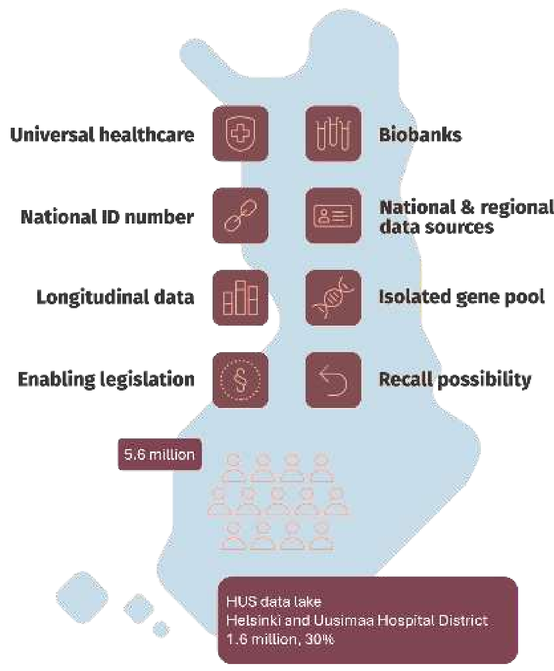
Relative survival in selected cancers in the Helsinki and Uusimaa region versus NORDCAN estimates for Finland and other Nordic countries, 2014–2023

EPH80

Ling Zhu[2], Johanna Vikkula[1], Johan Rehnberg[2], **Bettina Mannerström**[1]
[1] Medaffcon Oy, Espoo, Finland, [2] Medaffcon AB, Stockholm, Sweden

Medaffcon's Collaboration Research (CORE) dataset

- A retrospective registry-based cohort investigation in Helsinki and Uusimaa region (HUS) data lake
- All patients with cancer diagnosis (C00-C99*; '*' indicates any character) starting from 2013 are included in the cohort and the dataset is updated continuously
- The dataset includes all diagnoses, healthcare contacts (outpatient and inpatient visits), laboratory measures, pathological tests and results, procedures and operations, hospital medications and prescriptions, radiological tests and results from the baseline and follow-up period.



BACKGROUND

Recent NORDCAN-based comparisons in the media have prompted discussion about cancer survival in Finland relative to other Nordic countries, yet the Finnish estimates may be affected by incomplete national Cancer Registry data.

OBJECTIVES

This study aimed to estimate relative survival (RS) for selected cancers using register data from the Helsinki and Uusimaa (HUS) region, covering approximately 30% of the Finnish population, and compare these with corresponding NORDCAN (https://nordcan.iarc.fr/en) benchmarks.

METHODS

This retrospective study included patients diagnosed with multiple myeloma [C90], non-Hodgkin lymphoma [C82–C86, C96], or lung [C33–C34], cervical [C53], liver [C22], kidney [C64] or colorectal cancer [C18–C20] in the HUS region in 2014–2023. Age-standardized 1- and 5-year RS estimates were stratified by sex, cancer type and diagnosis period, 2014–2018 or 2019–2023, and compared with NORDCAN estimates and confidence intervals. This poster presents the results for the latter time period, i.e. 2019-2023.

RESULTS

- **Overall:**
  - Across cancers, sexes and diagnosis periods, HUS CORE 1- and 5-year RS generally matched or exceeded NORDCAN Finland (Figure 1), except cervical cancer (Figure 1A-B).
  - HUS CORE and NORDCAN Sweden had higher point estimates than NORDCAN Finland for most outcomes, particularly at 5 years (Figure 1).
- **Higher 5-year RS:** HUS CORE versus NORDCAN Finland (Table 1):
  - **Multiple myeloma**
    Women: 70% vs 59% Men: 70% vs 56%
  - **Lung cancer**
    Women: 41% vs 29% Men: 25% vs 17%
  - **Colorectal cancer**
    Women: 77% vs 72% Men: 73% vs 68%

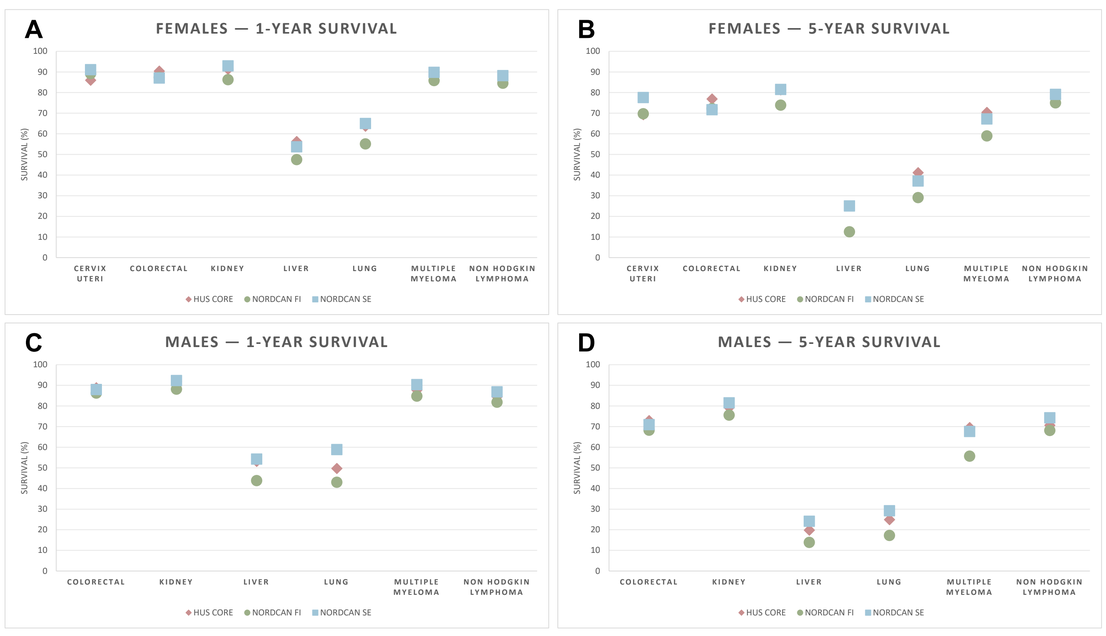


Figure 1. Age-standardized relative survival (%) for selected cancers in 2019–2023, comparing HUS CORE with NORDCAN Finland and Sweden. (A) Females, 1 year. (B) Females, 5 years. (C) Males, 1 year. (D) Males, 5 years.

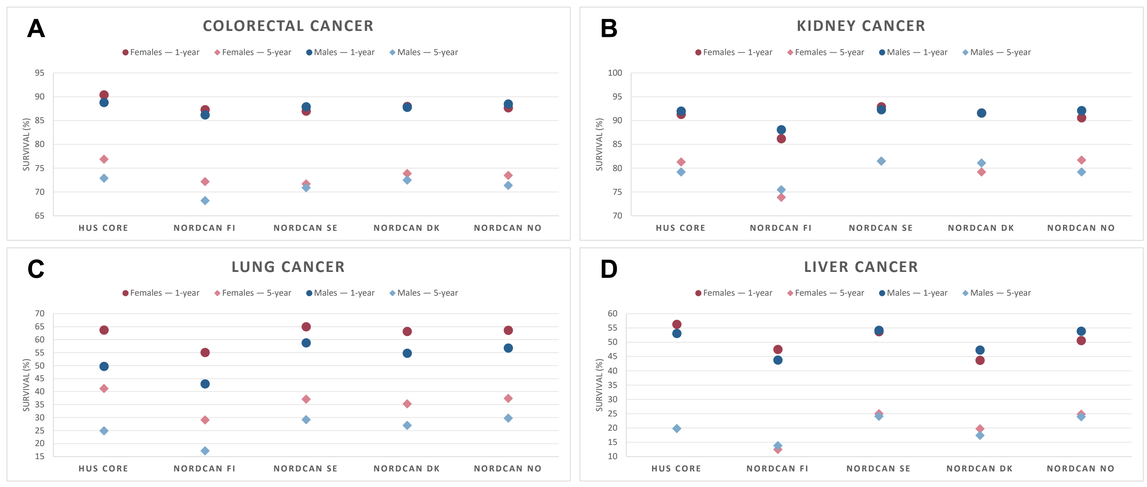


Figure 2. Age-standardized 1- and 5-year relative survival (%) by sex in 2019–2023, comparing HUS CORE with NORDCAN estimates for Finland, Sweden, Denmark and Norway. (A) Colorectal cancer. (B) Kidney cancer. (C) Lung cancer. (D) Liver cancer.

Nordic comparison: HUS CORE estimates were similar to NORDCAN Sweden, Denmark and Norway, with minor variation by cancer type, sex or diagnosis period (Figure 2).

Table 1. Five-year relative survival estimates with 95% confidence intervals for seven cancers, stratified by sex, comparing HUS CORE with NORDCAN Finland and Sweden in 2019–2023. Female liver cancer age-standardized 5-year survival was not available for HUS CORE.

Cancer type	Sex	HUS CORE 5-year	NORDCAN FI 5-year	NORDCAN SE 5-year
Cervix uteri	Female	**69.3%** (60.6–79.3)	**69.7%** (66.2–73.4)	**77.6%** (75.8–79.6)
Colorectal	Female	**76.9%** (74.5–79.3)	**72.2%** (71.0–73.4)	**71.7%** (70.8–72.6)
Colorectal	Male	**72.9%** (70.4–75.4)	**68.2%** (66.9–69.4)	**70.9%** (70.0–71.7)
Kidney	Female	**81.3%** (76.7–86.2)	**73.9%** (71.5–76.3)	**81.5%** (79.4–83.7)
Kidney	Male	**79.2%** (75–83.7)	**75.5%** (73.3–77.8)	**81.5%** (79.7–83.3)
Liver	Female	NA	**12.5%** (9.8–16.0)	**25.0%** (22.4–28.0)
Liver	Male	**19.8%** (16.1–24.4)	**13.8%** (11.9–16.0)	**24.1%** (22.3–26.1)
Lung	Female	**41.2%** (38.1–44.6)	**29.1%** (27.4–30.9)	**37.1%** (35.9–38.3)
Lung	Male	**24.9%** (22.3–27.9)	**17.2%** (16.0–18.5)	**29.2%** (27.9–30.6)
Multiple myeloma	Female	**70.4%** (65.2–76)	**59.0%** (55.8–62.3)	**67.2%** (64.7–69.8)
Multiple myeloma	Male	**69.5%** (63.7–75.8)	**55.6%** (52.4–59.1)	**67.6%** (65.4–69.9)
Non-Hodgkin lymphoma	Female	**77.0%** (74.1–80.1)	**75.0%** (73.2–76.8)	**79.1%** (77.6–80.7)
Non-Hodgkin lymphoma	Male	**70.6%** (67.2–74.2)	**68.1%** (66.3–70.0)	**74.2%** (72.8–75.7)

Estimates are percentages; ranges in parentheses show 95% confidence intervals. NA = not available.

CONTACT

For more information, please contact Medaffcon Oy:

Bettina Mannerström (Sr Scientific Advisor)

bettina.mannerstrom@medaffcon.fi

CONCLUSIONS

These preliminary HUS CORE findings suggest a more favorable picture of cancer survival in Finland than recent NORDCAN-based interpretations imply.

- HUS CORE survival estimates were comparable with NORDCAN estimates for Finland and other Nordic countries.
- Regional register data provide complementary evidence for benchmarking cancer outcomes and interpreting national survival estimates.
- Limitation: the potentially incomplete NORDCAN data in the other Nordic countries was not accounted for.