

**TABLE 12.** Classification of the causes of death of patients who died in 2007

| Cause of death                  | Male   |         | Female |         | Total  |         | No information available |         |
|---------------------------------|--------|---------|--------|---------|--------|---------|--------------------------|---------|
|                                 |        | (%)     |        | (%)     |        | (%)     |                          | (%)     |
| Cardiac failure                 | 3 387  | (22.5)  | 2333   | (26.5)  | 5 720  | (24.0)  | 1                        | (24.0)  |
| Cerebrovascular disease         | 1 288  | (8.6)   | 841    | (9.6)   | 2 129  | (8.9)   | 0                        | (8.9)   |
| Infectious disease              | 2 879  | (19.1)  | 1637   | (18.6)  | 4 516  | (18.9)  | 1                        | (18.9)  |
| Hemorrhage                      | 304    | (2.0)   | 179    | (2.0)   | 483    | (2.0)   | 0                        | (2.0)   |
| Malignant tumor                 | 1 558  | (10.4)  | 626    | (7.1)   | 2 184  | (9.2)   | 0                        | (9.2)   |
| Cachexia/uremia                 | 430    | (2.9)   | 318    | (3.6)   | 748    | (3.1)   | 0                        | (3.1)   |
| Cardiac infarction              | 704    | (4.7)   | 344    | (3.9)   | 1 048  | (4.4)   | 0                        | (4.4)   |
| Potassium poisoning/moribund    | 809    | (5.4)   | 394    | (4.5)   | 1 203  | (5.0)   | 0                        | (5.0)   |
| Chronic hepatitis/cirrhosis     | 209    | (1.4)   | 82     | (0.9)   | 291    | (1.2)   | 0                        | (1.2)   |
| Encephalopathy                  | 12     | (0.1)   | 10     | (0.1)   | 22     | (0.1)   | 0                        | (0.1)   |
| Suicide/refusal of treatment    | 154    | (1.0)   | 58     | (0.7)   | 212    | (0.9)   | 0                        | (0.9)   |
| Intestinal obstruction          | 144    | (1.0)   | 100    | (1.1)   | 244    | (1.0)   | 0                        | (1.0)   |
| Lung thrombus/pulmonary embolus | 44     | (0.3)   | 38     | (0.4)   | 82     | (0.3)   | 0                        | (0.3)   |
| Death due to disaster           | 120    | (0.8)   | 56     | (0.6)   | 176    | (0.7)   | 0                        | (0.7)   |
| Others                          | 1 428  | (9.5)   | 888    | (10.1)  | 2 316  | (9.7)   | 0                        | (9.7)   |
| Undetermined                    | 1 576  | (10.5)  | 885    | (10.1)  | 2 461  | (10.3)  | 3                        | (10.3)  |
| Total                           | 15 046 | (100.0) | 8789   | (100.0) | 23 835 | (100.0) | 5                        | (100.0) |
| No information available        | 20     |         | 8      |         | 28     |         | 0                        |         |
| Total                           | 15 066 |         | 8797   |         | 23 863 |         | 5                        |         |

*b. Dialysate solution bacterial count.* Measured bacterial counts in the dialysate solution were reported by 1565 facilities, 97.4% of which satisfied the quality control standard by the Japanese Society for Dialysis Therapy, which is <100 cfu/mL (Table 19). The percentage of facilities that satisfied the ultrapure dialysate solution level of <0.1 cfu/mL was 47.9%.

*c. Medium used for bacterial cultivation of the dialysate solution.* The use of an oligotrophic medium is recommended for the cultivation of bacteria in the dialysate solution. According to the survey result, an oligotrophic medium of Reasoner's No 2 agar (R2A) or tryptone glucose extract agar (TGEA)

was used at 73.4% of the facilities. The percentage of facilities that used R2A was the highest at 66.3% (Table 20).

*d. Amount of sample for the measurement of the dialysate solution bacterial count.* Generally, the amount of a sample used to measure the bacterial count in plate media was <1 mL; however, at least 10 mL of a sample is required to accurately measure a bacterial count of <0.1 cfu/mL in the dialysate solution, which is the count required to maintain an ultrapure dialysate solution. From the survey, the amount of the sample dialysate solution was 10 mL or more in 46.5% of the facilities (Table 21).

**TABLE 13.** Annual changes in the major causes of death

| Year                    | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Cardiac failure         | 30.3 | 30.5 | 31.3 | 33.2 | 32.7 | 36.5 | 33.4 | 30.4 | 30.5 | 31.1 | 29.9 | 28.2 | 25.4 |
| Infectious disease      | 11.0 | 11.5 | 11.5 | 12.0 | 12.0 | 12.2 | 11.7 | 11.6 | 12.1 | 11.3 | 12.2 | 12.6 | 13.8 |
| Cerebrovascular disease | 14.2 | 15.4 | 14.2 | 14.0 | 14.2 | 12.9 | 13.2 | 13.9 | 13.7 | 13.6 | 13.5 | 14.1 | 13.5 |
| Malignant tumor         | 7.7  | 6.9  | 6.4  | 6.9  | 5.8  | 6.9  | 7.6  | 8.2  | 7.6  | 7.1  | 7.4  | 7.3  | 7.2  |
| Cardiac infarction      | 5.3  | 4.8  | 5.3  | 6.1  | 6.0  | 5.4  | 5.3  | 5.8  | 5.8  | 5.8  | 5.7  | 7.1  | 7.5  |
| Others                  | 5.1  | 4.9  | 5.7  | 4.7  | 5.2  | 4.8  | 4.4  | 4.6  | 4.4  | 4.5  | 4.1  | 4.5  | 5.8  |
| Year                    | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |      |
| Cardiac failure         | 24.1 | 23.9 | 24.1 | 24.3 | 23.2 | 25.5 | 25.1 | 25.0 | 25.1 | 25.8 | 24.9 | 24.0 |      |
| Infectious disease      | 14.6 | 14.9 | 15.0 | 16.3 | 16.6 | 16.3 | 15.9 | 18.5 | 18.8 | 19.2 | 19.9 | 18.9 |      |
| Cerebrovascular disease | 12.9 | 12.6 | 12.1 | 11.3 | 11.3 | 11.6 | 11.2 | 10.7 | 10.6 | 9.8  | 9.4  | 8.9  |      |
| Malignant tumor         | 7.7  | 8.1  | 7.7  | 7.6  | 8.3  | 8.5  | 8.5  | 8.5  | 9.0  | 9.0  | 9.2  | 9.2  |      |
| Cardiac infarction      | 7.4  | 8.4  | 7.9  | 7.4  | 7.0  | 7.4  | 7.4  | 6.2  | 5.4  | 5.1  | 4.4  | 4.4  |      |
| Others                  | 6.3  | 6.7  | 7.0  | 7.7  | 7.9  | 9.1  | 9.0  | 9.7  | 10.3 | 9.1  | 9.5  | 9.7  |      |

**TABLE 14.** Change in the annual crude death rate

| Year | Crude death rate (%) | Year | Crude death rate (%) |
|------|----------------------|------|----------------------|
| 1983 | 9.0                  | 1996 | 9.4                  |
| 1984 | 8.9                  | 1997 | 9.4                  |
| 1985 | 9.1                  | 1998 | 9.2                  |
| 1986 | 9.0                  | 1999 | 9.7                  |
| 1987 | 8.5                  | 2000 | 9.2                  |
| 1988 | 9.2                  | 2001 | 9.3                  |
| 1989 | 7.9                  | 2002 | 9.2                  |
| 1990 | 9.6                  | 2003 | 9.3                  |
| 1991 | 8.9                  | 2004 | 9.4                  |
| 1992 | 9.7                  | 2005 | 9.5                  |
| 1993 | 9.4                  | 2006 | 9.2                  |
| 1994 | 9.5                  | 2007 | 9.4                  |
| 1995 | 9.7                  |      |                      |

## B. Current status of hepatitis virus infection

### 1. Hepatitis C virus antibody prevalence

The hepatitis C virus antibody (HCVAb) prevalence was calculated using the following equation:

$$\text{HCVAb prevalence (\%)} = \frac{\text{Number of HCVAb-positive patients}}{\text{Number of HCVAb-positive patients} + \text{Number of HCVAb-negative patients}}$$

In this equation, HCV-RNA was not taken into consideration.

*a. Changes over the past eight years.* The HCVAb prevalence of chronic dialysis patients at the end of each year was summarized on the basis of the results of the survey by the Statistical Survey Committee (4–9). The HCVAb prevalence decreased yearly from 15.95% in 1999 to <10% at the end of 2007 (9.83%; Table 22). The previous activities carried out to prevent in-hospital infection from 1999 until today include the publication of the “Manual for prevention of in-hospital infection in dialysis therapy (initial version)” (10) in 1999, the start of the sale of erythropoietin-pre-filled syringes in 2001, and the publication of the “Manual for prevention of in-hospital infection in dialysis therapy (revised version)” (11) in 2006.

*b. Treatment method.* Table 23 shows the relationship between HCVAb prevalence and the treatment method. The HCVAb prevalence in patients treated by hemoabsorption was the highest, followed by those in patients treated by hemodiafiltration and home hemodialysis. As explained later, patients with a longer dialysis duration showed a higher HCVAb prevalence. The duration of dialysis in patients treated by the above methods was long and thereby

considered to account for the high HCVAb prevalence (the mean durations of dialysis for patients treated by different methods obtained from this survey are:  $6.46 \pm 6.57$  ( $\pm$ SD) years for facility hemodialysis,  $11.45 \pm 9.03$  years for hemodiafiltration,  $6.06 \pm 6.77$  years for hemofiltration,  $24.68 \pm 6.59$  years for hemoabsorption,  $12.42 \pm 9.38$  years for home hemodialysis, and  $3.54 \pm 4.17$  years for peritoneal dialysis). The HCVAb prevalence in patients treated by peritoneal dialysis was lower than that in patients treated by facility hemodialysis, which was probably because the duration of dialysis was short in patients treated by peritoneal dialysis. These trends were almost similar to those in the 2006 survey.

*c. Gender.* Table 24 shows the relationship between HCVAb prevalence and gender. The HCVAb prevalence in male patients was higher than that in female patients.

*d. Duration of dialysis.* Table 25 shows the relationship between HCVAb prevalence and the duration of dialysis. Before reaching the duration of 15 years, the HCVAb prevalence was approximately 7.7% and showed no particular relationship with the duration of dialysis; however, the HCVAb prevalence tended to increase when the duration of dialysis was 15 years or longer, and it markedly increased with increasing dialysis duration of >20 years. The HCV virus was first detected and HCVAb tests therefore performed in the clinical setting about 20 years ago, which may account for the increase in HCVAb prevalence in patients who have undergone dialysis for 20 years or longer.

*e. Age.* Table 26 shows the relationship between HCVAb prevalence and age. The HCVAb prevalence was relatively high in the 45–89 age group, whereas that in patients outside this age group, younger or older, was low. This age group includes many patients with a relatively long duration of dialysis, which may account for such a high HCVAb prevalence.

*f. Primary disease.* Table 27 shows the relationship between HCVAb prevalence and primary disease. To easily understand HCVAb prevalence in relation to the primary disease, the primary diseases are listed in descending order of HCVAb prevalence. The HCVAb prevalence in patients who had been reintroduced to dialysis after transplantation and who had renal or urinary tract tuberculosis as the primary

TABLE 15. Survival rates of new patients begun on dialysis since 1983

| Year when patients were newly introduced to dialysis | Number of patients | 1-year survival rate | 2-year survival rate | 3-year survival rate | 4-year survival rate | 5-year survival rate | 6-year survival rate | 7-year survival rate | 8-year survival rate | 9-year survival rate | 10-year survival rate | 11-year survival rate | 12-year survival rate | 13-year survival rate | 14-year survival rate | 15-year survival rate | 16-year survival rate | 17-year survival rate | 18-year survival rate | 19-year survival rate | 20-year survival rate | 21-year survival rate | 22-year survival rate | 23-year survival rate | 24-year survival rate |
|--|--------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1983   | 9923               | 0.819                | 0.748                | 0.683                | 0.634                | 0.590                | 0.557                | 0.525                | 0.486                | 0.457                | 0.426                 | 0.397                 | 0.373                 | 0.349                 | 0.330                 | 0.309                 | 0.290                 | 0.274                 | 0.257                 | 0.244                 | 0.229                 | 0.216                 | 0.202                 | 0.191                 | 0.181                 |
| 1984   | 10 764             | 0.818                | 0.736                | 0.671                | 0.621                | 0.578                | 0.539                | 0.500                | 0.467                | 0.437                | 0.409                 | 0.380                 | 0.355                 | 0.331                 | 0.310                 | 0.290                 | 0.273                 | 0.255                 | 0.241                 | 0.229                 | 0.214                 | 0.201                 | 0.191                 | 0.182                 |                       |
| 1985   | 11 676             | 0.796                | 0.721                | 0.662                | 0.611                | 0.565                | 0.523                | 0.487                | 0.447                | 0.416                | 0.388                 | 0.363                 | 0.339                 | 0.314                 | 0.292                 | 0.274                 | 0.256                 | 0.239                 | 0.224                 | 0.211                 | 0.195                 | 0.183                 | 0.172                 |                       |                       |
| 1986   | 12 676             | 0.799                | 0.725                | 0.667                | 0.619                | 0.566                | 0.521                | 0.480                | 0.446                | 0.410                | 0.380                 | 0.353                 | 0.329                 | 0.307                 | 0.286                 | 0.269                 | 0.252                 | 0.235                 | 0.222                 | 0.210                 | 0.198                 | 0.185                 |                       |                       |                       |
| 1987   | 13 618             | 0.816                | 0.739                | 0.673                | 0.609                | 0.558                | 0.509                | 0.464                | 0.428                | 0.396                | 0.367                 | 0.341                 | 0.317                 | 0.296                 | 0.274                 | 0.256                 | 0.241                 | 0.223                 | 0.206                 | 0.193                 | 0.183                 |                       |                       |                       |                       |
| 1988   | 14 828             | 0.825                | 0.741                | 0.668                | 0.605                | 0.549                | 0.501                | 0.458                | 0.421                | 0.386                | 0.355                 | 0.329                 | 0.305                 | 0.283                 | 0.262                 | 0.244                 | 0.227                 | 0.213                 | 0.198                 | 0.188                 |                       |                       |                       |                       |                       |
| 1989   | 14 663             | 0.850                | 0.762                | 0.689                | 0.620                | 0.564                | 0.515                | 0.470                | 0.431                | 0.396                | 0.364                 | 0.338                 | 0.313                 | 0.291                 | 0.271                 | 0.253                 | 0.237                 | 0.221                 | 0.208                 |                       |                       |                       |                       |                       |                       |
| 1990   | 16 600             | 0.839                | 0.750                | 0.675                | 0.610                | 0.556                | 0.503                | 0.461                | 0.421                | 0.386                | 0.355                 | 0.327                 | 0.302                 | 0.280                 | 0.263                 | 0.246                 | 0.230                 | 0.213                 |                       |                       |                       |                       |                       |                       |                       |
| 1991   | 18 305             | 0.829                | 0.736                | 0.663                | 0.599                | 0.540                | 0.489                | 0.446                | 0.408                | 0.377                | 0.347                 | 0.320                 | 0.295                 | 0.275                 | 0.256                 | 0.239                 | 0.223                 |                       |                       |                       |                       |                       |                       |                       |                       |
| 1992   | 19 991             | 0.822                | 0.728                | 0.652                | 0.589                | 0.532                | 0.484                | 0.440                | 0.402                | 0.370                | 0.342                 | 0.317                 | 0.293                 | 0.273                 | 0.252                 | 0.234                 |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| 1993   | 20 990             | 0.833                | 0.743                | 0.667                | 0.599                | 0.543                | 0.492                | 0.448                | 0.410                | 0.377                | 0.347                 | 0.320                 | 0.296                 | 0.273                 | 0.255                 |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| 1994   | 21 548             | 0.831                | 0.745                | 0.672                | 0.606                | 0.547                | 0.495                | 0.452                | 0.414                | 0.378                | 0.347                 | 0.320                 | 0.295                 | 0.273                 | 0.255                 |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| 1995   | 23 053             | 0.842                | 0.755                | 0.682                | 0.613                | 0.556                | 0.508                | 0.465                | 0.426                | 0.391                | 0.359                 | 0.330                 | 0.306                 |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| 1996   | 25 109             | 0.833                | 0.751                | 0.676                | 0.613                | 0.559                | 0.512                | 0.462                | 0.424                | 0.389                | 0.357                 | 0.329                 |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| 1997   | 25 780             | 0.840                | 0.754                | 0.684                | 0.624                | 0.567                | 0.518                | 0.474                | 0.431                | 0.396                | 0.364                 |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| 1998   | 27 073             | 0.846                | 0.767                | 0.701                | 0.640                | 0.579                | 0.529                | 0.481                | 0.440                | 0.405                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| 1999   | 28 094             | 0.852                | 0.775                | 0.709                | 0.643                | 0.586                | 0.534                | 0.488                | 0.448                |                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| 2000   | 29 619             | 0.858                | 0.780                | 0.714                | 0.652                | 0.596                | 0.543                | 0.497                |                      |                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| 2001   | 31 344             | 0.857                | 0.778                | 0.710                | 0.646                | 0.592                | 0.541                |                      |                      |                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| 2002   | 32 107             | 0.861                | 0.784                | 0.718                | 0.657                | 0.598                |                      |                      |                      |                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| 2003   | 33 269             | 0.863                | 0.787                | 0.721                | 0.660                |                      |                      |                      |                      |                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| 2004   | 34 474             | 0.869                | 0.793                | 0.729                |                      |                      |                      |                      |                      |                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| 2005   | 35 594             | 0.865                | 0.792                |                      |                      |                      |                      |                      |                      |                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| 2006   | 36 629             | 0.874                |                      |                      |                      |                      |                      |                      |                      |                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |

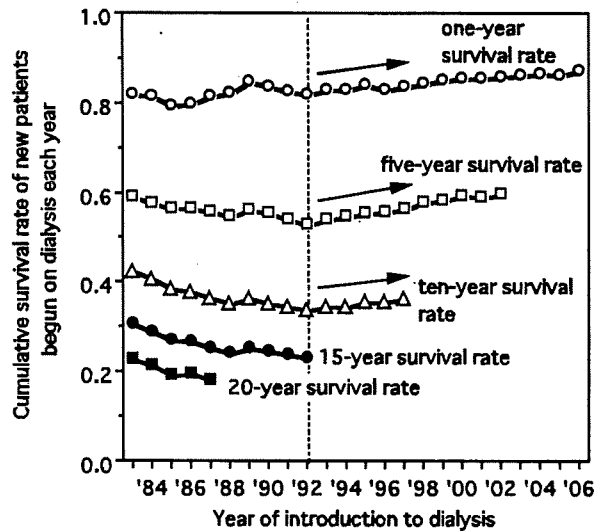


FIG. 2. Changes in the cumulative survival rate of patients begun on dialysis.

disease were 20% or higher. In contrast, the HCVAb prevalence in patients with myeloma as the primary disease was as low as 4.52%. The HCVAb prevalence in patients with other primary diseases ranged between 6% and 13%, showing a continuous distribution without a marked difference.

The HCVAb prevalence in patients with chronic glomerulonephritis as the primary disease, the number of which is largest among all the patients, was 10.35%, and that in patients with diabetic nephropathy, which is the second largest in number, was 10.29%; these prevalences were not significantly different. For the third largest number of patients with nephrosclerosis as the primary disease, the HCVAb prevalence was 6.89% and lower than that for the patients with the two above-mentioned primary diseases.

## 2. Hepatitis B virus surface antigen prevalence

The hepatitis B virus surface antigen (HBsAg) prevalence was calculated using the following equation:

$$\text{HBsAg prevalence (\%)} = \frac{\text{Number of HBsAg-positive patients}}{\text{Number of HBsAg-positive patients} + \text{Number of HBsAg-negative patients}}$$

The mean HBsAg prevalence of all the patients surveyed in this study was 1.94%.

*a. Treatment method.* Table 28 shows the relationship between HBsAg prevalence and treatment method. The HBsAg prevalence in patients treated by hemoabsorption was as high as 3.69%, whereas

those in patients treated by hemofiltration and peritoneal dialysis were slightly low (approximately 1.5%). Following these treatment methods, the HBsAg prevalence in patients treated by home hemodialysis was as low as 1.71%. The HBsAg prevalence in patients treated by hemodialysis and hemodiafiltration were nearly equal to the mean in all the dialysis patients.

*b. Gender.* Table 29 shows the relationship between HBsAg prevalence and gender. Similarly to HCVAb prevalence, the HBsAg prevalence was higher in male patients than in female patients.

*c. Duration of dialysis.* Table 30 shows the relationship between HBsAg prevalence and duration of dialysis. For the patients with the duration longer than 10 years, the HBsAg prevalence tended to increase with increasing duration of dialysis.

*d. Age.* Table 31 shows the relationship between HBsAg prevalence and age. The HBsAg prevalence was high in patients in the 45–74 age group, whereas that in patients outside this age group, that is, younger or older patients, was low.

*e. Primary disease.* Table 32 shows the relationship between HBsAg prevalence and primary disease. To easily understand the relationship between them, primary diseases are listed in the descending order of HBsAg prevalence. From this list, the primary diseases with HBsAg prevalence are renal or urinary tract tuberculosis and nephropathy of pregnancy or pregnancy toxemia, whereas those with low HBsAg prevalence include renal or urinary tract calculosis, rapidly progressive glomerulonephritis, and amyloid nephropathy.

The HBsAg prevalence in patients with chronic glomerulonephritis as the primary disease, whose number was largest among all the patients, was 2.08%. That in patients with diabetic nephropathy, whose number was the second largest, was 1.85%.

## C. Current status of renal anemia therapy

In the survey conducted at the end of 2007, hemoglobin concentration, serum iron concentration, total iron-binding capacity, and serum ferritin concentration (all of these are pre-dialysis values) were investigated as indices regarding renal anemia therapy. The relationships between hemoglobin concentration and other related indices are reported below.

**TABLE 16. Measurement frequency of the dialysate solution endotoxin concentration (according to the type of facility)**

| Kind of facility                           | Measurement frequency of endotoxin concentration |           |            |                 |             |                        |             |  | Subtotal     | Unspecified | No information available | Total |
|--|--|-----------|------------|-----------------|-------------|------------------------|-------------|--|--------------|-------------|--------------------------|-------|
|  | None   | Every day | Every week | Every two weeks | Every month | Several times per year | Once a year |  |              |             |                          |       |
| National public university hospital (%)    | 2 (4.2)  | 0 (0.0)   | 0 (0.0)    | 1 (2.1)         | 17 (35.4)   | 23 (47.9)              | 5 (10.4)    |  | 48 (100.0)   | 1           | 2                        | 51    |
| Private university hospital (%)            | 6 (10.3)   | 0 (0.0)   | 1 (1.7)    | 6 (10.3)        | 23 (39.7)   | 20 (34.5)              | 2 (3.4)     |  | 58 (100.0)   | 3           | 1                        | 62    |
| National hospital (%)                      | 4 (13.8)   | 0 (0.0)   | 1 (3.4)    | 0 (0.0)         | 5 (17.2)    | 13 (44.8)              | 6 (20.7)    |  | 29 (100.0)   | 5           | 6                        | 40    |
| Prefectural municipal village hospital (%) | 48 (12.5)  | 1 (0.3)   | 2 (0.5)    | 7 (1.8)         | 88 (23.0)   | 173 (45.2)             | 64 (16.7)   |  | 383 (100.0)  | 32          | 22                       | 437   |
| Social insurance hospital (%)              | 7 (11.7)   | 0 (0.0)   | 0 (0.0)    | 3 (5.0)         | 13 (21.7)   | 27 (45.0)              | 10 (16.7)   |  | 60 (100.0)   | 2           | 1                        | 63    |
| "Kouseiren" hospital (%)                   | 5 (4.5)  | 0 (0.0)   | 1 (0.9)    | 6 (5.4)         | 28 (25.2)   | 48 (43.2)              | 23 (20.7)   |  | 111 (100.0)  | 5           | 3                        | 119   |
| Other public hospital (%)                  | 21 (12.1)  | 1 (0.6)   | 5 (2.9)    | 7 (4.0)         | 43 (24.7)   | 67 (38.5)              | 30 (17.2)   |  | 174 (100.0)  | 4           | 6                        | 184   |
| Private general hospital (%)               | 12 (12.1)  | 1 (1.0)   | 5 (5.1)    | 5 (4.2)         | 25 (25.3)   | 42 (42.4)              | 14 (14.1)   |  | 99 (100.0)   | 8           | 1                        | 108   |
| Private hospital (%)                       | 138 (13.6)                                       | 6 (0.6)   | 26 (2.6)   | 46 (4.5)        | 234 (23.1)  | 386 (38.2)             | 175 (17.3)  |  | 1011 (100.0) | 57          | 44                       | 1112  |
| Private clinic (%)                         | 216 (12.8)                                       | 12 (0.7)  | 45 (2.7)   | 128 (7.6)       | 366 (21.6)  | 658 (38.9)             | 266 (15.7)  |  | 1691 (100.0) | 92          | 93                       | 1876  |
| Total (%)                                  | 459 (12.5)                                       | 21 (0.6)  | 81 (2.2)   | 209 (5.7)       | 842 (23.0)  | 1457 (39.8)            | 595 (16.2)  |  | 3664 (100.0) | 209         | 179                      | 4052  |

<sup>1</sup>Kouseiren: a welfare association belonging to agricultural cooperative associations.

**TABLE 17. Dialysate solution endotoxin concentrations (according to the type of facility)**

| Kind of facility                           | Dialysate solution endotoxin concentration (EU/mL) |             |             |             |             |             |          | Subtotal     | Unspecified | No information available | Total |
|--|--|-------------|-------------|-------------|-------------|-------------|----------|--------------|-------------|--------------------------|-------|
|  | <0.001   | 0.001-0.009 | 0.010-0.049 | 0.050-0.099 | 0.100-0.249 | 0.250-0.499 | ≥0.500   |              |             |                          |       |
| National public university hospital (%)    | 30 (66.7)  | 10 (22.2)   | 4 (8.9)     | 1 (2.2)     | 0 (0.0)     | 0 (0.0)     | 0 (0.0)  | 45 (100.0)   | 2           | 4                        | 51    |
| Private university hospital (%)            | 24 (46.2)  | 17 (32.7)   | 10 (19.2)   | 0 (0.0)     | 1 (1.9)     | 0 (0.0)     | 0 (0.0)  | 52 (100.0)   | 3           | 7                        | 62    |
| National hospital (%)                      | 14 (53.8)  | 7 (26.9)    | 4 (15.4)    | 0 (0.0)     | 1 (3.8)     | 0 (0.0)     | 0 (0.0)  | 26 (100.0)   | 5           | 9                        | 40    |
| Prefectural municipal village hospital (%) | 197 (58.1)   | 87 (25.7)   | 42 (12.4)   | 6 (1.8)     | 2 (0.6)     | 2 (0.6)     | 3 (0.9)  | 339 (100.0)  | 26          | 72                       | 437   |
| Social insurance hospital (%)              | 25 (48.1)  | 17 (32.7)   | 7 (13.5)    | 3 (5.8)     | 0 (0.0)     | 0 (0.0)     | 0 (0.0)  | 52 (100.0)   | 3           | 8                        | 63    |
| "Kouseiren" hospital (%)                   | 53 (50.5)  | 30 (28.6)   | 13 (12.4)   | 4 (3.8)     | 2 (1.9)     | 1 (1.0)     | 2 (1.9)  | 105 (100.0)  | 6           | 8                        | 119   |
| Other public hospital (%)                  | 89 (48.7)  | 43 (26.6)   | 15 (16.1)   | 4 (4.1)     | 1 (3.0)     | 0 (0.5)     | 0 (0.5)  | 152 (100.0)  | 5           | 27                       | 184   |
| Private general hospital (%)               | 44 (50.6)  | 24 (27.6)   | 13 (14.9)   | 3 (3.4)     | 2 (2.3)     | 1 (1.1)     | 0 (0.0)  | 87 (100.0)   | 7           | 14                       | 108   |
| Private hospital (%)                       | 423 (48.7)   | 231 (26.6)  | 140 (16.1)  | 36 (4.1)    | 28 (3.0)    | 8 (0.9)     | 4 (0.5)  | 868 (100.0)  | 60          | 184                      | 1112  |
| Private clinic (%)                         | 789 (54.0)   | 399 (27.3)  | 182 (12.5)  | 50 (3.4)    | 28 (1.9)    | 9 (0.6)     | 3 (0.2)  | 1460 (100.0) | 98          | 318                      | 1876  |
| Total (%)                                  | 1688 (53.0)  | 865 (27.2)  | 430 (13.5)  | 107 (3.4)   | 63 (2.0)    | 21 (0.7)    | 12 (0.4) | 3186 (100.0) | 215         | 651                      | 4052  |

<sup>1</sup>Kouseiren: a welfare association belonging to agricultural cooperative associations.

TABLE 18. Measurement frequency of the dialysate solution bacterial count (according to the type of facility)

| Kind of facility                           | Measurement frequency of the dialysate solution bacterial count |             |             |                 |               |                        |               |                 |     |     | Subtotal | Unspecified | No information available | Total |
|--|---|-------------|-------------|-----------------|---------------|------------------------|---------------|-----------------|-----|-----|----------|-------------|--------------------------|-------|
|  | None  | Every day   | Every week  | Every two weeks | Every month   | Several times per year | Once a year   |                 |     |     |          |             |                          |       |
| National public university hospital (%)    | 21<br>(45.7)  | 0<br>(0.0)  | 0<br>(0.0)  | 0<br>(0.0)      | 9<br>(19.6)   | 15<br>(32.6)           | 1<br>(2.2)    | 46<br>(100.0)   | 3   | 2   | 51       |             |                          |       |
| Private university hospital (%)            | 18<br>(34.6)  | 0<br>(0.0)  | 1<br>(1.9)  | 3<br>(5.8)      | 8<br>(15.4)   | 19<br>(36.5)           | 3<br>(5.8)    | 52<br>(100.0)   | 9   | 1   | 62       |             |                          |       |
| National hospital (%)                      | 19<br>(63.3)  | 0<br>(0.0)  | 0<br>(0.0)  | 1<br>(3.3)      | 1<br>(3.3)    | 5<br>(16.7)            | 4<br>(13.3)   | 30<br>(100.0)   | 4   | 6   | 40       |             |                          |       |
| Prefectural municipal village hospital (%) | 199<br>(54.8)   | 1<br>(0.3)  | 1<br>(0.3)  | 2<br>(0.6)      | 45<br>(12.4)  | 76<br>(20.9)           | 39<br>(10.7)  | 363<br>(100.0)  | 48  | 26  | 437      |             |                          |       |
| Social insurance hospital (%)              | 25<br>(45.5)  | 0<br>(0.0)  | 2<br>(3.6)  | 0<br>(0.0)      | 6<br>(10.9)   | 17<br>(30.9)           | 5<br>(9.1)    | 55<br>(100.0)   | 7   | 1   | 63       |             |                          |       |
| "Kouseiren" <sup>††</sup> hospital (%)     | 40<br>(40.0)  | 0<br>(0.0)  | 0<br>(0.0)  | 2<br>(2.0)      | 18<br>(18.0)  | 27<br>(27.0)           | 13<br>(13.0)  | 100<br>(100.0)  | 16  | 3   | 119      |             |                          |       |
| Other public hospital (%)                  | 84<br>(50.0)  | 0<br>(0.0)  | 2<br>(1.2)  | 3<br>(1.8)      | 28<br>(16.7)  | 31<br>(18.5)           | 20<br>(11.9)  | 168<br>(100.0)  | 8   | 8   | 184      |             |                          |       |
| Private general hospital (%)               | 60<br>(63.2)  | 2<br>(2.1)  | 0<br>(0.0)  | 2<br>(2.1)      | 14<br>(14.7)  | 10<br>(10.5)           | 7<br>(7.4)    | 95<br>(100.0)   | 12  | 1   | 108      |             |                          |       |
| Private hospital (%)                       | 462<br>(49.4)   | 4<br>(0.4)  | 14<br>(1.5) | 21<br>(2.2)     | 130<br>(13.9) | 180<br>(19.3)          | 124<br>(13.3) | 935<br>(100.0)  | 129 | 48  | 1112     |             |                          |       |
| Private clinic (%)                         | 788<br>(49.3)   | 3<br>(0.2)  | 13<br>(0.8) | 64<br>(4.0)     | 180<br>(11.3) | 361<br>(22.6)          | 188<br>(11.8) | 1597<br>(100.0) | 176 | 103 | 1876     |             |                          |       |
| Total (%)                                  | 1716<br>(49.9)  | 10<br>(0.3) | 33<br>(1.0) | 98<br>(2.8)     | 439<br>(12.8) | 741<br>(21.5)          | 404<br>(11.7) | 3441<br>(100.0) | 412 | 199 | 4052     |             |                          |       |

<sup>††</sup>Kouseiren: a welfare association belonging to agricultural cooperative associations.

**TABLE 19.** Dialysate solution bacterial counts (according to the type of facility)

| Kind of facility                           | Dialysate solution bacterial count (cfu/mL) |            |            |            |          | Subtotal     | Unspecified | No information available | Total |
|--|---|------------|------------|------------|----------|--------------|-------------|--------------------------|-------|
|  | <0.1  | 0.1–0.9    | 1–9        | 10–99      | ≥100     |              |             |                          |       |
| National public university hospital (%)    | 8 (34.8)                                    | 7 (30.4)   | 4 (17.4)   | 4 (17.4)   | 0 (0.0)  | 23 (100.0)   | 5           | 23                       | 51    |
| Private university hospital (%)            | 11 (34.4)                                   | 10 (31.3)  | 8 (25.0)   | 3 (9.4)    | 0 (0.0)  | 32 (100.0)   | 10          | 20                       | 62    |
| National hospital (%)                      | 8 (72.7)                                    | 0 (0.0)    | 2 (18.2)   | 1 (9.1)    | 0 (0.0)  | 11 (100.0)   | 4           | 25                       | 40    |
| Prefectural municipal village hospital (%) | 79 (53.0)                                   | 20 (13.4)  | 24 (16.1)  | 22 (14.8)  | 4 (2.7)  | 149 (100.0)  | 62          | 226                      | 437   |
| Social insurance hospital (%)              | 10 (37.0)                                   | 6 (22.2)   | 5 (18.5)   | 6 (22.2)   | 0 (0.0)  | 27 (100.0)   | 10          | 26                       | 63    |
| "Kouseiren" <sup>†</sup> hospital (%)      | 28 (50.0)                                   | 10 (17.9)  | 10 (17.9)  | 6 (10.7)   | 2 (3.6)  | 56 (100.0)   | 18          | 45                       | 119   |
| Other public hospital (%)                  | 44 (57.1)                                   | 14 (18.2)  | 13 (16.9)  | 4 (5.2)    | 2 (2.6)  | 77 (100.0)   | 15          | 92                       | 184   |
| Private general hospital (%)               | 15 (48.4)                                   | 4 (12.9)   | 6 (19.4)   | 4 (12.9)   | 2 (6.5)  | 31 (100.0)   | 15          | 62                       | 108   |
| Private hospital (%)                       | 179 (42.2)                                  | 80 (18.9)  | 90 (21.2)  | 60 (14.2)  | 15 (3.5) | 424 (100.0)  | 174         | 514                      | 1112  |
| Private clinic (%)                         | 368 (50.1)                                  | 137 (18.6) | 136 (18.5) | 79 (10.7)  | 15 (2.0) | 735 (100.0)  | 239         | 902                      | 1876  |
| Total (%)                                  | 750 (47.9)                                  | 288 (18.4) | 298 (19.0) | 189 (12.1) | 40 (2.6) | 1565 (100.0) | 552         | 1935                     | 4052  |

<sup>†</sup>Kouseiren: a welfare association belonging to agricultural cooperative associations.

### 1. Changes over the past three years

Table 33 shows the distribution of hemoglobin concentrations in all the dialysis patients from the end of 2005 to the end of 2007. The mean hemoglobin concentrations in all the dialysis patients at the end of 2005, 2006, and 2007 were 10.23, 10.23, and 10.27 g/

dL, respectively, showing negligible change over these three years; however, the percentages of patients with hemoglobin concentrations <10.0 g/dL at the end of 2005, 2006, and 2007 were 39.0, 39.8, and 37.8%, respectively, showing a slight decrease in 2007. The percentages of patients with hemoglobin

**TABLE 20.** Media used for bacterial cultivation of the dialysate solution (according to the dialysate solution bacterial count)

| Media used for bacterial cultivation of the dialysate solution | Dialysate solution bacterial count (cfu/mL) |            |            |            |          | Subtotal     | Unspecified | No information available | Total |
|--|---|------------|------------|------------|----------|--------------|-------------|--------------------------|-------|
|  | <0.1  | 0.1–0.9    | 1–9        | 10–99      | ≥100     |              |             |                          |       |
| General agar medium (%)  | 122 (61.3)                                  | 33 (16.6)  | 27 (13.6)  | 14 (7.0)   | 3 (1.5)  | 199 (100.0)  | 21          | 0                        | 220   |
| R2A medium (%)   | 410 (41.8)                                  | 189 (19.3) | 211 (21.5) | 141 (14.4) | 29 (3.0) | 980 (100.0)  | 44          | 4                        | 1028  |
| TGEA medium (%)  | 55 (50.0)                                   | 24 (21.8)  | 23 (20.9)  | 7 (6.4)    | 1 (0.9)  | 110 (100.0)  | 1           | 0                        | 111   |
| Blood agar medium (%)  | 26 (65.0)                                   | 5 (12.5)   | 4 (10.0)   | 4 (10.0)   | 1 (2.5)  | 40 (100.0)   | 8           | 4                        | 52    |
| TSA medium (%)   | 4 (44.4)                                    | 1 (11.1)   | 1 (11.1)   | 2 (22.2)   | 1 (11.1) | 9 (100.0)    | 0           | 0                        | 9     |
| Other media (%)  | 59 (60.2)                                   | 15 (15.3)  | 17 (17.3)  | 6 (6.1)    | 1 (1.0)  | 98 (100.0)   | 33          | 0                        | 131   |
| Subtotal (%)   | 676 (47.1)                                  | 267 (18.6) | 283 (19.7) | 174 (12.1) | 36 (2.5) | 1436 (100.0) | 107         | 8                        | 1551  |
| Unspecified (%)  | 73 (57.9)                                   | 20 (15.9)  | 14 (11.1)  | 15 (11.9)  | 4 (3.2)  | 126 (100.0)  | 443         | 1151                     | 1720  |
| No information available (%)                                   | 1 (33.3)                                    | 1 (33.3)   | 1 (33.3)   |            |          | 3 (100.0)    | 2           | 776                      | 781   |
| Total (%)  | 750 (47.9)                                  | 288 (18.4) | 298 (19.0) | 189 (12.1) | 40 (2.6) | 1565 (100.0) | 552         | 1935                     | 4052  |

R2A, Reasoner's No 2 agar; TGEA, tryptone glucose extract agar; TSA, tryptic soy agar.

**TABLE 21.** Amount of sample used for measuring dialysate solution bacterial count (according to the dialysate solution bacterial count)

| Amount of sample         | Dialysate solution bacterial count (cfu/mL) |         |        |        |        | Subtotal | Unspecified | No information available | Total |
|--------------------------|---|---------|--------|--------|--------|----------|-------------|--------------------------|-------|
|                          | <0.1  | 0.1-0.9 | 1-9    | 10-99  | ≥100   |          |             |                          |       |
| <1 mL                    | 141   | 28      | 22     | 10     | 3      | 204      | 20          | 2                        | 226   |
| (%)                      | (69.1)                                      | (13.7)  | (10.8) | (4.9)  | (1.5)  | (100.0)  |             |                          |       |
| 1-9 mL                   | 253   | 113     | 132    | 68     | 16     | 582      | 74          | 4                        | 660   |
| (%)                      | (43.5)                                      | (19.4)  | (22.7) | (11.7) | (2.7)  | (100.0)  |             |                          |       |
| 10-49 mL                 | 152   | 64      | 71     | 58     | 9      | 354      | 21          | 1                        | 376   |
| (%)                      | (42.9)                                      | (18.1)  | (20.1) | (16.4) | (2.5)  | (100.0)  |             |                          |       |
| 50-99 mL                 | 114   | 44      | 47     | 36     | 7      | 248      | 7           | 1                        | 256   |
| (%)                      | (46.0)                                      | (17.7)  | (19.0) | (14.5) | (2.8)  | (100.0)  |             |                          |       |
| 100-499 mL               | 43  | 19      | 14     | 7      | 1      | 84       | 4           | 1                        | 89    |
| (%)                      | (51.2)                                      | (22.6)  | (16.7) | (8.3)  | (1.2)  | (100.0)  |             |                          |       |
| 500-999 mL               | 4   | 5       | 5      | 2      | 2      | 18       | 4           | 0                        | 22    |
| (%)                      | (22.2)                                      | (27.8)  | (27.8) | (11.1) | (11.1) | (100.0)  |             |                          |       |
| 1-9 L                    | 14  | 3       | 1      | 6      | 0      | 24       | 1           | 0                        | 25    |
| (%)                      | (58.3)                                      | (12.5)  | (4.2)  | (25.0) | (0.0)  | (100.0)  |             |                          |       |
| ≥10 L                    | 3   | 0       | 0      | 0      | 0      | 3        | 0           | 0                        | 3     |
| (%)                      | (100.0)                                     | (0.0)   | (0.0)  | (0.0)  | (0.0)  | (100.0)  |             |                          |       |
| Subtotal                 | 724   | 276     | 292    | 187    | 38     | 1517     | 131         | 9                        | 1657  |
| (%)                      | (47.7)                                      | (18.2)  | (19.2) | (12.3) | (2.5)  | (100.0)  |             |                          |       |
| Unspecified              | 24  | 12      | 5      | 2      | 2      | 45       | 420         | 1138                     | 1603  |
| (%)                      | (53.3)                                      | (26.7)  | (11.1) | (4.4)  | (4.4)  | (100.0)  |             |                          |       |
| No information available | 2   | 0       | 1      | 0      | 0      | 3        | 3           | 788                      | 792   |
| (%)                      | (66.7)                                      | (0.0)   | (33.3) | (0.0)  | (0.0)  | (100.0)  |             |                          |       |
| Total                    | 750   | 288     | 298    | 189    | 40     | 1565     | 552         | 1935                     | 4052  |
| (%)                      | (47.9)                                      | (18.4)  | (19.0) | (12.1) | (2.6)  | (100.0)  |             |                          |       |

concentrations of  $\geq 10.0$  g/dL and  $< 12.0$  g/dL at the end of 2005, 2006, and 2007 were 52.7, 51.9, and 53.9%, respectively, showing a slight increase in 2007. The percentage of patients with a hemoglobin concentration of  $\geq 12.0$  g/dL remained at 8.3% from the end of 2005 to the end of 2007.

## 2. Gender

Table 34 shows the relationship between hemoglobin concentration and gender. The mean hemoglobin concentration in male patients was 10.36 g/dL, whereas that in female patients was 10.13 g/dL, which was slightly lower than that in male patients. The percentage of patients with hemoglobin concentrations  $< 10$  g/dL was 35.1% in male patients and 42.2% in female patients, indicating that the number of patients with a low hemoglobin concentration is great in female patients.

## 3. Age

Table 35 shows the relationship between hemoglobin concentration and age. The hemoglobin concen-

tration in young patients aged 15 years or older and younger than 45 years was high, whereas that in patients older than this age group decreased with increasing age. Patients younger than 15 years also tended to have low hemoglobin concentrations.

## 4. Primary disease

Table 36 shows the relationship between hemoglobin concentration and primary disease. The mean hemoglobin concentrations in patients with leading primary diseases were 10.33 g/dL (chronic glomerulonephritis), 10.22 g/dL (diabetic nephropathy), 10.20 g/dL (nephrosclerosis), and 10.45 g/dL (polycystic kidney disease). Patients with polycystic kidney disease tended to have a high hemoglobin concentration. No clear difference in hemoglobin concentration was found between other main primary diseases.

## 5. Change in iron metabolism-related indices over the past three years

Table 37 shows the changes in mean hemoglobin concentration, serum iron concentration, total

**TABLE 22.** Changes in hepatitis C virus (HCV) antibody prevalence

| Year                 | 1999  | 2000  | 2001  | 2002  | 2003  | 2006  | 2007 |
|----------------------|-------|-------|-------|-------|-------|-------|------|
| HCVAb prevalence (%) | 15.95 | 14.56 | 13.88 | 13.06 | 12.37 | 10.22 | 9.83 |



**TABLE 23. Hepatitis C virus (HCV) antibody (HCVAb) prevalence and treatment methods (all dialysis patients)**

| Method of dialysis    | HCVAb: -   |           |                     |                                  |            |            | HCVAb: +                |                                   |           |            |                     |                                  | HCVAb: no information available |            |                         |                                   |           |           |                     |                                  |          |                          |       |  |
|-----------------------|------------|-----------|---------------------|----------------------------------|------------|------------|-------------------------|-----------------------------------|-----------|------------|---------------------|----------------------------------|---------------------------------|------------|-------------------------|-----------------------------------|-----------|-----------|---------------------|----------------------------------|----------|--------------------------|-------|--|
|                       | HCV-RNA: - |           |                     | HCV-RNA: +                       |            |            | HCV-RNA: -              |                                   |           | HCV-RNA: + |                     |                                  | HCV-RNA: -                      |            |                         | HCV-RNA: +                        |           |           | HCV-RNA: -          |                                  |          | HCV-RNA: +               |       |  |
|                       | HCVRNA: -  | HCVRNA: + | HCVRNA: unspecified | HCVRNA: no information available | Subtotal-1 | Subtotal-2 | Subtotal-1 + Subtotal-2 | HCVAb prevalence <sup>1</sup> (%) | HCVRNA: - | HCVRNA: +  | HCVRNA: unspecified | HCVRNA: no information available | Subtotal-1                      | Subtotal-2 | Subtotal-1 + Subtotal-2 | HCVAb prevalence <sup>1</sup> (%) | HCVRNA: - | HCVRNA: + | HCVRNA: unspecified | HCVRNA: no information available | Subtotal | No information available | Total |  |
| Facility hemodialysis | 48 867     | 209       | 85 241              | 35 980                           | 170 297    | 2801       | 4707                    | 6706                              | 3193      | 17 407     | 187 704             | 9.27                             | 1044                            | 196        | 1974                    | 100                               | 880       | 148       | 619                 | 192 665                          | 43 295   | 235 960                  |       |  |
| Hemodiafiltration     | 3 722      | 35        | 5 763               | 2 524                            | 12 044     | 268        | 742                     | 813                               | 474       | 2 297      | 14 341              | 16.02                            | 33                              | 31         | 64                      | 2                                 | 74        | 21        | 101                 | 14 667                           | 3 092    | 17 759                   |       |  |
| Hemofiltration        | 14         | 0         | 19                  | 131                              | 164        | 2          | 4                       | 5                                 | 10        | 21         | 185                 | 11.35                            | 4                               | 0          | 0                       | 0                                 | 0         | 0         | 1                   | 190                              | 113      | 303                      |       |  |
| Hemoadsorption        | 200        | 4         | 391                 | 149                              | 744        | 60         | 171                     | 212                               | 102       | 545        | 1 289               | 42.28                            | 1                               | 15         | 10                      | 0                                 | 7         | 8         | 12                  | 1 342                            | 201      | 1 543                    |       |  |
| Home hemodialysis     | 46         | 0         | 46                  | 9                                | 101        | 1          | 5                       | 9                                 | 2         | 17         | 118                 | 14.41                            | 0                               | 0          | 4                       | 0                                 | 0         | 0         | 0                   | 122                              | 39       | 161                      |       |  |
| Peritoneal dialysis   | 1 164      | 2         | 2 681               | 966                              | 4813       | 46         | 28                      | 110                               | 46        | 230        | 5 043               | 4.56                             | 4                               | 0          | 211                     | 99                                | 6         | 1         | 61                  | 5 425                            | 3 205    | 8 630                    |       |  |
| Total                 | 54 013     | 250       | 94 141              | 39 759                           | 188 163    | 3178       | 5657                    | 7855                              | 3827      | 20 517     | 208 680             | 9.83                             | 1086                            | 242        | 2263                    | 201                               | 967       | 178       | 794                 | 214 411                          | 49 945   | 264 356                  |       |  |

<sup>1</sup>HCVAb prevalence (%) = Subtotal-2 ÷ (Subtotal-1 + Subtotal-2).

**TABLE 24. Hepatitis C virus (HCV) antibody (HCVAb) prevalence and gender (all dialysis patients)**

| Genders                  | HCVAb: -   |           |                     |                                  |            |            | HCVAb: +                |                                   |           |            |                     |                                  | HCVAb: no information available |            |                         |                                   |           |           |                     |                                  |          |                          |       |  |
|--------------------------|------------|-----------|---------------------|----------------------------------|------------|------------|-------------------------|-----------------------------------|-----------|------------|---------------------|----------------------------------|---------------------------------|------------|-------------------------|-----------------------------------|-----------|-----------|---------------------|----------------------------------|----------|--------------------------|-------|--|
|                          | HCV-RNA: - |           |                     | HCV-RNA: +                       |            |            | HCV-RNA: -              |                                   |           | HCV-RNA: + |                     |                                  | HCV-RNA: -                      |            |                         | HCV-RNA: +                        |           |           | HCV-RNA: -          |                                  |          | HCV-RNA: +               |       |  |
|                          | HCVRNA: -  | HCVRNA: + | HCVRNA: unspecified | HCVRNA: no information available | Subtotal-1 | Subtotal-2 | Subtotal-1 + Subtotal-2 | HCVAb prevalence <sup>1</sup> (%) | HCVRNA: - | HCVRNA: +  | HCVRNA: unspecified | HCVRNA: no information available | Subtotal-1                      | Subtotal-2 | Subtotal-1 + Subtotal-2 | HCVAb prevalence <sup>1</sup> (%) | HCVRNA: - | HCVRNA: + | HCVRNA: unspecified | HCVRNA: no information available | Subtotal | No information available | Total |  |
| Male                     | 32 940     | 142       | 57 299              | 24 223                           | 114 604    | 2007       | 3746                    | 5207                              | 2516      | 13 476     | 128 080             | 10.52                            | 619                             | 150        | 1421                    | 131                               | 594       | 116       | 501                 | 131 612                          | 30 611   | 162 223                  |       |  |
| Female                   | 21 073     | 108       | 36 840              | 15 517                           | 73 538     | 1171       | 1911                    | 2648                              | 1311      | 7 041      | 80 579              | 8.74                             | 467                             | 92         | 842                     | 70                                | 373       | 62        | 293                 | 82 778                           | 19 334   | 102 112                  |       |  |
| Subtotal                 | 54 013     | 250       | 94 139              | 39 740                           | 188 142    | 3178       | 5657                    | 7855                              | 3827      | 20 517     | 208 659             | 9.83                             | 1086                            | 242        | 2263                    | 201                               | 967       | 178       | 794                 | 214 390                          | 49 945   | 264 335                  |       |  |
| No information available | 0          | 0         | 2                   | 19                               | 21         | 0          | 0                       | 0                                 | 0         | 0          | 21                  | 0.00                             | 0                               | 0          | 0                       | 0                                 | 0         | 0         | 0                   | 21                               | 0        | 21                       |       |  |
| Total                    | 54 013     | 250       | 94 141              | 39 759                           | 188 163    | 3178       | 5657                    | 7855                              | 3827      | 20 517     | 208 680             | 9.83                             | 1086                            | 242        | 2263                    | 201                               | 967       | 178       | 794                 | 214 411                          | 49 945   | 264 356                  |       |  |

<sup>1</sup>HCVAb prevalence (%) = Subtotal-2 ÷ (Subtotal-1 + Subtotal-2).

**TABLE 25. Hepatitis C virus (HCV) antibody (HCVAb) prevalence and duration of dialysis (all dialysis patients)**

| Duration of dialysis (years) | HCVAb: -   |            |                      |                                   | HCVAb: +   |            |                      |                                   | HCVAb: unspecified |            |                      |                                   | HCVAb: no information available |            |                      |                                   | Total |       |      |         |        |         |      |
|------------------------------|------------|------------|----------------------|-----------------------------------|------------|------------|----------------------|-----------------------------------|--------------------|------------|----------------------|-----------------------------------|---------------------------------|------------|----------------------|-----------------------------------|-------|-------|------|---------|--------|---------|------|
|                              | HCV-RNA: - | HCV-RNA: + | HCV-RNA: unspecified | HCV-RNA: no information available | HCV-RNA: - | HCV-RNA: + | HCV-RNA: unspecified | HCV-RNA: no information available | HCV-RNA: -         | HCV-RNA: + | HCV-RNA: unspecified | HCV-RNA: no information available | HCV-RNA: -                      | HCV-RNA: + | HCV-RNA: unspecified | HCV-RNA: no information available |       |       |      |         |        |         |      |
| <2                           | 13 113     | 52         | 22 936               | 9271                              | 45 372     | 565        | 847                  | 1600                              | 701                | 3 713      | 49 085               | 7 56                              | 177                             | 27         | 687                  | 82                                | 260   | 32    | 121  | 50 471  | 11 667 | 62 138  |      |
| 2-4                          | 14 226     | 57         | 24 849               | 10 581                            | 49 713     | 711        | 1114                 | 1661                              | 772                | 4 258      | 53 971               | 7 89                              | 265                             | 41         | 564                  | 57                                | 229   | 38    | 203  | 55 368  | 13 202 | 68 570  |      |
| 5-9                          | 13 816     | 52         | 24 042               | 10 077                            | 47 987     | 702        | 1084                 | 1548                              | 753                | 4 087      | 52 074               | 7 85                              | 343                             | 51         | 531                  | 28                                | 210   | 37    | 168  | 53 442  | 12 634 | 66 076  |      |
| 10-14                        | 6 771      | 30         | 11 844               | 4 857                             | 23 502     | 332        | 571                  | 734                               | 346                | 1 983      | 25 485               | 7 78                              | 158                             | 24         | 247                  | 14                                | 124   | 14    | 101  | 26 167  | 6 103  | 32 270  |      |
| 15-19                        | 3 243      | 16         | 5 711                | 2 672                             | 11 642     | 219        | 417                  | 511                               | 250                | 1 397      | 13 039               | 10 71                             | 86                              | 24         | 127                  | 10                                | 66    | 12    | 66   | 13 431  | 3 041  | 16 472  |      |
| 20-24                        | 1 691      | 15         | 2 794                | 1 366                             | 5 866      | 264        | 555                  | 622                               | 341                | 1 782      | 7 648                | 23 30                             | 33                              | 19         | 58                   | 7                                 | 30    | 16    | 59   | 7 870   | 1 733  | 9 603   |      |
| ≥25                          | 1 153      | 28         | 1 965                | 935                               | 4 081      | 385        | 1069                 | 1179                              | 664                | 3 297      | 7 378                | 44 69                             | 24                              | 56         | 49                   | 3                                 | 47    | 29    | 76   | 7 662   | 1 565  | 9 227   |      |
| Total                        | 54 013     | 250        | 94 141               | 39 759                            | 188 163    | 3178       | 5657                 | 7855                              | 3827               | 20 517     | 208 680              | 9 83                              | 1086                            | 242        | 2263                 | 201                               | 967   | 178   | 794  | 214 411 | 49 945 | 264 356 |      |
| Mean                         | 6.35       | 9.26       | 6.32                 | 6.56                              | 9.99       | 12.09      | 10.38                | 11.25                             | 11.25              | 7.28       | 13.63                | 5.77                              | 4.64                            | 6.93       | 10.84                | 9.59                              | 6.84  | 10.37 | 9.05 | 6.84    | 6.68   | 6.81    | 6.81 |
| SD                           | 6.35       | 9.34       | 6.31                 | 6.51                              | 9.64       | 10.63      | 10.26                | 10.58                             | 10.58              | 6.24       | 11.11                | 6.33                              | 6.22                            | 7.43       | 10.37                | 9.05                              | 7.02  | 9.05  | 6.82 | 7.02    | 6.82   | 6.98    | 6.98 |

<sup>†</sup>HCVAb prevalence (%) = Subtotal-2 ÷ (Subtotal-1 + Subtotal-2).

**TABLE 26. Hepatitis C virus (HCV) antibody (HCVAb) prevalence and age (all dialysis patients)**

| Age (years)              | HCVAb: -   |            |                      |                                   | HCVAb: +   |            |                      |                                   | HCVAb: unspecified |            |                      |                                   | HCVAb: no information available |            |                      |                                   | Total |       |       |         |        |         |       |
|--------------------------|------------|------------|----------------------|-----------------------------------|------------|------------|----------------------|-----------------------------------|--------------------|------------|----------------------|-----------------------------------|---------------------------------|------------|----------------------|-----------------------------------|-------|-------|-------|---------|--------|---------|-------|
|                          | HCV-RNA: - | HCV-RNA: + | HCV-RNA: unspecified | HCV-RNA: no information available | HCV-RNA: - | HCV-RNA: + | HCV-RNA: unspecified | HCV-RNA: no information available | HCV-RNA: -         | HCV-RNA: + | HCV-RNA: unspecified | HCV-RNA: no information available | HCV-RNA: -                      | HCV-RNA: + | HCV-RNA: unspecified | HCV-RNA: no information available |       |       |       |         |        |         |       |
| <15                      | 12         | 0          | 29                   | 19                                | 60         | 0          | 0                    | 0                                 | 0                  | 0          | 0                    | 8                                 | 0                               | 0          | 0                    | 0                                 | 0     | 0     | 0     | 68      | 38     | 106     |       |
| 15-29                    | 356        | 2          | 620                  | 294                               | 1 272      | 10         | 7                    | 10                                | 2                  | 29         | 705                  | 1 301                             | 9                               | 0          | 19                   | 3                                 | 3     | 7     | 5     | 1 344   | 353    | 1 697   |       |
| 30-44                    | 3 469      | 58         | 6 083                | 2 619                             | 12 177     | 115        | 226                  | 226                               | 138                | 705        | 12 882               | 5 47                              | 70                              | 4          | 149                  | 15                                | 64    | 7     | 43    | 13 234  | 3 187  | 16 421  |       |
| 45-59                    | 13 550     | 58         | 23 765               | 10 126                            | 47 499     | 778        | 1676                 | 2005                              | 1119               | 5 578      | 53 077               | 10 51                             | 255                             | 71         | 555                  | 63                                | 243   | 51    | 236   | 54 551  | 12 890 | 67 441  |       |
| 60-74                    | 23 456     | 115        | 40 903               | 17 153                            | 81 627     | 1477       | 2626                 | 3823                              | 1838               | 9 764      | 91 391               | 10 68                             | 482                             | 115        | 961                  | 85                                | 420   | 74    | 316   | 93 844  | 21 477 | 115 321 |       |
| 75-89                    | 12 598     | 68         | 21 774               | 9 149                             | 43 589     | 773        | 1101                 | 1744                              | 717                | 4 335      | 47 924               | 9 05                              | 251                             | 50         | 547                  | 32                                | 225   | 46    | 188   | 49 263  | 11 465 | 60 728  |       |
| ≥90                      | 572        | 1          | 966                  | 398                               | 1 937      | 25         | 21                   | 47                                | 12                 | 105        | 2 042                | 5 14                              | 19                              | 2          | 24                   | 3                                 | 3     | 0     | 6     | 2 104   | 532    | 2 636   |       |
| Subtotal                 | 54 013     | 250        | 94 140               | 39 758                            | 188 161    | 3178       | 5657                 | 7855                              | 3826               | 20 516     | 208 677              | 9 83                              | 1086                            | 242        | 2263                 | 201                               | 967   | 178   | 794   | 214 408 | 49 942 | 264 350 |       |
| No information available | 0          | 0          | 1                    | 1                                 | 2          | 0          | 0                    | 1                                 | 1                  | 1          | 3                    | 33 33                             | 0                               | 0          | 0                    | 0                                 | 0     | 0     | 0     | 3       | 3      | 6       |       |
| Total                    | 54 013     | 250        | 94 141               | 39 759                            | 188 163    | 3178       | 5657                 | 7855                              | 3827               | 20 517     | 208 680              | 9 83                              | 1086                            | 242        | 2263                 | 201                               | 967   | 178   | 794   | 214 411 | 49 945 | 264 356 |       |
| Mean                     | 64.96      | 66.36      | 64.85                | 64.66                             | 66.15      | 64.52      | 65.90                | 64.68                             | 64.68              | 65.45      | 64.57                | 62.57                             | 64.91                           | 65.76      | 64.42                | 64.89                             | 64.76 | 64.89 | 64.76 | 64.89   | 64.76  | 64.87   | 64.87 |
| SD                       | 12.80      | 11.76      | 12.82                | 12.91                             | 11.36      | 10.93      | 10.69                | 10.65                             | 10.65              | 12.92      | 10.07                | 13.53                             | 13.12                           | 12.74      | 11.08                | 12.52                             | 12.66 | 12.52 | 12.66 | 12.52   | 12.66  | 12.90   | 12.91 |

<sup>†</sup>HCVAb prevalence (%) = Subtotal-2 ÷ (Subtotal-1 + Subtotal-2).

**TABLE 27. Hepatitis C virus (HCV) antibody (HCVAb) prevalence and primary disease (all dialysis patients)**

| Primary disease   | HCVAb: -   |            |                                   |                      |            |            | HCVAb: +                          |                      |            |                      |                                   |                      | HCVAb: no information available |            |                                   |                      |            |            | Subtotal | No information available | Total   |
|---|------------|------------|-----------------------------------|----------------------|------------|------------|-----------------------------------|----------------------|------------|----------------------|-----------------------------------|----------------------|---------------------------------|------------|-----------------------------------|----------------------|------------|------------|----------|--------------------------|---------|
|   | HCV-RNA: - |            |                                   | HCV-RNA: unspecified |            |            | HCV-RNA: -                        |                      |            | HCV-RNA: unspecified |                                   |                      | HCV-RNA: -                      |            |                                   | HCV-RNA: unspecified |            |            |          |                          |         |
|   | HCV-RNA: - | HCV-RNA: + | HCV-RNA: no information available | HCV-RNA: unspecified | HCV-RNA: - | HCV-RNA: + | HCV-RNA: no information available | HCV-RNA: unspecified | HCV-RNA: - | HCV-RNA: +           | HCV-RNA: no information available | HCV-RNA: unspecified | HCV-RNA: -                      | HCV-RNA: + | HCV-RNA: no information available | HCV-RNA: unspecified | HCV-RNA: - | HCV-RNA: + |          |                          |         |
| Reintroduction after transplantation                      | 303        | 5          | 602                               | 247                  | 1,157      | 31         | 94                                | 113                  | 66         | 304                  | 1,461                             | 20.81                | 1                               | 2          | 18                                | 14                   | 7          | 5          | 5        | 381                      | 1,894   |
| Kidney and urinary tract tuberculosis                     | 68         | 1          | 136                               | 38                   | 243        | 11         | 18                                | 22                   | 10         | 61                   | 304                               | 20.07                | 0                               | 2          | 5                                 | 0                    | 0          | 0          | 1        | 80                       | 392     |
| Nephropathy of pregnancy/ pregnancy toxemia               | 340        | 2          | 604                               | 288                  | 1,234      | 34         | 55                                | 65                   | 46         | 200                  | 1,434                             | 13.95                | 2                               | 3          | 13                                | 2                    | 5          | 2          | 3        | 311                      | 1,775   |
| Other nephritides that cannot be classified               | 242        | 1          | 386                               | 186                  | 815        | 23         | 34                                | 40                   | 21         | 118                  | 933                               | 12.65                | 5                               | 2          | 9                                 | 2                    | 5          | 0          | 1        | 257                      | 1,214   |
| Kidney and urinary tract stone                            | 118        | 0          | 192                               | 91                   | 401        | 10         | 16                                | 18                   | 8          | 52                   | 453                               | 11.48                | 2                               | 0          | 8                                 | 0                    | 1          | 0          | 2        | 86                       | 552     |
| Chronic pyelonephritis                                    | 655        | 3          | 1,028                             | 515                  | 2,201      | 57         | 74                                | 95                   | 55         | 281                  | 2,482                             | 11.32                | 13                              | 0          | 15                                | 2                    | 9          | 3          | 16       | 2,540                    | 3,138   |
| Obstructive urinary tract disease                         | 129        | 1          | 255                               | 92                   | 477        | 12         | 14                                | 21                   | 11         | 58                   | 535                               | 10.84                | 4                               | 1          | 8                                 | 0                    | 2          | 1          | 4        | 137                      | 692     |
| Renal failure due to congenital abnormality of metabolism | 41         | 0          | 101                               | 37                   | 179        | 5          | 6                                 | 7                    | 3          | 21                   | 200                               | 10.50                | 0                               | 0          | 2                                 | 0                    | 0          | 0          | 0        | 60                       | 262     |
| Chronic glomerulonephritis                                | 21,986     | 100        | 37,281                            | 15,979               | 75,346     | 1,344      | 2,531                             | 3,236                | 1,584      | 8,695                | 84,041                            | 10.35                | 491                             | 123        | 900                               | 62                   | 394        | 72         | 411      | 86,494                   | 106,704 |
| Diabetic nephropathy                                      | 18,151     | 91         | 31,464                            | 13,097               | 62,803     | 1,050      | 1,909                             | 2,838                | 1,409      | 7,206                | 70,009                            | 10.29                | 386                             | 81         | 731                               | 72                   | 348        | 69         | 236      | 71,932                   | 88,258  |
| Hypoplastic kidney  | 98         | 1          | 200                               | 87                   | 386        | 9          | 12                                | 14                   | 5          | 40                   | 426                               | 9.39                 | 2                               | 1          | 11                                | 0                    | 1          | 0          | 0        | 441                      | 548     |
| Others  | 976        | 7          | 1,700                             | 662                  | 3,345      | 48         | 94                                | 136                  | 61         | 339                  | 3,684                             | 9.20                 | 15                              | 5          | 42                                | 5                    | 8          | 2          | 10       | 3,771                    | 4,725   |
| Undetermined  | 3,801      | 18         | 6,918                             | 2,924                | 13,661     | 230        | 317                               | 518                  | 224        | 1,289                | 14,950                            | 8.62                 | 58                              | 11         | 220                               | 24                   | 63         | 10         | 45       | 15,381                   | 19,453  |
| Kidney and urinary tract tumor                            | 150        | 2          | 230                               | 114                  | 496        | 10         | 11                                | 16                   | 4          | 41                   | 537                               | 7.64                 | 2                               | 0          | 4                                 | 2                    | 4          | 0          | 0        | 549                      | 644     |
| Gouty kidney  | 261        | 1          | 474                               | 197                  | 933        | 15         | 21                                | 27                   | 12         | 75                   | 1,008                             | 7.44                 | 7                               | 1          | 10                                | 0                    | 7          | 2          | 3        | 1,038                    | 1,257   |
| Nephrosclerosis   | 3,489      | 9          | 6,720                             | 2,627                | 12,845     | 167        | 239                               | 389                  | 155        | 950                  | 13,795                            | 6.89                 | 40                              | 6          | 142                               | 10                   | 58         | 6          | 22       | 14,079                   | 17,144  |
| Amyloid kidney  | 83         | 0          | 197                               | 90                   | 370        | 3          | 11                                | 6                    | 7          | 27                   | 397                               | 6.80                 | 1                               | 0          | 3                                 | 1                    | 2          | 0          | 3        | 407                      | 513     |
| Rapidly progressive glomerulonephritis                    | 322        | 1          | 649                               | 276                  | 1,248      | 16         | 16                                | 33                   | 24         | 89                   | 1,337                             | 6.66                 | 1                               | 1          | 15                                | 0                    | 4          | 0          | 7        | 1,365                    | 1,742   |
| Malignant hypertension                                    | 410        | 0          | 661                               | 346                  | 1,417      | 13         | 29                                | 37                   | 20         | 99                   | 1,516                             | 6.53                 | 9                               | 0          | 11                                | 0                    | 11         | 0          | 4        | 1,551                    | 1,956   |
| Systemic lupus erythematosus nephritis                    | 435        | 1          | 835                               | 360                  | 1,631      | 16         | 35                                | 37                   | 21         | 109                  | 1,740                             | 6.26                 | 2                               | 2          | 19                                | 0                    | 8          | 1          | 5        | 1,777                    | 2,261   |
| Polycystic kidney   | 1,908      | 6          | 3,408                             | 1,456                | 6,778      | 74         | 119                               | 180                  | 74         | 447                  | 7,225                             | 6.19                 | 44                              | 1          | 75                                | 3                    | 29         | 5          | 14       | 7,396                    | 8,920   |
| Myeloma   | 38         | 0          | 74                                | 36                   | 148        | 0          | 1                                 | 4                    | 2          | 7                    | 155                               | 4.52                 | 0                               | 0          | 2                                 | 0                    | 1          | 0          | 2        | 161                      | 207     |
| Subtotal  | 54,004     | 250        | 94,115                            | 39,745               | 188,114    | 3,178      | 5,656                             | 7,852                | 3,822      | 20,508               | 208,622                           | 9.83                 | 1,086                           | 242        | 2,263                             | 199                  | 967        | 178        | 794      | 214,351                  | 264,251 |
| No information available                                  | 9          | 0          | 26                                | 14                   | 49         | 0          | 1                                 | 3                    | 5          | 9                    | 58                                | 15.52                | 0                               | 0          | 0                                 | 2                    | 0          | 0          | 0        | 60                       | 105     |
| Total   | 54,013     | 250        | 94,141                            | 39,759               | 188,163    | 3,178      | 5,657                             | 7,855                | 3,827      | 20,517               | 208,680                           | 9.83                 | 1,086                           | 242        | 2,263                             | 201                  | 967        | 178        | 794      | 214,411                  | 264,356 |

\*HCVAb prevalence (%) = Subtotal-2 ÷ (Subtotal-1 + Subtotal-2).

**TABLE 28. Hepatitis B virus surface antigen (HBsAg) prevalence and treatment methods (all dialysis patients)**

| Method of dialysis    | HBs antibody: - |             |                    |                                 |               |            |                    |                                 |                                 |            |                    |                                 | HBs antibody: +    |            |                    |                                 |             |                |                    |                                 |               |                |                    |                                 | HBs antibody: unspecified       |          |                    |                                 |                    |  |  |  |  |  |  |  | HBs antibody: no information available |  |  |  |  |  |  |  |  |  |  |  | Subtotal | No information available | Total |
|-----------------------|-----------------|-------------|--------------------|---------------------------------|---------------|------------|--------------------|---------------------------------|---------------------------------|------------|--------------------|---------------------------------|--------------------|------------|--------------------|---------------------------------|-------------|----------------|--------------------|---------------------------------|---------------|----------------|--------------------|---------------------------------|---------------------------------|----------|--------------------|---------------------------------|--------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----------|--------------------------|-------|
|                       | HBsAg: -        |             |                    |                                 | HBsAg: +      |            |                    |                                 | HBsAg: no information available |            |                    |                                 | HBsAg: unspecified |            |                    |                                 | HBsAg: -    |                |                    |                                 | HBsAg: +      |                |                    |                                 | HBsAg: no information available |          |                    |                                 | HBsAg: unspecified |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                          |       |
|                       | HBsAg: -        | HBsAg: +    | HBsAg: unspecified | HBsAg: no information available | HBsAg: -      | HBsAg: +   | HBsAg: unspecified | HBsAg: no information available | HBsAg: -                        | HBsAg: +   | HBsAg: unspecified | HBsAg: no information available | HBsAg: -           | HBsAg: +   | HBsAg: unspecified | HBsAg: no information available | HBsAg: -    | HBsAg: +       | HBsAg: unspecified | HBsAg: no information available | HBsAg: -      | HBsAg: +       | HBsAg: unspecified | HBsAg: no information available | HBsAg: -                        | HBsAg: + | HBsAg: unspecified | HBsAg: no information available |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                          |       |
| Facility hemodialysis | 102 263         | 1850        | 970                | 1198                            | 16 152        | 627        | 78                 | 341                             | 47 508                          | 723        | 1749               | 229                             | 19 049             | 464        | 19                 | 184 972                         | 3664        | 188 636        | 1.94               | 193 220                         | 42 740        | 235 960        |                    |                                 |                                 |          |                    |                                 |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                          |       |
| Hemodiafiltration     | 7 958           | 133         | 54                 | 90                              | 1 328         | 51         | 2                  | 47                              | 3 206                           | 59         | 43                 | 16                              | 1 686              | 42         | 3                  | 14 178                          | 285         | 14 463         | 1.97               | 14 718                          | 3 041         | 17 759         |                    |                                 |                                 |          |                    |                                 |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                          |       |
| Hemofiltration        | 110             | 2           | 0                  | 0                               | 5             | 0          | 0                  | 1                               | 17                              | 0          | 0                  | 0                               | 4                  | 0          | 0                  | 136                             | 2           | 138            | 1.45               | 139                             | 164           | 303            |                    |                                 |                                 |          |                    |                                 |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                          |       |
| Hemoadsorption        | 659             | 28          | 5                  | 12                              | 154           | 7          | 1                  | 3                               | 344                             | 10         | 6                  | 11                              | 96                 | 3          | 0                  | 1 253                           | 48          | 1 301          | 3.69               | 1 339                           | 204           | 1 543          |                    |                                 |                                 |          |                    |                                 |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                          |       |
| Home hemodialysis     | 89              | 2           | 0                  | 0                               | 14            | 0          | 0                  | 8                               | 0                               | 4          | 0                  | 4                               | 0                  | 0          | 0                  | 115                             | 2           | 117            | 1.71               | 121                             | 40            | 161            |                    |                                 |                                 |          |                    |                                 |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                          |       |
| Peritoneal dialysis   | 2 237           | 29          | 28                 | 12                              | 128           | 7          | 0                  | 6                               | 1 888                           | 29         | 282                | 49                              | 680                | 11         | 9                  | 4 933                           | 76          | 5 009          | 1.52               | 5 395                           | 3 235         | 8 630          |                    |                                 |                                 |          |                    |                                 |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                          |       |
| <b>Total</b>          | <b>113 316</b>  | <b>2044</b> | <b>1057</b>        | <b>1312</b>                     | <b>17 781</b> | <b>692</b> | <b>81</b>          | <b>398</b>                      | <b>52 971</b>                   | <b>821</b> | <b>2084</b>        | <b>305</b>                      | <b>21 519</b>      | <b>520</b> | <b>31</b>          | <b>205 587</b>                  | <b>4077</b> | <b>209 664</b> | <b>1.94</b>        | <b>214 932</b>                  | <b>49 424</b> | <b>264 356</b> |                    |                                 |                                 |          |                    |                                 |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                          |       |

<sup>†</sup>HBsAg prevalence (%) = Subtotal-2 ÷ (Subtotal-1 + Subtotal-2).

**TABLE 29. Hepatitis B virus surface antigen (HBsAg) prevalence and genders (all dialysis patients)**

| Gender                   | HBs antibody: - |             |                    |                                 |               |            |                    |                                 |                                 |            |                    |                                 | HBs antibody: +    |            |                    |                                 |             |                |                    |                                 |               |                |                    |                                 | HBs antibody: unspecified       |          |                    |                                 |                    |  |  |  |  |  |  |  | HBs antibody: no information available |  |  |  |  |  |  |  |  |  |  |  | Subtotal | No information available | Total |
|--------------------------|-----------------|-------------|--------------------|---------------------------------|---------------|------------|--------------------|---------------------------------|---------------------------------|------------|--------------------|---------------------------------|--------------------|------------|--------------------|---------------------------------|-------------|----------------|--------------------|---------------------------------|---------------|----------------|--------------------|---------------------------------|---------------------------------|----------|--------------------|---------------------------------|--------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----------|--------------------------|-------|
|                          | HBsAg: -        |             |                    |                                 | HBsAg: +      |            |                    |                                 | HBsAg: no information available |            |                    |                                 | HBsAg: unspecified |            |                    |                                 | HBsAg: -    |                |                    |                                 | HBsAg: +      |                |                    |                                 | HBsAg: no information available |          |                    |                                 | HBsAg: unspecified |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                          |       |
|                          | HBsAg: -        | HBsAg: +    | HBsAg: unspecified | HBsAg: no information available | HBsAg: -      | HBsAg: +   | HBsAg: unspecified | HBsAg: no information available | HBsAg: -                        | HBsAg: +   | HBsAg: unspecified | HBsAg: no information available | HBsAg: -           | HBsAg: +   | HBsAg: unspecified | HBsAg: no information available | HBsAg: -    | HBsAg: +       | HBsAg: unspecified | HBsAg: no information available | HBsAg: -      | HBsAg: +       | HBsAg: unspecified | HBsAg: no information available | HBsAg: -                        | HBsAg: + | HBsAg: unspecified | HBsAg: no information available |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                          |       |
| Male                     | 69 324          | 1326        | 653                | 847                             | 11 059        | 464        | 38                 | 244                             | 32 372                          | 526        | 1296               | 193                             | 13 209             | 346        | 23                 | 125 964                         | 2662        | 128 626        | 2.07               | 131 920                         | 30 303        | 162 223        |                    |                                 |                                 |          |                    |                                 |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                          |       |
| Female                   | 43 992          | 718         | 404                | 465                             | 6 722         | 228        | 43                 | 154                             | 20 597                          | 295        | 788                | 112                             | 8 291              | 174        | 8                  | 79 602                          | 1415        | 81 017         | 1.75               | 82 991                          | 19 121        | 102 112        |                    |                                 |                                 |          |                    |                                 |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                          |       |
| <b>Subtotal</b>          | <b>113 316</b>  | <b>2044</b> | <b>1057</b>        | <b>1312</b>                     | <b>17 781</b> | <b>692</b> | <b>81</b>          | <b>398</b>                      | <b>52 969</b>                   | <b>821</b> | <b>2084</b>        | <b>305</b>                      | <b>21 500</b>      | <b>520</b> | <b>31</b>          | <b>205 566</b>                  | <b>4077</b> | <b>209 643</b> | <b>1.94</b>        | <b>214 911</b>                  | <b>49 424</b> | <b>264 335</b> |                    |                                 |                                 |          |                    |                                 |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                          |       |
| No information available | 0               | 0           | 0                  | 0                               | 0             | 0          | 0                  | 0                               | 2                               | 0          | 0                  | 0                               | 19                 | 0          | 0                  | 21                              | 0           | 21             | 0.00               | 21                              | 0             | 21             |                    |                                 |                                 |          |                    |                                 |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                          |       |
| <b>Total</b>             | <b>113 316</b>  | <b>2044</b> | <b>1057</b>        | <b>1312</b>                     | <b>17 781</b> | <b>692</b> | <b>81</b>          | <b>398</b>                      | <b>52 971</b>                   | <b>821</b> | <b>2084</b>        | <b>305</b>                      | <b>21 519</b>      | <b>520</b> | <b>31</b>          | <b>205 587</b>                  | <b>4077</b> | <b>209 664</b> | <b>1.94</b>        | <b>214 932</b>                  | <b>49 424</b> | <b>264 356</b> |                    |                                 |                                 |          |                    |                                 |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |                          |       |

<sup>†</sup>HBsAg prevalence (%) = Subtotal-2 ÷ (Subtotal-1 + Subtotal-2).

**TABLE 30. Hepatitis B virus surface antigen (HBsAg) prevalence and durations of dialysis (all dialysis patients)**

| Duration of dialysis (years) | HBs antibody: - |          |                    |          |                                 |          | HBs antibody: + |          |                    |          |                                 |          | HBs antibody: no information available |          |                    |          |                                 |          | Subtotal | No information available | Total  |         |
|------------------------------|-----------------|----------|--------------------|----------|---------------------------------|----------|-----------------|----------|--------------------|----------|---------------------------------|----------|--|----------|--------------------|----------|---------------------------------|----------|----------|--------------------------|--------|---------|
|                              | HBsAg: +        |          | HBsAg: unspecified |          | HBsAg: no information available |          | HBsAg: +        |          | HBsAg: unspecified |          | HBsAg: no information available |          | HBsAg: +                               |          | HBsAg: unspecified |          | HBsAg: no information available |          |          |                          |        |         |
|                              | HBsAg: +        | HBsAg: - | HBsAg: +           | HBsAg: - | HBsAg: +                        | HBsAg: - | HBsAg: +        | HBsAg: - | HBsAg: +           | HBsAg: - | HBsAg: +                        | HBsAg: - | HBsAg: +                               | HBsAg: - | HBsAg: +           | HBsAg: - | HBsAg: +                        | HBsAg: - |          |                          |        |         |
| <2                           | 26 996          | 404      | 318                | 250      | 3 362                           | 124      | 8               | 65       | 12 977             | 189      | 625                             | 48       | 4 980                                  | 114      | 15                 | 48 315   | 831                             | 49 146   | 1 69     | 50 475                   | 11 663 | 62 138  |
| 2-4                          | 29 327          | 481      | 290                | 317      | 4 472                           | 158      | 15              | 110      | 13 653             | 215      | 543                             | 95       | 5 737                                  | 119      | 7                  | 53 189   | 973                             | 54 162   | 1 80     | 55 539                   | 13 031 | 68 570  |
| 5-9                          | 28 262          | 507      | 284                | 309      | 4 573                           | 182      | 20              | 96       | 13 075             | 175      | 493                             | 71       | 5 451                                  | 123      | 7                  | 51 561   | 987                             | 52 348   | 1 89     | 53 628                   | 12 448 | 66 076  |
| 10-14                        | 13 933          | 275      | 79                 | 160      | 2 303                           | 96       | 12              | 45       | 6 416              | 106      | 217                             | 47       | 2 486                                  | 73       | 1                  | 25 138   | 550                             | 23 688   | 2 14     | 26 249                   | 6 021  | 32 270  |
| 15-19                        | 7 035           | 142      | 38                 | 105      | 1 269                           | 58       | 8               | 32       | 3 244              | 59       | 113                             | 18       | 1 323                                  | 45       | 0                  | 12 871   | 304                             | 13 175   | 2 31     | 13 489                   | 2 983  | 16 472  |
| 20-24                        | 4 086           | 94       | 27                 | 70       | 825                             | 43       | 6               | 18       | 1 803              | 32       | 46                              | 11       | 792                                    | 24       | 1                  | 7 506    | 193                             | 7 699    | 2 51     | 7 878                    | 1 725  | 9 603   |
| ≥25                          | 3 677           | 141      | 21                 | 101      | 977                             | 31       | 12              | 32       | 1 803              | 45       | 47                              | 15       | 750                                    | 22       | 0                  | 7 207    | 239                             | 7 446    | 3 21     | 7 674                    | 1 553  | 9 227   |
| Total                        | 113 316         | 2044     | 1057               | 1312     | 17 781                          | 692      | 81              | 398      | 52 971             | 821      | 2084                            | 305      | 21 519                                 | 520      | 31                 | 205 587  | 4077                            | 209 664  | 1 94     | 214 932                  | 49 424 | 264 356 |
| Mean                         | 6.73            | 8.15     | 5.26               | 8.60     | 7.89                            | 8.20     | 11.59           | 8.71     | 6.69               | 7.50     | 5.68                            | 7.72     | 6.77                                   | 7.69     | 3.19               | 6.84     | 7.01                            | 6.67     | 6.81     | 6.84                     | 6.67   | 6.81    |
| SD                           | 6.88            | 8.03     | 6.03               | 8.40     | 7.71                            | 7.55     | 9.47            | 8.72     | 6.93               | 7.71     | 6.26                            | 7.71     | 6.94                                   | 7.53     | 4.34               | 6.84     | 7.01                            | 6.84     | 6.84     | 6.84                     | 6.67   | 6.81    |

<sup>†</sup>HBsAg prevalence (%) = Subtotal-2 ÷ (Subtotal-1 + Subtotal-2).

**TABLE 31. Hepatitis B virus surface antigen (HBsAg) prevalence and ages (all dialysis patients)**

| Age (years)              | HBs antibody: - |          |                    |          |                                 |          | HBs antibody: + |          |                    |          |                                 |          | HBs antibody: no information available |          |                    |          |                                 |          | Subtotal | No information available | Total   |         |         |
|--------------------------|-----------------|----------|--------------------|----------|---------------------------------|----------|-----------------|----------|--------------------|----------|---------------------------------|----------|--|----------|--------------------|----------|---------------------------------|----------|----------|--------------------------|---------|---------|---------|
|                          | HBsAg: +        |          | HBsAg: unspecified |          | HBsAg: no information available |          | HBsAg: +        |          | HBsAg: unspecified |          | HBsAg: no information available |          | HBsAg: +                               |          | HBsAg: unspecified |          | HBsAg: no information available |          |          |                          |         |         |         |
|                          | HBsAg: +        | HBsAg: - | HBsAg: +           | HBsAg: - | HBsAg: +                        | HBsAg: - | HBsAg: +        | HBsAg: - | HBsAg: +           | HBsAg: - | HBsAg: +                        | HBsAg: - | HBsAg: +                               | HBsAg: - | HBsAg: +           | HBsAg: - | HBsAg: +                        | HBsAg: - |          |                          |         |         |         |
| <15                      | 34              | 0        | 2                  | 12       | 4                               | 19       | 0               | 0        | 0                  | 0        | 0                               | 11       | 354                                    | 1        | 20                 | 8        | 0                               | 0        | 58       | 0                        | 68      | 38      | 106     |
| 15-29                    | 775             | 7        | 64                 | 104      | 457                             | 34       | 6               | 1        | 3250               | 45       | 142                             | 10       | 1280                                   | 27       | 1                  | 12 752   | 201                             | 12 953   | 1 14     | 1 351                    | 346     | 1 697   |         |
| 30-44                    | 7 765           | 95       | 64                 | 381      | 3 970                           | 215      | 18              | 95       | 13 065             | 266      | 526                             | 89       | 5547                                   | 159      | 8                  | 51 986   | 1334                            | 53 320   | 1 55     | 13 285                   | 3 136   | 16 421  |         |
| 45-59                    | 29 404          | 694      | 246                | 48 761   | 950                             | 548      | 8 487           | 311      | 186                | 23 304   | 383                             | 899      | 151                                    | 9311     | 250                | 16       | 89 863                          | 1894     | 91 757   | 2 06                     | 94 067  | 21 254  | 115 321 |
| 60-74                    | 48 761          | 950      | 463                | 257      | 264                             | 4 626    | 120             | 16       | 99                 | 12 471   | 117                             | 465      | 50                                     | 5000     | 76                 | 5        | 47 605                          | 602      | 48 207   | 1 25                     | 49 363  | 11 365  | 60 728  |
| 75-89                    | 25 508          | 289      | 257                | 264      | 4 626                           | 120      | 16              | 99       | 12 471             | 117      | 465                             | 50       | 5000                                   | 76       | 5                  | 47 605   | 602                             | 48 207   | 1 25     | 49 363                   | 11 365  | 60 728  |         |
| ≥90                      | 1 067           | 9        | 13                 | 11       | 222                             | 6        | 0               | 6        | 515                | 9        | 24                              | 2        | 220                                    | 7        | 1                  | 2 024    | 31                              | 2 055    | 1 51     | 2 112                    | 524     | 2 636   |         |
| Subtotal                 | 113 314         | 2044     | 1057               | 1312     | 17 781                          | 692      | 81              | 398      | 52 970             | 821      | 2084                            | 305      | 21 519                                 | 520      | 31                 | 205 584  | 4077                            | 209 661  | 1 94     | 214 929                  | 49 421  | 264 350 |         |
| No information available | 2               | 0        | 0                  | 0        | 0                               | 0        | 0               | 0        | 0                  | 0        | 0                               | 0        | 0                                      | 0        | 0                  | 3        | 205 587                         | 4077     | 209 664  | 1 94                     | 214 932 | 49 424  | 264 356 |
| Total                    | 113 316         | 2044     | 1057               | 1312     | 17 781                          | 692      | 81              | 398      | 52 971             | 821      | 2084                            | 305      | 21 519                                 | 520      | 31                 | 205 587  | 4077                            | 209 664  | 1 94     | 214 932                  | 49 424  | 264 356 |         |
| Mean                     | 64.53           | 62.89    | 65.06              | 63.58    | 67.17                           | 63.66    | 66.25           | 66.93    | 65.07              | 62.83    | 64.07                           | 63.83    | 64.90                                  | 63.21    | 65.94              | 64.89    | 64.78                           | 64.87    | 64.87    | 64.87                    | 64.78   | 64.87   |         |
| SD                       | 12.86           | 11.10    | 13.21              | 12.64    | 11.09                           | 11.68    | 10.07           | 11.39    | 12.68              | 11.39    | 13.69                           | 11.53    | 12.72                                  | 11.51    | 10.64              | 12.66    | 12.89                           | 12.89    | 12.89    | 12.66                    | 12.89   |         |         |

<sup>†</sup>HBsAg prevalence (%) = Subtotal-2 ÷ (Subtotal-1 + Subtotal-2).

**TABLE 32. Hepatitis B virus surface antigen (HBsAg) prevalence and primary diseases (all dialysis patients)**

| Primary disease   | HBs antibody: - |          |                    |          |                                 |          | HBs antibody: + |          |                    |          |                                 |          | HBs antibody: no information available |          |                    |          |                                 |          | Subtotal | No information available | Total |          |        |         |
|---|-----------------|----------|--------------------|----------|---------------------------------|----------|-----------------|----------|--------------------|----------|---------------------------------|----------|--|----------|--------------------|----------|---------------------------------|----------|----------|--------------------------|-------|----------|--------|---------|
|   | HBsAg: +        |          | HBsAg: unspecified |          | HBsAg: no information available |          | HBsAg: +        |          | HBsAg: unspecified |          | HBsAg: no information available |          | HBsAg: +                               |          | HBsAg: unspecified |          | HBsAg: no information available |          |          |                          |       |          |        |         |
|   | HBsAg: -        | HBsAg: + | HBsAg: -           | HBsAg: + | HBsAg: -                        | HBsAg: + | HBsAg: -        | HBsAg: + | HBsAg: -           | HBsAg: + | HBsAg: -                        | HBsAg: + | HBsAg: -                               | HBsAg: + | HBsAg: -           | HBsAg: + | HBsAg: -                        | HBsAg: + |          |                          |       | HBsAg: - |        |         |
| Kidney and urinary tract tuberculosis                     | 158             | 7        | 0                  | 0        | 0                               | 33       | 2               | 1        | 1                  | 84       | 2                               | 3        | 0                                      | 22       | 0                  | 0        | 0                               | 297      | 11       | 308                      | 3.57  | 313      | 79     | 392     |
| Nephropathy of pregnancy/pregnancy toxemia                | 772             | 17       | 8                  | 13       | 137                             | 7        | 4               | 7        | 314                | 9        | 14                              | 1        | 155                                    | 8        | 0                  | 0        | 0                               | 1 378    | 41       | 1 419                    | 2.89  | 1 466    | 309    | 1 775   |
| Gouty kidney  | 549             | 10       | 3                  | 6        | 100                             | 6        | 0               | 0        | 242                | 4        | 11                              | 1        | 113                                    | 2        | 0                  | 0        | 0                               | 1 004    | 22       | 1 026                    | 2.14  | 1 047    | 210    | 1 257   |
| Other nephritides that cannot be classified               | 512             | 11       | 3                  | 4        | 77                              | 4        | 0               | 2        | 212                | 4        | 10                              | 1        | 114                                    | 1        | 0                  | 0        | 0                               | 915      | 20       | 935                      | 2.14  | 955      | 259    | 1 214   |
| Polycystic kidney   | 3 858           | 72       | 32                 | 40       | 657                             | 21       | 1               | 14       | 1 866              | 33       | 54                              | 7        | 735                                    | 29       | 0                  | 0        | 0                               | 7 116    | 155      | 7 271                    | 2.13  | 7 419    | 1 501  | 8 920   |
| Others  | 2 111           | 49       | 21                 | 24       | 311                             | 9        | 1               | 3        | 851                | 14       | 49                              | 8        | 323                                    | 6        | 0                  | 0        | 0                               | 3 596    | 78       | 3 674                    | 2.12  | 3 780    | 945    | 4 725   |
| Chronic glomerulonephritis                                | 45 532          | 892      | 397                | 603      | 7 356                           | 306      | 46              | 151      | 21 333             | 336      | 826                             | 151      | 8 592                                  | 223      | 13                 | 13       | 13                              | 82 813   | 1757     | 84 570                   | 2.08  | 86 757   | 19 947 | 106 704 |
| Obstructive urinary tract disease                         | 285             | 6        | 3                  | 2        | 52                              | 1        | 0               | 0        | 145                | 1        | 5                               | 0        | 46                                     | 3        | 0                  | 0        | 0                               | 528      | 11       | 539                      | 2.04  | 549      | 143    | 692     |
| Undetermined  | 8351            | 140      | 78                 | 67       | 1 357                           | 52       | 1               | 15       | 3 555              | 71       | 234                             | 12       | 1 429                                  | 30       | 3                  | 3        | 3                               | 14 692   | 293      | 14 985                   | 1.96  | 15 395   | 4 058  | 19 453  |
| Reintroduction after transplantation                      | 782             | 17       | 12                 | 8        | 111                             | 4        | 0               | 4        | 384                | 6        | 30                              | 4        | 152                                    | 1        | 0                  | 0        | 0                               | 1 429    | 28       | 1 457                    | 1.92  | 1 515    | 379    | 1 894   |
| Myeloma   | 87              | 1        | 1                  | 0        | 10                              | 1        | 0               | 0        | 39                 | 1        | 1                               | 1        | 19                                     | 0        | 0                  | 0        | 0                               | 155      | 3        | 158                      | 1.90  | 161      | 46     | 207     |
| Diabetic nephropathy                                      | 38 088          | 656      | 396                | 425      | 5 615                           | 216      | 19              | 140      | 17 888             | 268      | 656                             | 95       | 7 448                                  | 164      | 9                  | 9        | 9                               | 69 039   | 1304     | 70 343                   | 1.85  | 72 083   | 16 175 | 88 258  |
| Chronic pyelonephritis                                    | 1 442           | 26       | 8                  | 18       | 237                             | 5        | 0               | 5        | 556                | 9        | 14                              | 1        | 215                                    | 2        | 1                  | 1        | 1                               | 2 450    | 42       | 2 492                    | 1.69  | 2 539    | 599    | 3 138   |
| Systemic lupus erythematosus nephritis                    | 944             | 11       | 12                 | 11       | 117                             | 6        | 0               | 5        | 437                | 8        | 13                              | 4        | 215                                    | 4        | 1                  | 1        | 1                               | 1 713    | 29       | 1 742                    | 1.66  | 1 788    | 473    | 2 261   |
| Hypoplastic kidney  | 243             | 3        | 4                  | 1        | 23                              | 2        | 0               | 0        | 107                | 1        | 9                               | 1        | 46                                     | 1        | 0                  | 0        | 0                               | 419      | 7        | 426                      | 1.64  | 441      | 107    | 548     |
| Nephrosclerosis   | 7 208           | 99       | 64                 | 66       | 1 218                           | 37       | 6               | 35       | 3 749              | 46       | 119                             | 11       | 1 413                                  | 37       | 2                  | 2        | 2                               | 13 588   | 219      | 13 807                   | 1.59  | 14 110   | 3 034  | 17 144  |
| Malignant hypertension                                    | 875             | 12       | 2                  | 14       | 139                             | 5        | 1               | 9        | 333                | 3        | 8                               | 3        | 151                                    | 4        | 0                  | 0        | 0                               | 1 498    | 24       | 1 522                    | 1.58  | 1 559    | 397    | 1 956   |
| Renal failure due to congenital abnormality of metabolism | 103             | 3        | 4                  | 0        | 16                              | 0        | 0               | 0        | 56                 | 0        | 1                               | 0        | 19                                     | 0        | 0                  | 0        | 0                               | 194      | 3        | 197                      | 1.52  | 202      | 60     | 262     |
| Kidney and urinary tract tumor                            | 298             | 6        | 1                  | 3        | 43                              | 2        | 0               | 3        | 138                | 0        | 5                               | 0        | 54                                     | 0        | 0                  | 0        | 0                               | 533      | 8        | 541                      | 1.48  | 553      | 91     | 644     |
| Amyloid kidney  | 200             | 2        | 1                  | 1        | 32                              | 0        | 1               | 1        | 115                | 1        | 4                               | 1        | 43                                     | 1        | 0                  | 0        | 0                               | 390      | 4        | 394                      | 1.02  | 403      | 110    | 513     |
| Rapidly progressive glomerulonephritis                    | 656             | 3        | 7                  | 4        | 100                             | 3        | 0               | 3        | 410                | 3        | 13                              | 2        | 160                                    | 4        | 2                  | 2        | 2                               | 1 326    | 13       | 1 339                    | 0.97  | 1 370    | 372    | 1 742   |
| Kidney and urinary tract stone                            | 236             | 1        | 0                  | 2        | 37                              | 2        | 0               | 0        | 130                | 0        | 4                               | 1        | 54                                     | 0        | 0                  | 0        | 0                               | 457      | 3        | 460                      | 0.65  | 467      | 85     | 552     |
| Subtotal  | 113 290         | 2044     | 1057               | 1312     | 17 778                          | 691      | 81              | 398      | 52 944             | 820      | 2083                            | 305      | 21 518                                 | 520      | 31                 | 31       | 31                              | 205 590  | 4075     | 209 665                  | 1.94  | 214 872  | 49 379 | 264 251 |
| No information available                                  | 26              | 0        | 0                  | 0        | 3                               | 1        | 0               | 0        | 27                 | 1        | 1                               | 0        | 1                                      | 0        | 0                  | 0        | 0                               | 57       | 2        | 59                       | 3.39  | 60       | 45     | 105     |
| Total   | 113 316         | 2044     | 1057               | 1312     | 17 781                          | 692      | 81              | 398      | 52 971             | 821      | 2084                            | 305      | 21 519                                 | 520      | 31                 | 31       | 31                              | 205 587  | 4077     | 209 664                  | 1.94  | 214 932  | 49 424 | 264 356 |

HBsAg prevalence (%) = Subtotal-2 ÷ (Subtotal-1 + Subtotal-2).

**TABLE 33.** Changes in pre-dialysis hemoglobin concentration (all dialysis patients)

|                                 | Pre-dialysis hemoglobin concentration (g/dL) |               |               |               |               |              |                 | Subtotal | No information available | Total | Mean | SD |
|---------------------------------|--|---------------|---------------|---------------|---------------|--------------|-----------------|----------|--------------------------|-------|------|----|
|                                 | <8.0   | 8.0-8.9       | 9.0-9.9       | 10.0-10.9     | 11.0-11.9     | ≥12.0        |                 |          |                          |       |      |    |
| Patients at the end of 2005 (%) | 6564 (4.8)                                   | 12 707 (9.3)  | 33 785 (24.8) | 45 231 (33.2) | 26 608 (19.5) | 11 298 (8.3) | 136 193 (100.0) | 31 919   | 168 112                  | 10.23 | 1.37 |    |
| Patients at the end of 2006 (%) | 9529 (4.4)                                   | 21 622 (10.0) | 54 878 (25.4) | 71 654 (33.1) | 40 619 (18.8) | 17 876 (8.3) | 216 178 (100.0) | 33 779   | 249 957                  | 10.23 | 1.33 |    |
| Patients at the end of 2007 (%) | 9604 (4.2)                                   | 21 294 (9.3)  | 55 658 (24.3) | 77 395 (33.8) | 45 918 (20.1) | 18 973 (8.3) | 228 842 (100.0) | 35 514   | 264 356                  | 10.27 | 1.32 |    |

**TABLE 34.** Pre-dialysis hemoglobin and gender (all dialysis patients)

| Gender                   | Pre-dialysis hemoglobin concentration (g/dL) |            |              |               |               |               |              |            |                 |        |         | Subtotal | No information available | Total | Mean | SD |
|--------------------------|--|------------|--------------|---------------|---------------|---------------|--------------|------------|-----------------|--------|---------|----------|--------------------------|-------|------|----|
|                          | <7.0   | 7.0-7.9    | 8.0-8.9      | 9.0-9.9       | 10.0-10.0     | 11.0-11.9     | 12.0-12.9    | ≥13.0      |                 |        |         |          |                          |       |      |    |
| Male (%)                 | 1790 (1.3)                                   | 3788 (2.7) | 11 927 (8.5) | 31 750 (22.6) | 47 152 (33.6) | 30 461 (21.7) | 9 823 (7.0)  | 3733 (2.7) | 140 424 (100.0) | 21 799 | 162 223 | 10.36    | 1.35                     |       |      |    |
| Female (%)               | 1189 (1.3)                                   | 2836 (3.2) | 9 363 (10.6) | 23 899 (27.0) | 30 237 (34.2) | 15 456 (17.5) | 4 257 (4.8)  | 1160 (1.3) | 88 397 (100.0)  | 13 715 | 102 112 | 10.13    | 1.27                     |       |      |    |
| Subtotal (%)             | 2979 (1.3)                                   | 6624 (2.9) | 21 290 (9.3) | 55 649 (24.3) | 77 389 (33.8) | 45 917 (20.1) | 14 080 (6.2) | 4893 (2.1) | 228 821 (100.0) | 35 514 | 264 335 | 10.27    | 1.32                     |       |      |    |
| No information available | 0  | 1          | 4            | 9             | 6             | 1             | 0            | 0          | 21              | 0      | 21      | 9.5      | 0.88                     |       |      |    |
| Total (%)                | 2979 (1.3)                                   | 6625 (2.9) | 21 294 (9.3) | 55 658 (24.3) | 77 395 (33.8) | 45 918 (20.1) | 14 080 (6.2) | 4893 (2.1) | 228 842 (100.0) | 35 514 | 264 356 | 10.27    | 1.32                     |       |      |    |

**TABLE 35. Pre-dialysis hemoglobin concentrations and age (all dialysis patients)**

| Age (years)              | Pre-dialysis hemoglobin concentration (g/dL) |            |             |              |              |              |             |            |                |       | Subtotal | No information available | Total | Mean | SD |
|--------------------------|--|------------|-------------|--------------|--------------|--------------|-------------|------------|----------------|-------|----------|--------------------------|-------|------|----|
|                          | Less than 7                                  | 7-         | 8-          | 9-           | 10-          | 11-          | 12-         | 13-        | 13-            | 13-   |          |                          |       |      |    |
| <15 (%)                  | 3 (4.9)                                      | 4 (6.6)    | 6 (9.8)     | 16 (26.2)    | 10 (16.4)    | 11 (18.0)    | 6 (9.8)     | 5 (8.2)    | 61 (100.0)     | 45    | 106      | 10.29                    | 2.09  |      |    |
| 15-29 (%)                | 15 (1.1)                                     | 26 (1.8)   | 97 (6.8)    | 305 (21.4)   | 466 (32.7)   | 365 (25.6)   | 116 (8.1)   | 34 (2.4)   | 1424 (100.0)   | 273   | 1697     | 10.5                     | 1.31  |      |    |
| 30-44 (%)                | 126 (0.9)                                    | 284 (2.0)  | 1026 (7.3)  | 2901 (20.5)  | 4744 (33.6)  | 3415 (24.2)  | 1181 (8.4)  | 456 (3.2)  | 14133 (100.0)  | 2288  | 16421    | 10.51                    | 1.32  |      |    |
| 45-59 (%)                | 664 (1.1)                                    | 1385 (2.4) | 4546 (7.8)  | 13038 (22.3) | 19962 (34.2) | 12754 (21.8) | 4365 (7.5)  | 1661 (2.8) | 58375 (100.0)  | 9066  | 67441    | 10.41                    | 1.34  |      |    |
| 60-74 (%)                | 1284 (1.3)                                   | 2858 (2.9) | 9391 (9.4)  | 24844 (24.8) | 34269 (34.2) | 19779 (19.7) | 5806 (5.8)  | 1963 (2.0) | 100194 (100.0) | 15127 | 115321   | 10.25                    | 1.3   |      |    |
| 75-89 (%)                | 844 (1.6)                                    | 1964 (3.7) | 5931 (11.3) | 13957 (26.6) | 17222 (32.9) | 9230 (17.6)  | 2521 (4.8)  | 752 (1.4)  | 52421 (100.0)  | 8307  | 60728    | 10.09                    | 1.31  |      |    |
| ≥90 (%)                  | 43 (1.9)                                     | 104 (4.7)  | 297 (13.3)  | 596 (26.7)   | 720 (32.3)   | 364 (16.3)   | 85 (3.8)    | 22 (1.0)   | 2231 (100.0)   | 405   | 2636     | 9.96                     | 1.34  |      |    |
| Subtotal (%)             | 2979 (1.3)                                   | 6625 (2.9) | 21294 (9.3) | 55657 (24.3) | 77393 (33.8) | 45918 (20.1) | 14080 (6.2) | 4893 (2.1) | 228839 (100.0) | 35511 | 264350   | 10.27                    | 1.32  |      |    |
| No information available | 0  | 0          | 0           | 1            | 2            | 0            | 0           | 0          | 3              | 3     | 6        | 10.27                    | 0.35  |      |    |
| Total (%)                | 2979 (1.3)                                   | 6625 (2.9) | 21294 (9.3) | 55658 (24.3) | 77395 (33.8) | 45918 (20.1) | 14080 (6.2) | 4893 (2.1) | 228842 (100.0) | 35514 | 264356   | 10.27                    | 1.32  |      |    |
| Mean                     | 66.91  | 67.51      | 66.82       | 65.87        | 64.76        | 63.63        | 62.43       | 61.33      | 64.88          | 64.79 | 64.87    |                          |       |      |    |
| SD                       | 12.51  | 12.48      | 12.49       | 12.42        | 12.50        | 12.83        | 12.92       | 12.82      | 12.65          | 13.08 | 12.71    |                          |       |      |    |

iron-binding capacity, transferrin saturation level, and serum ferritin concentration in all the dialysis patients over the past three years. To easily understand the changes, the percentages of the mean values in each year with respect to those in 2005 are also given.

As mentioned above, little change was observed in hemoglobin concentration; however, the serum iron concentration, transferrin saturation level, and serum ferritin concentration tended to increase from 2005 to 2006. In contrast, the total iron-binding capacity decreased. These changes may be due to the inclusion of the price of erythropoietin in the artificial kidney technical fee, which was determined on the basis of the system for medical treatment fee revised in 2006. That is, with the revision of the system, it was considered that a sufficient amount of iron has been supplemented to dialysis patients.

**6. Transferrin saturation level**

Table 38 shows the relationship between hemoglobin concentration and transferrin saturation level. Patients with high hemoglobin concentrations tended to have high transferrin saturation levels.

**7. Serum ferritin concentration**

Table 39 shows the relationship between hemoglobin concentration and serum ferritin concentration. Patients with high hemoglobin concentrations tended to have low serum ferritin concentrations.

In anemia therapies, both the serum ferritin concentration and transferrin saturation level are regarded as indices reflecting iron sufficiency. In general, it is understood that the decrease in either of the indices indicates the necessity of iron supplementation. Results of this survey, however, showed that the transferrin saturation level increased with increasing hemoglobin concentration, whereas the serum ferritin concentration decreased with increasing hemoglobin concentration. These findings suggest differences in the roles of iron metabolism between the transferrin saturation level and serum ferritin concentration.

**8. Serum C-reactive protein concentration**

Table 40 shows the relationship between hemoglobin concentration and serum C-reactive protein (CRP) concentration. For patients with hemoglobin concentrations <10.0 g/dL, the percentage of patients with a high serum CRP concentration increased with decreasing hemoglobin concentration.

**D. History of hip fracture**

Conventionally, the history of fracture in dialysis patients has not been surveyed; this survey was the



TABLE 36. Pre-dialysis hemoglobin concentrations and primary disease (all dialysis patients)

| Primary disease   | Pre-dialysis hemoglobin concentration (g/dL) |            |              |               |               |               |              |            |                 |        | Subtotal | No information available | Total | Mean | SD |
|---|--|------------|--------------|---------------|---------------|---------------|--------------|------------|-----------------|--------|----------|--------------------------|-------|------|----|
|   | <7.0   | 7.0-7.9    | 8.0-8.9      | 9.0-9.9       | 10.0-10.9     | 11.0-11.9     | 12.0-12.9    | ≥13.0      |                 |        |          |                          |       |      |    |
| Chronic glomerulonephritis (%)                                | 1047 (1.1)                                   | 2424 (2.6) | 7903 (8.5)   | 22 132 (23.9) | 31 863 (34.4) | 19 189 (20.7) | 6113 (6.6)   | 2071 (2.2) | 92 742 (100.0)  | 13 962 | 106 704  | 10.33                    | 1.31  |      |    |
| Chronic pyelonephritis (%)                                    | 31 (1.1)                                     | 80 (3.0)   | 256 (9.4)    | 654 (24.1)    | 918 (33.9)    | 547 (20.2)    | 172 (6.3)    | 53 (2.0)   | 2 711 (100.0)   | 427    | 3 138    | 10.27                    | 1.32  |      |    |
| Rapidly progressive glomerulonephritis (%)                    | 23 (1.6)                                     | 57 (3.9)   | 132 (9.1)    | 357 (24.6)    | 466 (32.2)    | 293 (20.2)    | 95 (6.6)     | 26 (1.8)   | 1 449 (100.0)   | 293    | 1 742    | 10.23                    | 1.34  |      |    |
| Nephropathy of pregnancy/pregnancy toxemia (%)                | 16 (1.0)                                     | 38 (2.4)   | 135 (8.6)    | 423 (26.9)    | 558 (35.5)    | 301 (19.2)    | 81 (5.2)     | 18 (1.1)   | 1 570 (100.0)   | 205    | 1 775    | 10.22                    | 1.18  |      |    |
| Other nephritides that cannot be classified (%)               | 12 (1.1)                                     | 36 (3.4)   | 91 (8.6)     | 231 (21.8)    | 352 (32.2)    | 241 (22.8)    | 73 (6.9)     | 23 (2.2)   | 1 059 (100.0)   | 155    | 1 214    | 10.35                    | 1.35  |      |    |
| Polycystic kidney (%)   | 77 (1.0)                                     | 181 (2.3)  | 611 (7.8)    | 1 843 (23.4)  | 2 592 (32.9)  | 1 670 (21.2)  | 605 (7.7)    | 301 (3.8)  | 7 880 (100.0)   | 1 040  | 8 920    | 10.45                    | 1.38  |      |    |
| Nephrosclerosis (%)   | 199 (1.3)                                    | 456 (3.1)  | 1 455 (9.7)  | 3 787 (25.4)  | 5 119 (34.3)  | 2 892 (19.4)  | 767 (5.1)    | 260 (1.7)  | 14 935 (100.0)  | 2 209  | 17 144   | 10.20                    | 1.30  |      |    |
| Malignant hypertension (%)                                    | 21 (1.3)                                     | 42 (2.5)   | 161 (9.8)    | 397 (24.1)    | 564 (34.2)    | 315 (19.1)    | 105 (6.4)    | 45 (2.7)   | 1 650 (100.0)   | 306    | 1 956    | 10.29                    | 1.38  |      |    |
| Diabetic nephropathy (%)                                      | 1118 (1.5)                                   | 2388 (3.1) | 7 796 (10.2) | 18 979 (24.7) | 25 626 (33.4) | 14 771 (19.3) | 4471 (5.8)   | 1553 (2.0) | 76 702 (100.0)  | 11 556 | 88 258   | 10.22                    | 1.33  |      |    |
| Systemic lupus erythematosus nephritis (%)                    | 31 (1.6)                                     | 67 (3.5)   | 194 (10.1)   | 504 (26.3)    | 632 (33.0)    | 362 (18.9)    | 96 (5.0)     | 32 (1.7)   | 1 918 (100.0)   | 343    | 2 261    | 10.14                    | 1.30  |      |    |
| Amyloid kidney (%)  | 4 (0.9)                                      | 17 (3.9)   | 46 (10.6)    | 107 (24.8)    | 134 (31.0)    | 94 (21.8)     | 24 (5.6)     | 6 (1.4)    | 432 (100.0)     | 81     | 513      | 10.21                    | 1.32  |      |    |
| Gouty kidney (%)  | 11 (1.0)                                     | 30 (2.7)   | 94 (8.5)     | 238 (21.5)    | 374 (33.8)    | 247 (22.3)    | 81 (7.3)     | 33 (3.0)   | 1 108 (100.0)   | 149    | 1 257    | 10.41                    | 1.34  |      |    |
| Renal failure due to congenital abnormality of metabolism (%) | 3 (1.4)                                      | 4 (1.8)    | 19 (8.6)     | 51 (23.1)     | 71 (32.1)     | 52 (23.5)     | 15 (6.8)     | 6 (2.7)    | 221 (100.0)     | 41     | 262      | 10.38                    | 1.39  |      |    |
| Kidney and urinary tract tuberculosis (%)                     | 2 (0.6)                                      | 10 (3.0)   | 42 (12.7)    | 100 (30.1)    | 97 (29.2)     | 54 (16.3)     | 19 (5.7)     | 8 (2.4)    | 332 (100.0)     | 60     | 392      | 10.14                    | 1.29  |      |    |
| Kidney and urinary tract stone (%)                            | 9 (1.9)                                      | 15 (3.1)   | 45 (9.4)     | 125 (26.0)    | 160 (33.3)    | 92 (19.2)     | 27 (5.6)     | 7 (1.5)    | 480 (100.0)     | 72     | 552      | 10.17                    | 1.30  |      |    |
| Kidney and urinary tract tumor (%)                            | 12 (2.1)                                     | 26 (4.6)   | 82 (14.4)    | 133 (23.4)    | 173 (30.4)    | 124 (21.8)    | 16 (2.8)     | 3 (0.5)    | 569 (100.0)     | 75     | 644      | 9.99                     | 1.28  |      |    |
| Obstructive urinary tract disease (%)                         | 14 (2.3)                                     | 20 (3.4)   | 46 (7.7)     | 137 (23.0)    | 215 (36.1)    | 104 (17.4)    | 40 (6.7)     | 20 (3.4)   | 596 (100.0)     | 96     | 692      | 10.29                    | 1.40  |      |    |
| Myeloma (%)   | 16 (9.1)                                     | 12 (6.9)   | 31 (17.7)    | 48 (27.4)     | 37 (21.1)     | 23 (13.1)     | 6 (3.4)      | 2 (1.1)    | 175 (100.0)     | 32     | 207      | 9.45                     | 1.57  |      |    |
| Hypoplastic kidney (%)  | 5 (1.1)                                      | 8 (1.7)    | 40 (8.5)     | 98 (20.8)     | 162 (34.3)    | 114 (24.2)    | 34 (7.2)     | 11 (2.3)   | 472 (100.0)     | 76     | 548      | 10.43                    | 1.30  |      |    |
| Undetermined (%)  | 220 (1.4)                                    | 523 (3.2)  | 1 589 (9.8)  | 4 003 (24.7)  | 5 420 (33.5)  | 3 251 (20.1)  | 898 (5.5)    | 296 (1.8)  | 16 200 (100.0)  | 3 253  | 19 453   | 10.22                    | 1.32  |      |    |
| Reintroduction after transplantation (%)                      | 26 (1.6)                                     | 54 (3.3)   | 130 (8.1)    | 357 (22.1)    | 527 (32.7)    | 359 (22.3)    | 119 (7.4)    | 40 (2.5)   | 1 612 (100.0)   | 282    | 1 894    | 10.35                    | 1.39  |      |    |
| Others (%)  | 82 (2.1)                                     | 134 (3.4)  | 391 (9.9)    | 935 (23.6)    | 1 304 (33.0)  | 812 (20.5)    | 221 (5.6)    | 77 (1.9)   | 3 956 (100.0)   | 769    | 4 725    | 10.20                    | 1.37  |      |    |
| Total (%)   | 2979 (1.3)                                   | 6622 (2.9) | 21 289 (9.3) | 55 639 (24.3) | 77 364 (33.8) | 45 907 (20.1) | 14 078 (6.2) | 4891 (2.1) | 228 769 (100.0) | 35 482 | 264 251  | 10.27                    | 1.32  |      |    |
| No information available (%)                                  | 0  | 3          | 5            | 19            | 31            | 11            | 2            | 2          | 73              | 32     | 105      | 10.22                    | 1.20  |      |    |
| Total (%)   | 2979 (1.3)                                   | 6625 (2.9) | 21 294 (9.3) | 55 658 (24.3) | 77 395 (33.8) | 45 918 (20.1) | 14 080 (6.2) | 4893 (2.1) | 228 842 (100.0) | 35 514 | 264 356  | 10.27                    | 1.32  |      |    |

**TABLE 37. Changes in the iron metabolism-related indices over the past three years (facility hemodialysis, hemodiafiltration, hemoadsorption)**

|                 | Hemoglobin concentration (g/dL) |      |               | Serum iron concentration (µg/dL) |        |               | Total iron-binding capacity (µg/dL) |       |               | Transferrin saturation level (%) |       |               | Serum ferritin concentration (ng/mL) |        |               |
|-----------------|---------------------------------|------|---------------|----------------------------------|--------|---------------|-------------------------------------|-------|---------------|----------------------------------|-------|---------------|--------------------------------------|--------|---------------|
|                 | Mean                            | SD   | vs. 2005† (%) | Mean                             | SD     | vs. 2005† (%) | Mean                                | SD    | vs. 2005† (%) | Mean                             | SD    | vs. 2005† (%) | Mean                                 | SD     | vs. 2005† (%) |
|                 |                                 |      |               |                                  |        |               |                                     |       |               |                                  |       |               |                                      |        |               |
| The end of 2005 | 10.23                           | 1.37 | 100.00        | 62.31                            | 29.38  | 100.00        | 246.05                              | 64.38 | 100.00        | 26.50                            | 13.82 | 100.00        | 191.29                               | 329.38 | 100.00        |
| The end of 2006 | 10.23                           | 1.33 | 100.00        | 64.65                            | 30.28  | 103.76        | 236.96                              | 60.73 | 96.31         | 28.39                            | 14.60 | 107.13        | 239.59                               | 383.29 | 125.25        |
| The end of 2007 | 10.27                           | 1.32 | 100.39        | 63.42†                           | 29.54† | 101.78        | 236.85                              | 60.73 | 96.26         | 28.09                            | 14.42 | 106.00        | 227.54                               | 349.56 | 118.95        |

†The percentages of the mean values in each year with respect to those in 2005.

**TABLE 38. Pre-dialysis hemoglobin concentrations and transferrin saturation levels (all dialysis patients)**

| Transferrin saturation level (%) | Pre-dialysis hemoglobin concentration (g/dL) |            |             |              |              |              |             |            |                |       |        |       | Subtotal | No information available | Total | Mean | SD |
|----------------------------------|--|------------|-------------|--------------|--------------|--------------|-------------|------------|----------------|-------|--------|-------|----------|--------------------------|-------|------|----|
|                                  | Pre-dialysis hemoglobin concentration (g/dL) |            |             |              |              |              |             |            |                |       |        |       |          |                          |       |      |    |
|                                  | <7.0   | 7.0-7.9    | 8.0-8.9     | 9.0-9.9      | 10.0-10.9    | 11.0-11.9    | 12.0-12.9   | ≥13.0      |                |       |        |       |          |                          |       |      |    |
| <10 (%)                          | 210 (2.9)                                    | 500 (7.0)  | 1168 (16.3) | 1855 (25.9)  | 1903 (26.5)  | 1064 (14.8)  | 364 (5.1)   | 111 (1.5)  | 7175 (100.0)   | 55    | 7230   | 9.83  | 1.47     |                          |       |      |    |
| 10-19 (%)                        | 530 (1.4)                                    | 1270 (3.4) | 3930 (10.5) | 9616 (25.7)  | 12110 (32.3) | 6961 (18.6)  | 2227 (5.9)  | 811 (2.2)  | 37455 (100.0)  | 280   | 37735  | 10.2  | 1.34     |                          |       |      |    |
| 20-29 (%)                        | 455 (0.9)                                    | 1059 (2.0) | 4011 (7.5)  | 12659 (23.8) | 19267 (36.2) | 11424 (21.5) | 3226 (6.1)  | 1055 (2.0) | 53156 (100.0)  | 378   | 53534  | 10.36 | 1.23     |                          |       |      |    |
| 30-39 (%)                        | 318 (1.0)                                    | 568 (1.8)  | 2199 (6.9)  | 7242 (22.9)  | 11608 (36.6) | 7099 (22.4)  | 2035 (6.4)  | 617 (1.9)  | 31686 (100.0)  | 204   | 31890  | 10.4  | 1.25     |                          |       |      |    |
| 40-49 (%)                        | 140 (1.1)                                    | 241 (1.9)  | 997 (7.9)   | 2791 (22.1)  | 4411 (34.9)  | 2860 (22.6)  | 894 (7.1)   | 299 (2.4)  | 12633 (100.0)  | 85    | 12718  | 10.41 | 1.31     |                          |       |      |    |
| 50-59 (%)                        | 60 (1.2)                                     | 125 (2.5)  | 444 (8.9)   | 1150 (23.1)  | 1652 (33.2)  | 1056 (21.2)  | 356 (7.2)   | 131 (2.6)  | 4974 (100.0)   | 26    | 5000   | 10.36 | 1.35     |                          |       |      |    |
| ≥60 (%)                          | 159 (2.9)                                    | 265 (4.8)  | 609 (11.0)  | 1332 (24.1)  | 1665 (30.1)  | 1022 (18.5)  | 371 (6.7)   | 110 (2.0)  | 5533 (100.0)   | 33    | 5566   | 10.1  | 1.48     |                          |       |      |    |
| Subtotal (%)                     | 1872 (1.2)                                   | 4028 (2.6) | 13358 (8.8) | 36645 (24.0) | 52616 (34.5) | 31486 (20.6) | 9473 (6.2)  | 3134 (2.1) | 152612 (100.0) | 1061  | 153673 | 10.3  | 1.3      |                          |       |      |    |
| No information available         | 1107   | 2597       | 7936        | 19013        | 24779        | 14432        | 4607        | 1759       | 76230          | 34453 | 110683 | 10.21 | 1.36     |                          |       |      |    |
| Total (%)                        | 2979 (1.3)                                   | 6625 (2.9) | 21294 (9.3) | 55658 (24.3) | 77395 (33.8) | 45918 (20.1) | 14080 (6.2) | 4893 (2.1) | 228842 (100.0) | 35514 | 264356 | 10.27 | 1.32     |                          |       |      |    |
| Mean                             | 28.89  | 26.48      | 26.78       | 27.59        | 28.52        | 28.73        | 28.95       | 28.10      | 28.10          | 26.88 | 28.09  |       |          |                          |       |      |    |
| SD                               | 20.17  | 18.34      | 16.06       | 14.50        | 13.67        | 13.69        | 14.67       | 14.58      | 14.43          | 13.62 | 14.42  |       |          |                          |       |      |    |

**TABLE 39. Pre-dialysis hemoglobin concentrations and serum ferritin concentrations (all dialysis patients)**

| Serum ferritin concentration (ng/mL) | Pre-dialysis hemoglobin concentration (g/dL) |            |              |               |               |               |              |            |                 |        | Subtotal | No information available | Total | Mean | SD |
|--------------------------------------|--|------------|--------------|---------------|---------------|---------------|--------------|------------|-----------------|--------|----------|--------------------------|-------|------|----|
|                                      | <7.0   | 7.0-7.9    | 8.0-8.9      | 9.0-9.9       | 10.0-10.9     | 11.0-11.9     | 12.0-12.9    | ≥13.0      |                 |        |          |                          |       |      |    |
| <25 (%)                              | 288 (1.2)                                    | 627 (2.7)  | 2 268 (9.6)  | 5 521 (23.3)  | 7 517 (31.8)  | 4 885 (20.6)  | 1 793 (7.6)  | 759 (3.2)  | 23 658 (100.0)  | 180    | 23 838   | 10.36                    | 1.38  |      |    |
| 25-49 (%)                            | 240 (1.0)                                    | 545 (2.3)  | 1 742 (7.5)  | 5 119 (22.0)  | 7 848 (33.8)  | 5 205 (22.4)  | 1 759 (7.6)  | 767 (3.3)  | 23 225 (100.0)  | 154    | 23 379   | 10.45                    | 1.35  |      |    |
| 50-99 (%)                            | 352 (1.0)                                    | 688 (2.0)  | 2 474 (7.4)  | 7 781 (23.1)  | 11 883 (35.4) | 7 471 (22.2)  | 2 221 (6.6)  | 744 (2.2)  | 33 614 (100.0)  | 239    | 33 853   | 10.39                    | 1.27  |      |    |
| 100-149 (%)                          | 282 (1.0)                                    | 592 (2.2)  | 2 141 (7.8)  | 6 569 (24.0)  | 9 920 (36.3)  | 5 809 (21.2)  | 1 580 (5.8)  | 460 (1.7)  | 27 353 (100.0)  | 199    | 27 552   | 10.32                    | 1.23  |      |    |
| 150-199 (%)                          | 221 (1.1)                                    | 465 (2.3)  | 1 707 (8.4)  | 5 064 (24.8)  | 7 222 (35.4)  | 4 287 (21.0)  | 1 146 (5.6)  | 288 (1.4)  | 20 400 (100.0)  | 156    | 20 556   | 10.29                    | 1.24  |      |    |
| 200-299 (%)                          | 302 (1.1)                                    | 730 (2.7)  | 2 487 (9.2)  | 6 961 (25.6)  | 9 590 (35.3)  | 5 304 (19.5)  | 1 421 (5.2)  | 379 (1.4)  | 27 174 (100.0)  | 227    | 27 401   | 10.22                    | 1.24  |      |    |
| 300-499 (%)                          | 328 (1.4)                                    | 796 (3.3)  | 2 526 (10.4) | 6 138 (25.4)  | 8 250 (34.1)  | 4 482 (18.5)  | 1 300 (5.4)  | 355 (1.5)  | 24 175 (100.0)  | 190    | 24 365   | 10.17                    | 1.3   |      |    |
| 500-999 (%)                          | 280 (1.9)                                    | 660 (4.5)  | 1 750 (11.8) | 3 771 (25.5)  | 4 561 (30.8)  | 2 617 (17.7)  | 859 (5.8)    | 287 (1.9)  | 14 785 (100.0)  | 142    | 14 927   | 10.1                     | 1.4   |      |    |
| ≥1000 (%)                            | 200 (3.8)                                    | 293 (5.6)  | 659 (12.7)   | 1 164 (22.4)  | 1 428 (27.5)  | 919 (17.7)    | 373 (7.2)    | 161 (3.1)  | 5 197 (100.0)   | 57     | 5 254    | 10.05                    | 1.63  |      |    |
| Subtotal (%)                         | 2493 (1.2)                                   | 5396 (2.7) | 17 754 (8.9) | 48 088 (24.1) | 68 219 (34.2) | 40 979 (20.5) | 12 452 (6.2) | 4200 (2.1) | 199 581 (100.0) | 1 544  | 201 125  | 10.29                    | 1.31  |      |    |
| No information available             | 486  | 1229       | 3540         | 7 570         | 9 176         | 4 939         | 1 628        | 693        | 29 261          | 33 970 | 63 231   | 10.11                    | 1.39  |      |    |
| Total (%)                            | 2979 (1.3)                                   | 6625 (2.9) | 21 294 (9.3) | 55 658 (24.3) | 77 395 (33.8) | 45 918 (20.1) | 14 080 (6.2) | 4893 (2.1) | 228 842 (100.0) | 273.71 | 227.54   | 10.27                    | 1.32  |      |    |
| Mean                                 | 361.73                                       | 325.41     | 268.15       | 228.58        | 216.2         | 209.14        | 216.83       | 217.12     | 227.18          | 510.53 | 349.56   |                          |       |      |    |
| SD                                   | 631.31                                       | 562.23     | 404.59       | 320.89        | 324.95        | 314.91        | 341.85       | 420.43     | 348.01          |        |          |                          |       |      |    |

**TABLE 40. Pre-dialysis hemoglobin concentrations and serum C-reactive protein (CRP) concentrations (all dialysis patients)**

| Serum CRP concentration (mg/dL) | Pre-dialysis hemoglobin concentration (g/dL) |            |             |              |              |              |             |            |                |       | Subtotal | No information available | Total | Mean | SD |
|---------------------------------|--|------------|-------------|--------------|--------------|--------------|-------------|------------|----------------|-------|----------|--------------------------|-------|------|----|
|                                 | <7.0   | 7.0-7.9    | 8.0-8.9     | 9.0-9.9      | 10.0-10.9    | 11.0-11.9    | 12.0-12.9   | ≥13.0      |                |       |          |                          |       |      |    |
| <0.2 (%)                        | 784 (0.8)                                    | 1753 (1.8) | 7063 (7.1)  | 23384 (23.6) | 36168 (36.5) | 21736 (22.0) | 6208 (6.3)  | 1862 (1.9) | 98958 (100.0)  | 665   | 99623    | 10.39                    | 1.21  |      |    |
| 0.2-0.4 (%)                     | 359 (1.0)                                    | 880 (2.5)  | 3053 (8.8)  | 8187 (23.5)  | 11831 (34.0) | 7261 (20.9)  | 2372 (6.8)  | 840 (2.4)  | 34783 (100.0)  | 243   | 35026    | 10.34                    | 1.32  |      |    |
| 0.5-0.9 (%)                     | 246 (1.5)                                    | 641 (3.9)  | 1771 (10.9) | 4125 (25.4)  | 5243 (32.3)  | 2955 (18.2)  | 936 (5.8)   | 338 (2.1)  | 16255 (100.0)  | 130   | 16385    | 10.16                    | 1.36  |      |    |
| 1.0-1.9 (%)                     | 253 (2.4)                                    | 575 (5.5)  | 1421 (13.6) | 2694 (25.8)  | 3027 (29.0)  | 1696 (16.2)  | 574 (5.5)   | 207 (2.0)  | 10447 (100.0)  | 79    | 10526    | 9.99                     | 1.46  |      |    |
| 2.0-3.9 (%)                     | 197 (3.1)                                    | 452 (7.2)  | 1073 (17.0) | 1633 (25.8)  | 1746 (27.6)  | 826 (13.1)   | 278 (4.4)   | 113 (1.8)  | 6318 (100.0)   | 47    | 6365     | 9.79                     | 1.48  |      |    |
| 4.0-5.9 (%)                     | 108 (4.6)                                    | 220 (9.3)  | 440 (18.6)  | 632 (26.8)   | 555 (23.5)   | 275 (11.6)   | 94 (4.0)    | 38 (1.6)   | 2362 (100.0)   | 19    | 2381     | 9.59                     | 1.56  |      |    |
| 6.0-7.9 (%)                     | 64 (5.3)                                     | 144 (12.0) | 232 (19.4)  | 289 (24.1)   | 283 (23.6)   | 122 (10.2)   | 40 (3.3)    | 23 (1.9)   | 1197 (100.0)   | 11    | 1208     | 9.47                     | 1.59  |      |    |
| 8.0-9.9 (%)                     | 46 (6.6)                                     | 85 (12.2)  | 157 (22.5)  | 176 (25.3)   | 133 (19.1)   | 63 (9.0)     | 26 (3.7)    | 11 (1.6)   | 697 (100.0)    | 8     | 705      | 9.3                      | 1.62  |      |    |
| 10.0-14.9 (%)                   | 59 (7.5)                                     | 108 (13.8) | 139 (17.8)  | 181 (23.1)   | 167 (21.4)   | 85 (10.9)    | 31 (4.0)    | 12 (1.5)   | 782 (100.0)    | 6     | 788      | 9.39                     | 1.68  |      |    |
| ≥15.0 (%)                       | 41 (7.3)                                     | 69 (12.4)  | 109 (19.5)  | 133 (23.8)   | 122 (21.9)   | 58 (10.4)    | 18 (3.2)    | 8 (1.4)    | 558 (100.0)    | 4     | 562      | 9.35                     | 1.64  |      |    |
| Subtotal (%)                    | 2157 (1.3)                                   | 4927 (2.9) | 15458 (9.0) | 41434 (24.0) | 59275 (34.4) | 35077 (20.4) | 10577 (6.1) | 3452 (2.0) | 172357 (100.0) | 1212  | 173569   | 10.28                    | 1.31  |      |    |
| No information available        | 822  | 1698       | 5836        | 14224        | 18120        | 10841        | 3503        | 1441       | 56485          | 34302 | 90787    | 10.24                    | 1.37  |      |    |
| Total                           | 2979   | 6625       | 21294       | 55658        | 77395        | 45918        | 14080       | 4893       | 228842         | 35514 | 264356   | 10.27                    | 1.32  |      |    |
| Mean                            | 1.3  | 2.9        | 9.3         | 24.3         | 33.8         | 20.1         | 6.2         | 2.1        | 100.0          | 0.82  | 0.64     |                          |       |      |    |
| SD                              | 1.98   | 1.70       | 1.10        | 0.66         | 0.50         | 0.45         | 0.49        | 0.58       | 0.64           | 4.11  | 2.04     |                          |       |      |    |