Additional file 5 Health-Related Quality of Life in Relation to Symptomatic and Radiographic Definitions of Knee Osteoarthritis: Data from Osteoarthritis Initiative (OAI) 4-Year Follow-Up Study

These tables report pairwise differences between estimated marginal means of SF-6D-disutility scores from GEE-analyses.

**Table S13** Pairwise differences between estimated marginal means of SF-6D-disutility score from GEEanalyses, symptomatic OA status (2-scale), K-L grade  $\geq$ 2 and knee pain on more than half the days during past month in the same knee

| Symptomatic OA status | No     | Yes     |
|-----------------------|--------|---------|
| No                    |        | -0.025* |
| Yes                   | 0.025* |         |

The mean difference is significant at the p<0.05 level

**Table S14** Pairwise differences between estimated marginal means of SF-6D-disutility score from GEEanalyses, K-L grade  $\geq 2$  (2-scale)

| K-L grade ≥2 | No     | Yes     |
|--------------|--------|---------|
| No           |        | -0.006* |
| Yes          | 0.006* |         |

The mean difference is significant at the p<0.05 level

**Table S15** Pairwise differences between estimated marginal means of SF-6D-disutility score from GEEanalyses, symptomatic OA status (3-scale), K-L grade  $\geq 2$  and knee pain on more than half the days during past month in the same knee

| Symptomatic OA status | No     | Yes, unilateral | Yes, bilateral |
|-----------------------|--------|-----------------|----------------|
| No                    |        | -0.024*         | -0.030*        |
| Yes, unilateral       | 0.024* |                 | -0.006         |
| Yes, bilateral        | 0.030* | 0.006           |                |

\*The mean difference is significant at the p<0.05 level

**Table S16** Pairwise differences between estimated marginal means of SF-6D-disutility score from GEEanalyses, K-L grade  $\geq 2$  (3-scale)

| K-L grade ≥2    | No     | Yes, unilateral | Yes, bilateral |
|-----------------|--------|-----------------|----------------|
| No              |        | -0.001          | -0.013*        |
| Yes, unilateral | 0.001  |                 | -0.012*        |
| Yes, bilateral  | 0.013* | 0.012*          |                |

\*The mean difference is significant at the p<0.05 level

Additional file 5 Health-Related Quality of Life in Relation to Symptomatic and Radiographic Definitions of Knee Osteoarthritis: Data from Osteoarthritis Initiative (OAI) 4-Year Follow-Up Study

| analyses, the highest K-L grade |        |        |        |        |         |  |  |  |  |  |  |  |
|---------------------------------|--------|--------|--------|--------|---------|--|--|--|--|--|--|--|
| K-L grade                       | 0      | 1      | 2      | 3      | 4       |  |  |  |  |  |  |  |
| 0                               |        | -0.002 | -0.004 | -0.008 | -0.027* |  |  |  |  |  |  |  |
| 1                               | 0.002  |        | -0.002 | -0.007 | -0.025* |  |  |  |  |  |  |  |
| 2                               | 0.004  | 0.002  |        | -0.005 | -0.023* |  |  |  |  |  |  |  |
| 3                               | 0.008  | 0.007  | 0.005  |        | -0.018* |  |  |  |  |  |  |  |
| 4                               | 0.027* | 0.025* | 0.023* | 0.018* |         |  |  |  |  |  |  |  |

**Table S17** Pairwise differences between estimated marginal means of SF-6D-disutility score from GEEanalyses, the highest K-L grade

\*The mean difference is significant at the p<0.05 level

**Table S18** Pairwise differences between estimated marginal means of SF-6D-disutility score from GEEanalyses, mean of K-L grades

| K-L grade | 0.0    | 0.5    | 1.0    | 1.5    | 2.0     | 2.5     | 3.0     | 3.5     | 4.0     |
|-----------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| 0.0       |        | -0.002 | 0.004  | -0.003 | -0.012* | -0.008  | -0.019* | -0.036* | -0.040* |
| 0.5       | 0.002  |        | 0.006  | 0.000  | -0.010  | -0.006  | -0.017* | -0.034* | -0.038* |
| 1.0       | -0.004 | -0.006 |        | -0.007 | -0.016* | -0.012* | -0.023* | -0.040* | -0.044* |
| 1.5       | 0.003  | 0.000  | 0.007  |        | -0.010* | -0.005  | -0.016* | -0.034* | -0.038* |
| 2.0       | 0.012* | 0.010  | 0.016* | 0.010* |         | 0.005   | -0.006  | -0.024* | -0.028* |
| 2.5       | 0.008  | 0.006  | 0.012* | 0.005  | -0.005  |         | -0.011* | -0.028* | -0.032* |
| 3.0       | 0.019* | 0.017* | 0.023* | 0.016* | 0.006   | 0.011*  |         | -0.017* | -0.021  |
| 3.5       | 0.036* | 0.034* | 0.040* | 0.034* | 0.024*  | 0.028*  | 0.017*  |         | -0.004  |
| 4.0       | 0.040* | 0.038* | 0.044* | 0.038* | 0.028*  | 0.032*  | 0.021   | 0.004   |         |

\*The mean difference is significant at the p<0.05 level

Additional file 5 Health-Related Quality of Life in Relation to Symptomatic and Radiographic Definitions of Knee Osteoarthritis: Data from Osteoarthritis Initiative (OAI) 4-Year Follow-Up Study

| K-L    | (0;0)  | (1;0)  | (1;1)  | (2;0)  | (2;1)  | (2;2)   | (3;0)  | (3;1)   | (3;2)   | (3;3)   | (4;0)   | (4;1)  | (4;2)   | (4;3)   | (4;4)   |
|--------|--------|--------|--------|--------|--------|---------|--------|---------|---------|---------|---------|--------|---------|---------|---------|
| grades |        |        |        |        |        |         |        |         |         |         |         |        |         |         |         |
| (0;0)  |        | -0.002 | 0.000  | 0.006  | -0.003 | -0.012* | -0.002 | -0.009  | -0.008  | -0.018* | -0.028* | -0.011 | -0.021* | -0.036* | -0.040* |
| (1;0)  | 0.002  |        | 0.002  | 0.008  | -0.001 | -0.009  | 0.000  | -0.007  | -0.005  | -0.016* | -0.026* | -0.009 | -0.018* | -0.034* | -0.038* |
| (1;1)  | 0.000  | -0.002 |        | 0.006  | -0.004 | -0.012  | -0.003 | -0.009  | -0.008  | -0.018* | -0.029* | -0.011 | -0.021* | -0.036* | -0.040* |
| (2;0)  | -0.006 | -0.008 | -0.006 |        | -0.010 | -0.018* | -0.008 | -0.015* | -0.014* | -0.024* | -0.034* | -0.017 | -0.027* | -0.042* | -0.046* |
| (2;1)  | 0.003  | 0.001  | 0.004  | 0.010  |        | -0.008  | 0.001  | -0.006  | -0.004  | -0.015* | -0.025* | -0.007 | -0.017* | -0.033* | -0.037* |
| (2;2)  | 0.012* | 0.009  | 0.012  | 0.018* | 0.008  |         | 0.009  | 0.002   | 0.004   | -0.007  | -0.017  | 0.001  | -0.009  | -0.025* | -0.029* |
| (3;0)  | 0.002  | 0.000  | 0.003  | 0.008  | -0.001 | -0.009  |        | -0.007  | -0.005  | -0.016* | -0.026* | -0.008 | -0.018  | -0.034* | -0.038* |
| (3;1)  | 0.009  | 0.007  | 0.009  | 0.015* | 0.006  | -0.002  | 0.007  |         | 0.002   | -0.009  | -0.019  | -0.002 | -0.011  | -0.027* | -0.031* |
| (3;2)  | 0.008  | 0.005  | 0.008  | 0.014* | 0.004  | -0.004  | 0.005  | -0.002  |         | -0.011  | -0.021  | -0.003 | -0.013  | -0.029* | -0.033* |
| (3;3)  | 0.018* | 0.016* | 0.018* | 0.024* | 0.015* | 0.007   | 0.016* | 0.009   | 0.011   |         | -0.010  | 0.007  | -0.002  | -0.018* | -0.022* |
| (4;0)  | 0.028* | 0.026* | 0.029* | 0.034* | 0.025* | 0.017   | 0.026* | 0.019   | 0.021   | 0.010   |         | 0.018  | 0.008   | -0.008  | -0.012  |
| (4;1)  | 0.011  | 0.009  | 0.011  | 0.017  | 0.007  | -0.001  | 0.008  | 0.002   | 0.003   | -0.007  | -0.018  |        | -0.010  | -0.025  | -0.029  |
| (4;2)  | 0.021* | 0.018* | 0.021* | 0.027* | 0.017* | 0.009   | 0.018  | 0.011   | 0.013   | 0.002   | -0.008  | 0.010  |         | -0.016  | -0.020  |
| (4;3)  | 0.036* | 0.034* | 0.036* | 0.042* | 0.033* | 0.025*  | 0.034* | 0.027*  | 0.029*  | 0.018*  | 0.008   | 0.025  | 0.016   |         | -0.004  |
| (4;4)  | 0.040* | 0.038* | 0.040* | 0.046* | 0.037* | 0.029*  | 0.038* | 0.031*  | 0.033*  | 0.022*  | 0.012   | 0.029  | 0.020   | 0.004   |         |

Table S19 Pairwise differences between estimated marginal means of SF-6D-disutility score from GEE-analyses, combination of K-L grades

\*The mean difference is significant at the p<0.05 level