

An estimated 5000 expected new cancer diagnoses not yet made

The expedited delivery of data by the laboratories for pathological anatomy enabled the Belgian Cancer Registry to complete its study on the impact of COVID-19 on the number of new cancer diagnoses in our country.

In July, the Belgian Cancer Registry published the results of a first study on the impact of the corona crisis. This study showed that the number of cancer diagnoses* declined by nearly half in April 2020 when compared to April 2019. At that moment, the first wave of the corona crisis had just peaked in Belgium.

The most recent figures (up to September 18 this year) suggest that a recovery has been initiated. Compared to the same period in 2019, we find that the decrease in the number of cancer diagnoses between March 1 and September 18, 2020 amounts to just 14% of the number of last year's diagnoses. (Figure 1).

In absolute numbers, this means that about 5000 cancer diagnoses have not yet been made during the period of March-September. This number corresponds roughly to a month of cancer diagnoses in Belgium under normal circumstances (5.725 new cancer diagnoses^{*}).



After sharp decline during the first wave, stabilization from June

During the first wave of the pandemic, a marked decrease in the number of new cancer diagnoses was observed from March (**Figure 2**). This decline changed in April. The increase has continued progressively, and from the beginning of June throughout the summer, the number of new cancer diagnoses stabilized around normal values.

This trend shows a strong relationship between the number of confirmed COVID-19 infections and the number of hospital beds occupied because of COVID-19.



FIGURE 2

The daily results of the number of new cancer diagnoses were calculated based on a 7-day moving average.

Age and tumor type

To evaluate differences based on age and tumor type, the entire period from early March to mid-September 2020 was compared with the same period in 2019.

For patients aged 80 and over, the decline of 18% in newly diagnosed cancer cases is the highest of all age groups (**Figure 1**). A decrease of around 12% is seen among those from 65 to 79 years old and a decrease of around 16% is seen for patients aged 50 to 64 years. The decrease is smaller for age groups under 50 years. For those 35 to 49 years old, a decrease of 9% is seen and for those 20 to 34 years old, the decrease stands at 5%. The number of diagnoses in children and adolescents up to 19 years of age is comparable to last year. Compared to the first study (with figures available until the end of April), a catch-up movement has clearly started.

From March to September of this year, there were 22% fewer skin cancer cases diagnosed compared to the same period the year before (**Figure 3**). The decrease in bladder and kidney cancer is also just over 20%. The decrease in newly diagnosed head and neck cancer cases is 19% and 15% for prostate cancer. In haematological malignancies (cancers of the bone marrow or lymph nodes), the decrease remains 15% on average, but this group is very heterogeneous, and a limited impact is seen in acute leukaemias (2%). The decline is also less pronounced in other more aggressive cancers, especially lung cancer (10%), pancreatic cancer (9%) and oesophageal cancer (9%).



FIGURE 3

Explanation of cancer types:

- Acute leukaemias: Acute leukaemias (myeloid and lymphoblastic) and related neoplasms

- Lymphomas: Mature lymphomas and histiocytoses

Population screening

Non-essential medical examinations were temporarily discontinued from mid-March to early May. Population screenings for breast, cervical and colon cancer were also temporarily stopped and then gradually resumed (**Figures 4** and **5**).

Comparing the entire period from March 1 to September 18, 2020 with the same period last year, the number of colon cancer diagnoses declined by 18% in men and 22% in women. In the screening age group (50-74 years), this is 22% for both men and women. Breast cancer diagnoses show a smaller decline of 14% for all ages and 20% in the screening age group (50-69 years). For cervical cancer, the

effect of the first wave appears to be completely compensated and no decrease can be observed. This applies to both the screening age group and all ages combined.



FIGURE 4

The results of the daily number of cancer diagnoses were calculated based on a 14-day moving average.

FIGURE 5



The results of the daily number of cancer diagnoses were calculated based on a 14-day moving average.

Catch-up

This study with data available until mid-September indicates that a catch-up movement has started. This needs to continue further to compensate for the sharp drop in the number of diagnoses of new cancer cases during the first wave of the pandemic. The results show that the decrease in number of new case diagnoses compared to last year is greatest around the peak of the first wave, but even in the aftermath it took a few weeks before diagnosis numbers returned to average.

* all cancers with the exception of non-melanoma skin cancer

