16 Cancer of the bladder

Summary

When compared with other cancer sites, relative survival after diagnosis of bladder cancer is good. During the 1992–1997 period, one-year relative survival after diagnosis with bladder cancer was 86.9% for males and 78.2% for females and five-year relative survival after diagnosis was 70.8% for males and 64.7% for females (Table 16.1). Survival ten years after diagnosis was 65.8% for males and 62.0% for females in 1987–1991, the most recent period for which ten-year relative survival data are available (Figure 16.2; Tables 16.2 and 16.3).

Between 1982–1986 and 1992–1997, there were no statistically significant changes in relative survival after diagnosis of bladder cancer for males or females (Figure 16.2; Tables 16.2 and 16.3).

As age at diagnosis increased, five-year relative survival decreased. Five-year relative survival was highest for males aged 20–29 years (98.6%) and decreased to 54.3% for males aged 80–89 years. For females, the numbers of new cases and deaths were small for age groups below 30 years, making survival estimates for these age groups less robust. Five-year relative survival for females aged 40–49 years was 88.1% and decreased to 49.8% for females aged 80–89 years (Figure 16.3; Table 16.1).

For individual age groups, there were no significant increases in relative survival for any age group between 1982–1986 and 1992–1997 (Figure 16.3; Tables 16.5 and 16.6).

Table 16.1: Cancer of the bladder: number of new cases and deaths, and five-year relative survival proportions, by age at diagnosis and sex, Australia, 1992–1997

	New cases		Deaths		5-year relative survival (%)	
Age	**Males**	**Females**	**Males**	**Females**	**Males**	**Females**
0–19 years	15	9	4	1	73.0	*
20–29 years	51	14	1	0	*	*
30–39 years	124	64	11	9	90.7	87.4
40–49 years	460	145	74	18	85.4	88.1
50–59 years	1,306	326	281	75	82.0	78.5
60–69 years	3,103	898	1,028	322	74.9	69.9
70–79 years	4,018	1,271	2,006	622	65.1	59.0
80–89 years	1,973	829	1,408	570	54.3	49.8
90–99 years	219	158	191	135	34.8	36.4
All ages	**11,269**	**3,714**	**5,004**	**1,752**	**70.8**	**64.7**

* Interpretation difficult due to statistical instability. The instability in this age/sex/site group may be due to the survival model's handling a combination of small number of cases/deaths and or unstable background survival patterns resulting in invalid estimates. These results are therefore not presented here.

Incidence and mortality

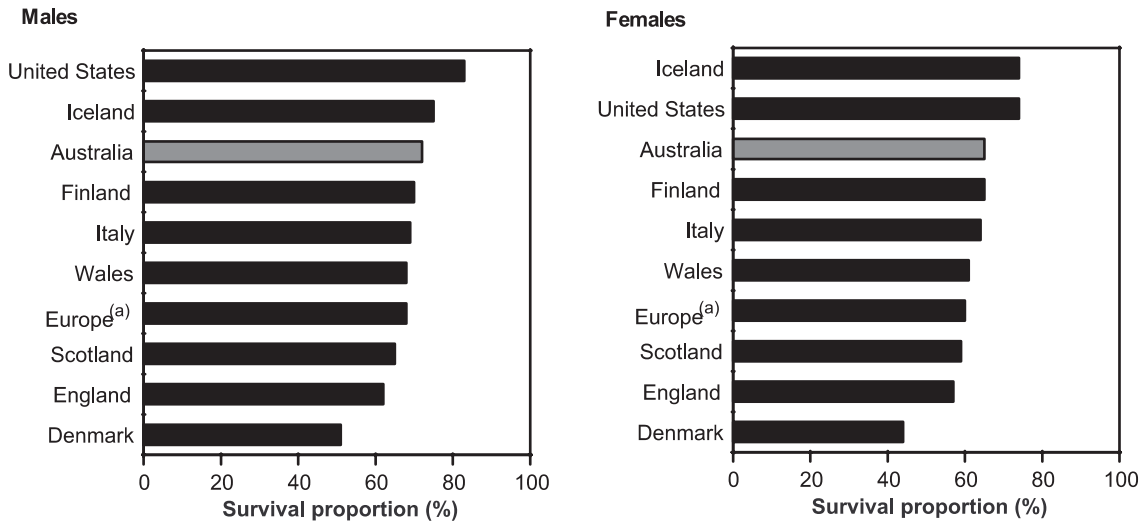
During 1997, there were 2,693 new cases of cancer of the bladder which represented 4.6% of all new cases of male cancers and 1.9% of all new cases of females cancers in 1997.

Bladder cancer was the cause of 807 deaths in 1997, with 554 male deaths and 253 female deaths. It is estimated that there were about 2,400 years of life lost due to bladder cancer in males, and 800 years of life lost in females during 1997.

For the six-year period 1992–1997, age-standardised incidence rates for bladder cancer increased by 0.3% per annum for males and 1.8% per annum for females. Age-standardised mortality for bladder cancer decreased by 1.1% for both males and females during this period.

International comparisons

International comparison of bladder cancer survival is difficult because of differing coding practices between countries. For instance, it has been reported that the United States bladder cancer incidence estimates (compiled by the United States SEER Program) combine in situ and invasive bladder cancers (Parkin et al. 1992). This has the effect of inflating United States bladder cancer five-year relative survival when compared with estimates from countries where in situ bladder cancers are not included with invasive bladder cancers, such as in Australia. Therefore, the following comparisons should be considered with caution. Five-year relative survival for males and females diagnosed in Australia during 1987–1992 was lower than for the United States and Iceland (Figure 16.1; Table 16.8). However, Australian proportions were similar to those in the Scandinavian countries and higher than those in countries such as Scotland, England and Denmark.



(a) Weighted average.

Note: The survival period varies among countries, but is broadly within the 1987–1991 period.

Sources: Ries et al. 1999; Coleman et al. 1999, Berrino et al. 1999.

Figure 16.1: Cancer of the bladder five-year relative survival proportions: selected countries

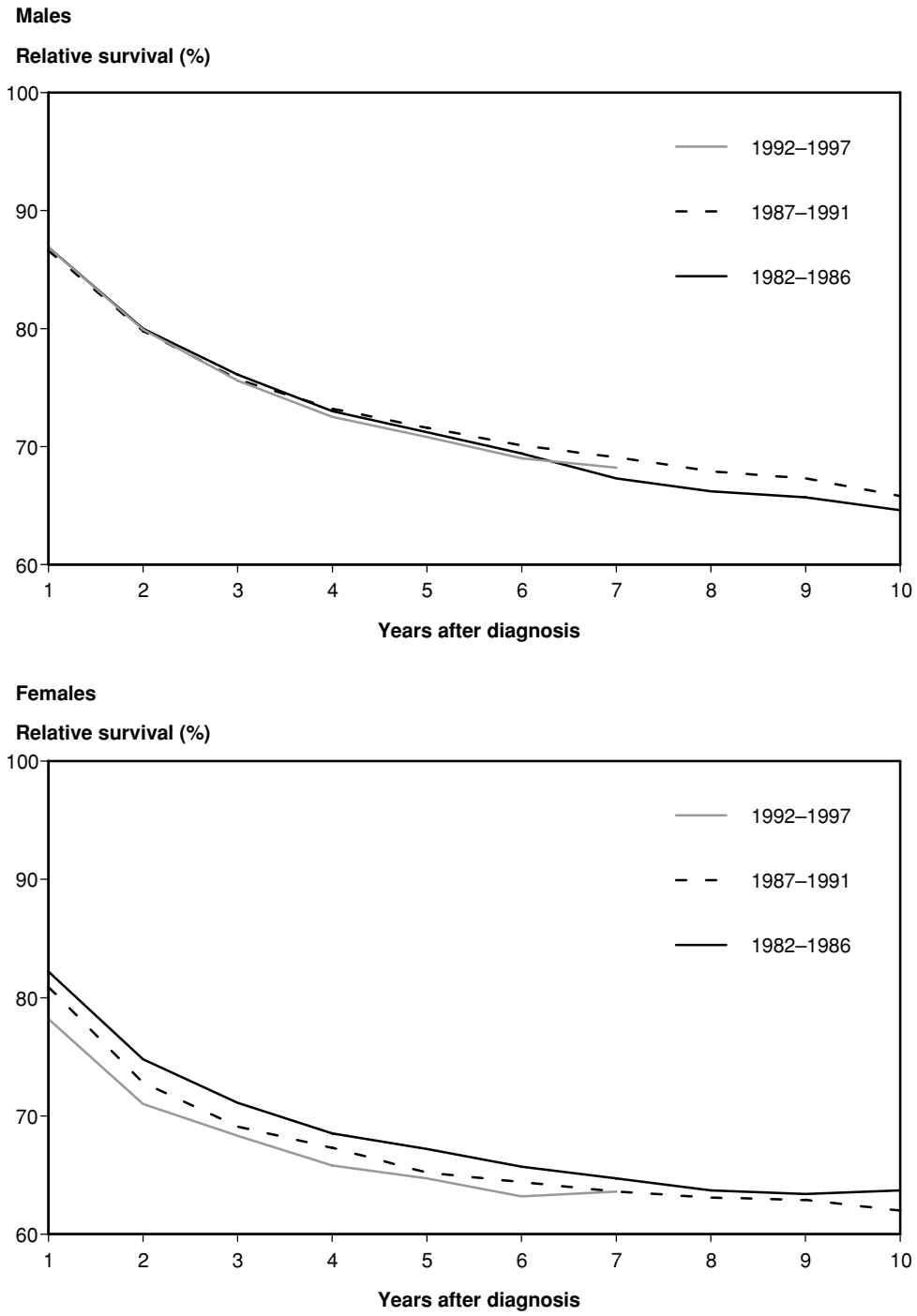
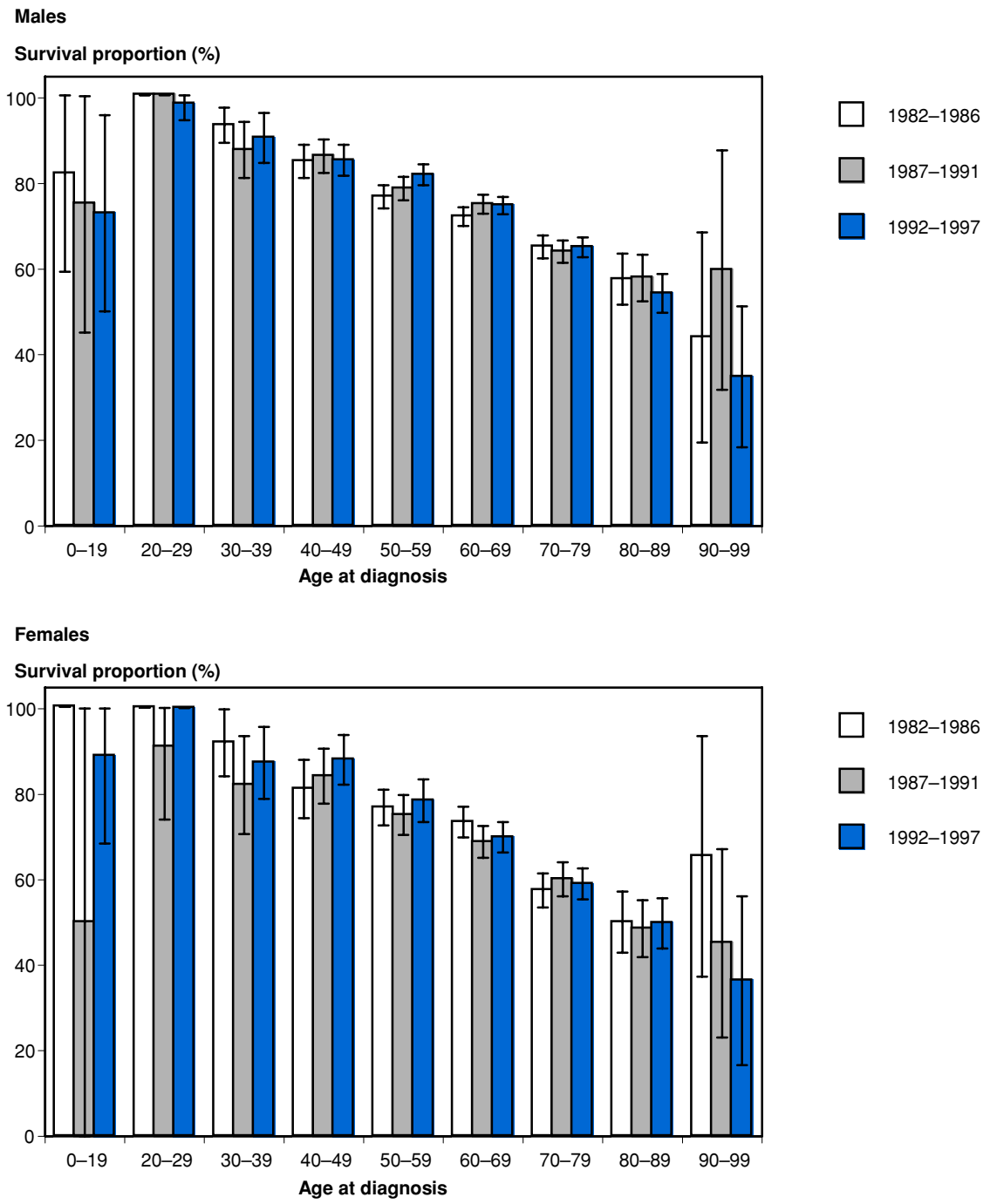


Figure 16.2: Cancer of the bladder relative survival proportions: period of diagnosis, Australia



Note: 95% confidence intervals are shown for each age group.

Figure 16.3: Cancer of the bladder five-year relative survival proportions: age at diagnosis by period of diagnosis, Australia