

H. Wooten<sup>1,2</sup>, M. Keller<sup>2</sup>, E. I. Braicu<sup>1,2</sup>, D. Zocholl<sup>3</sup>, P. Krabisch<sup>2,4</sup>, T. Boxler<sup>2,5</sup>, P. Barretina-Ginesta<sup>6</sup>, C. Mendiola<sup>7</sup>, J. Lafleur<sup>8</sup>, D. Reimer<sup>9</sup>, V. Heinzelmann<sup>10</sup>, E. Samartzis<sup>11</sup>, M. A. Vardar<sup>12</sup>, C. Taskiran<sup>13</sup>, I. Vergote<sup>14</sup>, E. van Nieuwenhuysen<sup>14</sup>, J. Sehouli<sup>1,2</sup>

<sup>1</sup> European Competence Center for Ovarian Cancer (EKZE), Department of Gynecology, Charité – University Medicine of Berlin, Campus Virchow Klinikum, Augustenburger Platz 1, 13353 Berlin, Germany | <sup>2</sup> North-Eastern German Society of Gynecological Oncology (NOGGO), Schwedenstr. 9, 13359 Berlin, Germany | <sup>3</sup> Institute for Biometrics and Klinische Epidemiology, Charité – University Medicine of Berlin, Charitéplatz 1, 10117 Berlin, Germany | <sup>4</sup> Oncological Center Chemnitz, Flemmingstraße 4, 09116 Chemnitz, Germany | <sup>5</sup> Gynecological Cancer Center Fürth, Jakob-Henle-Straße 1, 90766 Fürth, Germany | <sup>6</sup> Grupo Español de Investigación en Cáncer de Ovario (GEICO) and Medical Oncology Department, Catalan Institute of Oncology (ICO)Girona, Spain | <sup>7</sup> Grupo Español de Investigación en Cáncer de Ovario (GEICO) and University Hospital 12 de Octubre, Madrid, Spain | <sup>8</sup> AGO Austria and Ordensklinikum Barmherzige Schwestern Linz, Seilerstätte 4, 4010 Linz, Austria | <sup>9</sup> AGO Austria and Department of Obstetrics and Gynecology, Innsbruck Medical University, Austria | <sup>10</sup> Swiss GO and Universitätsspital Basel, Petersgraben 4, 4031 Basel, Switzerland | <sup>11</sup> Swiss GO and Universitätsspital Zürich, Department for Gynecology, Frauenklinikstrasse 10, 8091 Zürich, Switzerland | <sup>12</sup> Turkish Society of Gynecologic Oncology (TRSGO) and Cukurova University School of Medicine Department of Gynecologic Oncology Balcali, Çukurova Üniversitesi Rektörlüğü, 01330 Sarıçam/Adana, Turkey | <sup>13</sup> Turkish Society of Gynecologic Oncology (TRSGO) and Professor Koc University School of Medicine and VKV American Hospital, Department of Obstetrics and Gynecology, Division of Gynecologic Oncology, Tesvikiye Guzelbahce Sk. No:20, PC: 34365 Sisli, Istanbul, Turkey | <sup>14</sup> Belgium and Luxembourg Gynaecological Oncology Group (BGOG) and Department of Gynecologic Oncology, Leuven Cancer Institute, University Hospitals Leuven, KU Leuven, Leuven, Belgium

### BACKGROUND

Long-term survivors (LTS) with ovarian cancer may be cured from cancer, but frequently experience long-term toxicities such as fatigue with a huge impact on quality of life. Aim of this study was to evaluate factors associated with fatigue in LTS.

### PATIENT'S AND METHODS

Within the study “Carolin meets HANNA” (www.carolinmeetsHANNA.com) long-term survivors with ovarian cancer (LTS) were recruited since 11/2016. Long-term survival was defined as an ovarian cancer diagnosis more than eight years ago. The anonymous survey “Expression VI” can be filled out paper-based or online and consists of 68 questions.

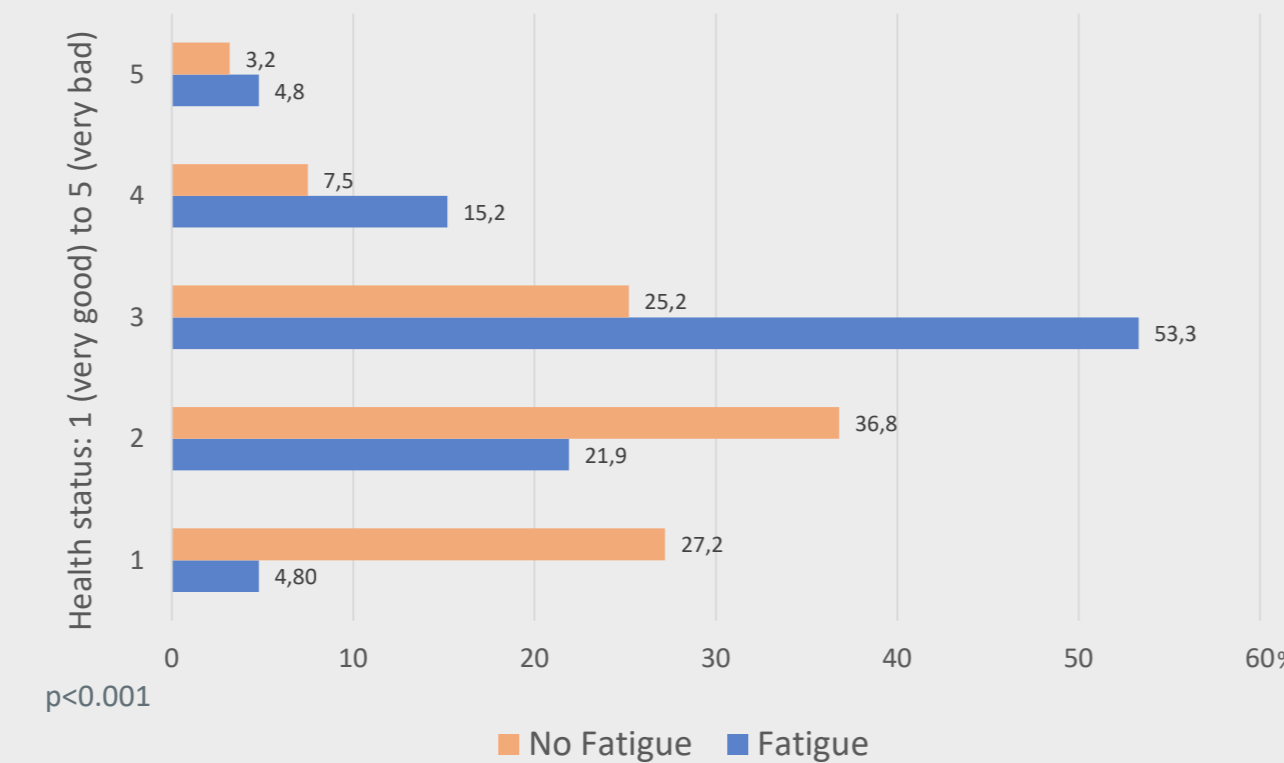
### RESULTS

So far 473 long-term survivors from 40 centers (26 sites in Germany, 6 in Austria, 5 in Switzerland, 1 in Belgium, 2 in Turkey) could be included in this analysis. The study is still recruiting and open in Austria, Belgium, Czech Republic, Germany, Hungary, Romania, Saudi-Arabia, Slovakia, Slovenia, Spain, Switzerland, Turkey, Ukraine.

- 211 LTS (44.5%) have experienced fatigue.
- At the time point of recruitment in 23.4% (111 LTS) fatigue was still present.
- There were no differences in comorbidities prior to cancer diagnosis (except for dyslipidemia p=0.05)
- There was no differences in the amount of medication (means: LTS with fatigue 4.6 vs. 3.4 in LTS w/o fatigue, p=0.17)
- Lifestyle factors:
  - No difference regarding physical activity before diagnosis and at timepoint of recruitment
  - Tendency that LTS with fatigue have never smoked (68.8% vs. 56.5%, p=0.06)
  - No difference in alcohol consumption

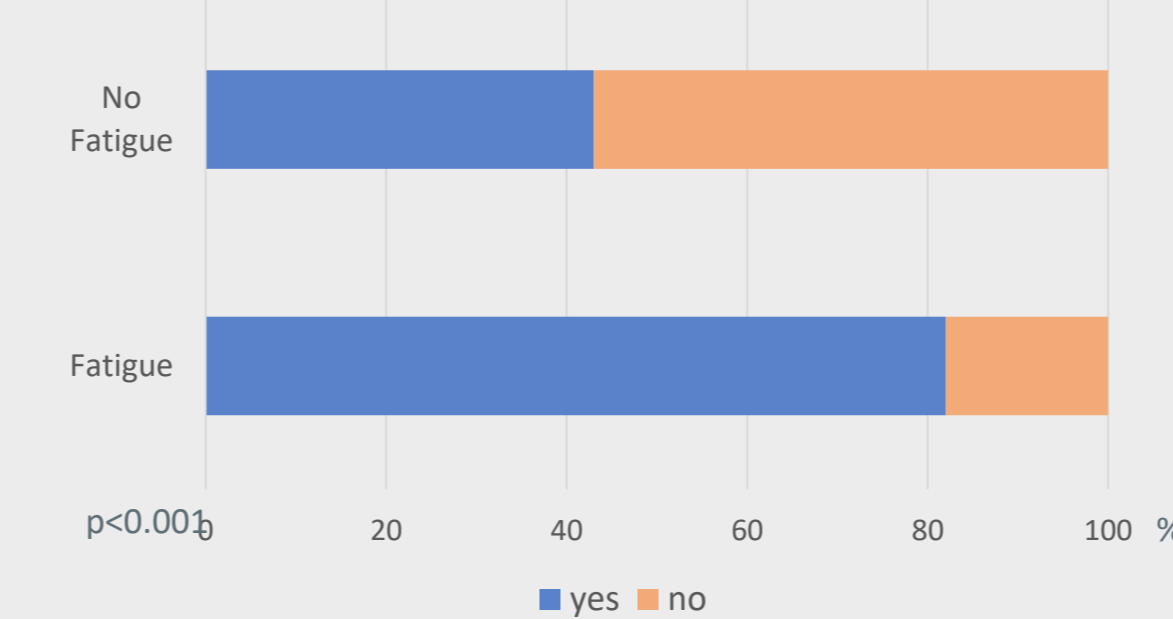
Table 1: Patients' characteristics				
n=473		Fatigue	No Fatigue	p value
		111 (23.4%)	362 (76.5%)	
Median age	years	52	53	0.2
FIGO (n=221)	I	5 (4.5%)	48 (13.3%)	0.002
	II	10 (9.0%)	27 (7.5%)	
	III	39 (35.1%)	75 (20.7%)	
	IV	8 (7.2%)	9 (2.5%)	
Primary surgery		99.6%		
Differences in surgical procedures	omentectomy	73 (65.8%)	173 (47.7%)	0.0008
	Lymphonodectomy	77 (69.4%)	218 (60.1%)	0.08
	Partial liver resection	5 (4.5%)	6 (1.7%)	0.08
Adjuvant chemotherapy		106 (95.5%)	320 (88.6%)	0.03
Current treatment		38 (34.5%)	102 (29.25%)	0.35
<b>Situation at recurrence</b>				
Recurrent disease (n=470)		65 (58.6%)	149 (41.2%)	0.001
Amount of recurrences (n=270)	Once	21 (18.9%)	70 (19.3%)	0.055
	More than once	41 (36.9%)	75 (20.7%)	
Surgery at recurrence (n=211)		55 (85.9%)	121 (82.3%)	0.5
	Lymphonodectomy	23 (20.7%)	47 (12.95%)	0.04
Differences in surgical procedures	Bowel resection	19 (92.1%)	39 (10.75%)	0.07
Chemotherapy at recurrence (n=207)		58 (92.1%)	130 (90.3%)	0.7

**LTS with fatigue have a worse health status compared to LTS without fatigue**



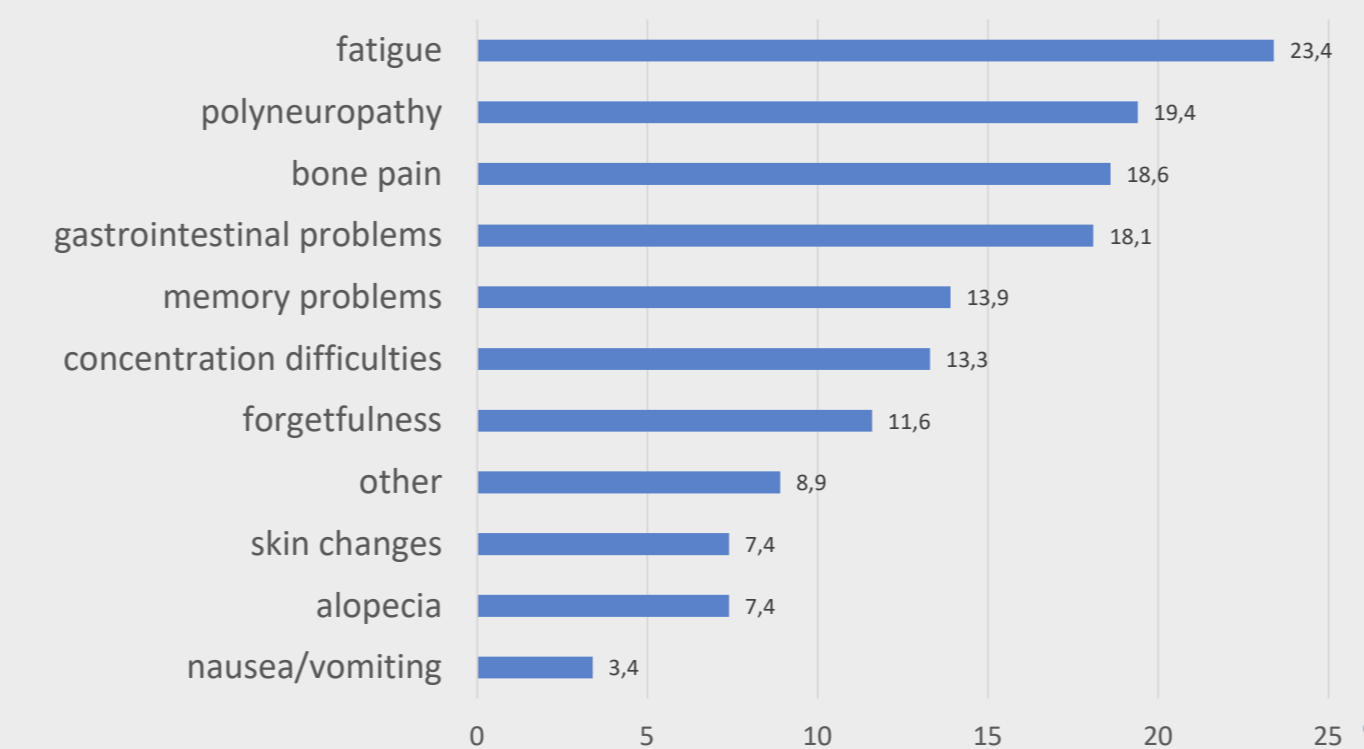
**Figure 1: Evaluation of current health situation**

**Fatigue was associated with medical complaints at the timepoint of recruitment (p<0.001)**



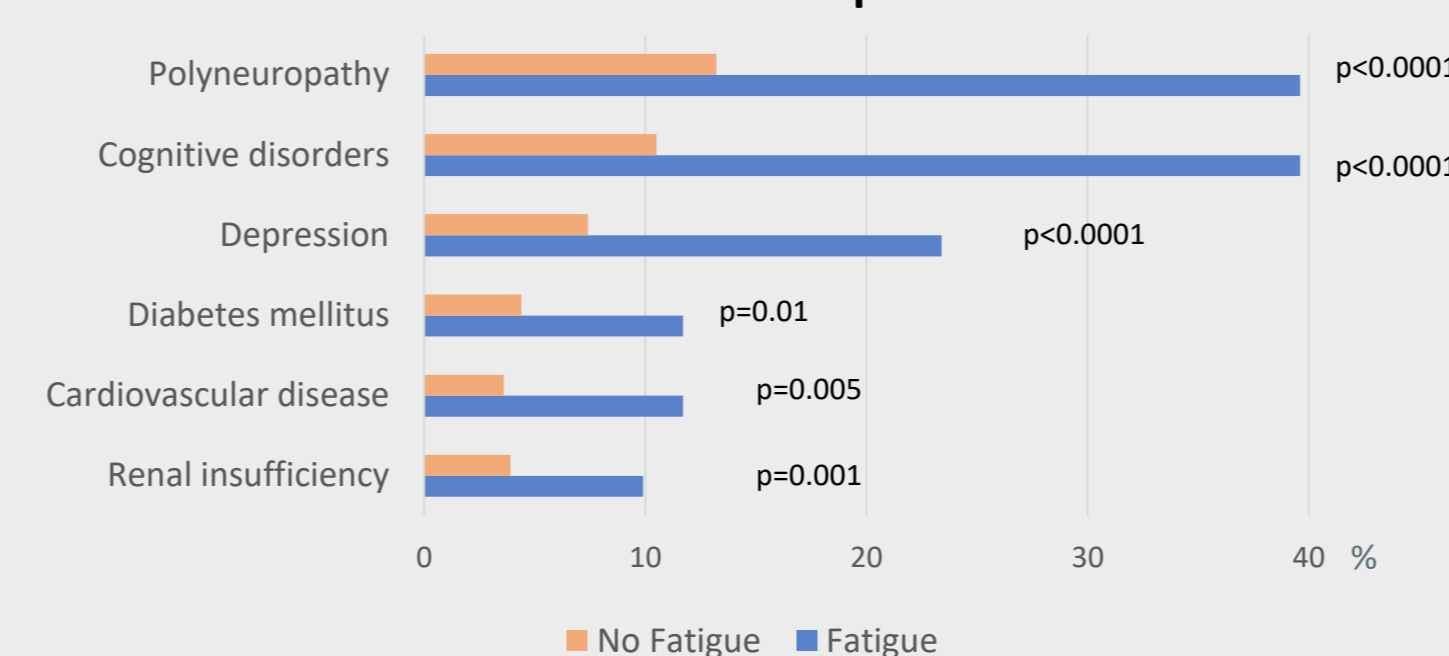
**Figure 2: Current medical complaints**

**Long-term survivors experience still many side effects**



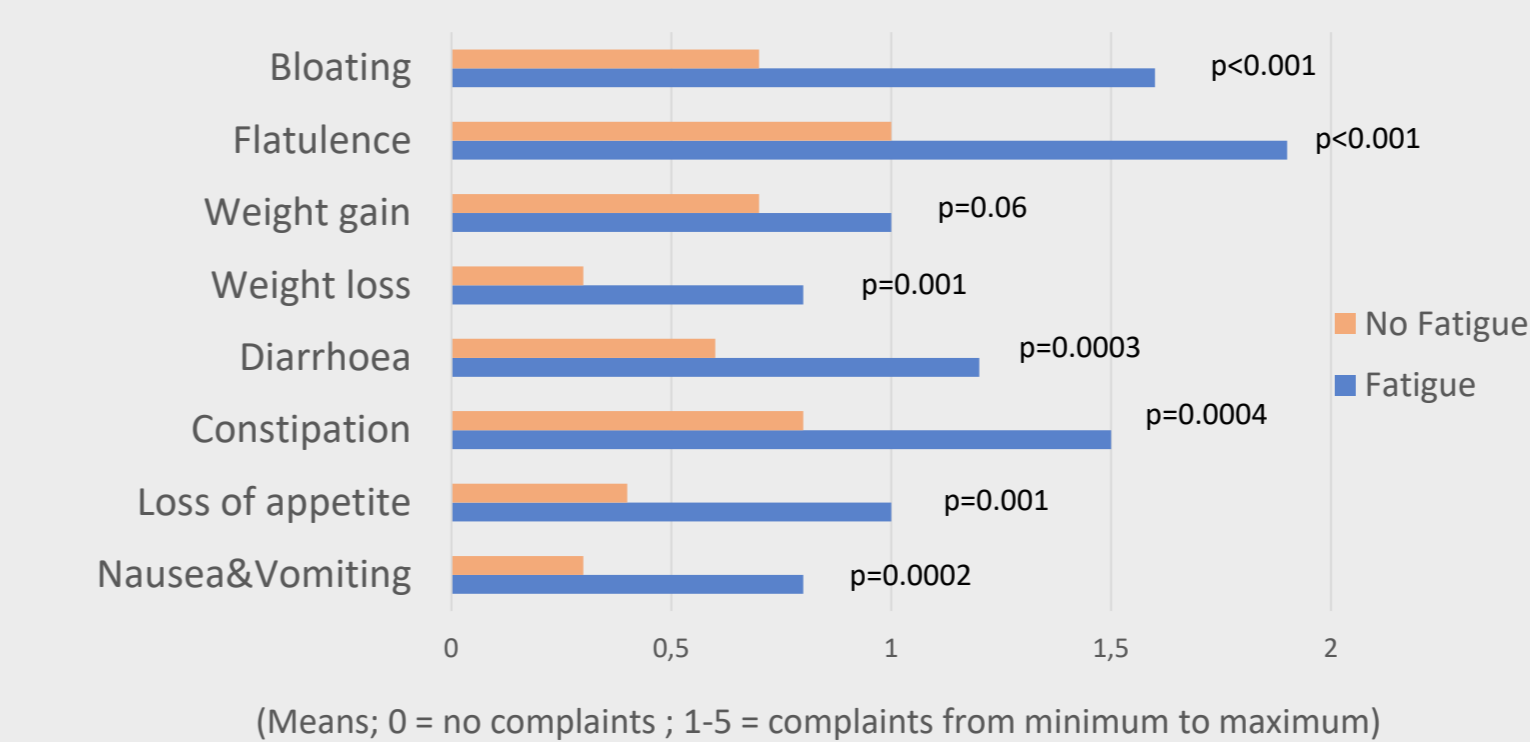
**Figure 3: Side effects that are still present**

**Especially neurological side effects are still present in LTS with fatigue**



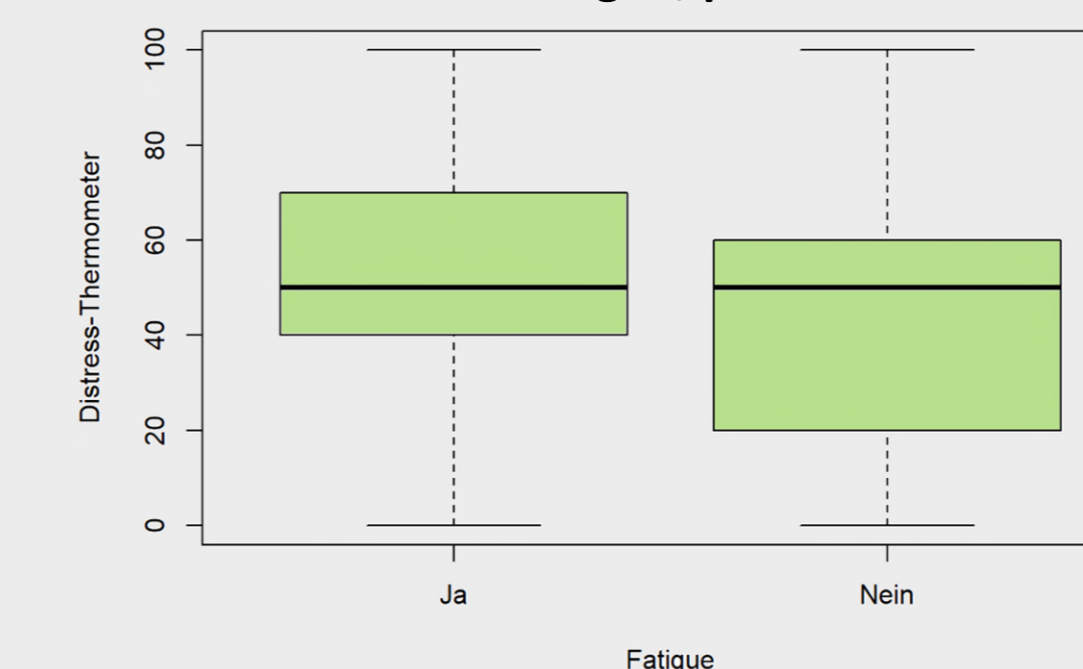
**Figure 4.1: Current complaints/diagnoses in association with fatigue**

**LTS with fatigue have more frequently current gastrointestinal complaints compared to LTS without fatigue**



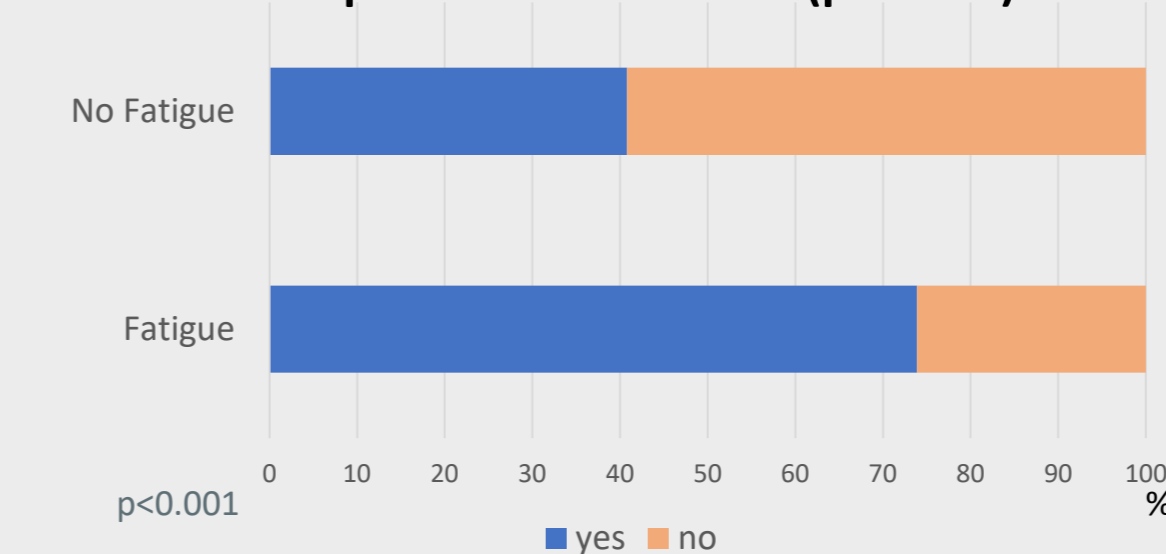
**Figure 4.2 Current gastrointestinal complaints in association with fatigue**

**LTS with fatigue show higher distress levels compared to LTS without fatigue, p=0.0002.**



**Figure 5: Distress-Thermometer**

**Fatigue was associated with medical complaints at the timepoint of recruitment (p<0.001)**



**Figure 6: Do you still regard yourself as cancer patient?**

### CONCLUSIONS

Fatigue is very common in long-term survivors. Fatigue is associated with worsened health status and several long-term side effects underlining the impact on LTS.

Therefore systematic evaluation of fatigue and development of treatment options should be established for long-term survivors.

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### CONTACT

hannah.woopen@charite.de  
carolin-meets-hanna@charite.de  
www.carolinmeetshanna.com

