

Agilent gene expression microarray raw data for STO-3

SND-ID: 2021-340-1. **Version:** 1. **DOI:** <https://doi.org/10.5878/3vxa-3c28>

Associated documentation

List_of_probes_STO3_Agilent_microarray_gMeanSignals_652.txt (711.31 KB)

Citation

Johansson, A., & Lindström, L. (2022) Agilent gene expression microarray raw data for STO-3 (Version 1) [Data set]. Karolinska Institutet. Available at: <https://doi.org/10.5878/3vxa-3c28>

Creator/Principal investigator(s)

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Description

Agilent microarray profiling of primary breast tumors in the Stockholm tamoxifen trial (STO-3) was performed in 2014. The STO-3 trial enrolled 1780 postmenopausal lymph node-negative patients with tumors smaller than or equal to 30 mm and were randomized to tamoxifen vs no endocrine therapy. Molecular analysis was possible for 808 patients with available formalin-fixed paraffin-embedded (FFPE) tissue blocks from the primary breast cancer tumor. Eighty-one patients were excluded from analysis due to insufficient invasive tumor cells, leaving 727 samples available for further analysis. Gene expression data were independently generated using custom-designed arrays, Agilent Technologies (CA, USA), containing approximately 32.1K probes, representing approximately 21.5K unique genes from FFPE breast cancer tumor tissue. 652 of 727 breast cancer tumors passed the RNA quality check according to the diagnostic quality model and were used in the analysis, of which 538 were ER-positive.

The dataset consists of a table in one (1) txt file containing: Gene expression data (Agilent custom 32K microarray) generated in 2014 for 652 primary tumors from the STO-3 trial. The variables are the 31195 probes included in the Agilent microarray used to generate the data.

File name: STO3_Agilent_microarray_gMeanSignals_652.txt

The 31195 probes included in the Agilent microarray used to generate the data are listed and mapped to gene names in an annotation file.

Annotation file name: List_of_probes_STO3_Agilent_microarray_gMeanSignals_652.txt

Data contains personal data

Yes

Sensitive personal data

Yes

Type of personal data

Pseudonymised data

Code key exists

Yes

Language

[English](#)

Population

Breast cancer patients diagnosed in Stockholm 1976-1990

Study design

Randomised controlled trial (RCT)

Biobank is connected to the study

This study has used existing samples from a scientific collection or biobank

Scientific collection or biobank name: Biobank Sverige, Stockholm tamoxifenstudierna (STO)

Type(s) of sample: formalin-fixed paraffin-embedded (FFPE) primary breast tumors

Variables

31195

Number of individuals/objects

652

Data format / data structure

[Numeric](#)

Data collection 1

- Mode of collection: Registry extract and/or access to biobank sample
- Time period(s) for data collection: 2013 - 2014
- Source of the data: Biological samples

Geographic spread

Geographic location: [Stockholm County](#)

Responsible department/unit

Department of oncology-pathology

Ethics Review

Stockholm - Ref. 2017/2066-32, 97-451, 76-51.

The STO-3 trial was approved by the ethics committee at Karolinska Institutet and participants provided oral consent. The trial was conducted at the Regional Cancer Center Stockholm-Gotland, Sweden, and began in 1976

Research area

[Genetics](#) (Standard för svensk indelning av forskningsämnen 2011)

[Cancer and oncology](#) (Standard för svensk indelning av forskningsämnen 2011)

Keywords

[Breast neoplasms](#), [Tamoxifen](#), [Gene expression](#), [Clinical trial](#)

Publications

Johansson & Lindström et al., Clinical and Molecular Characteristics of ER-Positive Ultralow Risk Breast Cancer Tumors Identified by the 70-Gene Signature, International Journal of Cancer, 2022

DOI: <https://doi.org/10.1002/ijc.33969>

Accessibility level

Access to data through SND

Access to data is restricted

Use of data

[Things to consider when using data shared through SND](#)

Versions

Version 1. 2022-03-02

Contacts for questions about the data

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Download metadata

[DataCite](#)

[DDI 2.5](#)

[DDI 3.3](#)

[DCAT-AP-SE 2.0](#)

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