Familial cancer among gastric cancer survivors

There seems to be a correlation between gastric cancer and uterine cancer in the families of gastric cancer survivors.

Further analysis is ongoing and will show, if that can be explained by Lynch syndrome or if there is an independent correlation.

In addition, many cases of prostate cancer were found among the relatives and even among the index patients; pedigrees in these families will be analysed in detail.

Introduction
Although most gastric cancers are sporadic, familial aggregation is seen in about 10% of the cases. As an attempt to contribute to further understanding of genetic predisposing factors to gastric cancer, we have analysed 107 patients who survived gastric cancer. The family history of cancer cases was registered and pedigrees created, in search for connections between gastric cancer and other cancer types.

Method
Within Stockholm, all patients previously diagnosed with gastric cancer and still alive were invited to participate in the study. Those who accepted were asked to answer a questionnaire regarding cancer diagnoses in their family. A blood sample for DNA extraction was collected. The proportions of different cancer types in the relatives of the patients were compared to the general Swedish cancer population in 1970 and 2010.

Results
Among first- and second degree relatives to the gastric cancer patients, the proportion of uterine cancer as well as gastric cancer was significantly overrepresented compared to the general cancer population.

We also found an interesting, although non-significant, overrepresentation of prostate cancer among the relatives. The proportion of breast cancer was significantly lower.