

Table 1 Characteristics of patients (0-24 years) diagnosed between 1980 and 2005 with chronic myeloid leukemia in England by sex, age group and period of diagnosis

| | Alive^a (N=233) | Dead^a (N=305) | Total (N=538) |
|----------------------------|--|---|--------------------------------|
| Sex | | | |
| Male | 147 (63.1) | 180 (59.0) | 327 (60.8) |
| Female | 86 (36.9) | 125 (41.0) | 211 (39.2) |
| Age group | | | |
| < 5 years | 25 (10.7) | 57 (18.7) | 82 (15.2) |
| 5 - 14 years | 55 (23.6) | 62 (20.3) | 117 (21.7) |
| 15 - 24 years | 153 (65.7) | 186 (61.0) | 339 (63.0) |
| Period of diagnosis | | | |
| 1980-1984 | 10 (4.3) | 72 (23.6) | 82 (15.2) |
| 1985-1989 | 31 (13.3) | 71 (23.3) | 102 (19.0) |
| 1990-1994 | 33 (14.2) | 66 (21.6) | 99 (18.4) |
| 1995-1999 | 49 (21.0) | 55 (18.0) | 104 (19.3) |
| 2000-2005 | 110 (47.2) | 41 (13.4) | 151 (28.1) |

^a The vital status of each patients was assessed during the first 15 years of follow-up

Table 2 Results from the univariable mixture cure model: “cure” proportion and median survival time of the “uncured” (in years) with their 95% confidence intervals for each period of diagnosis

| Period of diagnosis | Proportion of “cured” (95% CI) | Median survival time [years] of “uncured” (95% CI) |
|----------------------------|---------------------------------------|---|
| 1980-1984 | 0.09 (0.04-0.22) | 2.11 (1.34-2.87) |
| 1985-1989 | 0.26 (0.16-0.39) | 2.72 (1.61-3.84) |
| 1990-1994 | 0.32 (0.23-0.42) | 2.45 (1.69-3.22) |
| 1995-1999 | 0.47 (0.37-0.56) | 1.52 (0.97-2.06) |
| 2000-2005 | 0.71 (0.62-0.79) | 2.00 (0.85-3.15) |

Table 3 Results from the multivariable mixture cure model (using the retained final model*):

“cure” proportion and median survival time of the “uncured” (in years) with their 95% confidence intervals for specific age at diagnosis and year of diagnosis

| Age at diagnosis (years) | Year of diagnosis | Proportion of “cured” (95% CI) | Median survival time [years] of “uncured” (95% CI) |
|---------------------------------|--------------------------|---------------------------------------|---|
| 0.5 | 1980 | 0.01 (0-0.22) | 1.13 (0.58-1.68) |
| 0.5 | 1990 | 0.29 (0.16-0.48) | 0.83 (0.44-1.22) |
| 0.5 | 2000 | 0.56 (0.37-0.73) | 0.61 (0.27-0.95) |
| 0.5 | 2005 | 0.81 (0.61-0.92) | 0.52 (0.20-0.85) |
| 5 | 1980 | 0.01 (0-0.27) | 2.00 (1.18-2.82) |
| 5 | 1990 | 0.34 (0.24-0.46) | 1.47 (1.02-1.93) |
| 5 | 2000 | 0.61 (0.49-0.71) | 1.09 (0.69-1.48) |
| 5 | 2005 | 0.84 (0.71-0.92) | 0.93 (0.53-1.34) |
| 15 | 1980 | 0.01 (0-0.25) | 4.08 (2.45-5.72) |
| 15 | 1990 | 0.30 (0.20-0.42) | 3.01 (2.15-3.87) |
| 15 | 2000 | 0.56 (0.47-0.65) | 2.21 (1.47-2.95) |
| 15 | 2005 | 0.82 (0.69-0.90) | 1.90 (1.12-2.68) |
| 24 | 1980 | 0.01 (0-0.32) | 3.14 (1.73-4.56) |
| 24 | 1990 | 0.39 (0.27-0.52) | 2.32 (1.49-3.15) |
| 24 | 2000 | 0.65 (0.54-0.76) | 1.71 (1.02-2.39) |
| 24 | 2005 | 0.87 (0.75-0.93) | 1.46 (0.78-2.15) |

* Multivariable model with a linear effect of year of diagnosis on survival of the “uncured” and a non-linear effect of year of diagnosis on the proportion of “cured”, and a non-linear effect of age at diagnosis on both the survival of the “uncured” and on the proportion of “cured”.