

# AUST. & N.Z. DIALYSIS AND TRANSPLANT SURVEY

THIS SECTION FOR ALL PATIENTS

REGISTRY NUMBER

1 INITIAL HOSPITAL Hospital/State Hosp. Unit No. CURRENT PARENT HOSPITAL Hospital/State Hosp. Unit No. Physician (Optional)


2 Surname  Given Names  3 DATE OF BIRTH    4 SEX

5 RACIAL ORIGIN (Record from list) OTHER  6 PRIMARY RENAL DISEASE (Record from list) OTHER  7 BIOPSY Y/N  8 SE. CREATININE AT ENTRY

9 COUNTRY OF BIRTH (If Australia or NZ - Tick box) AUST  NZ  OTHER COUNTRY (Please specify)  10 POSTCODE At Entry     POSTCODE At End Survey

11 CO-MORBID CONDITIONS AT ENTRY

LATE REFERRAL (<3 MTHS BEFORE FIRST TREATMENT) (Y/N)  HEIGHT (cms)  WEIGHT (kg)  CIGARETTE SMOKING  N=Never F=Former C=Current



DISEASE AT ENTRY AND DURING CURRENT SURVEY

	Y=Yes N=No S=Suspected	CHRONIC LUNG Y/S/N	CORONARY ARTERY Y/S/N	PERIPHERAL VASCULAR Y/S/N	CEREBRO VASCULAR Y/S/N	DIABETES N=No O=Type 1 Insulin dependent P=Type 2 Non Insulin requiring Q=Type 2 Insulin requiring
AT ENTRY	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
LAST	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
CURRENT	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

OTHER CO-MORBID CONDITIONS (Write In)

AT ENTRY	PREVIOUS ENTRIES	CURRENT
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

12 CENTRE OF TREATMENT HOSPITAL / CENTRE NAME (Write In or Tick if same)  CENTRE CODE  DATE TRANSFER

Enter geographical location at Death or End of Survey CURRENT LAST

13 COURSE OF TREATMENT COMPLETE ACCORDING TO CODE

REASON FOR DIALYSIS MODALITY CHANGE from CAPD to APD / APD to CAPD / Any PD to HD / HD to any PD Enter Reason for Change FROM Previous Modality TO Current Modality Refer to codes on back of form

14 HEPATITIS C ANTIBODY 1=Positive 2=Negative 3=Not done CURRENT LAST

SEQ. No.	CODE	DAY	MTH	YR	REASON	SEQ. No.	CODE	DAY	MTH	YR	REASON	SEQ. No.	CODE	DAY	MTH	YR	REASON
1						18						35					
2						19						36					
3						20						37					
4						21						38					
5						22											
6						23											
7						24											
8						25											
9						26											
10						27											
11						28											
12						29											
13						30											
14						31											
15						32											
16						33											
17						34											

15 CANCER EVER? Y/N  If Yes, please complete Cancer Form

16 CAUSE OF DEATH (Record from list) OTHER

17 WAS GRAFT SUSTAINING LIFE? Without dialysis at time of death Y=Yes N=No

18 PARENTHOOD HAS THIS PATIENT BECOME PREGNANT OR FATHERED A CHILD DURING THIS SURVEY  Y=Yes N=No If Yes, please complete a Parenthood Outcome form

DATE OF LAST OUTCOME

THIS SECTION FOR ALL PATIENTS DIALYSED AT ANY TIME DURING THE SURVEY PERIOD

19 TYPE OF DIALYSIS  (See list)

20 DRY WEIGHT AT LAST DIALYSIS  kg (HD and PD Patients)

21 UNCORRECTED CALCIUM  mmol/l (See instructions on the back of the form)

22 PHOSPHATE  mmol/l

23 HAEMOGLOBIN  g/l Last Available

24 EPO AGENT  Y=Yes N=No

25 FERRITIN  ug/l Within last 3 mths of Survey or record not done

26 % SATURATION IRON (Transferrin Saturation)

## HAEMODIALYSIS

27 DIALYSER BRAND (Write In) CODE  BRAND NAME AND MODEL

28 BLOOD FLOW RATE  Pump Speed (mls/min)

29 SESSIONS PER WEEK

30 HOURS PER SESSION

31 UREA REDUCTION or Kt/V Method  Value  (See List)

32 ACCESS IN USE (Functioning only) Enter for ALL PATIENTS ON HAEMODIALYSIS AT ANY TIME DURING THIS SURVEY PERIOD

AT FIRST HD  1=Native 2=Synthetic 3=Tunnel CV Catheter 4=Non Tunnel CV Catheter

AT LAST HD

FOR FISTULAS AND GRAFTS ONLY DECLETTED during Survey Y=Yes N=No D=Declocted and revised

REVISED during Survey N=No S=Surgical A=Angioplasty B=Both

IN THE EVENT OF THE PATIENT HAVING BOTH HD AND PD, AND A TRANSPLANT DURING THE SURVEY COMPLETE SECTIONS 19-41 INCLUSIVE

## ALL PERITONEAL DIALYSIS

33 PET TEST (Once Only) Within first 6 mths (Dx / Plasma Creatinine at 4 hours)

34 CONNECTION SYSTEM CODE  (Write In)

35 PERITONITIS DATE OF FIRST EPISODE

36 NUMBER OF EPISODES OF PERITONITIS During this Survey

37 TOTAL VOLUME OF WEEKLY CHANGES (Litres/week)

38 CREATININE CLEARANCE Dialysate ONLY  Adjusted for Body Surface Area (Litres/week/1.73 m<sup>2</sup>) Range 10-200 Litres/Week

39 WEEKLY Kt/V Dialysate ONLY  (Range 0.1 - 5.0)

40 RESIDUAL RENAL FUNCTION (Creatinine Clearance)  Adjusted for Body Surface Area (Litres/week/1.73 m<sup>2</sup>)

41 PD SOLUTIONS - Y=Yes N=No (Please fill in all boxes)

Glucose  Icodextrin  Low GDP Lactate  Low GDP Bicarbonate

OTHER

CURRENT GRAFT (IN THE EVENT OF BOTH GRAFT FAILURE AND RETRANSPLANT IN THIS SURVEY - USE A NEW FORM)

42 GRAFT NUMBER

43 DATE OF THIS TRANSPLANT

44 REFERRING HOSPITAL

45 DONOR HOSPITAL

46 TRANSPLANT HOSPITAL

47 RECIPIENT ANTIBODY STATUS AT GRAFT CMV EBV

1=Positive 2=Negative 3=Not done

48 NUMBER REJECTION EPISODES THIS SURVEY (Complete acute rejection form for each episode) (at any time)

49 DONOR DETAILS SOURCE AGE SEX

50 TOTAL ISCHAEMIA  (Hours)

51 IMMEDIATE FUNCTION  (See list)

52 DISEASE IN GRAFT  If Yes

53 DATE FIRST PROVEN  (eg. Graft biopsy)

54 CAUSE OF GRAFT FAILURE OTHER  (Record from list)

55 MONOCLONAL / POLYCLONAL THERAPY (Record from list)

COURSE	DATE	AGENT	OTHER	NUMBER OF DOSES GIVEN	REASON	OTHER
1st						
2nd						
3rd						

56 TOTAL DAILY DRUG DOSE (mg)

TOTAL INITIAL ORAL DOSE	1 MTH	2 MTH	3 MTH	6 MTH	1 YR	2 YR	3 YR	5 YR	7 YR	10 YR	15 YR	20 YR	25 YR	30 YR	35 YR
CYA															
AZA															
PRED															
TACROL															
MMF															
SIROL															
OTHER															

57 CYA SPARING DRUG 0=NOT GIVEN 1=GIVEN (eg DILTIAZEM - KETOCONAZOLE - VERAPAMIL)

58 BODY WEIGHT (kg)

59 SERUM CREATININE   $\mu$ mol/L

FOR OFFICE USE ONLY

60 HLA TYPING RECIPIENT DONOR BLOOD GROUP A B DR DQ


62 PRA AND CROSSMATCH MAXIMUM CURRENT


**INSTRUCTIONS FOR DIALYSIS AND TRANSPLANTATION SURVEY COMPILATION**  
**PLEASE READ THE EXPLANATORY NOTES BEFORE COMMENCING TO FILL IN THE FORMS**  
Please complete the form using neat capitals

**5 – RACIAL ORIGIN**

- 1 Caucasian
- 2 Australian Aborigine
- 3 Chinese
- 4 Maori
- 5 Arab
- 61 Cook Islander
- 63 Samoan
- 64 Tongan
- 65 Torres Strait Islander
- 69 Pacific People – other (**specify**)
- 7 Indian
- 8 Indonesian
- 9 Malay
- 10 Filipino
- 11 Vietnamese
- 20 Other (**specify**)
- 00 Patient objects to answering question

Mixed race coded by patient's assessment

**6 - PRIMARY RENAL DISEASE**

**Results of ANCA (Anti Neutrophil Cytoplasmic Antibody) test in association with glomerulonephritis should be entered in box marked OTHER**

- 100 Presumed GN, type undefined histologically (no biopsy)
- 110 Focal sclerosing GN (including hyalinosis)
- 111 Primary focal sclerosing GN or focal glomerular sclerosis
- 112 Secondary focal sclerosing GN
- 121 Mesangiocapillary GN with subendothelial deposits (double contour)
- 122 Mesangiocapillary GN with intramembranous deposits (dense deposit disease)
- 130 Membranous GN
- 140 Extra and intra capillary GN (extensive crescents - clinically rapidly progressive)
- 151 Mesangial proliferative (IgA+ positive)
- 152 Mesangial proliferative (IgA- negative)
- 153 Mesangial proliferative (no I.F. studies)
- 160 Focal and segmental proliferative GN (including focal necrotising)
- 170 Advanced GN (unclassified = end stage)
- 180 GN with systemic disease (**specify**)
- 181 Goodpasture's syndrome with linear IgG and lung haemorrhage
- 182 Proliferative GN with linear IgG -no lung haemorrhage
- 183 SLE
- 184 Henoch-Schonlein purpura
- 185 Wegener's Granulomatosis
- 186 Microscopic Polyarteritis
- 187 Scleroderma
- 190 GN other (**specify**)
- 191 Familial GN (**specify Alport's - yes or no**)
- 200 Analgesic nephropathy
- 300 Renal vascular disease due to malignant hypertension (NO primary renal disease)
- 301 Renal vascular disease – type unspecified
- 302 Renal vascular disease – due to hypertension (nephrosclerosis) (NO primary renal disease)
- 303 Atheroembolic disease (cholesterol emboli)
- 304 Bilateral renal artery stenosis
- 400 Polycystic kidney disease
- 401 Medullary cystic disease
- 402 Infantile/juvenile polycystic kidney disease
- 500 Reflux nephropathy
- 600 Pyelonephritis
- 700 Calculi
- 701 Gout
- 801 Diabetes – Type 1 (insulin dependent) [**Juvenile onset**]
- 802 Diabetes – Type 2 (non-insulin requiring)
- 803 Diabetes – Type 2 (insulin requiring) [**Mature onset**]
- 000 Other (**specify**)
- 001 Uncertain diagnosis
- 002 Lead nephropathy
- 003 Cadmium toxicity
- 004 Renal tuberculosis
- 005 Amyloid disease
- 006 Haemolytic uraemic syndrome
- 007 Cortical necrosis
- 008 Interstitial nephritis
- 009 Congenital renal hypoplasia and dysplasia
- 010 Loss of single kidney (**specify - e.g. trauma, surgery**)
- 011 Megaureter
- 012 Oxalosis
- 013 Cystinosis
- 014 Balkan nephropathy
- 015 Renal cell carcinoma (GRAWITZ)
- 016 Transitional cell carcinoma of urinary tract
- 017 Paraproteinaemia (including multiple myeloma)

**PRIMARY RENAL DISEASE cont**

- 018 Light chain nephropathy (benign)
- 019 Lithium toxicity
- 020 Post partum nephropathy
- 021 Sarcoidosis
- 031 Posterior urethral valves
- 032 Pelvi-ureteric junction obstruction
- 033 Obstructed megaureter
- 034 Neuropathic bladder
- 035 Non-obstructed dilated bladder and ureters (megacystitis – megaureter)
- 036 Spina bifida or myelomeningocele
- 037 Bladder neck obstruction (incl. prostatomegaly)
- 039 Other lower urinary tract abnormalities (with secondary reflux) (**specify**)
- 040 Ureteric obstructive nephropathy
- 041 Obstructive nephropathy

**13 – REASON FOR MODALITY CHANGE**

**From CAPD to APD**

**From APD to CAPD**

**From any form of PD to HD**

**From HD to any form of PD**

- 10 Recurrent / persistent peritonitis
- 11 Acute peritonitis
- 15 Tunnel / exit site infection
- 16 Diverticulitis
- 20 Inadequate solute clearance
- 21 Inadequate fluid ultrafiltration
- 22 Excessive fluid ultrafiltration
- 27 Abdominal abscess
- 30 Dialysate leak
- 31 Catheter block
- 32 Haemoperitoneum
- 33 Catheter fell out
- 35 Hernia
- 36 Abdominal pain
- 40 Abdominal surgery
- 41 Sclerosing peritonitis
- 42 Peritoneal infection
- 43 Multiple adhesions
- 44 Pregnancy
- 45 Haematuria
- 46 Pleural effusion
- 47 Cardiovascular instability
- 48 Geography – poor access to dialysis services
- 49 Vascular access problems
- 50 Patient preference
- 51 Unable to manage self-care
- 60 Recovery of renal function
- 70 Transplantation
- 80 Death
- 81 Transfer outside Australia or New Zealand
- 82 Other surgery
- 83 Hydrothorax
- 85 Poor nutrition
- 86 Scrotal oedema
- 90 Planned transfer after acute PD start
- 91 Planned transfer after acute HD start
- 99 Other (**specify**)

**16 - CAUSE OF DEATH**

**CARDIAC**

- 10 Myocardial ischaemia (presumed)
- 11 Myocardial ischaemia and infarction
- 12 Pulmonary oedema
- 13 Hyperkalaemia
- 14 Haemorrhagic pericarditis
- 15 Hypertensive cardiac failure
- 16 Cardiac arrest – cause uncertain
- 17 Other causes of cardiac failure (**specify**)

**VASCULAR**

- 21 Pulmonary embolus
- 22 Cerebrovascular accident
- 23 Gastrointestinal haemorrhage
- 24 Haemorrhage from dialysis access site
- 25 Haemorrhage from transplant artery
- 26 Aortic aneurysm – rupture
- 27 Haemorrhage from elsewhere (**specify**)
- 28 Bowel infarction

**INFECTION**

Please enter code for nature of infective organism, after the code for site of infection Please **specify type of organism**  
eg Staph, CMV, Candida, etc

eg **321 Lung infection – bacterial (staph)**  
**322 Lung infection – viral (CMV)**

- |                  |             |
|------------------|-------------|
| 31 CNS           | 1 Bacterial |
| 32 Lung          | 2 Viral     |
| 33 Urinary tract | 3 Fungal    |
| 34 Wound         | 4 Protozoa  |
| 35 Shunt         | 5 Other     |
| 36 Peritoneum    |             |

**CAUSE OF DEATH cont**

- 37 Septicaemia – site unknown (**specify organism**)
- 38 Liver (incl viral hepatitis) (**specify A, B, CMV, herpes, etc**)
- 39 Other site (**specify**)

**SOCIAL**

- 40 Withdrawal for psycho-social reasons
- 41 Patient refused further treatment (**specify reason**)
- 42 Suicide
- 43 Therapy ceased for any other reason (**specify reason**)
- 44 Accidental death (**specify**)
- 45 Withdrawal for cardiovascular comorbid conditions
- 46 Withdrawal for cerebrovascular comorbid conditions
- 47 Withdrawal for peripheral vascular comorbid conditions
- 48 Withdrawal related to malignancy
- 49 Withdrawal related to dialysis access difficulties (AVF, Tenckhoff, etc)

**MISCELLANEOUS**

- 50 Hepatic failure (**specify**)
- 51 Uraemia caused by graft failure
- 52 Pancreatitis
- 53 Bone marrow depression
- 54 Cachexia
- 55 Unknown
- 56 Malignant disease
- 57 Perforation of abdominal viscus – peptic ulcer, diverticulum, appendix
- 58 Dementia (aluminium)
- 59 Other (**specify**)
- 60 Immunodeficiency due to viral infection (**specify organisms involved**)
- 61 Chronic respiratory failure
- 62 Sclerosing peritonitis

**19 – TYPE OF DIALYSIS**

- 11 Haemodialysis – plate dialysers
- 12 Haemodialysis – hollow fibre dialysers
- 15 Haemofiltration
- 16 Haemodiafiltration
- 19 C.V.V.HD (Intensive Care Unit)
- 20 Peritoneal – bags no cyclor
- 21 Peritoneal – continuous ambulatory (CAPD)
- 22 Peritoneal – automated (APD)
- 23 Peritoneal – intermittent cyclor (IPD)
- 25 Peritoneal – other (**specify**)

**20 – DRY WEIGHT**

At end of survey, transplantation or death.

**21 – UNCORRECTED CALCIUM**

Not corrected for albumin

Midweek, predialysis, at end of survey, transplantation or death.

**22 – PHOSPHATE**

Midweek, predialysis, at end of survey, transplantation or death.

**23 – HAEMOGLOBIN**

Midweek, predialysis, at end of survey, transplantation or death.

**31 – URR or Kt/V Please enter method used**

- A Urea Reduction Ratio % (URR%)
  - B Kt/V (by BIostat)
  - C Kt/V (by UKM)
  - D Kt/V (by DAUGIRDAS – single pool)
  - E Kt/V (other method – **specify**)
- Kt/V** (for HD patients) Range 0.5 – 2.2

**UREA REDUCTION RATIO %**

( Pre dialysis urea – post dialysis urea ) x 100 = URR%  
Pre dialysis urea

**Pre dialysis urea:**

Blood should be drawn from the 'arterial' needle immediately prior to dialysis, at a mid-week dialysis session.

**Post dialysis urea:**

Blood is again drawn from the 'arterial' needle and this should occur **within 20 seconds** after cessation of the blood pump (alternatively the pump can be turned down to 50 ml/min) – this is to avoid problems with recirculation.

**32 – ACCESS IN USE**

**Type at First HD** - leave blank if initial renal replacement treatment was not haemodialysis.

**Type at Last HD** - enter for all patients on haemodialysis at any time during the survey. Enter the procedure closest to the end of survey, change to PD, transplantation, or death.

**33 – PET TEST** (Required Once Only per patient)

**Standard Peritoneal Dialysis Equilibration Test** performed 1-6 months after initiation of PD (2.5% 2 litre exchanges)

**Provide dialysis/plasma creatinine at 4 hours**  
Range 0.1 – 1.2

**38 to 40 – PD CLEARANCE STUDIES**

**Generated from a 24 hour collection of PD effluent and urine**

**NOTE:** Dialysate Creatinine Clearance and Kt/V both refer to dialysis clearances ONLY (NOT the total of dialysis and renal clearances).

**38 CREATININE CLEARANCE – DIALYSATE ONLY**  
Range 10 - 200 litres / week  
Litres / week / 1.73 m<sup>2</sup> Body Surface Area

**39 WEEKLY Kt/V – DIALYSATE ONLY** Range 0.1 – 5.0

**40 RESIDUAL RENAL FUNCTION (Creatinine Clearance)**  
Litres / week / 1.73 m<sup>2</sup> Body Surface Area

**49 – SOURCE OF DONOR KIDNEY**

- 1 Deceased Donor
- 2 Sister (if twin, record 6 or 7)
- 3 Brother (if twin, record 6 or 7)
- 4 Mother
- 5 Father
- 6 Monozygotic (identical) twin
- 7 Dizygotic (non-identical) twin
- 8 Other related living donor (**specify**)
- 9 Son
- 10 Daughter
- 11 Husband
- 12 Wife
- 13 Cousin
- 14 Unrelated living donor (**specify**)

**50 – TOTAL ISCHAEMIA (HOURS)**

From time of donor renal artery interruption or aortic clamp, until time of release of renal artery in the recipient (clamp off).

**51 – IMMEDIATE FUNCTION**

- 1 Spontaneous fall in se.creatinine by 10% within 24 hours
- 2 Spontaneous fall in se.creatinine by 10%, first recorded between 25-72 hours
- 3 Poor immediate function No spontaneous fall in se.creatinine within 72 hours; but no dialysis needed
- 4 No immediate function No spontaneous fall (> 10%) in se.creatinine; dialysis required within 72 hours

**52 – DISEASE IN GRAFT** Histologically proven

Complete this section for **FUNCTIONING or FAILED GRAFTS**  
Please enter **Date first proven (e.g. Graft Biopsy)**

- B** = BK virus nephropathy in graft  
**Y** = Disease recurrence  
– primary renal disease and disease in graft the same  
**D** = De novo glomerulonephritis  
– primary renal disease known and not the same  
**G** = Glomerulonephritis in graft  
– primary renal disease unknown or not biopsied

In cases of glomerulonephritis, where histological confirmation of recurrence may be uncertain, enter as G

**54 – CAUSE OF GRAFT FAILURE**

**REJECTION**

- 10 Hyperacute rejection (within 48 hours of transplantation)
- 20 Acute rejection at anytime, causing graft failure
- 40 Chronic allograft nephropathy (slow progressive loss of renal function, not due to recurrent original disease or acute rejection)

**VASCULAR**

- 50 Renal artery stenosis
- 51 Renal artery thrombosis
- 52 Renal vein thrombosis
- 53 Renal vessel haemorrhage (primary)
- 54 Renal vessel haemorrhage (secondary)
- 55 Embolus – thrombo
- 56 Embolus – cholesterol
- 57 Haemolytic uraemic syndrome

**TECHNICAL**

- 60 Non-viable kidney (due to pre-transplant cortical necrosis)
- 61 Cortical necrosis Post transplant (not due to rejection)
- 70 Ureteric and bladder problems

**GLOMERULONEPHRITIS**

- 82 Mesangiocapillary GN with subendothelial deposits
- 83 Mesangiocapillary GN with intramembranous deposits (dense deposit disease)
- 84 Focal sclerosing GN (including hyalinosis)
- 85 Membranous GN
- 86 Mesangial proliferative GN (IgA positive)
- 87 Goodpasture's syndrome
- 88 Intra and extra capillary GN with extensive crescents (clinically rapidly progressive)
- 89 Other (**specify**)

**DRUG THERAPY**

- 90 Complications of drug therapy requiring reduction or withdrawal of steroid and/or immunosuppressants
- 91 Non-compliance with therapy – causing graft failure
- 92 Rejection following I/S reduction due to malignancy
- 93 Rejection following I/S reduction due to infection

**MISCELLANEOUS**

- 00 Other (**specify**)
- 01 Donor malignancy
- 02 Malignancy invading graft
- 05 BK virus nephropathy

**55 – MONOCLONAL / POLYCLONAL THERAPY**

Record in order of administration, each separate course of such drugs; a second course of the same drug should be separately recorded.

Complete the requested details regarding, date, identity of drug, number of doses given, and reason for administration, according to the following codes.

<u>TYPE OF AGENT</u>	<u>NUMBER OF DOSES</u>
2 Daclizumab (Zenepax)	Record actual number of doses given
4 OKT3	
5 Intravenous Immunoglobulin	
6 Basilixmab (Simulect)	
7 Rituximab	
8 Polyclonal anti T cell	
9 Other monoclonal ( <b>specify</b> )	

**REASON FOR USE**

- 1 Prophylaxis
- 7 Treatment for acute rejection
- 8 Other (**specify**)

**56 – TOTAL DAILY DRUG DOSE**

Enter the total daily dose for each drug where applicable; if an unlisted drug is used, enter the name in the space provided marked **OTHER**.

Only those drugs taken at the listed intervals should be entered; where necessary provide the dose recorded on the closest day preceding the requested time interval.

The initial drug dose (at zero months) is **the first oral maintenance dose; DO NOT** enter the intravenous loading doses administered at or shortly after transplantation.

(2007)