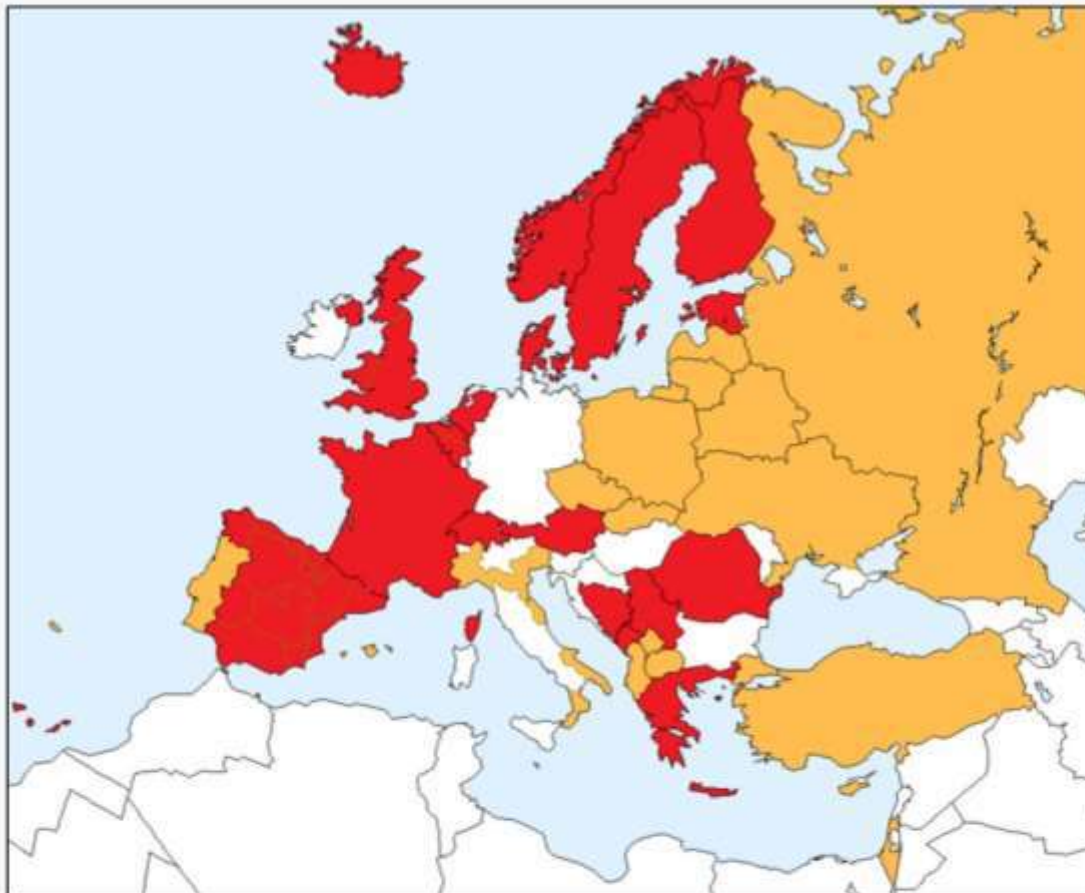






Summary of the 2019 ERA-EDTA Registry Annual Report

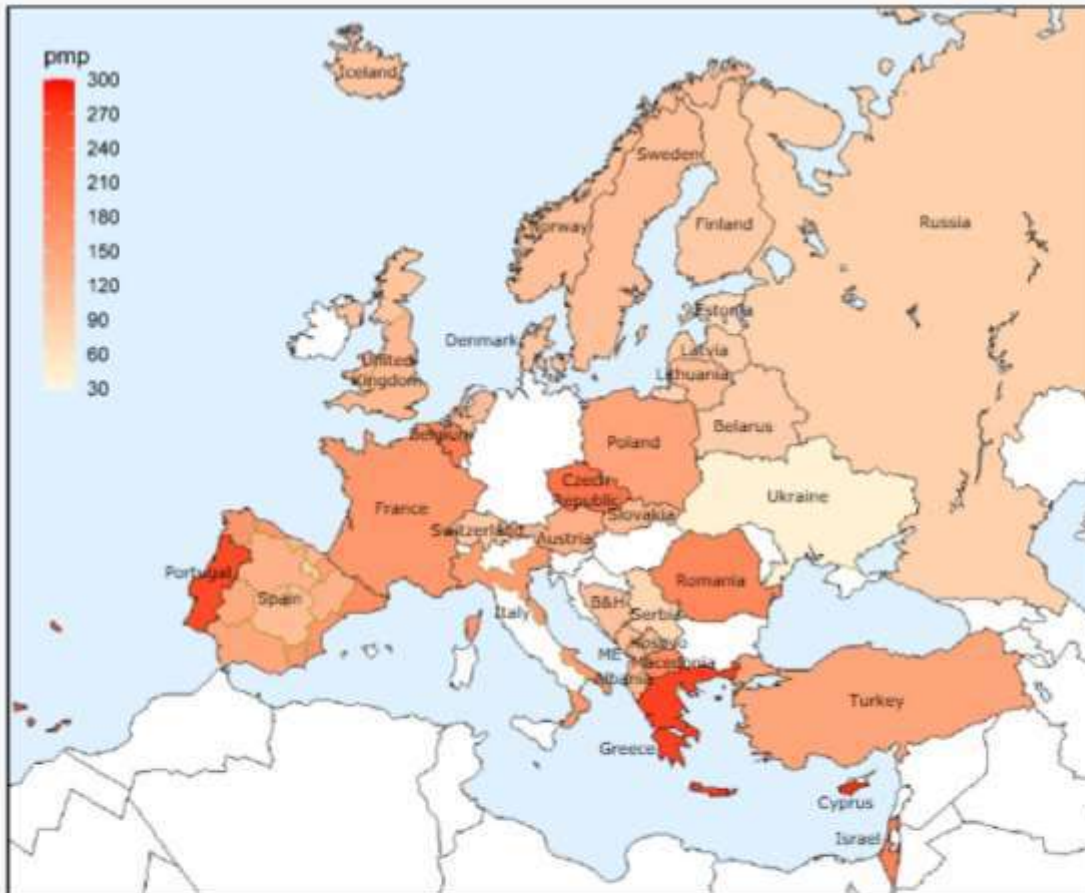


National and regional renal registries that contributed data to the 2019 ERA-EDTA Registry Annual Report



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

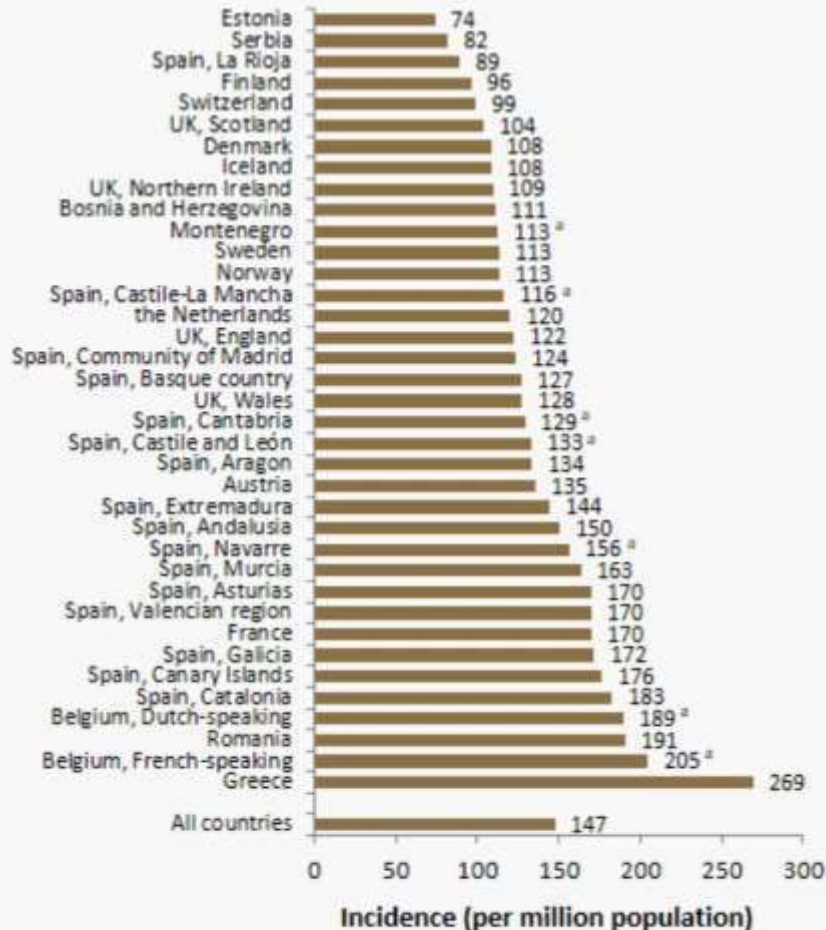
Incident patients accepted for RRT in 2019, at day 1 *by country*



Incident patients accepted for RRT in 2019 at day 1 by country

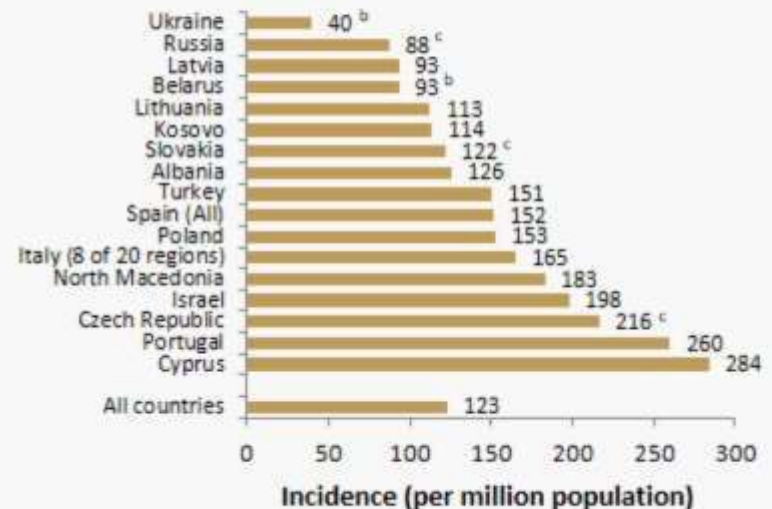
Unadjusted incidence

renal registries providing individual patient data



Unadjusted incidence

renal registries providing aggregated data



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

Incident patients accepted for RRT in 2019 at day 1

*by country
adjusted for age and sex*

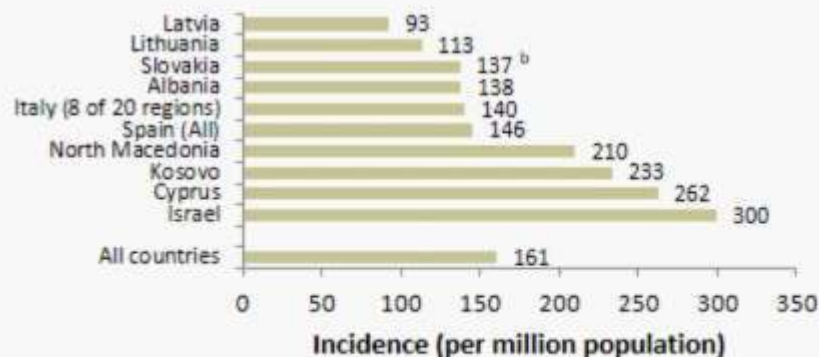
Adjusted incidence

renal registries providing individual patient data



Adjusted incidence

renal registries providing aggregated data

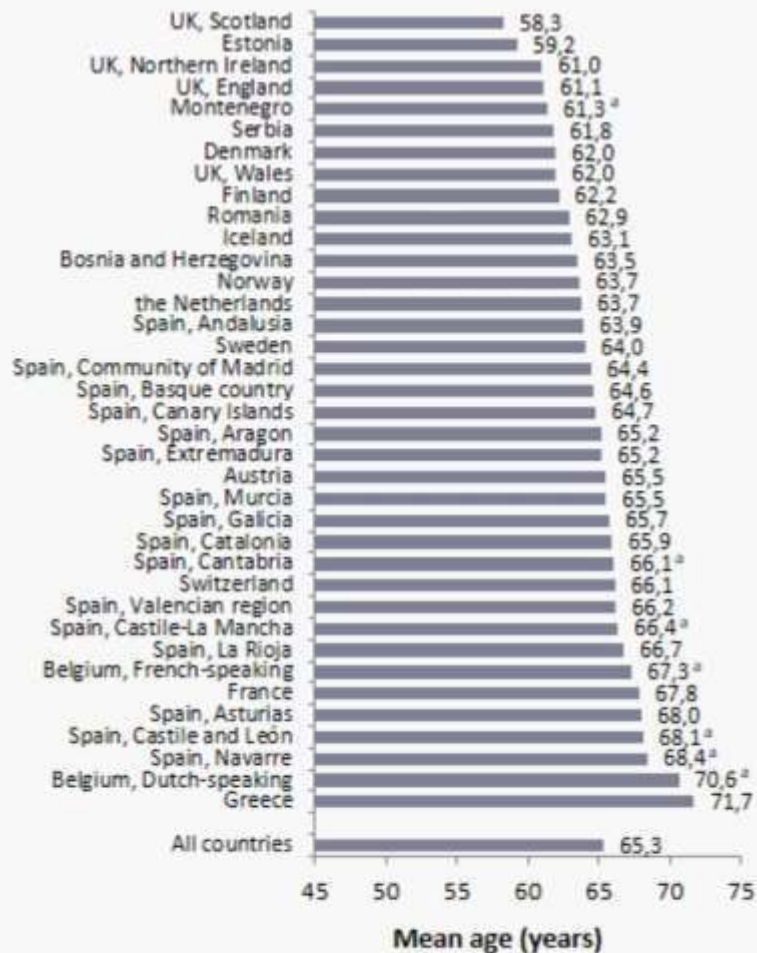


^a patients younger than 20 years of age are not included; ^b data includes patients receiving dialysis only

Incident patients accepted for RRT in 2019 at day 1 mean age

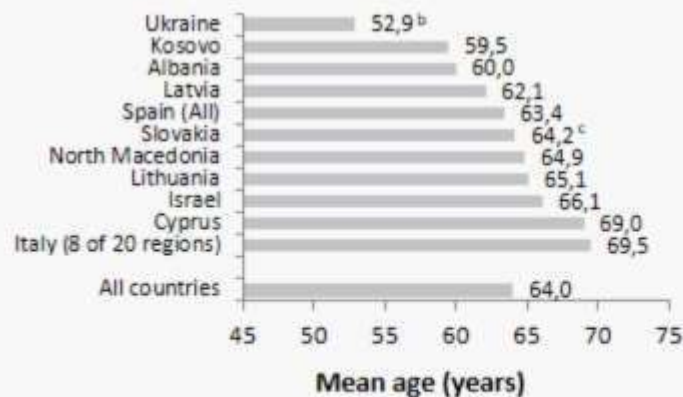
Mean age at start of RRT

renal registries providing individual patient data



Mean age at start of RRT

renal registries providing aggregated data



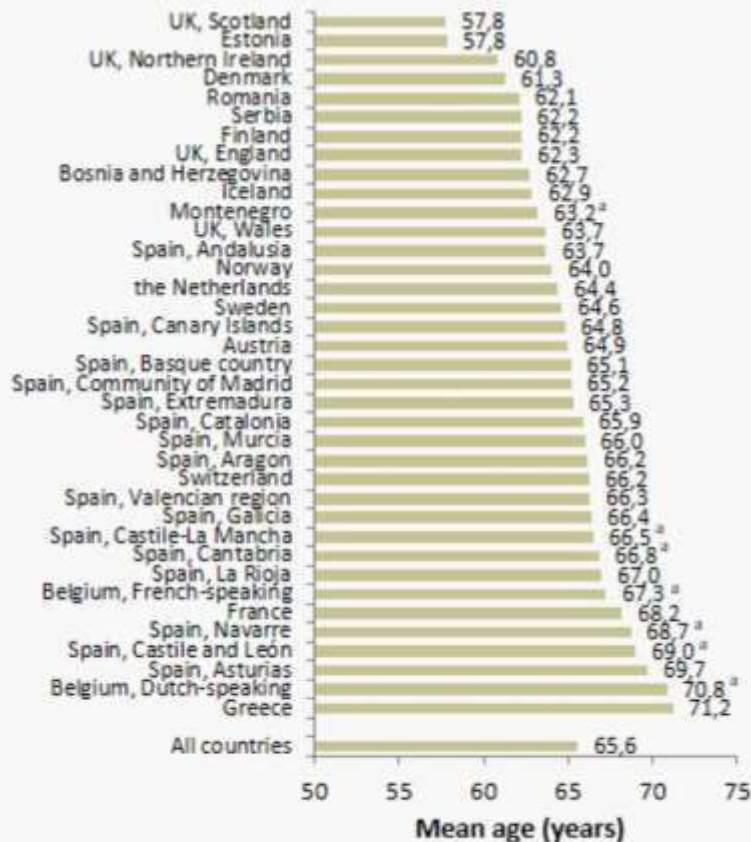
^a patients younger than 20 years of age are not included; ^b patients younger than 18 years of age are not included; ^c data includes patients receiving dialysis only

Incident patients accepted for RRT in 2019, at day 1

registries providing individual patient data only

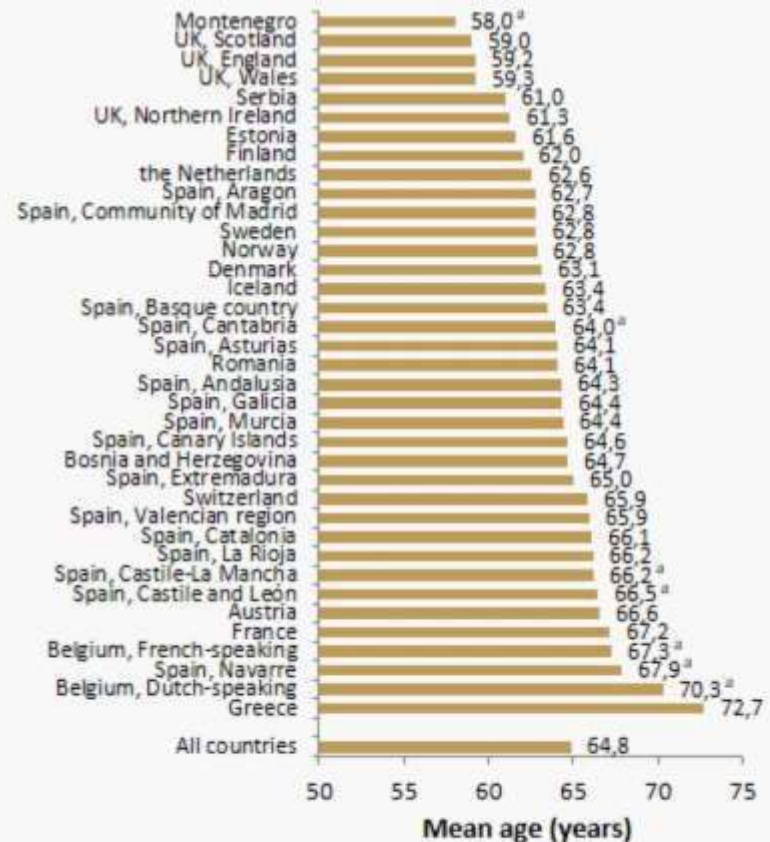
Mean age at start of RRT

male patients



Mean age at start of RRT

female patients

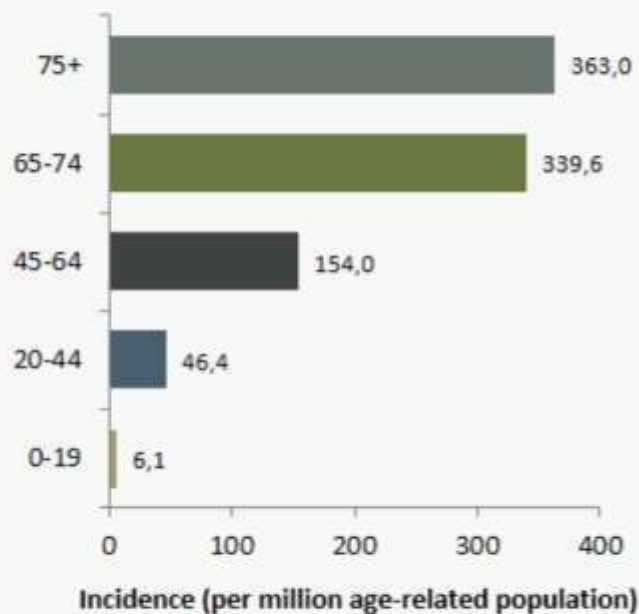


^a patients younger than 20 years of age are not included;

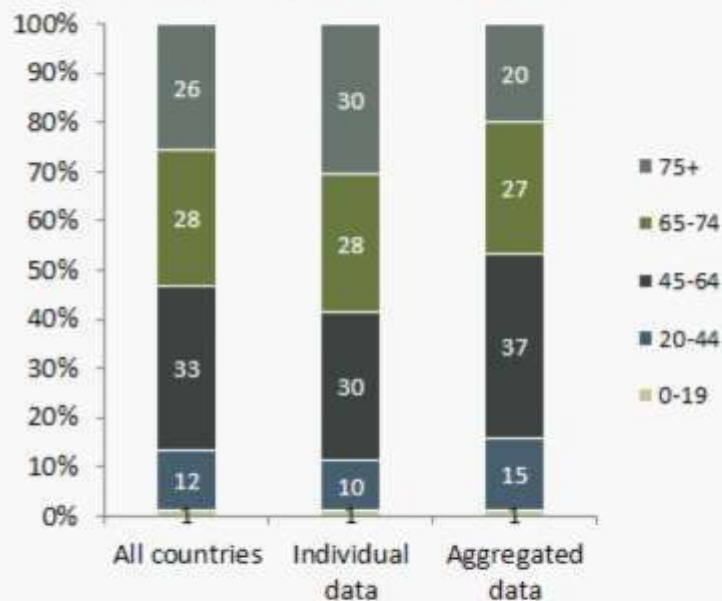
Incident patients accepted for RRT in 2019, at day 1

by age category

Incidence by age category
for all registries



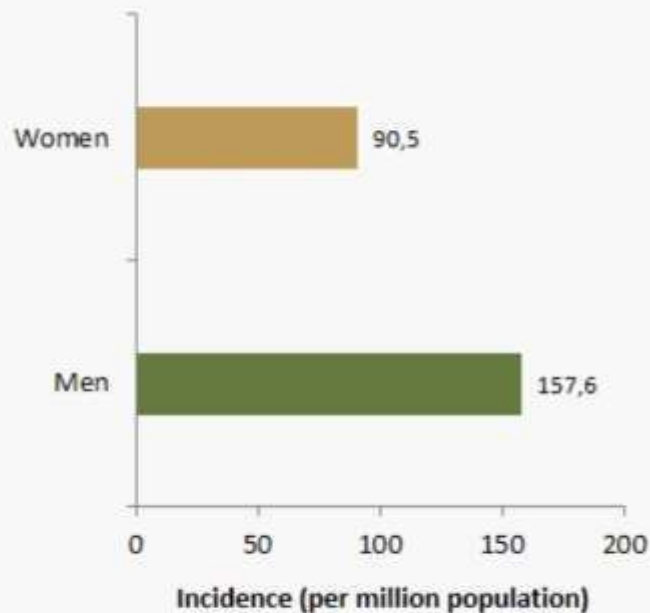
Incidence by age category
by type of data provided by registry



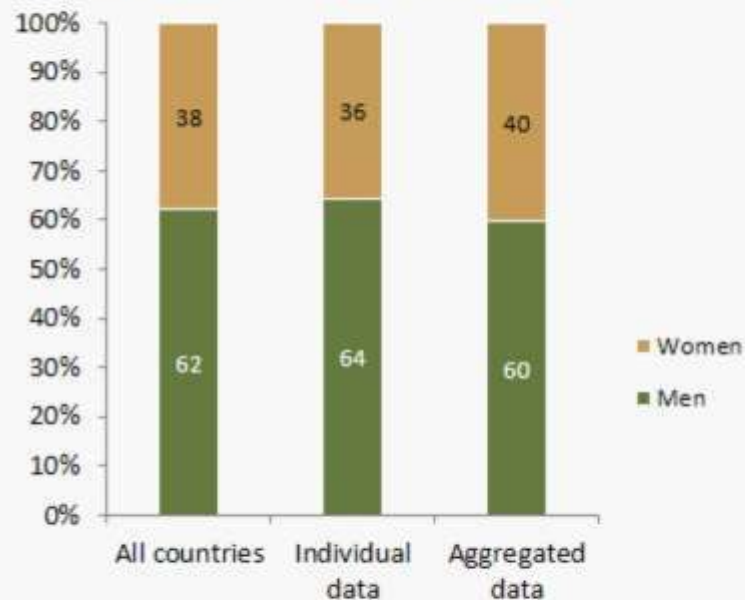
Incident patients accepted for RRT in 2019, at day 1

by sex

Incidence by sex
for all registries



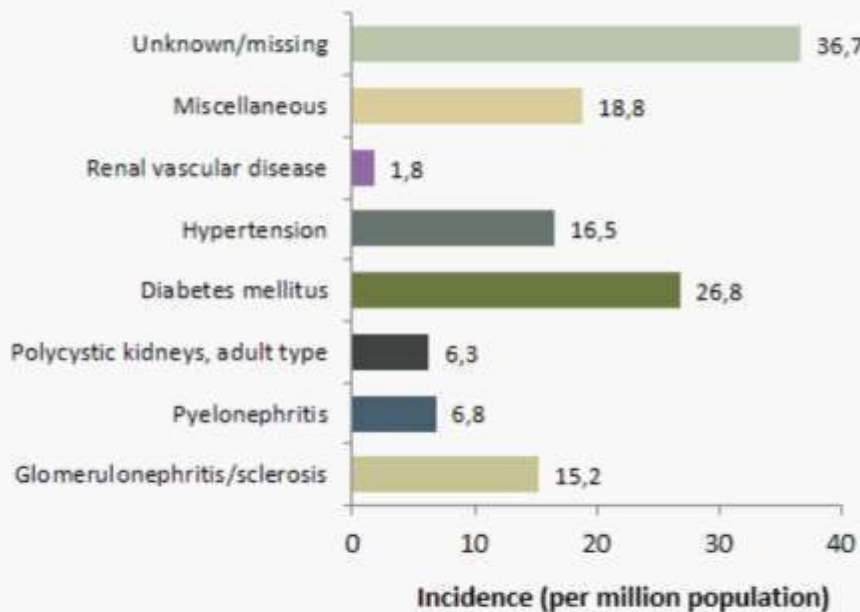
Incidence by sex
by type of data provided by registry



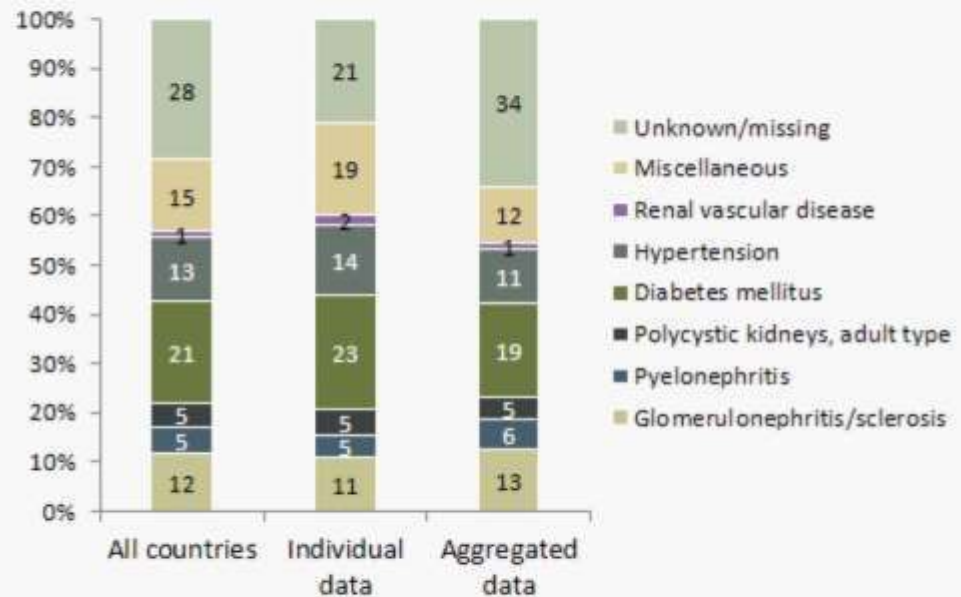
Incident patients accepted for RRT in 2019, at day 1

by primary renal disease

Incidence by primary renal disease
for all registries



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



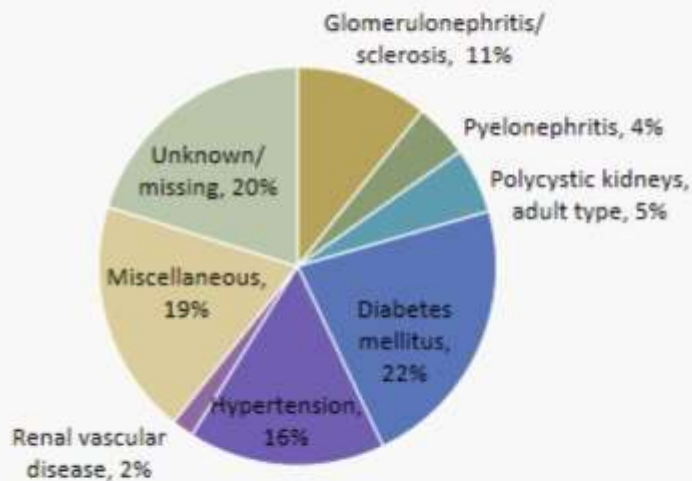
Incident patients accepted for RRT in 2019, at day 1

by primary renal disease and age category

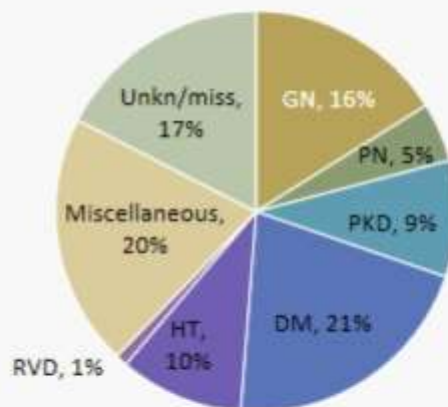
Incidence by primary renal disease

patients from registries providing individual patient data only

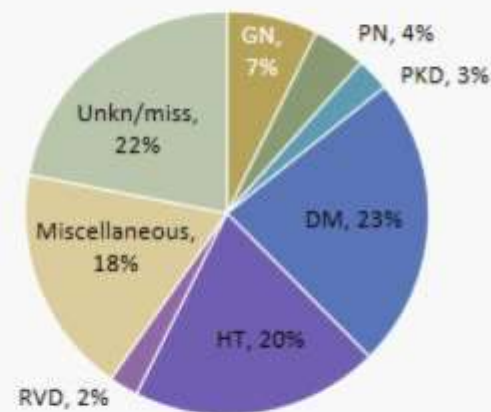
all patients



**patients younger than 65 years
of age at the start of RRT**

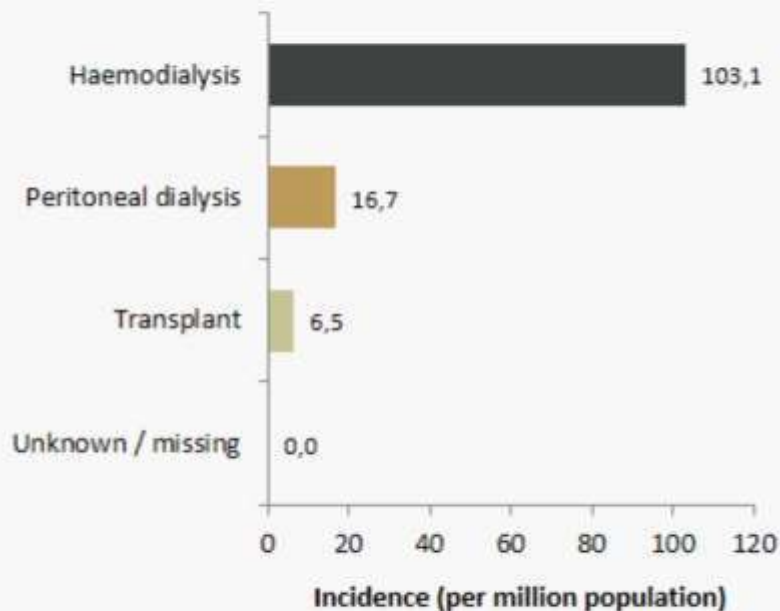


**patients aged 65 years or older
at the start of RRT**

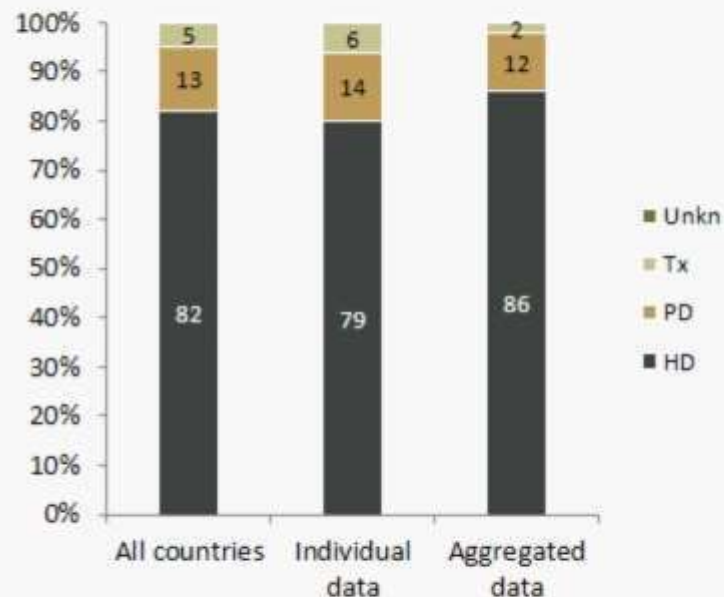


Incident patients accepted for RRT in 2019, at day 91 *by established modality*

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



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



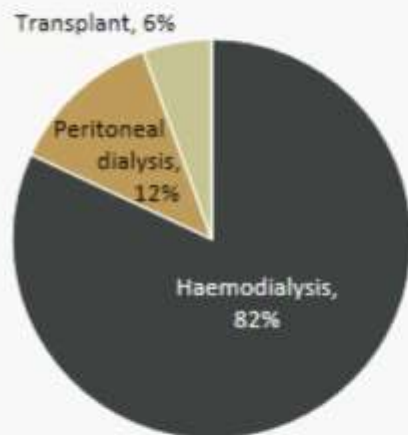
Incident patients accepted for RRT in 2019, at day 91

by established modality and age category

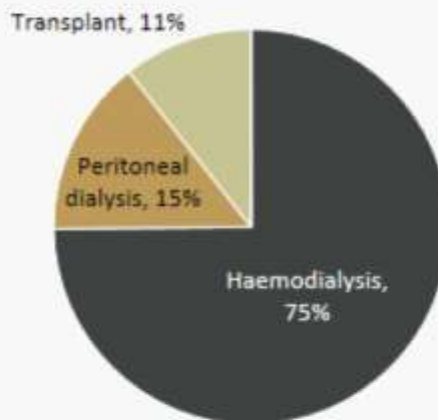
Incidence at day 91 by established modality

patients from registries providing individual patient data only

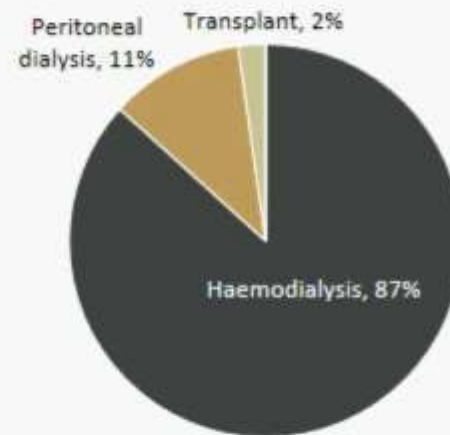
all patients



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



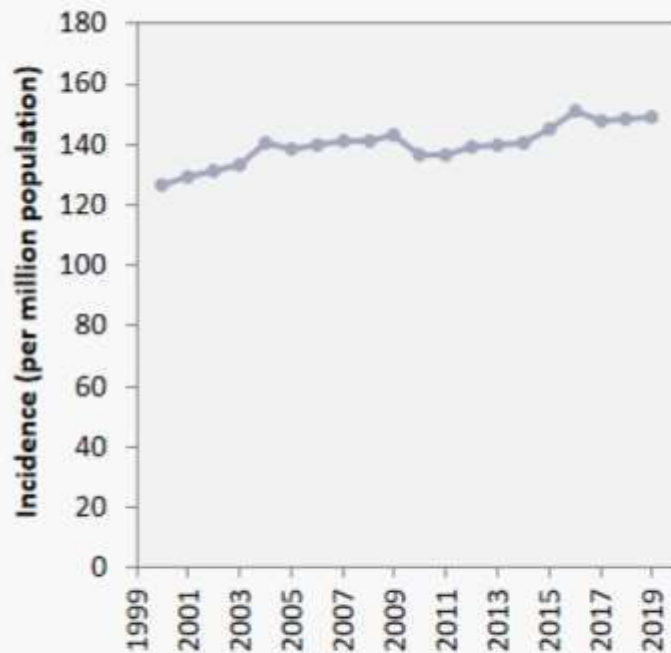
patients aged 65 years or older
at the start of RRT



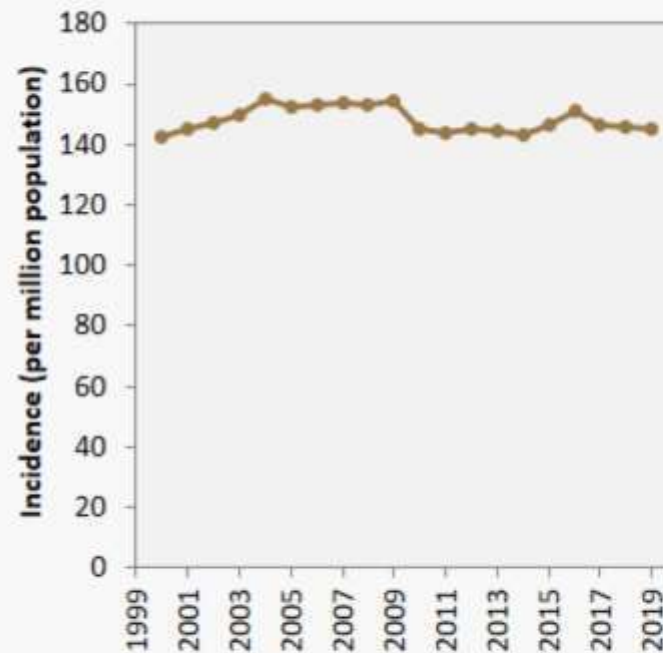
Incident patients accepted for RRT, at day 1

last 20 years (2000-2019)

Unadjusted incidence over time
all patients starting RRT



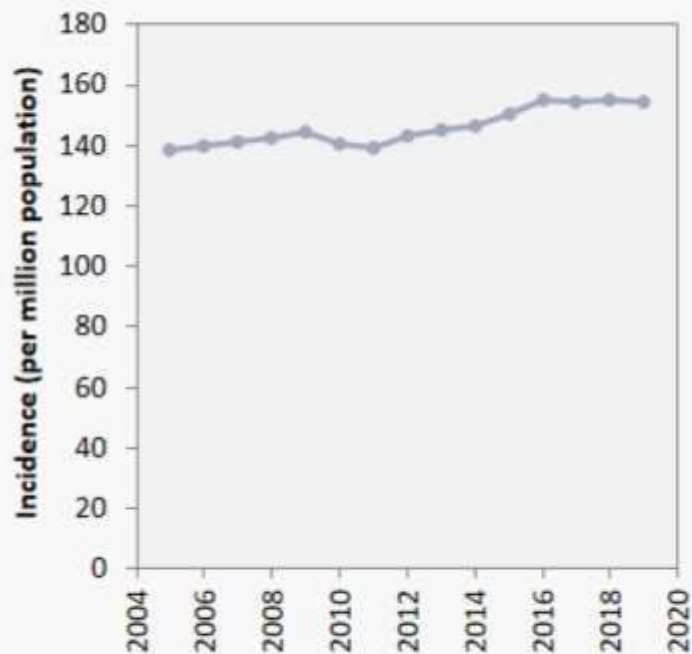
Adjusted incidence over time
all patients starting RRT



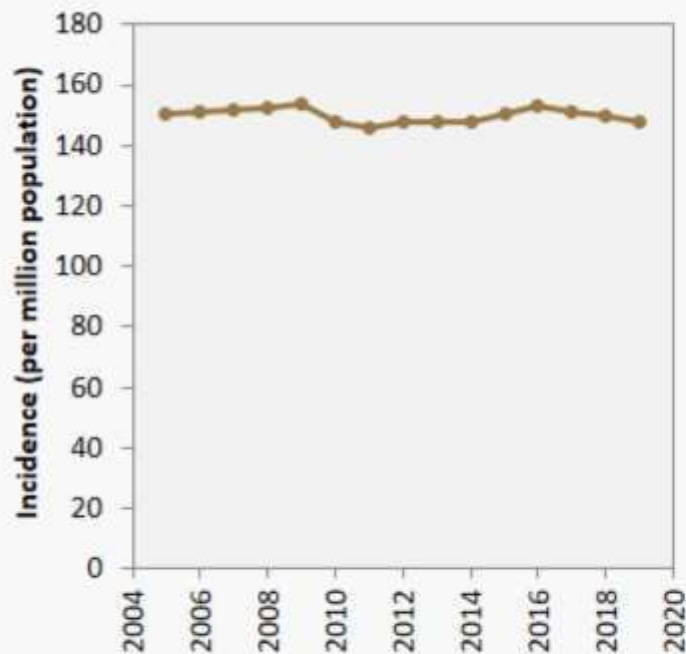
Incident patients accepted for RRT, at day 1

last 15 years (2005-2019)

Unadjusted incidence over time
all patients starting RRT



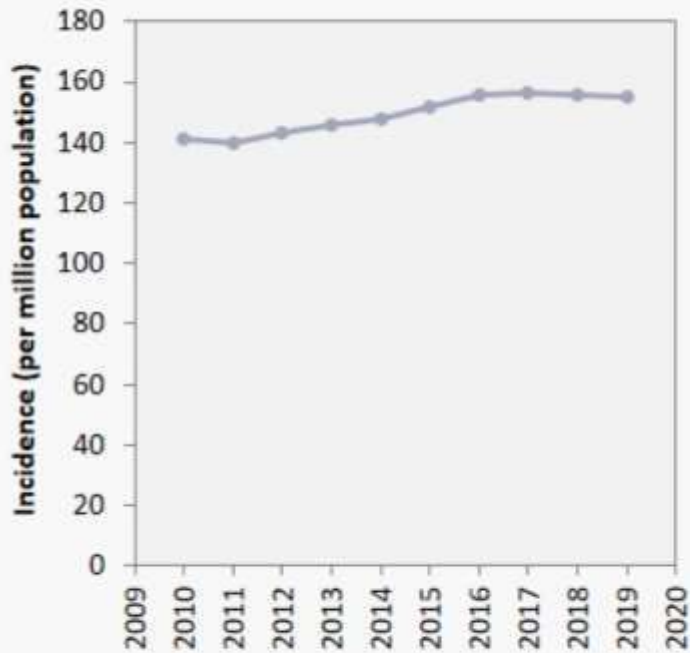
Adjusted incidence over time
all patients starting RRT



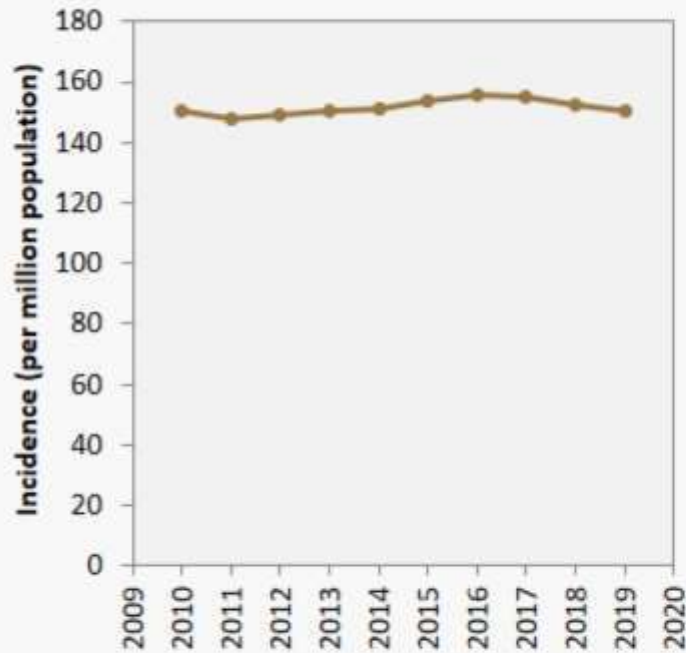
Incident patients accepted for RRT, at day 1

last 10 years (2010-2019)

Unadjusted incidence over time
all patients starting RRT



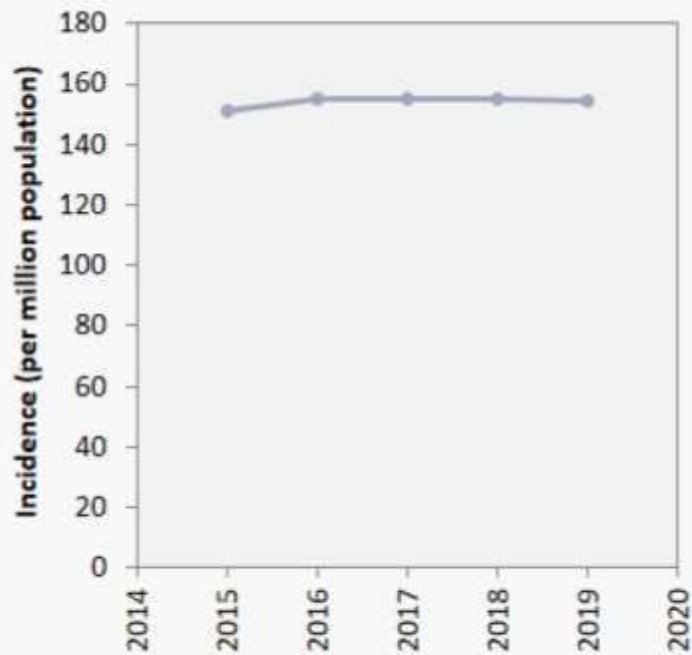
Adjusted incidence over time
all patients starting RRT



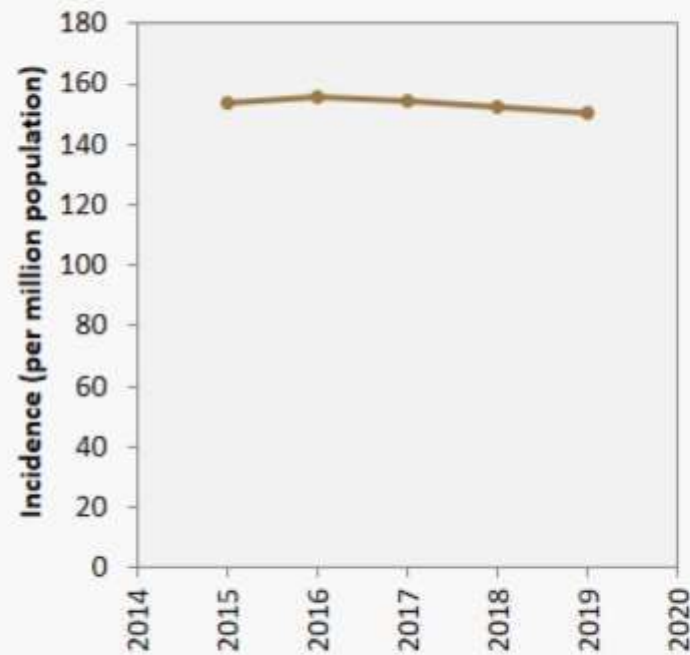
Incident patients accepted for RRT, at day 1

last 5 years (2015-2019)

Unadjusted incidence over time
all patients starting RRT

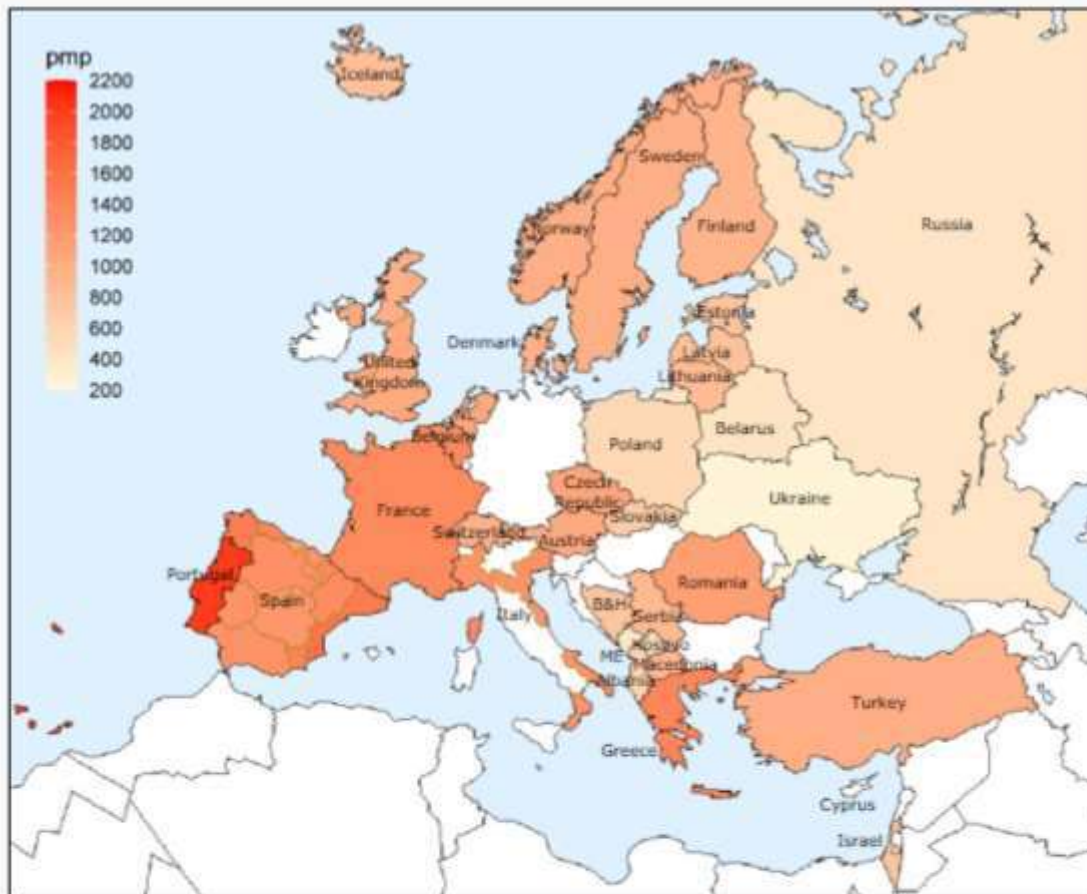


Adjusted incidence over time
all patients starting RRT



Prevalent patients on RRT in 2019

by country

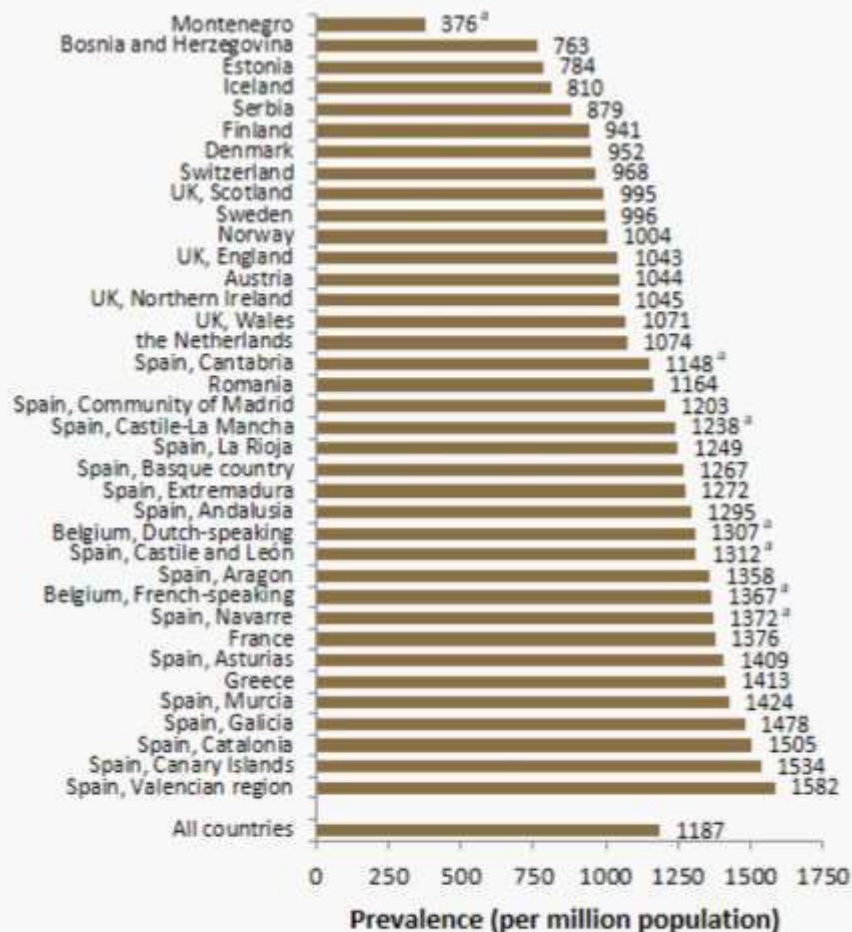


Prevalent patients on RRT in 2019

by country

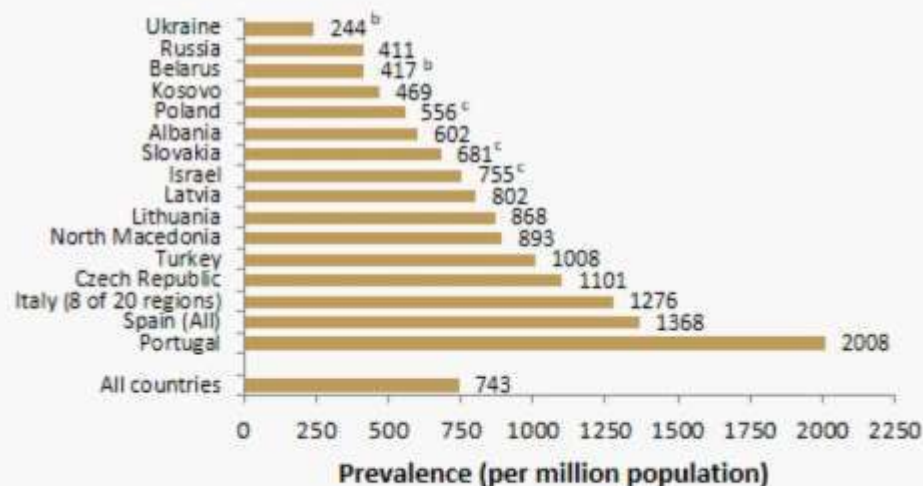
Unadjusted prevalence

renal registries providing individual patient data



Unadjusted prevalence

renal registries providing aggregated data



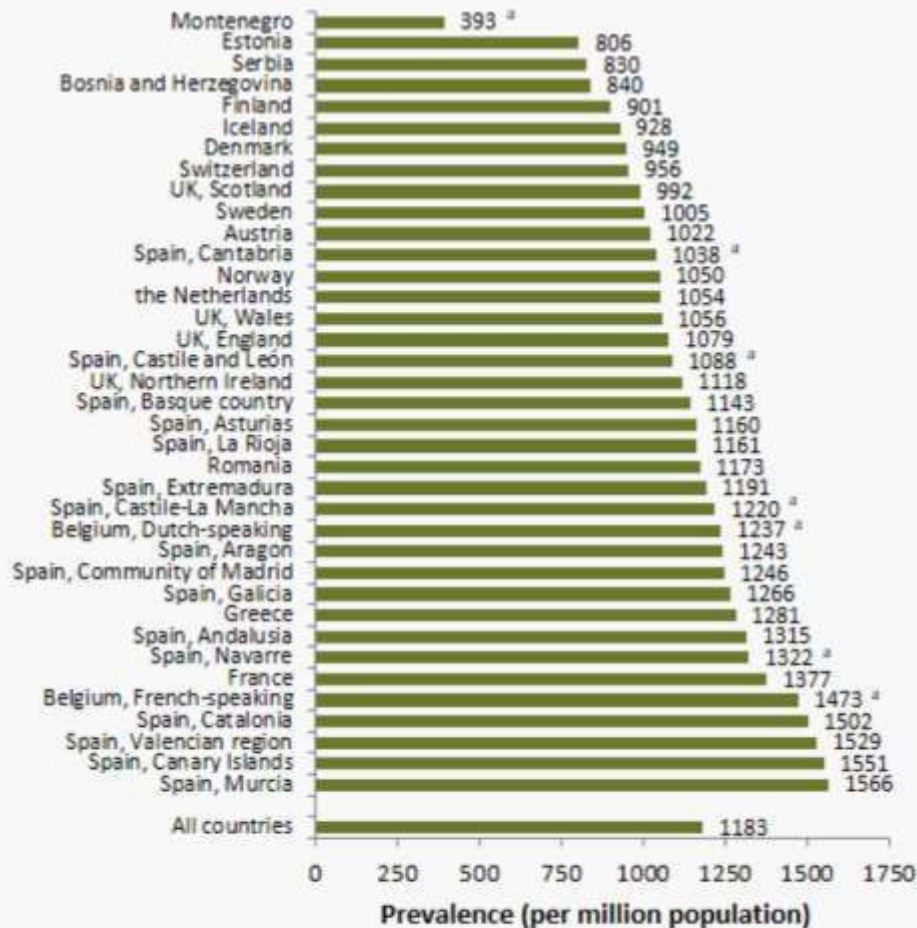
^a patients younger than 20 years of age are not included; ^b patients younger than 18 years of age are not included; ^c data includes patients receiving dialysis only

Prevalent patients on RRT in 2019

by country
adjusted for age and sex

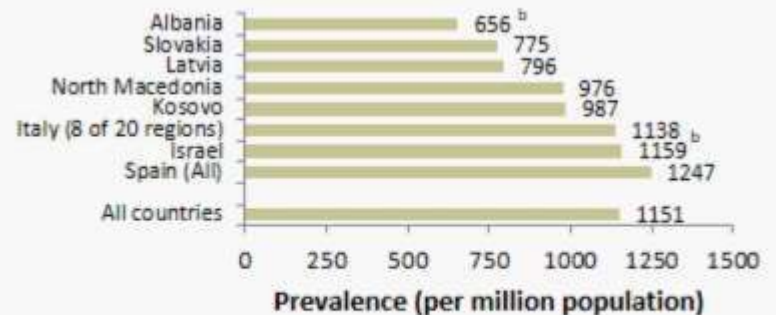
Adjusted prevalence

renal registries providing individual patient data



Adjusted prevalence

renal registries providing aggregated data



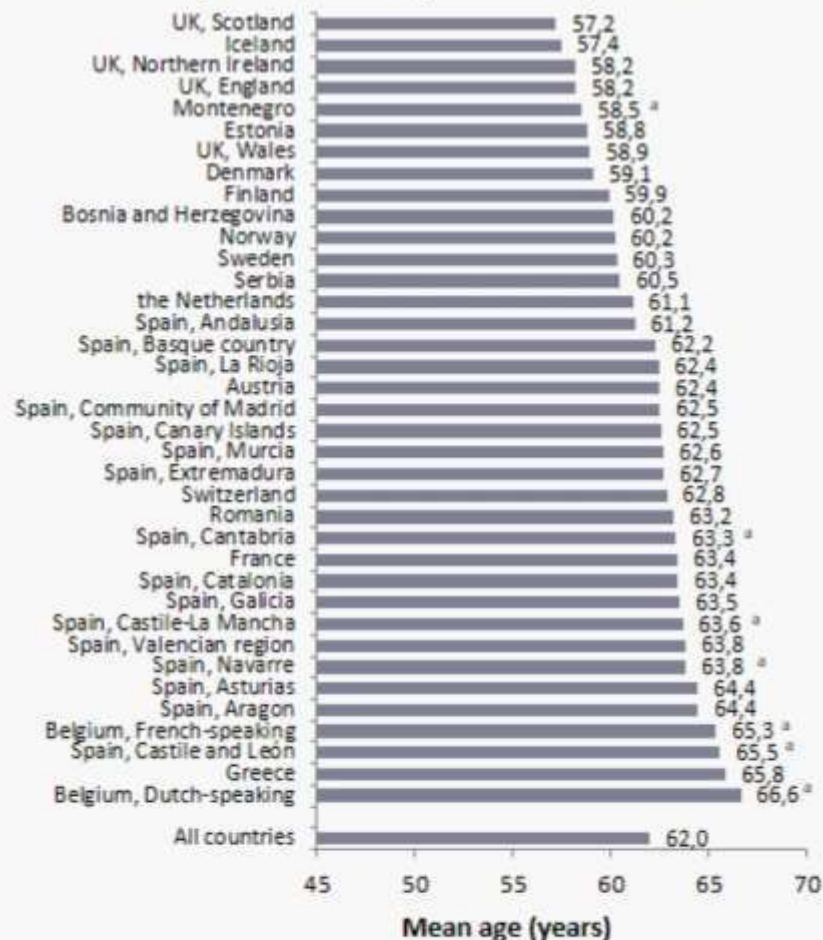
^a patients younger than 20 years of age are not included; ^b data includes patients receiving dialysis only

Prevalent patients on RRT in 2019

mean age

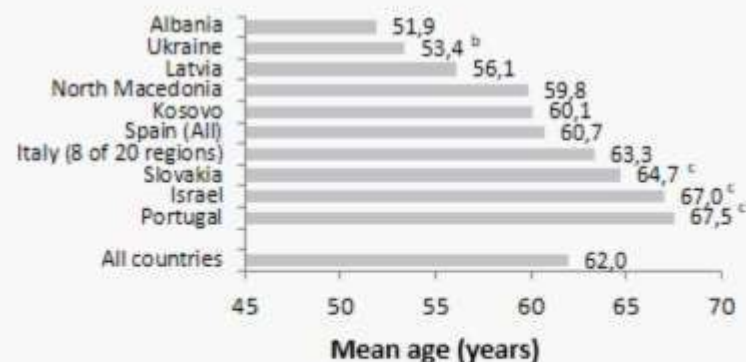
Mean age on 31 December 2019

renal registries providing individual patient data



Mean age on 31 December 2019

renal registries providing aggregated data



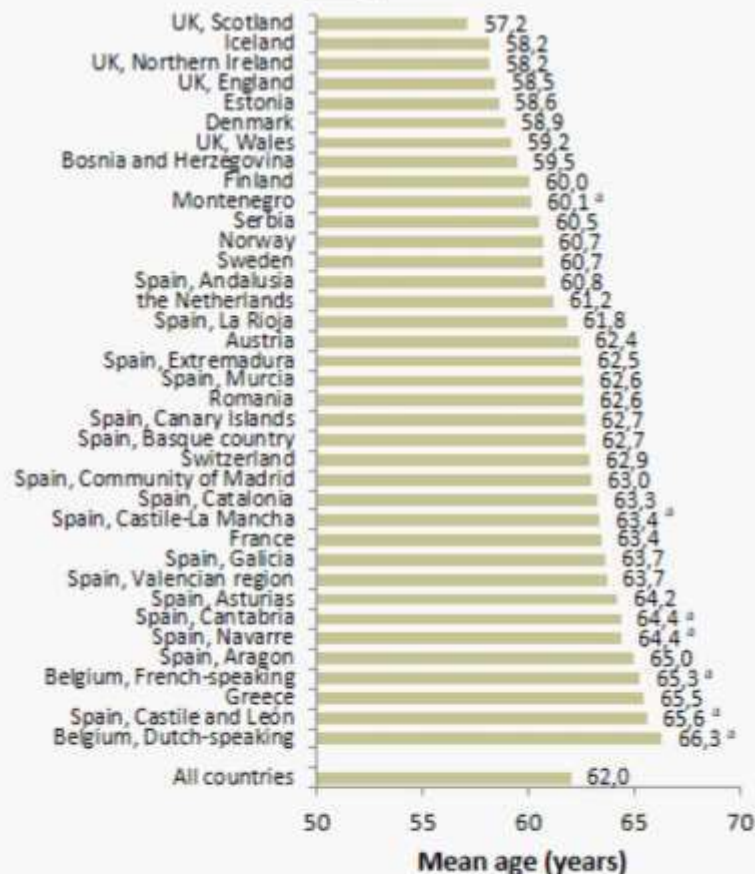
^a patients younger than 20 years of age are not included; ^b patients younger than 18 years of age are not included; ^c data includes patients receiving dialysis only

Prevalent patients on RRT in 2019

for registries providing individual patient data only

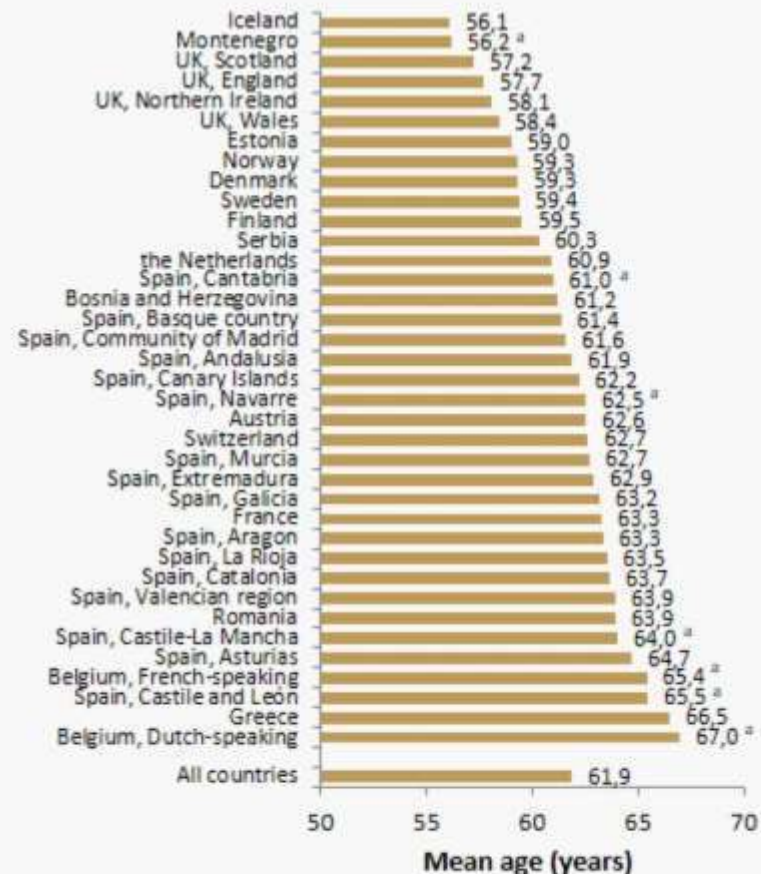
Mean age on 31 December 2019

male patients



Mean age on 31 December 2019

female patients

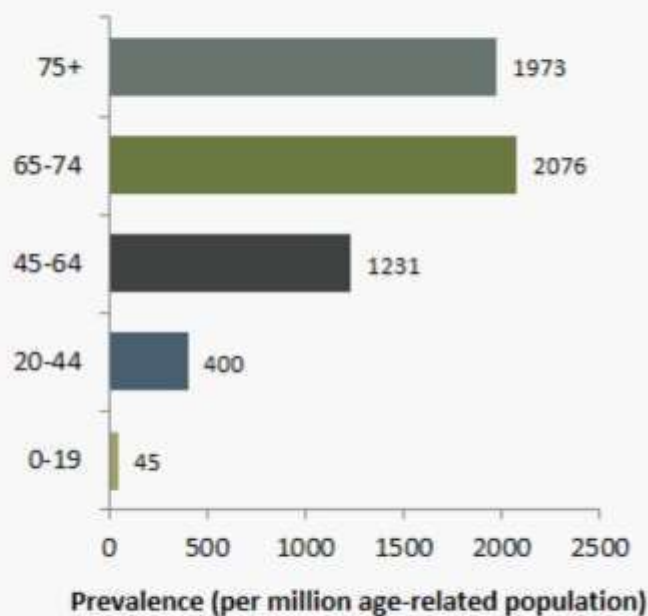


^a patients younger than 20 years of age are not included;

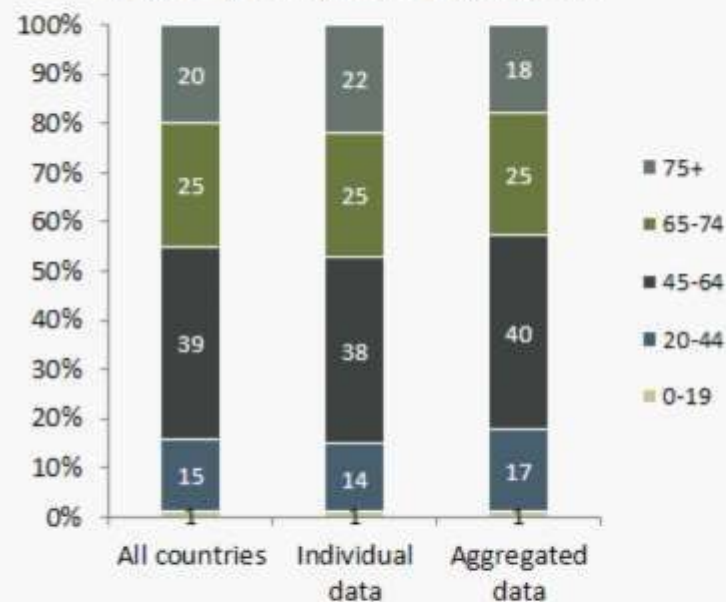
Prevalent patients on RRT in 2019

by age category

Prevalence by age category
for all registries



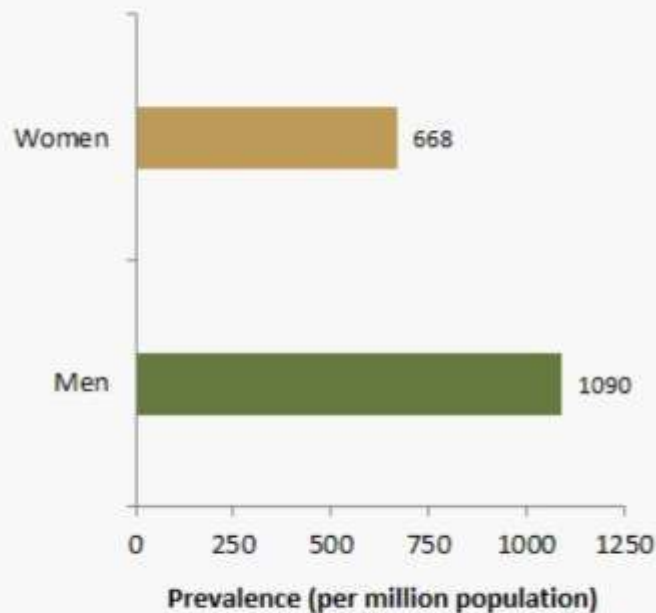
Prevalence by age category
by type of data provided by registry



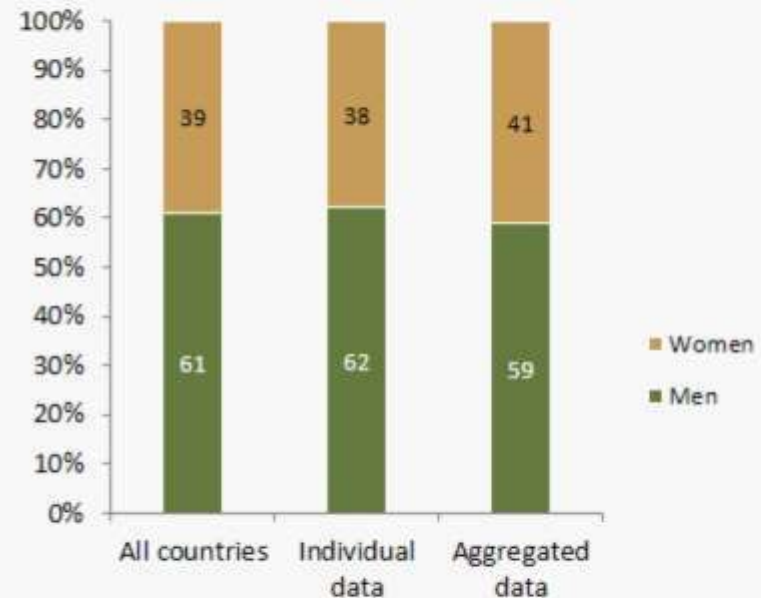
Prevalent patients on RRT in 2019

by sex

Prevalence by sex
for all registries

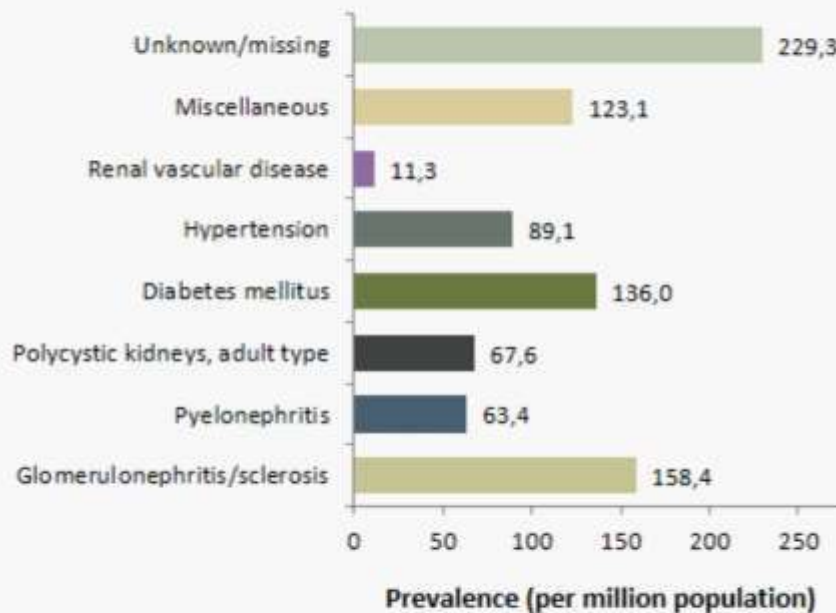


Prevalence by sex
by type of data provided by registry

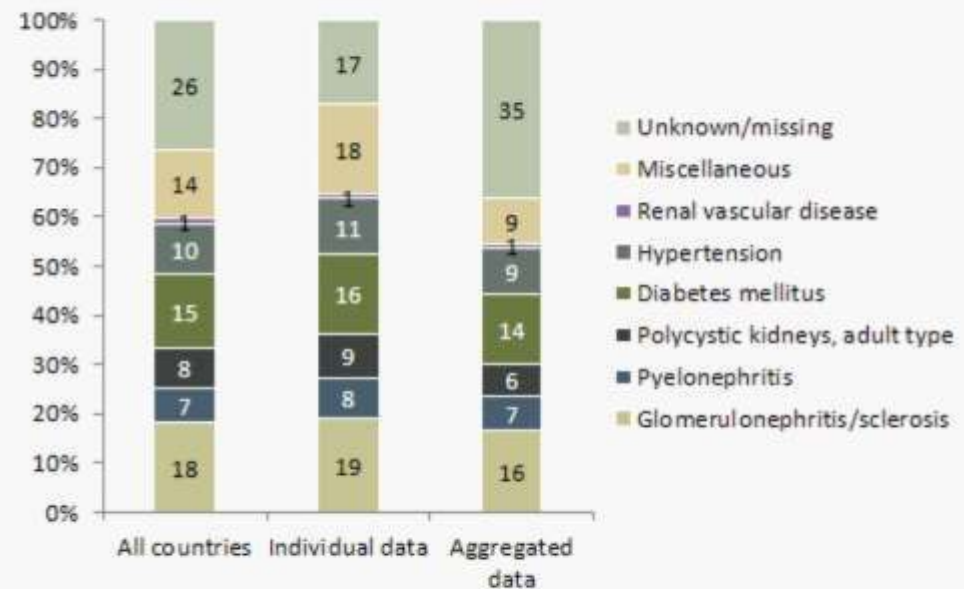


Prevalent patients on RRT in 2019 *by primary renal disease*

Prevalence by primary renal disease
for all registries



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



Prevalent patients on RRT in 2019

by primary renal disease and age category

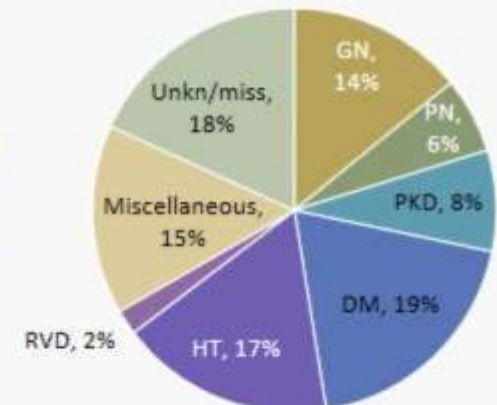
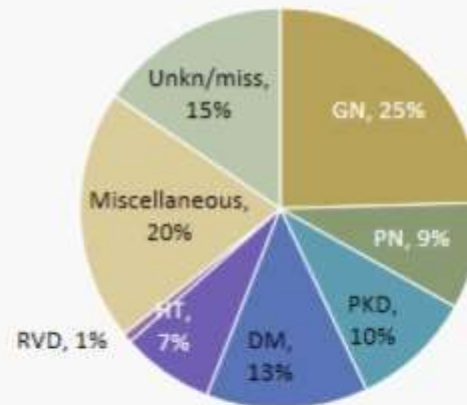
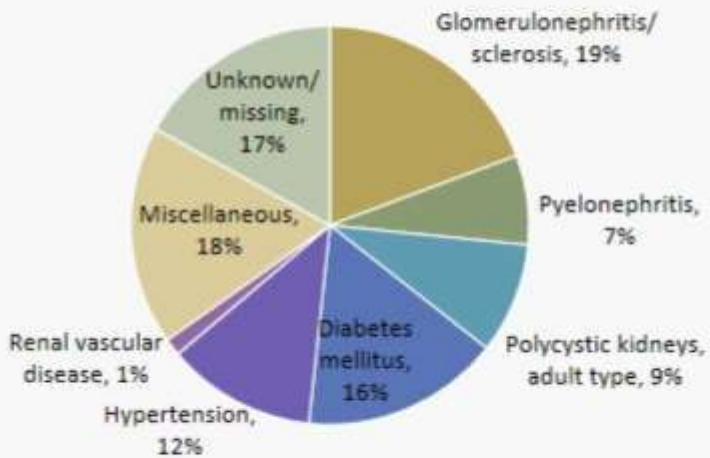
Prevalence by primary renal disease

patients from registries providing individual patient data only

all patients

patients younger than 65 years of age

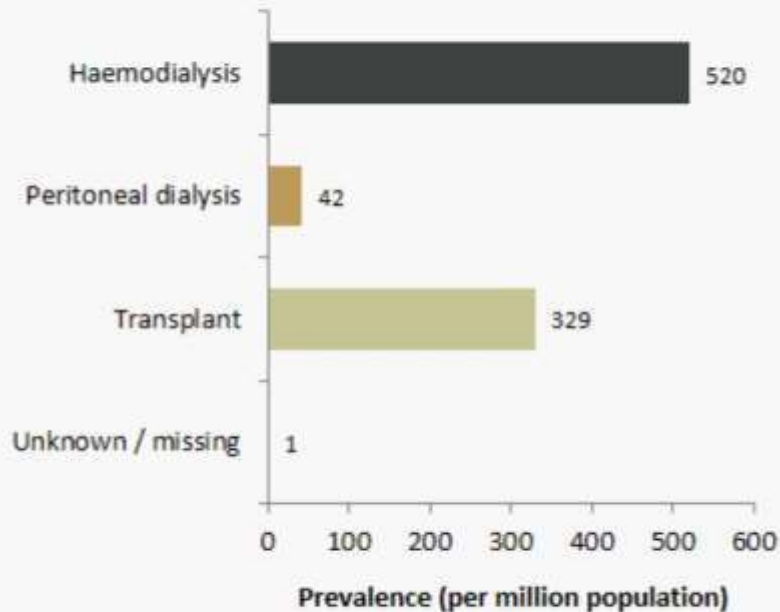
patients aged 65 years or older



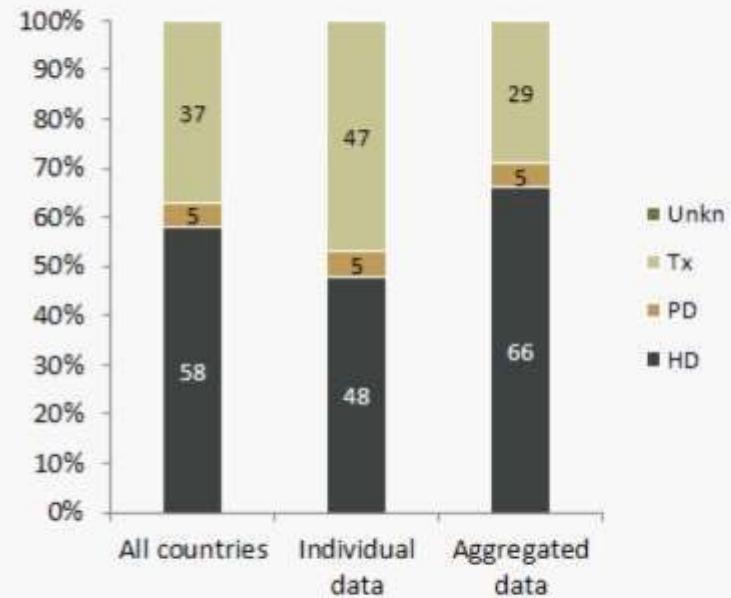
Prevalent patients on RRT in 2019

by modality

Prevalence by modality
for all registries



Prevalence by modality
by type of data provided by registry



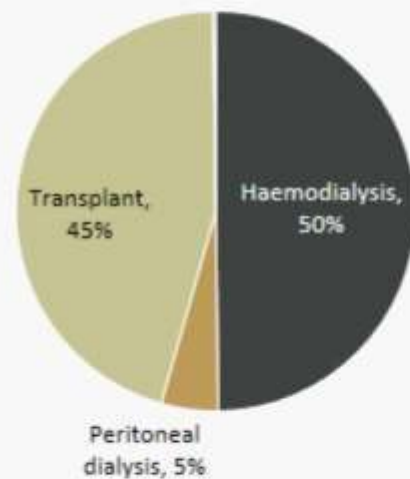
Prevalent patients on RRT in 2019

by modality and age category

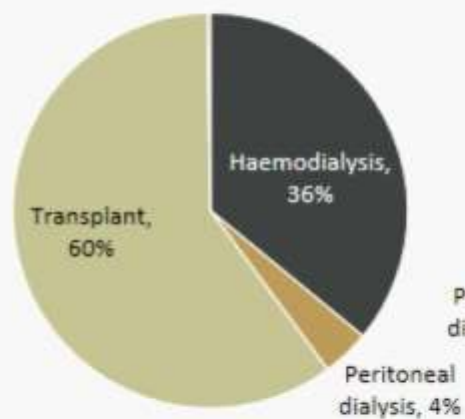
Prevalence by modality

patients from registries providing individual patient data only

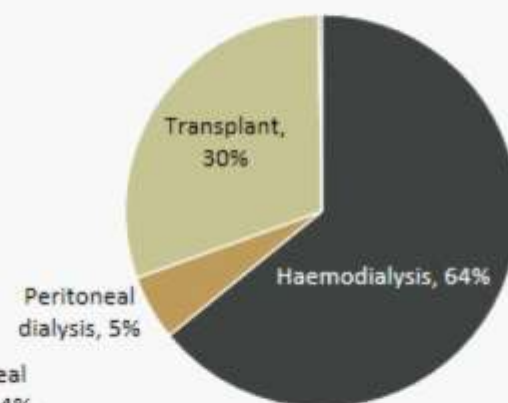
all patients



patients younger than 65 years of age



patients aged 65 years or older

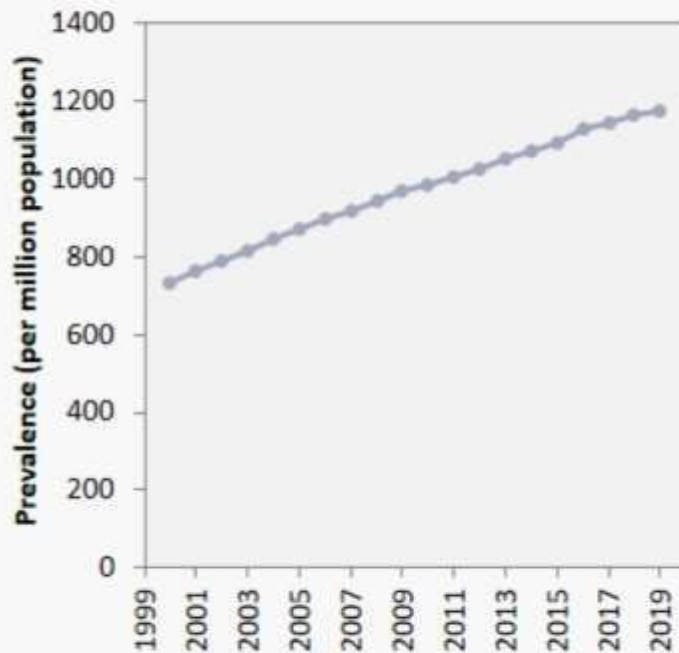


Prevalent patients on RRT

last 20 years (2000-2019)

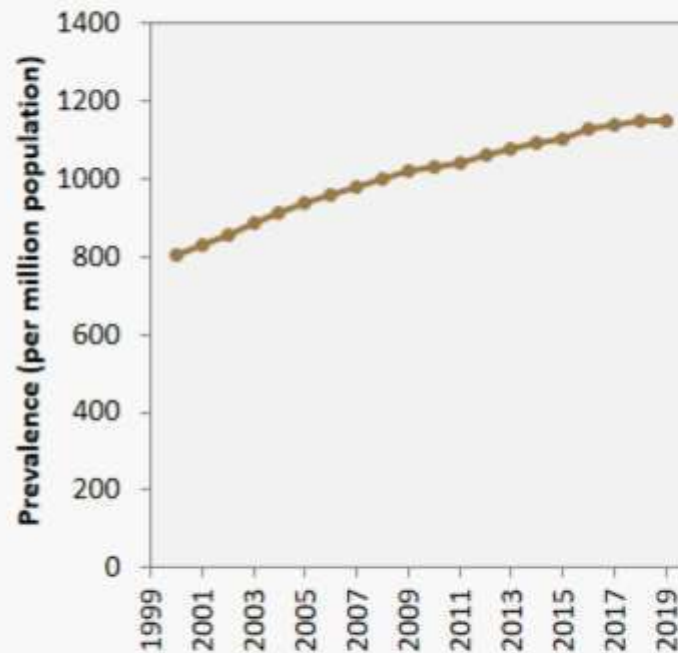
Unadjusted prevalence over time

all patients on RRT



Adjusted prevalence over time

all patients on RRT

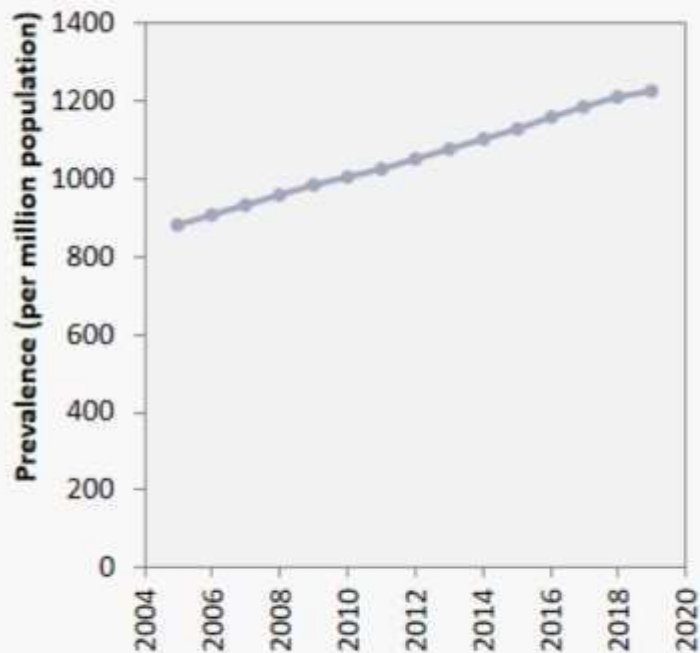


Prevalent patients on RRT

last 15 years (2005-2019)

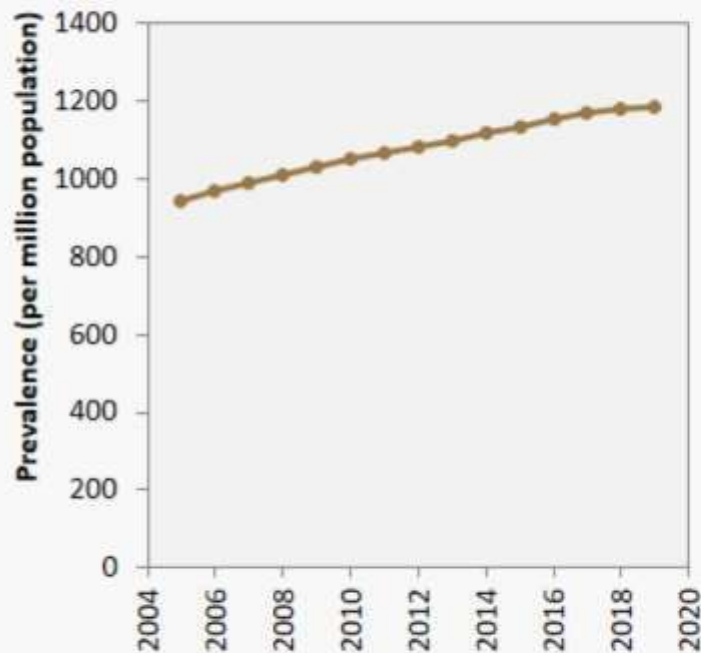
Unadjusted prevalence over time

all patients on RRT



Adjusted prevalence over time

all patients on RRT

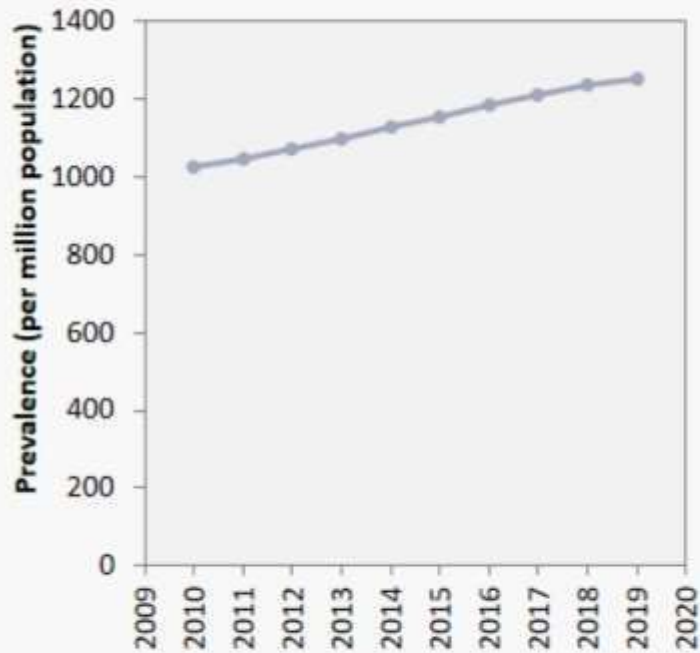


Prevalent patients on RRT

last 10 years (2010-2019)

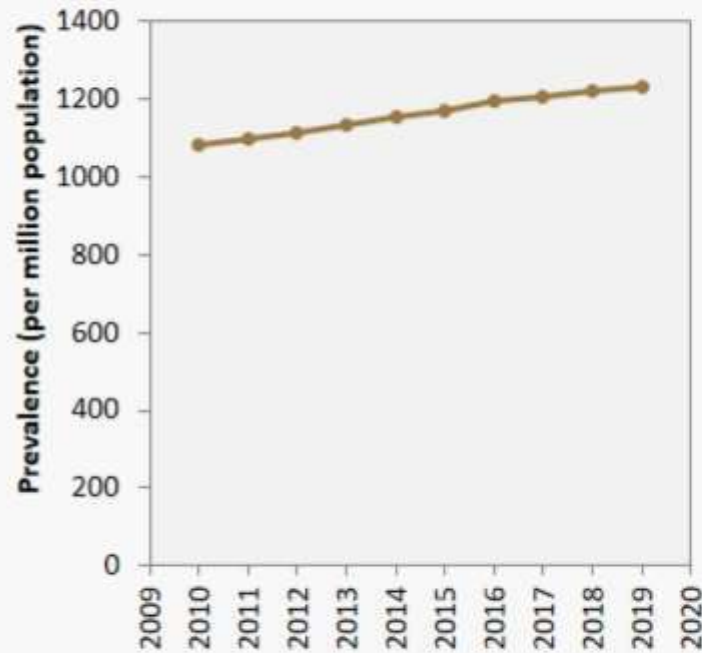
Unadjusted prevalence over time

all patients on RRT



Adjusted prevalence over time

all patients on RRT

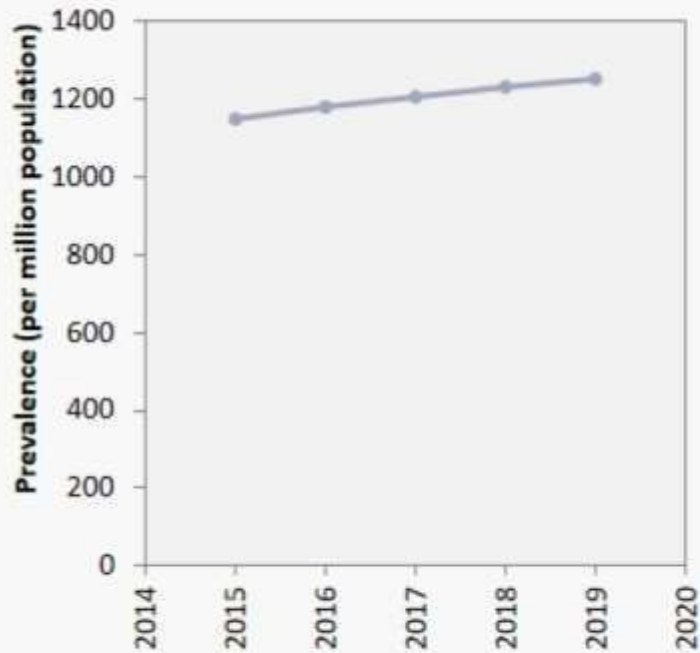


Prevalent patients on RRT

last 5 years (2015-2019)

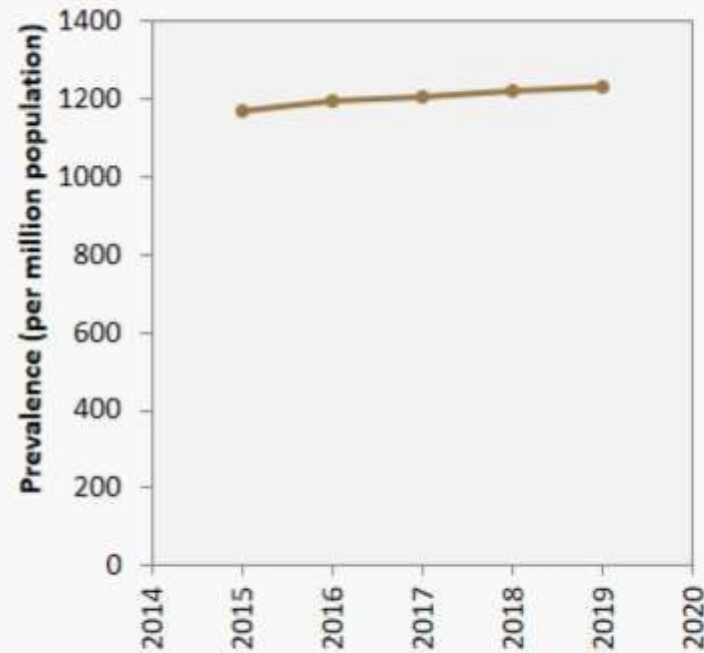
Unadjusted prevalence over time

all patients on RRT



Adjusted prevalence over time

all patients on RRT

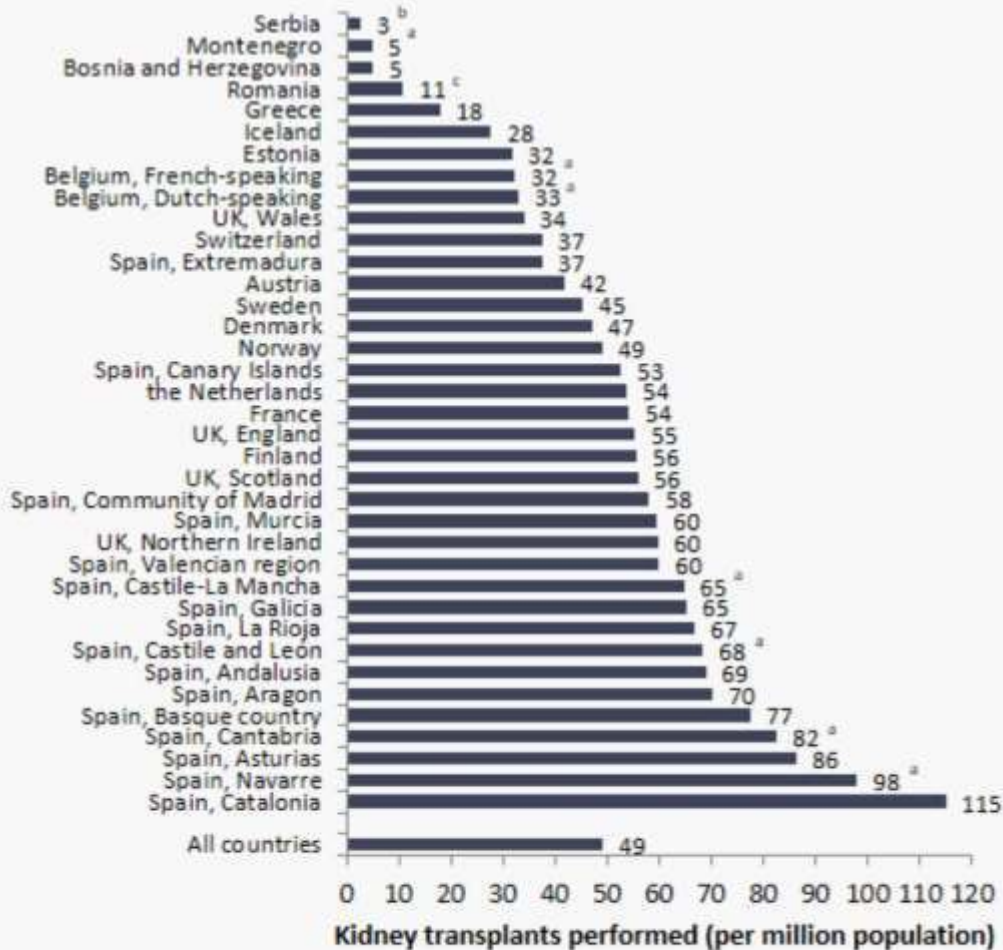


Kidney transplants performed in 2019

by country

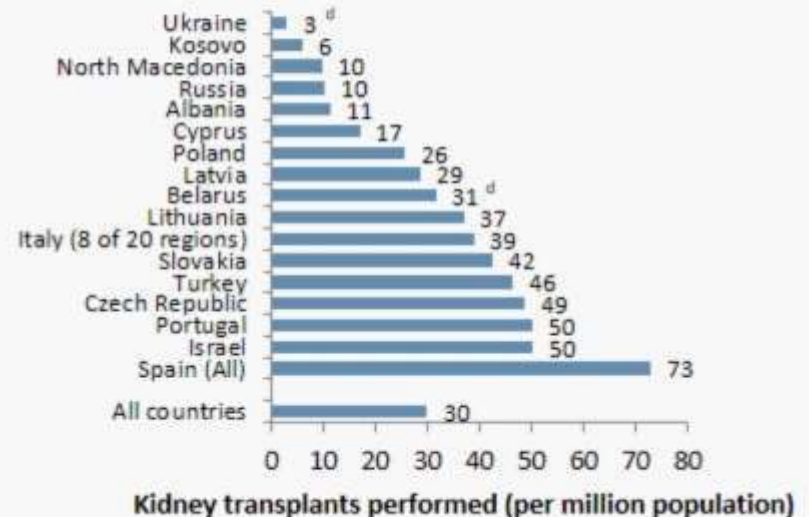
Kidney transplants performed

renal registries providing individual patient data



Kidney transplants performed

renal registries providing aggregated data



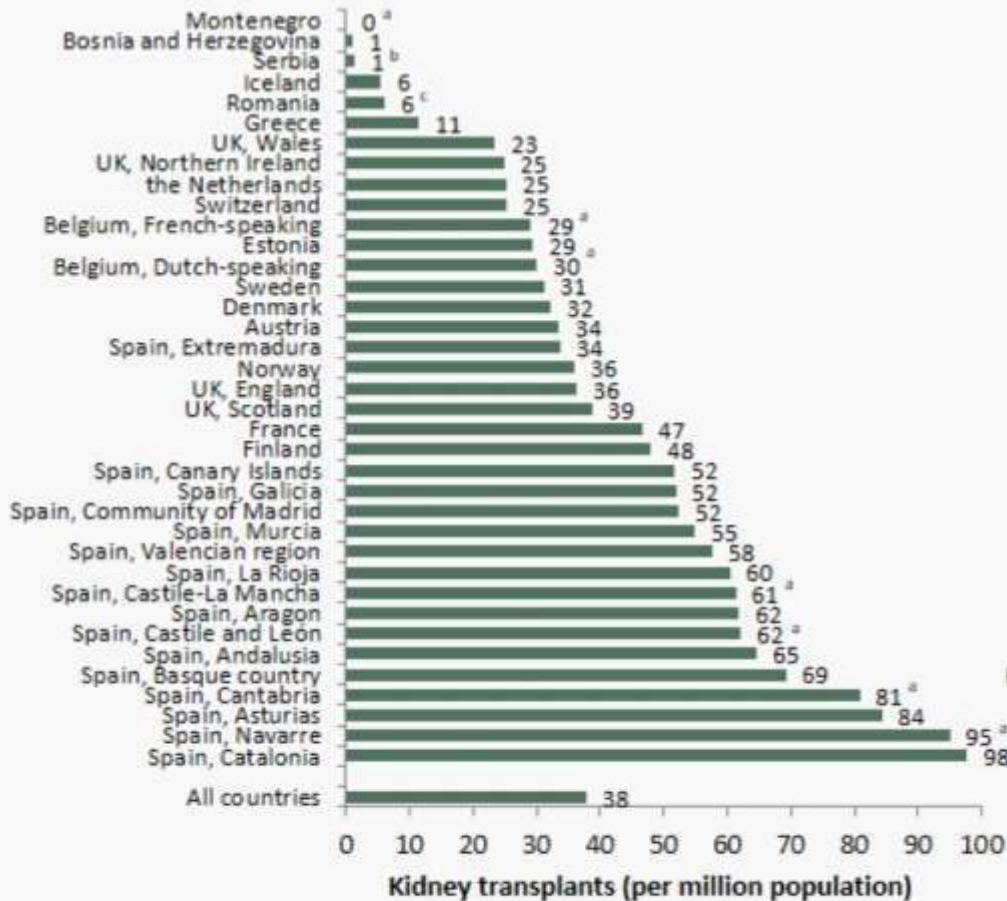
^a patients younger than 20 years of age are not included; ^{b,c} transplant rates are underestimated by 15% (b), 30% (c); ^d patients younger than 18 years of age are not included

Kidney transplants performed in 2019

transplants from deceased donors by country

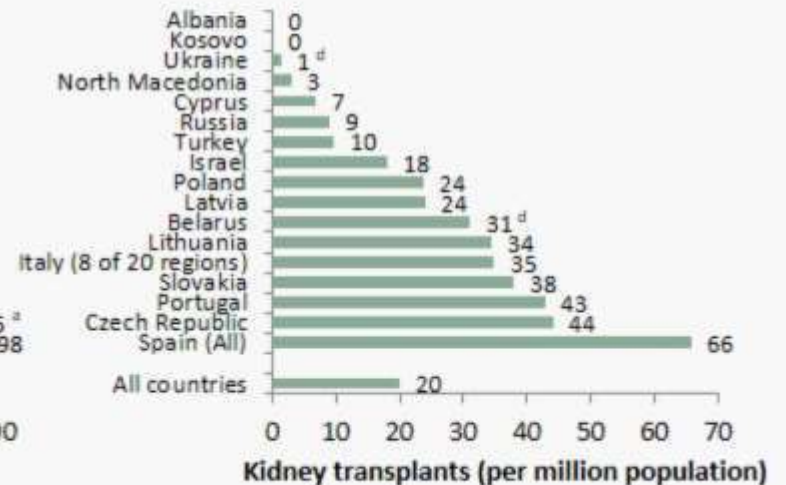
Deceased donor transplant rate

renal registries providing individual patient data



Deceased donor transplant rate

renal registries providing aggregated data



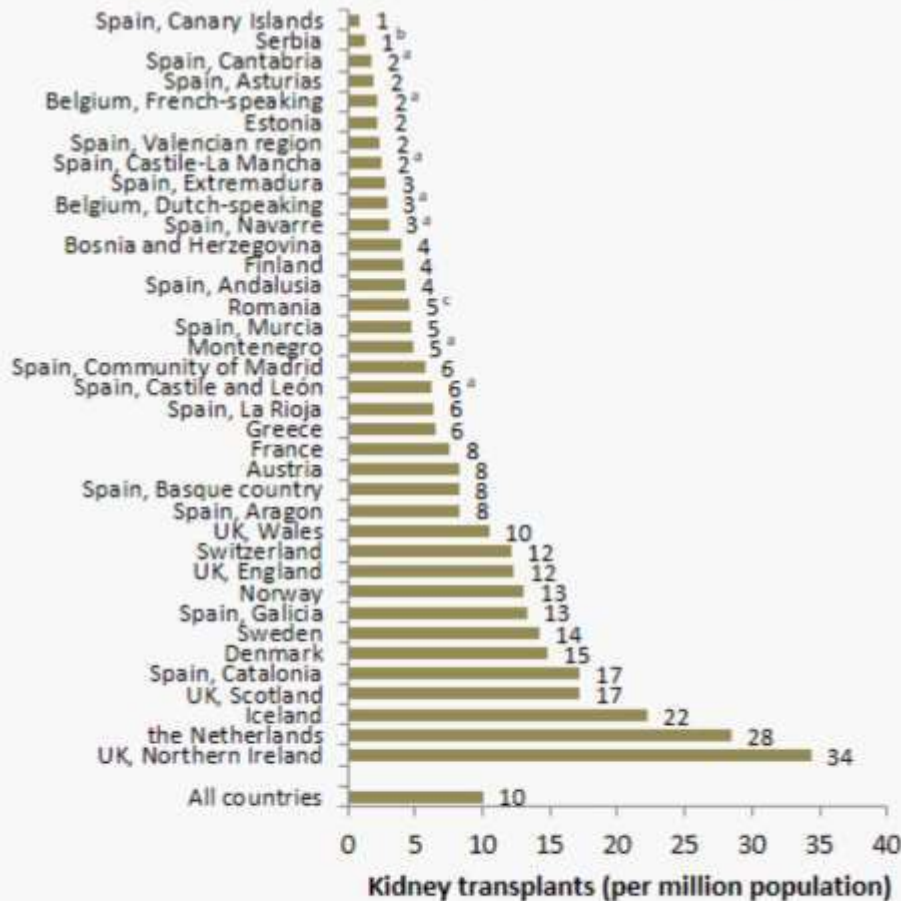
^a patients younger than 20 years of age are not included; ^{b,c} transplant rates are underestimated by 16% (b), 30% (c); ^d patients younger than 18 years of age are not included

Kidney transplants performed in 2019

transplants from living donors by country

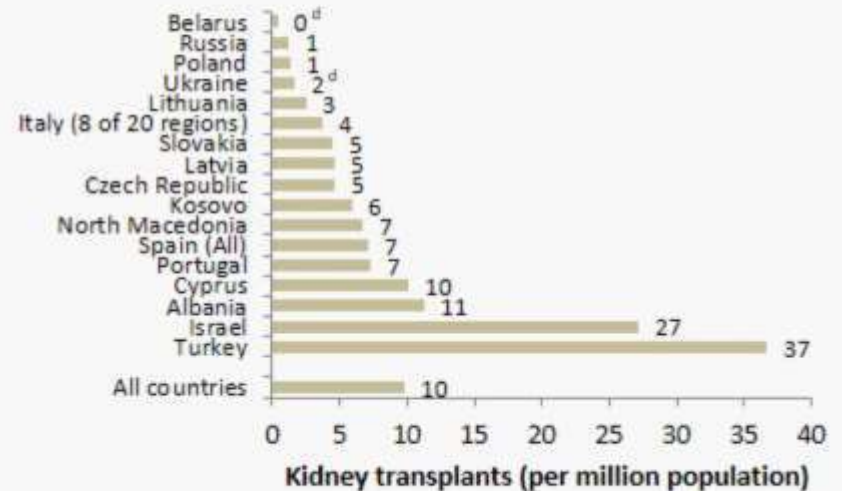
Living donor transplant rate

renal registries providing individual patient data



Living donor transplant rate

renal registries providing aggregated data

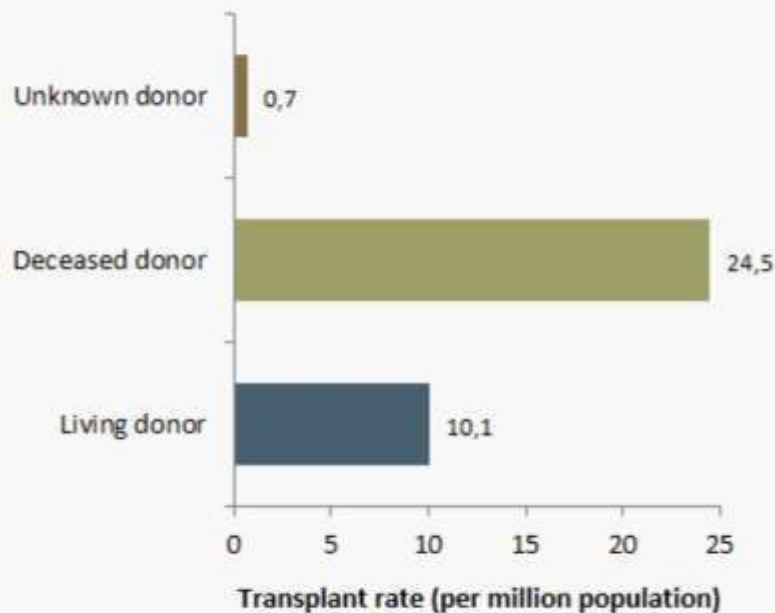


^a patients younger than 20 years of age are not included; ^{b,c} transplant rates are underestimated by 12% (b), 30% (c); ^d patients younger than 18 years of age are not included

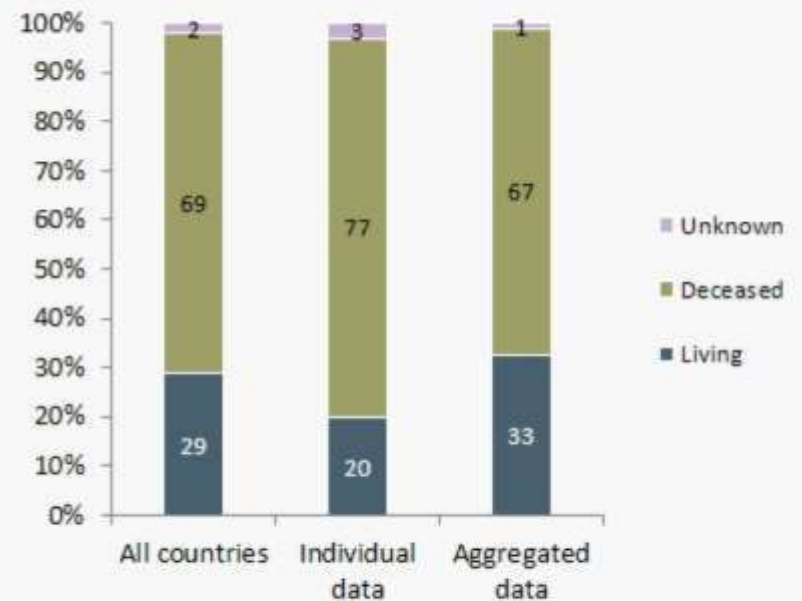
Kidney transplants performed in 2019

by donor type

Kidney transplants by donor type
for all registries



Kidney transplants by donor type
by type of data provided by registry



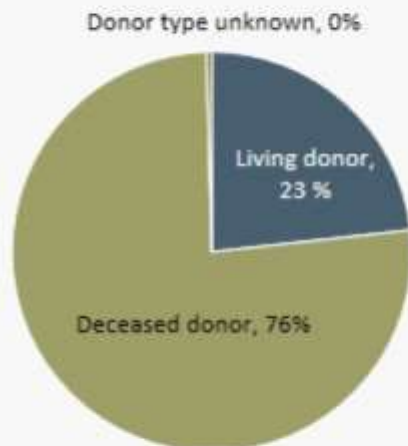
Kidney transplants performed in 2019

by donor type

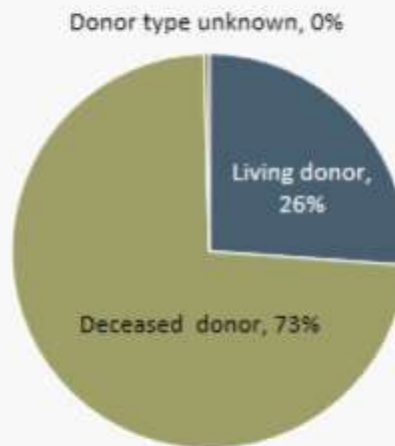
Kidney transplants by donor type

patients from registries providing individual patient data only

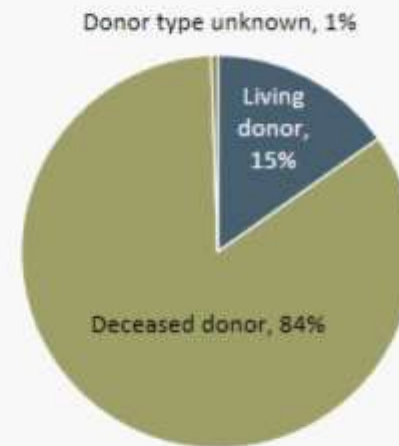
all patients



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



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

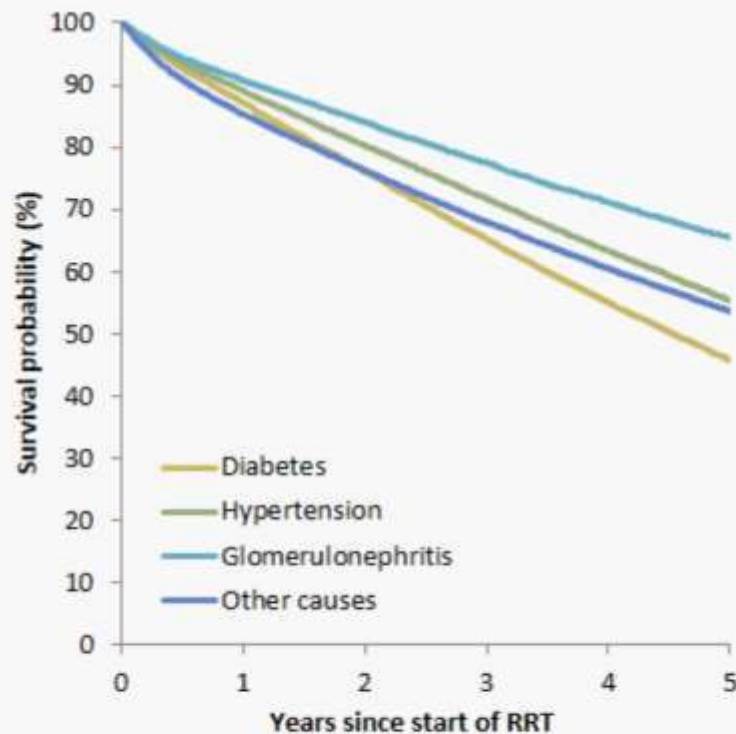


Survival probability cohort 2010-2014

by primary renal disease

Adjusted patient survival by primary renal disease Incident RRT patients

from day 1, adjusted for age and sex



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).

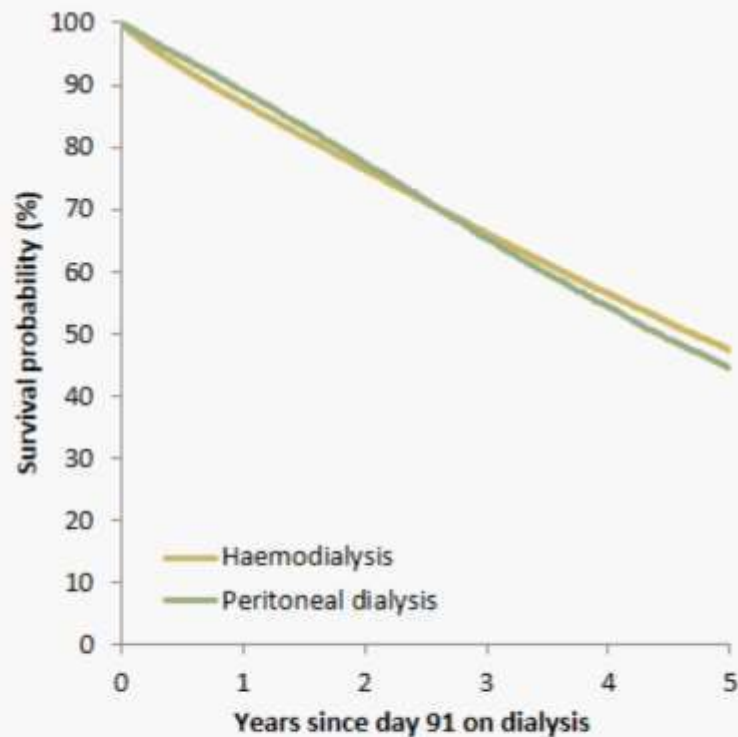
Cox regression model was used to calculate survival probabilities.

Survival probability cohort 2010-2014

by dialysis modality

Adjusted patient survival by modality Incident dialysis patients

from day 91, adjusted for age, sex, and primary renal disease



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).

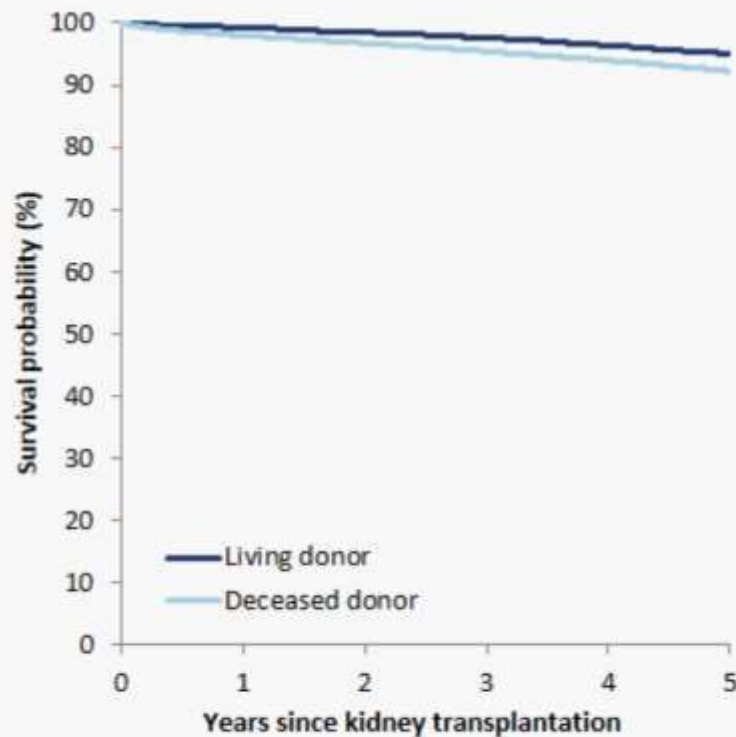
Cox regression model was used to calculate survival probabilities.

Survival probability cohort 2010-2014

by kidney donor

Adjusted patient survival by donor type Patients receiving a first kidney transplant

from day of transplant, adjusted for age, sex, and primary renal disease



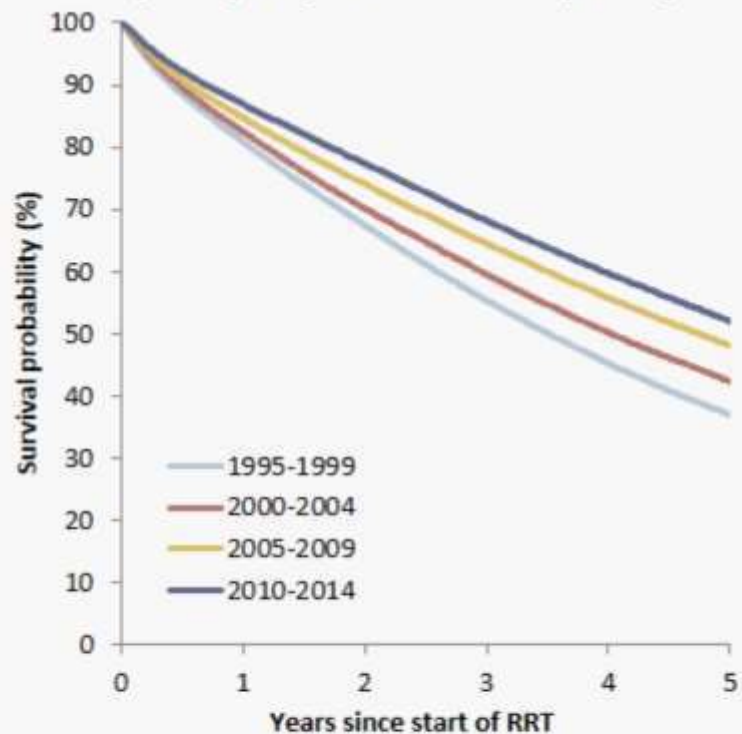
Survival probabilities were adjusted for fixed values for age (50 years), sex (63% men), and the primary renal disease distribution (14% diabetes mellitus, 10% hypertension / renal vascular disease, 23% glomerulonephritis and 53% other primary renal diseases).

Cox regression model was used to calculate survival probabilities.

Patient survival on RRT *by cohort*

Patient survival incident RRT patients

adjusted for age, sex and cause of renal failure



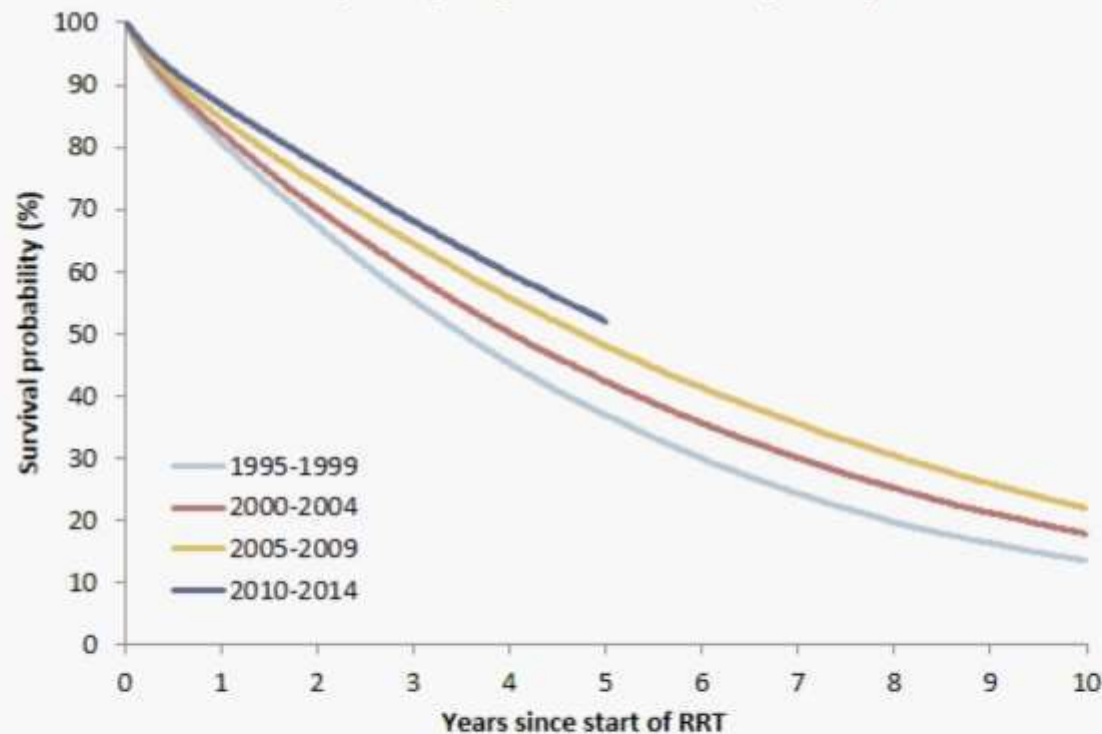
Survival probabilities were adjusted for fixed values for age (67 years), sex (63% men), and the primary renal disease distribution (24% diabetes mellitus, 19% hypertension / renal vascular disease, 11% glomerulonephritis and 46% other primary renal diseases).

Cox regression model was used to calculate survival probabilities.

Patient survival on RRT *by cohort*

Patient survival incident RRT 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).

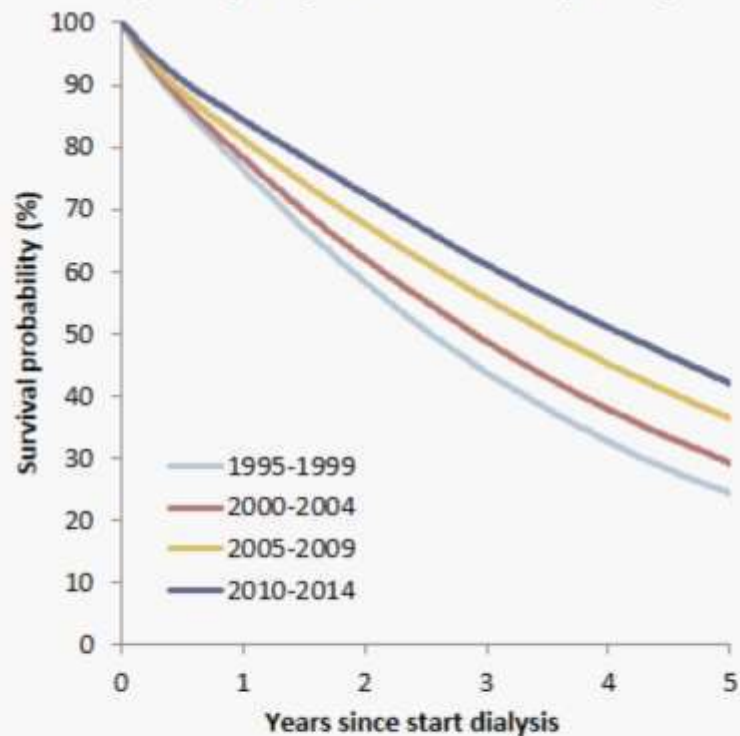
Cox regression model was used to calculate survival probabilities.

Patient survival on dialysis

by cohort

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).

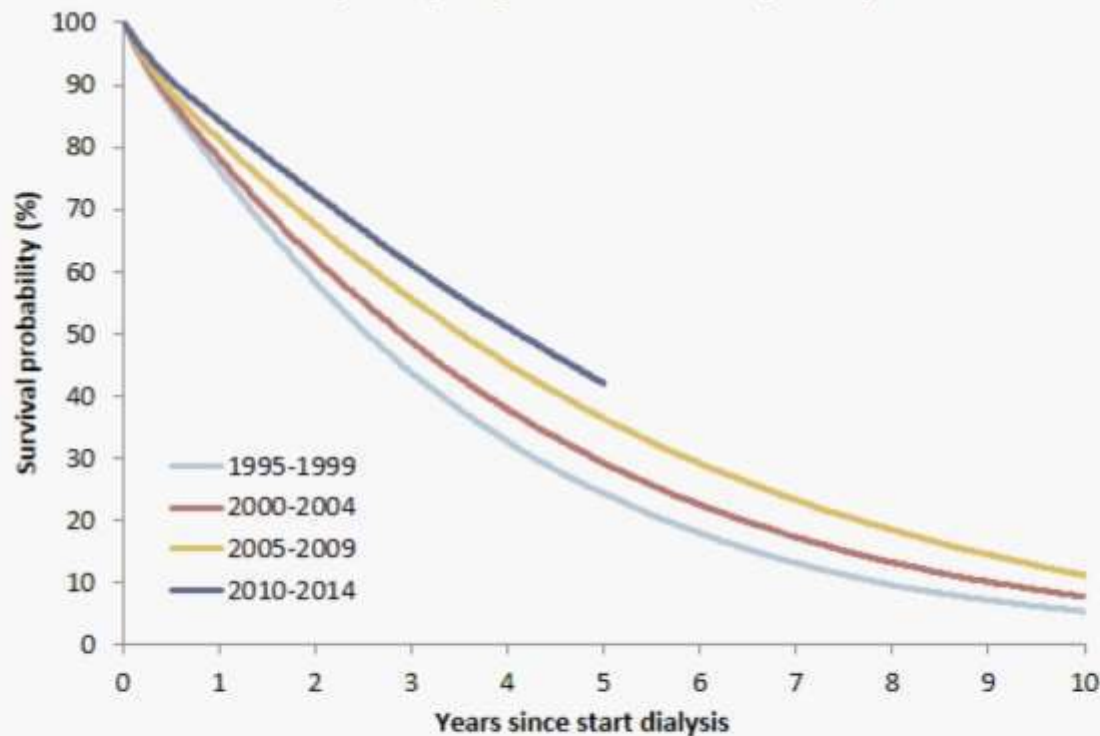
Cox regression model was used to calculate survival probabilities.

Patient survival on dialysis

by cohort

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).

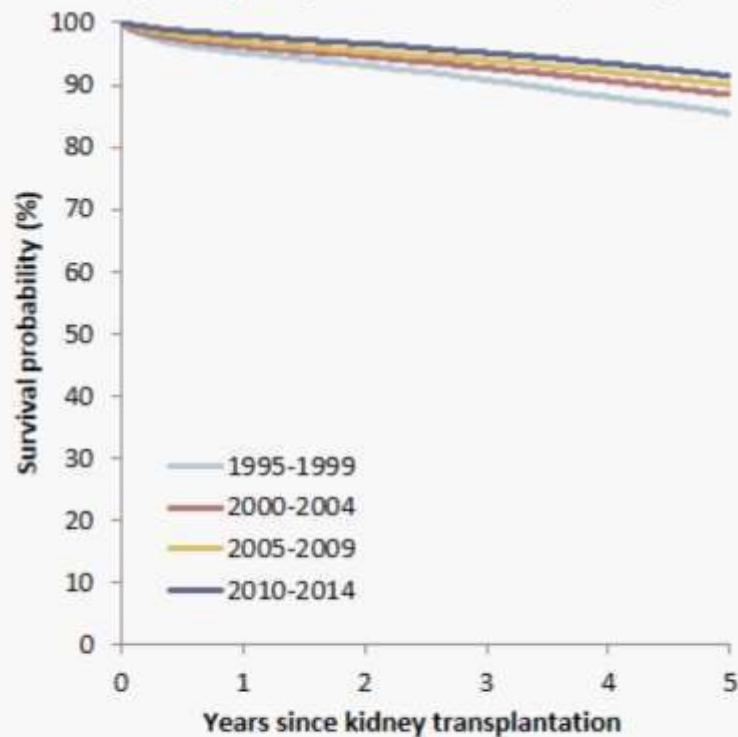
Cox regression model was used to calculate survival probabilities.

Patient survival after kidney transplantation

by cohort

Patient survival after first kidney transplantation

adjusted for age, sex and cause of renal failure



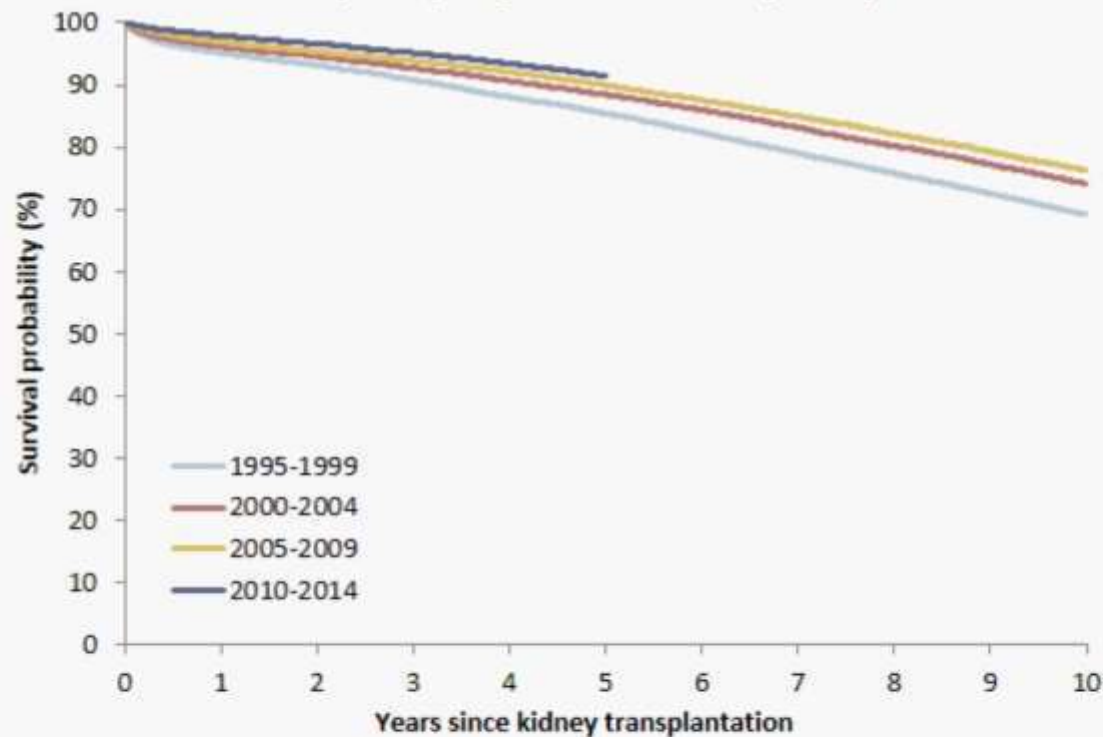
Survival probabilities were adjusted for fixed values for age (50 years), sex (63% men), and the primary renal disease distribution (14% diabetes mellitus, 10% hypertension / renal vascular disease, 23% glomerulonephritis and 53% other primary renal diseases).

Cox regression model was used to calculate survival probabilities.

Patient survival after kidney transplantation

by cohort

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



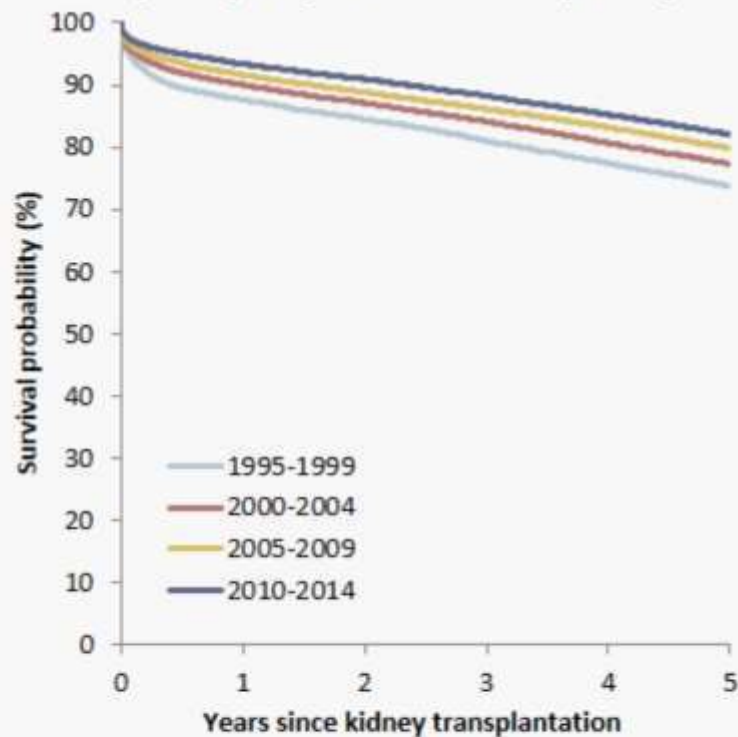
Survival probabilities were adjusted for fixed values for age (50 years), sex (63% men), and the primary renal disease distribution (14% diabetes mellitus, 10% hypertension / renal vascular disease, 23% glomerulonephritis and 53% other primary renal diseases).

Cox regression model was used to calculate survival probabilities.

Graft survival after kidney transplantation

by cohort

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



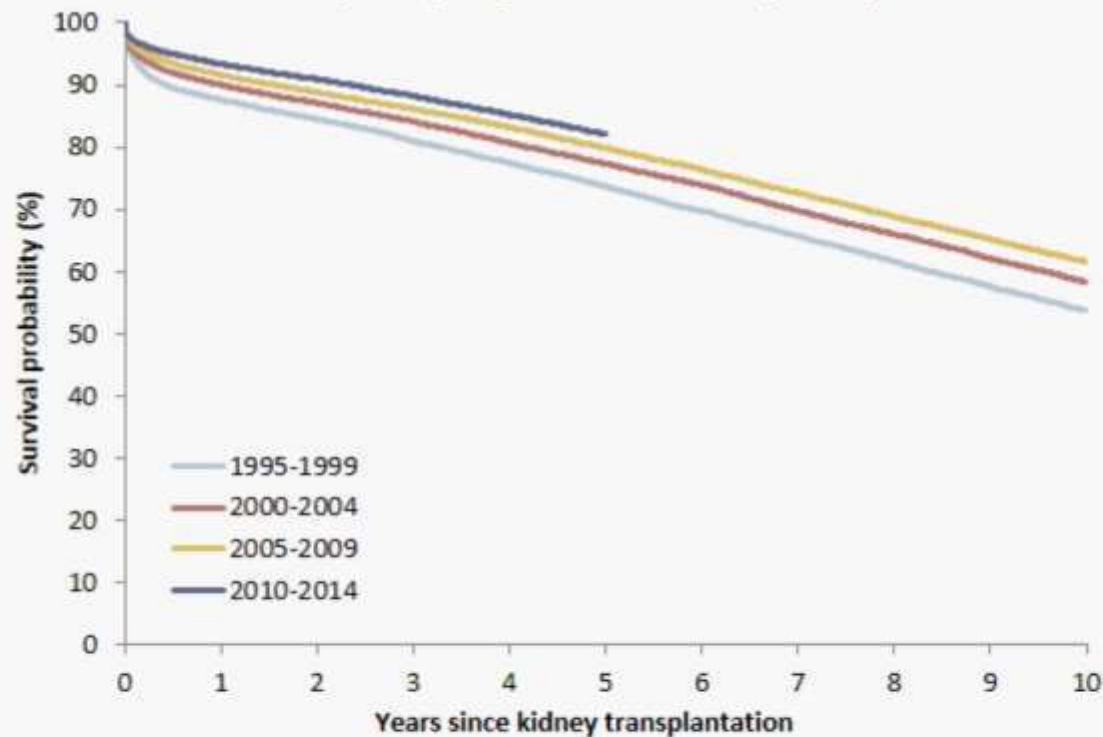
Survival probabilities were adjusted for fixed values for age (50 years), sex (63% men), and the primary renal disease distribution (14% diabetes mellitus, 10% hypertension / renal vascular disease, 23% glomerulonephritis and 53% other primary renal diseases).

Cox regression model was used to calculate survival probabilities.

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.