**Information Leaflet Factorial Optimisation Experiment: Data Notes**

**Versions of data:**

| Name | Description | Use for: |
|---|---|---|
| IL_Data_Cleaned_Primary_and_Secondary | Final cleaned dataframe. Contains optimization constraints. N=1603 | Main analyses |

**Variables in main dataset '**IL_Data_Cleaned_Primary_and_Secondary**':**

| Variable Name | Class | Levels (factor variables) | Description |
|---|---|---|---|
| Total_Duration | Numeric | | Duration in seconds that participant spent completing the survey. |
| ScreeningQ | Factor | Yes/ no | Asking eligibility criteria- answer must have been yes to proceed with survey. |
| Age | Numeric | | Age in years |
| MaritalStat | Factor | Single<br>Married<br>Cohabiting/living with a partner<br>Divorced/ Separated<br>Widowed | Marital status |
| Educ | Factor | GCSE/ O-Level/ CSE<br>Vocational Qual.<br>A-Level<br>Higher educational qualifications<br>Degree level education<br>No formal qualifications<br>Still Studying<br>Other | Education level |
| EducOth | Character | | Other responses to education level |
| Ethnicity | Factor | Asian/Asian British<br>Black or Black British (African) | Ethnicity |

| | | Black or Black British (Caribbean)<br>Mixed<br>Chinese<br>White British<br>Do not wish to answer<br>Other | |
| --- | --- | --- | --- |
| EthnOth | Character | | Other responses to ethnicity |
| MenStat | Factor | Premenopausal<br>Postmenopausal<br>Unsure | Menopausal status |
| BCDiagYN | Factor | Yes/ No | Have you ever been diagnosed with breast cancer? |
| BCStage | Factor | Stage 0<br>Stage 1<br>Stage 2<br>Stage 3<br>Stage 4<br>Unsure | Stage of breast cancer |
| BCERPR | Factor | Yes/no | Was the breast cancer ER or PR receptor positive? |
| AET | Factor | Currently taking AET<br>Previously taken AET<br>Never prescribed AET<br>Unsure | Have you ever been prescribed adjuvant hormone therapy? |
| Tamoxifen | Factor | Yes | What is the name of the hormone therapy you are currently taking/ have previously taken? |
| Anastrozole | Factor | Yes | What is the name of the hormone therapy you are currently taking/ have previously taken? |
| Letrozole | Factor | Yes | What is the name of the hormone therapy you are currently taking/ have previously taken? |
| Exemestane | Factor | Yes | What is the name of the hormone therapy you are currently taking/ have previously taken? |
| AETOth | Factor | Yes | What is the name of the hormone therapy you are currently taking/ have previously taken? |

| AETOthDet | Character | | Details about other AET taken |
|---|---|---|---|
| CloseRelDiag | Factor | Yes/No | Have any females close to you been diagnosed with breast cancer? |
| DiagParent | Factor | Yes | What relation was this person to you? |
| DiagSibling | Factor | Yes | What relation was this person to you? |
| DiagGrandparent | Factor | Yes | What relation was this person to you? |
| DiagPartner | Factor | Yes | What relation was this person to you? |
| DiagFriend | Factor | Yes | What relation was this person to you? |
| DiagOth | Factor | Yes | What relation was this person to you? |
| DiagOthDet | Character | | Other relation |
| DemogPageTime | Numeric | | Time spent completing demographics (seconds) |
| DemogClickCount | Numeric | | Number of clicks on demographics page |
| BMQ1_1 | Factor | Strongly disagree<br>Disagree<br>Neither agree nor disagree<br>Agree<br>Strongly Agree | My health at present depends on me taking hormone treatment |
| BMQ1_2 | Factor | As in BMQ1_1 | Having to take hormone treatment worries me |
| BMQ1_3 | Factor | As in BMQ1_1 | Taking hormone treatment makes me feel I am taking positive steps to remain well |
| BMQ1_4 | Factor | As in BMQ1_1 | Without taking hormone treatment I would be more likely to develop breast cancer again |
| BMQ1_5 | Factor | As in BMQ1_1 | I sometimes worry about long-term effects of taking hormone treatment |
| BMQ1_6 | Factor | As in BMQ1_1 | Hormone treatment is a mystery to me |
| BMQ1_7 | Factor | As in BMQ1_1 | My health in the future will depend on me taking hormone treatment |
| BMQ1_8 | Factor | As in BMQ1_1 | Taking hormone treatment disrupts my life |
| BMQ1_9 | Factor | As in BMQ1_1 | I sometimes worry about having hormone treatment over a long period of time |
| BMQ1_10 | Factor | As in BMQ1_1 | Hormone treatment protects me from becoming ill |
| BMQ1PageTime | Numeric | | Time spent completing baseline BMQ (seconds) |
| BMQ1ClickCount | Numeric | | Number of clicks on baseline BMQ page |
| Con1PageTime, Con2PageTime etc. | Numeric | | Length of time spent viewing the information leaflet. E.g. Con1PageTime refers to length of time spent viewing the information leaflet for participants randomised to condition 1. If not randomised to the condition, the field will be blank. |

| Con1ClickCount, Con2ClickCount etc. | Numeric | | As above but for click count per condition. |
|---|---|---|---|
| BMQ2_1 | Factor | Strongly disagree Disagree Neither agree nor disagree Agree Strongly Agree | My health at present depends on me taking hormone treatment |
| BMQ2_2 | Factor | As in BMQ2_1 | Having to take hormone treatment worries me |
| BMQ2_3 | Factor | As in BMQ2_1 | Taking hormone treatment makes me feel I am taking positive steps to remain well |
| BMQ2_4 | Factor | As in BMQ2_1 | Without taking hormone treatment I would be more likely to develop breast cancer again |
| BMQ2_5 | Factor | As in BMQ2_1 | I sometimes worry about long-term effects of taking hormone treatment |
| BMQ2_6 | Factor | As in BMQ2_1 | Hormone treatment is a mystery to me |
| BMQ2_7 | Factor | As in BMQ2_1 | My health in the future will depend on me taking hormone treatment |
| BMQ2_8 | Factor | As in BMQ2_1 | Taking hormone treatment disrupts my life |
| BMQ2_9 | Factor | As in BMQ2_1 | I sometimes worry about having hormone treatment over a long period of time |
| BMQ2_10 | Factor | As in BMQ2_1 | Hormone treatment protects me from becoming ill |
| BMQ2PageTime | Numeric | | Time spent completing follow up BMQ (seconds) |
| BMQ2ClickCount | Numeric | | Number of clicks on follow up BMQ page |
| SIMS_1 | Factor | No information needed No information received Too little information received About the right amount of information received Too much information received | What hormone therapy is (or would be) called |
| SIMS_2 | Factor | As in SIMS_1 | What hormone therapy is for |
| SIMS_3 | Factor | As in SIMS_1 | What hormone therapy does |
| SIMS_4 | Factor | As in SIMS_1 | How hormone therapy works |
| SIMS_5 | Factor | As in SIMS_1 | How long hormone therapy is taken for |

| SIMS_6 | Factor | As in SIMS_1 | How to get a further supply |
|---|---|---|---|
| SIMS_7 | Factor | As in SIMS_1 | Whether the hormone therapy could have any unwanted effects (side effects) |
| SIMS_8 | Factor | As in SIMS_1 | What are the risks of getting side effects |
| SIMS_9 | Factor | As in SIMS_1 | What should be done if unwanted side-effects were experienced |
| SIMS_10 | Factor | As in SIMS_1 | What should be done if a dose is missed or forgotten |
| SIMS_11 | Factor | As in SIMS_1 | What the benefits of taking hormone therapy are |
| SIMSPageTime | Numeric | | Time spent completing SIMS (seconds) |
| SIMSClickCount | Numeric | | Number of clicks on SIMS page |
| Know1 | Factor | True/False | Hormone therapies slow or stop the growth of hormone sensitive breast cancer cells |
| Know2 | Factor | True/False | Hormone therapy reduces the chance of breast cancer coming back |
| Know3 | Factor | True/False | All types of hormone therapy have the same side effects |
| Know4 | Factor | True/False | There is nothing that can be done if someone experiences side effects from hormone therapy. |
| Know5 | Factor | True/False | Nausea, fatigue, pain and difficulty sleeping are all possible side effects of hormone therapy |
| Know6 | Factor | True/False | Tamoxifen and aromatase inhibitors increase the amount of oestrogen that can attach to cancer cells. |
| Know7 | Factor | True/False | Hormone therapy reduces the chance of dying from breast cancer |
| Know8 | Factor | True/False | There is an equal chance of experiencing hot flushes/ night sweats and endometrial cancer as a result of taking tamoxifen. |
| SubjKnow | Numeric | | How informed do you feel about hormone therapy for women with breast cancer? |
| KnowPageTime | Numeric | | Time spent completing Knowledge questionnaire (seconds) |
| KnowClickCount | Numeric | | Number of clicks on knowledge questionnaire page |
| Condition1, Condition2, Condition3 etc. | Factor | Yes<br>N/A | Confirming randomisation allocation. Yes = randomised to this condition. N/A = not randomised to condition. |
| BMQ1_1_Num, BMQ1_2_Num etc. | Numeric | | Baseline BMQ scores converted to numerical variables. |
| BMQ1NecTot | Numeric | | Baseline BMQ score for necessity subscale.<br>Calculated by adding together BMQ1_1_Num, BMQ1_3_Num, BMQ1_4_Num, BMQ1_7_Num, BMQ1_10_Num. |
| BMQ1ConTot | Numeric | | Baseline BMQ score for concerns subscale. Calculated by adding together BMQ1_2_Num, BMQ1_5_Num, BMQ1_6_Num, BMQ1_8_Num, BMQ1_9_Num. |

| BMQ1Diff | Numeric | | Baseline BMQ Differential Score. Calculated by subtracting concerns subscale from necessity subscale. |
|---|---|---|---|
| BMQ2_1_Num, BMQ2_2_Num etc. | Numeric | | Follow up BMQ scores for each item, converted to numerical variables. |
| BMQ2NecTot | Numeric | | Follow up BMQ score for necessity subscale. Calculated by adding together BMQ2_1_Num, BMQ2_3_Num, BMQ2_4_Num, BMQ2_7_Num, BMQ2_10_Num. |
| BMQ2ConTot | Numeric | | Follow up BMQ score for concerns subscale. Calculated by adding together BMQ2_2_Num, BMQ2_5_Num, BMQ2_6_Num, BMQ2_8_Num, BMQ2_9_Num. |
| BMQ2Diff | Numeric | | **Primary outcome.** Follow up BMQ Differential Score. Calculated by subtracting concerns subscale from necessity subscale. |
| SIMS_1_Dich, SIMS_2_Dich etc. | Numeric | | SIMS questionnaire items dichotomised. Answers of "no information needed" or "about the right information received" score 1. Answers of "no information received", "too little information received" and "too much information received" score 0. |
| SIMSTotalNew | Numeric | | **Secondary outcome.** Total SIMS score, using dichotomised scored items. Higher score indicates greater satisfaction with information received. |
| Know1_Num, Know2_Num etc. | Numeric | | Knowledge questionnaire items converted to numerical variables, where a correct answer scores 1 point, and an incorrect answer scores 0. |
| KnowTotal | Numeric | | **Secondary outcome.** Total score on objective knowledge questionnaire (0-8). The score reflects how many of the knowledge questions the participant answered correctly; a higher score indicates greater knowledge. |
| Rand | Factor | Condition1 Condition2 …. Condition32 | Randomisation Allocation. |
| Diagrams | Numeric | | Effect coding for diagrams component. 1= On, -1 = Off. |
| Diagrams_Fact | Factor | On/ Off | Diagrams component level as a categorical variable. |
| Benefits | Numeric | | Effect coding for benefits component. 1= On, -1 = Off. |
| Benefits_Fact | Factor | On/ Off | Benefits component level as a categorical variable. |
| Sideeffects | Numeric | | Effect coding for side effects component. 1= On, -1 = Off. |
| Sideeffects_Fact | Factor | On/ Off | Side effects component level as a categorical variable. |
| Concerns | Numeric | | Effect coding for concerns component. 1= On, -1 = Off. |

| Concerns_Fact | Factor | On/ Off | Concerns component level as a categorical variable. |
|---|---|---|---|
| Patient | Numeric | | Effect coding for patient input component. 1= On, -1 = Off. |
| Patient_Fact | Factor | On/ Off | Patient input component level as a categorical variable. |