5 Estimated average lifetime costs of cancer

This section presents information on the approximate total average costs of treatment per new cancer case across the entire lifetime. Treatment costs for malignant neoplasms in 1993–94 are divided by the number of new cases of malignant neoplasms in 1993 to give an approximate estimate of average lifetime treatment costs per incident case. These lifetime cost estimates are approximate because they are based on the assumption that incidence and mortality rates have been steady over time. For cancers where incidence rates have been increasing or decreasing over time, or where improvements in treatment are altering survival rates, the approximate costs shown in Table 11 will underestimate or overestimate the actual lifetime costs of treating a cancer case. These estimates in 1993–94 dollars also assume that the real cost of treating each cancer at various ages and stages through the course of the illness remain constant at their 1993–94 values.

For each cancer site, Table 11 shows health system treatment costs for malignant neoplasms only in 1993–94 and estimated new cases in 1993. Cancer sites are ranked in descending order of average lifetime treatment costs per malignant case. Leukemia is the most expensive cancer with an estimated lifetime treatment cost of nearly $58,000 per new case.

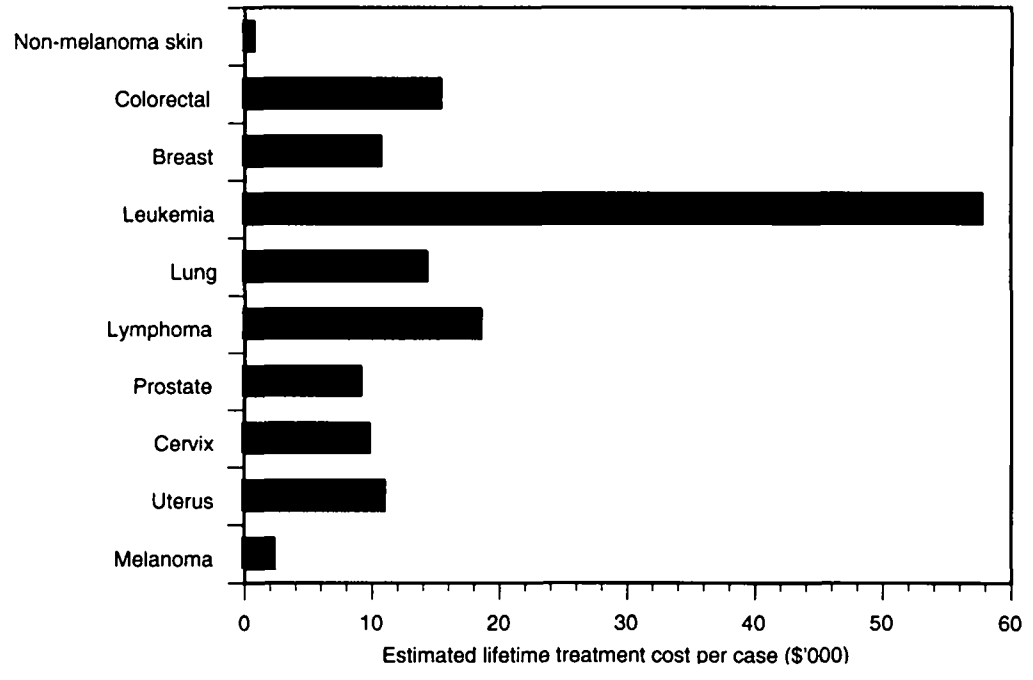

Figure 5: Estimated average lifetime treatment cost per new case for the 10 cancers with highest total health system costs, 1993–94

Estimated lifetime treatment costs vary enormously, from around $58,000 per leukemia to $2,400 for melanoma and $750 per NMSC. The commonest cancers apart from NMSC are in the middle of the list, e.g. around $15,000 for colorectal and lung cancers. Cervical cancer ranks seventeenth in the list at just under $10,000 per new case, followed by prostate cancer at $9,000 per new case. Figure 5 shows the average lifetime treatment cost per new case for the 10 cancers identified in Table 2 as having the highest total health system costs.

Table 11: Lifetime cancer costs per case: estimated treatment costs ($) per new case, number of new cases 1993, and total treatment costs ($ million) 1993–94, ranked by treatment cost per new case

Cancer site	Treatment costs per case[a] ($)	New cases	Treatment costs[b] ($ million)
1. Leukemia	57,777	1,662	96.0
2. Other sites[c]	237,690	7,258	270.3
3. Brain and CNS	25,333	1,182	29.9
4. Oesophagus	21,624	885	19.1
5. Bladder	19,447	2,388	46.4
6. Lymphoma	18,519	3,698	68.5
7. Liver	18,266	469	8.6
8. Stomach	16,305	1,788	29.2
9. Kidney	15,891	1,646	26.2
10. Pancreas	15,820	1,432	22.7
11. Colorectal	15,374	9,538	146.6
12. Lung	14,298	6,911	98.8
13. Head and neck	12,825	2,400	30.8
14. Ovary	12,786	1,059	13.5
15. Uterus	11,020	1,227	13.5
16. Breast	10,680	8,448	90.2
17. Cervix	9,802	1,002	9.8
18. Prostate	9,110	10,013	91.2
19. Melanoma	2,402	6,954	16.7
20. Non-melanoma skin	750	243,691	182.7
All cancers excluding non-melanoma skin	**17,671**	**69,960**	**1,128.1**

(a) Total costs in 1993–94 divided by new cases in 1994 gives an approximate estimate of lifetime costs per incident case where treatment costs, incidence and mortality rates have been steady over time.

(b) Treatment costs for malignant neoplasms only. Prevention costs and research costs excluded, as are treatment costs for non-malignant neoplasms.

(c) Includes cancer of larynx, thyroid, gallbladder, testis and other sites not explicitly listed above.