**The journey to cancer centres of excellence**

**Explanation of the survey, method and analysis**

The purpose of this investigation is to determine which cancer centres are considered by medical specialists as cancer centres of excellence for specific tumour types. We want to make this view available to patients and general practioners because they don’t always know where the best cancer centres of excellence are located. A second objective is to initiate discussion about why cancer patients don’t always receive the best treatment when their postcode happens to be too far away from one of these top centres. This research is based on a opinion/perception survey among medical specialists and the result, therefore, does not constitute advice to patients but rather an additional source of information.

In the period from February 1 to March 1, 2020, the research agency IQVIA[[1]](#footnote-1) invited medical specialists to respond to the following question “Please indicate for the following oncological indications which cancer centres in the Netherlands, in your view, are the top 3 in terms of quality of care”.

During this period, this question was asked for the following oncological indications:

- Uterine cancer

- Bladder cancer

- Breast cancer

- Colon cancer

- Head and neck cancer

- Non-small cell lung carcinoma (NSCLC)

- Small cell lung carcinoma (SCLC)

- Melanomas

- Kidney cancer

- Ovarian cancer

- Pancreatic cancer

- Prostate cancer

- Oesophageal/stomach cancer

In the coming months, more medical specialists will be approached to both increase the number of respondents and also get a clearer picture of their vision for additional tumour types. In this respect, this study can be considered a “moving train” and more results will follow later in the year.

We currently consider it premature to publish the survey results for uterine, bladder, kidney, ovarian and prostate cancers. We expect to come back later this year with more information for these tumour types. The same goes for (non-) Hodgkin lymphoma, glioblastomas, head and neck cancer, leukemia, mesothelioma, multiple myeloma and myelodysplastic syndrome.

This also applies to tumour types which have not yet been included in the questionnaire, such as tumours in the field of haematology for example. Furthermore, question categories will become more detailed e.g. uterine cancer will be split into cervical cancer and uterine cancer, colon cancer into colon cancer and rectal cancer, and oesophageal and stomach cancers will be addressed individually. This only applies to the survey among medical specialists: it is definitely not our intention to compartmentalise the human body. It’s possible that the same cancer can occur in the stomach, oesophagus and in between. This is an example in which the super specialist in this type of cancer must fully master all three tumour sites.

This report should therefore be seen as a good first start - more responses are on the way and more results will follow this year.

Based on the results, we want to determine the top cancer centres of excellence per tumour type. As the data from a previous study[[2]](#footnote-2) showed, the distribution of the centres of excellence named by the medical specialists tends to be quite skewed. As an example, see Figure 1 in which the results of the previous survey regarding melanomas is shown. We can see that there is one hospital far out in front, followed by two other hospitals with 14 and 13 nominations before the curve quickly tails off. We saw this phenomenon for all tumour types examined in 2012 and we are seeing it again in 2020. According to the medical specialists, there seems to be a small number of cancer centres that are at the top. In light of this rapid tailing off, we choose to highlight three hospitals at the top for melanomas.

*Figure 1. Example of skewed distribution of hospital ranking for melanomas by medical specialists*

**Data collection**

IQVIA contacted 1 803 medical specialists (pulmonologists, radiotherapists, surgeons, pathologists, internist-haematologists and internist-oncologists) by email and/or letter. At this point in time, 167 medical specialists have responded and the response rate of 9% can be considered reasonably high for this survey method.

The fieldwork continues and the number of respondents will increase in the coming months. Special attention will be paid to medical specialisms where the response rate is currently relatively low.

The results of the tumour types that we report here are based on the responses from 76 medical specialists including many surgeons and internists. The response has been checked for representivity with regards to regional distribution across the Netherlands and the nature of the medical specialism and both were deemed acceptable.

As far as we can assess, the quality of the results is good. In some cases there are partial non-responses when a specialist has indicated “don't know” or hasn’t filled one of the fields.

We’ve also checked whether there are specialists who vote for themselves. This is a possibility, and although not considered a problem per se, the danger of respondents voting for their own hospital is always lurking. Finally no observations worth mentioning emerged from this audit[[3]](#footnote-3).

**Additional controls and reflection on the data and results**

Medical specialists were asked to: “Please indicate for the following oncological indications which cancer centres in the Netherlands, in your view, are the top 3 in terms of quality of care”. We have deliberately refrained from giving the specialist further guidance on how the term “quality” is defined, intended or experienced. On one hand, we are surveying highly-educated professionals and, on the other hand, the concept of quality is so vast and diverse that every additional detail could override the specialist's initial thoughts.

We have also refrained from including an additional question that read “Imagine that your partner, child or parent was diagnosed with (…) cancer, which centre would you send them to?”, the reason being that we strive for our research questions to be professional and pragmatic.

To reflect on the results, we looked at the extent to which the results discussed here were recognizable compared with data from the Dutch National Health Care Institute[[4]](#footnote-4). What emerged was that:

1. The results were globally recognizable.

2. In the future, a further nuance must be made between “being excellent” in diagnostics and in “being excellent” in treatment. The latter category can then be subdivided into surgery versus systemic or radiation treatment.

3. Health insurers have many relevant analyses which are sometimes made available to their policyholders upon request from the insured. This information can be requested online (by clients only) from Zilveren Kruis via <https://www.zilverenkruis.nl/Consumenten/zorgreken/Paginas/zorgrapportaanvragen.aspx>

Although the dataset from the medical specialists could be enriched with data from the Dutch National Health Care Institute, we have now decided not to do this. In this way, the picture from the medical specialists remains clear by letting them have their say about where they believe the top three cancer centres of excellence are located.

**In conclusion**

This is an important interim result of the survey conducted by Inspire2Go and IQVIA among medical specialists to find out which - according to them - are the top 3 cancer centres in the Netherlands in terms of quality of care.

The responses and distribution of the respondents have been carefully tested and new results will follow for other tumour types in the course of 2020.

On behalf of the research team of Inspire2Go and IQVIA,

Prof. Dr. H.M.P. Kersten

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**Results as of March 1 2020**

As mentioned, results for more tumour types will follow later this year and will be published on the Inspire2Go website.

Please find below the results collected so far for 7 different tumour types:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Breast cancer** | **Colon cancer** | **Melanomas** | **Pancreatic cancer** | **NSCLC** | **SCLC** | **Oesophageal/ stomach cancer** |
| Amsterdam UMC, AMC site |  | 21 |  | 29 |  |  | 18 |
| Amsterdam UMC, VU site |  |  |  |  | 8 | 6 |  |
| Antoni van Leeuwenhoek | 39 | 14 | 32 | 10\* | 28 | 23 | 7 |
| Erasmus MC | 14 | 11 | 14 | 22 | 17 | 16 | 20 |
| Maastricht UMC+ | 10 |  |  |  |  |  |  |
| Radboud UMC |  |  | 13 |  |  |  |  |
| UMC Utrecht, AZU site | 8 | 15 |  | 6 |  |  | 7 |
| UMCG Groningen |  |  |  | 6 | 9 | 8 |  |
| Nominations other hospitals | 25 | 26 | 30 | 19 | 24 | 16 | 23 |
| **Total number nominations** | **96** | **87** | **89** | **92** | **86** | **69** | **75** |

*\* During the analysis of the results, it emerged that AVL does not treat patients with pancreatic cancer. It would seem that AVL’s international reputation in the field of pancreatic cancer research is reflected in these 10 nominations.*

Table 1: Dutch cancer centres that are considered by the medical specialists to be among the top

1. *See https://www.iqvia.com/* [↑](#footnote-ref-1)
2. *Key Opinion Leaders Oncologie, 2012, Cegedim* [↑](#footnote-ref-2)
3. *In total 5% of the respondents nominated their own hospital which doesn’t change the total picture* [↑](#footnote-ref-3)
4. [*https://english.zorginstituutnederland.nl/*](https://english.zorginstituutnederland.nl/) [↑](#footnote-ref-4)