**Supplemental Material**

From a Clustering of Adverse Symptoms After Colorectal Cancer Therapy to Chronic Fatigue and Ability to Work: A Cohort Study Analysis with 3 Months of Follow-up

**Table of contents**

[**Suppl. Table S1.** Comparison of important baseline characteristics of participants who completed the 3-month follow-up, non-responding participants, and with late recruited participants who did not have a chance yet to participate in the 3-month follow-up 2](#_Toc151733982)

[**Suppl. Table S2.** Interfactor correlation matrix of the identified 6 factors 3](#_Toc151733983)

[**Suppl. Table S3.** Longitudinal associations of baseline covariates with the change in the fatigue score until 3-month follow-up 4](#_Toc151733984)

[**Suppl. Table S4.** Longitudinal associations of symptoms at baseline with the change in the fatigue score until 3-month follow-up 5](#_Toc151733985)

[**Suppl. Table S5.** Longitudinal associations of symptoms at with the change in the fatigue score until 3-month follow-up , subgroup analysis by sex 6](#_Toc151733986)

[**Suppl. Table S6.** Longitudinal associations of symptoms at baseline with the change in the fatigue score until 3-month follow-up, subgroup analysis by age 7](#_Toc151733987)

[**Suppl. Table S7.** Longitudinal associations of covariates at baseline with the change in the ability to work score until 3-month follow-up 8](#_Toc151733988)

[**Suppl. Table S8.** Longitudinal associations of symptoms at baseline with the change in the ability to work score until 3-month follow-up 9](#_Toc151733989)

[**Suppl. Table S9.** Longitudinal associations of symptoms at baseline with the change in the ability to work score until 3-month follow-up, subgroup analysis by sex 10](#_Toc151733990)

[**Suppl. Table S10.** Longitudinal associations of symptoms at baseline the change in the ability to work score until 3-month follow-up, subgroup analysis by age 11](#_Toc151733991)

# **Suppl. Table S1.** Comparison of important baseline characteristics of participants who completed the 3-month follow-up, non-responding participants, and with late recruited participants who did not have a chance yet to participate in the 3-month follow-up

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Baseline** | **Response at the 3-month follow up** | | | | | | |
| **characteristics** | **Yes  (N=279)** |  | **No  (N=51)** | |  | **Late recruitment  (N=64)** | |
|  | **Proportion (%)** |  | **Proportion (%)** | **P value a** |  | **Proportion (%)** | **P value a** |
| **Age (years)** |  |  |  |  |  |  |  |
| < 65 | 164 (58.8) |  | 27 (52.9) | 0.437 |  | 31 (48.4) | 0.132 |
| ≥ 65 | 115 (41.2) |  | 24 (47.1) | 33 (51.6) |
| **Sex** |  |  |  |  |  |  |  |
| Female | 113 (40.5) |  | 25 (49.0) | 0.257 |  | 28 (43.7) | 0.634 |
| Male | 166 (59.5) |  | 26 (51.0) | 36 (56.3) |
| **Cancer stage** |  |  |  |  |  |  |  |
| I | 86 (31.4) |  | 16 (32.0) | 0.979 |  | 15 (29.4) | 0.145 |
| II | 91 (33.2) |  | 15 (30.0) | 14 (27.5) |
| III | 69 (25.2) |  | 14 (28.0) | 16 (31.4) |
| IV | 14 (5.1) |  | 3 (6.0) | 6 (11.8) |
| Unknown | 14 (5.1) |  | 2 (4.0) | 0 (0) |

a Chi square test

# **Suppl. Table S2.** Interfactor correlation matrix of the identified 6 factors

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Factor 1**  **"Fatigue"** | **Factor 2**  **"Gastro-**  **intestinal**  **symptoms"** | **Factor 3 "Pain"** | **Factor 4**  **"Psychosocial symptoms"** | **Factor 5**  **"Urinary**  **symptoms"** | **Factor 6**  **"Chemotherapy side effects"** |
|  | **Pearson correlation coefficient r** | | | | | |
| Factor 1 | N.A. |  |  |  |  |  |
| Factor 2 | 0.34 | N.A. |  |  |  |  |
| Factor 3 | 0.54 | 0.48 | N.A. |  |  |  |
| Factor 4 | 0.32 | 0.23 | 0.27 | N.A. |  |  |
| Factor 5 | 0.56 | 0.16 | 0.33 | 0.32 | N.A. |  |
| Factor 6 | 0.53 | 0.22 | 0.32 | 0.18 | 0.42 | N.A. |

Abbreviation: N.A., not applicable

# **Suppl. Table S3.** Longitudinal associations of baseline covariates with the change in the fatigue score until 3-month follow-up

|  |  |  |
| --- | --- | --- |
| **Variable** | **β coefficient (95% CI)** | **p value** |
| Age | 0.06 (-0.06 ; 0.17) | 0.335 |
| Sex |  |  |
| Female | 1.00 Ref. |  |
| Male | 1.09 (-1.06 ; 3.24) | 0.322 |
| BMI (kg/m2) |  |  |
| > 25 | 1.00 Ref. |  |
| 25 – 30 | -2.43 (-4.84 ; -0.02) | 0.048 |
| 30 – 35 | -1.13 (-4.31 ; 2.06) | 0.488 |
| > 35 | -4.51 (-8.68 ; -0.35) | 0.034 |
| Stage |  |  |
| 1 | 1.00 Ref. |  |
| 2 | 0.61 (-1.98 ; 3.20) | 0.645 |
| 3 and 4 | -2.41 (-5.69 ; 0.86) | 0.149 |
| Unknown | 1.26 (-3.63 ; 6.15) | 0.614 |
| Physical activitya |  |  |
| No | 1.00 Ref. |  |
| Yes | 0.52 (-1.60 ; 2.64) | 0.630 |
| Smoking |  |  |
| Non smokers | 1.00 Ref. |  |
| Former smokers | 0.10 (-2.13 ; 2.33) | 0.932 |
| Current smokers | -2.55 (-5.95 ; 0.85) | 0.141 |
| Number of comorbidities |  |  |
| 0 | 1.00 Ref. |  |
| 1 | 0.93 (-2.25 ; 4.10) | 0.568 |
| >=2 | 0.39 (-2.67 ; 3.45) | 0.804 |
| Months since surgery | 0.38 (-1.91 ; 2.67) | 0.745 |
| Chemotherapy/radiation | 4.71 (1.93 ; 7.48) | 0.001 |
| FACIT-F-FS at baseline | 0.61 (0.52 ; 0.70) | < 0.001 |

a At least 150 min of moderate-intensity or 75 min of vigorous-intensity aerobic physical activity throughout the week

# **Suppl. Table S4.** Longitudinal associations of symptoms at baseline with the change in the fatigue score until 3-month follow-up

| **Factor** | **Symptom** | **β Coefficient (95% CI)** | **P value** |
| --- | --- | --- | --- |
| Fatigue | Dyspnea | -3.52 (-5.91; -1.12) | 0.004 |
| Cognitive Fatigue | -2.93 (-5.84; -0.02) | 0.048 |
| Depression | -2.43 (-5.07; 0.20) | 0.070 |
| Emotional Fatigue | -1.95 (-4.84; 0.95) | 0.187 |
| Appetite Loss | -1.84 (-4.87; 1.18) | 0.233 |
| Social Sequelae | -1.84 (-4.90; 1.23) | 0.240 |
| Interference with Daily Life | -1.05 (-4.03; 1.94) | 0.492 |
| Ability to Work | 0.14 (-2.25; 2.54) | 0.906 |
| Gastrointestinal symptoms | Embarrassment | -3.36 (-5.57; -1.15) | 0.003 |
| Stool Frequency | -2.44 (-4.60; -0.28) | 0.027 |
| Diarrhea | -2.32 (-4.46; -0.18) | 0.033 |
| Sore Skin | -2.24 (-4.65; 0.18) | 0.069 |
| Faecal Incontinence | -2.08 (-4.24; 0.09) | 0.060 |
| Flatulence | 0.13 (-2.22; 2.47) | 0.915 |
| Blood or Mucus in Stool | 0.70 (-1.78; 3.18) | 0.579 |
| Pain | Abdominal Pain | -5.11 (-7.86; -2.37) | < 0.001 |
| Dysuria | -3.98 (-7.01; -0.94) | 0.010 |
| Buttock Pain | -2.56 (-5.08; -0.05) | 0.046 |
| Pain | -1.92 (-4.16; 0.32) | 0.092 |
| Bloating | -1.76 (-4.07; 0.56) | 0.138 |
| Psychosocial symptoms | Anxiety | -4.94 (-7.97; -1.91) | 0.001 |
| Financial Difficulties | -3.37 (-5.60; -1.13) | 0.003 |
| Psychosocial stress | -2.28 (-4.78; 0.23) | 0.075 |
| Urinary symptoms | Sleep Disturbance | -4.42 (-6.78; -2.05) | < 0.001 |
| Urinary Incontinence | -3.99 (-6.51; -1.47) | 0.002 |
| Urinary Frequency | -0.93 (-3.10; 1.24) | 0.402 |
| Chemotherapy side effects | Constipation | -4.19 (-7.39; -0.99) | 0.010 |
| Nausea or Vomiting | -3.70 (-6.31; -1.08) | 0.006 |
| Taste | -1.53 (-3.96; 0.89) | 0.215 |
| Hair Loss | -1.50 (-4.20; 1.19) | 0.274 |

Note: Grey shade indicates p value <0.05

# **Suppl. Table S5.** Longitudinal associations of symptoms at with the change in the fatigue score until 3-month follow-up , subgroup analysis by sex

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Factor** | **Symptom** | **Females** | |  | **Males** | |
|  |  | **β coefficient  (95% CI)** | **P value** |  | **β coefficient  (95% CI)** | **P value** |
| Fatigue | Cognitive Fatigue | -3.83 (-8.79; 1.13) | 0.130 |  | -1.57 (-5.43; 2.29) | 0.425 |
| Ability to Work | -2.98 (-7.69; 1.73) | 0.215 |  | 1.69 (-1.29; 4.68) | 0.266 |
| Depression | -2.94 (-7.65; 1.78) | 0.222 |  | -2.33 (-5.51; 0.85) | 0.151 |
| Interference with Daily Life | -2.83 (-8.50; 2.84) | 0.328 |  | -0.84 (-4.44; 2.77) | 0.648 |
| Dyspnea | -2.09 (-6.71; 2.53) | 0.376 |  | -4.87 (-7.65; -2.09) | 0.001 |
| Appetite Loss | -1.25 (-6.42; 3.93) | 0.637 |  | -3.31 (-7.65; 1.02) | 0.134 |
| Emotional Fatigue | -0.39 (-5.66; 4.87) | 0.884 |  | -2.99 (-6.69; 0.71) | 0.113 |
| Social Sequelae | 2.09 (-3.26; 7.43) | 0.444 |  | -4.66 (-8.46; -0.87) | 0.016 |
| Gastrointestinal symptoms | Sore Skin | -5.21 (-9.33; -1.08) | 0.013 |  | -0.33 (-3.36; 2.71) | 0.832 |
| Faecal Incontinence | -4.67 (-8.50; -0.83) | 0.017 |  | -0.00 (-2.76; 2.75) | 0.998 |
| Stool Frequency | -3.56 (-7.49; 0.37) | 0.076 |  | -1.50 (-4.16; 1.16) | 0.269 |
| Embarrassment | -3.53 (-7.47; 0.41) | 0.079 |  | -3.05 (-5.88; -0.23) | 0.034 |
| Diarrhea | -3.27 (-7.40; 0.85) | 0.120 |  | -1.79 (-4.33; 0.76) | 0.169 |
| Flatulence | -0.17 (-4.29; 3.96) | 0.937 |  | 1.51 (-1.42; 4.45) | 0.312 |
| Blood or Mucus in Stool | 1.46 (-3.26; 6.18) | 0.545 |  | 0.20 (-2.78; 3.19) | 0.894 |
| Pain | Dysuria | -9.87 (-15.72; -4.02) | 0.001 |  | -1.80 (-5.47; 1.87) | 0.337 |
| Abdominal Pain | -5.88 (-10.40; -1.37) | 0.011 |  | -4.26 (-8.09; -0.42) | 0.030 |
| Bloating | -5.14 (-8.86; -1.42) | 0.007 |  | 1.49 (-1.58; 4.56) | 0.342 |
| Pain | -4.89 (-9.13; -0.65) | 0.024 |  | 0.03 (-2.69; 2.75) | 0.984 |
| Buttock Pain | -4.62 (-8.71; -0.52) | 0.027 |  | -0.98 (-4.24; 2.28) | 0.556 |
| Psychosocial symptoms | Financial Difficulties | -6.40 (-10.42; -2.38) | 0.002 |  | -2.51 (-5.27; 0.25) | 0.075 |
| Psychosocial stress | -5.57 (-10.11; -1.02) | 0.016 |  | -0.89 (-3.86; 2.08) | 0.558 |
| Anxiety | -3.63 (-9.10; 1.85) | 0.194 |  | -5.00 (-8.75; -1.26) | 0.009 |
| Urinary symptoms | Sleep disturbances Disturbance | -4.04 (-8.31; 0.23) | 0.063 |  | -4.38 (-7.35; -1.40) | 0.004 |
| Urinary Incontinence | -3.13 (-7.35; 1.08) | 0.145 |  | -5.10 (-8.39; -1.81) | 0.002 |
| Urinary Frequency | -0.04 (-3.95; 3.87) | 0.984 |  | -1.61 (-4.24; 1.02) | 0.230 |
| Chemotherapy side effects | Hair Loss | -4.32 (-8.49; -0.15) | 0.043 |  | 1.69 (-2.17; 5.56) | 0.390 |
| Nausea or Vomiting | -4.24 (-8.65; 0.17) | 0.060 |  | -3.58 (-7.04; -0.13) | 0.042 |
| Constipation | -3.22 (-8.68; 2.25) | 0.248 |  | -5.25 (-9.56; -0.94) | 0.017 |
| Taste | -2.76 (-7.75; 2.23) | 0.278 |  | -1.75 (-4.53; 1.03) | 0.218 |

Note: Grey shade indicates p value <0.05

# **Suppl. Table S6.** Longitudinal associations of symptoms at baseline with the change in the fatigue score until 3-month follow-up, subgroup analysis by age

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Factor** | **Symptom** | **Younger than 65 years** | |  | **65 years and older** | |
|  |  | **β coefficient  (95% CI)** | **P value** |  | **β coefficient  (95% CI)** | **P value** |
| Fatigue | Dyspnea | -2.71 (-6.26; 0.84) | 0.135 |  | -4.49 (-8.10; -0.88) | 0.015 |
| Cognitive Fatigue | -2.64 (-6.61; 1.32) | 0.191 |  | -2.25 (-6.75; 2.25) | 0.327 |
| Emotional Fatigue | -2.54 (-6.56; 1.48) | 0.215 |  | -0.13 (-4.41; 4.14) | 0.952 |
| Interference with Daily Life | -2.47 (-6.68; 1.73) | 0.248 |  | 3.01 (-1.68; 7.71) | 0.208 |
| Depression | -2.17 (-5.69; 1.35) | 0.227 |  | -3.82 (-8.00; 0.36) | 0.073 |
| Social Sequelae | -1.65 (-6.11; 2.81) | 0.468 |  | -2.04 (-6.06; 1.99) | 0.321 |
| Appetite Loss | -0.67 (-5.18; 3.85) | 0.773 |  | -4.20 (-8.35; -0.06) | 0.047 |
| Ability to Work | -0.06 (-3.41; 3.30) | 0.974 |  | 0.54 (-3.09; 4.18) | 0.770 |
| Gastrointestinal symptoms | Embarrassment | -4.58 (-7.61; -1.55) | 0.003 |  | -1.11 (-4.47; 2.25) | 0.517 |
| Diarrhea | -3.76 (-6.85; -0.68) | 0.017 |  | 0.14 (-3.09; 3.38) | 0.931 |
| Sore Skin | -3.53 (-6.91; -0.14) | 0.041 |  | -0.71 (-4.27; 2.84) | 0.694 |
| Stool Frequency | -2.81 (-5.79; 0.18) | 0.065 |  | -1.48 (-4.74; 1.77) | 0.372 |
| Faecal Incontinence | -2.71 (-5.83; 0.41) | 0.088 |  | -0.25 (-3.45; 2.95) | 0.879 |
| Blood or Mucus in Stool | 2.54 (-1.02; 6.10) | 0.161 |  | -0.96 (-4.35; 2.43) | 0.577 |
| Flatulence | -0.29 (-3.66; 3.09) | 0.867 |  | 1.00 (-2.16; 4.16) | 0.535 |
| Pain | Abdominal Pain | -6.98 (-10.74; -3.22) | < 0.001 |  | -2.86 (-7.09; 1.38) | 0.186 |
| Dysuria | -5.43 (-9.75; -1.11) | 0.014 |  | -1.67 (-6.12; 2.78) | 0.462 |
| Bloating | -3.49 (-6.76; -0.22) | 0.036 |  | 0.84 (-2.48; 4.17) | 0.618 |
| Pain | -3.07 (-6.31; 0.17) | 0.063 |  | 0.02 (-3.16; 3.20) | 0.989 |
| Buttock Pain | -2.42 (-5.86; 1.02) | 0.168 |  | -2.36 (-6.25; 1.53) | 0.235 |
| Psychosocial symptoms | Anxiety | -6.39 (-10.28; -2.49) | 0.001 |  | -1.91 (-6.93; 3.12) | 0.457 |
| Financial Difficulties | -4.08 (-7.21; -0.94) | 0.011 |  | -2.38 (-5.76; 1.00) | 0.167 |
| Psychosocial stress | -1.88 (-5.35; 1.60) | 0.290 |  | -1.70 (-5.44; 2.04) | 0.372 |
| Urinary symptoms | Urinary Incontinence | -5.14 (-8.90; -1.37) | 0.007 |  | -1.40 (-4.84; 2.04) | 0.426 |
| Sleep disturbances | -3.89 (-7.21; -0.57) | 0.022 |  | -4.50 (-7.93; -1.08) | 0.010 |
| Urinary Frequency | -0.31 (-3.37; 2.74) | 0.840 |  | -0.42 (-3.76; 2.91) | 0.803 |
| Chemotherapy side effects | Constipation | -5.30 (-9.51; -1.09) | 0.014 |  | -1.31 (-6.69; 4.07) | 0.633 |
| Nausea or Vomiting | -3.78 (-7.40; -0.17) | 0.040 |  | -3.69 (-7.50; 0.12) | 0.058 |
| Hair Loss | -1.39 (-5.04; 2.26) | 0.456 |  | -2.43 (-6.59; 1.74) | 0.253 |
| Taste | -1.21 (-4.79; 2.37) | 0.508 |  | -1.08 (-4.45; 2.29) | 0.531 |

Note: Grey shade indicates p value <0.05

# **Suppl. Table S7.** Longitudinal associations of covariates at baseline with the change in the ability to work score until 3-month follow-up

|  |  |  |
| --- | --- | --- |
| **Variable** | **β coefficient (95% CI)** | **p value** |
| Age | 0.00 (-0.02; 0.01) | 0.706 |
| Sex |  |  |
| Female | 1.00 Ref. |  |
| Male | 0.06 (-0.21; 0.32) | 0.678 |
| BMI (kg/m2) |  |  |
| > 25 | 1.00 Ref. |  |
| 25 – 30 | 0.09 (-0.22; 0.39) | 0.580 |
| 30 – 35 | 0.07 (-0.33; 0.46) | 0.742 |
| > 35 | -0.37 (-0.90; 0.15) | 0.161 |
| Stage |  |  |
| 1 | 1.00 Ref. |  |
| 2 | -0.07 (-0.39; 0.26) | 0.688 |
| 3 and 4 | -0.27 (-0.68; 0.14) | 0.200 |
| Unknown | -0.22 (-0.84; 0.39) | 0.479 |
| Physical activitya |  |  |
| No | 1.00 Ref. |  |
| Yes | -0.00 (-0.27; 0.27) | 0.982 |
| Smoking |  |  |
| Non smokers | 1.00 Ref. |  |
| Former smokers | -0.13 (-0.41; 0.15) | 0.367 |
| Current smokers | -0.32 (-0.75; 0.11) | 0.146 |
| Number of comorbidities |  |  |
| 0 | 1.00 Ref. |  |
| 1 | 0.12 (-0.28; 0.53) | 0.544 |
| >=2 | -0.15 (-0.54; 0.23) | 0.434 |
| Months since surgery | -0.23 (-0.53; 0.06) | 0.119 |
| Chemotherapy/radiation | 0.39 (0.04; 0.74) | 0.030 |
| FACIT-F-FWB Ability to Work item at baseline | 0.53 (0.42; 0.63) | < 0.001 |

a At least 150 min of moderate-intensity or 75 min of vigorous-intensity aerobic physical activity throughout the week

# **Suppl. Table S8.** Longitudinal associations of symptoms at baseline with the change in the ability to work score until 3-month follow-up

|  |  |  |  |
| --- | --- | --- | --- |
| **Factor** | **Symptom** | **β Coefficient (95% CI)** | **P value** |
| Fatigue | Appetite Loss | -0.66 (-1.00; -0.31) | < 0.001 |
| Emotional Fatigue | -0.66 (-0.95; -0.37) | < 0.001 |
| Fatigue (FACIT-F) | -0.63 (-0.92; -0.34) | < 0.001 |
| Depression | -0.50 (-0.79; -0.21) | 0.001 |
| Cognitive Fatigue | -0.50 (-0.83; -0.17) | 0.003 |
| Interference with Daily Life | -0.48 (-0.76; -0.21) | 0.001 |
| Social Sequelae | -0.44 (-0.80; -0.09) | 0.015 |
| Dyspnea | -0.40 (-0.70; -0.11) | 0.007 |
| Gastrointestinal symptoms | Embarrassment | -0.68 (-0.95; -0.41) | < 0.001 |
| Faecal Incontinence | -0.37 (-0.64; -0.11) | 0.006 |
| Sore Skin | -0.34 (-0.65; -0.03) | 0.030 |
| Diarrhea | -0.34 (-0.59; -0.08) | 0.011 |
| Stool Frequency | -0.12 (-0.39; 0.16) | 0.401 |
| Flatulence | -0.04 (-0.32; 0.24) | 0.787 |
| Blood or Mucus in Stool | 0.08 (-0.23; 0.40) | 0.596 |
| Pain | Abdominal Pain | -0.64 (-0.99; -0.29) | < 0.001 |
| Pain | -0.56 (-0.83; -0.29) | < 0.001 |
| Dysuria | -0.54 (-0.92; -0.16) | 0.005 |
| Buttock Pain | -0.54 (-0.84; -0.23) | 0.001 |
| Bloating | -0.34 (-0.63; -0.06) | 0.019 |
| Psychosocial symptoms | Anxiety | -0.73 (-1.07; -0.39) | < 0.001 |
| Psychosocial stress | -0.51 (-0.78; -0.24) | < 0.001 |
| Financial Difficulties | -0.39 (-0.67; -0.11) | 0.006 |
| Urinary symptoms | Sleep Disturbance | -0.63 (-0.90; -0.36) | < 0.001 |
| Urinary Incontinence | -0.23 (-0.55; 0.08) | 0.148 |
| Urinary Frequency | -0.09 (-0.37; 0.18) | 0.502 |
| Chemotherapy side effects | Nausea or Vomiting | -0.83 (-1.12; -0.53) | < 0.001 |
| Taste | -0.49 (-0.79; -0.20) | 0.001 |
| Constipation | -0.45 (-0.84; -0.05) | 0.027 |
| Hair Loss | -0.16 (-0.50; 0.18) | 0.368 |

Note: Grey shade indicates p value <0.05

# **Suppl. Table S9.** Longitudinal associations of symptoms at baseline with the change in the ability to work score until 3-month follow-up, subgroup analysis by sex

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Factor** | **Symptom** | **Female** | |  | **Male** | |
|  |  | **β coefficient  (95% CI)** | **P value** |  | **β coefficient  (95% CI)** | **P value** |
| Fatigue | Cognitive Fatigue | -0.58 (-1.09; -0.08) | 0.022 |  | -0.35 (-0.84; 0.14) | 0.157 |
| Depression | -0.49 (-0.95; -0.04) | 0.035 |  | -0.55 (-0.95; -0.15) | 0.007 |
| Emotional Fatigue | -0.40 (-0.88; 0.08) | 0.103 |  | -0.82 (-1.22; -0.42) | < 0.001 |
| Interference with Daily Life | -0.40 (-0.88; 0.07) | 0.094 |  | -0.54 (-0.91; -0.17) | 0.004 |
| Appetite Loss | -0.35 (-0.93; 0.23) | 0.239 |  | -0.98 (-1.48; -0.48) | < 0.001 |
| Fatigue (FACIT-F) | -0.35 (-0.88; 0.19) | 0.204 |  | -0.82 (-1.18; -0.47) | < 0.001 |
| Social Sequelae | -0.25 (-0.82; 0.32) | 0.396 |  | -0.68 (-1.17; -0.20) | 0.006 |
| Dyspnea | -0.16 (-0.69; 0.36) | 0.544 |  | -0.61 (-0.98; -0.23) | 0.001 |
| Gastrointestinal symptoms | Embarrassment | -0.65 (-1.10; -0.21) | 0.004 |  | -0.68 (-1.05; -0.31) | < 0.001 |
| Sore Skin | -0.53 (-1.02; -0.04) | 0.033 |  | -0.25 (-0.67; 0.17) | 0.247 |
| Faecal Incontinence | -0.43 (-0.87; 0.02) | 0.061 |  | -0.33 (-0.70; 0.04) | 0.081 |
| Blood or Mucus in Stool | 0.36 (-0.18; 0.89) | 0.191 |  | -0.06 (-0.47; 0.35) | 0.783 |
| Diarrhea | -0.15 (-0.62; 0.33) | 0.541 |  | -0.43 (-0.76; -0.10) | 0.010 |
| Stool Frequency | -0.08 (-0.54; 0.38) | 0.724 |  | -0.15 (-0.51; 0.21) | 0.419 |
| Flatulence | 0.04 (-0.41; 0.49) | 0.873 |  | -0.04 (-0.43; 0.36) | 0.858 |
| Pain | Dysuria | -0.92 (-1.60; -0.24) | 0.008 |  | -0.40 (-0.89; 0.10) | 0.115 |
| Abdominal Pain | -0.79 (-1.30; -0.28) | 0.003 |  | -0.47 (-0.99; 0.05) | 0.077 |
| Pain | -0.77 (-1.25; -0.29) | 0.002 |  | -0.45 (-0.81; -0.10) | 0.012 |
| Buttock Pain | -0.65 (-1.11; -0.19) | 0.005 |  | -0.44 (-0.89; 0.01) | 0.055 |
| Bloating | -0.41 (-0.85; 0.03) | 0.070 |  | -0.24 (-0.66; 0.17) | 0.252 |
| Psychosocial symptoms | Anxiety | -0.64 (-1.19; -0.10) | 0.021 |  | -0.71 (-1.18; -0.24) | 0.003 |
| Financial Difficulties | -0.53 (-1.01; -0.05) | 0.032 |  | -0.38 (-0.75; -0.02) | 0.041 |
| Psychosocial stress | -0.45 (-0.92; 0.02) | 0.063 |  | -0.61 (-0.95; -0.26) | 0.001 |
| Urinary symptoms | Sleep disturbances | -0.60 (-1.05; -0.14) | 0.011 |  | -0.61 (-0.98; -0.25) | 0.001 |
| Urinary Incontinence | -0.24 (-0.72; 0.24) | 0.330 |  | -0.28 (-0.73; 0.18) | 0.233 |
| Urinary Frequency | -0.06 (-0.51; 0.40) | 0.810 |  | -0.15 (-0.51; 0.22) | 0.424 |
| Chemotherapy side effects | Nausea or Vomiting | -0.95 (-1.42; -0.49) | < 0.001 |  | -0.85 (-1.27; -0.43) | < 0.001 |
| Taste | -0.39 (-0.97; 0.18) | 0.182 |  | -0.60 (-0.96; -0.24) | 0.001 |
| Constipation | -0.33 (-0.94; 0.29) | 0.299 |  | -0.52 (-1.09; 0.06) | 0.078 |
| Hair Loss | -0.17 (-0.66; 0.33) | 0.507 |  | -0.06 (-0.59; 0.46) | 0.816 |

Note: Grey shade indicates p value <0.05

# **Suppl. Table S10.** Longitudinal associations of symptoms at baseline the change in the ability to work score until 3-month follow-up, subgroup analysis by age

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Factor** | **Symptom** | **Younger than 65 years** | |  | **65 years and older** | |
|  |  | **β coefficient  (95% CI)** | **P value** |  | **β coefficient  (95% CI)** | **P value** |
| Fatigue | Appetite Loss | -0.76 (-1.28; -0.25) | 0.004 |  | -0.77 (-1.26; -0.28) | 0.002 |
| Fatigue (FACIT-F) | -0.72 (-1.14; -0.30) | 0.001 |  | -0.64 (-1.06; -0.23) | 0.002 |
| Social Sequelae | -0.67 (-1.18; -0.17) | 0.008 |  | -0.15 (-0.67; 0.37) | 0.566 |
| Emotional Fatigue | -0.57 (-0.97; -0.17) | 0.005 |  | -0.90 (-1.35; -0.45) | < 0.001 |
| Interference with Daily Life | -0.53 (-0.93; -0.14) | 0.008 |  | -0.44 (-0.88; -0.01) | 0.046 |
| Cognitive Fatigue | -0.45 (-0.90; -0.01) | 0.047 |  | -0.61 (-1.16; -0.07) | 0.027 |
| Depression | -0.41 (-0.80; -0.01) | 0.044 |  | -0.67 (-1.14; -0.20) | 0.005 |
| Dyspnea | -0.30 (-0.74; 0.13) | 0.171 |  | -0.62 (-1.08; -0.17) | 0.007 |
| Gastrointestinal symptoms | Embarrassment | -0.81 (-1.17; -0.44) | < 0.001 |  | -0.49 (-0.93; -0.05) | 0.028 |
| Faecal Incontinence | -0.45 (-0.84; -0.07) | 0.022 |  | -0.31 (-0.73; 0.11) | 0.145 |
| Diarrhea | -0.40 (-0.78; -0.02) | 0.038 |  | -0.34 (-0.75; 0.07) | 0.101 |
| Blood or Mucus in Stool | 0.35 (-0.09; 0.79) | 0.120 |  | -0.25 (-0.71; 0.21) | 0.281 |
| Sore Skin | -0.33 (-0.76; 0.10) | 0.134 |  | -0.43 (-0.91; 0.05) | 0.078 |
| Flatulence | -0.14 (-0.53; 0.26) | 0.492 |  | 0.04 (-0.38; 0.47) | 0.839 |
| Stool Frequency | -0.03 (-0.41; 0.35) | 0.858 |  | -0.28 (-0.71; 0.16) | 0.215 |
| Pain | Abdominal Pain | -0.73 (-1.20; -0.26) | 0.002 |  | -0.67 (-1.22; -0.11) | 0.018 |
| Dysuria | -0.66 (-1.21; -0.11) | 0.018 |  | -0.34 (-0.95; 0.26) | 0.266 |
| Pain | -0.61 (-1.01; -0.20) | 0.003 |  | -0.54 (-0.93; -0.15) | 0.007 |
| Buttock Pain | -0.48 (-0.90; -0.07) | 0.023 |  | -0.64 (-1.16; -0.12) | 0.015 |
| Bloating | -0.43 (-0.82; -0.03) | 0.035 |  | -0.15 (-0.61; 0.30) | 0.509 |
| Psychosocial symptoms | Anxiety | -0.74 (-1.19; -0.29) | 0.001 |  | -0.75 (-1.31; -0.20) | 0.008 |
| Psychosocial stress | -0.44 (-0.83; -0.05) | 0.026 |  | -0.66 (-1.06; -0.27) | 0.001 |
| Financial Difficulties | -0.41 (-0.80; -0.02) | 0.038 |  | -0.27 (-0.72; 0.18) | 0.242 |
| Urinary symptoms | Sleep disturbances | -0.64 (-1.04; -0.25) | 0.001 |  | -0.61 (-1.01; -0.21) | 0.003 |
| Urinary Incontinence | -0.31 (-0.79; 0.17) | 0.205 |  | -0.18 (-0.63; 0.27) | 0.435 |
| Urinary Frequency | -0.18 (-0.56; 0.20) | 0.360 |  | 0.07 (-0.39; 0.54) | 0.757 |
| Chemotherapy side effects | Nausea or Vomiting | -0.88 (-1.28; -0.47) | < 0.001 |  | -0.82 (-1.28; -0.36) | < 0.001 |
| Constipation | -0.56 (-1.07; -0.05) | 0.032 |  | -0.24 (-0.94; 0.47) | 0.512 |
| Taste | -0.45 (-0.88; -0.02) | 0.039 |  | -0.56 (-1.00; -0.11) | 0.015 |
| Hair Loss | -0.14 (-0.59; 0.32) | 0.553 |  | -0.24 (-0.82; 0.35) | 0.427 |

Note: Grey shade indicates p value <0.05