

**Table SI. Definitions of item performance features used in classical test theory**

| Item | Item performance feature   | Definition   |
|------|----------------------------|--|
| 1    | Item difficulty            | Proportion of missing scores among the 721 respondents. Item difficulty was considered high if 10% or more of scores were missing.   |
| 2    | Response distribution      | The proportion of patients who responded to each item with the same response was determined. An item was described as having a poor distribution if > 70% of patients had chosen the same response.  |
| 3    | Item-test correlation      | The Spearman's correlation coefficients ( $r$ ) of each item with its subscale were calculated. If the $r$ of an item differed >0.1 with the $r$ of the other items in the subscale, it was considered suboptimal.                                       |
| 4    | Item-rest correlation      | The Spearman's correlation coefficients ( $r$ ) of each item with the sum of the other items in that subscale were calculated. Suboptimal item-rest correlation was defined as $r < 0.20$ .  |
| 5    | Item discriminant validity | We compared the item-rest correlation coefficients with the correlation coefficients of an item with the other subscales <sup>a</sup> . If the former equalled or was smaller than the latter, an item was defined as having poor discriminant validity. |
| 6    | Item complexity            | We investigated the factor loadings in a factor analysis for each item. Suboptimal complexity was said to exist if the highest loading of an item was <0.40 or if the difference between the loadings on different factors was <0.10.                    |
| 7    | Internal consistency       | For each subscale, the Cronbach's $\alpha$ was calculated. If $\alpha < 0.70$ , the internal consistency was considered suboptimal for each subscale's item.   |
| 8    | Stepwise regression        | For each subscale, a forward stepwise regression analysis was performed. If an item entered the model after 90% or more of the variance of that subscale was explained it was considered suboptimal.   |

<sup>a</sup>Subscales derived from the principal component analysis were used.

**Table SII. Provisional item list**

| Number | Item  |   |
|--------|---|---|
| 1      | Does it bother you to be careful about your behaviour in the sun?                 | • |
| 2      | Does it bother you to use more sunscreen (cream, spray, etc.)?                    | • |
| 3      | Does it bother you to check your skin for skin cancer?                            | • |
| 4      | Does it bother you to adjust your vacation to avoid the sun?                      |   |
| 5      | Do you feel that you have to avoid direct sunlight?                               |   |
| 6      | Does it bother you to wear certain clothing or a hat to protect you from the sun? |   |
| 7      | Do you feel that you should warn others about the sun?                            |   |
| 8      | Do you feel that you have to encourage others to get their skin checked?          | • |
| 9      | Does it bother you to have to protect your skin from the sun?                     | • |
| 10     | Did you have the feeling of having no control over your skin cancer?              |   |
| 11     | Were you worried about the period between diagnosis and treatment?                | • |
| 12     | Were you afraid of the treatment?   | • |
| 13     | Were you worried about (possible) side-effects of the treatment?                  |   |
| 14     | Were you worried about the anaesthetic injections?                                |   |
| 15     | Were you worried about scarring?  |   |
| 16     | Were you frightened by the word cancer?   | • |
| 17     | Were you afraid of getting skin cancer on multiple body sites?                    | • |
| 18     | Were you worried that the skin cancer would come back at the treated area?        |   |
| 19     | Were you worried about skin cancer spreading to other parts of the body?          | • |
| 20     | Were you worried about family members getting skin cancer?                        |   |
| 21     | Were you uncertain about the future?  | • |
| 22     | Were you worried that you would be less attractive?                               | • |
| 23     | Was your skin itching at the skin cancer area?                                    |   |
| 24     | Was your skin sensitive at the skin cancer area?                                  |   |
| 25     | Were you worried about other skin disorders?                                      | • |
| 26     | Were you insecure about not being able to recognise the signals of skin cancer?   |   |
| 27     | Were you worried about other people's skin?                                       | • |
| 28     | Were you worried about the severity of skin cancer?                               |   |
| 29     | Were you ashamed of the scar(s)?  |   |
| 30     | Did the questions by others about your scar(s) bother you?                        |   |
| 31     | Were you worried about whether your scar(s) could be covered?                     |   |
| 32     | Did it bother you to adjust your clothing in order to cover your scars and spots? | • |
| 33     | Did you feel less attractive?   | • |

•These items were translated from Dutch through forward/backward translating and are included in the final questionnaire.

**Table SIII. Basal and Squamous cell carcinoma Quality of Life (BaSQoL) questionnaire**

The following questions are about the influence of skin cancer on your daily life

|   | Not at all               | A little                 | Quite a bit              | Very much                |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| <b>Since the skin cancer diagnosis,</b>   |                          |                          |                          |                          |
| 1. does it bother you to be careful about your behaviour in the sun?                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. does it bother you to use more sunscreen (cream, spray, etc.)?                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. does it bother you to check your skin for skin cancer?                             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. does it bother you to have to protect your skin from the sun?                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. do you feel that you have to encourage others to get their skin checked?           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>When you think back to the time of diagnosis and treatment,</b>                    |                          |                          |                          |                          |
| 6. were you worried about the period between diagnosis and treatment?                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. were you afraid of the treatment?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. were you frightened by the word cancer?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>During the past week,</b>  |                          |                          |                          |                          |
| 9. were you afraid to get skin cancer on multiple body sites?                         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. were you worried about skin cancer spreading to other parts of the body?          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. were you uncertain about the future?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. were you worried about other skin disorders?                                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 13. were you worried that you would be less attractive?                               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 14. did it bother you to adjust your clothing in order to cover your scars and spots? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 15. did you feel less attractive?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 16. were you worried about other people's skin?                                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>Scoring of the items</b>   | <b>0</b>                 | <b>1</b>                 | <b>2</b>                 | <b>3</b>                 |

**Table SIV. Correlations between subscales**

|                       | Worries     | Appearance  | Behaviour   | Diagnosis & Treatment | Other people |
|-----------------------|-------------|-------------|-------------|-----------------------|--------------|
| Worries               |             | 0.11        | 0.15        | 0.33                  | 0.20         |
| Appearance            | <b>0.14</b> |             | 0.08        | 0.13                  | 0.04         |
| Behaviour             | <b>0.15</b> | <b>0.09</b> |             | 0.16                  | 0.09         |
| Diagnosis & Treatment | <b>0.33</b> | <b>0.16</b> | <b>0.15</b> |                       | 0.17         |
| Other People          | <b>0.20</b> | <b>0.06</b> | <b>0.09</b> | <b>0.17</b>           |              |

Bold numbers: complete cases; not bold: maximum likelihood with missing values (MLMV).