

The FABP5 gene expression is significantly higher in triple-negative sporadic than hereditary breast cancer tissues

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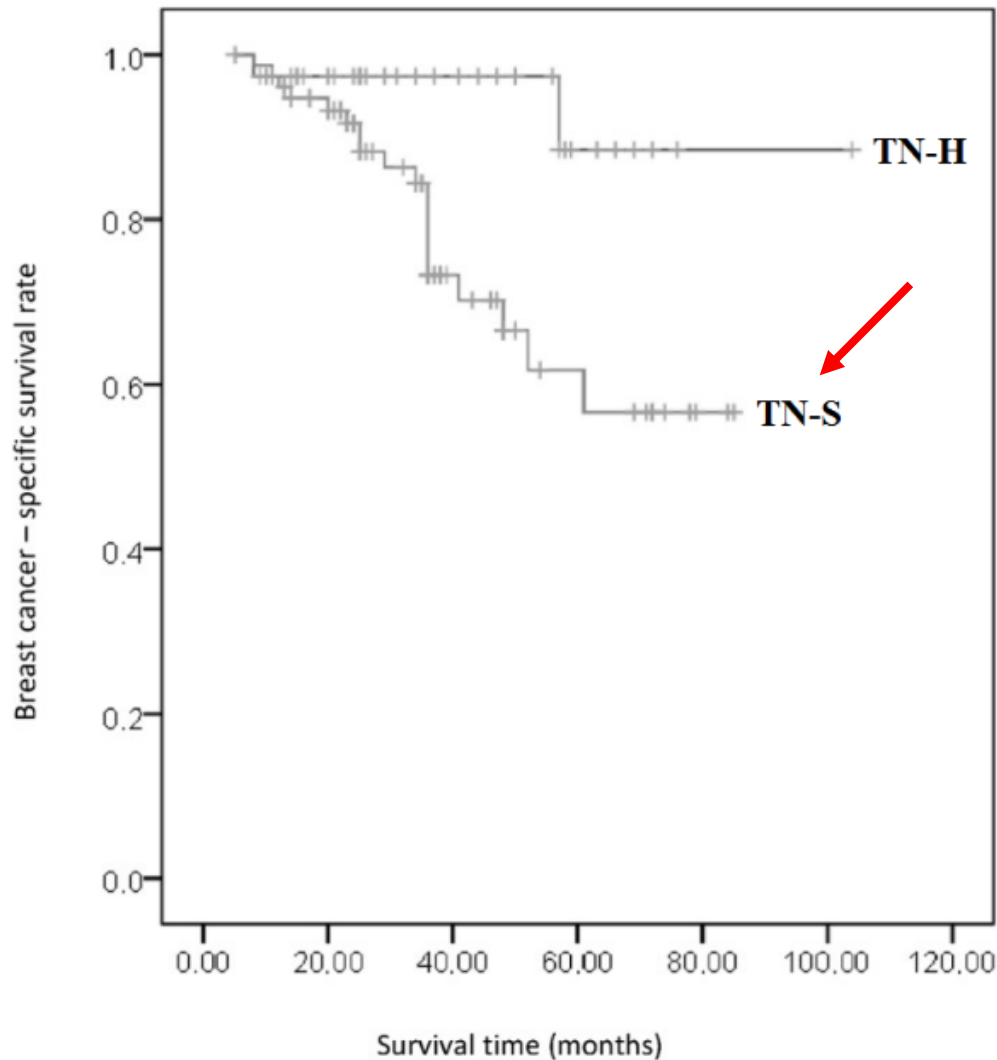
VITA BREVIS ARS LONGA

Triple negative breast cancer (TNBC)

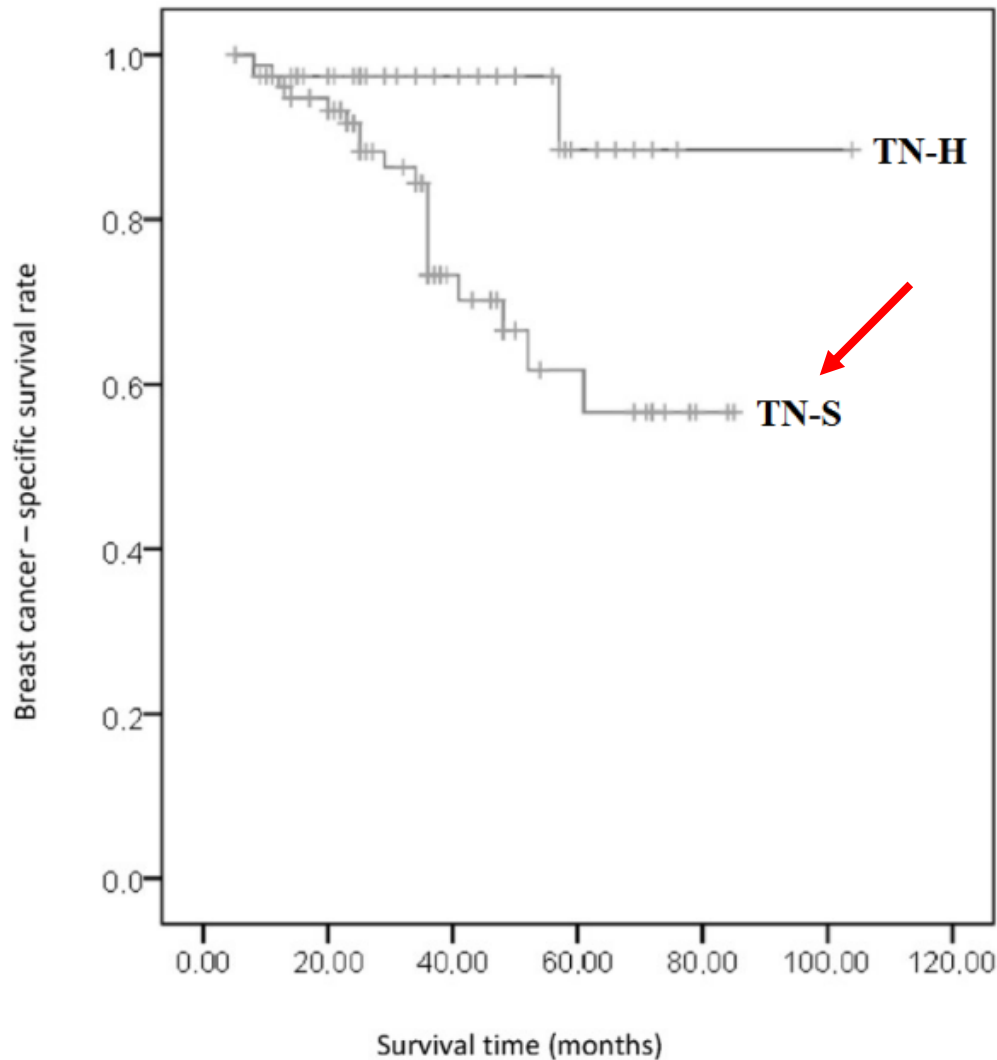


- Heterogenous disease
- TNBC → 12-17%
- Do not express →
 - » Estrogen
 - » Progesterone
 - » HER2
- Hereditary – 5-10%

<http://www.healthline.com/health-slideshow/triple-negative-breast-cancer-recurrence>



- Sporadic TNBC has worse recurrence-free survival rate than hereditary TNBC patients



- Sporadic TNBC has worse recurrence-free survival rate than hereditary TNBC patients;
- Sporadic TNBC is larger in size and less sensitive to chemotherapy.

THE AIM OF THE STUDY

To determine different gene expression in sporadic and hereditary triple negative breast cancer patients.

STUDY GROUPE

	Amount of patients
Hereditary TNBC	11
Sporadic TNBC	12
In total	23

METHODS

- RNA extraction
- Gene expression analysis : Whole-Genome DASL HT Assay
- qPCR
- Reverse Transcription
- Data analysis

RESULTS

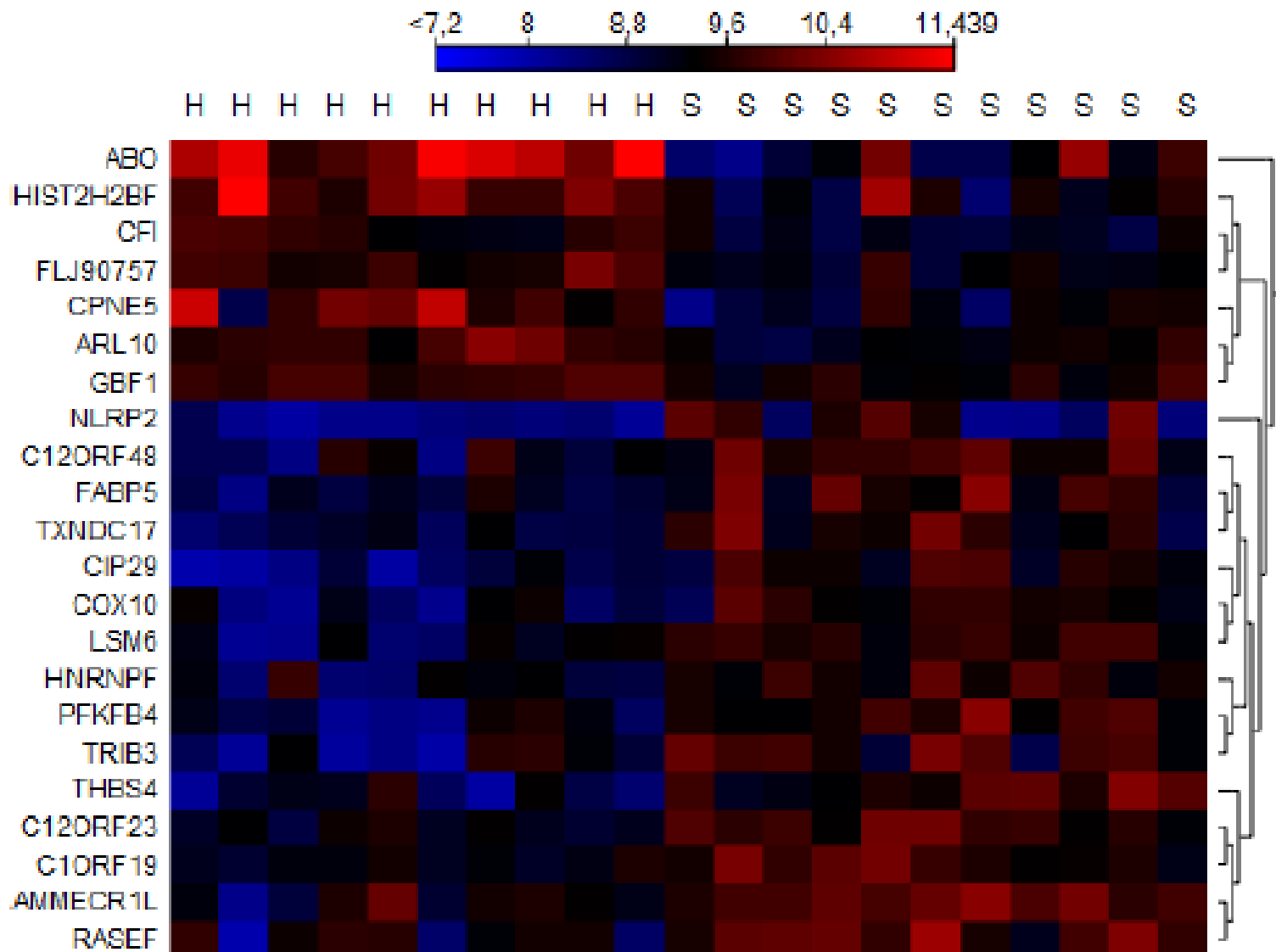


Figure 1. Gene expression profile differences between hereditary and sporadic TNBC groups; $p < 0,0005$. Kalniete et.al. 2015

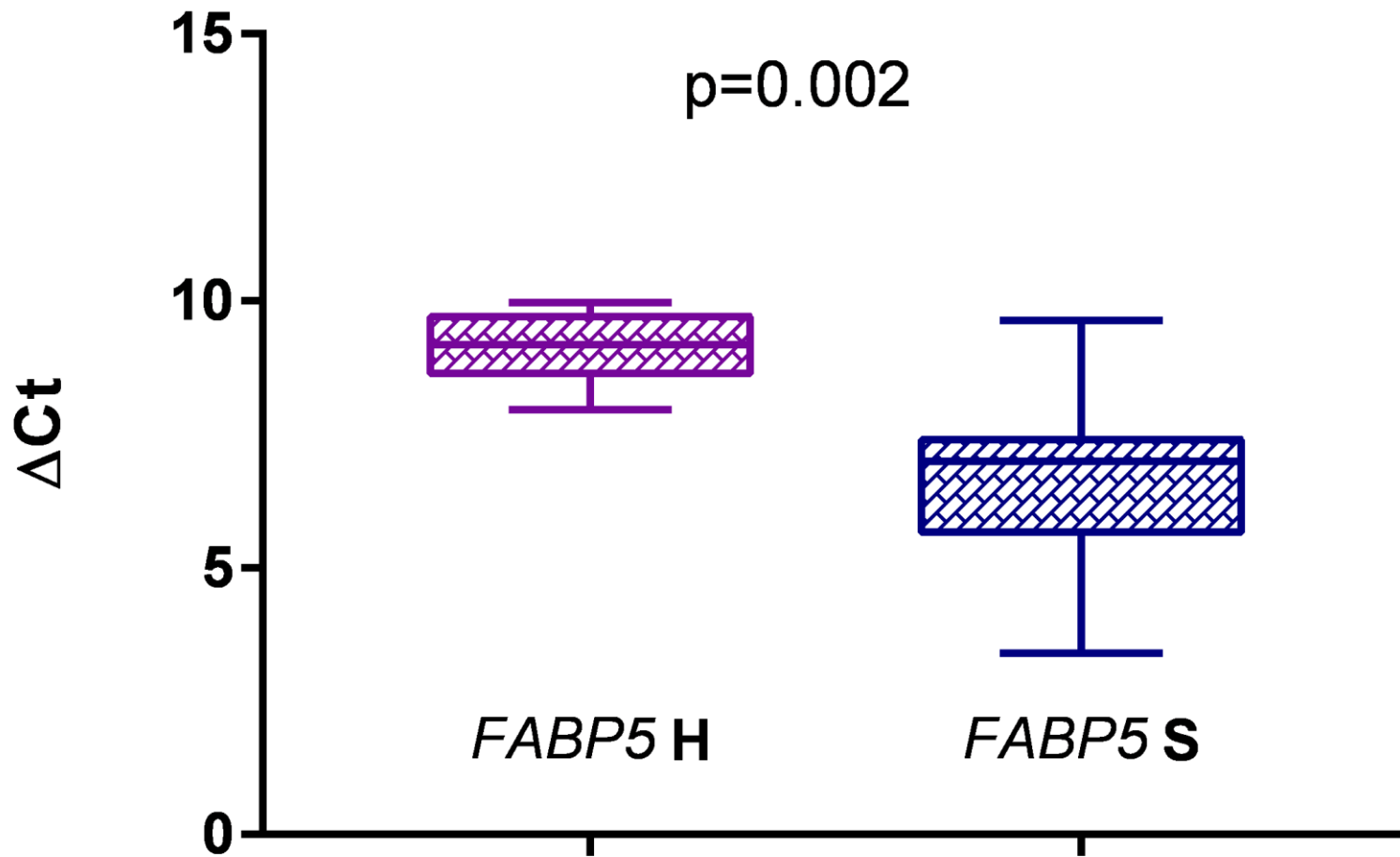


Figure 2. *FABP5* gene expression differences in sporadic and hereditary TNBC; $p=0.002$.

FABP5 – fatty acid binding protein 5

- A member of the intracellular lipid binding protein family;
- Is associated with several malignancies – colon, prostate, breast;
- Plays role in inflammatory and metabolic diseases;
- Promotes motility, invasion, growth and metastasis.

CONCLUSION

High expression of the *FABP5* gene in TNBC tissues may be the possible cause for sporadic TNBC patients to have worse disease specific survival than hereditary TNBC patients.

Thank you for your attention!