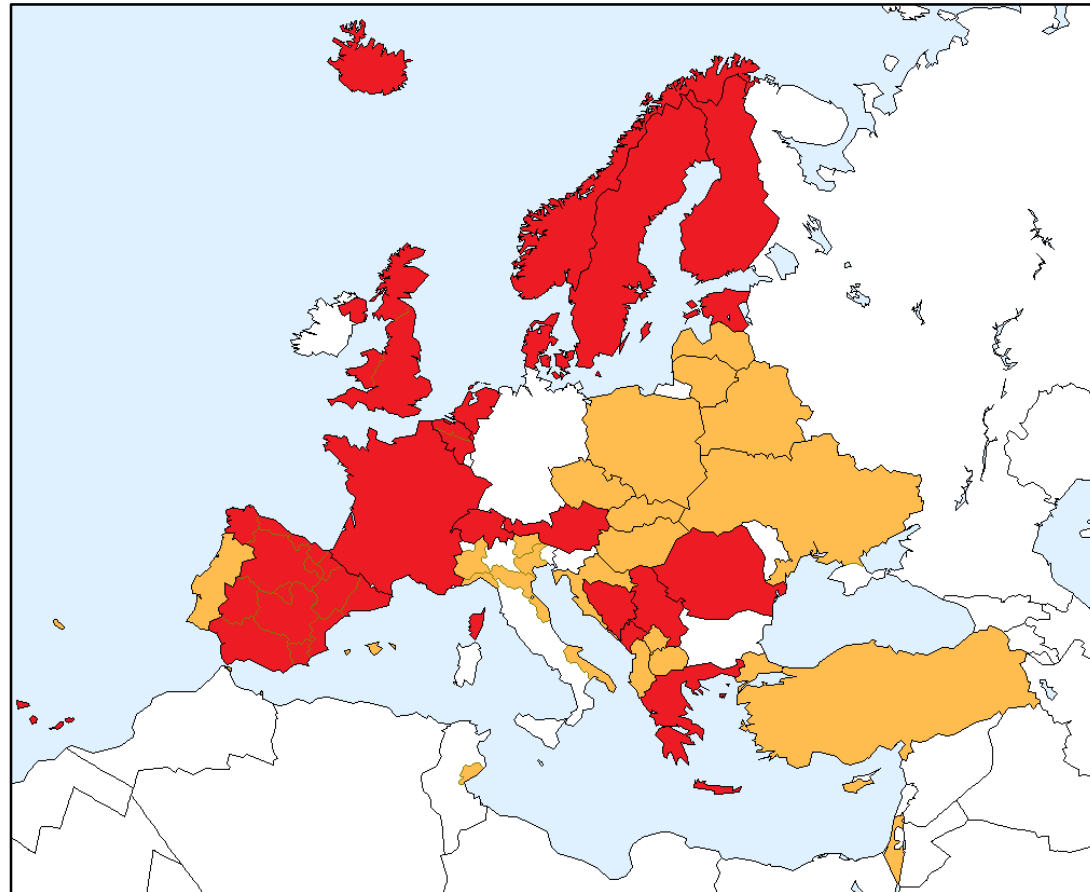






**Summary of the  
2021 ERA Registry Annual Report**

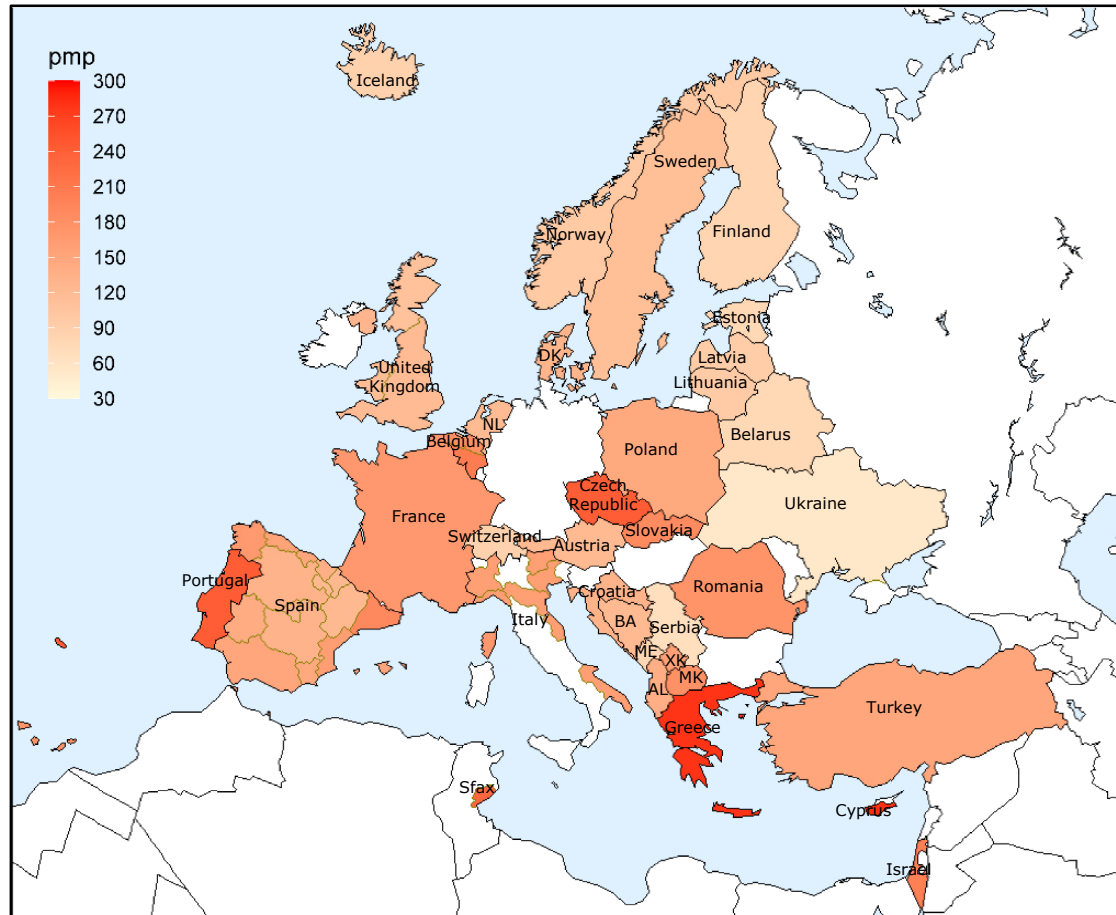
# National and regional renal registries that contributed data to the 2021 ERA Registry Annual Report



-  Renal registries contributing with individual patient data
-  Renal registries contributing with aggregated data

# Incident patients accepted for KRT in 2021, at day 1

*by country*



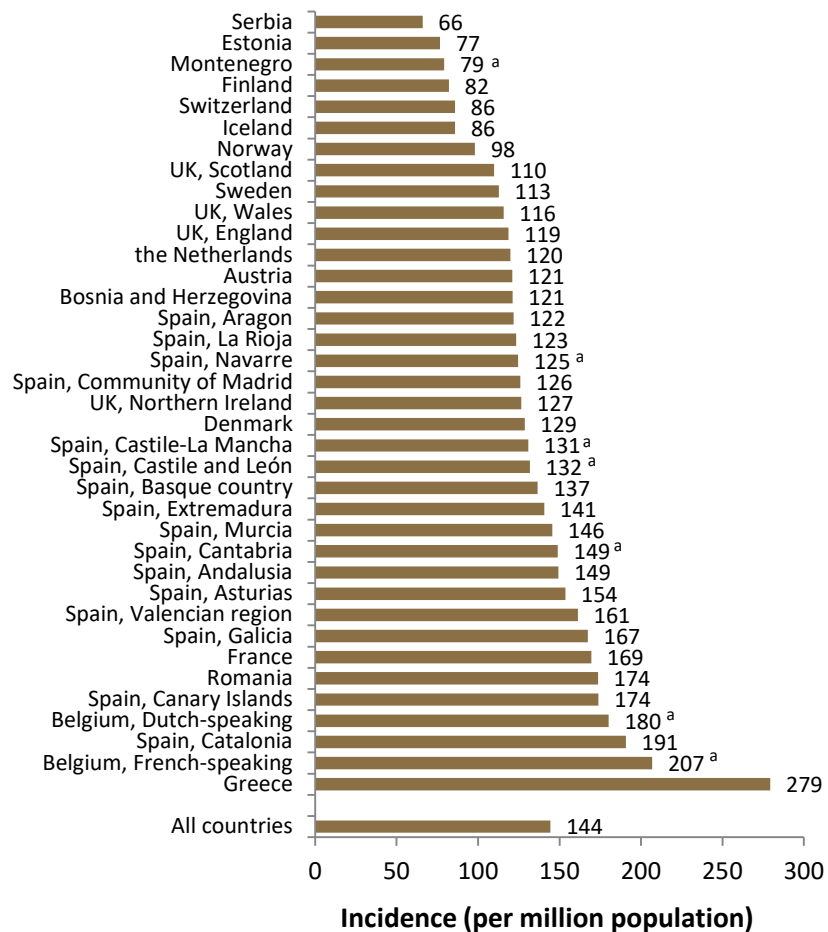


# Incident patients accepted for KRT in 2021, at day 1

by country

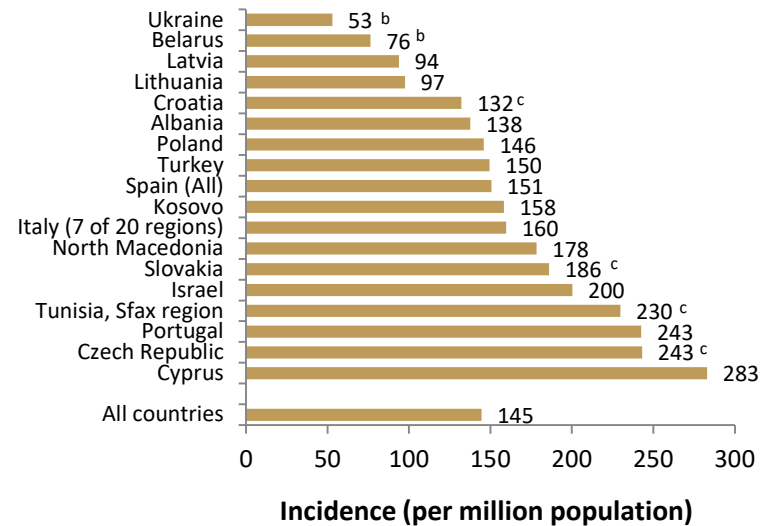
## Unadjusted incidence

renal registries providing individual patient data



## Unadjusted incidence

renal registries providing aggregated data



<sup>a</sup> patients younger than 20 years of age are not included; <sup>b</sup> patients younger than 18 years of age are not included; <sup>c</sup> data includes patients receiving dialysis only

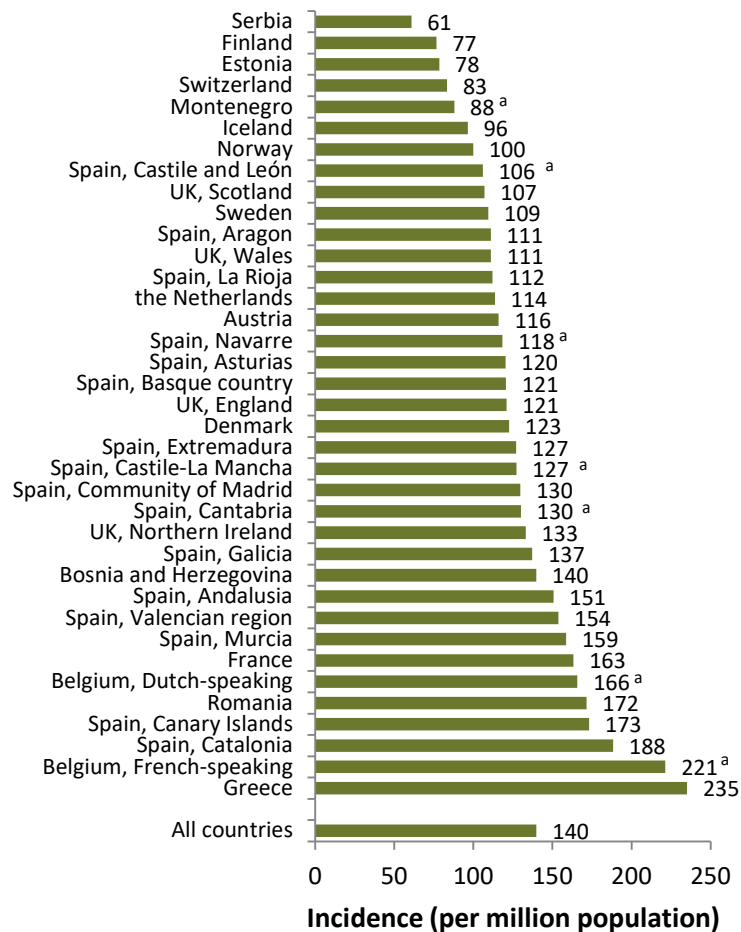


# Incident patients accepted for KRT in 2021, at day 1

*by country, adjusted for age and sex*

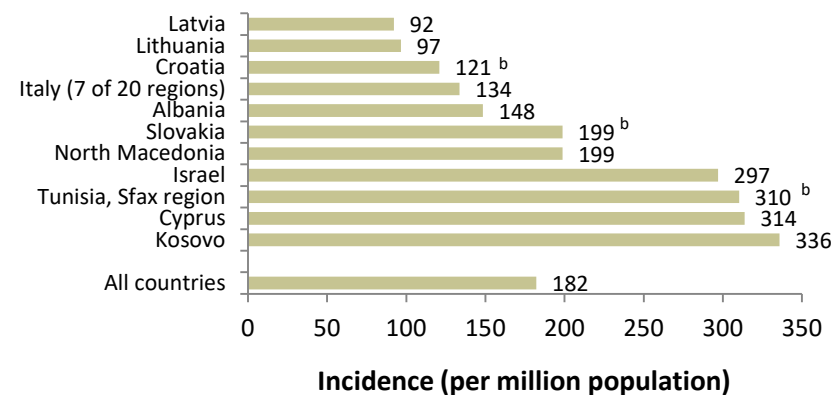
## Adjusted incidence

*renal registries providing individual patient data*



## Adjusted incidence

*renal registries providing aggregated data*



<sup>a</sup> patients younger than 20 years of age are not included; <sup>b</sup> data includes patients receiving dialysis only

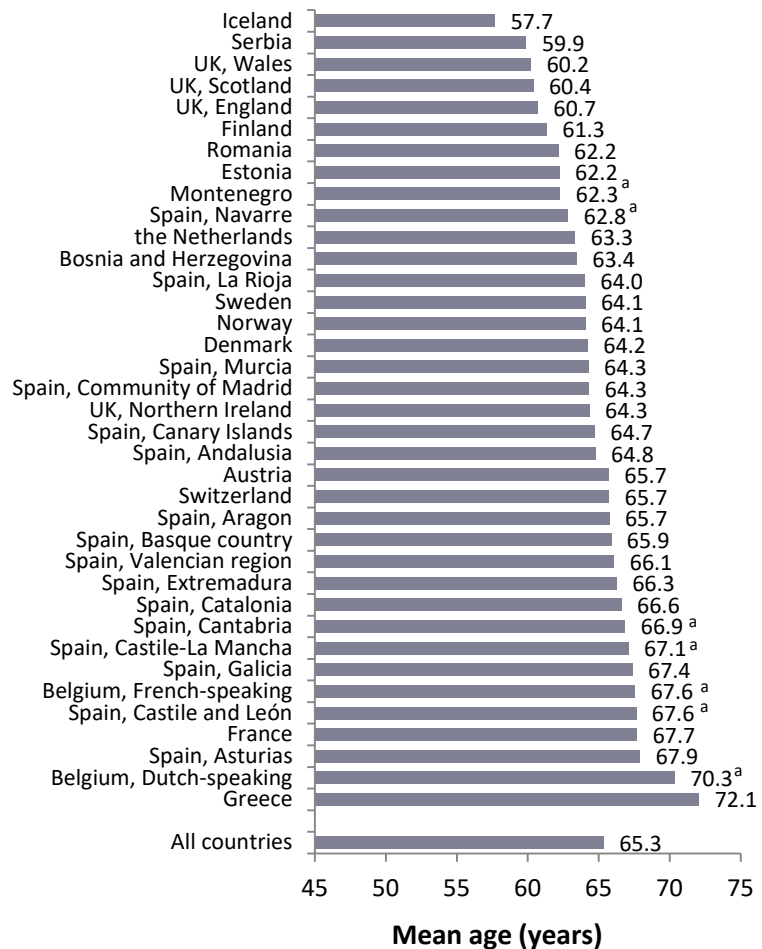


# Incident patients accepted for KRT in 2021, at day 1

*mean age*

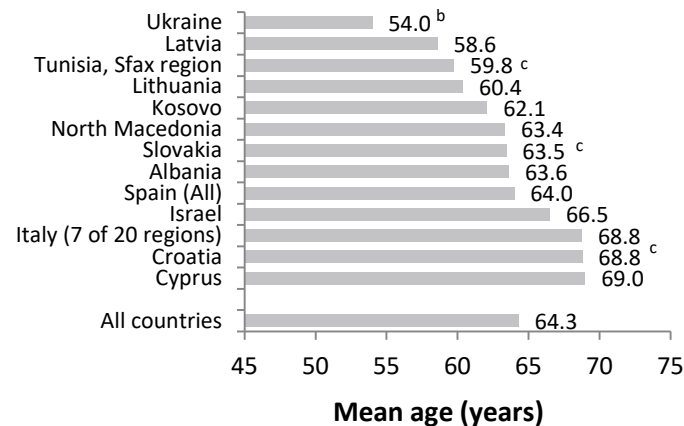
## Mean age at start of KRT

*renal registries providing individual patient data*



## Mean age at start of KRT

*renal registries providing aggregated data*



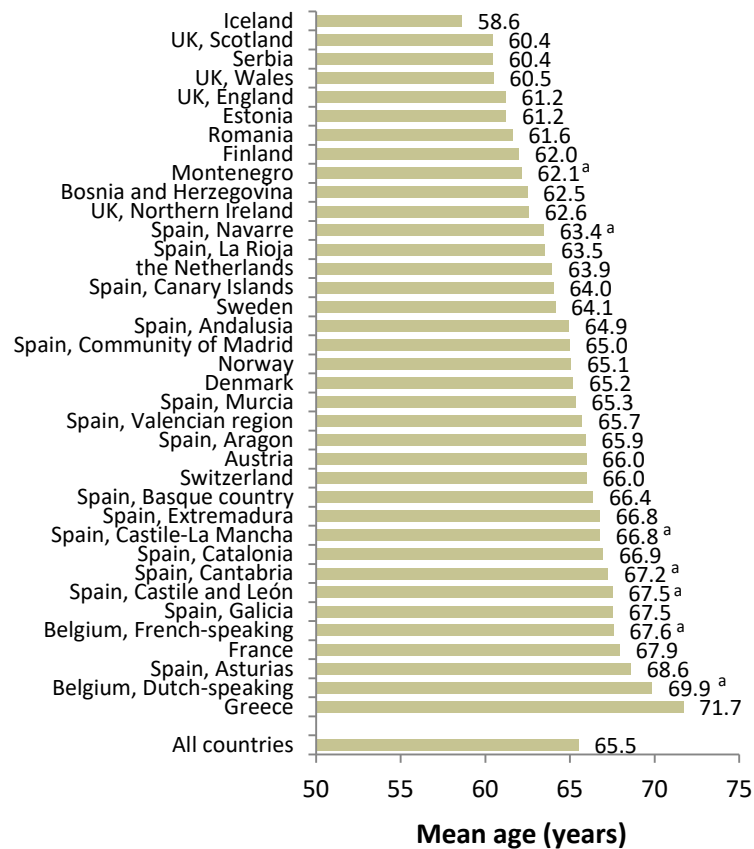
<sup>a</sup> patients younger than 20 years of age are not included; <sup>b</sup> patients younger than 18 years of age are not included; <sup>c</sup> data includes patients receiving dialysis only



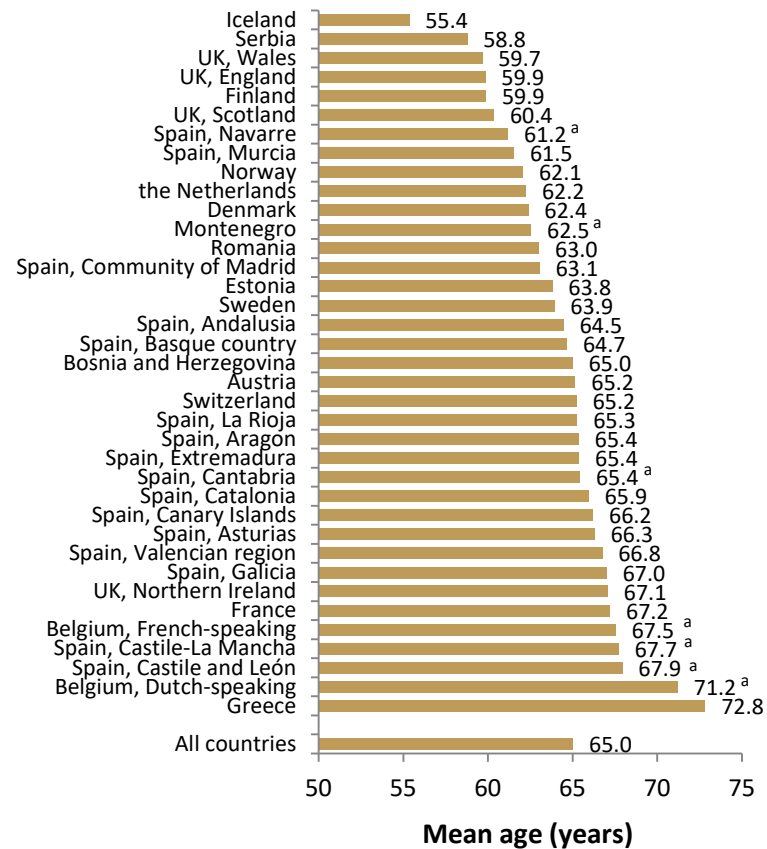
# Incident patients accepted for KRT in 2021, at day 1

registries providing individual patient data only

**Mean age at start of KRT**  
*male patients*



**Mean age at start of KRT**  
*female patients*



<sup>a</sup> patients younger than 20 years of age are not included

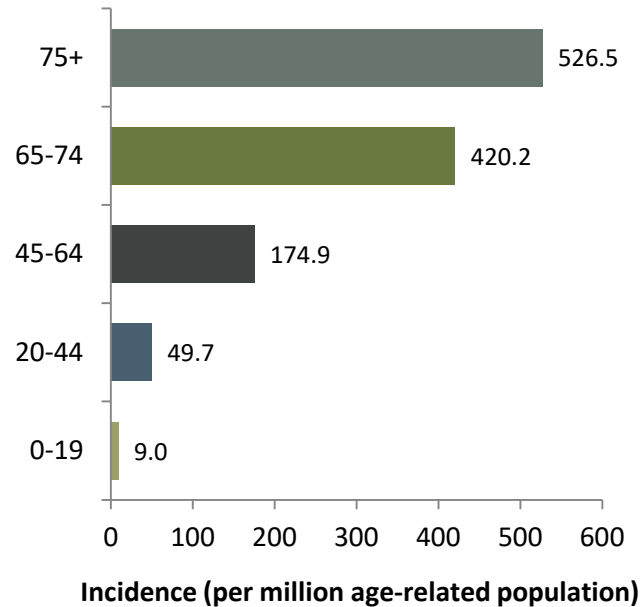


# Incident patients accepted for KRT in 2021, at day 1

*by age category*

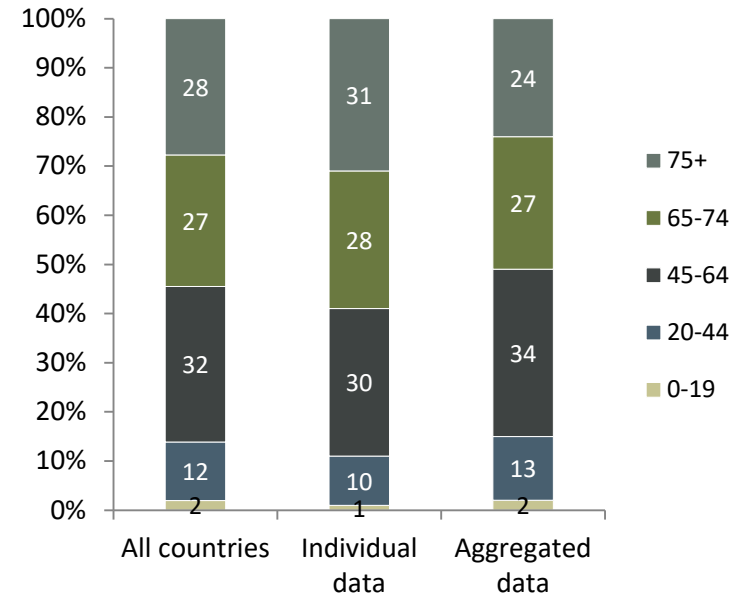
### Incidence by age category

*for all registries*



### Incidence by age category

*by type of data provided by registry*

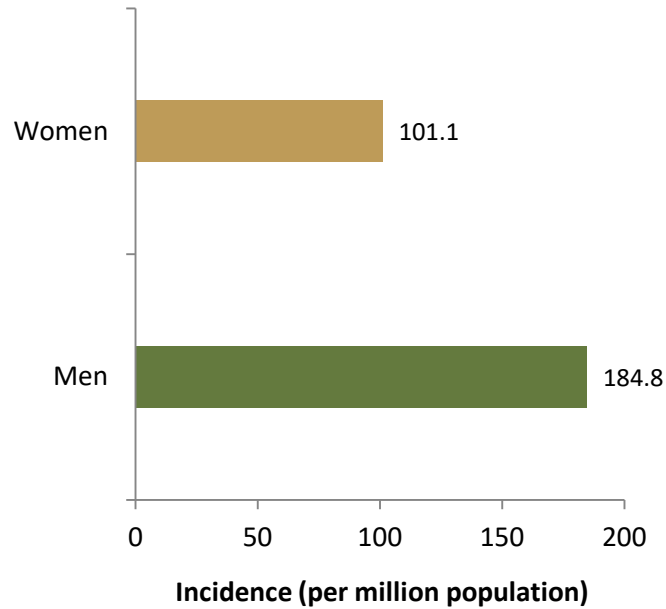




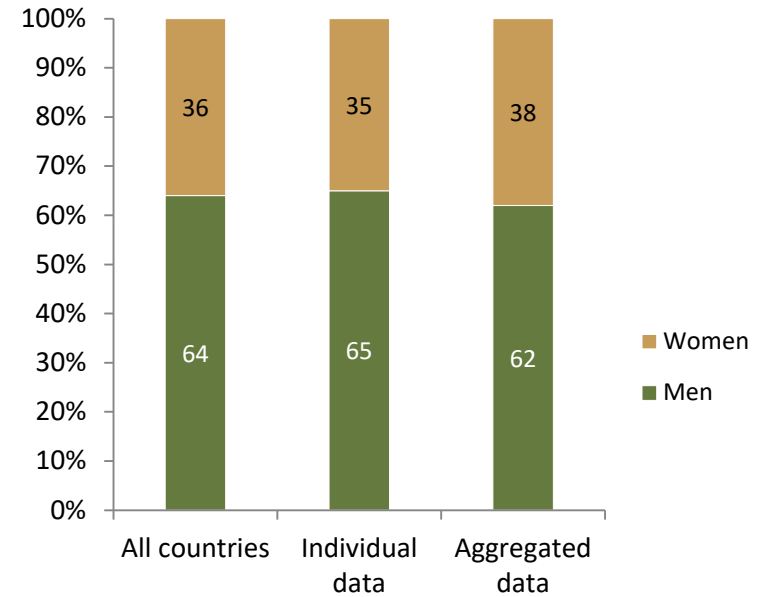
# Incident patients accepted for KRT in 2021, at day 1

*by sex*

**Incidence by sex**  
*for all registries*



**Incidence by sex**  
*by type of data provided by registry*

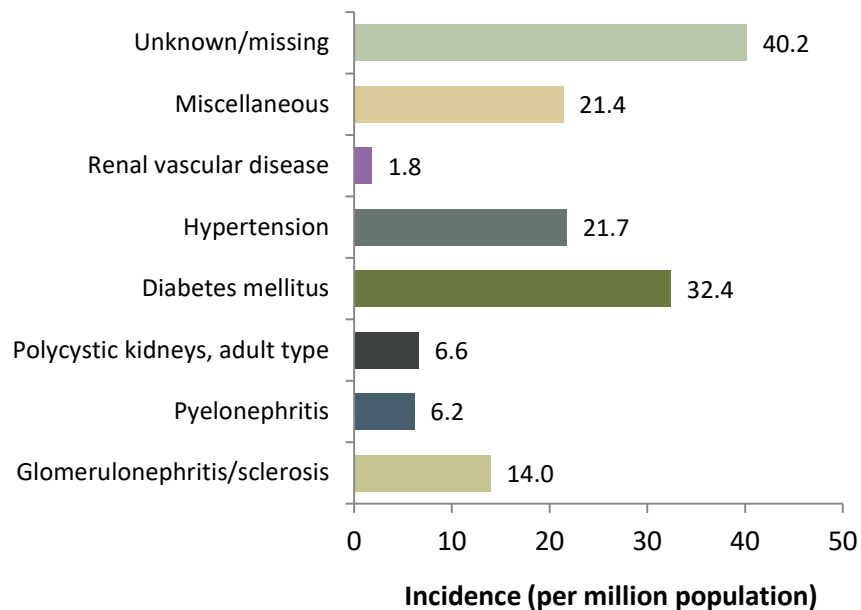




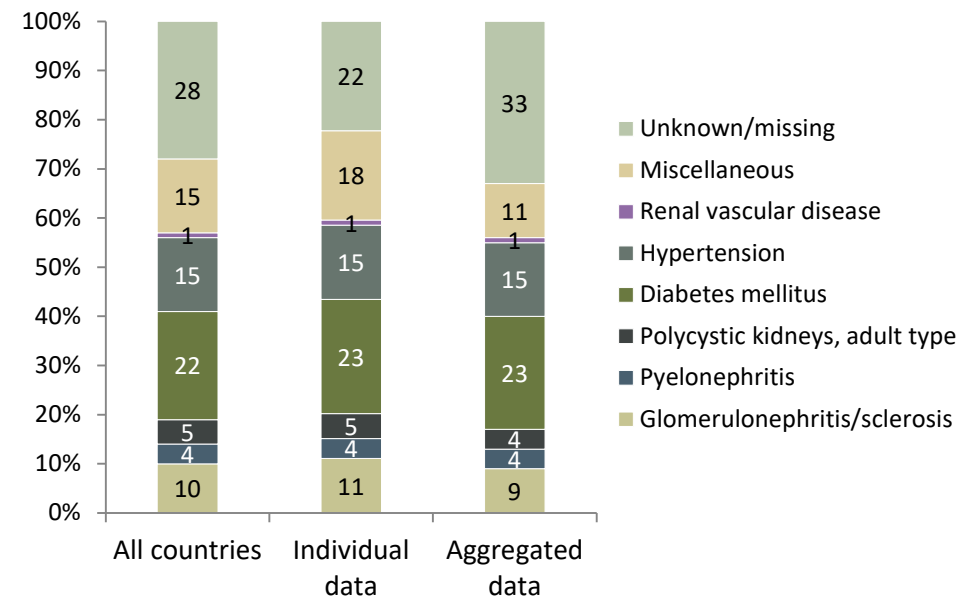
# Incident patients accepted for KRT in 2021, at day 1

*by primary renal disease*

**Incidence by primary renal disease**  
*for all registries*



**Incidence by primary renal disease**  
*by type of data provided by registry*

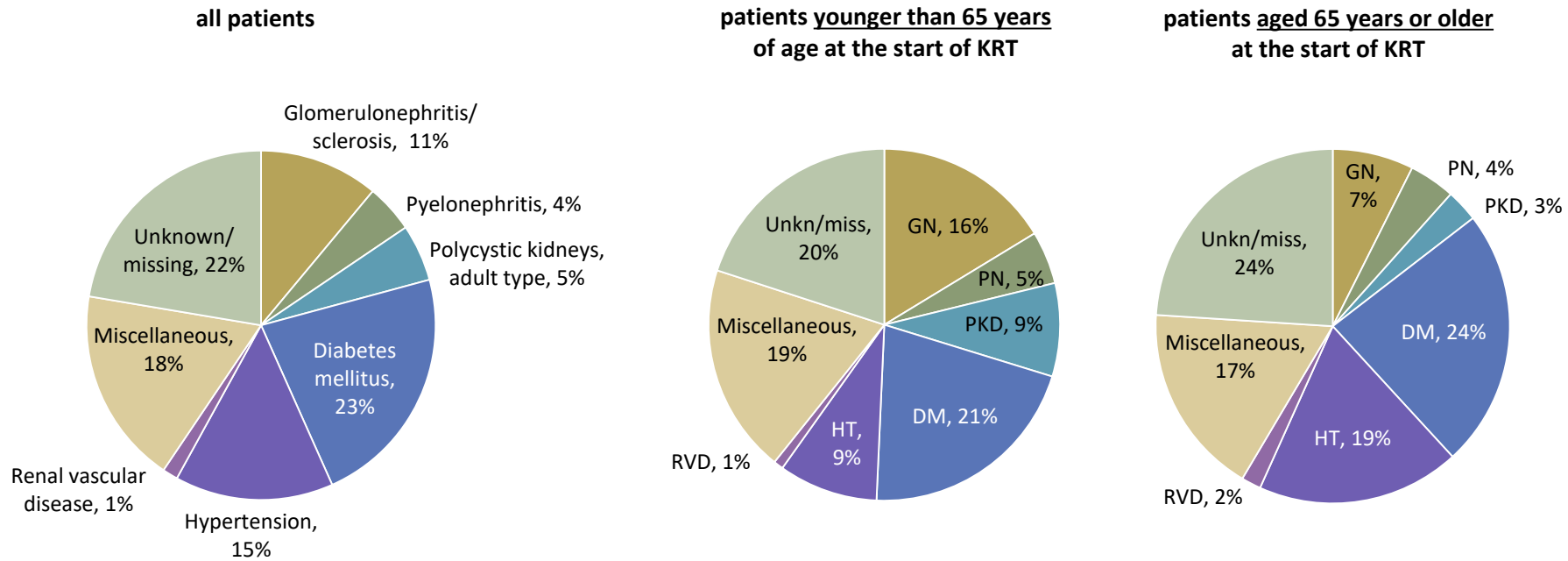


# Incident patients accepted for KRT in 2021, at day 1

*by primary renal disease and age category*

## Incidence by primary renal disease

*patients from registries providing individual patient data only*

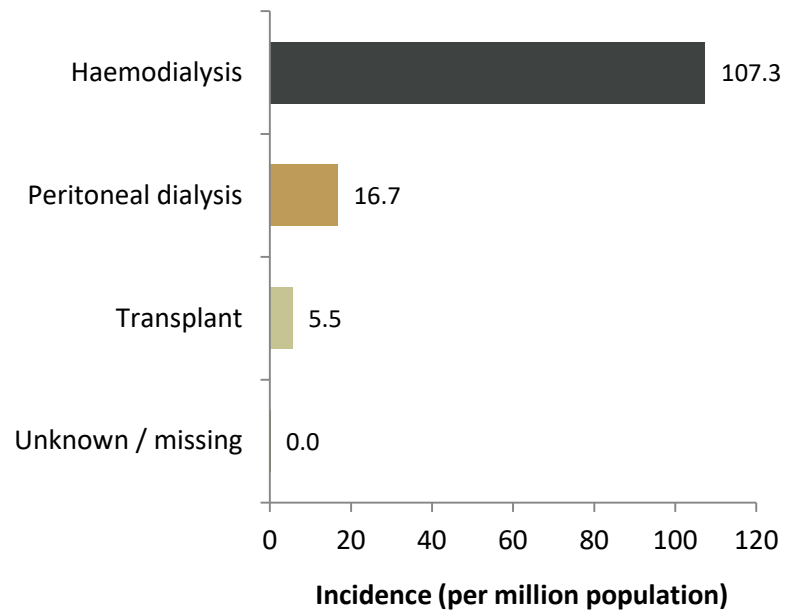




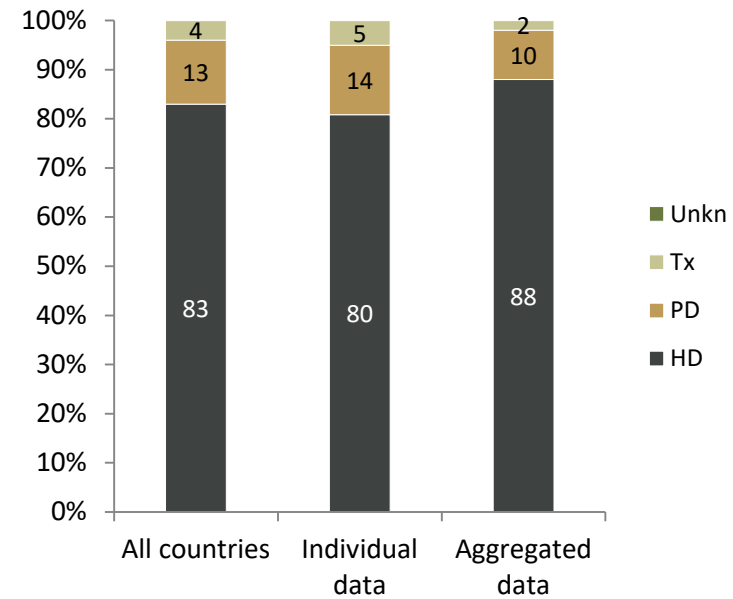
# Incident patients accepted for KRT in 2021, at day 91

*by established modality*

### Incidence at day 91 by established modality *for all registries*



### Incidence at day 91 by established modality *by type of data provided by registry*



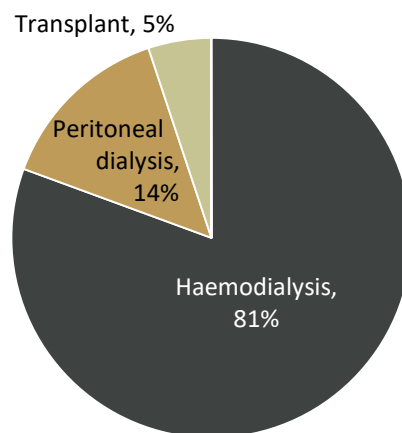
# Incident patients accepted for KRT in 2021, at day 91

*by established modality and age category*

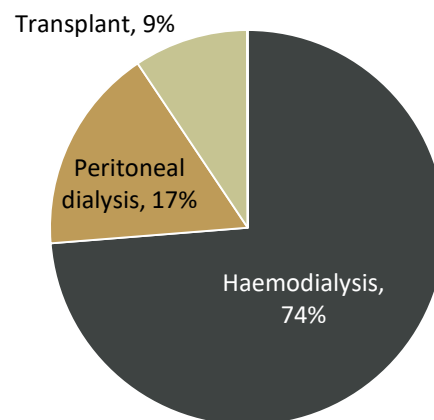
## Incidence at day 91 by established modality

*patients from registries providing individual patient data only*

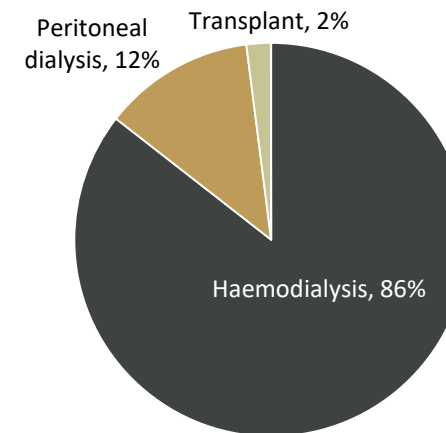
all patients



patients younger than 65 years  
of age at the start of KRT



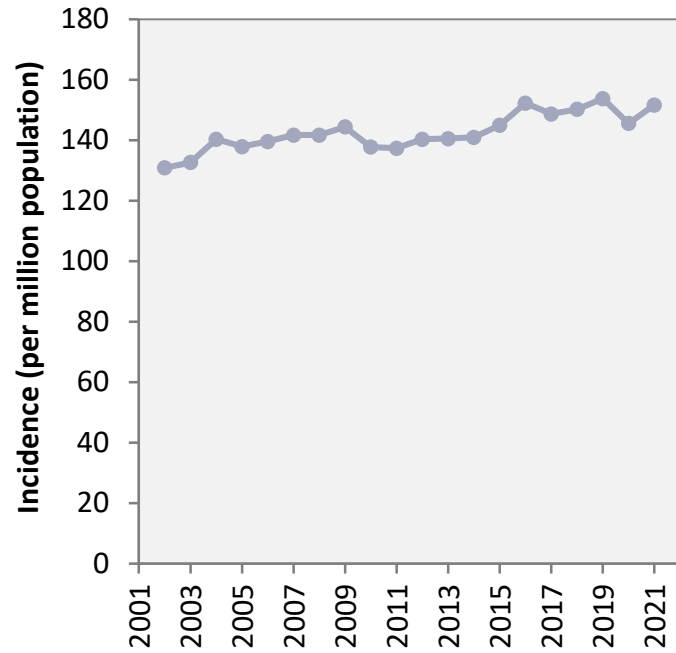
patients aged 65 years or older  
at the start of KRT



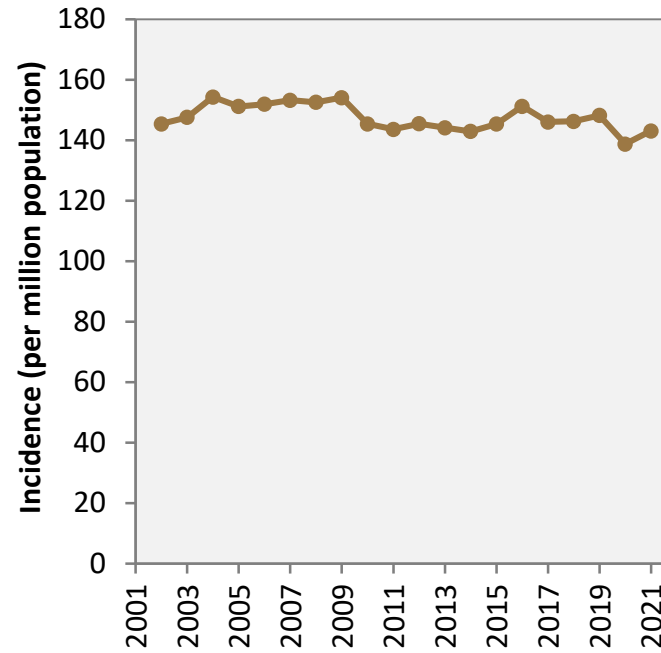
# Incident patients accepted for KRT, at day 1

*last 20 years (2002-2021)*

**Unadjusted incidence over time**  
*all patients starting KRT*



**Adjusted incidence over time**  
*all patients starting KRT*

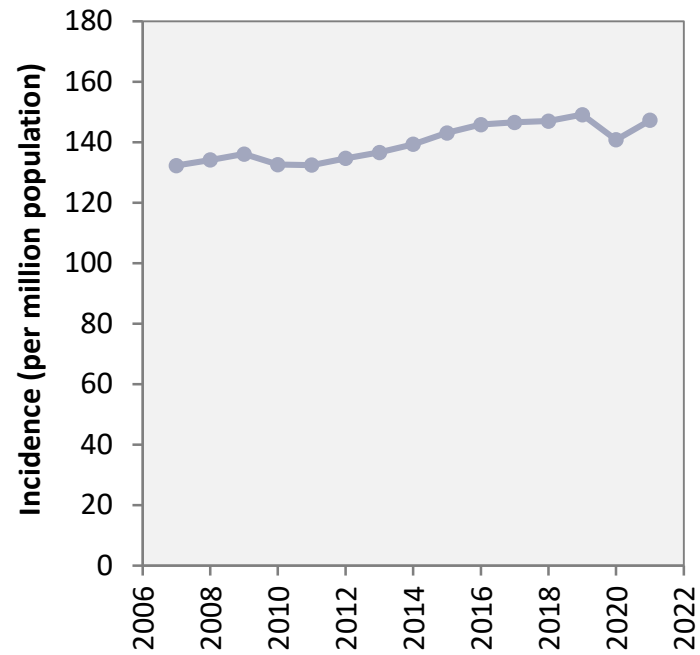


# Incident patients accepted for KRT, at day 1

*last 15 years (2007-2021)*

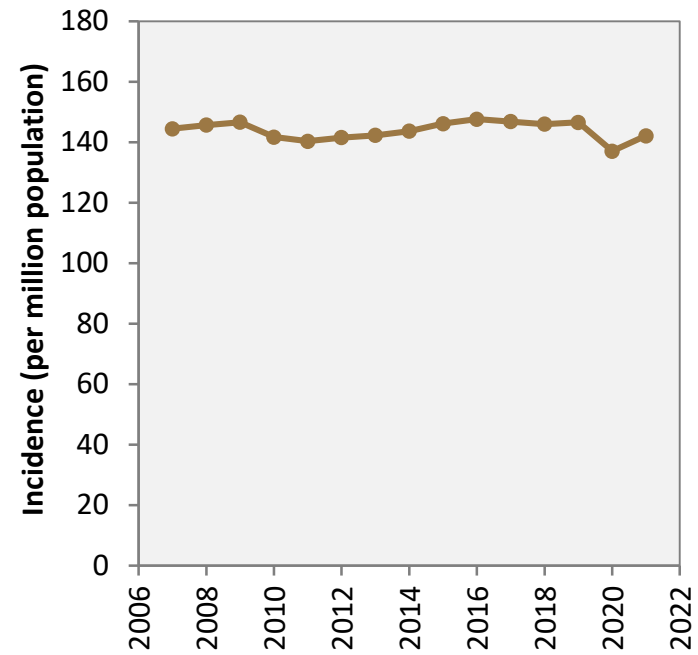
### Unadjusted incidence over time

*all patients starting KRT*



### Adjusted incidence over time

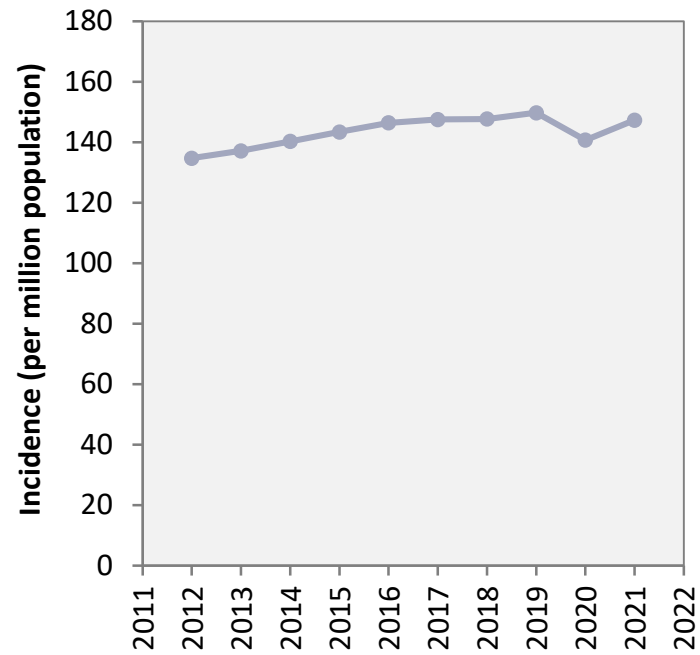
*all patients starting KRT*



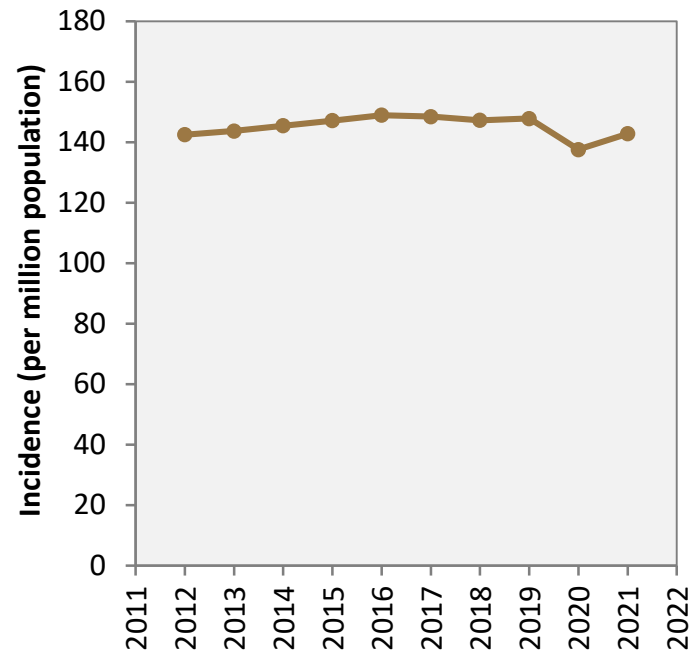
# Incident patients accepted for KRT, at day 1

*last 10 years (2012-2021)*

**Unadjusted incidence over time**  
*all patients starting KRT*



**Adjusted incidence over time**  
*all patients starting KRT*

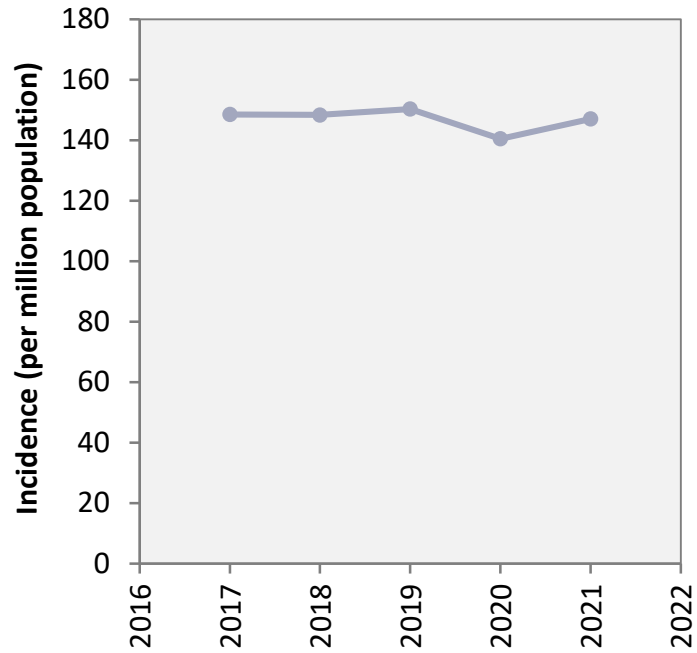




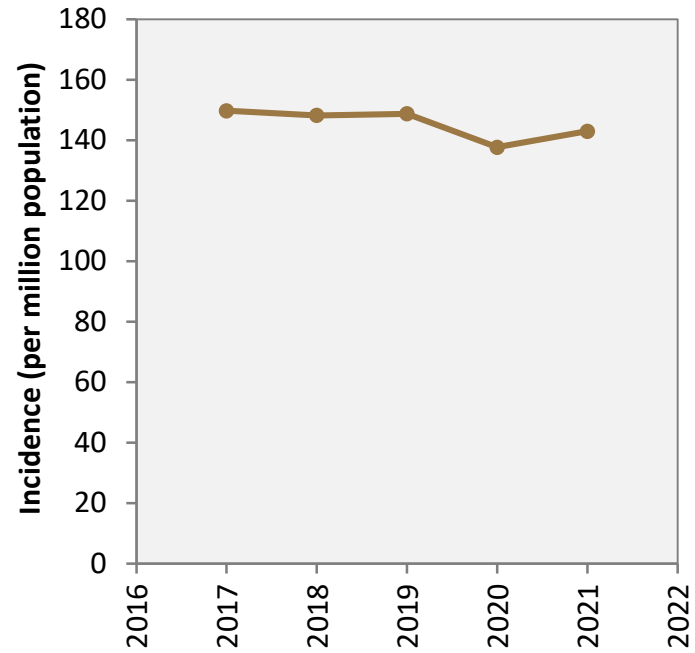
# Incident patients accepted for KRT, at day 1

*last 5 years (2017-2021)*

**Unadjusted incidence over time**  
*all patients starting KRT*

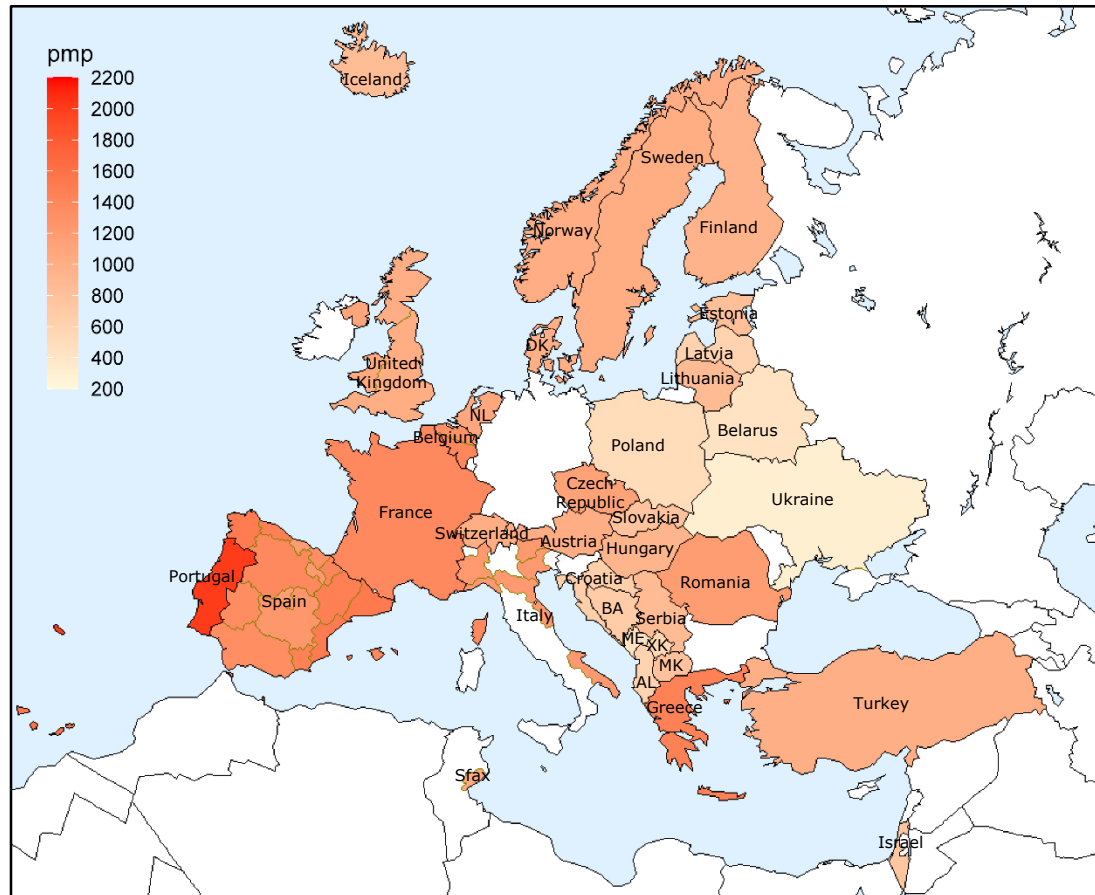


**Adjusted incidence over time**  
*all patients starting KRT*



# Prevalent patients on KRT in 2021

*by country*

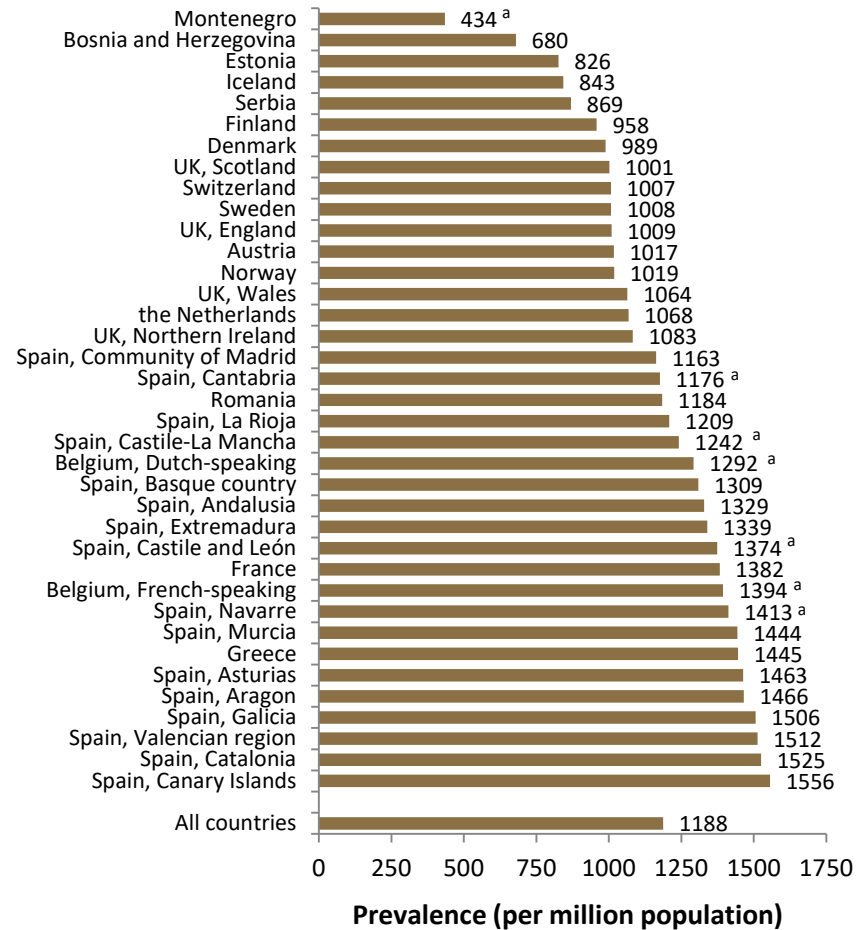


# Prevalent patients on KRT in 2021

by country

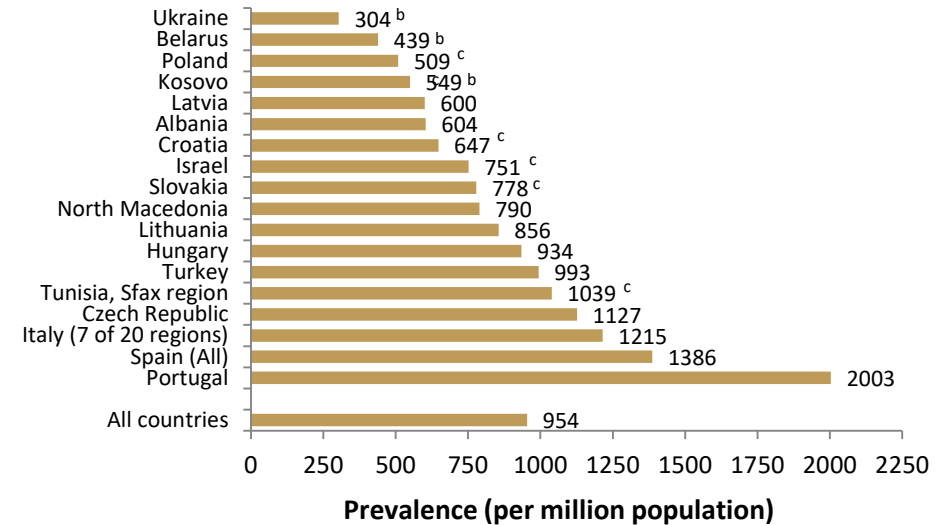
## Unadjusted prevalence

renal registries providing individual patient data



## Unadjusted prevalence

renal registries providing aggregated data



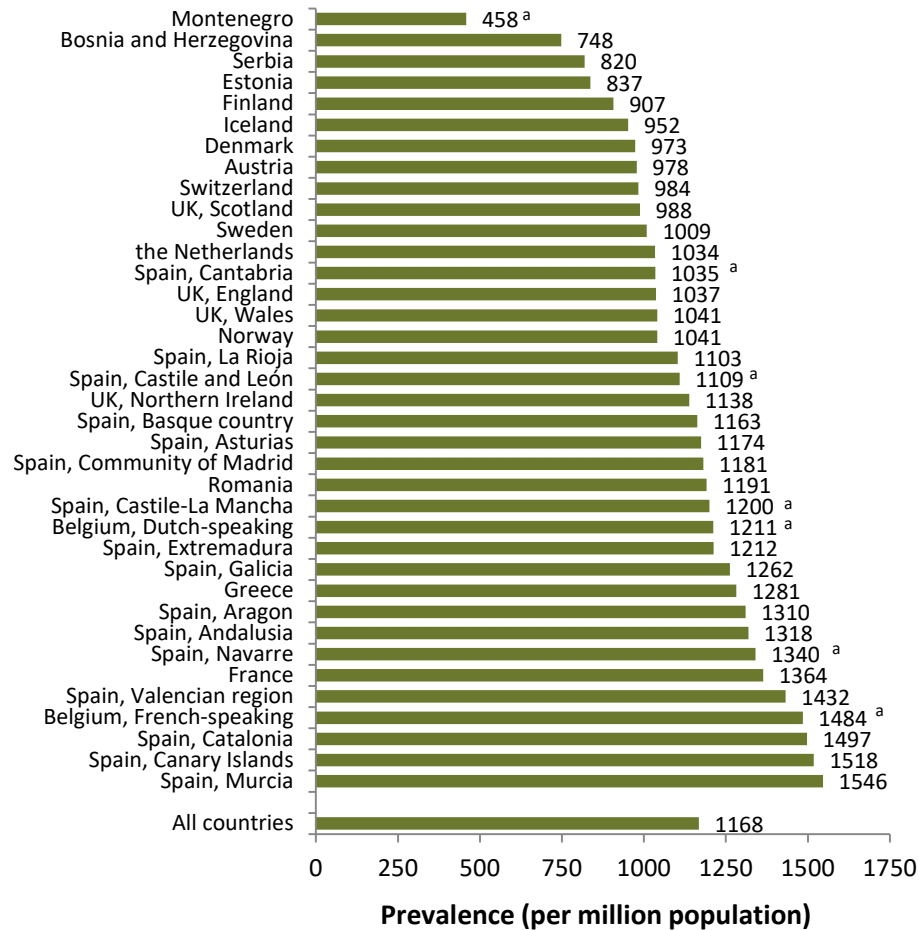
<sup>a</sup> patients younger than 20 years of age are not included; <sup>b</sup> patients younger than 18 years of age are not included; <sup>c</sup> data includes patients receiving dialysis only

# Prevalent patients on KRT in 2021

by country, adjusted for age and sex

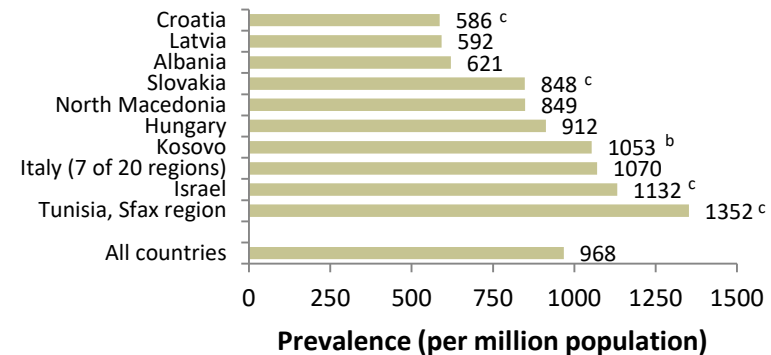
## Adjusted prevalence

renal registries providing individual patient data



## Adjusted prevalence

renal registries providing aggregated data



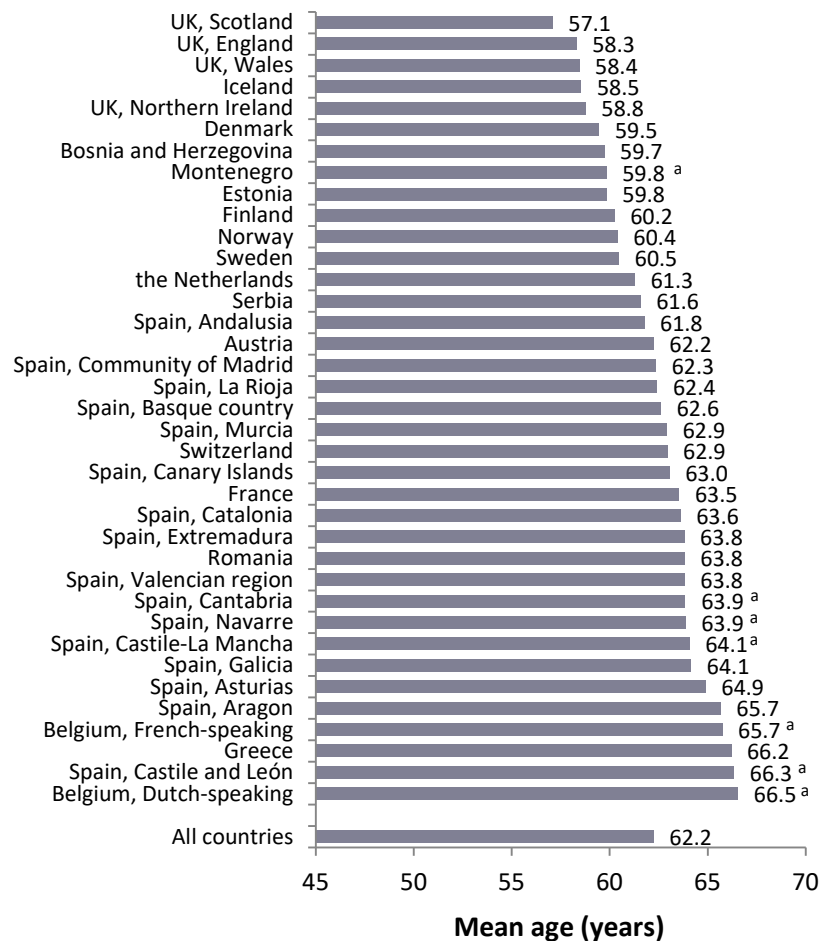
<sup>a</sup> patients younger than 20 years of age are not included; <sup>b</sup> patients younger than 18 years of age are not included; <sup>c</sup> data includes patients receiving dialysis only



# Prevalent patients on KRT in 2021

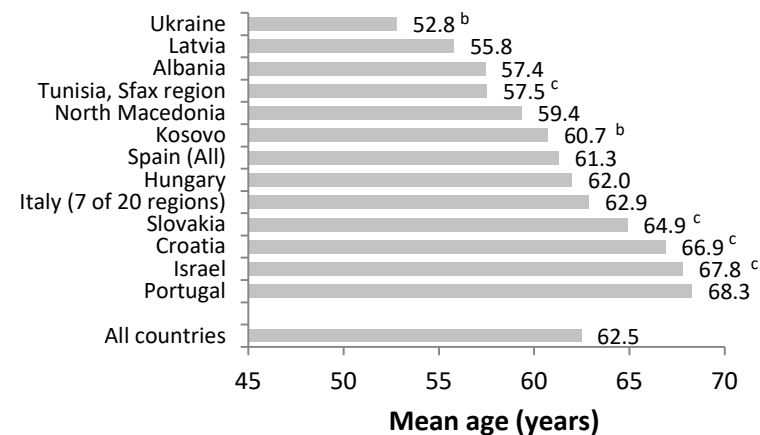
*mean age*

**Mean age on 31 December 2021**  
renal registries providing individual patient data



**Mean age on 31 December 2021**

*renal registries providing aggregated data*



<sup>a</sup> patients younger than 20 years of age are not included; <sup>b</sup> patients younger than 18 years of age are not included; <sup>c</sup> data includes patients receiving dialysis only

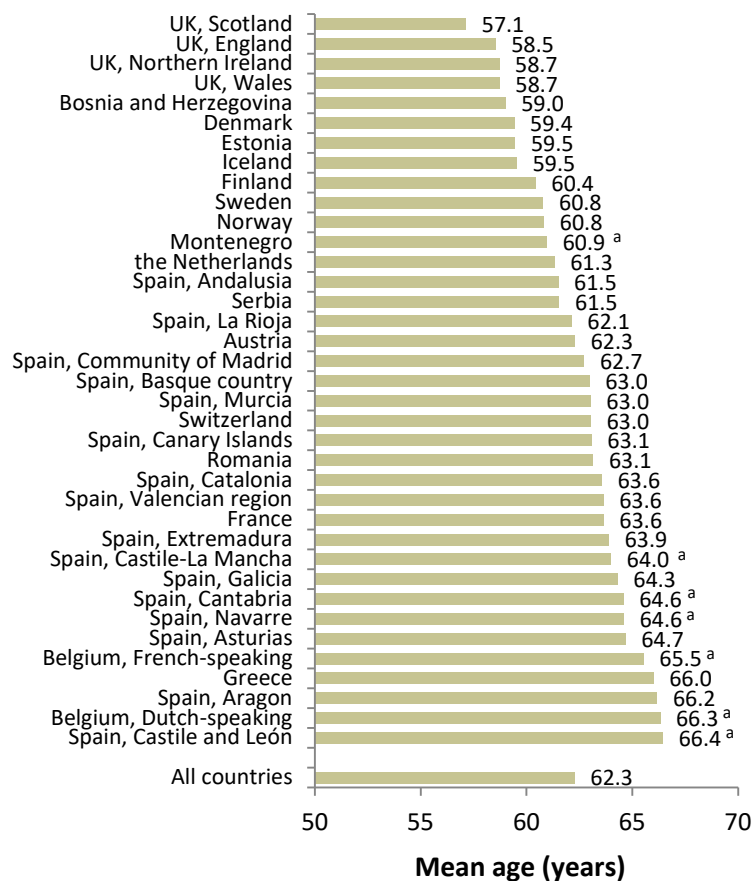


# Prevalent patients on KRT in 2021

for registries providing individual patient data only

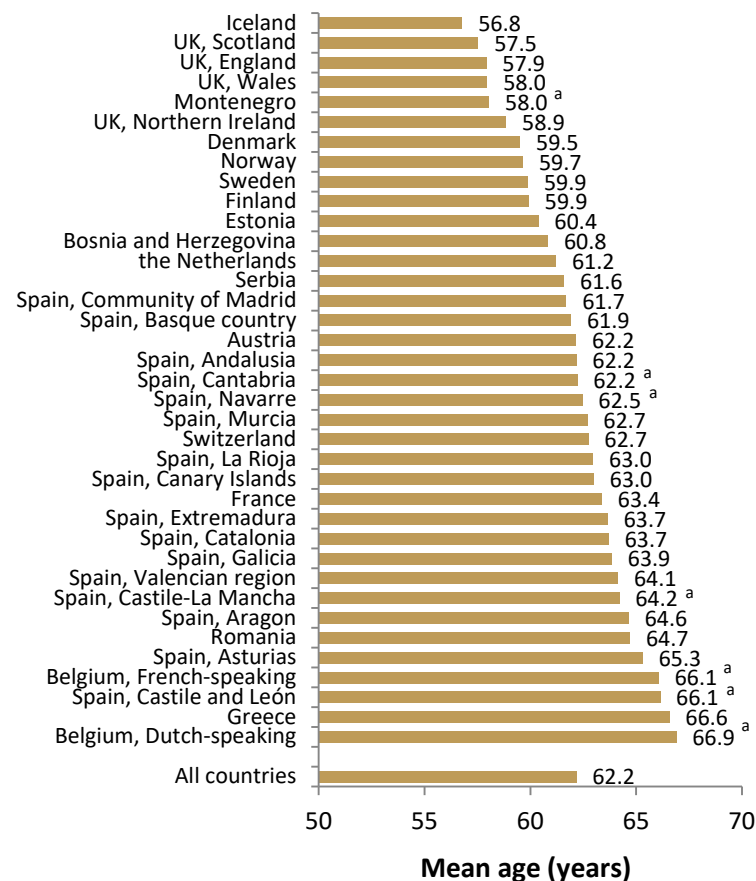
## Mean age on 31 December 2021

*male patients*



## Mean age on 31 December 2021

*female patients*

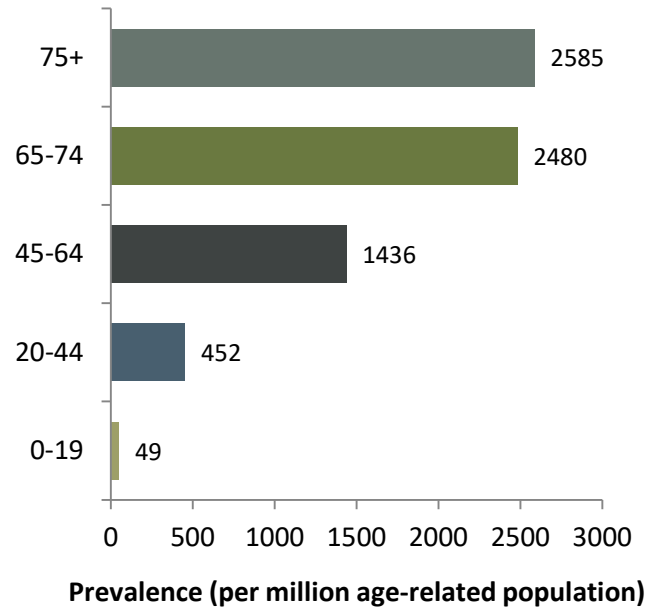


<sup>a</sup> patients younger than 20 years of age are not included;

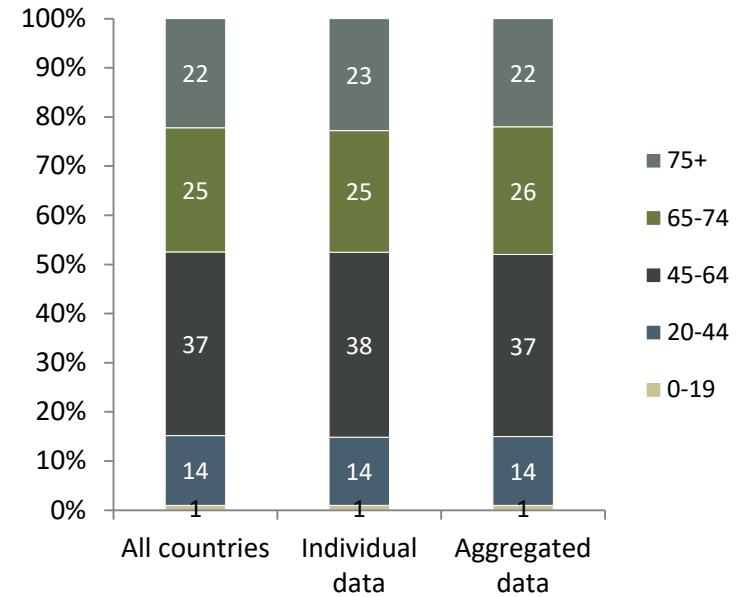
# Prevalent patients on KRT in 2021

*by age category*

**Prevalence by age category**  
*for all registries*



**Prevalence by age category**  
*by type of data provided by registry*



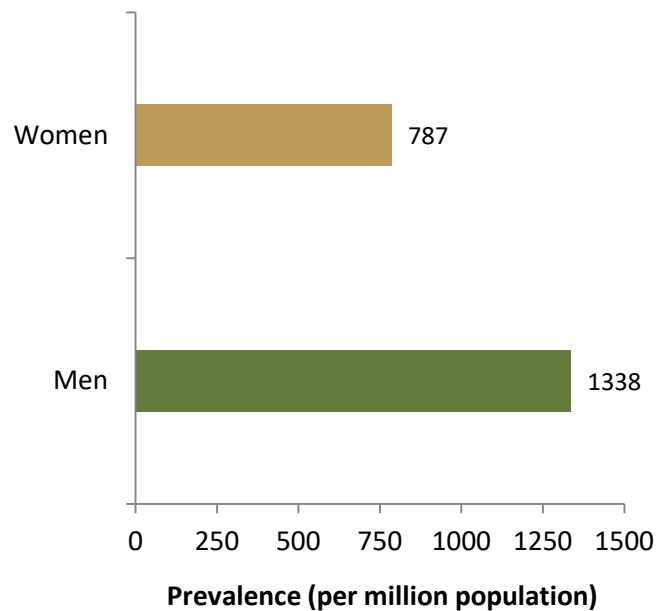


# Prevalent patients on KRT in 2021

*by sex*

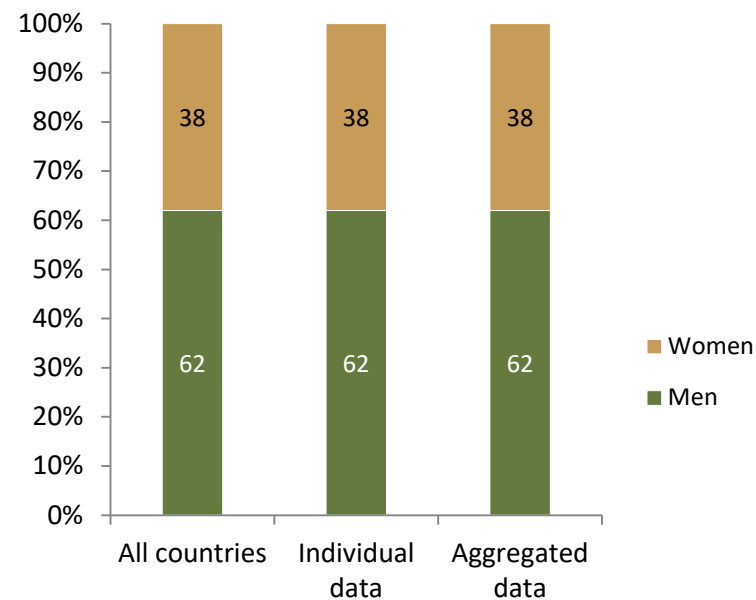
### Prevalence by sex

*for all registries*



### Prevalence by sex

*by type of data provided by registry*

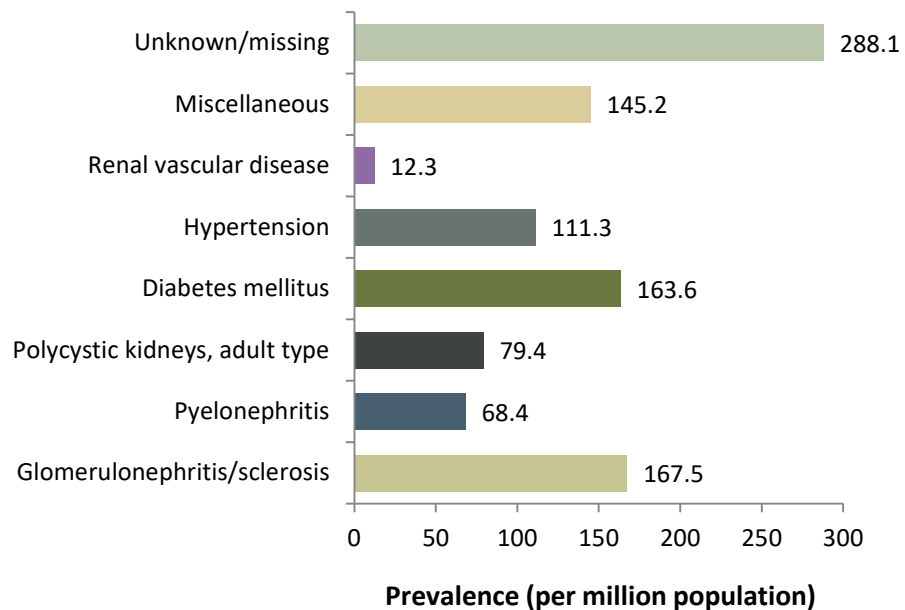




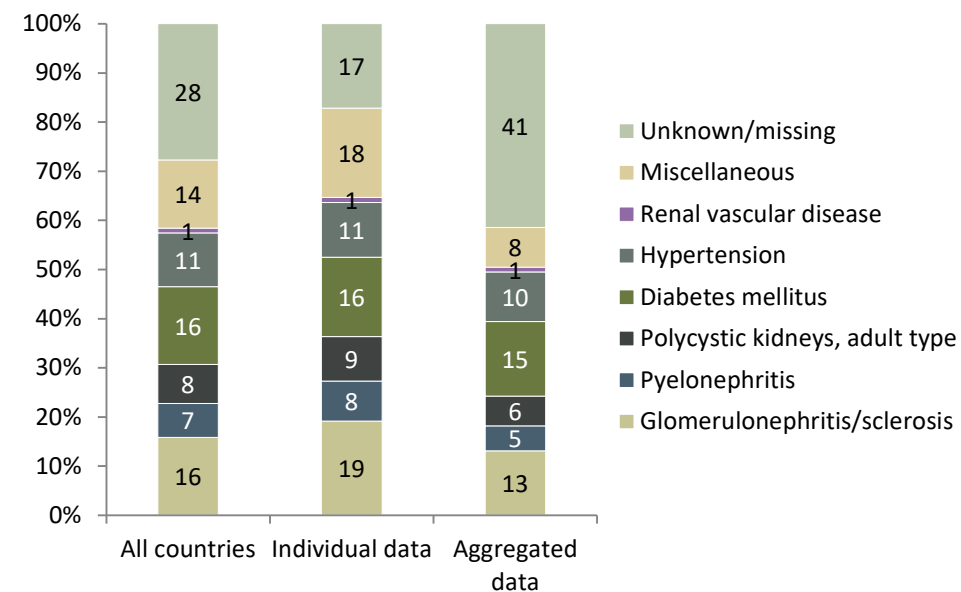
# Prevalent patients on KRT in 2021

*by primary renal disease*

**Prevalence by primary renal disease**  
*for all registries*



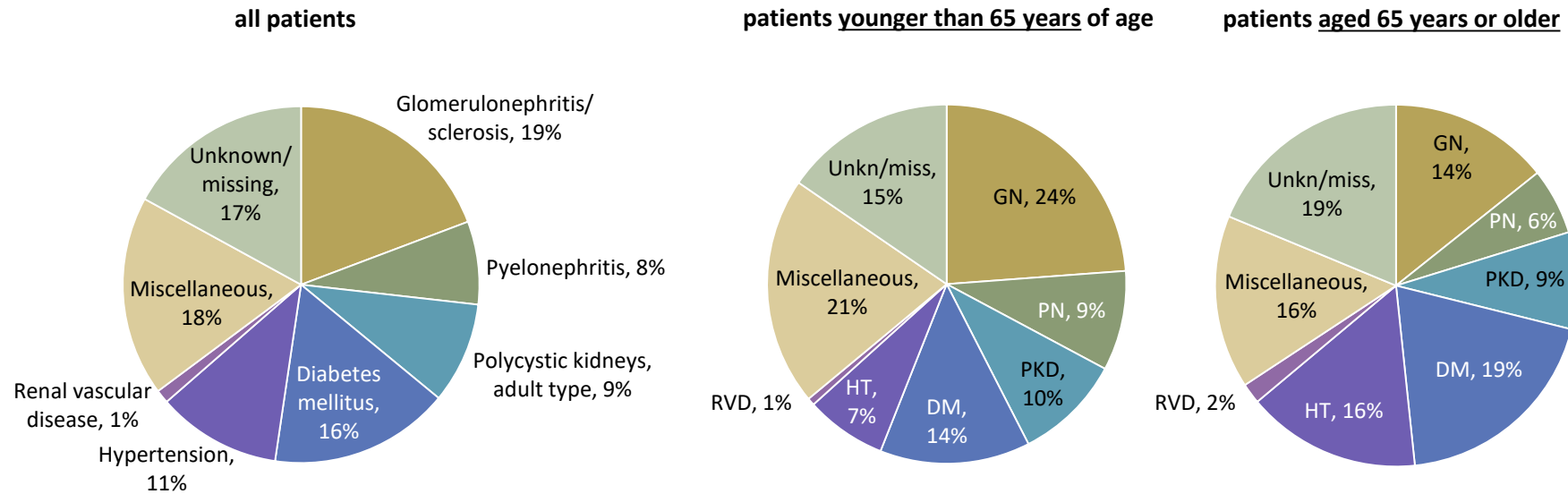
**Prevalence by primary renal disease**  
*by type of data provided by registry*



# Prevalent patients on KRT in 2021

*by primary renal disease and age category*

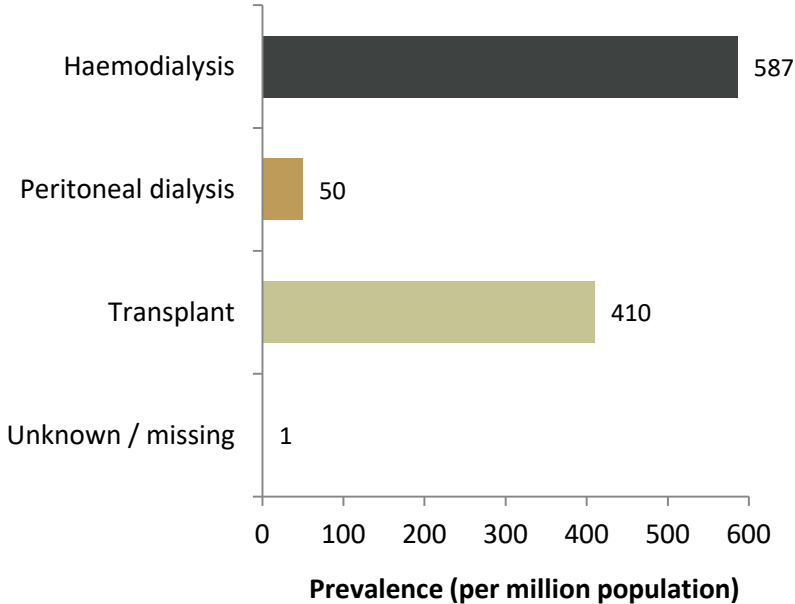
## Prevalence by primary renal disease *patients from registries providing individual patient data only*



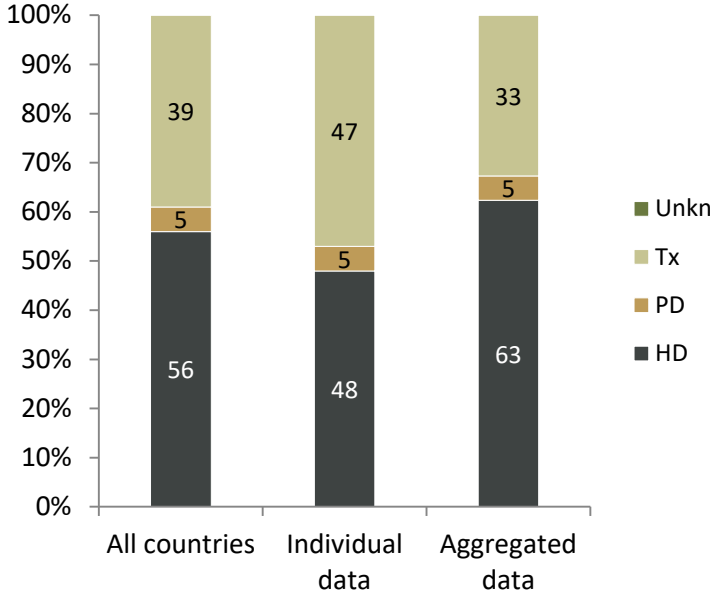
# Prevalent patients on KRT in 2021

*by modality*

**Prevalence by modality**  
*for all registries*



**Prevalence by modality**  
*by type of data provided by registry*



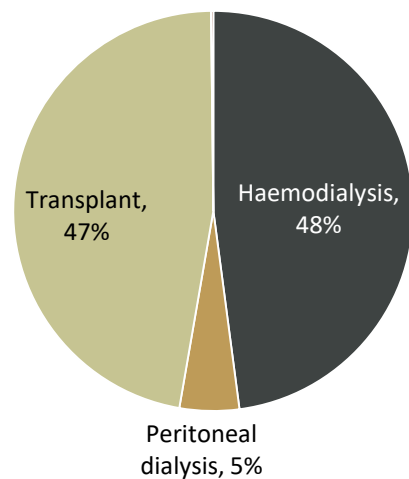
# Prevalent patients on KRT in 2021

*by modality and age category*

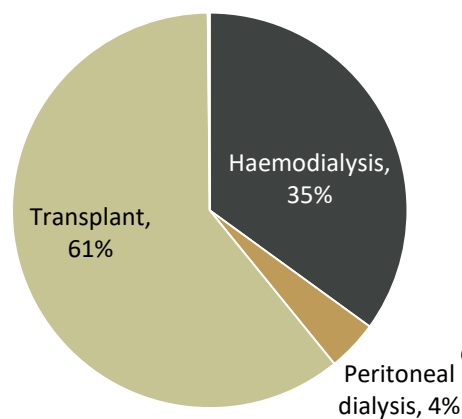
## Prevalence by modality

*patients from registries providing individual patient data only*

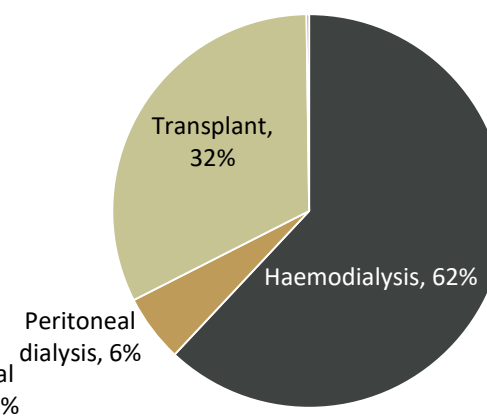
**all patients**



**patients younger than 65 years of age**



**patients aged 65 years or older**

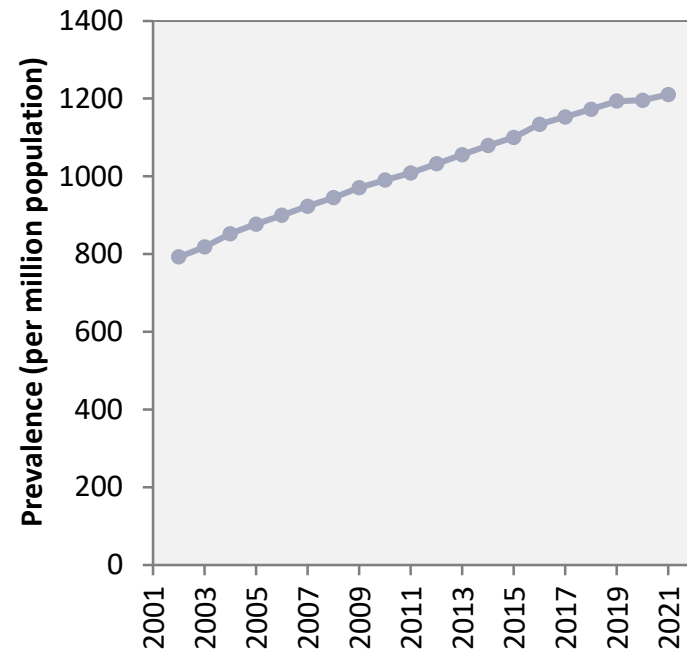


# Prevalent patients on KRT

*last 20 years (2002-2021)*

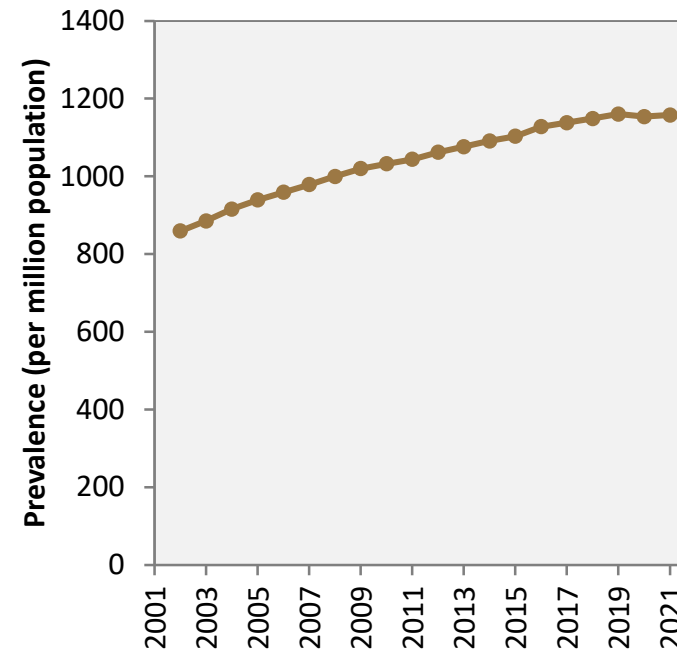
### Unadjusted prevalence over time

*all patients on KRT*



### Adjusted prevalence over time

*all patients on KRT*

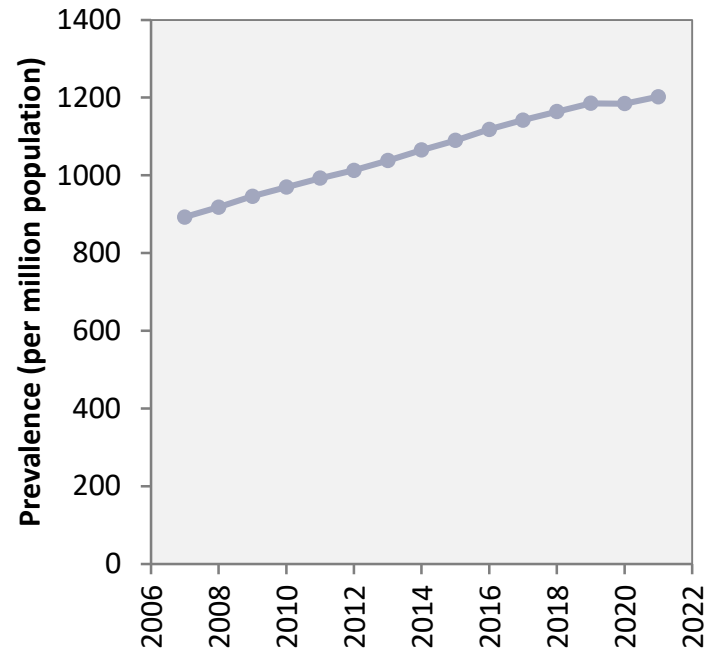


# Prevalent patients on KRT

*last 15 years (2007-2021)*

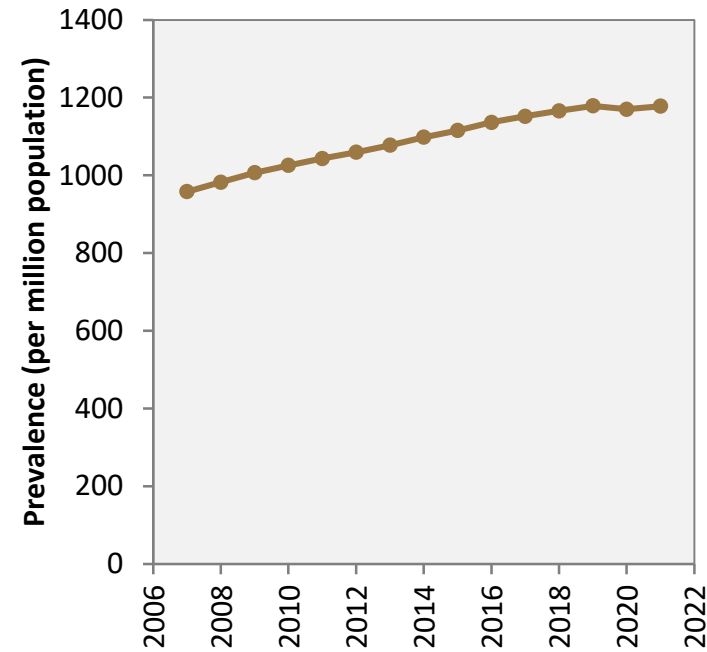
### Unadjusted prevalence over time

*all patients on KRT*



### Adjusted prevalence over time

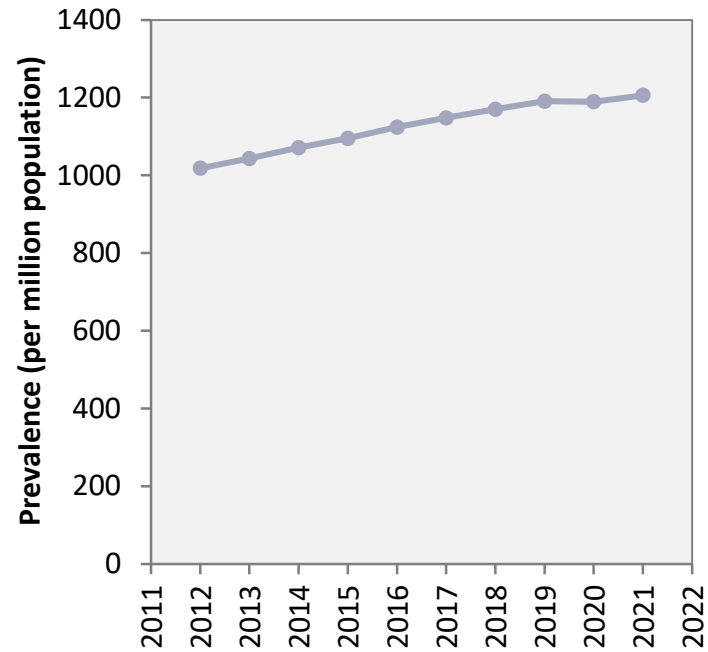
*all patients on KRT*



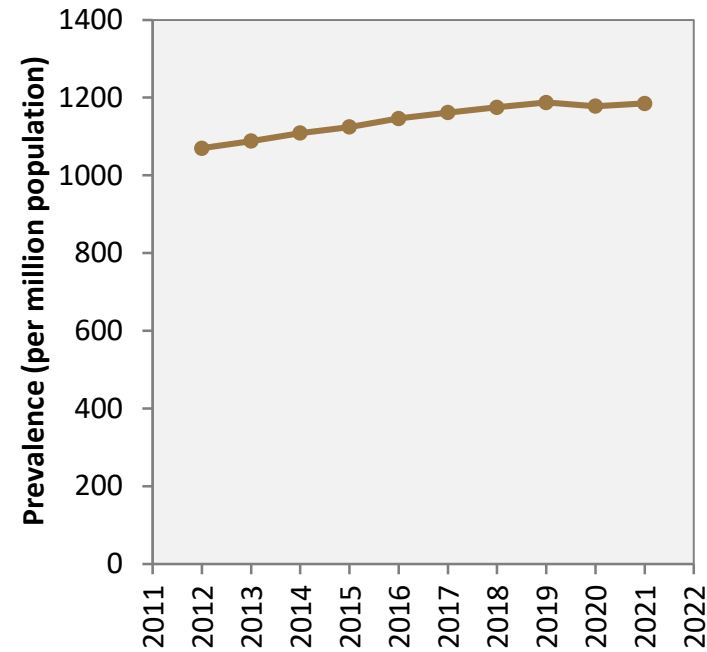
# Prevalent patients on KRT

*last 10 years (2012-2021)*

**Unadjusted prevalence over time**  
*all patients on KRT*



**Adjusted prevalence over time**  
*all patients on KRT*

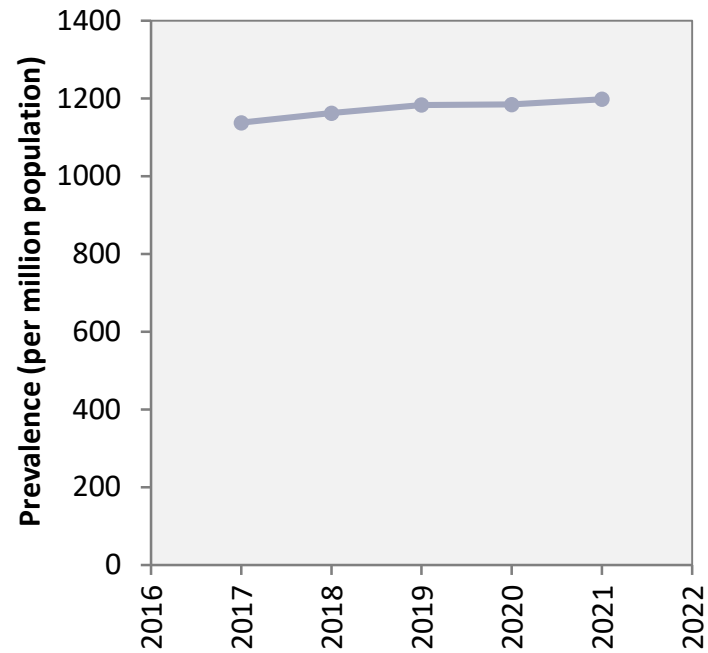


# Prevalent patients on KRT

*last 5 years (2017-2021)*

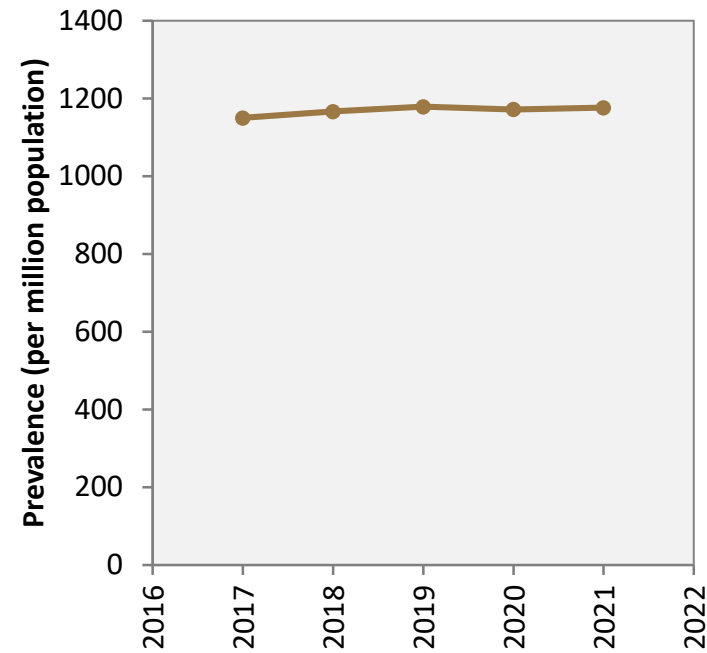
### Unadjusted prevalence over time

*all patients on KRT*



### Adjusted prevalence over time

*all patients on KRT*





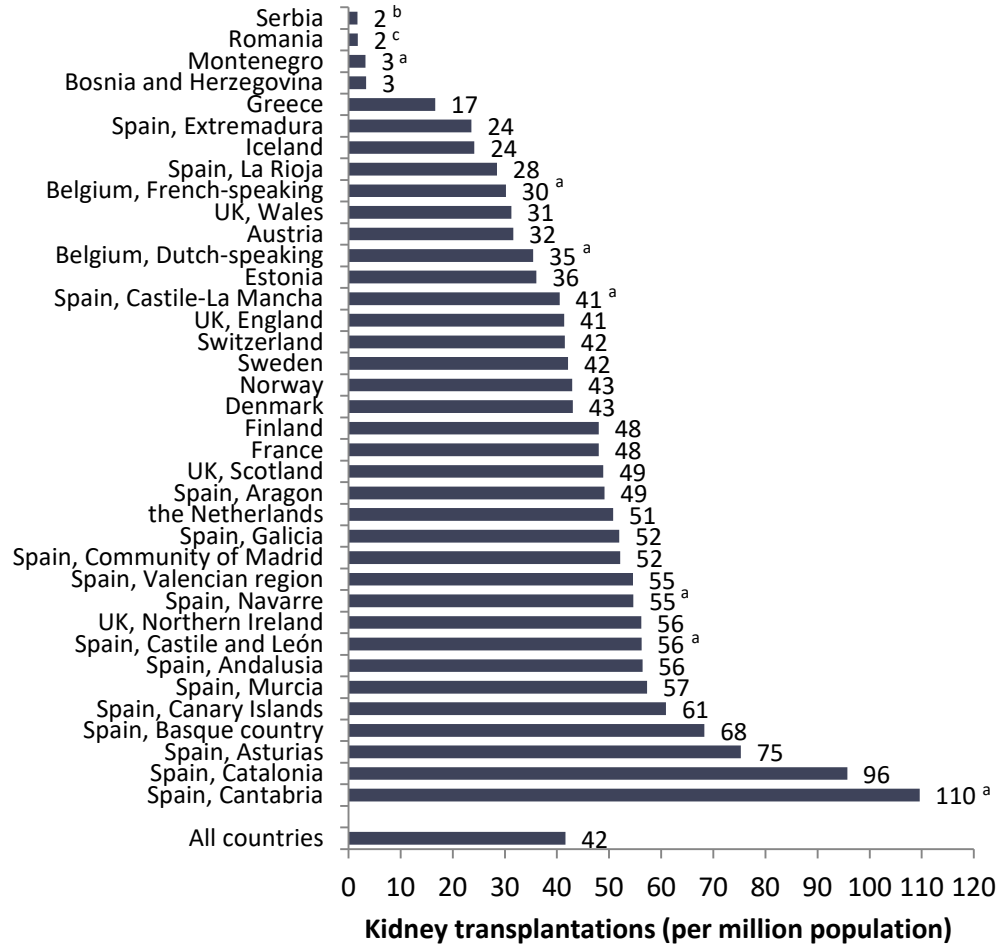


# Kidney transplantations performed in 2021

by country

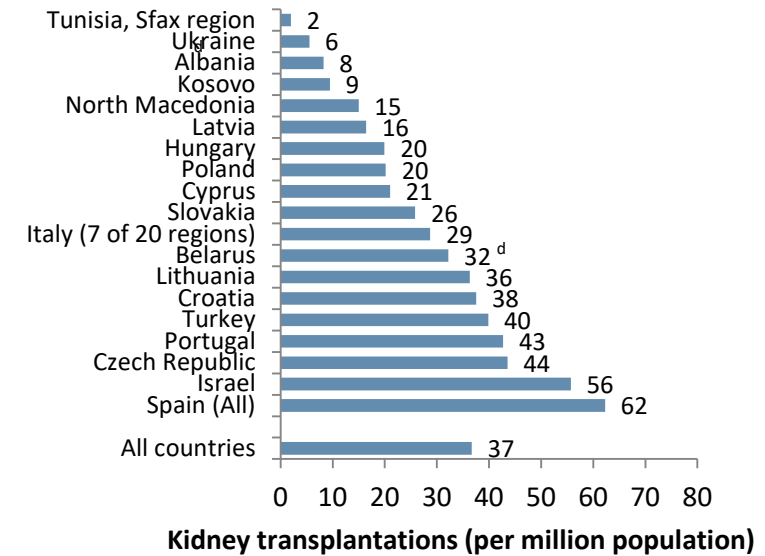
## Kidney transplantation rate

renal registries providing individual patient data



## Kidney transplantation rate

renal registries providing aggregated data



<sup>a</sup> patients younger than 20 years of age are not included; <sup>bc</sup> transplantation rates are underestimated by 15% (b), 30% (c); <sup>d</sup> patients younger than 18 years of age are not included

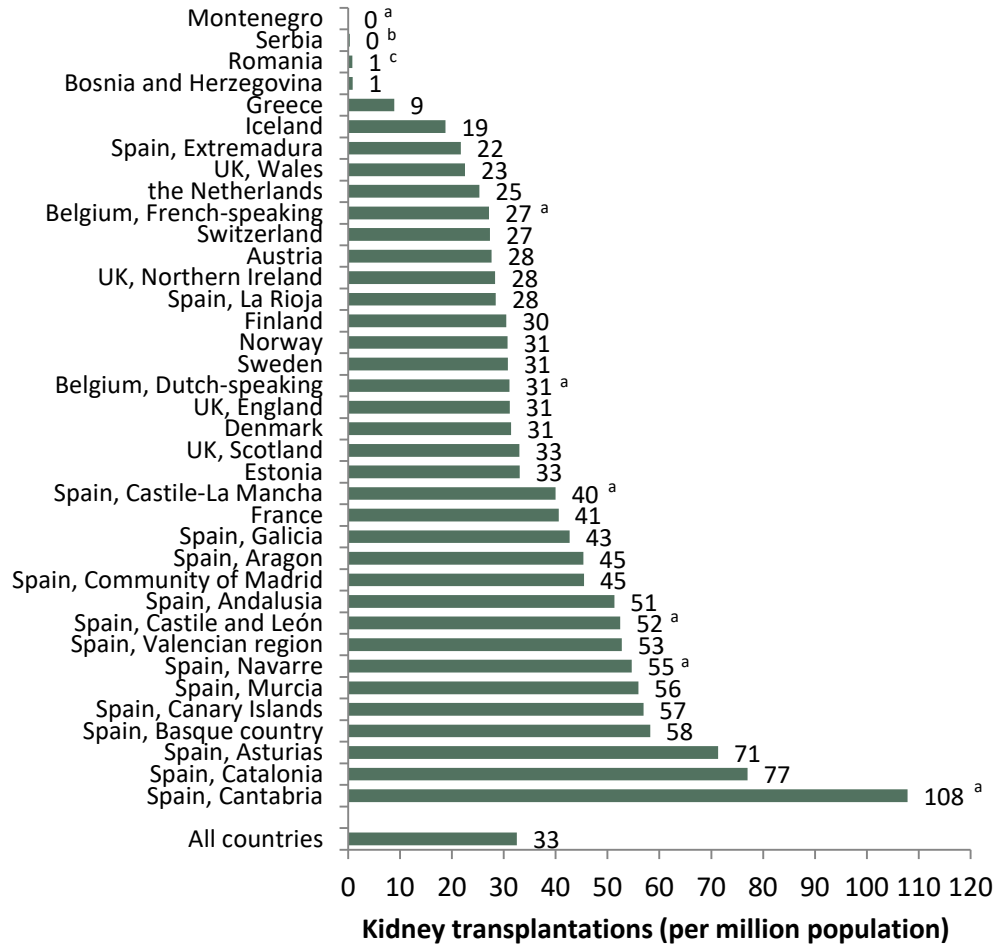


# Kidney transplantations performed in 2021

*transplants from deceased donors, by country*

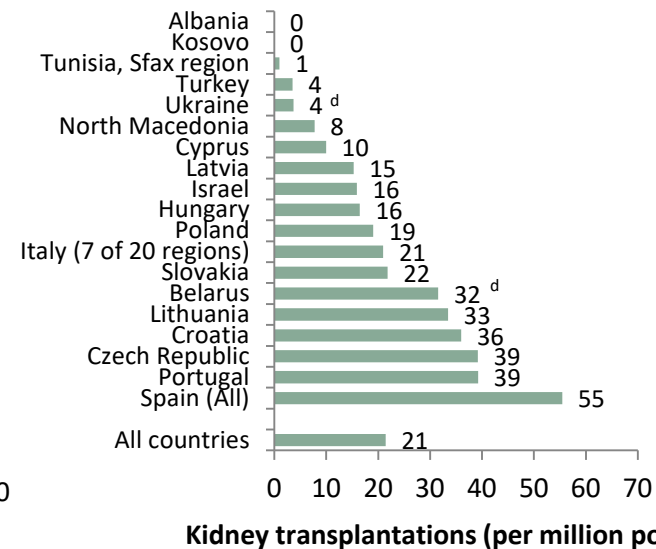
## Deceased donor transplantation rate

*renal registries providing individual patient data*



## Deceased donor transplantation rate

*renal registries providing aggregated data*



<sup>a</sup> patients younger than 20 years of age are not included; <sup>bc</sup> transplantation rates are underestimated by 16% (b), 30% (c); <sup>d</sup> patients younger than 18 years of age are not included

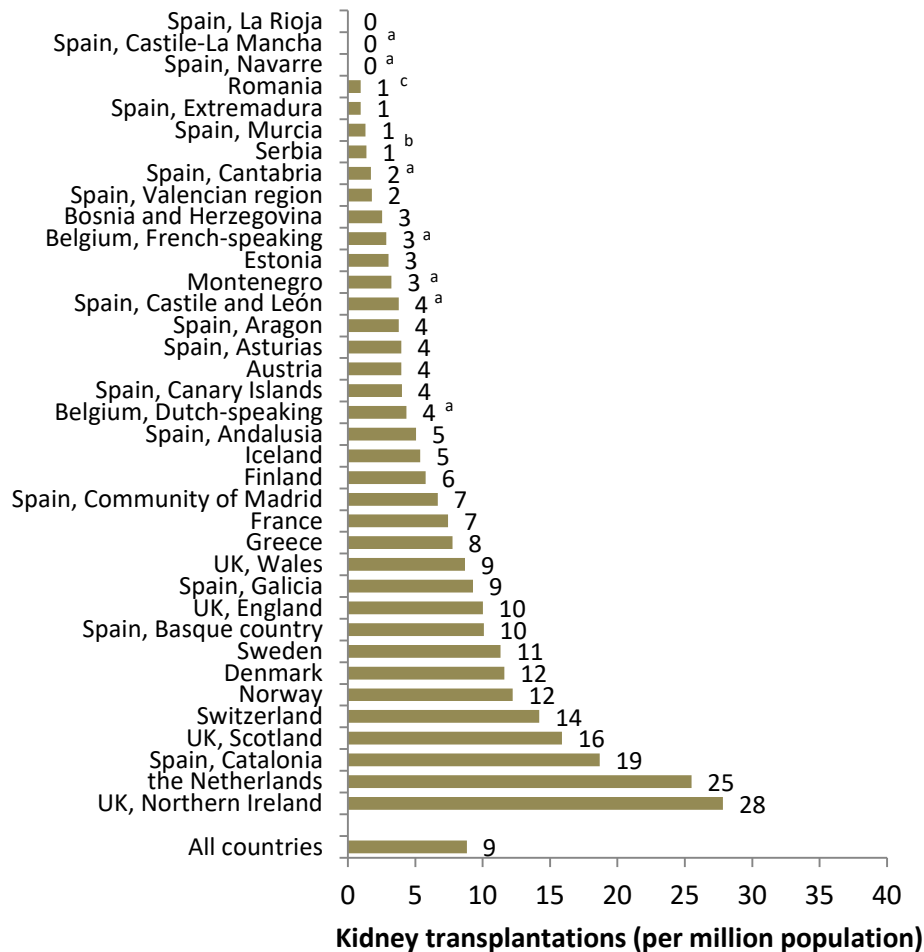


# Kidney transplantations performed in 2021

*transplants from living donors, by country*

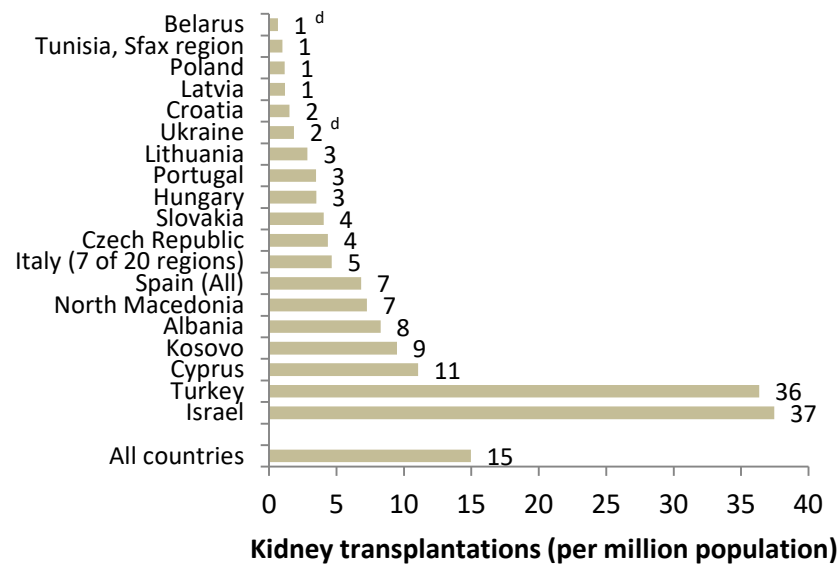
## Living donor transplantation rate

*renal registries providing individual patient data*



## Living donor transplantation rate

*renal registries providing aggregated data*

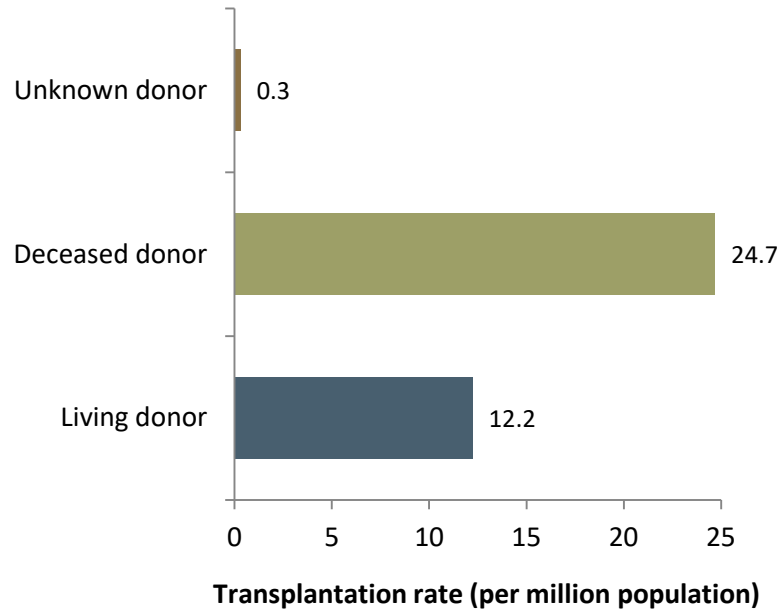


<sup>a</sup> patients younger than 20 years of age are not included; <sup>bc</sup> transplant rates are underestimated by 12% (b), 30% (c); <sup>d</sup> patients younger than 18 years of age are not included

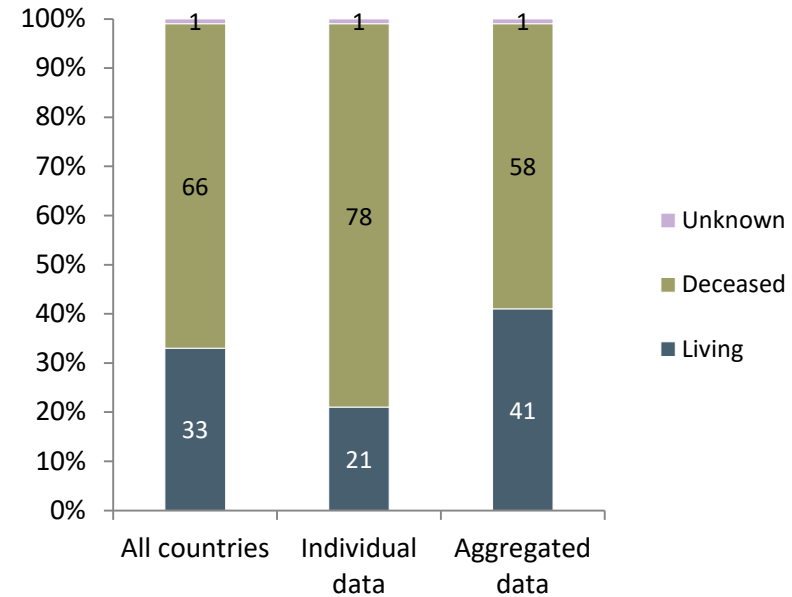
# Kidney transplantations performed in 2021

*by donor type*

**Kidney transplantations by donor type**  
*for all registries*



**Kidney transplantations by donor type**  
*by type of data provided by registry*



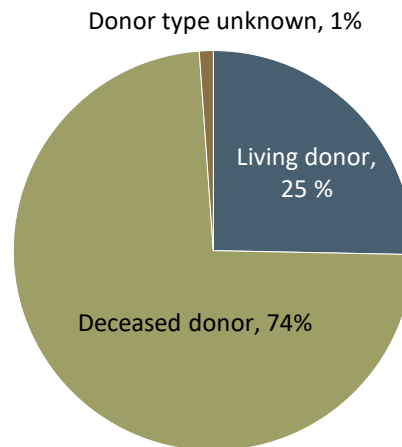
# Kidney transplantations performed in 2021

*by donor type*

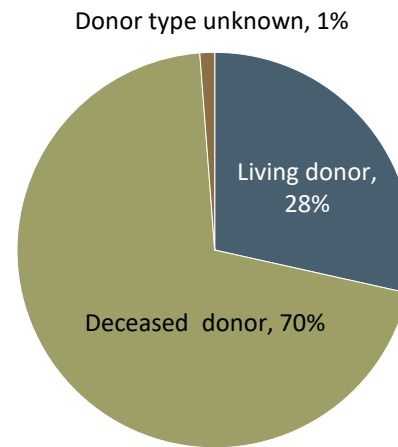
## Kidney transplantations by donor type

*patients from registries providing individual patient data only*

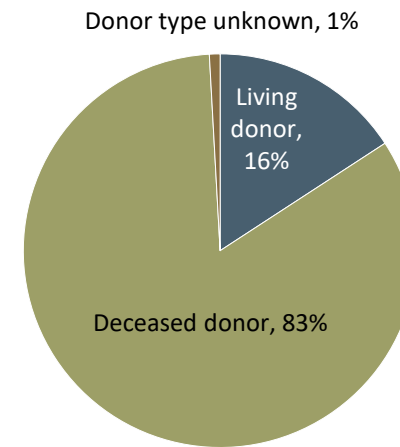
**all patients**



**patients younger than 65 years  
of age at transplantation**

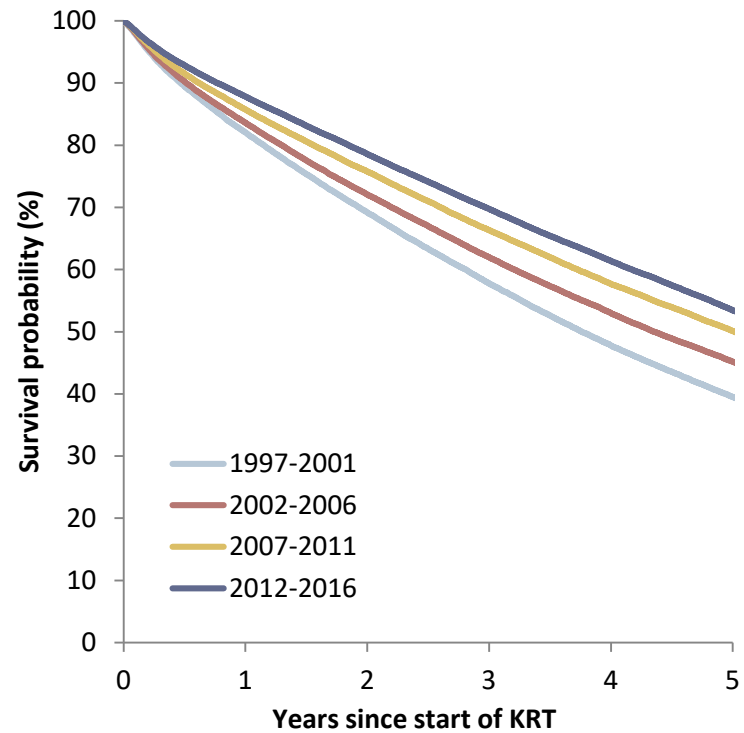


**patients aged 65 years or older  
at transplantation**



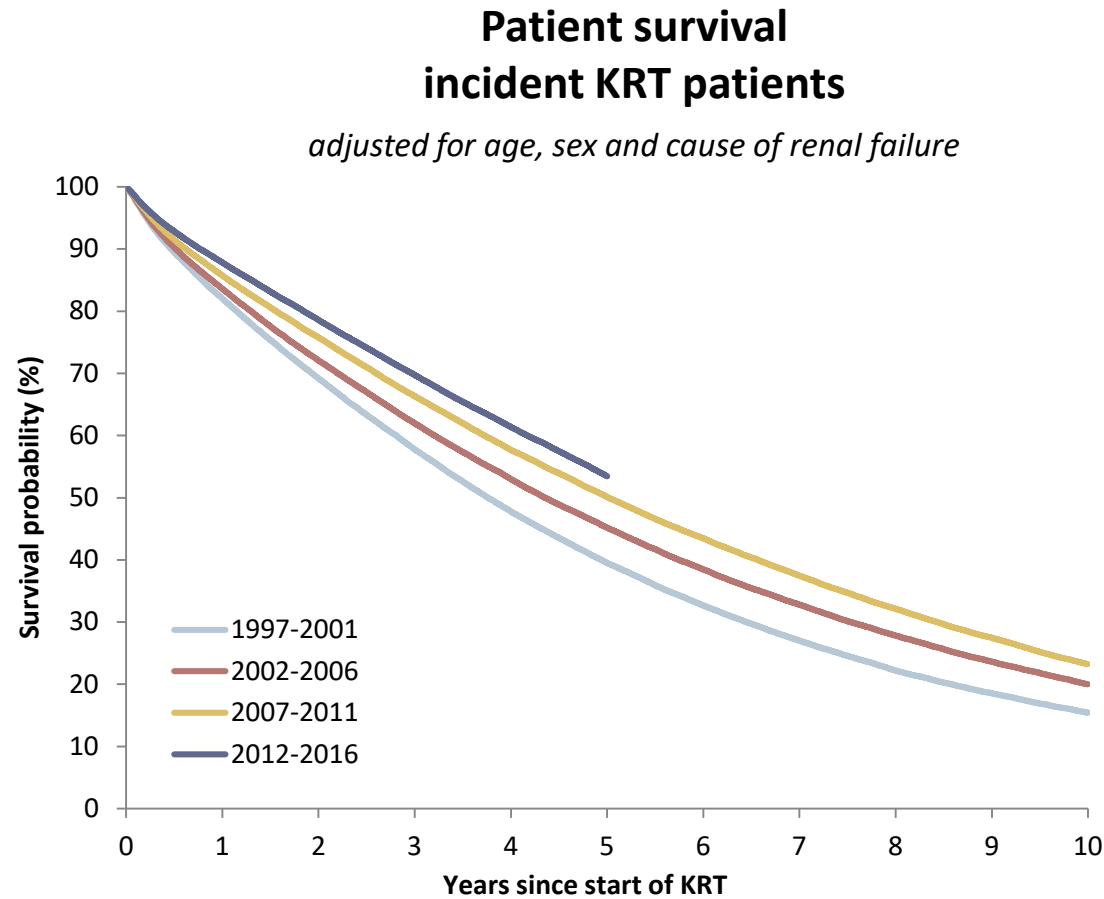
## Patient survival incident KRT patients

*adjusted for age, sex and cause of renal failure*



*Survival probabilities were adjusted for fixed values for age (67 years), sex (63% men), and the primary renal disease distribution (24% diabetes mellitus, 19% hypertension / renal vascular disease, 11% glomerulonephritis and 46% other primary renal diseases).*

*Cox regression model was used to calculate survival probabilities.*

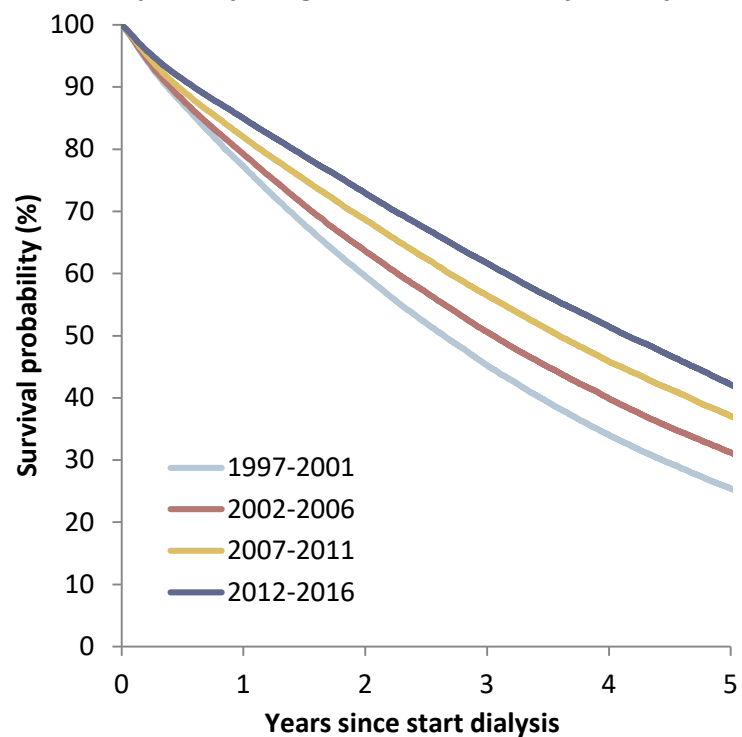


Survival probabilities were adjusted for fixed values for age (67 years), sex (63% men), and the primary renal disease distribution (24% diabetes mellitus, 19% hypertension / renal vascular disease, 11% glomerulonephritis and 46% other primary renal diseases).

Cox regression model was used to calculate survival probabilities.

## Patient survival incident dialysis patients

*adjusted for age, sex and cause of renal failure*



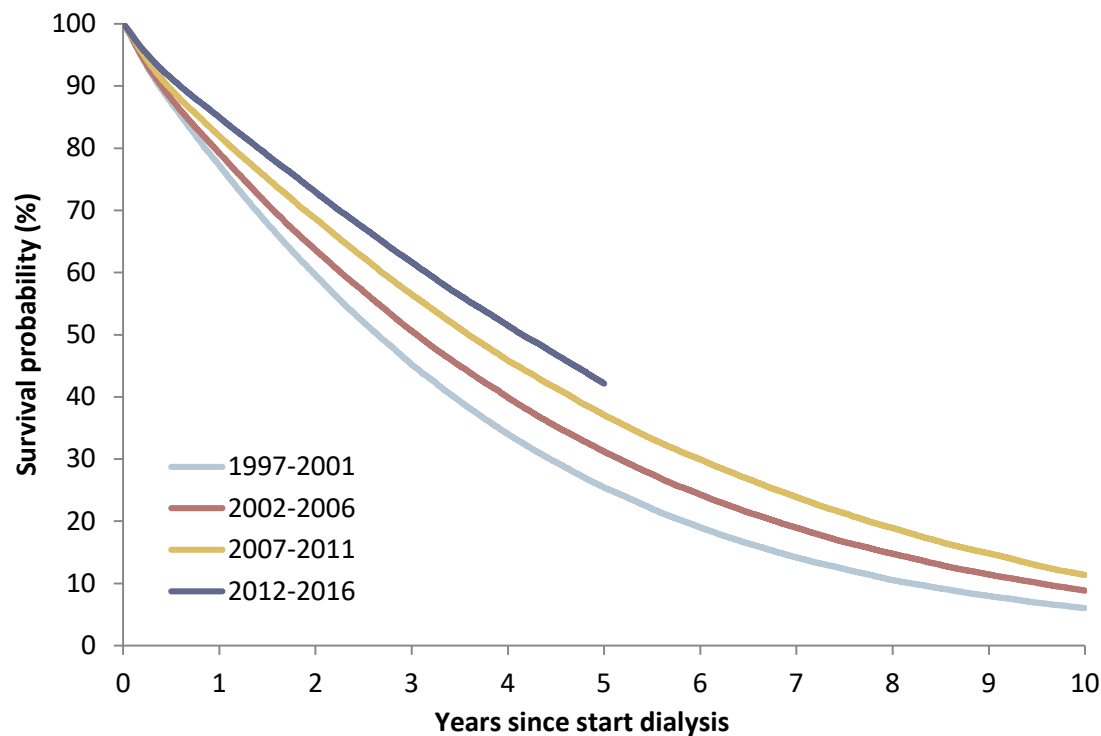
*Survival probabilities were adjusted for fixed values for age (67 years), sex (63% men), and the primary renal disease distribution (24% diabetes mellitus, 19% hypertension / renal vascular disease, 11% glomerulonephritis and 46% other primary renal diseases).*

*Cox regression model was used to calculate survival probabilities.*



## Patient survival incident dialysis patients

*adjusted for age, sex and cause of renal failure*

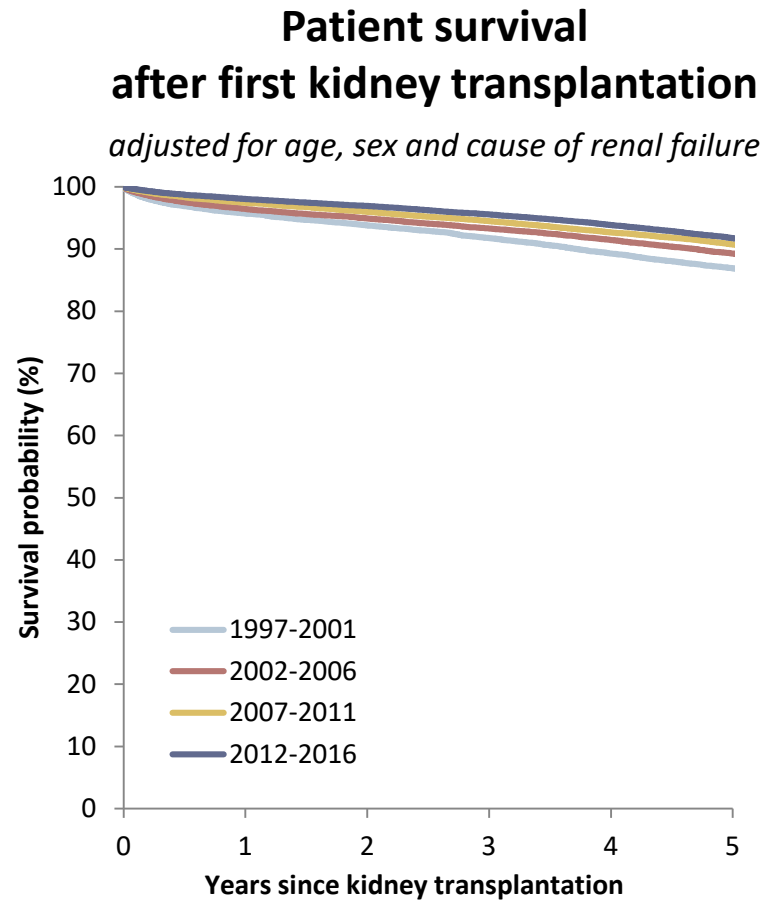


*Survival probabilities were adjusted for fixed values for age (67 years), sex (63% men), and the primary renal disease distribution (24% diabetes mellitus, 19% hypertension / renal vascular disease, 11% glomerulonephritis and 46% other primary renal diseases).*

*Cox regression model was used to calculate survival probabilities.*

# Patient survival after kidney transplantation

*by cohort*



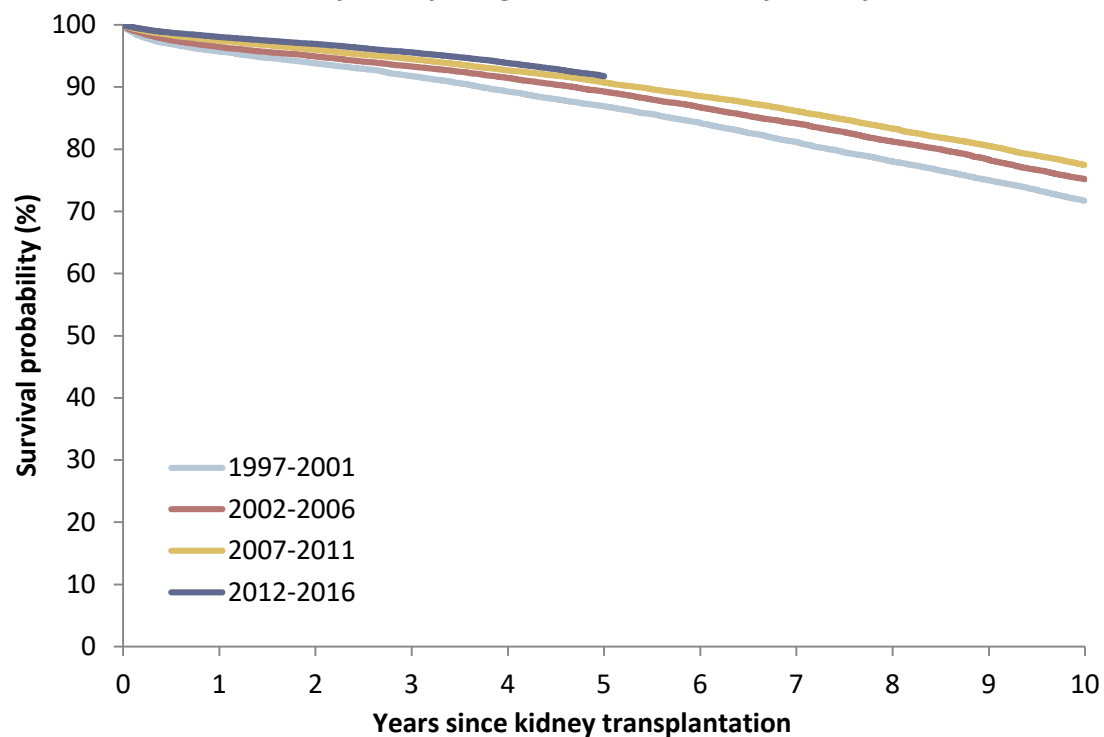
*Survival probabilities were adjusted for fixed values for age (50 years), sex (63% men), and the primary renal disease distribution (14% diabetes mellitus, 10% hypertension / renal vascular disease, 23% glomerulonephritis and 53% other primary renal diseases).*

*Cox regression model was used to calculate survival probabilities.*

# Patient survival after kidney transplantation

*by cohort*

**Patient survival  
after first kidney transplantation**  
*adjusted for age, sex and cause of renal failure*

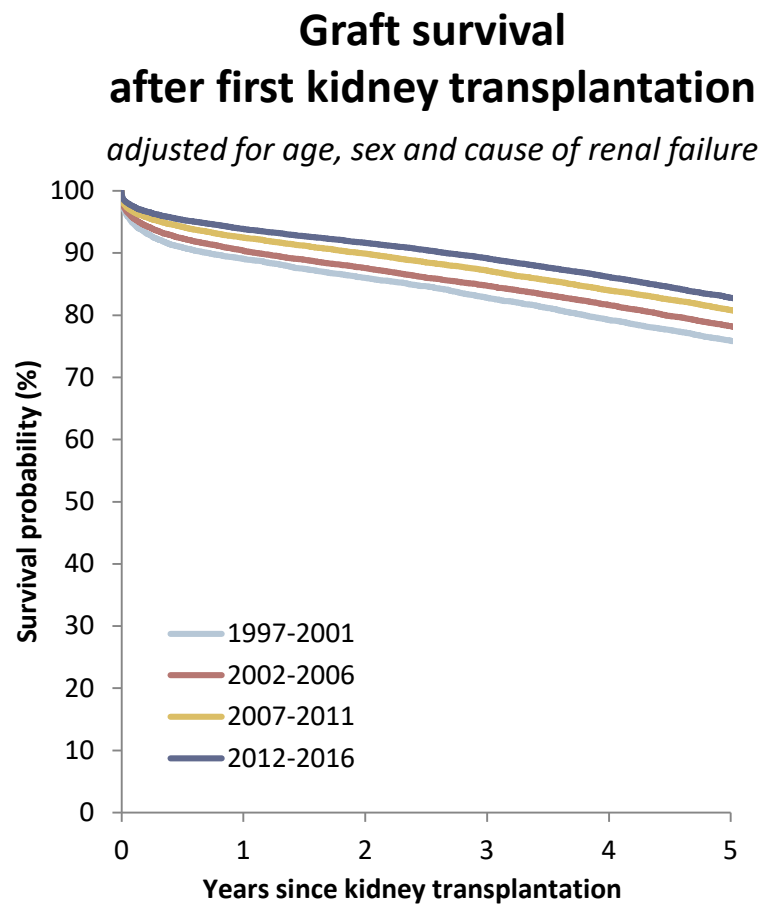


*Survival probabilities were adjusted for fixed values for age (50 years), sex (63% men), and the primary renal disease distribution (14% diabetes mellitus, 10% hypertension / renal vascular disease, 23% glomerulonephritis and 53% other primary renal diseases).*

*Cox regression model was used to calculate survival probabilities.*

# Graft survival after kidney transplantation

*by cohort*



*Survival probabilities were adjusted for fixed values for age (50 years), sex (63% men), and the primary renal disease distribution (14% diabetes mellitus, 10% hypertension / renal vascular disease, 23% glomerulonephritis and 53% other primary renal diseases).*

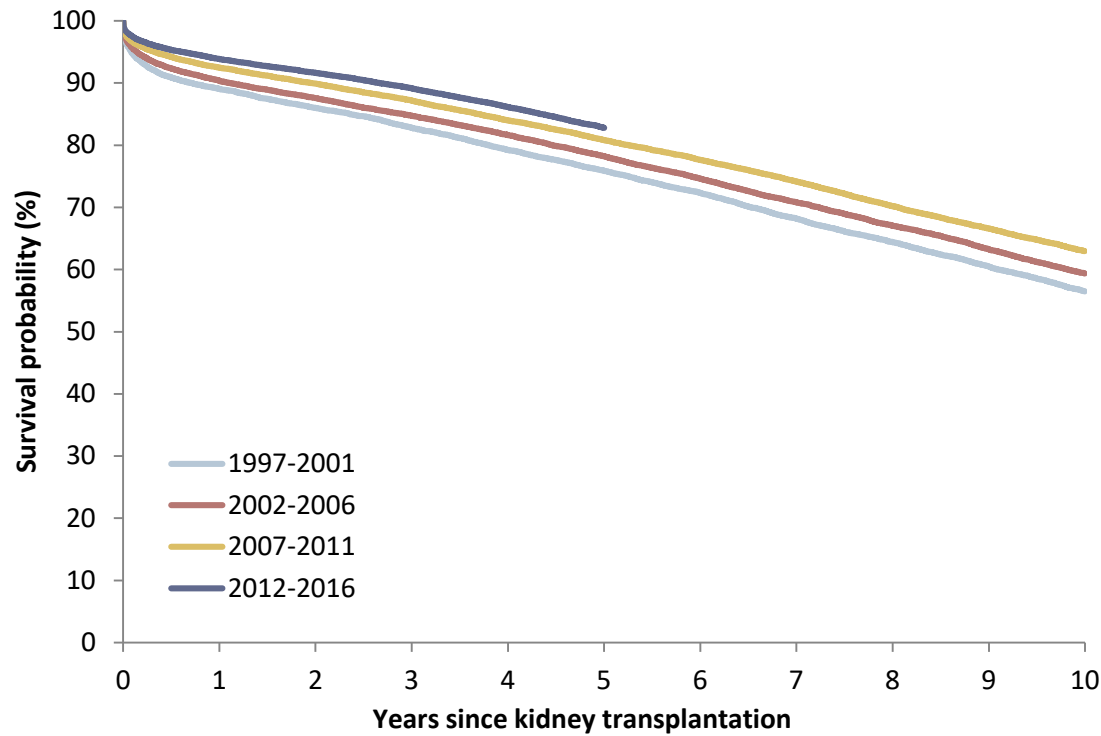
*Cox regression model was used to calculate survival probabilities.*

# Graft survival after kidney transplantation

*by cohort*

## Graft survival after first kidney transplantation

*adjusted for age, sex and cause of renal failure*



*Survival probabilities were adjusted for fixed values for age (50 years), sex (63% men), and the primary renal disease distribution (14% diabetes mellitus, 10% hypertension / renal vascular disease, 23% glomerulonephritis and 53% other primary renal diseases).*

*Cox regression model was used to calculate survival probabilities.*

## Expected remaining years of life of the general population and of prevalent dialysis and kidney transplant patients

