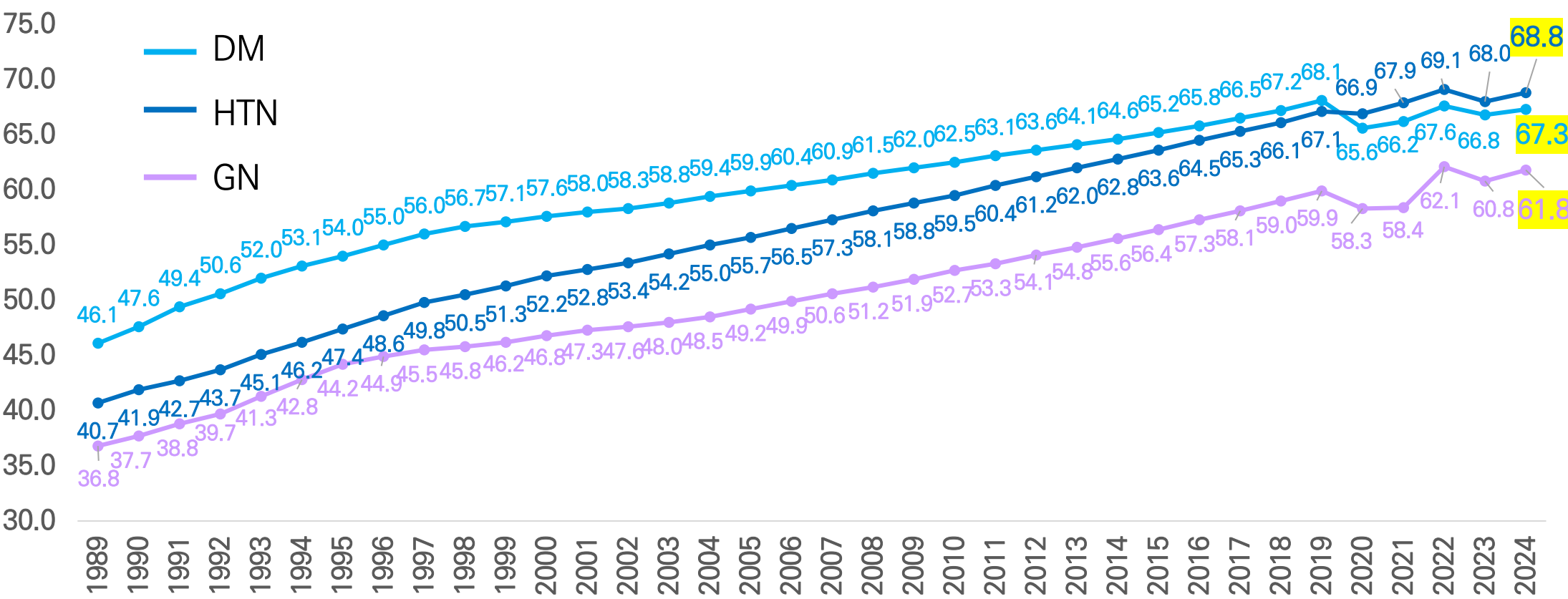


Trend in proportion of elderly patients with ESKD

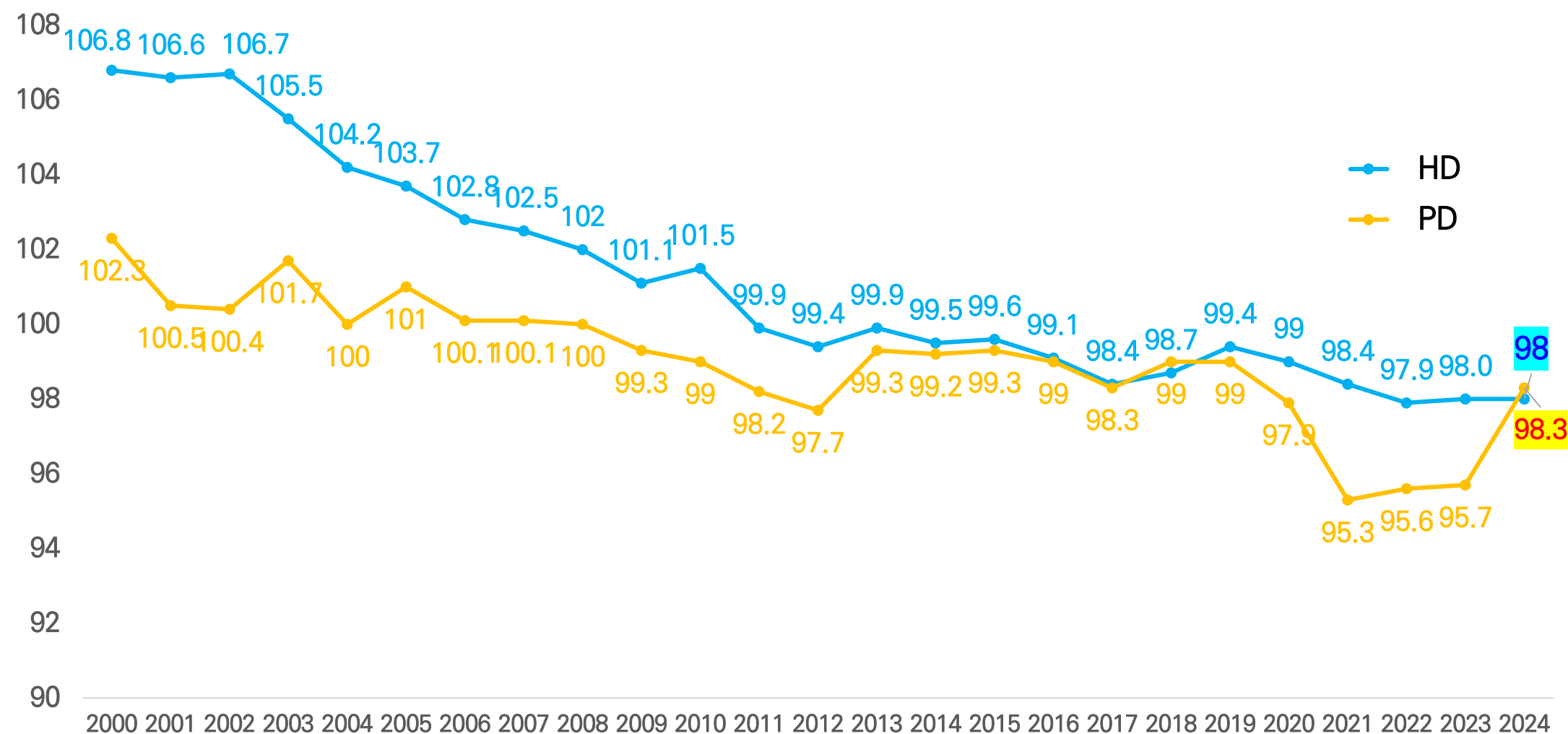


Age Distribution of Dialysis Patients according to underlying diseases

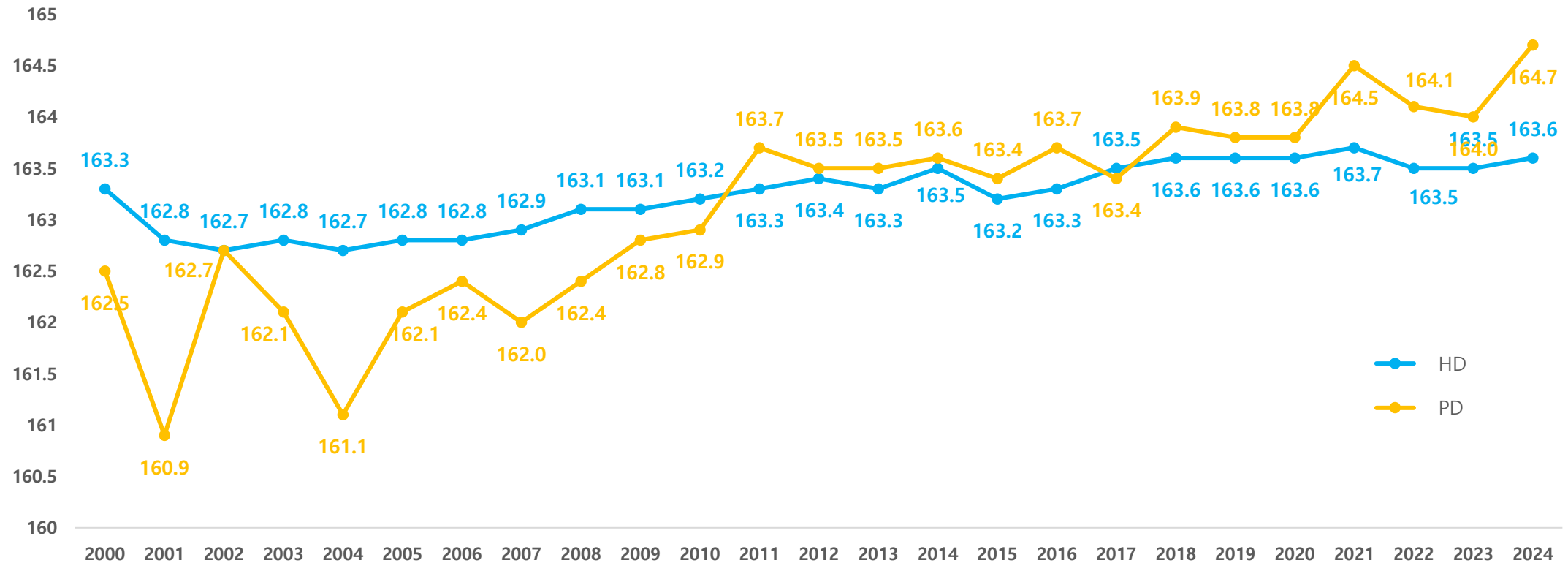
Age



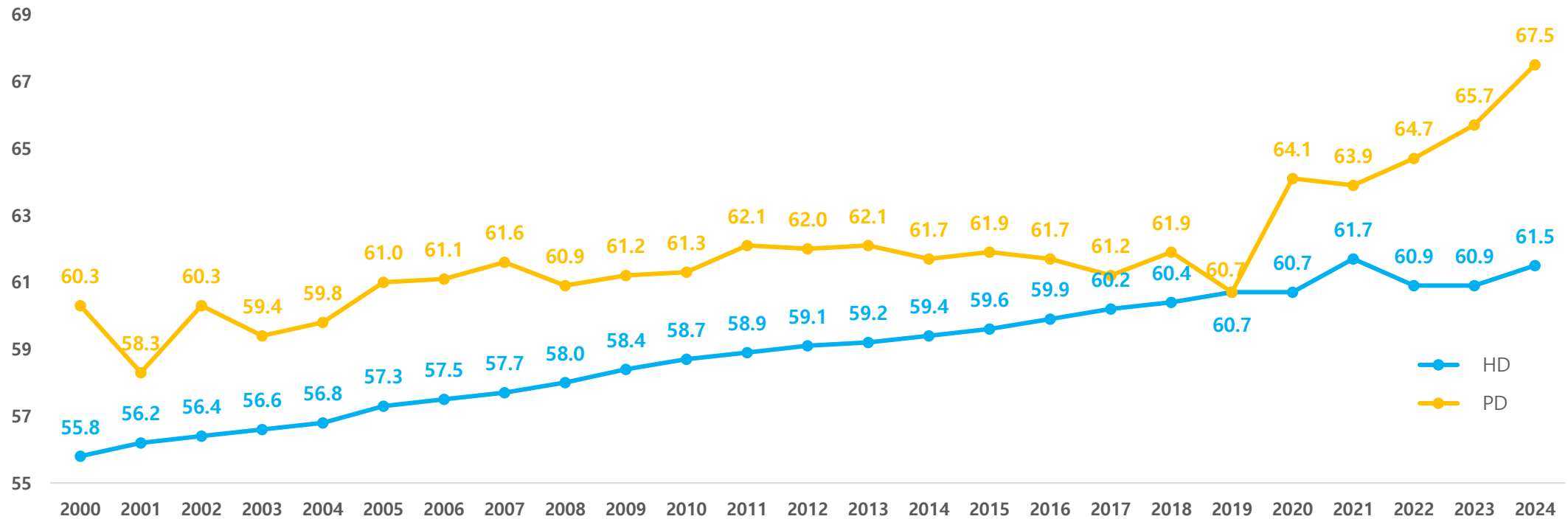
Mean Arterial Pressue in Dialysis patients



Distribution of Height in HD and PD patients



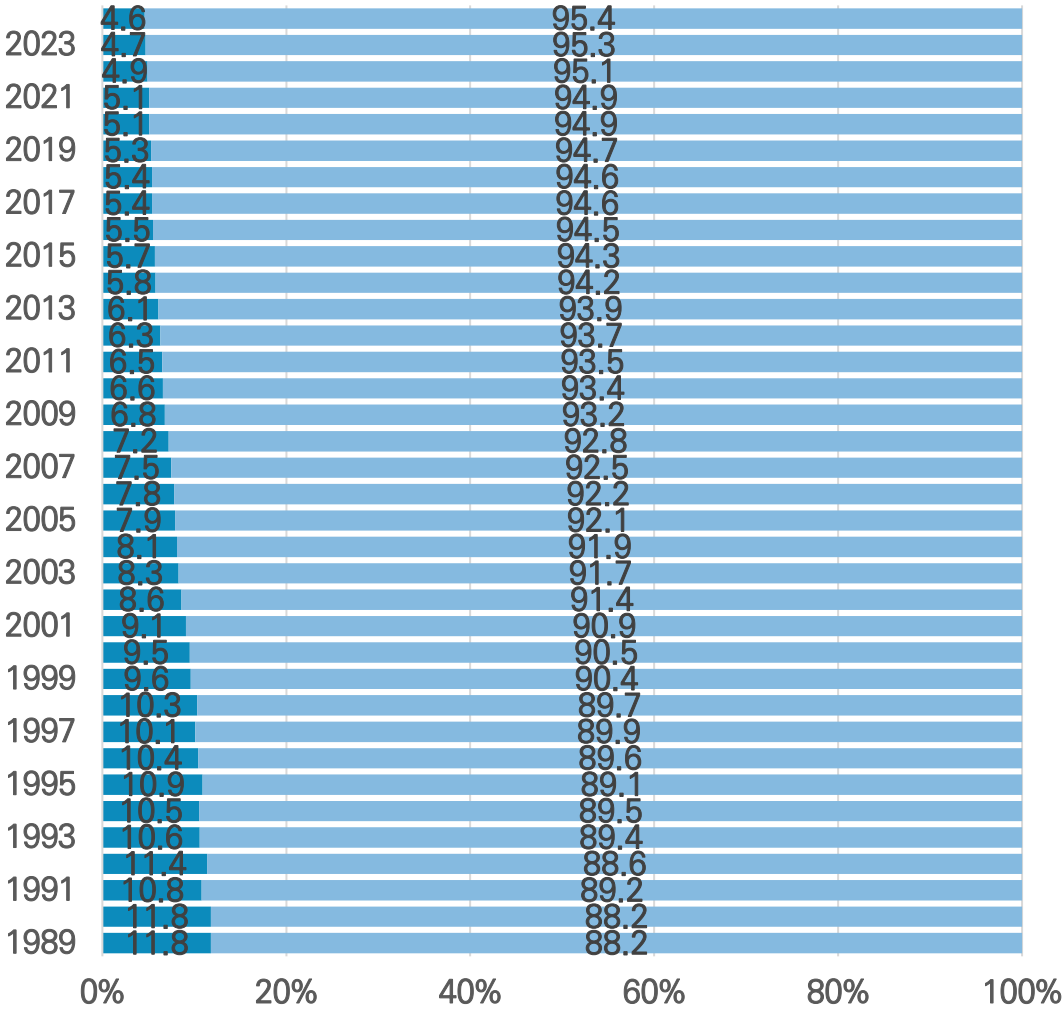
Distribution of Dry Weight in HD and PD patients



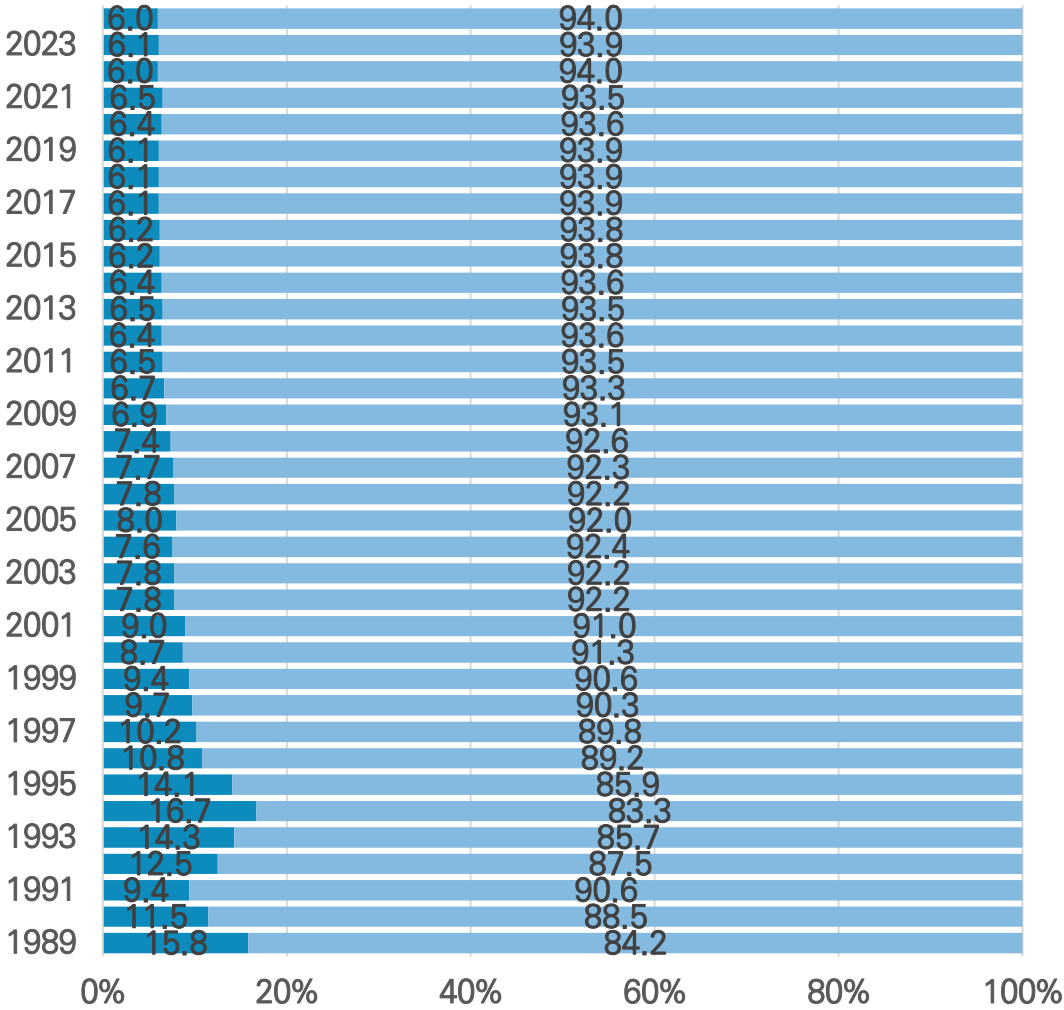
Hepatitis B

HBV (+)

HD



PD

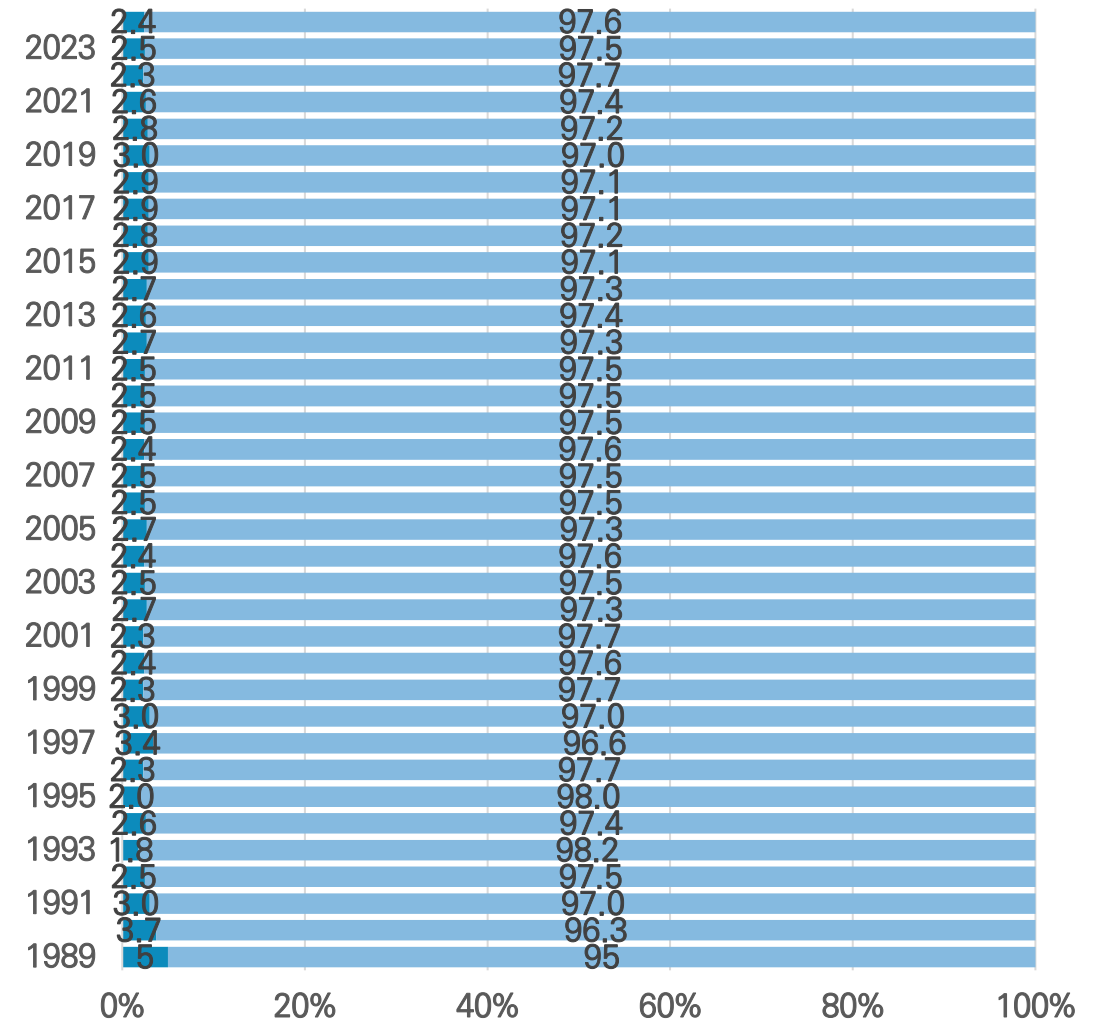
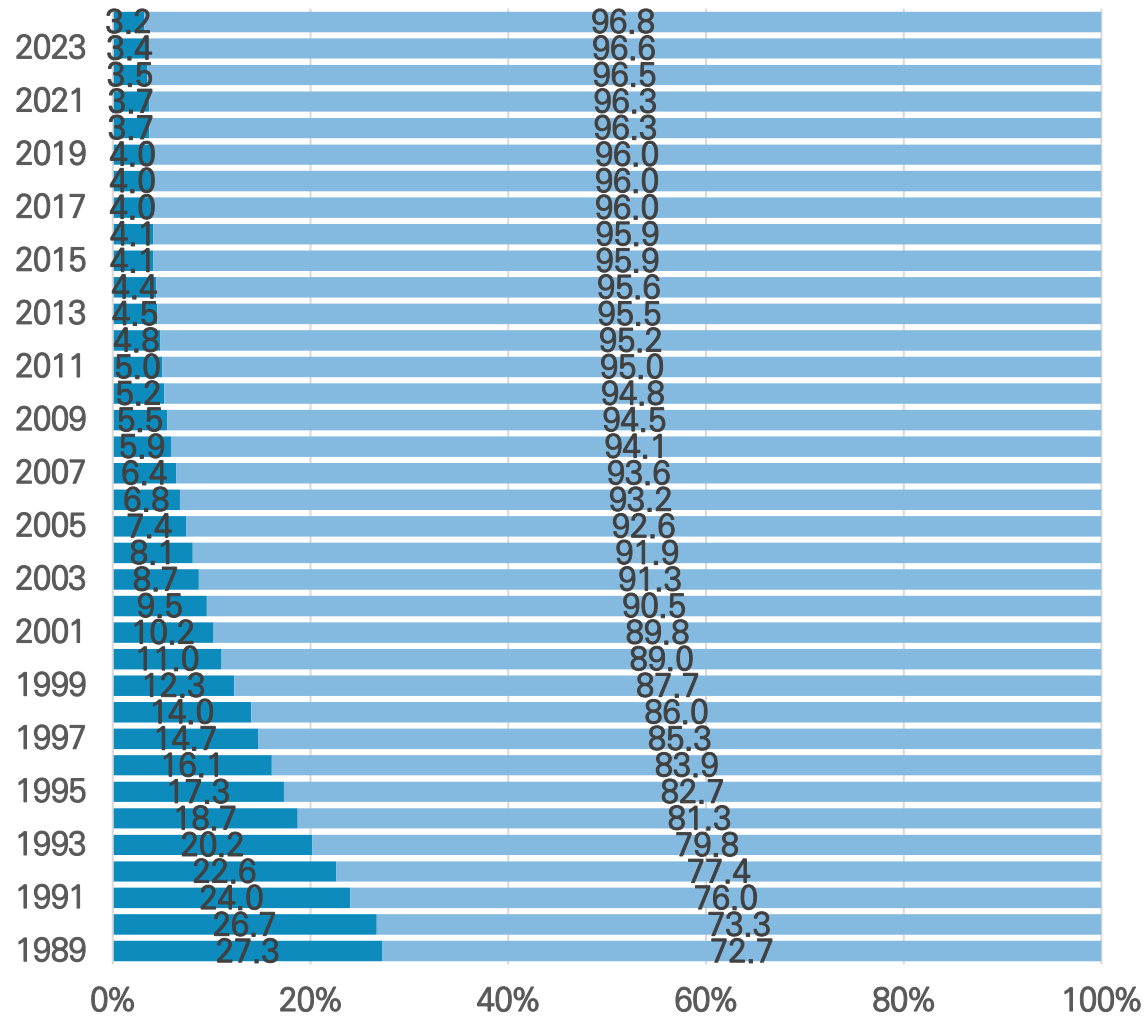


Hepatitis C

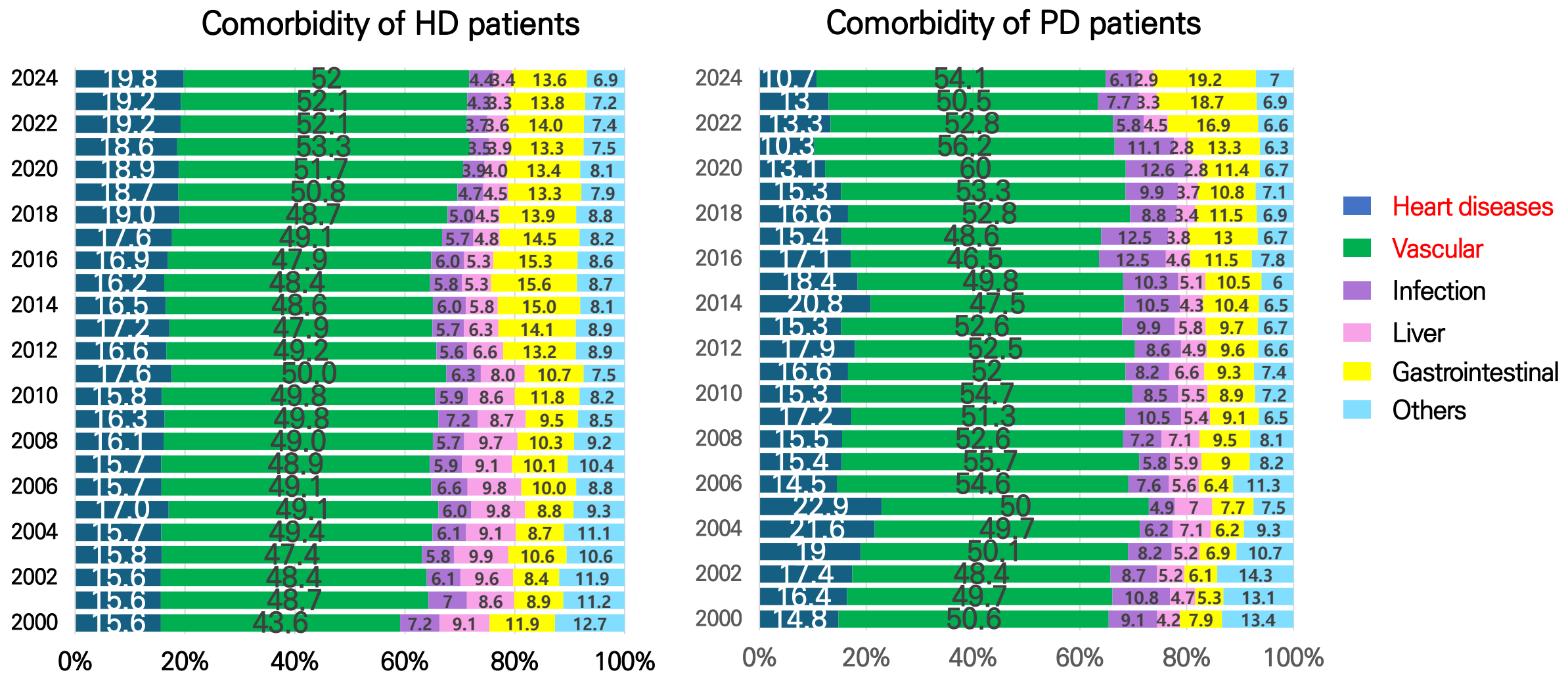
HCV (+)

HD

PD

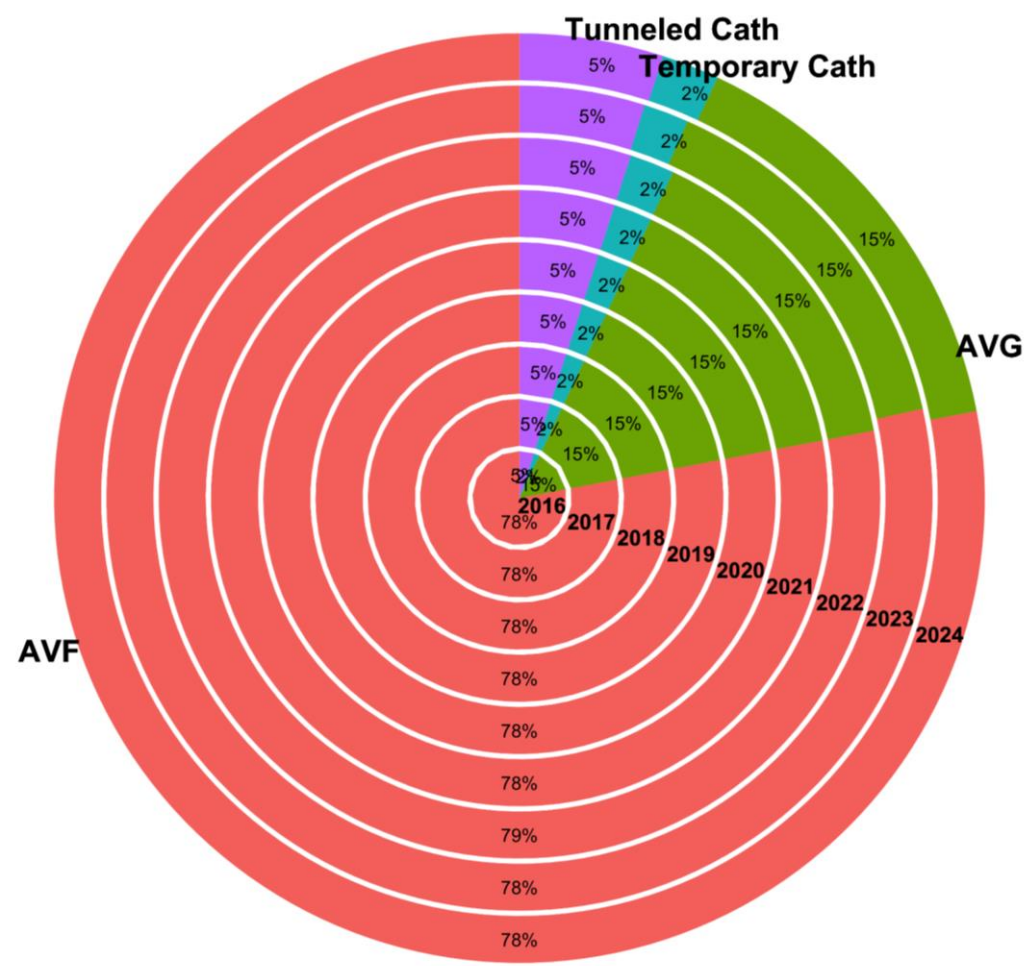


Comorbidity of Dialysis Patients

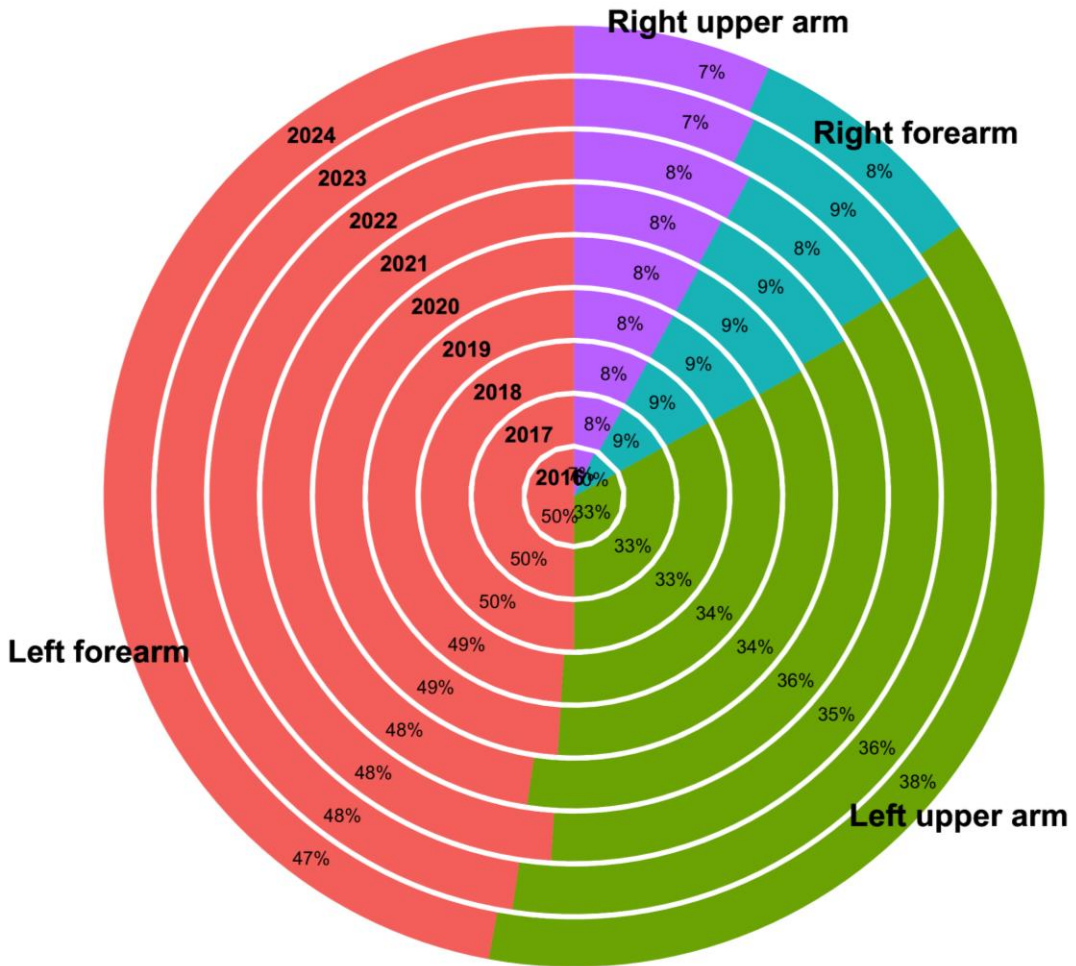


Characteristics of HD patients

Vascular Access: Access Type and Locations

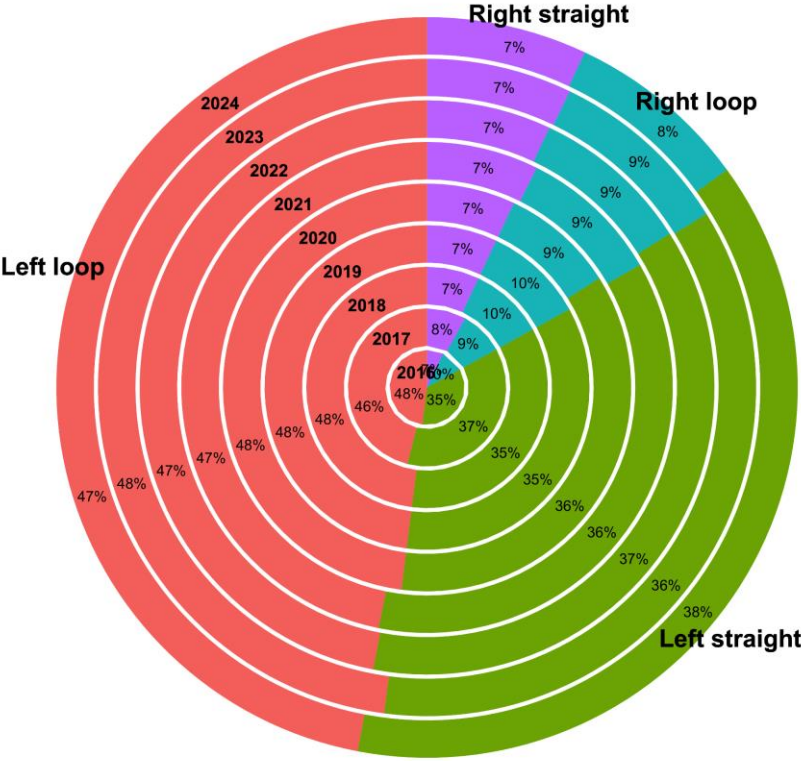


Access Type

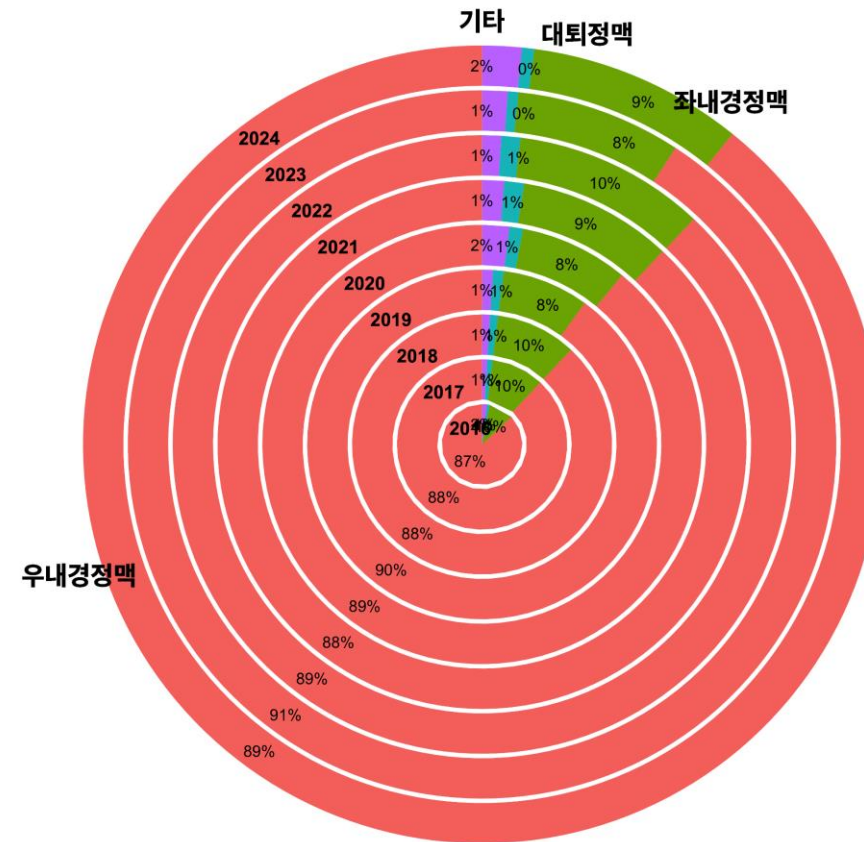


Access Locations

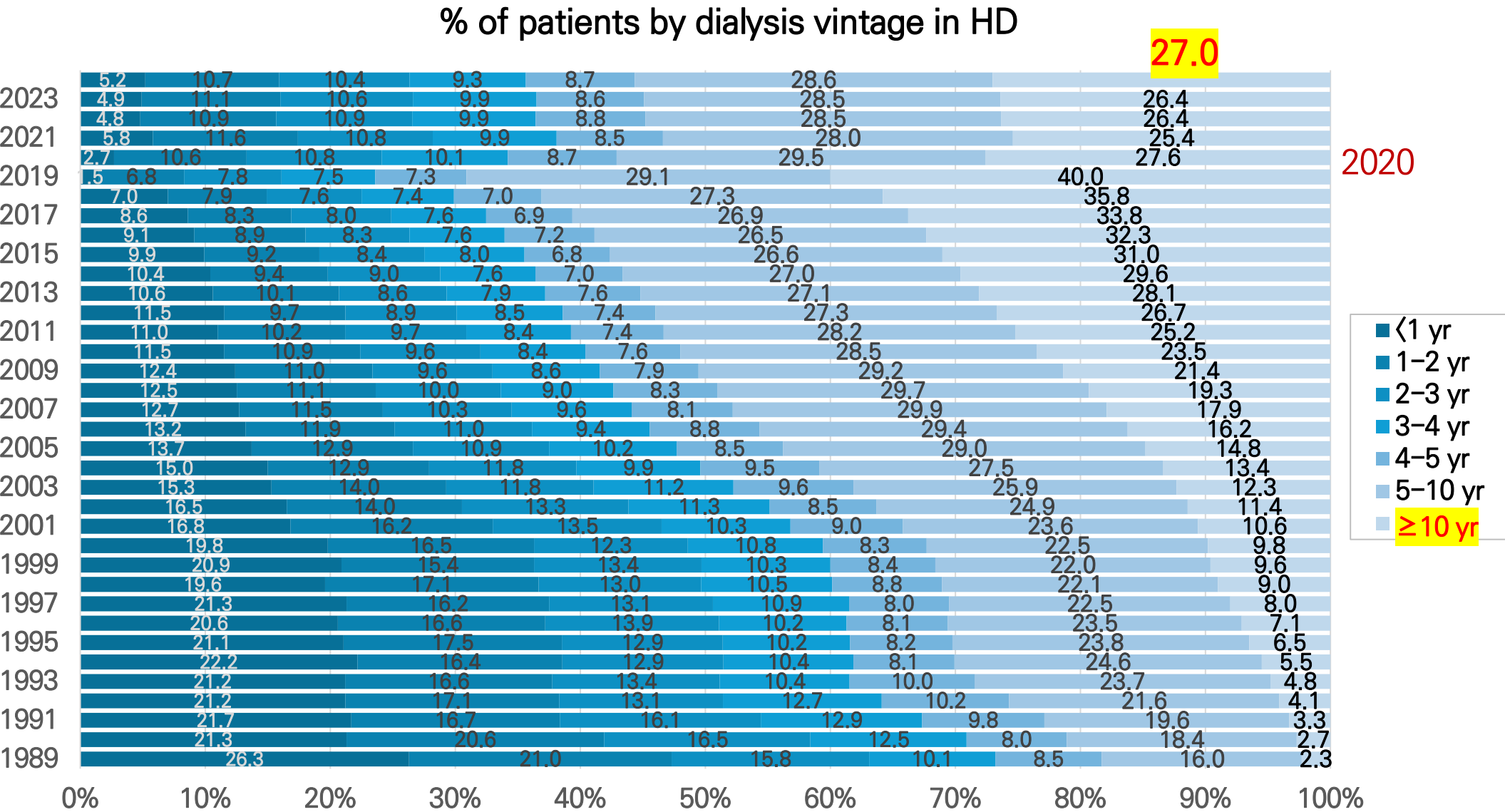
Type of AVG



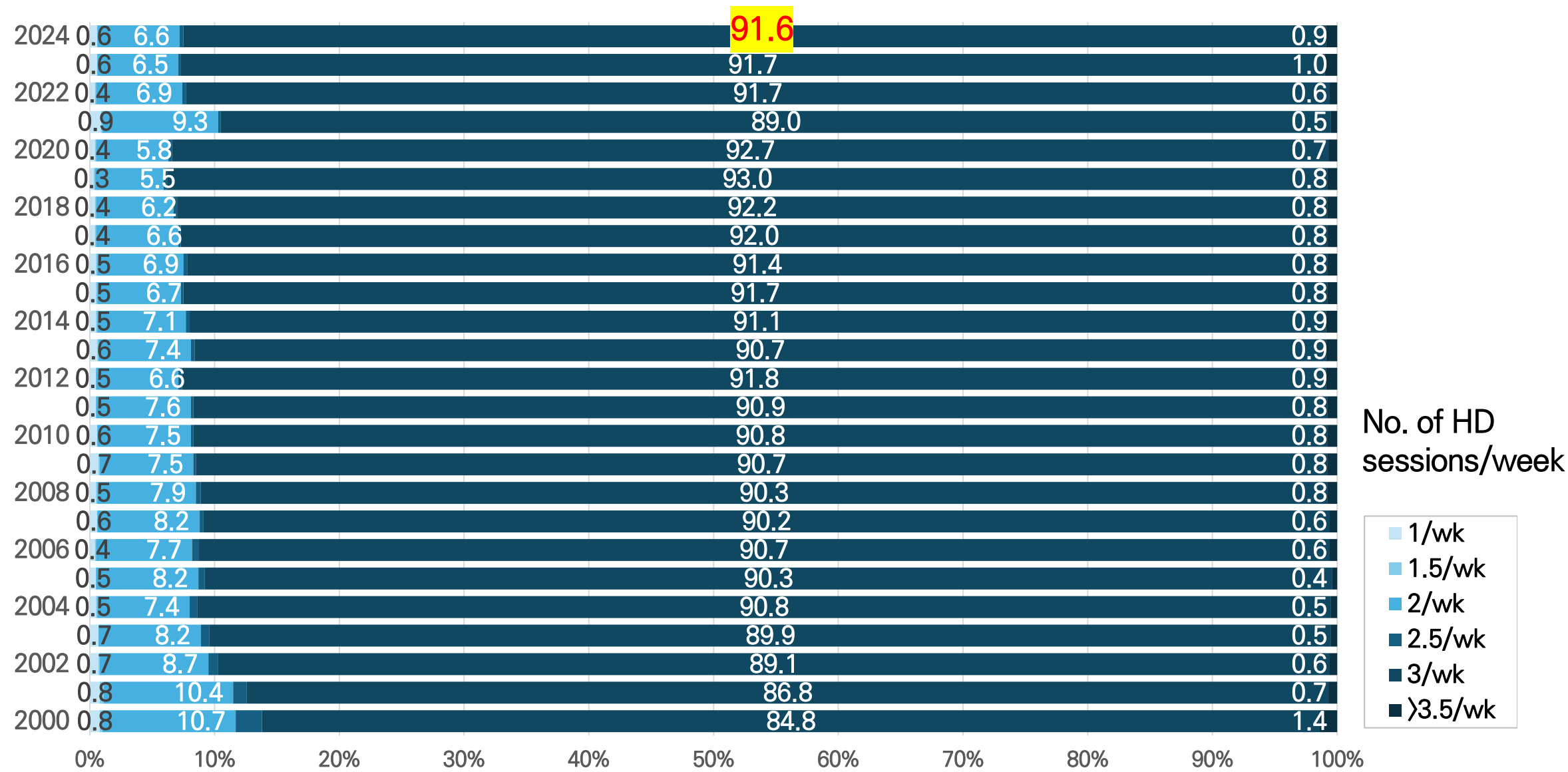
Location of Catheter for HD



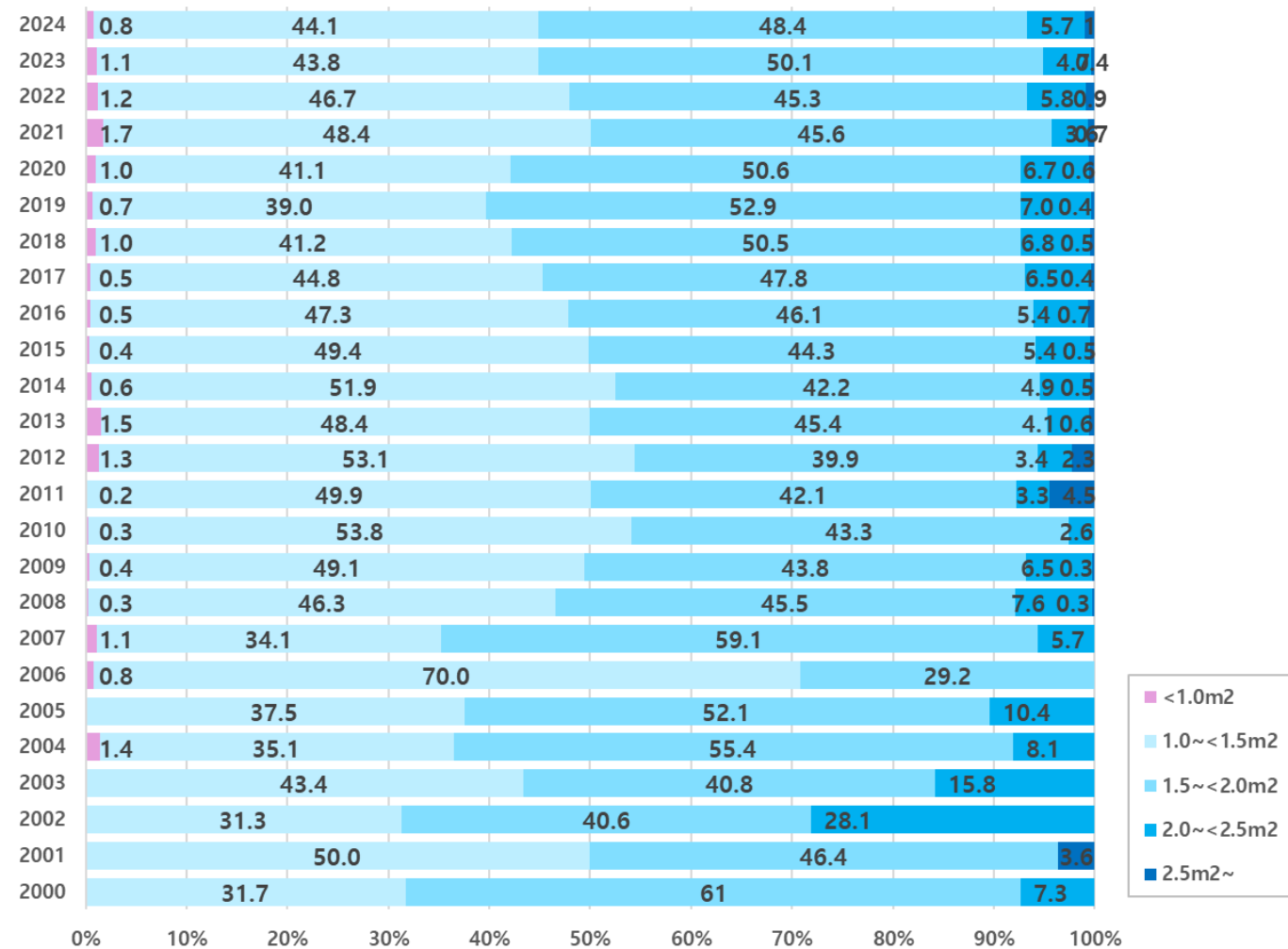
Dialysis Vintage of HD patietns



Distribution of Hemodialysis Frequency per Week

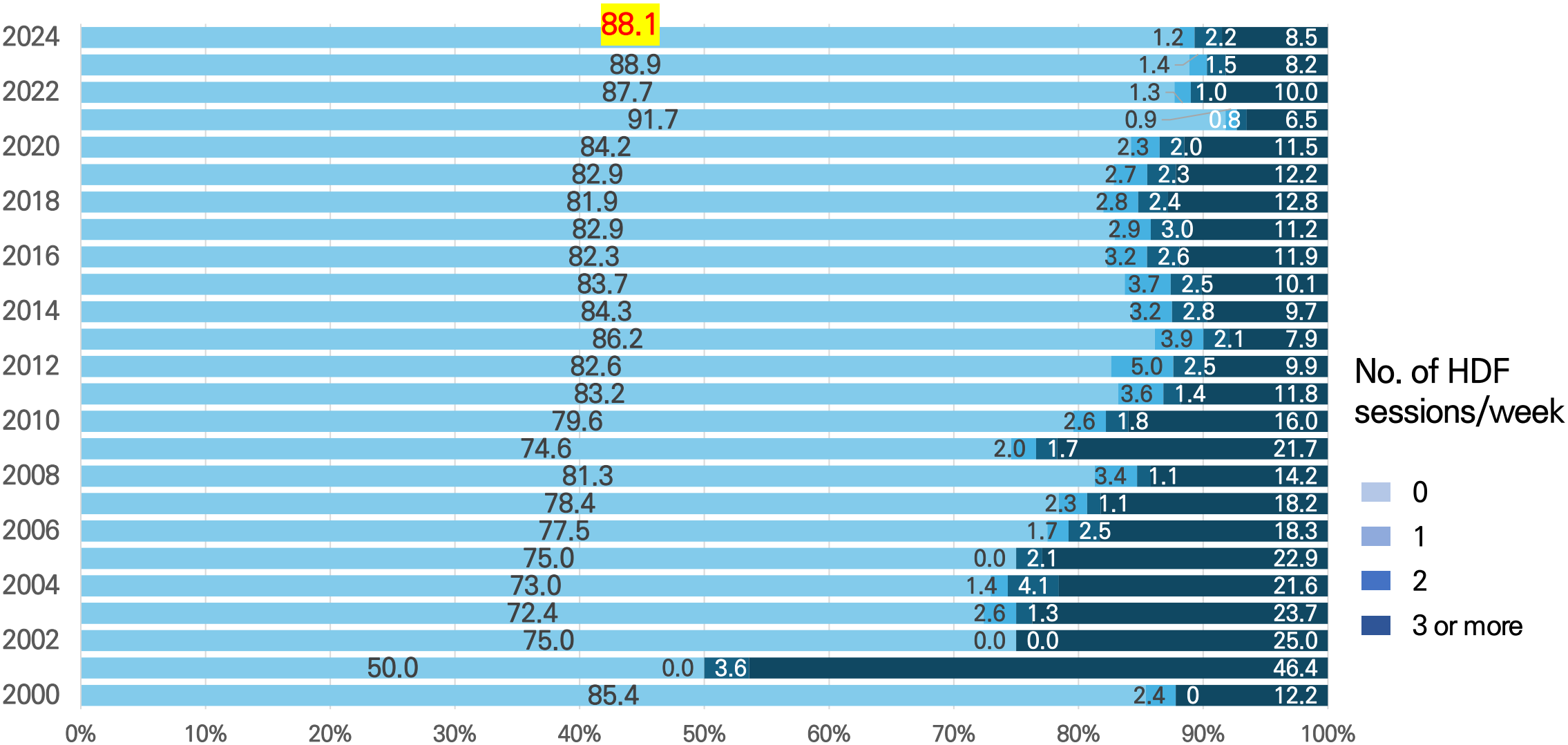


Dialyzer Membrane Surface Area

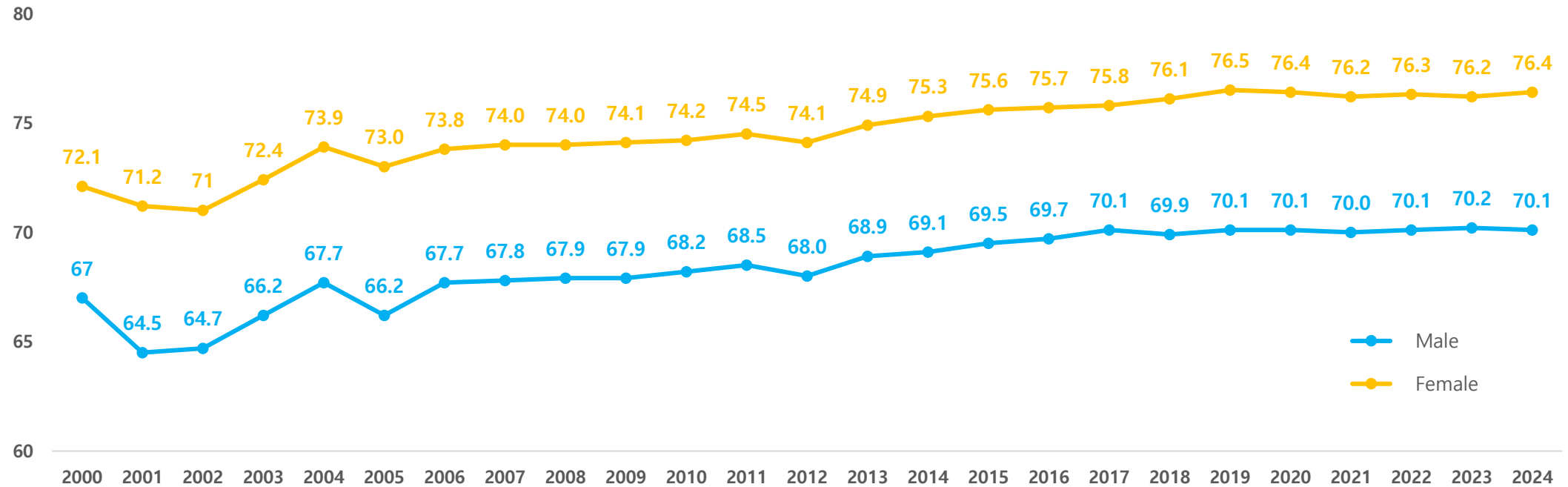


HDF Session Frequency Distribution

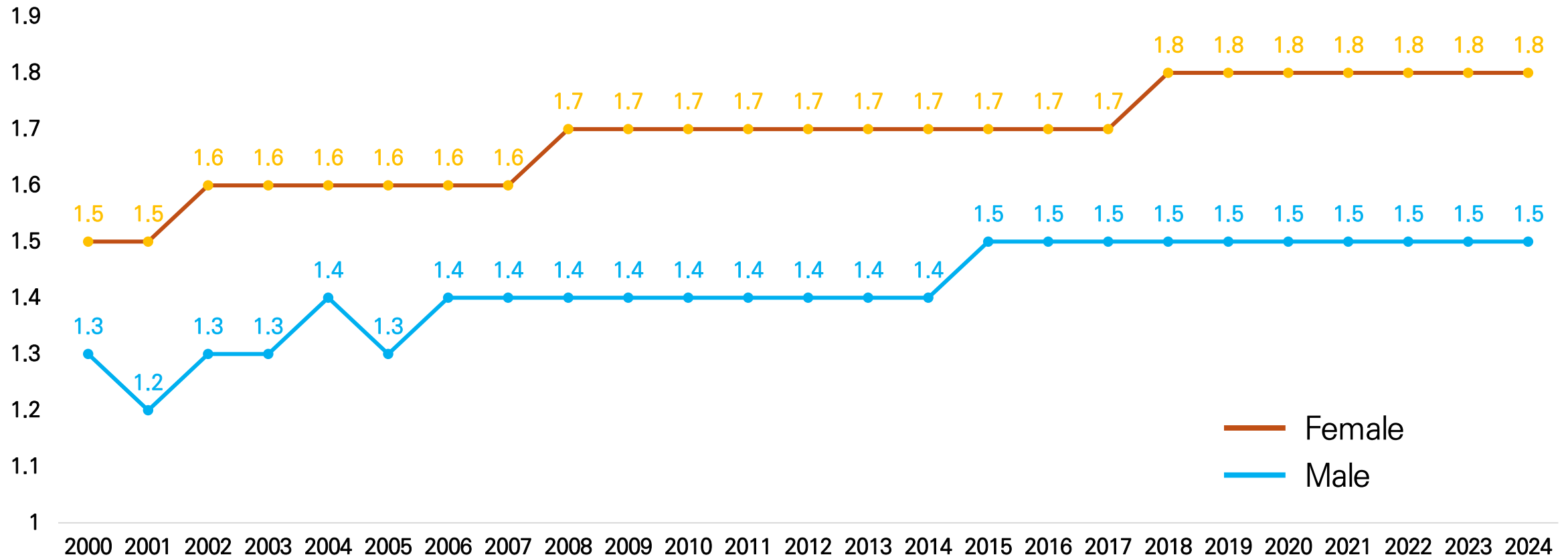
Distribution of patients by HDF sessions per week



Adequacy of HD (Urea Reduction Ratio)

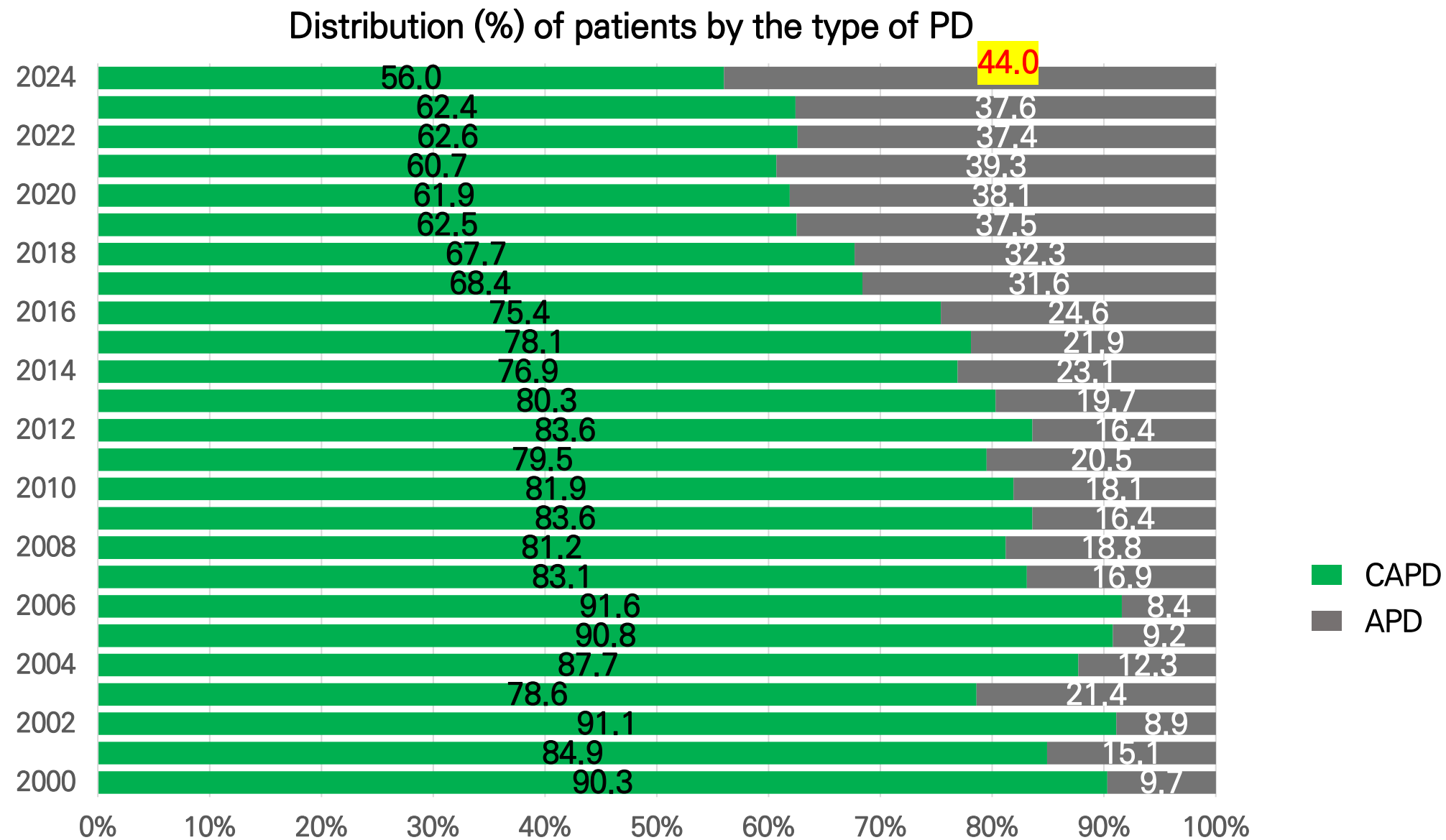


Adequacy of HD (spKt/V)

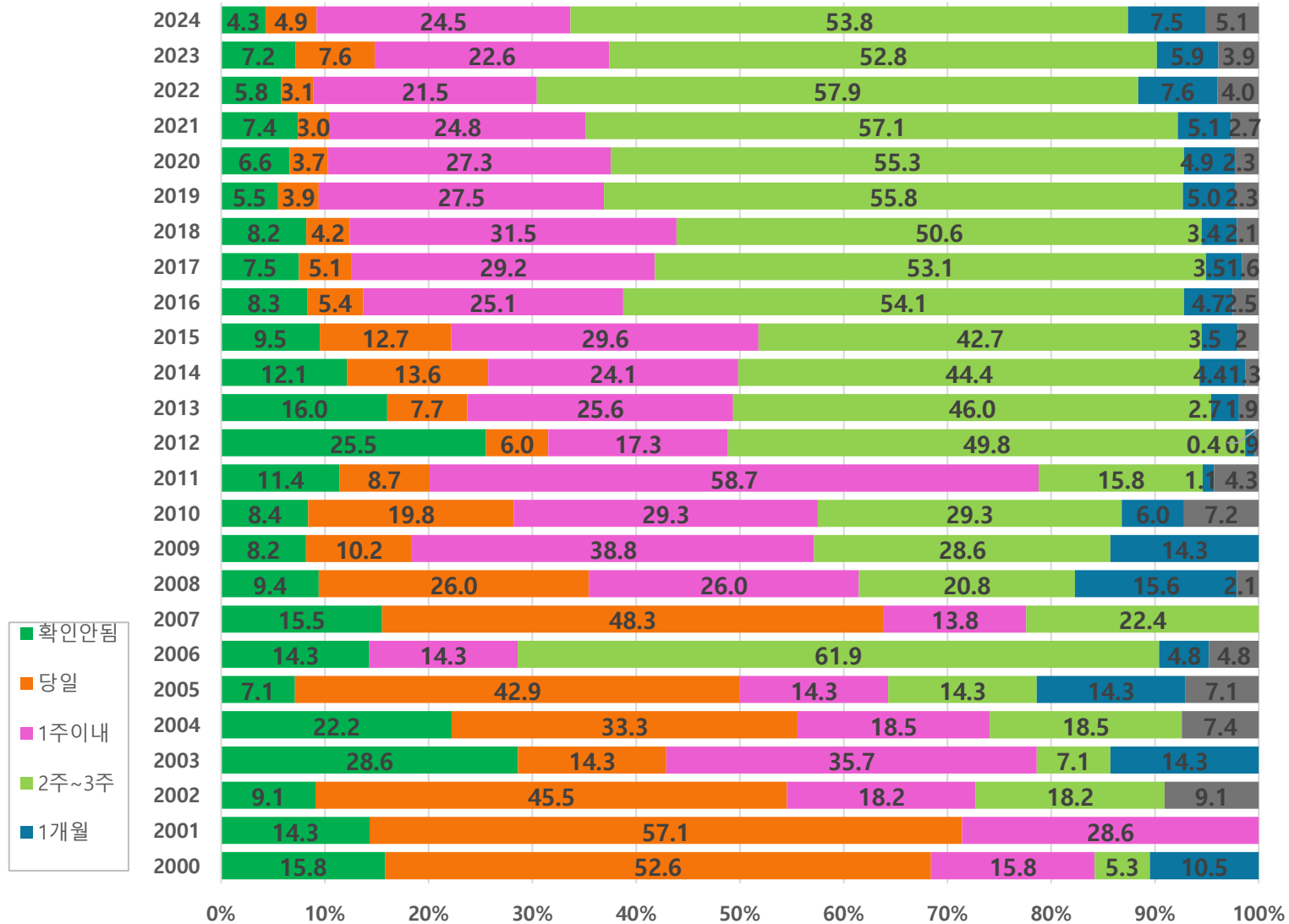


Characteristics of PD patients

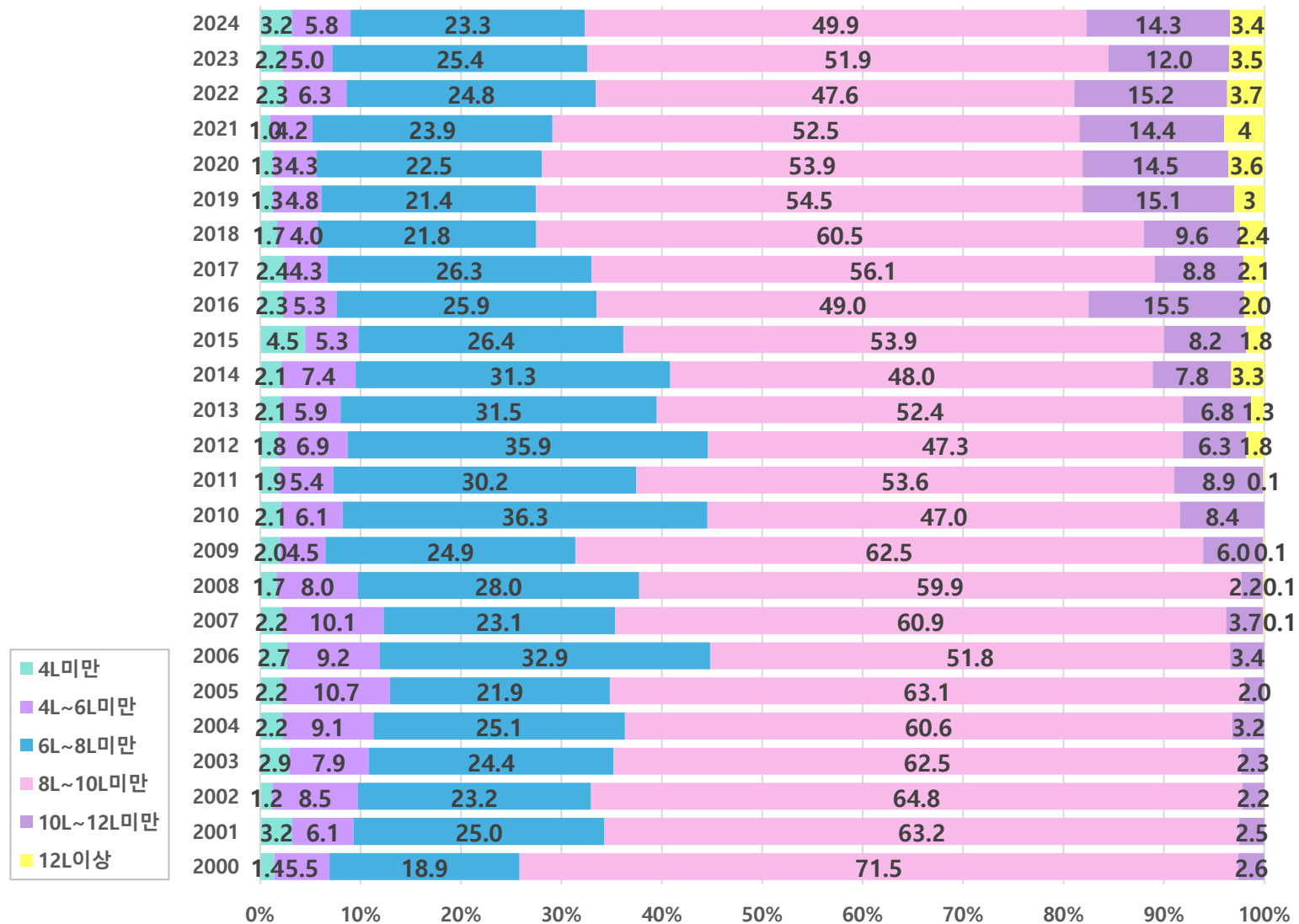
Trends in Type of Peritoneal Dialysis



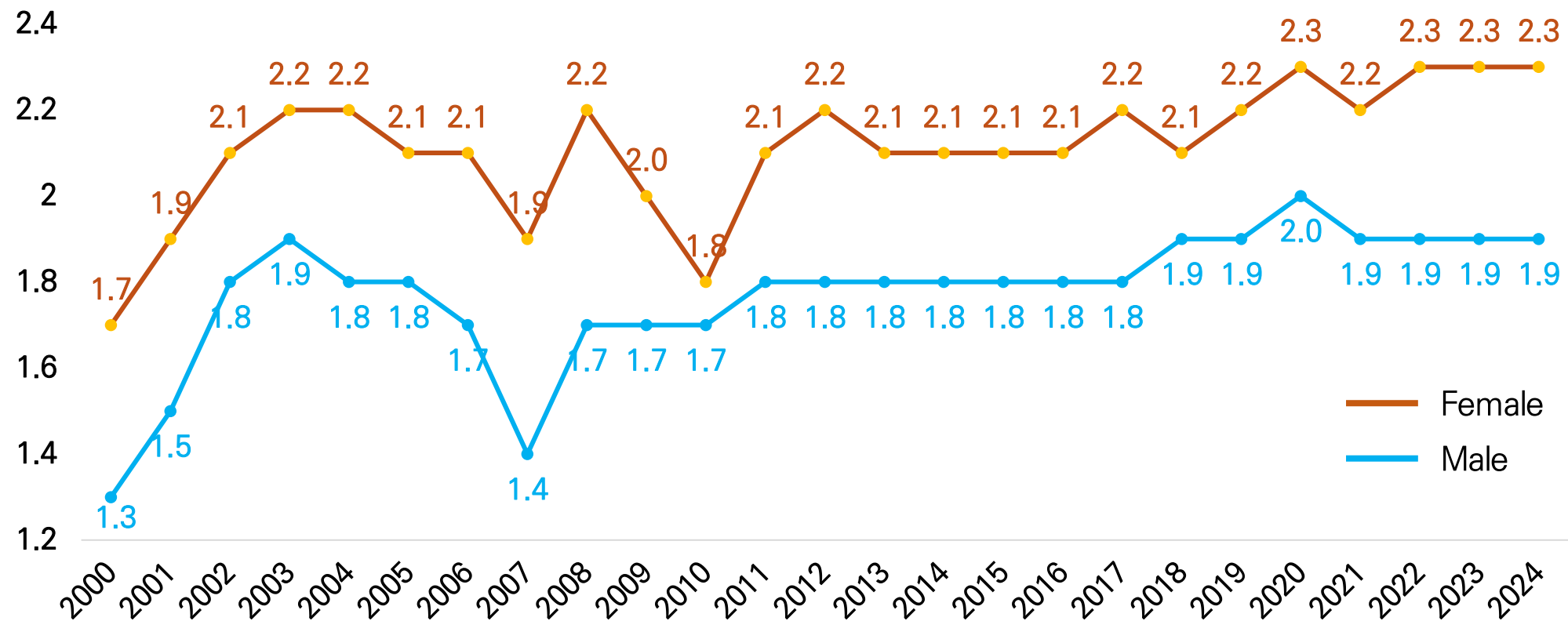
PD Catheter Insertion Break-In Period



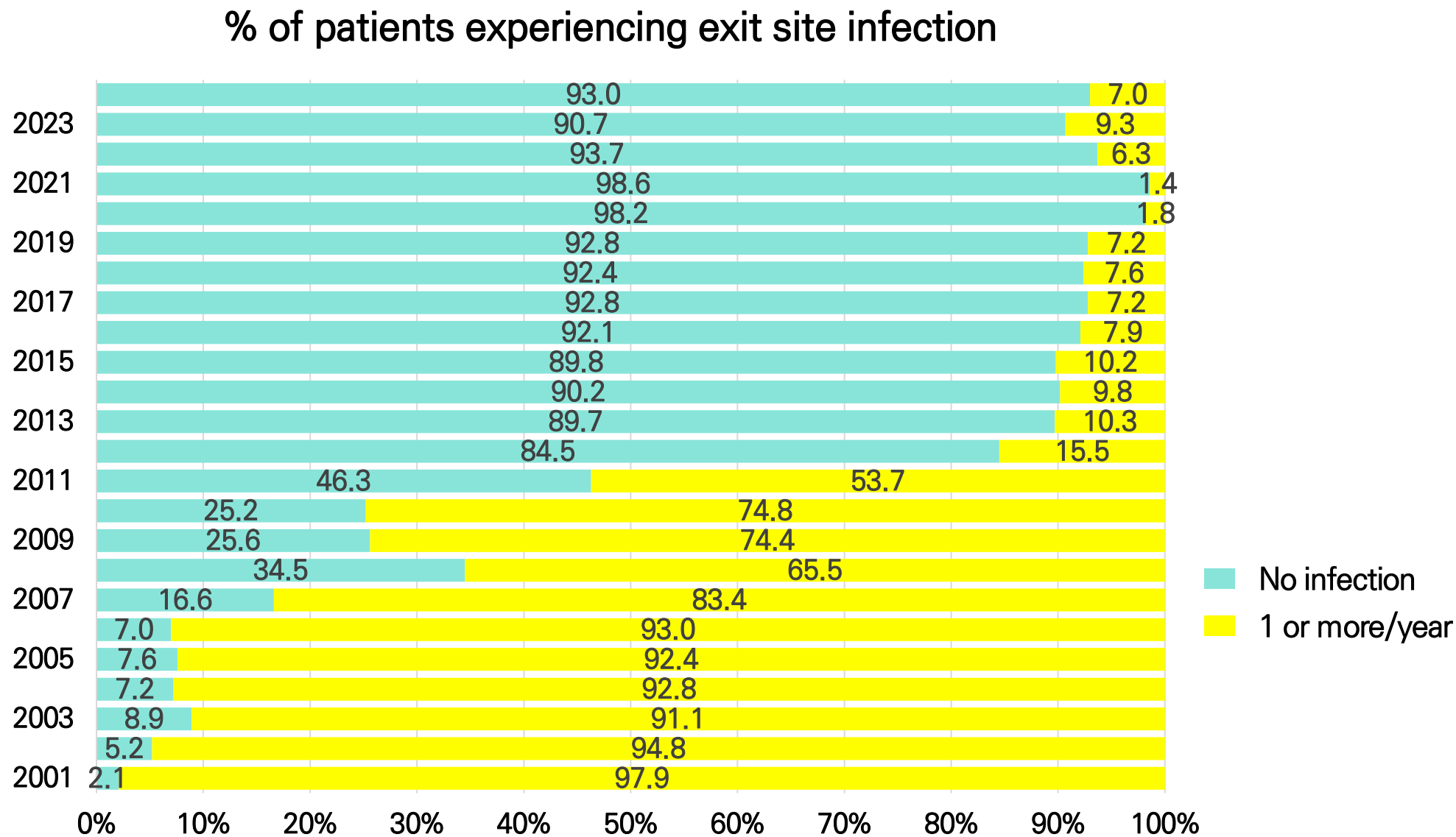
Prescriptions of PD dose per day



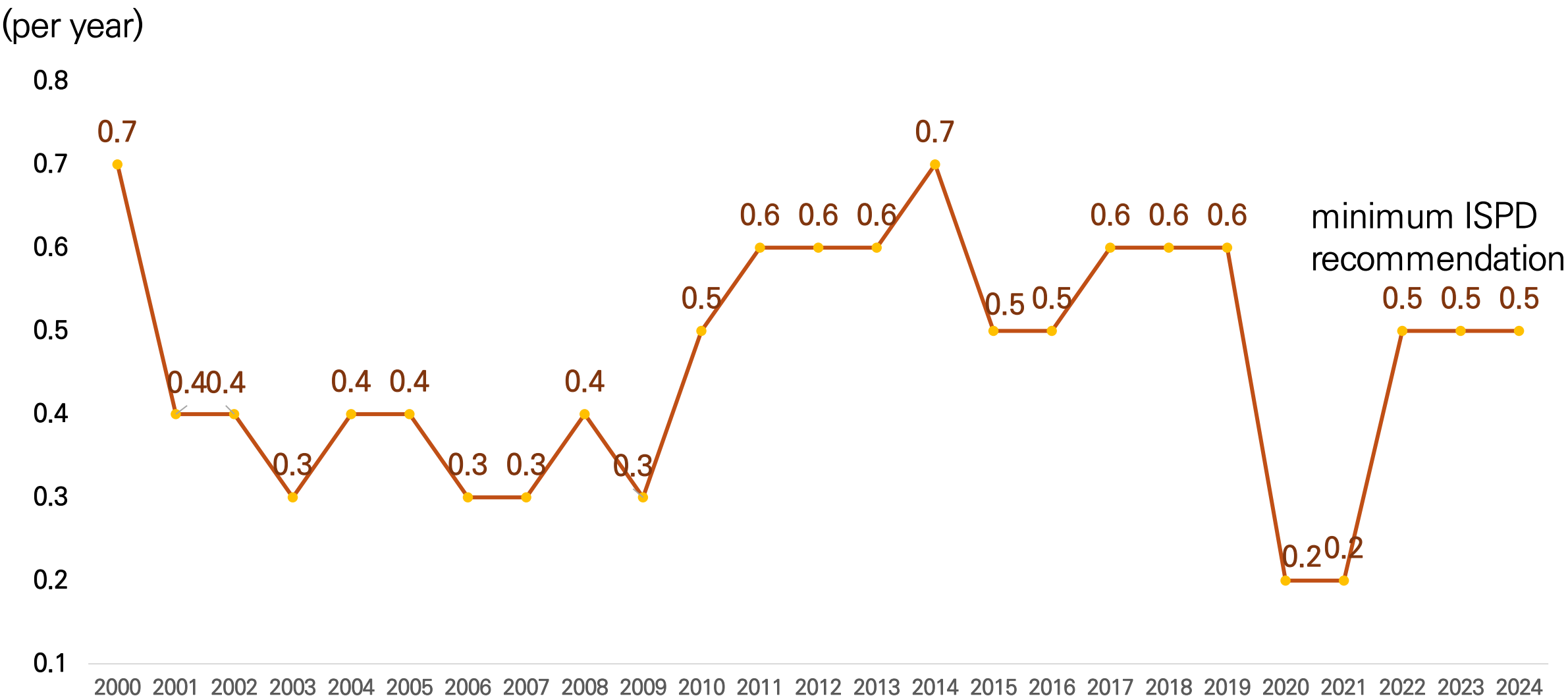
Adequacy of PD: weekly Kt/V (Dialysate)



Trends in Exit infection of PD patients (%)

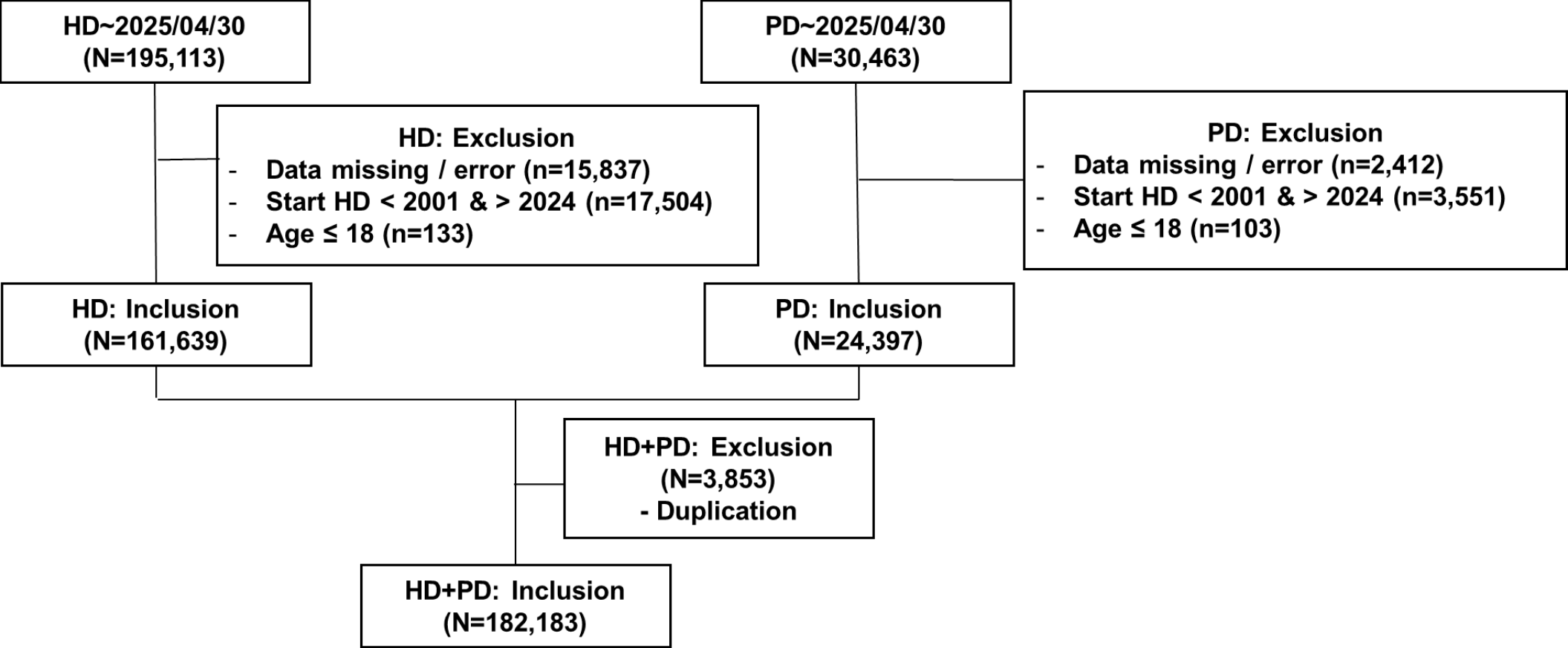


Annual occurrence of peritonitis in PD patients



II. 2024년 우리나라 말기 신부전 환자 사망률 분석 (Mortality analysis of ESKD patients in Korea, 2024)

Flow Chart of Patient Selection for the Cohort



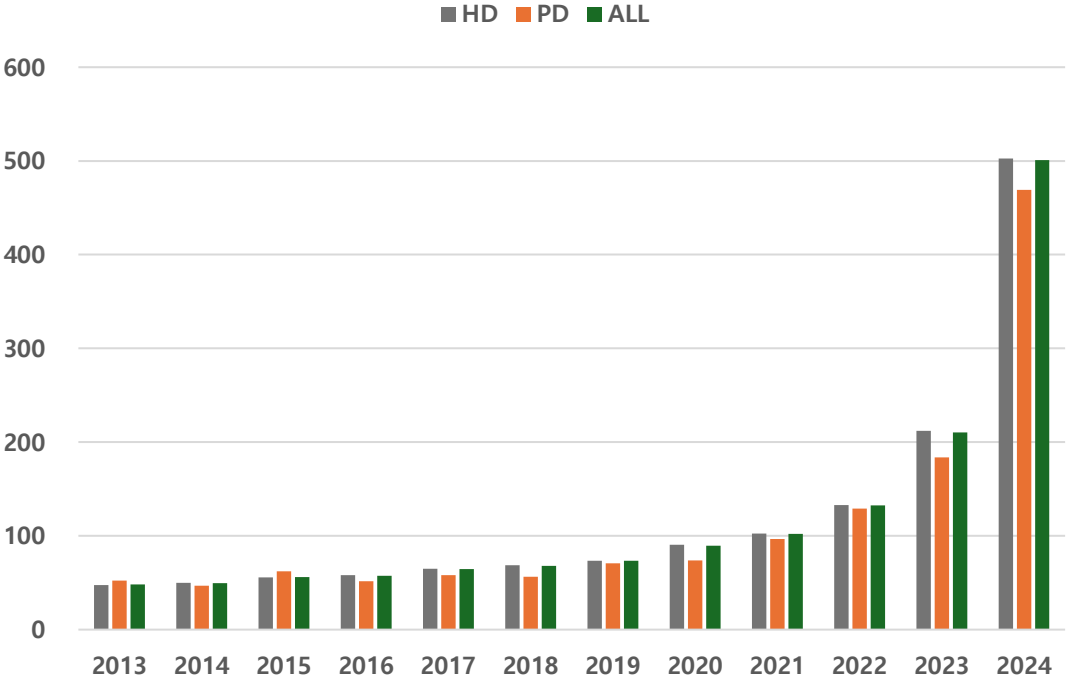
Contents

- **Hospitalization**
- **All-cause Mortality for Patients with Prevalent Dialysis**
- **Survival Probability of Incident Dialysis Patients & Causes of Death**
- **Summary**

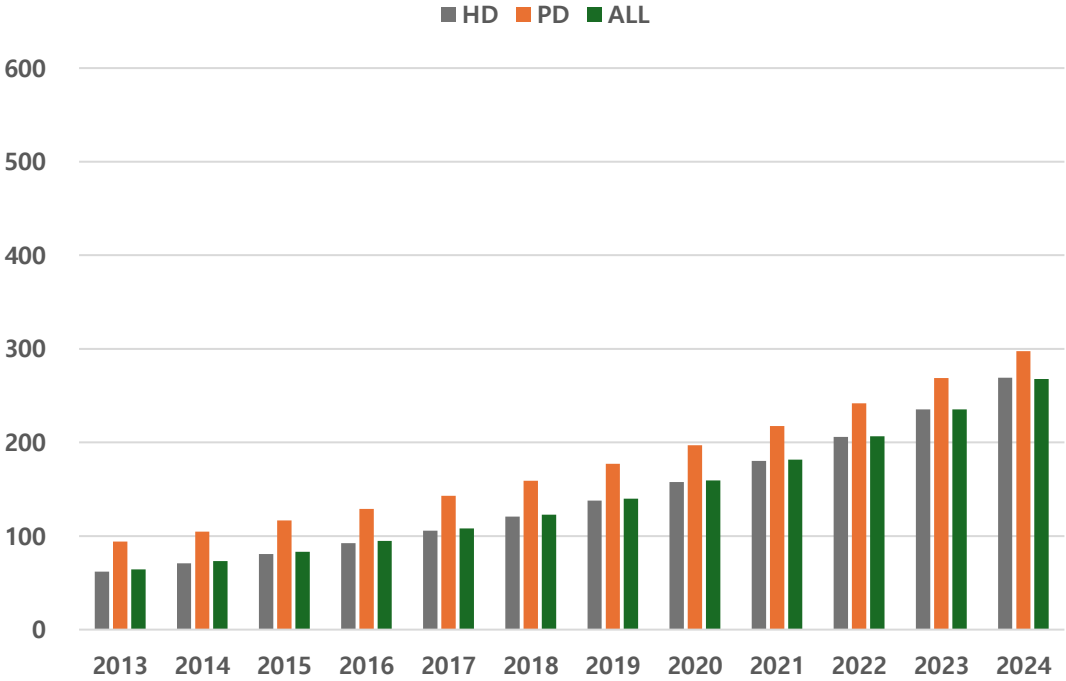
All-Cause Hospitalization for Dialysis Patients – Methods

- **Enrolled period: 2001.01.01~2024.12.31**
- **Event end date: 2024.12.31**
- **Hospitalization: Per 1,000 person-years**
- **Adjusted: Age & sex using Poisson regression model**
- **R-studio version 4.2.1**

All-Cause Hospitalization Rates in Dialysis Patients by Treatment Modality



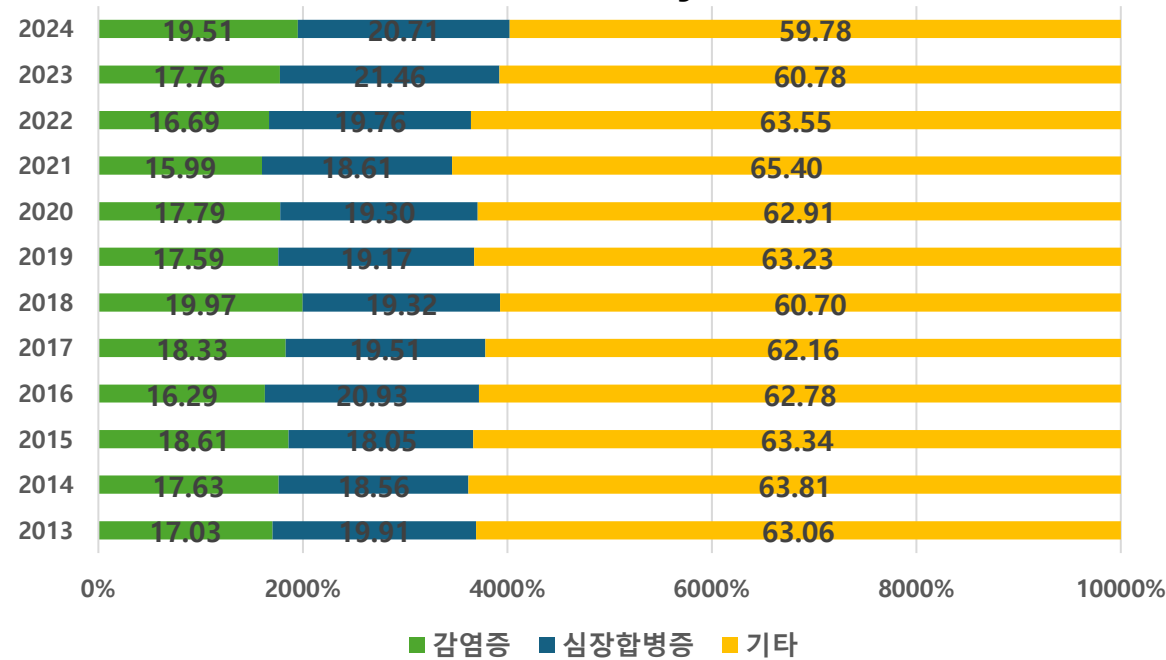
Unadjusted



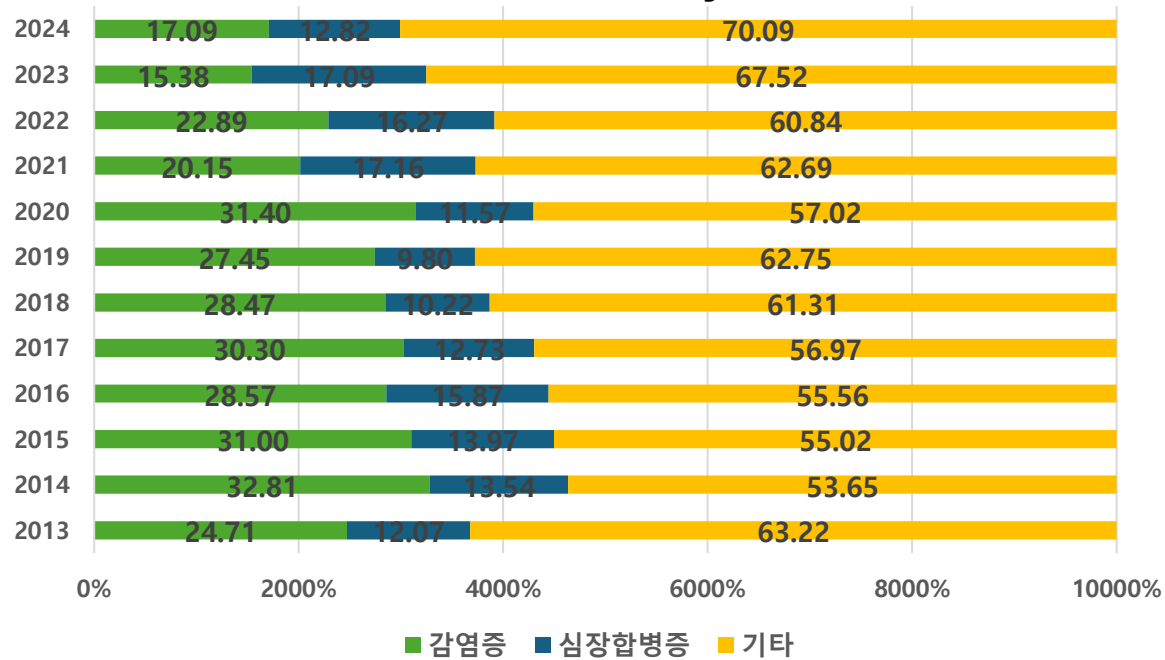
Adjusted by age & sex

Cause of Hospitalization in Dialysis Patients

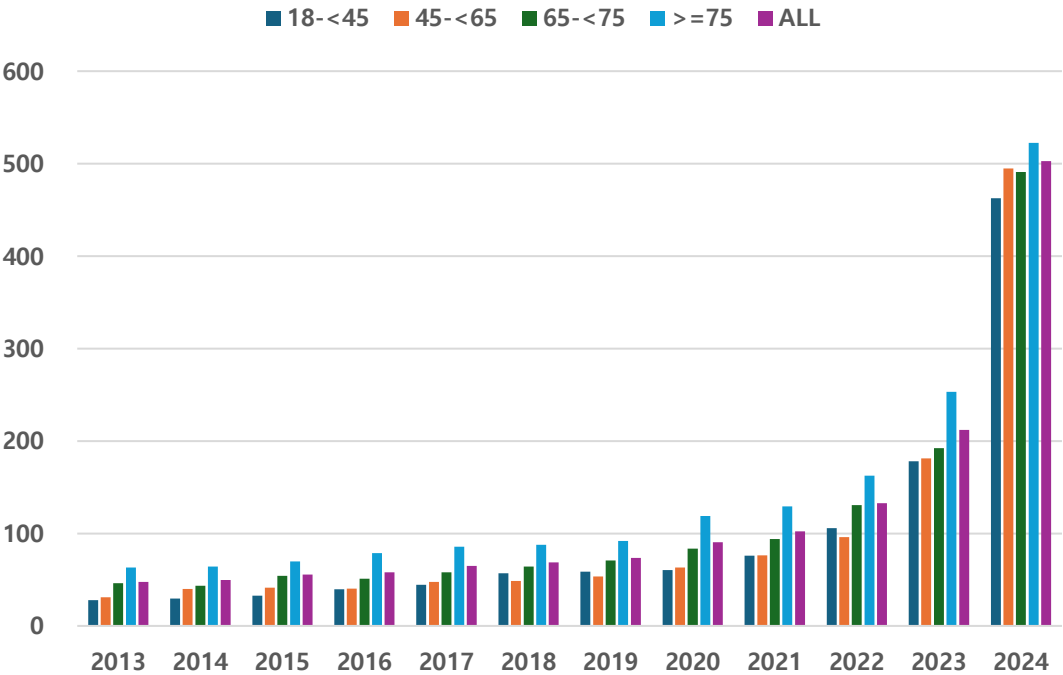
Hemodialysis



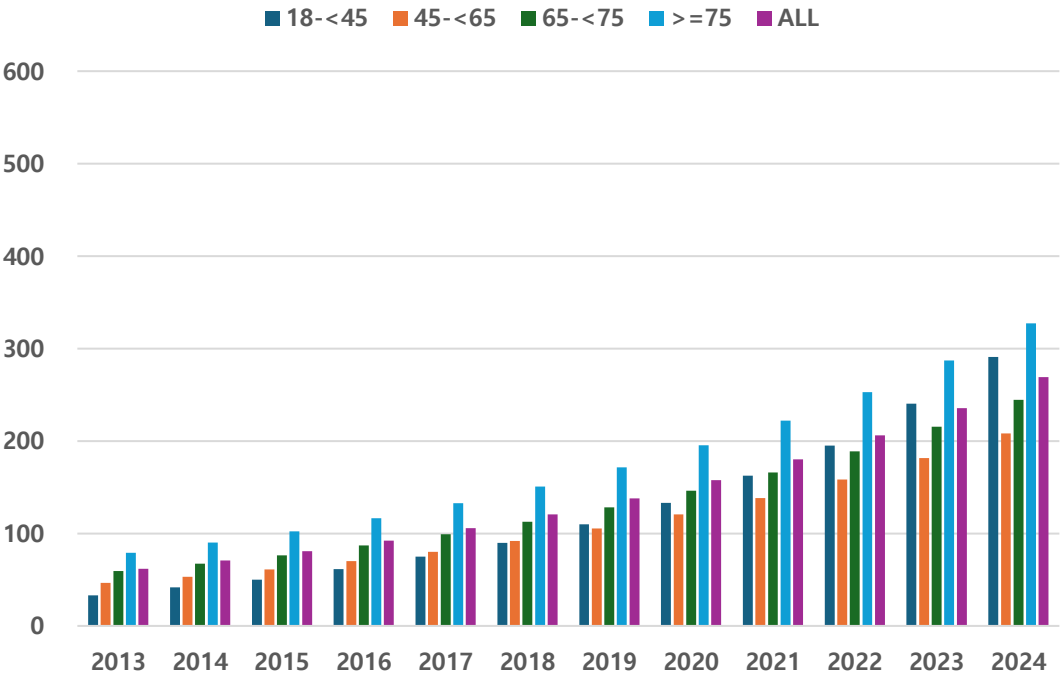
Peritoneal Dialysis



All-Cause Hospitalization Rates in HD Patients by Age

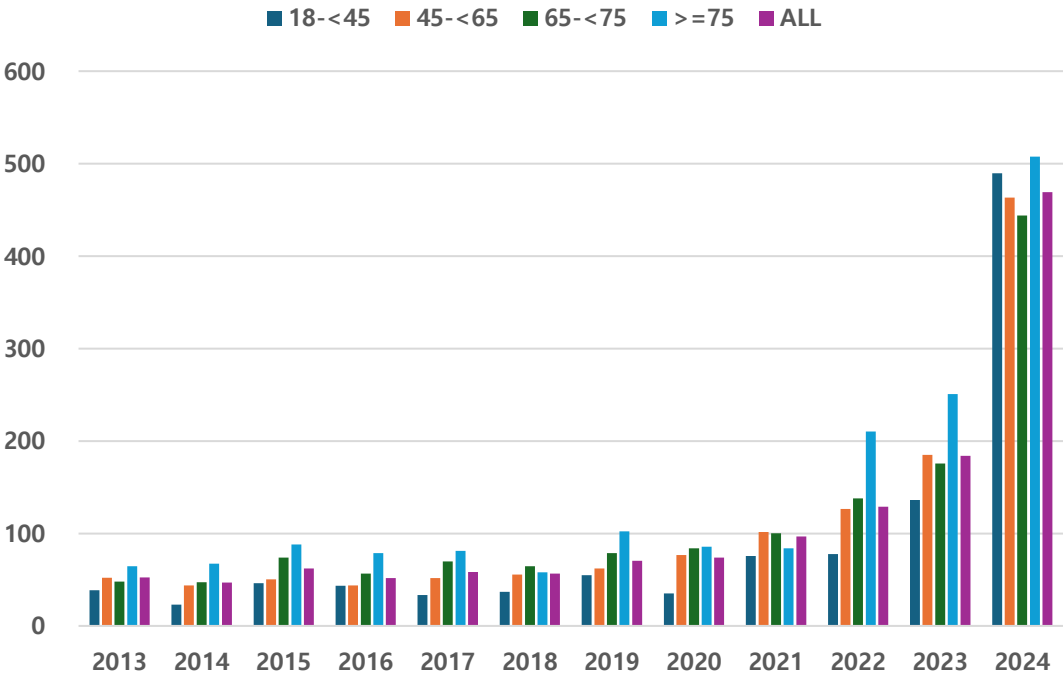


Unadjusted

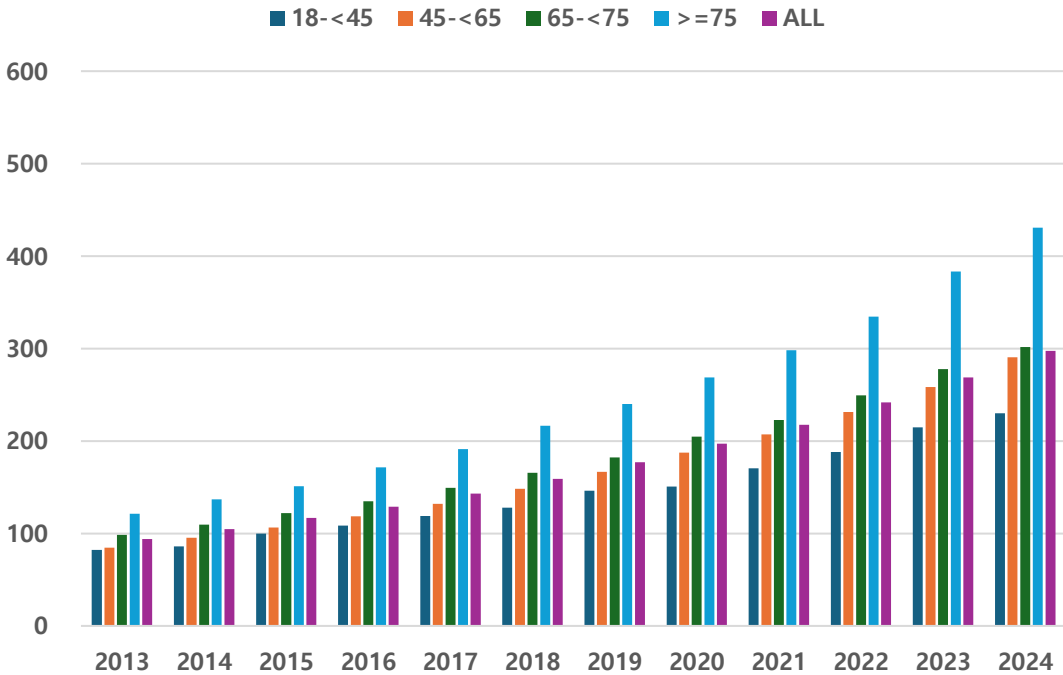


Adjusted by sex

All-Cause Hospitalization Rates in PD Patients by Age



Unadjusted

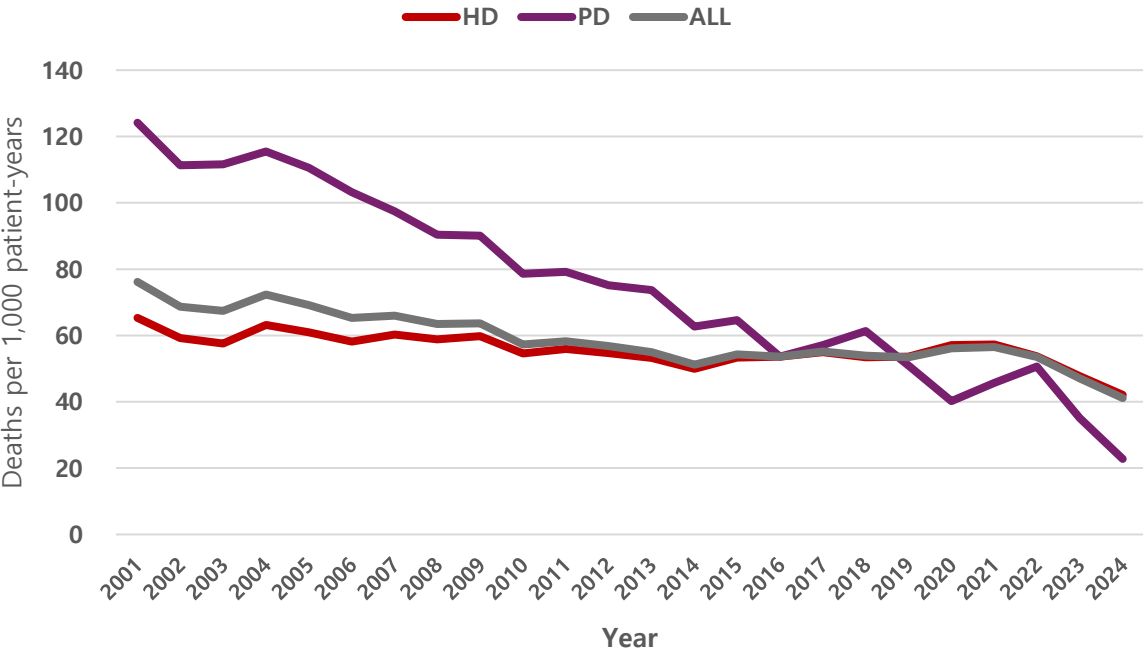


Adjusted by sex

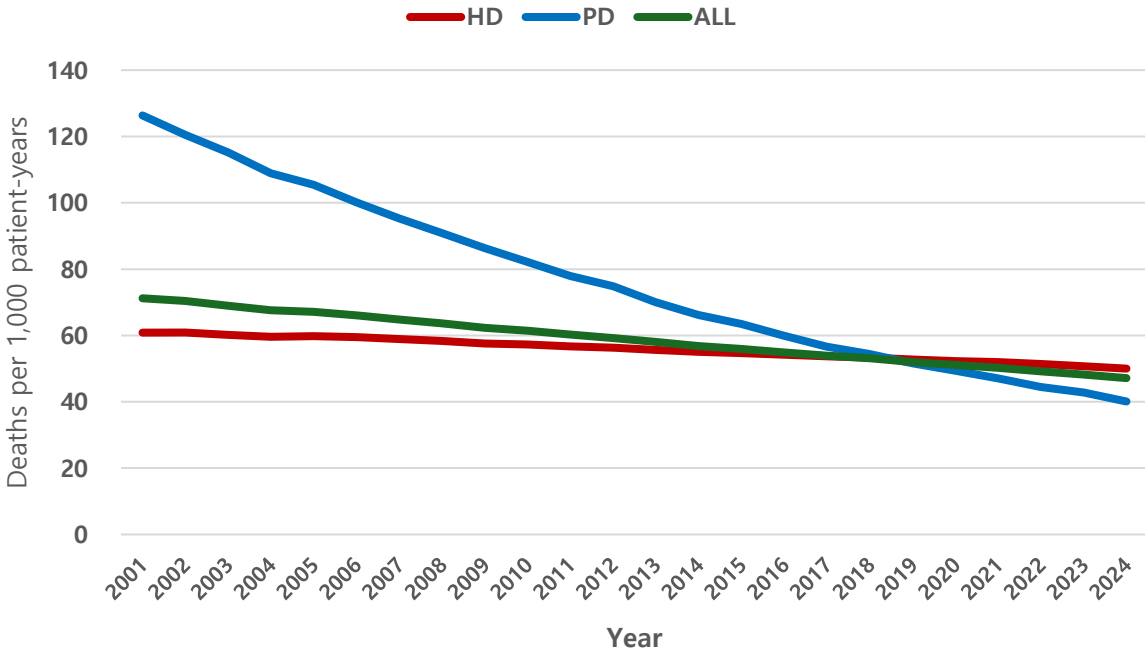
All-Cause Mortality for Patients with Prevalent Dialysis – Methods

- **Enrolled period: 2001.01.01~2024.12.31**
- **Event end date: 2024.12.31**
- **Mortality**
 - 1) **Per 1,000 person-years for death rate: Poisson regression model, adjusted by age and sex**
 - 2) **Survival probability: Cox regression model**
 - **Adjusted by age, sex, and the year of dialysis onset**
 - **Transplant as competing risk**
- **R studio version 4.2.1**

All-Cause Mortality in Dialysis Patients by Treatment Modality

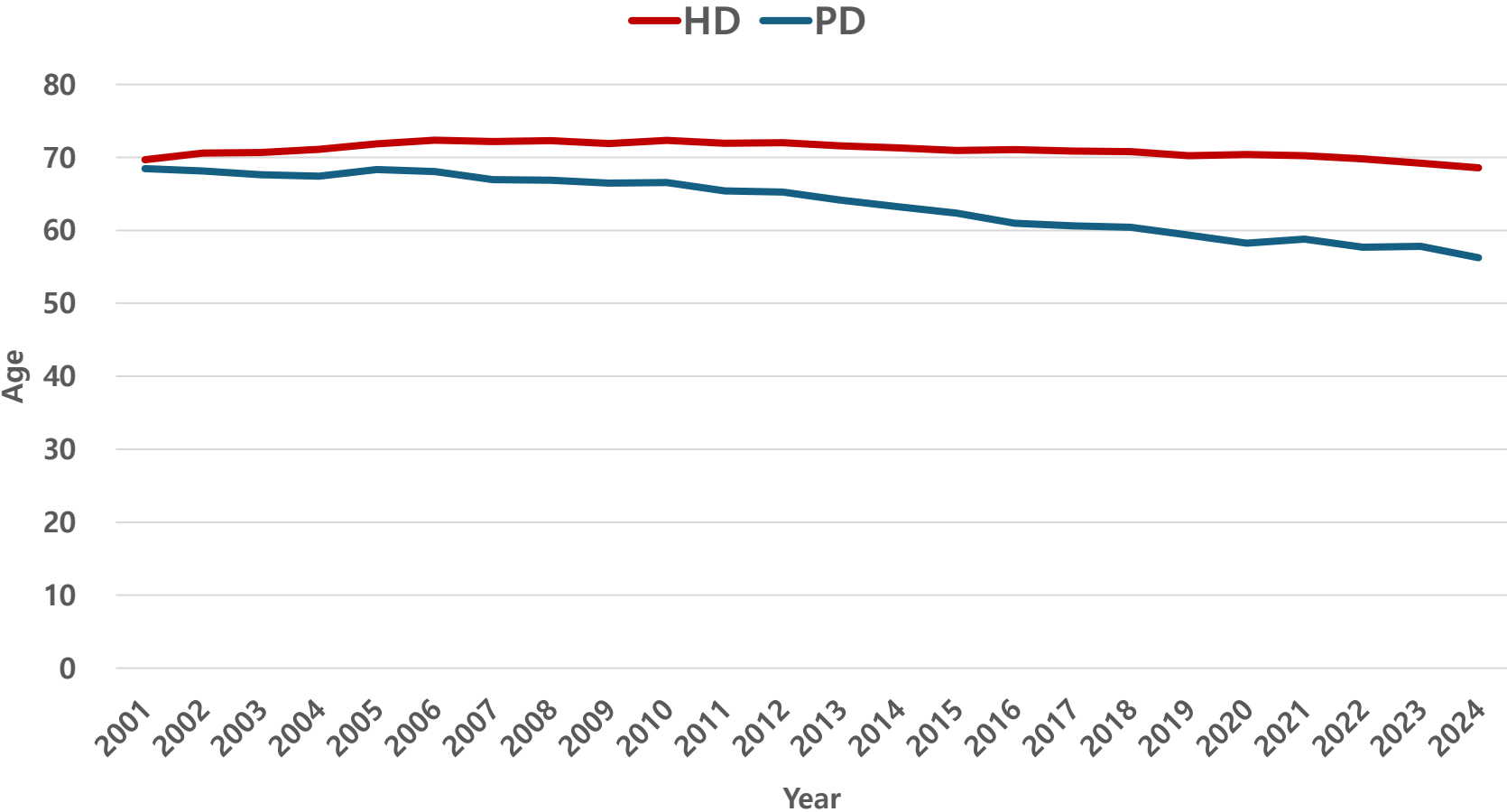


Unadjusted

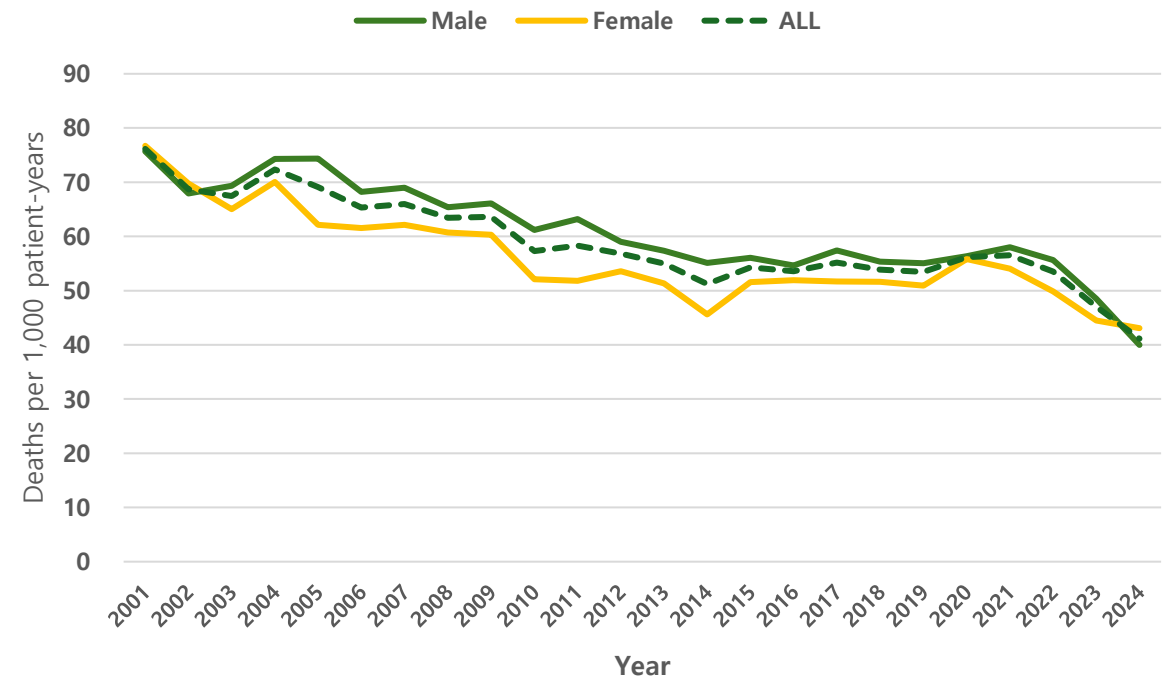


Adjusted by age & sex

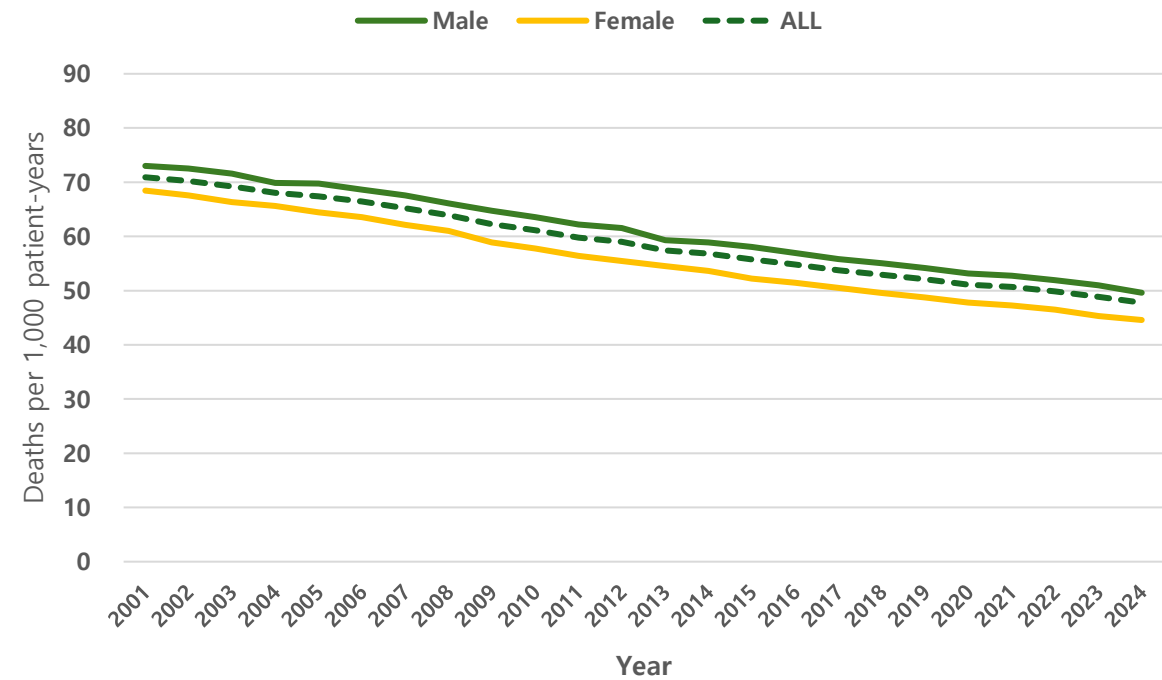
Mean Age of the Patients at the Dialysis Initiation by Treatment Modality



All-Cause Mortality in Dialysis Patients by Sex

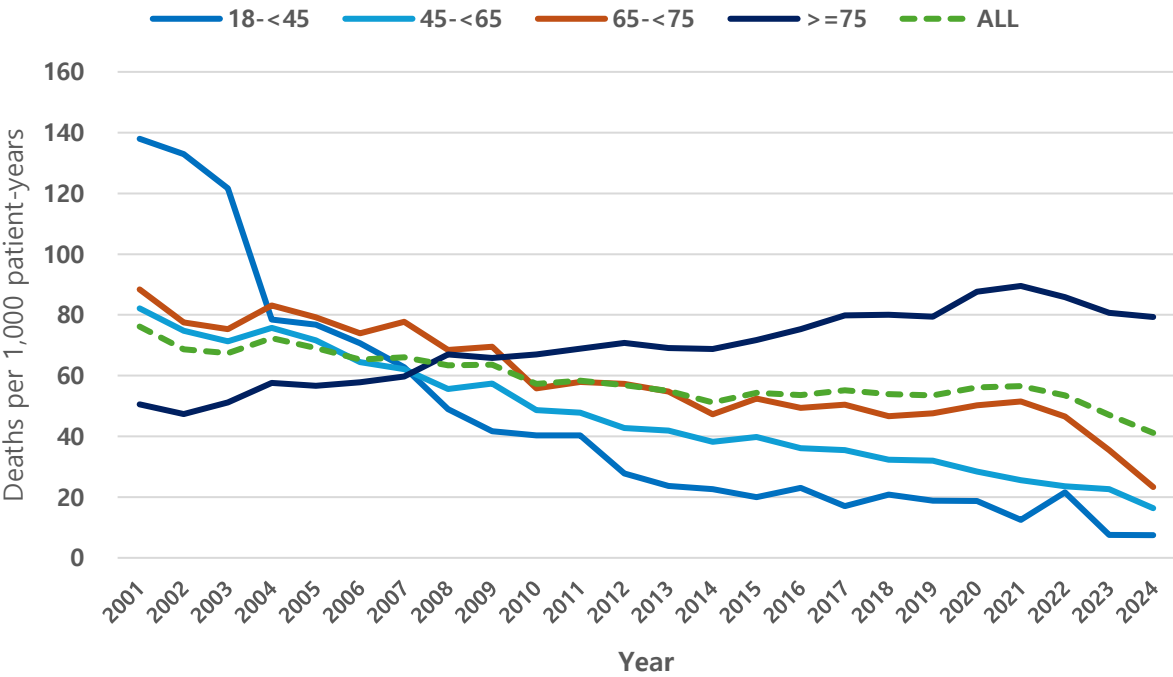


Unadjusted

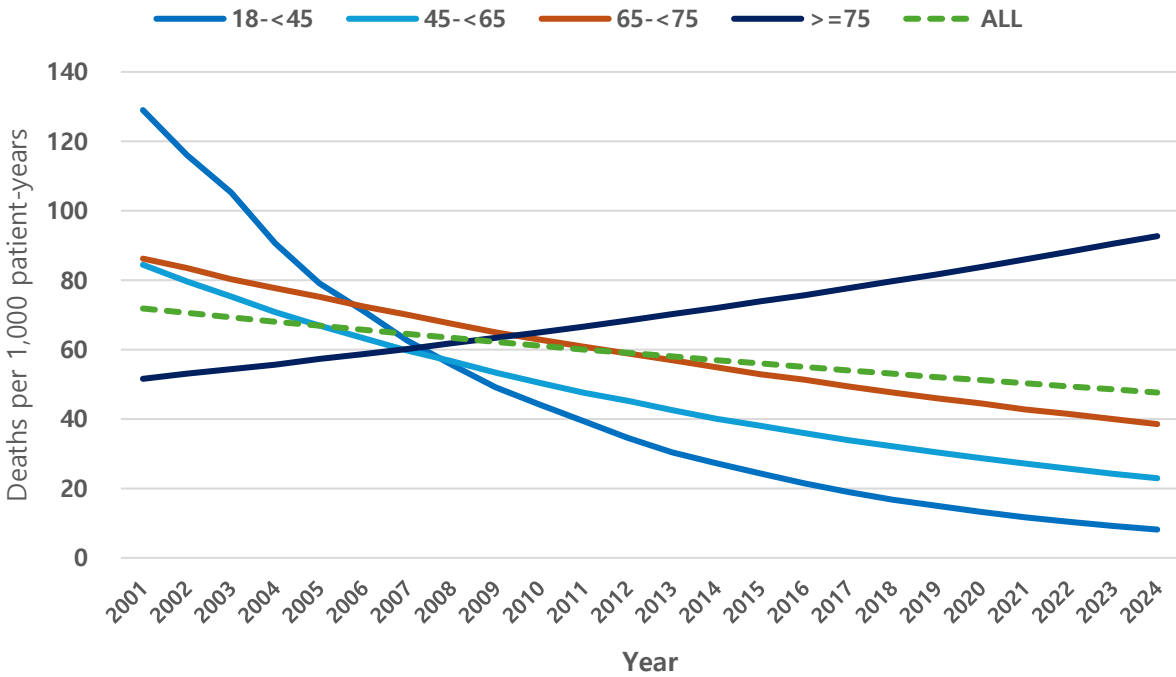


Adjusted by age & modality

All-Cause Mortality in Dialysis Patients by Four Age Subgroups

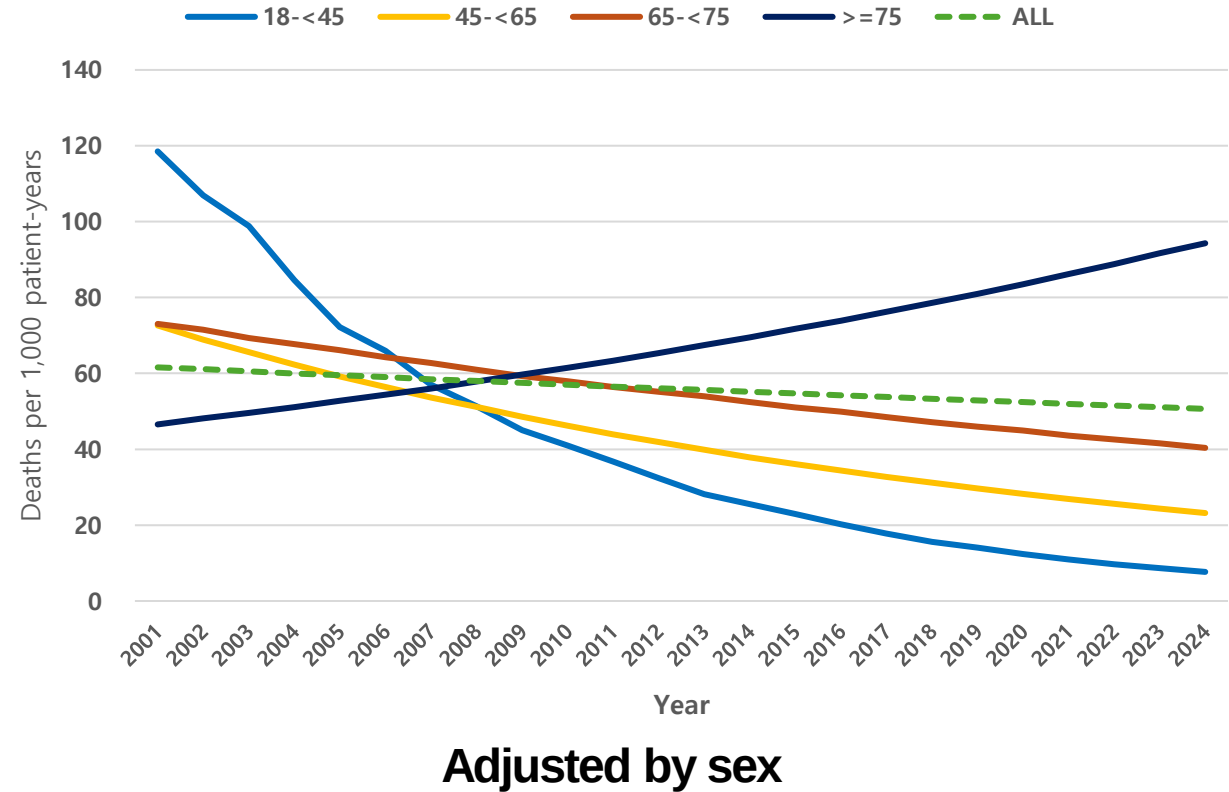
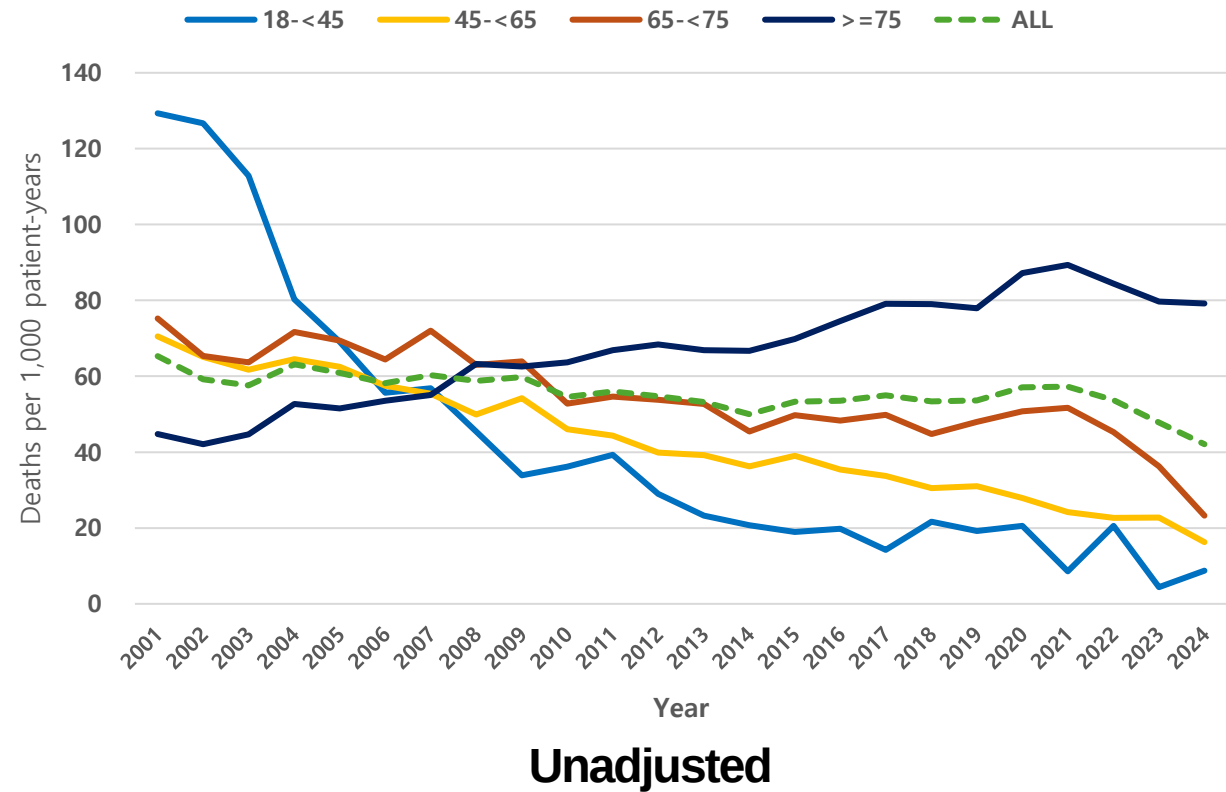


Unadjusted

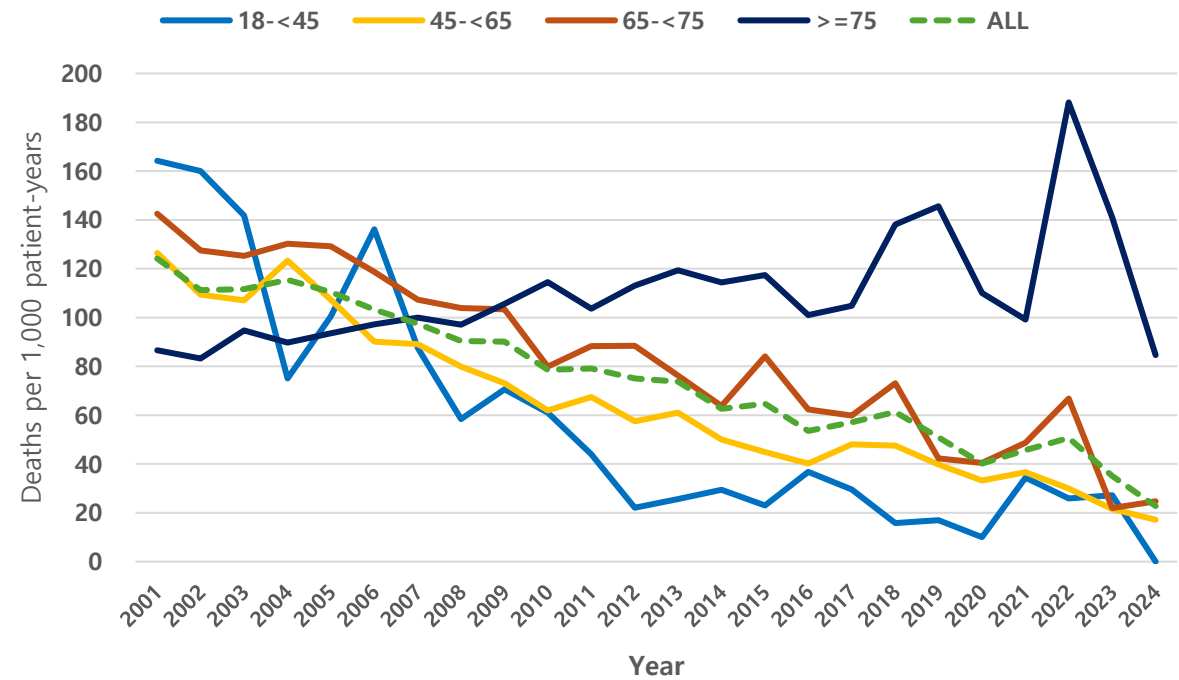


Adjusted by sex

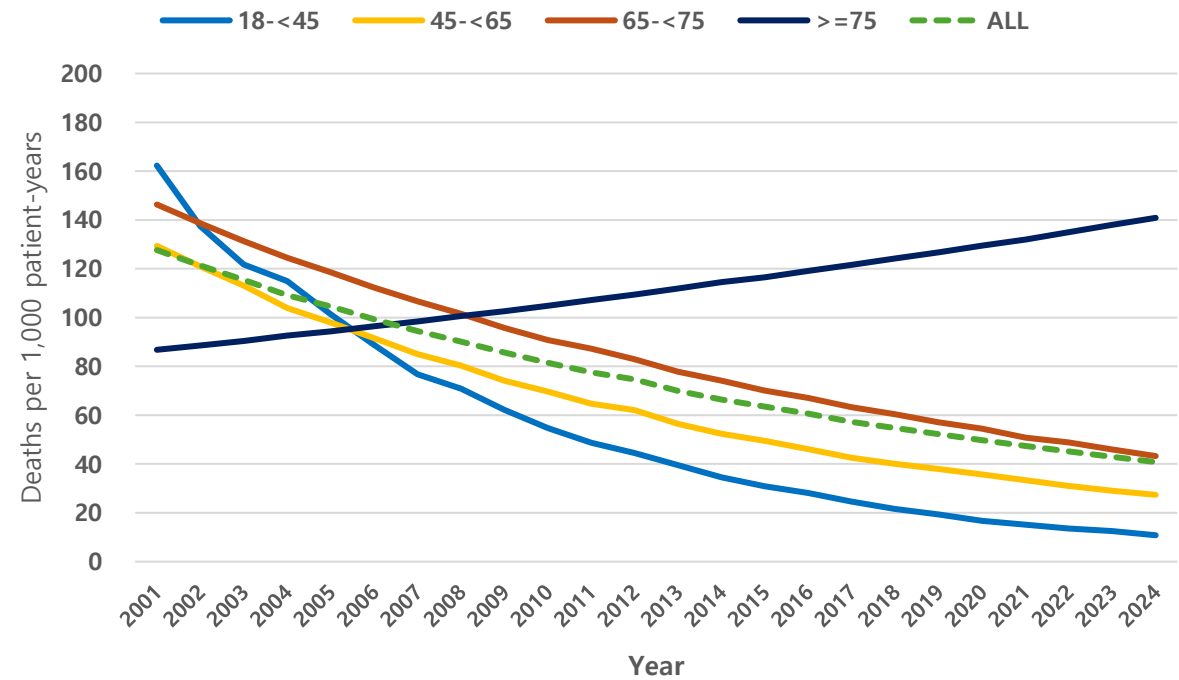
All-Cause Mortality in HD Patients by Four Age Subgroups



All-Cause Mortality in PD Patients by Four Age Subgroups



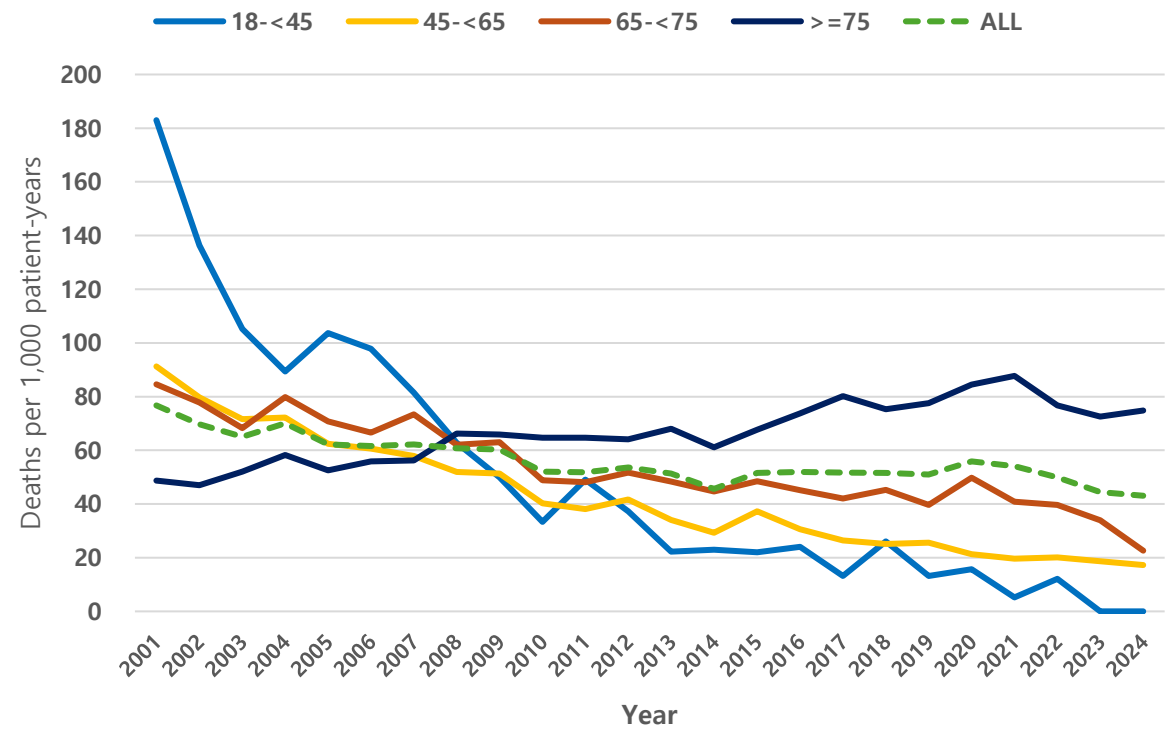
Unadjusted



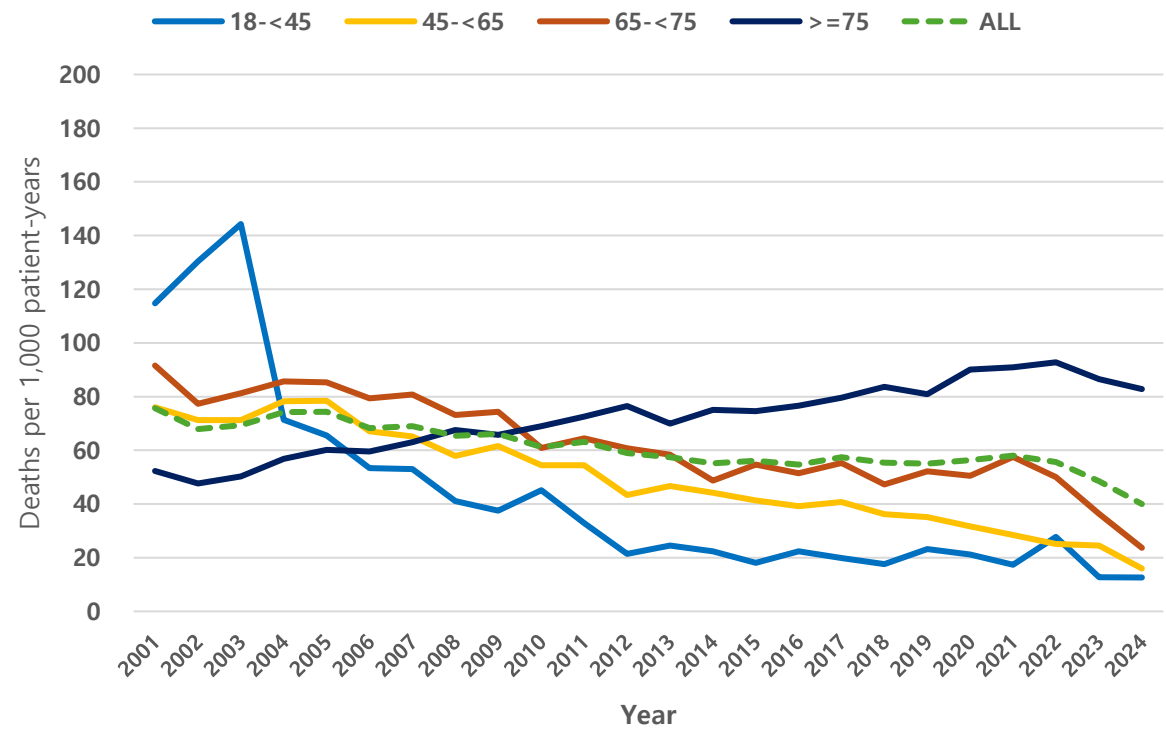
Adjusted by sex

All-Cause Mortality in Dialysis Patients by Four Age Subgroups across Sex

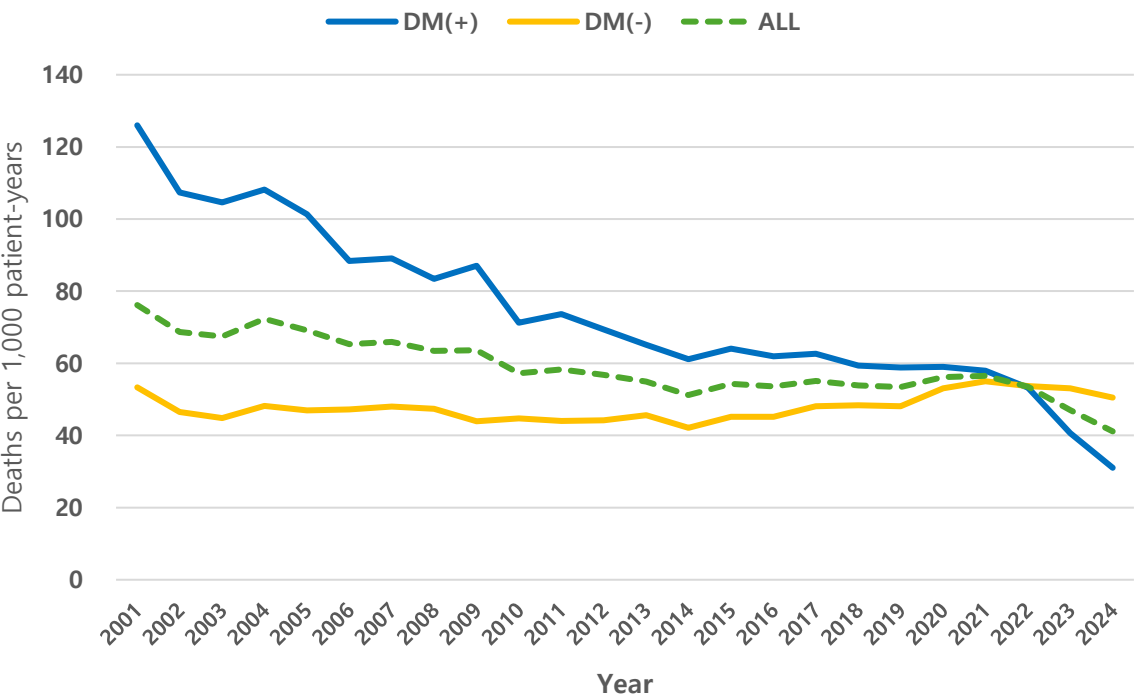
Female



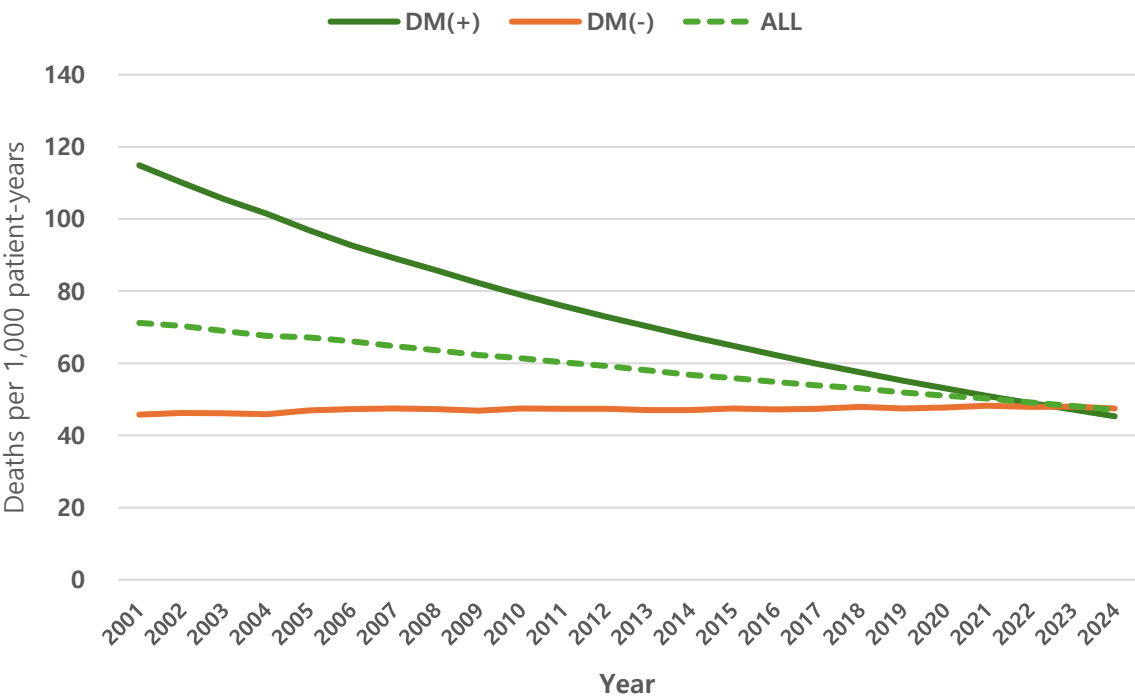
Male



All-Cause Mortality in Dialysis Patients by DM

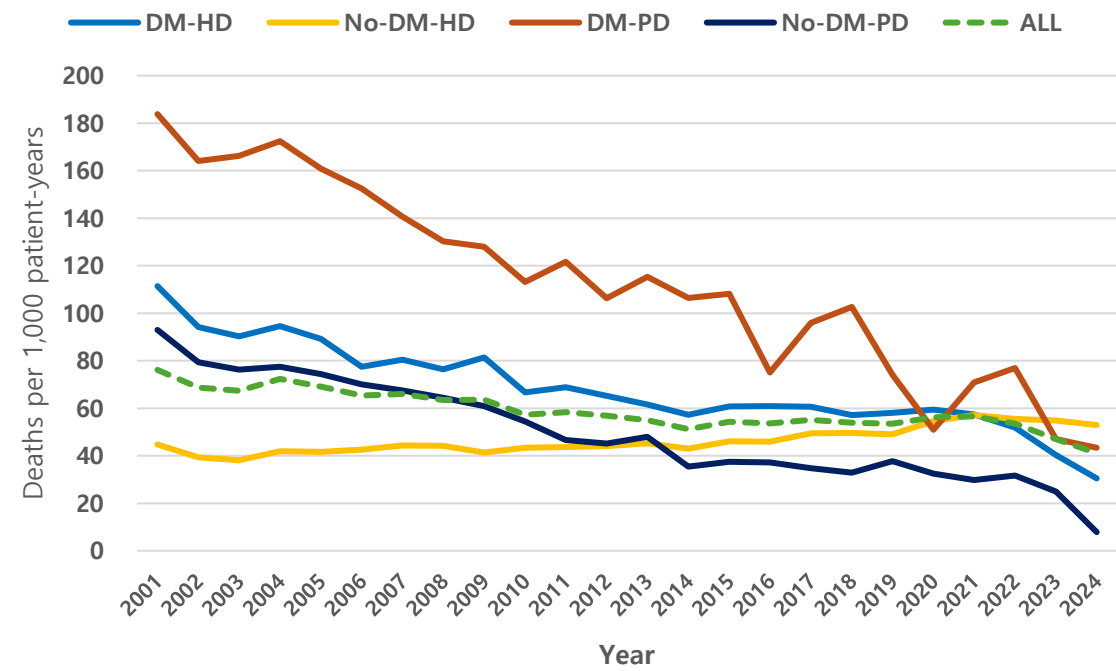


Unadjusted

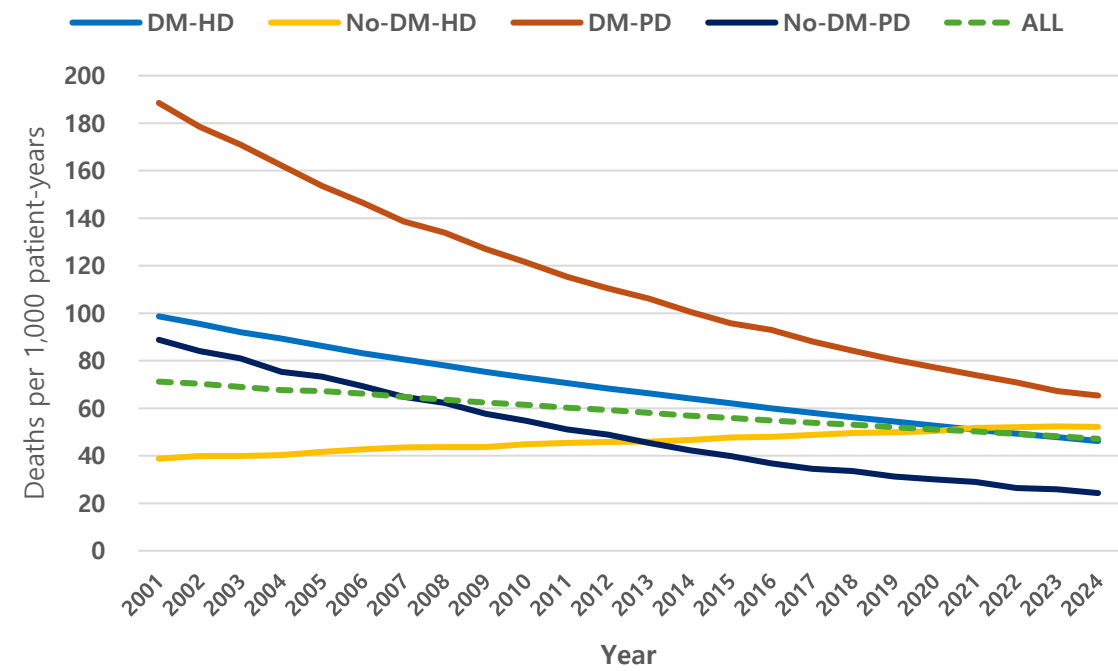


Adjusted by age and sex

All-Cause Mortality in Dialysis Patients by DM and Treatment Modality

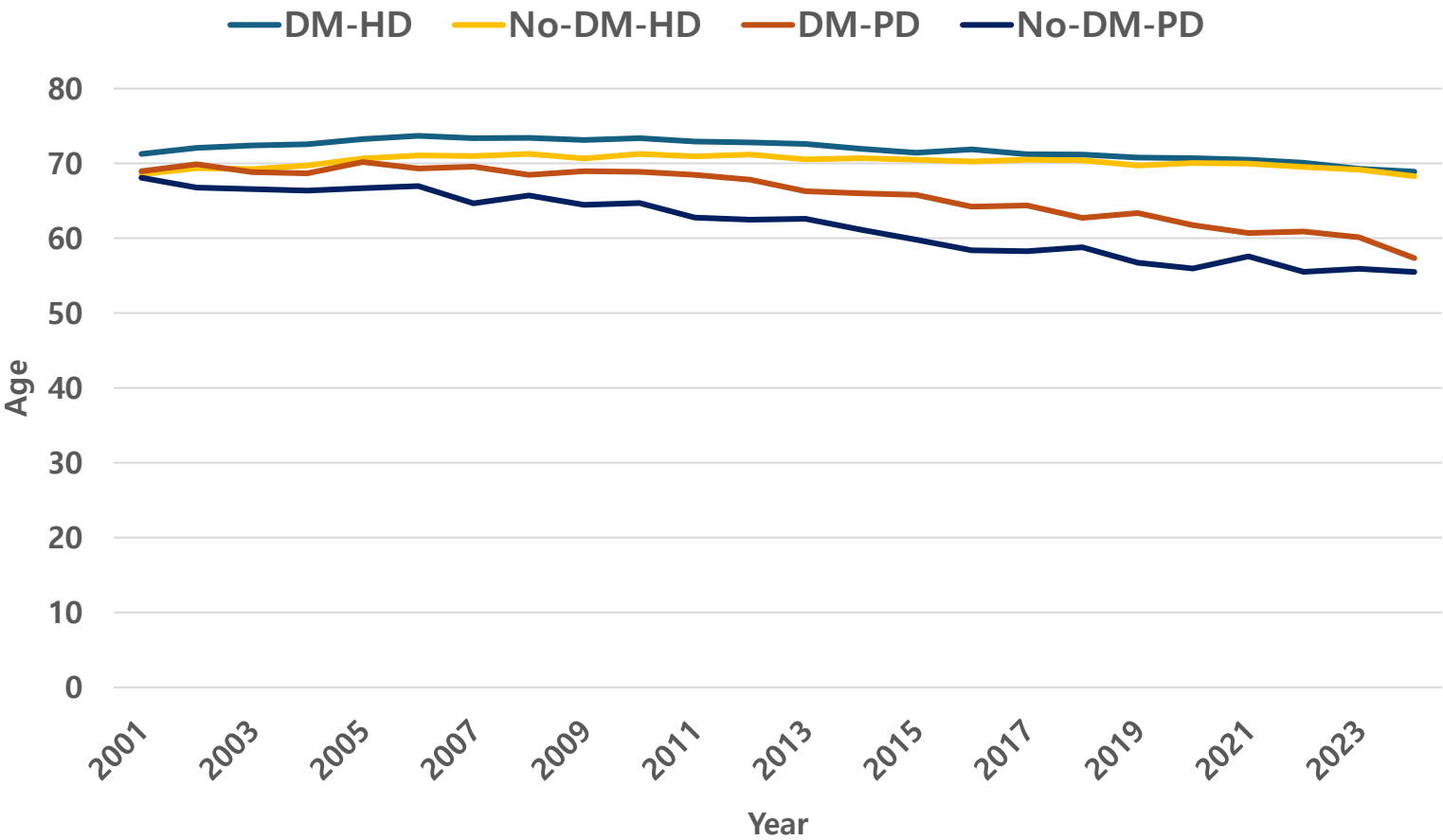


Unadjusted

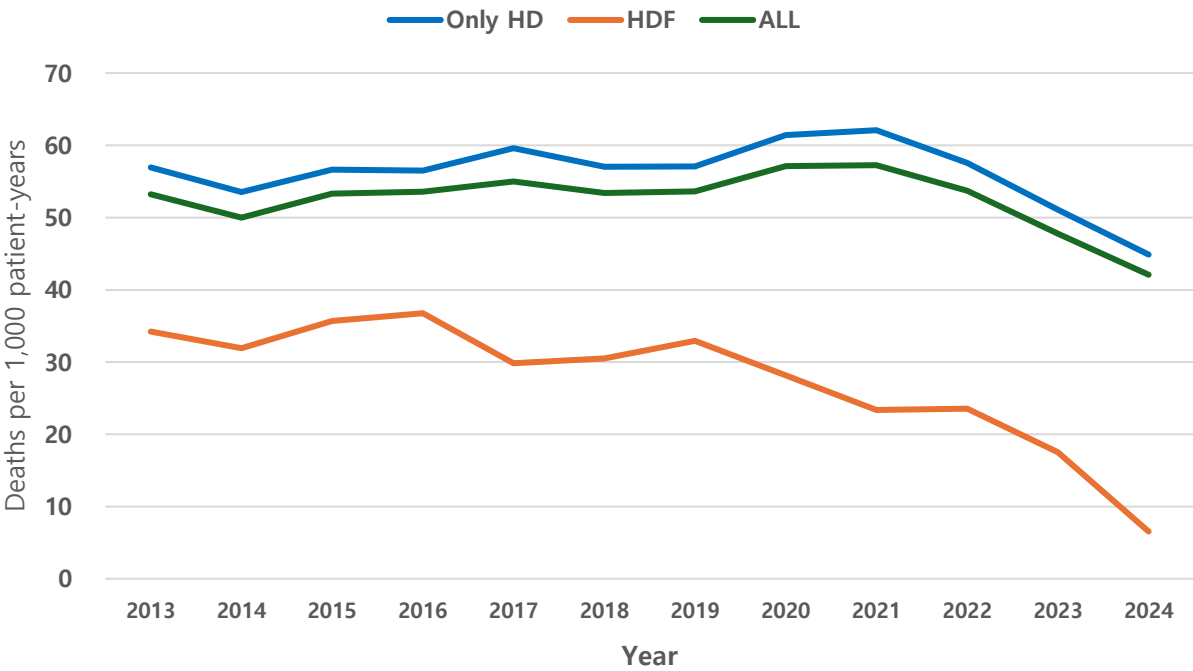


Adjusted by age & sex

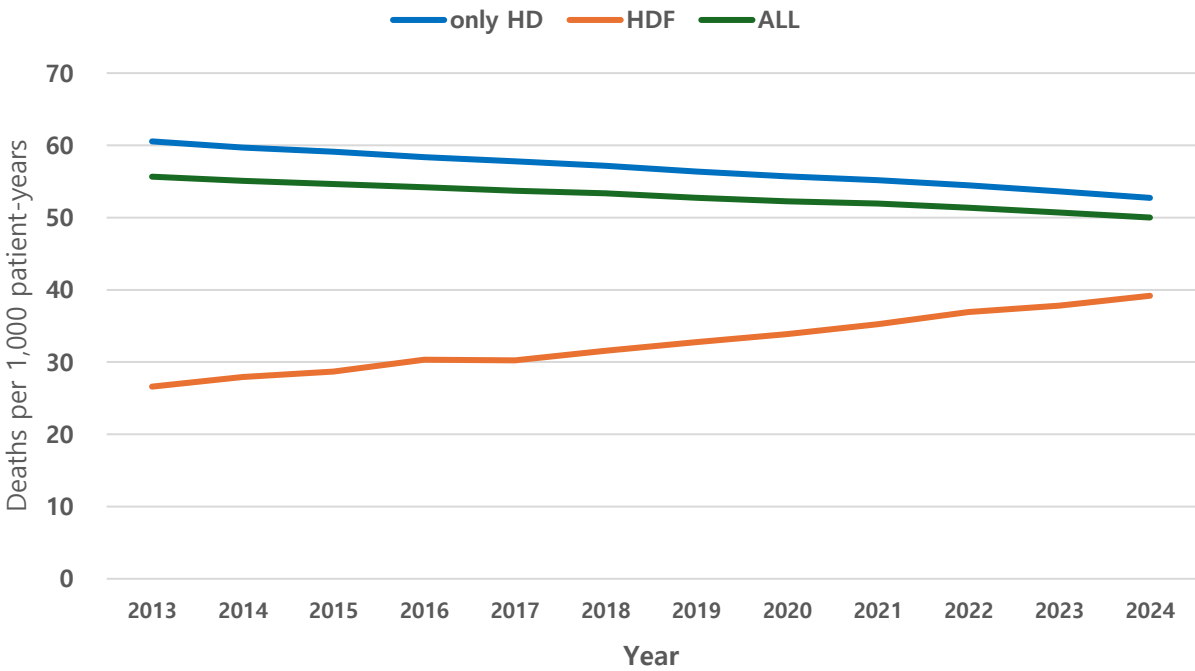
Mean Age of the Prevalent Dialysis Patients by DM and Treatment Modality



All-Cause Mortality in Dialysis Patients by HD Technique – HD vs. HDF

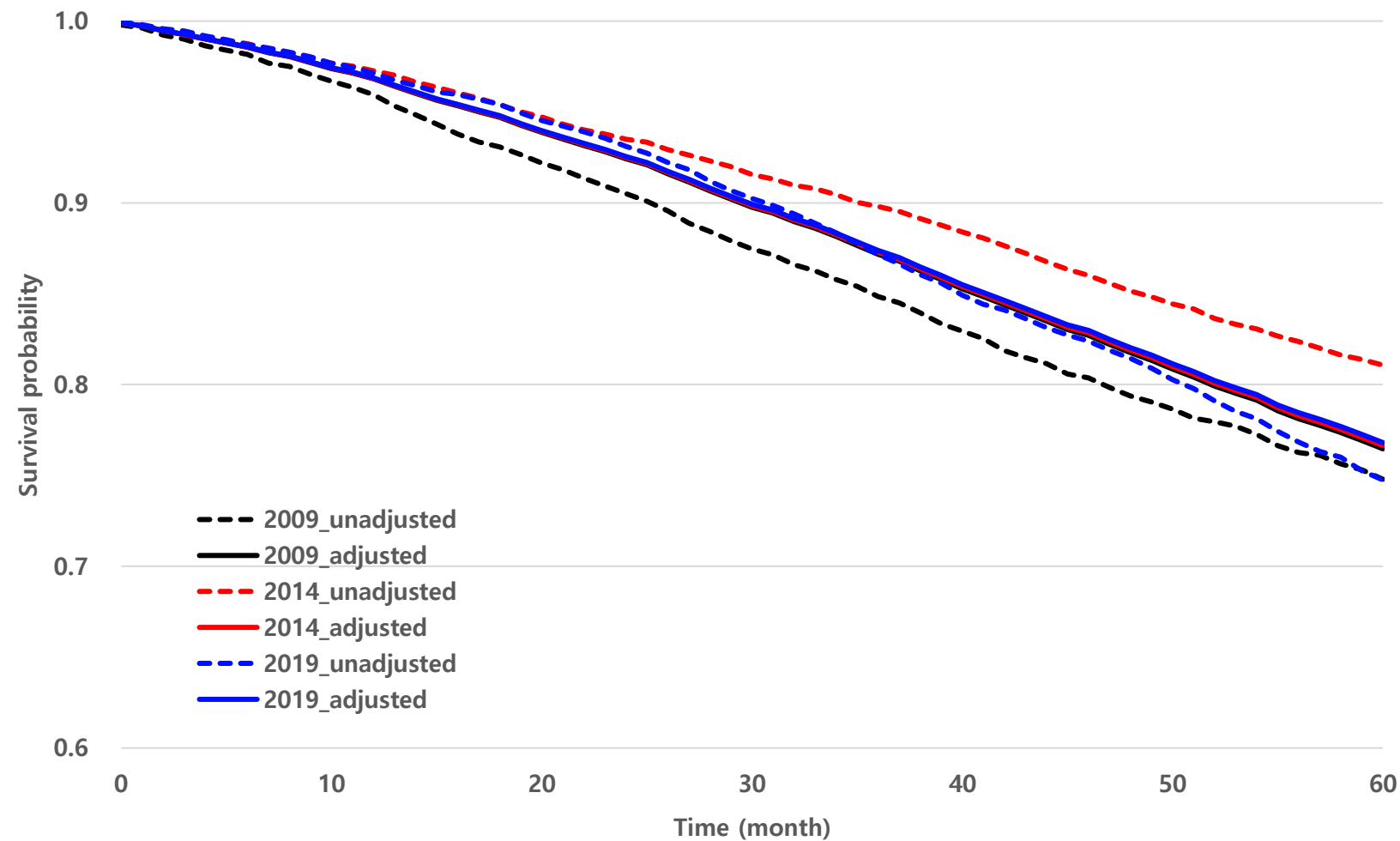


Unadjusted

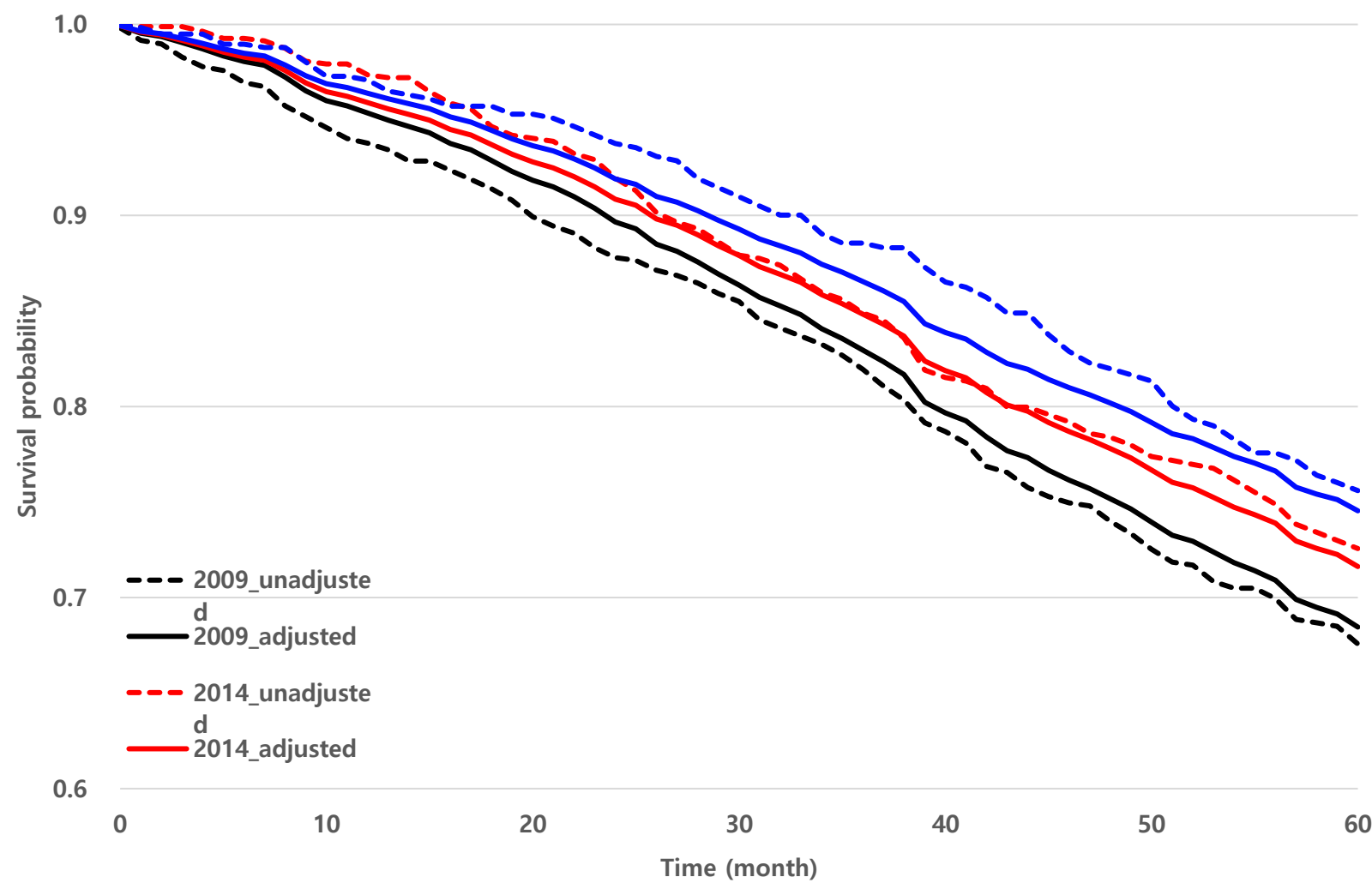


Adjusted by age & sex

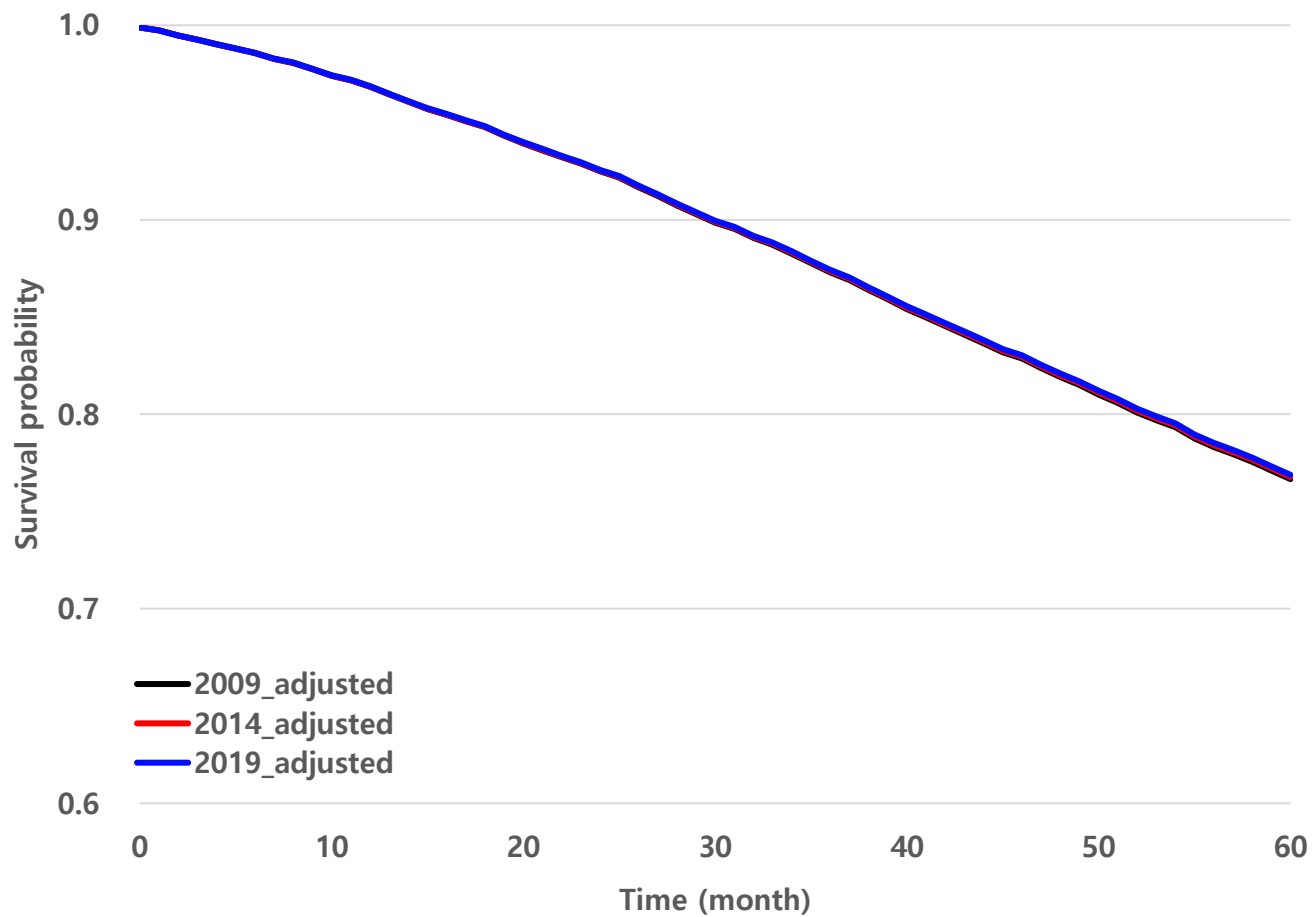
Survival Probability of Incident HD Patients over the First 5 Years



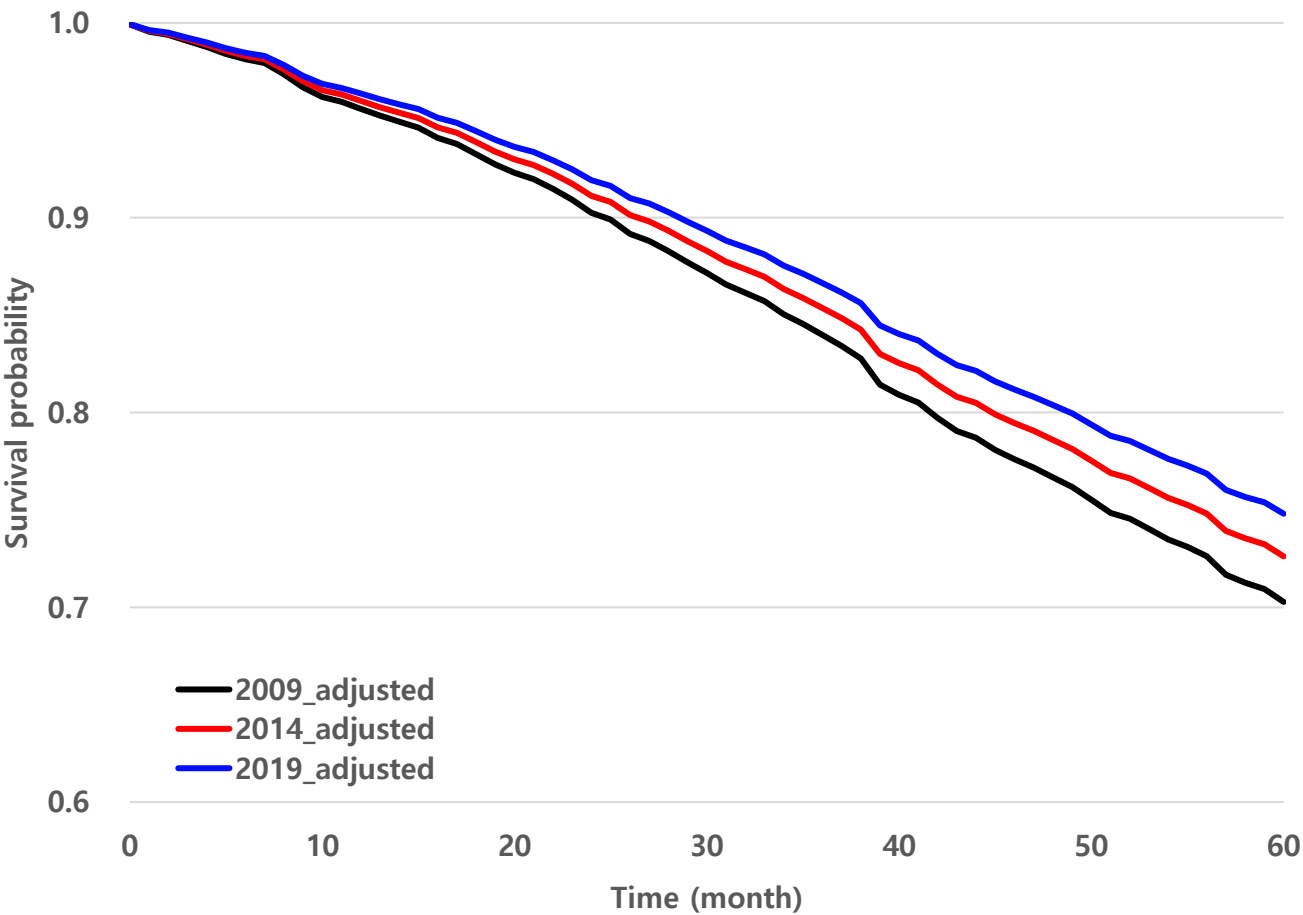
Survival Probability of Incident PD Patients over the First 5 Years



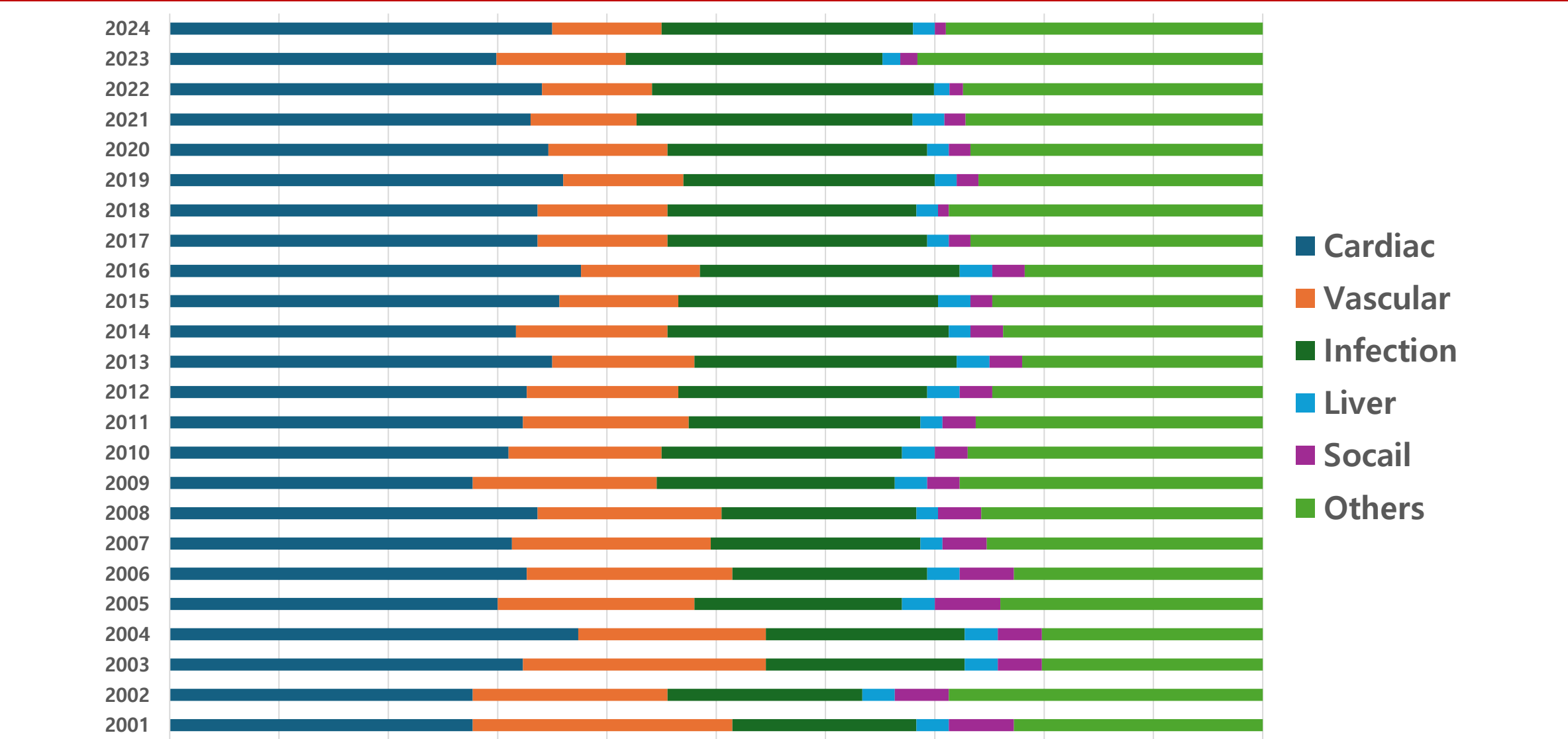
Survival probability of incident HD patients over the first 5 years, with Transplant as a Competing Risk



Survival probability of incident PD patients over the first 5 years, with Transplant as a Competing Risk



Comparison of Cause-Specific Death



요 약

- 고령 투석 환자의 지속적인 증가. 65세 이상 고령 환자는 59.8% 차지함.
- 혈액투석 여과법 적용 환자 비율 11.9%로 경미한 증가
- 복막투석 환자 중 APD 사용 비율 증가 추세
- 최근 1년간 입원율은 PD 환자에서 더 높으나 감염 관련 입원은 감소
- 지속적으로 전체 투석 환자의 사망률 감소, 특히 PD 환자에서 두드러짐
- 2019년 이후 PD 환자의 사망률이 HD 환자보다 낮아짐
- 사망 원인은 여전히 심혈관 질환이 가장 높은 비율 차지
- 지속적인 홍보와 참여 독려로 2024 KORDS 등록율은 73.9%로 상승함

대한신장학회 등록위원회

- 이사: 고강지 (고려의대), 김세중 (서울의대), 안선호 (원광의대)
- 간사: 김기표 (인하의대), 오세원 (고려의대)
- 위원: 김기원 (서울원내과), 김선철 (더케이내과), 김재석 (연세의대), 김재영 (국민건강보험 일산병원), 김지현 (서울의대), 김태희 (인제의대), 박석우 (서울의대), 박요한 (건양의대), 반태현 (가톨릭의대), 서상헌 (전남의대), 윤혜은 (가톨릭의대), 이용진 (단국의대), 이하린 (부산의대), 이하정 (서울의대)
- 통계분석: 성예슬
- 대한신장학회 사무국: 조지연, 유혜련

감사의 말씀

- 이번 등록 사업에서는 등록률 향상과 함께 신뢰성 있는 통계 기반을 마련하기 위한 중요한 전환점으로 건강보험공단 자료 연계를 통한 향후 분석 확장을 위한 준비가 진행되었습니다. 특히 분석 방법 보완과 시스템 개선은 현재 진행 중이며, 차기 보고서부터 반영될 예정입니다.
- KORDS는 단순한 등록사업을 넘어 투석의 미래를 함께 만들어가는 공동체적 성과이며, 자료 제공에 협조해주신 의료진 여러분께 깊이 감사드립니다.