
Impact of Covid-19 on incidence and survival of sarcoma in Northern Ireland

(A comparison between April-December of 2020 and 2018-2019)

Further information

Further information is available at: www.qub.ac.uk/research-centres/nicr

Phone: +44 (0)28 9097 6028

e-mail: nicr@qub.ac.uk

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The incidence, prevalence and survival statistics in this publication are designated as official statistics signifying that they comply with the Code of Practice for Official Statistics.



INCIDENCE

During the April-December period when Covid-19 was present the number of cases of sarcoma diagnosed decreased by 3.9% (3 patients) from 76 per year in 2018 - 2019 to 73 in 2020.

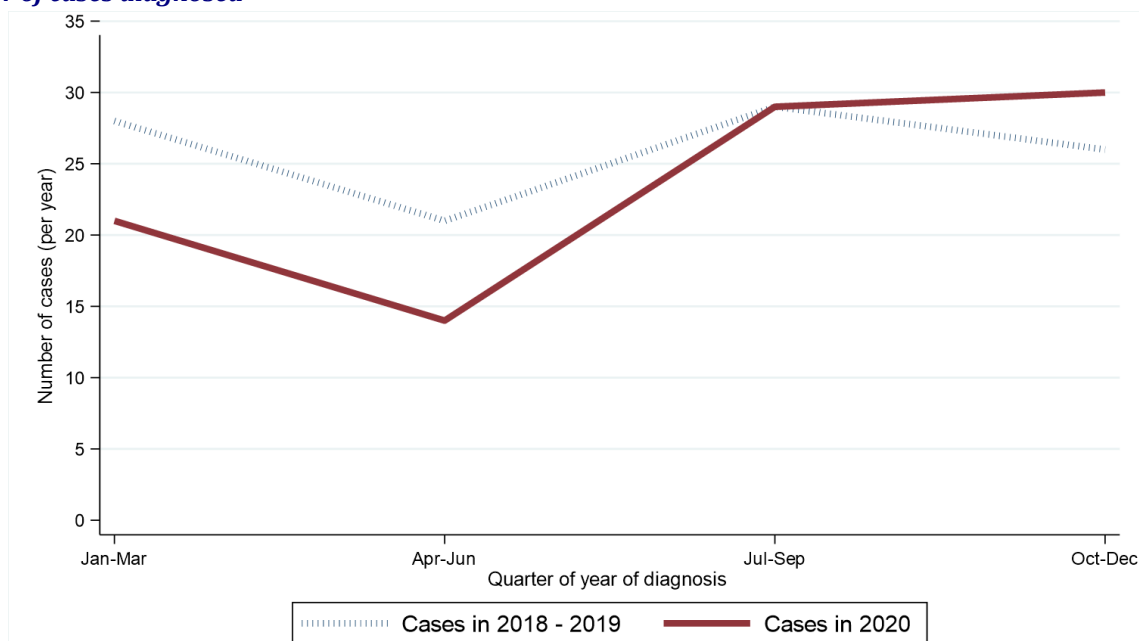
Table 1: Number of sarcoma cases diagnosed in 2018-2020 by quarter and year of diagnosis

Period of diagnosis	Annual total	Quarter of year diagnosed			
		Jan-Mar	Apr-Jun	Jul-Sept	Oct-Dec
2018-2019*	104	28	21	29	26
2020	94	21	14	29	30

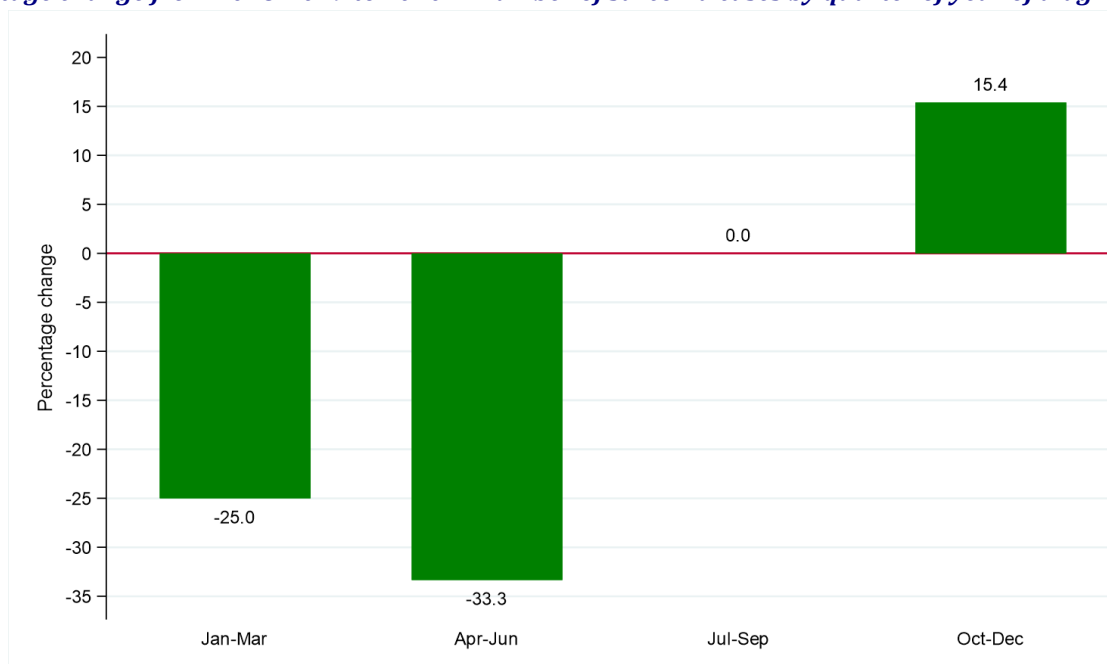
* Average cases per year rounded to the nearest integer. Row sums may thus differ slightly from the total.

Figure 1: Number of sarcoma cases diagnosed in 2018-2020 by quarter and year of diagnosis

(a) Number of cases diagnosed



(b) Percentage change from 2018-2019 to 2020 in number of sarcoma cases by quarter of year of diagnosis



GENDER

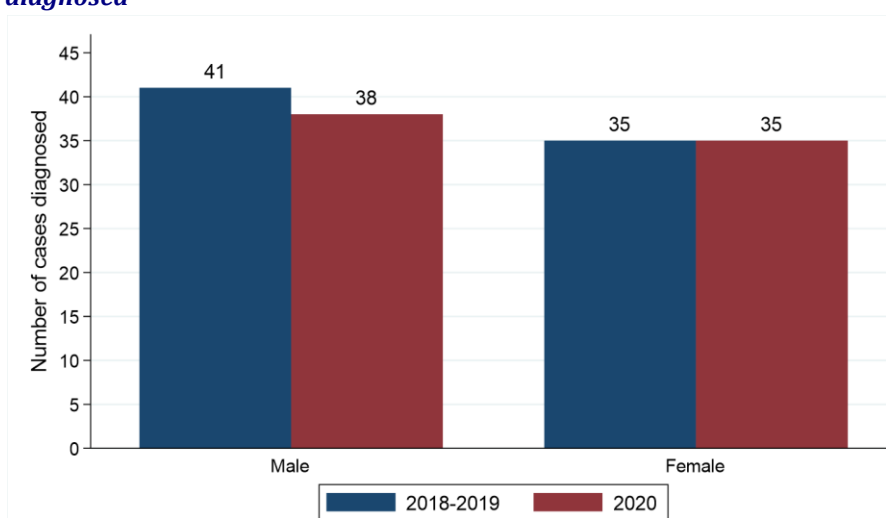
Excluding the first quarter of each year among males the number of cases of sarcoma diagnosed decreased by 7.3% from 41 per year in 2018 - 2019 to 38 in 2020. Among females there was no change in the number of cases per year between 2018 - 2019 and 2020, with an average of 35 cases each year. The change in case distribution by gender between 2018 - 2019 and 2020 was not statistically significant.

Table 2: Number and proportion of sarcoma cases diagnosed in April-December of 2018-2020 by gender and period of diagnosis

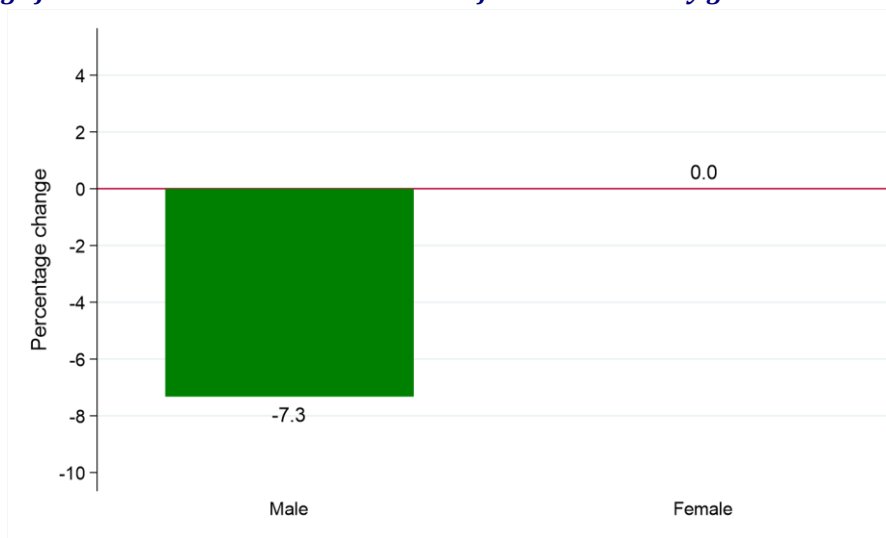
Gender	Period of diagnosis (Apr-Dec)		Percentage change
	2018-2019*	2020	
Male	41 (53.9%)	38 (52.1%)	-7.3% (3 patients)
Female	35 (46.1%)	35 (47.9%)	0.0% (0 patients)
All persons	76	73	-3.9% (3 patients)

* Average cases per year rounded to the nearest integer. Column sums may thus differ slightly from the total.

Figure 2: Sarcoma cases diagnosed in April-December of 2018-2020 by gender and period of diagnosis
(a) Number of cases diagnosed



(b) Percentage change from 2018-2019 to 2020 in number of sarcoma cases by gender



AGE

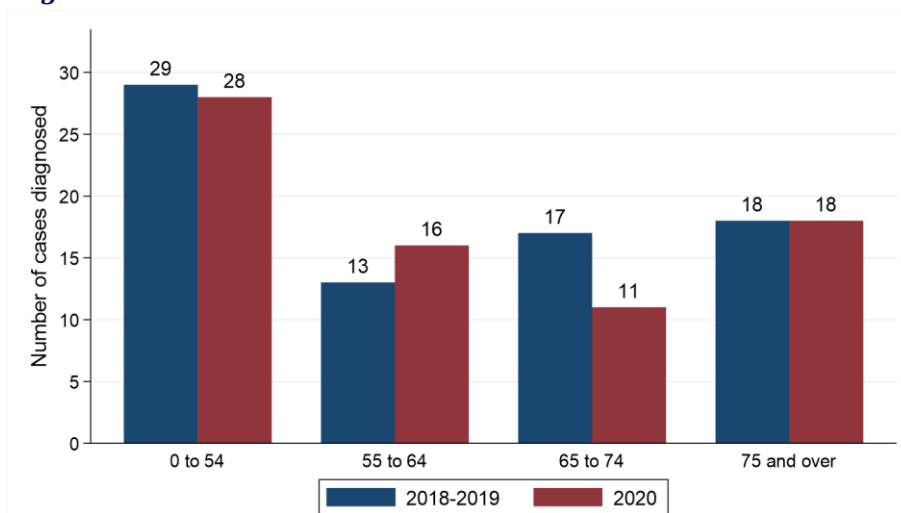
Excluding the first quarter of each year among people aged 65 to 74 the number of cases of sarcoma diagnosed decreased by 35.3% from 17 per year in 2018 - 2019 to 11 in 2020. Between the same two time periods, the number of cases among people aged 55 to 64 increased by 23.1% from 13 per year to 16. The change in case distribution by age between 2018 - 2019 and 2020 was not statistically significant.

Table 3: Number and proportion of sarcoma cases diagnosed in April-December of 2018-2020 by age and period of diagnosis

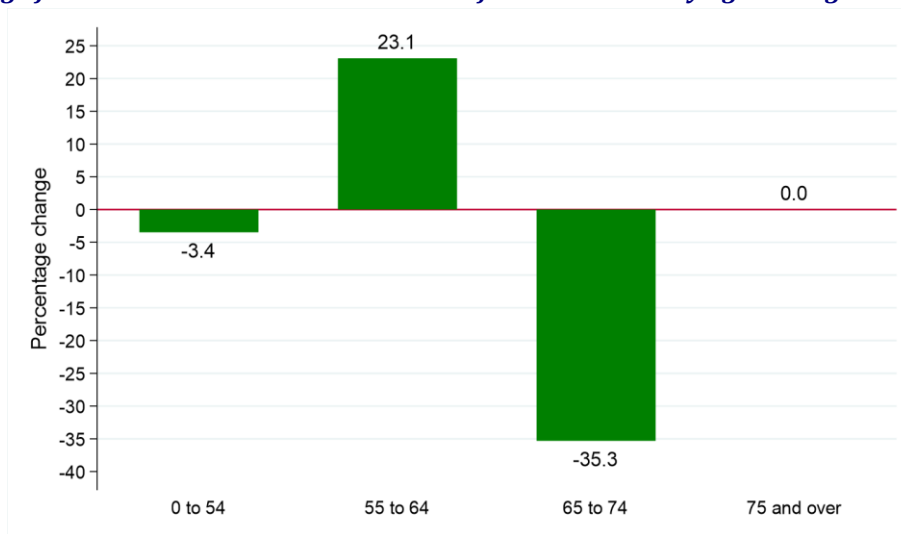
Age group	Period of diagnosis (Apr-Dec)		Percentage change
	2018-2019*	2020	
0 to 54	29 (38.2%)	28 (38.4%)	-3.4% (1 patient)
55 to 64	13 (17.1%)	16 (21.9%)	+23.1% (3 patients)
65 to 74	17 (22.4%)	11 (15.1%)	-35.3% (6 patients)
75 and over	18 (23.7%)	18 (24.7%)	0.0% (0 patients)
All ages	76	73	-3.9% (3 patients)

* Average cases per year rounded to the nearest integer. Column sums may thus differ slightly from the total.

Figure 3: Sarcoma cases diagnosed in April-December of 2018-2020 by age and period of diagnosis
(a) Number of cases diagnosed



(b) Percentage change from 2018-2019 to 2020 in number of sarcoma cases by age at diagnosis



HEALTH AND SOCIAL CARE TRUST

Excluding the first quarter of each year among residents of Northern HSCT the number of cases of sarcoma diagnosed decreased by 36.8% from 19 per year in 2018 - 2019 to 12 in 2020. Between the same two time periods the number of cases among residents of Southern HSCT increased by 61.5% from 13 per year to 21. The change in case distribution by HSCT between 2018 - 2019 and 2020 was not statistically significant.

Table 4: Number and proportion of sarcoma cases diagnosed in April-December of 2018-2020 by Health and Social Care Trust and period of diagnosis

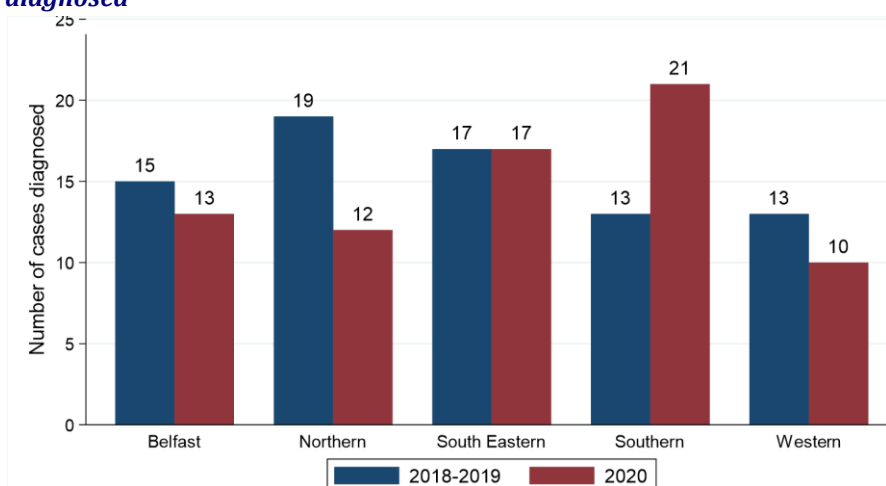
Health and Social Care Trust	Period of diagnosis (Apr-Dec)		Percentage change
	2018-2019*	2020	
Belfast HSCT	15 (19.7%)	13 (17.8%)	-13.3% (2 patients)
Northern HSCT	19 (25.0%)	12 (16.4%)	-36.8% (7 patients)
South Eastern HSCT	17 (22.4%)	17 (23.3%)	0.0% (0 patients)
Southern HSCT	13 (17.1%)	21 (28.8%)	+61.5% (8 patients)
Western HSCT	13 (17.1%)	10 (13.7%)	-23.1% (3 patients)
Northern Ireland	76	73	-3.9% (3 patients)

* Average cases per year rounded to the nearest integer. Column sums may thus differ slightly from the total.

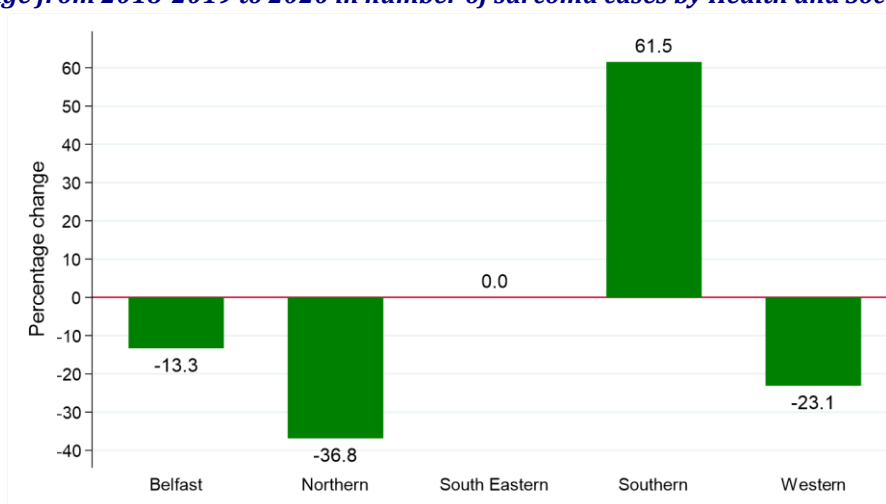
Note: Cases with unknown Health and Social Care Trust are included in totals

Figure 4: Sarcoma cases diagnosed in April-December of 2018-2020 by Health and Social Care Trust and period of diagnosis

(a) Number of cases diagnosed



(b) Percentage change from 2018-2019 to 2020 in number of sarcoma cases by Health and Social Care Trust



DEPRIVATION

Among residents of the most deprived areas there was no change in the number of cases per year between 2018 - 2019 and 2020, with an average of 14 cases each year. Between the same two time periods the number of cases among residents of the least deprived areas increased by 14.3% from 14 per year to 16. The change in case distribution by deprivation quintile between 2018 - 2019 and 2020 was not statistically significant.

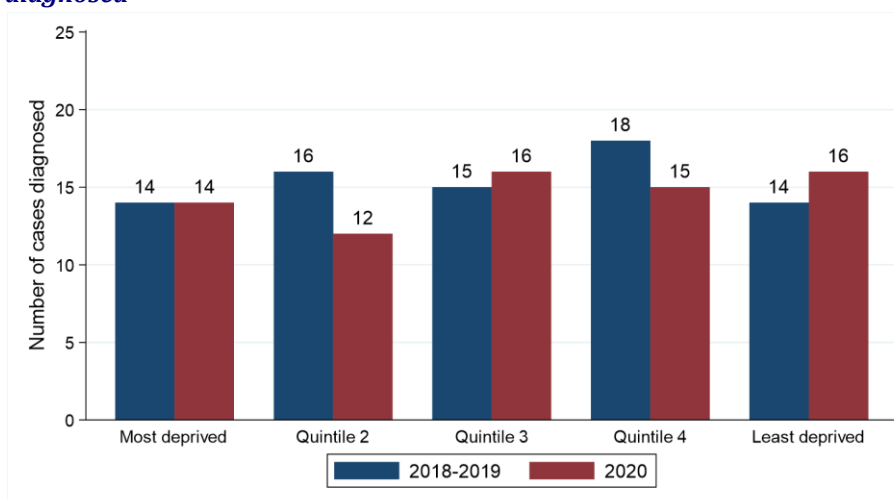
Table 5: Number and proportion of sarcoma cases diagnosed in April-December of 2018-2020 by deprivation quintile and period of diagnosis

Deprivation quintile	Period of diagnosis (Apr-Dec)		Percentage change
	2018-2019*	2020	
Most deprived	14 (18.4%)	14 (19.2%)	0.0% (0 patients)
Quintile 2	16 (21.1%)	12 (16.4%)	-25.0% (4 patients)
Quintile 3	15 (19.7%)	16 (21.9%)	+6.7% (1 patient)
Quintile 4	18 (23.7%)	15 (20.5%)	-16.7% (3 patients)
Least deprived	14 (18.4%)	16 (21.9%)	+14.3% (2 patients)
Northern Ireland	76	73	-3.9% (3 patients)

* Average cases per year rounded to the nearest integer. Column sums may thus differ slightly from the total.

Note: Cases with unknown deprivation quintile are included in totals

Figure 5: Sarcoma cases diagnosed in April-December of 2018-2020 by deprivation quintile and period of diagnosis
(a) Number of cases diagnosed



(b) Percentage change from 2018-2019 to 2020 in number of sarcoma cases by deprivation quintile



SURVIVAL

Changes in survival are evaluated using two measures. Observed survival examines the time between diagnosis and death from any cause. It thus represents what cancer patients experience, however, due to the inclusion of non-cancer deaths (e.g. heart disease), it may not reflect how changes in cancer care impact survival from cancer. Thus changes in age-standardised net survival are also examined. This measure provides an estimate of patient survival which has been adjusted to take account of deaths unrelated to cancer. It also assumes a standard age distribution thereby removing the impact of changes in the age distribution of cancer patients on changes in survival over time. While this measure is hypothetical, as it assumes patients can only die from cancer related factors, it is a better indicator of the impact of changes in cancer care on patient survival.

OBSERVED SURVIVAL

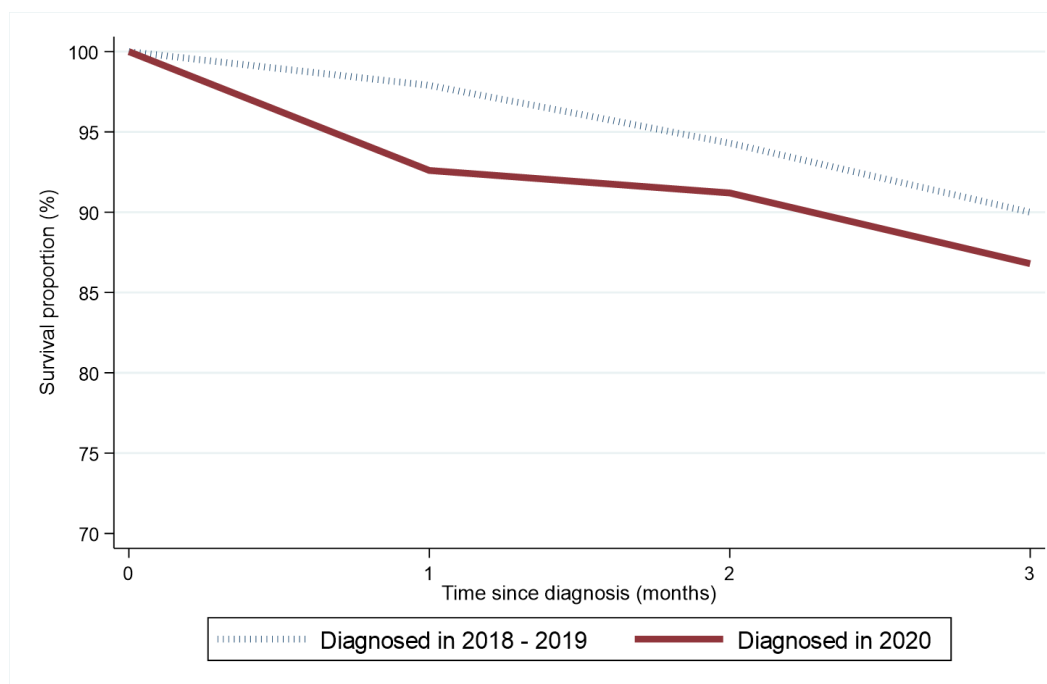
Survival among sarcoma patients one month after diagnosis decreased from 97.9% among those diagnosed in April-December of 2018 - 2019 to 92.6% among those diagnosed in April-December of 2020. This change was not statistically significant. Between the same two diagnosis periods, three-month survival decreased from 90.0% to 86.8%. This change was not statistically significant.

Table 6: Observed survival for patients with sarcoma diagnosed in April-December of 2018-2020 by period of diagnosis

Survival time	Period of diagnosis (Apr-Dec)	
	2018-2019	2020
1 month	97.9% (93.5% - 99.3%)	92.6% (83.2% - 96.9%)
2 months	94.3% (88.9% - 97.1%)	91.2% (81.4% - 95.9%)
3 months	90.0% (83.7% - 94.0%)	86.8% (76.1% - 92.9%)

No statistically significant reductions

Figure 6: Observed survival for patients with sarcoma diagnosed in April-December of 2018-2020 by period of diagnosis



NET SURVIVAL

Age-standardised net survival (which takes account of deaths from other causes such as Covid-19) among sarcoma patients one month after diagnosis decreased from 98.6% among those diagnosed in April-December of 2018 -

2019 to 93.9% among those diagnosed in April-December of 2020. This change was not statistically significant. Between the same two time periods, three-month age-standardised net survival decreased from 91.5% to 89.5%. This change was not statistically significant.

Table 7: Age-standardised net survival for patients with sarcoma diagnosed in April-December of 2018-2020 by period of diagnosis

Survival time	Period of diagnosis (Apr-Dec)	
	2018-2019	2020
1 month	98.6% (96.9% - 100.0%)	93.9% (88.9% - 99.2%)
2 months	95.6% (92.3% - 99.0%)	92.8% (87.3% - 98.6%)
3 months	91.5% (87.1% - 96.1%)	89.5% (82.8% - 96.8%)

No statistically significant reductions

Figure 7: Age-standardised net survival for patients with sarcoma diagnosed in April-December of 2018-2020 by period of diagnosis

