Supplemental Digital Content (SDC)

Table S1. Sensitivity analysis: association between income (5 years before dialysis/average over the 5 years prior to dialysis) and access to the waiting list/access to kidney transplantation conditional on transplant listing, by Cox proportional hazard regression

| | Access to the kidney waiting list | | Access to kidney transplantation conditional on waitlisting | |
|---------------------------------|---|---|---|---|
| Variables included in the model | Income 5 years before dialysis (n=13,759) | Average income over the 5 years before dialysis (n=13,751) | Income 5 years before dialysis (n=2,607) | Average income over the 5 years before dialysis (n=2,605) |
| | Model 1 HR (95% CI) | Model 2 HR (95% CI) | Model 3 HR (95% CI) | Model 4 HR (95% CI) |
| Disposable income | | | | |
| (ref = quintile 1) | | | | |
| Quintile 2 | 0.94 | 1.06 | 1.05 | 1.04 |
| Onintile 2 | (0.82–1.07) | (0.93–1.21) 1.15* | (0.90–1.21) | (0.89–1.21) |
| Quintile 3 | 1.08 (0.95–1.23) | (1.01–1.32) | 1.01 (0.87–1.16) | 1.08 (0.93–1.25) |
| Quintile 4 | 1.36*** | 1.44*** | 1.12 | 1.20* |
| Quintile 4 | (1.21–1.54) | (1.27–1.63) | (0.97–1.29) | (1.04–1.38) |
| Quintile 5 | 1.55*** | 1.86*** | 1.15* | 1.22** |
| | (1.37-1.75) | (1.64–2.11) | (1.01-1.33) | (1.06–1.41) |
| Education | | | | |
| (ref = mandatory) | | | | |
| Secondary school | 1.28*** | 1.25*** | 0.93 | 0.93 |
| | (1.16–1.40) | (1.14–1.37) | (0.84–1.04) | (0.83–1.03) |
| Higher education | 1.90*** | 1.80*** | 1.14* | 1.12 |
| | (1.69–2.13) | (1.60–2.02) | (1.01–1.29) | (0.99–1.26) |
| Age at | | | | |
| dialysis/being | | | | |
| waitlisted, years | | | | |
| (ref = 18-39) | | | | |
| 40–49 | 0.78*** | 0.77*** | 0.77** | 0.77** |
| 40-49 | (0.68–0.89) | (0.67–0.88) | (0.66–0.90) | (0.66–0.90) |
| 50–59 | 0.55*** | 0.53*** | 0.79** | 0.78** |
| 30 37 | (0.48-0.63) | (0.46-0.60) | (0.68–0.92) | (0.67-0.90) |
| 60+ | 0.10*** | 0.10*** | 0.83* | 0.81* |
| | (0.09–0.12) | (0.09–0.11) | (0.70–0.97) | (0.69–0.95) |
| Gender (ref = female) | | | | |
| Male | 1.06 | 1.04 | 1.01 | 1.00 |
| | (0.98–1.16) | (0.96–1.13) | (0.92–1.11) | (0.91-1.10) |
| Year of dialysis/being | 0.97*** | 0.97*** | 1.01 | 1.01 |
| waitlisted# | (0.96–0.98) | (0.96–0.98) | (1.00–1.02) | (1.00–1.02) |
| Marital status | | | | |
| (ref = married) | | | | |
| Single | 0.72*** | 0.73*** | 1.03 | 1.02 |
| Single | (0.66-0.80) | (0.66-0.80) | (0.92–1.15) | (0.92-1.14) |

| Divorced | 0.85** | 0.85** | 0.90 | 0.90 |
|------------------------|-------------|-------------|-------------|-------------|
| Bivolecu | (0.76-0.95) | (0.77-0.95) | (0.80-1.02) | (0.79–1.01) |
| Widowed | 0.41*** | 0.40*** | 0.73* | 0.71* |
| vvido ved | (0.33-0.51) | (0.32-0.50) | (0.56-0.95) | (0.55-0.93) |
| Citizenship | | | | |
| (ref = non-Swedish) | | | | |
| Swedish | 1.26* | 1.23* | 1.08 | 1.08 |
| | (1.03–1.54) | (1.00–1.51) | (0.87-1.35) | (0.87-1.35) |
| Missing | 1.17 | 1.15 | 1.10 | 1.09 |
| Wiissing | (0.91-1.50) | (0.89–1.47) | (0.83-1.45) | (0.82-1.43) |
| Home county§ | | | | |
| (ref = no KTx centre) | | | | |
| KTx centre | 0.99 | 0.98 | 0.95 | 0.94 |
| | (0.92-1.07) | (0.91–1.06) | (0.87-1.03) | (0.87-1.03) |
| Blood type $(ref = O)$ | | | | |
| A | | | 2.01*** | 2.00*** |
| A | | | (1.82-2.22) | (1.82–2.21) |
| В | | | 1.51*** | 1.51*** |
| В | | | (1.31–1.75) | (1.31–1.75) |
| AB | | | 3.46*** | 3.47*** |
| AB | | | (2.84–4.23) | (2.84–4.23) |

CI = confidence interval; HR = hazard ratio; ref = reference group; KTx = kidney transplantation.

For a definition of quintiles 1–5, see Table 1. #Year of dialysis/being waitlisted was treated as a continuous variable. §Whether patients' home county has a Tx centre.

^{***}p<0.001; **p<0.01; *p<0.05.

Table S2. Association between income and access to the waiting list/kidney transplantation for men and women separately, by Cox proportional hazard regression

| Variables included in | Access to the kidney waiting list | | Access to kidney transplantation | |
|--------------------------------------|-----------------------------------|-------------|----------------------------------|-----------------------|
| the model | Men | Women | Men Men | Women |
| the model | (n=9,171) | (n=4,811) | (n=1,781) | (n=913) |
| | HR (95% CI) | HR (95% CI) | HR (95% CI) | HR (95% CI) |
| Disposable income (ref = quintile 1) | | | | |
| Quintile 2 | 0.98 | 1.04 | 1.20 | 1.30* |
| Quintile 2 | (0.83–1.16) | (0.84–1.29) | (0.99–1.45) | (1.02–1.67) |
| Quintile 3 | 0.91 | 1.08 | 0.92 | 1.19 |
| _ | (0.77–1.08) | (0.87–1.35) | (0.76–1.12) | (0.92–1.53) |
| Quintile 4 | 1.21* | 1.52*** | 1.22* | 1.33* |
| Onintile 5 | (1.03–1.41) | (1.22–1.89) | (1.02–1.45) | (1.04–1.72) 1.51** |
| Quintile 5 | (1.49–2.01) | (1.42–2.23) | (1.10–1.53) | (1.17–1.97) |
| Education | (1.47-2.01) | (1.42-2.23) | (1.10–1.55) | (1.17-1.57) |
| (ref = mandatory) | | | | |
| Secondary school | 1.20** | 1.37*** | 0.93 | 0.88 |
| Secondary school | (1.07-1.34) | (1.16–1.62) | (0.82–1.05) | (0.73–1.06) |
| Higher education | 1.86*** | 1.74*** | 1.01 | 1.15 |
| Age at | (1.63–2.14) | (1.42–2.12) | (0.86–1.17) | (0.92–1.42) |
| dialysis/being | | | | |
| waitlisted, years | | | | |
| (ref = 18-39) | | | | |
| 40–49 | 0.72*** | 0.80* | 0.76** | 0.82 |
| | (0.61-0.85) | (0.65–0.99) | (0.63-0.92) | (0.64-1.05) |
| 50–59 | 0.53*** | 0.49*** | 0.75** | 0.84 |
| | (0.45–0.63) 0.10*** | (0.39–0.60) | (0.63–0.90) | (0.65–1.07) 0.93 |
| 60+ | (0.08–0.12) | (0.08–0.13) | (0.61–0.90) | (0.72–1.21) |
| Year of dialysis/being | 0.97*** | 0.98** | 1.00 | 1.03** |
| waitlisted# | (0.96–0.98) | (0.96–0.99) | (0.98–1.01) | (1.01–1.05) |
| Marital status | | | | |
| | | | | |
| (ref = married) | | | | |
| Single | 0.75*** | 0.76** | 0.95 | 1.28* |
| | (0.67–0.85) 0.86* | (0.64–0.90) | (0.84–1.09) 0.89 | (1.06–1.55) 0.92 |
| Divorced | (0.75–0.99) | (0.73–1.04) | (0.76–1.04) | (0.75–1.12) |
| Widowed | 0.39*** | 0.42*** | 0.78 | 0.70* |
| widowed | (0.27–0.56) | (0.31–0.57) | (0.51–1.19) | (0.50–0.99) |
| Citizenship (ref = non-Swedish) | , | , | | |
| Swedish | 1.21 | 1.16 | 1.07 | 1.21 |
| S Wedish | (0.97–1.51) | (0.86–1.57) | (0.84–1.36) | (0.86–1.71) |
| Missina | 1.14 | 1.10 | 1.05 | 1.35 |
| Missing | (0.86–1.52) | (0.75–1.62) | (0.76–1.45) | (0.87-2.11) |
| Home county§ | | | | |
| (ref = no KTx centre) | 0.06 | 1.06 | 1.01 | 0.81** |
| KTx centre | 0.96 | 1.06 | 1.01 | 0.81** |

| | (0.88–1.06) | (0.92–1.21) | (0.91–1.12) | (0.70-0.94) |
|------------------------|-------------|-------------|-------------|-------------|
| Blood type $(ref = O)$ | | | | |
| Α. | | | 2.02*** | 2.24*** |
| A | | | (1.79-2.28) | (1.89–2.66) |
| В | | | 1.53*** | 1.52** |
| D | | | (1.28-1.82) | (1.19–1.94) |
| AB | | | 4.49*** | 2.23*** |
| AB | | | (3.54-5.69) | (1.53–3.26) |

CI = confidence interval; HR = hazard ratio; ref = reference group; KTx = kidney transplantation. For a definition of quintiles 1–5, see Table 1. #Year of dialysis/being waitlisted was treated as a continuous variable. \$Whether patients' home county has a Tx centre. ***p<0.001; **p<0.01; **p<0.05.

Table S3. Association between education and access to the waiting list/kidney transplantation for men and women separately, by Cox proportional hazard regression

| Variables included in | Access to the kidney waiting list | | Access to kidney transplantation | |
|---|-----------------------------------|------------------------|----------------------------------|------------------------|
| the model | Men | Women | Men | Women |
| | (n=9,171) | (n=4,811) | (n=1,781) | (n=913) |
| | HR (95% CI) | HR (95% CI) | HR (95% CI) | HR (95% CI) |
| Education | | | | |
| (ref = mandatory) | | | | |
| Secondary school | 1.31*** (1.17–1.46) | 1.47*** (1.24–1.73) | 0.95 (0.84–1.07) | 0.92 (0.77–1.11) |
| TT' 1 1 4' | 2.20*** | 2.07*** | 1.07 | 1.26* |
| Higher education | (1.93–2.51) | (1.71–2.51) | (0.92–1.24) | (1.02–1.54) |
| Age at | | | | |
| dialysis/being | | | | |
| waitlisted, years | | | | |
| (ref = 18-39) | | | | |
| 40–49 | 0.75** | 0.84 | 0.77** | 0.86 |
| | (0.64–0.89) | (0.68–1.04) | (0.64–0.93) | (0.67–1.10) |
| 50–59 | 0.59*** (0.50–0.69) | 0.57*** (0.46–0.70) | 0.77** | 0.93 (0.73–1.18) |
| (0) | 0.11*** | 0.11*** | (0.65–0.93) | 1.06 |
| 60+ | (0.09–0.13) | (0.09–0.14) | (0.65–0.95) | (0.83–1.36) |
| Year of dialysis/being | 0.98** | 0.98** | 1.00 | 1.03** |
| waitlisted# | (0.97–0.99) | (0.96–0.99) | (0.99–1.01) | (1.01–1.04) |
| Marital status | | | | |
| (ref = married) | | | | |
| Single | 0.73*** | 0.77** | 0.96 | 1.34** |
| | (0.65–0.82) 0.86* | (0.64–0.91) 0.88 | (0.84–1.09) | (1.11–1.62) 0.93 |
| Divorced | (0.75–0.98) | (0.74–1.05) | (0.78–1.06) | (0.76–1.13) |
| Widowed | 0.41*** | 0.44*** | 0.80 | 0.73 |
| | (0.28–0.58) | (0.33–0.59) | (0.53-1.22) | (0.52–1.03) |
| Citizenship (ref = non-Swedish) | | | | |
| Swedish | 1.35** | 1.28 | 1.15 | 1.32 |
| S W Colon | (1.09–1.68) | (0.95–1.72) | (0.91–1.46) | (0.94–1.85) |
| Missing | 1.31 | 1.16 | 1.13 | 1.41 |
| | (0.99–1.74) | (0.79–1.71) | (0.83–1.56) | (0.91–2.18) |
| Home county [§] (ref = no KTx centre) | | | | |
| KTx centre | 0.98 | 1.10 | 1.01 | 0.83* |
| | (0.89–1.08) | (0.97–1.26) | (0.91–1.13) | (0.71–0.96) |
| Blood type (ref = O) | | | | |
| A | | | 2.00*** (1.77–2.25) | 2.21*** (1.87–2.62) |
| В | | | 1.52*** | 1.46** |
| Б | | | (1.27–1.81) | (1.15–1.86) |
| AB | | | 4.49*** | 2.21*** |
| | | | (3.54–5.69) | (1.51-3.23) |

CI = confidence interval; HR = hazard ratio; ref = reference group; KTx = kidney transplantation. #Year of dialysis/being waitlisted was treated as a continuous variable. \$Whether patients' home county has a Tx centre. ***p<0.001; **p<0.01; *p<0.05.

Table S4. Sensitivity analysis: association between income (excluding patients with negative and very low disposable income) and access to the waiting list/access to kidney transplantation conditional on transplant listing, by Cox proportional hazard regression

| Variables included in the model | Access to the kidney waiting list (n=13, 305) HR (95% CI) | Access to kidney transplantation (n= 2, 499) HR (95% CI) |
|--------------------------------------|--|--|
| Disposable income (ref = quintile 1) | | |
| Quintile 2 | 1.04 (0.90–1.20) | 1.19* (1.02–1.40) |
| Quintile 3 | 1.03 | 1.03 |
| Quintile 4 | (0.89–1.18) | (0.88–1.21) 1.27** |
| Quintile 5 | (1.21–1.58) 1.84*** | (1.09–1.47) 1.33*** |
| Education | (1.61–2.10) | (1.15–1.55) |
| (ref = mandatory) | | |
| Secondary school | 1.24*** (1.12–1.36) | 0.91 (0.82–1.01) |
| Higher education | 1.81*** (1.61–2.03) | 1.08*** (0.95–1.22) |
| Age at dialysis/being | (| (1.0.2) |
| waitlisted, years | | |
| (ref = 18-39) | | |
| 40–49 | 0.74*** (0.64–0.85) | 0.80** (0.68–0.94) |
| 50–59 | 0.52*** | 0.77*** |
| | (0.46–0.60) 0.10*** | (0.66–0.90) |
| 60+ | (0.09–0.12) | 0.81** (0.69–0.95) |
| Gender (ref = female) | , | (**** |
| Male | 1.02 (0.94–1.12) | 0.97 (0.88–1.06) |
| Year of dialysis/being waitlisted# | 0.97*** (0.96–0.98) | 1.01 (1.00–1.02) |
| Marital status | (6.50 6.50) | (1.00 1.02) |
| (ref = married) | | |
| Single | 0.76*** (0.69–0.84) | 1.02 (0.92–1.14) |
| Divorced | 0.87* | 0.91 |
| Widowed | (0.78–0.97) 0.41*** (0.32–0.51) | (0.80–1.03) 0.95* (0.57–0.97) |
| Citizenship (ref = non-Swedish) | (0.32-0.31) | (0.31-0.71) |
| Swedish | 1.30* (1.05–1.60) | 1.05 (0.84–1.31) |
| Missing | 1.26 (0.98–1.63) | 1.08 (0.82–1.44) |
| Home county§ (ref = no KTx centre) | (1,00) | (3.02 1) |

| KTx centre | 0.99 | 0.95 |
|----------------------|-------------|-------------|
| | (0.92–1.08) | (0.87–1.04) |
| Blood type (ref = O) | | |
| A | | 2.05*** |
| A | | (1.86–2.27) |
| В | | 1.54*** |
| Ь | | (1.33–1.79) |
| AB | | 3.42*** |
| AB | | (2.80–4.19) |

CI = confidence interval; HR = hazard ratio; ref = reference group; KTx = kidney transplantation. For a definition of quintiles 1–5, see Table 1. #Year of dialysis/being waitlisted was treated as a continuous variable. \$Whether patients' home county has a Tx centre. ***p<0.001; **p<0.01; **p<0.05.