

Supplement

Real-World Effectiveness, Safety, and Health-Related Quality of Life in Patients Receiving Adjuvant Nivolumab for Melanoma in Belgium and Luxembourg: Results of PRESERV MEL

Anne Rogiers^{1,2,3}, Laurence Willemot⁴, Laura McDonald⁵, Hilde Van Campenhout⁴, Guy Berchem⁶, Celine Jacobs⁷, Nathalie Blockx⁸, Andrée Rorive⁹, Bart Neyns^{2,3}

¹Centre Hospitalier Universitaire Brugmann, Brussels, Belgium

²Universitair Ziekenhuis Brussel, Brussels, Belgium

³Vrije Universiteit Brussel, Brussels, Belgium

⁴Bristol Myers Squibb, Braine L'Alleud, Belgium

⁵Bristol Myers Squibb, Uxbridge, United Kingdom

⁶Centre Hospitalier de Luxembourg, University of Luxembourg, Luxembourg

⁷Universitair Ziekenhuis Gent, Gent, Belgium

⁸Ziekenhuis Netwerk Antwerpen Middelheim, Antwerp, Belgium

⁹Centre Hospitalier Universitaire de Liège Sart-Tilman, Liège, Belgium

Supplemental Table S1. MIDs for HRQoL Assessments.

| Scale/Subscale | MID | |
|---------------------------|---|---|
| | Improvement | Deterioration |
| EORTC QLQ-C30 | | |
| Global health status/QoL | +7 (melanoma-specific) ^a +10 (general) ^b | -9 (melanoma-specific) ^a -10 (general) ^b |
| Physical functioning | +6 (melanoma-specific) ^a | -6 (melanoma-specific) ^a |
| Role functioning | +13 (melanoma-specific) ^a | -6 (melanoma-specific) ^a |
| Emotional functioning | +6 (melanoma-specific) ^a | -6 (melanoma-specific) ^a |
| Cognitive functioning | NA (melanoma-specific) ^a | -6 (melanoma-specific) ^a |
| Social functioning | +8 (melanoma-specific) ^a | -7 (melanoma-specific) ^a |
| Fatigue | -8 (melanoma-specific) ^a | +10 (melanoma-specific) ^a |
| Nausea/vomiting | -7 (melanoma-specific) ^a | +7 (melanoma-specific) ^a |
| Pain | -8 (melanoma-specific) ^a | +4 (melanoma-specific) ^a |
| Dyspnea | -7 (melanoma-specific) ^a | NA ^c |
| Insomnia | -4 (melanoma-specific) ^a | NA (melanoma-specific) ^a |
| Appetite loss | -12 (melanoma-specific) ^a | +18 (melanoma-specific) ^a |
| Constipation | NA ^c | NA ^c |
| Diarrhea | NA ^c | +5 (melanoma-specific) ^a |
| Financial difficulties | NA ^c | NA ^c |
| FACT-M | | |
| Total score | +5 ^d | -5 ^d |
| Melanoma subscale | +3 ^e | -3 ^e |
| TOI | +7 | -7 |
| Physical well-being | +2.5 ^f | -2.5 ^f |
| Social/family well-being | NA ^c | NA ^c |
| Emotional well-being | +2 ^f | -2 ^f |
| Functional well-being | +2.5 ^f | -2.5 ^f |
| Melanoma surgery subscale | +1.5 ^e | -1.5 ^e |
| EQ-5D-3L | | |
| Health utility index | +0.08 ^g | -0.08 ^g |
| EQ-VAS | +7 ^g | -7 ^g |

^aMusoro JZ, Bottomley A, Coens C, et al. Interpreting European Organisation for Research and Treatment for Cancer Quality of life Questionnaire core 30 scores as minimally importantly different for patients with malignant melanoma. *Eur J Cancer*. 2018;104:169–181.

^bOsoba D, Rodrigues G, Myles J, Zee B, Pater J. Interpreting the significance of changes in health-related quality-of-life scores. *J Clin Oncol*. 1998;16(1):139–144.

^cNA indicates that MIDs have not been reported for those scales.

^dBharmal M, Nolte S, Henry-Szatkowski M, Hennessy M, Schlichting M. Update on the psychometric properties and minimal important difference (MID) thresholds of the FACT-M questionnaire for use in treatment-naïve and previously treated patients with metastatic Merkel cell carcinoma. *Health Qual Life Outcomes*. 2020;18(1):145.

^eAskew RL, Xing Y, Palmer JL, Cella D, Moye LA, Cormier JN. Evaluating minimal important differences for the FACT-Melanoma quality of life questionnaire. *Value Health*. 2009;12(8):1144-1150.

^fWebster K, Cella D, Yost K. The Functional Assessment of Chronic Illness Therapy (FACIT) Measurement System: properties, applications, and interpretation. *Health Qual Life Outcomes*. 2003;1:79.

⁹Pickard AS, Neary MP, Cella D. Estimation of minimally important differences in EQ-5D utility and VAS scores in cancer. *Health Qual Life Outcomes*. 2007;5:70.

EORTC QLQ-C30, European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire C30; VAS, visual analogue scale; FACT-M, Functional Assessment of Cancer Therapy-Melanoma; HCRU, healthcare resource utilization. HRQoL health-related quality of life; MID, minimally important difference; NA, not available; NA, not available; QoL, quality of life; TOI, Trial Outcome Index.

Supplemental Table S2. Baseline Sociodemographic Questionnaire Results.

| Characteristic, n (%) | Adjuvant nivolumab (n = 152) |
|--|---|
| What is your highest level of qualification? | |
| Primary school | 11 (9) |
| Lower secondary school (general/technical) | 13 (10) |
| Higher secondary school (general/technical) | 33 (26) |
| Professional education (vocational) | 16 (13) |
| High school/Bachelor's degree | 24 (19) |
| University/Master's degree | 16 (13) |
| Missing | 12 (10) |
| What is your civil status? | |
| Married or living together | 86 (69) |
| Divorced and single | 8 (6) |
| Divorced and remarried | 5 (4) |
| Single | 10 (8) |
| Widow | 9 (7) |
| Missing | 7 (6) |
| Number of children | |
| 0 | 21 (17) |
| 1 | 26 (21) |
| 2 | 39 (31) |
| 3 | 25 (20) |
| 4 | 7 (6) |
| 5 | 0 |
| > 5 | 2 (2) |
| Missing | 5 (4) |
| What is your social status? | |
| Employee | 35 (28) |
| Laborer | 16 (13) |
| Independent | 13 (10) |
| Retired | 44 (35) |
| Disabled | 1 (1) |
| OCMW/CPAS support | 0 |
| Other | 11 (9) |
| Are you on sick leave at the moment? | |
| No | 60 (48) |
| Yes | 33 (26) |
| Yes part-time | 4 (3) |
| Not applicable | 22 (18) |
| Missing | 6 (5) |
| Do you have any professional issues or complaints? | |
| No problem | 81 (65) |
| Stress at work | 11 (9) |
| Job insecurity | 1 (1) |
| Other | 11 (9) |
| Missing | 21 (17) |

| Characteristic, n (%) | Adjuvant nivolumab (n = 152) |
|--|---|
| Do you have any financial problems? | |
| No | 102 (82) |
| Yes | 4 (3) |
| I need to track my spending | 14 (11) |
| Missing | 5 (4) |
| Do you have any familial issues or complaints? | |
| No | 109 (87) |
| Yes | 11 (9) |
| Relational problems | 3 (2) |
| Worries about my partner related to my illness | 3 (2) |
| Worries about my children related to my illness | 1 (1) |
| Other worries not related to my illness | 4 (3) |
| Missing | 5 (4) |
| Do you take any sleep medication, sedatives, or antidepressants? | |
| No | 98 (78) |
| Yes | 22 (18) |
| Missing | 5 (4) |
| Have you experienced any of the following problems in the past? | |
| No problem | 85 (68) |
| Depression | 10 (8) |
| Burn-out | 3 (2) |
| Drinking problem | 1 (1) |
| Anxiety | 7 (6) |
| Panic attacks | 1 (1) |
| Phobia | 1 (1) |
| Psychosis | 0 |
| Traumatic events | 6 (5) |
| Several problems | 1 (1) |
| Other | 5 (4) |
| Missing | 5 (4) |
| Mental attitude | |
| Optimistic | 95 (76) |
| Pessimistic | 21 (17) |
| Missing | 9 (7) |

CPAS, Centre public d'action sociale; OCMW, Openbaar centrum voor maatschappelijk welzijn.

Supplemental Table S3. PRO Completion Rates.^a

| Time Point | EORTC QLQ-C30,^b <i>n/N (%)</i> | FACT-M,^c <i>n/N (%)</i> | EQ-5D-3L,^d <i>n/N (%)</i> |
|-------------------|--|---|---|
| Baseline | 115/125 (92) | 113/125 (90) | 117/125 (94) |
| 3 months | 109/124 (88) | 108/124 (87) | 111/124 (90) |
| 6 months | 100/118 (85) | 99/118 (84) | 102/118 (86) |
| 9 months | 87/111 (78) | 84/111 (76) | 87/111 (78) |
| 12 months | 83/107 (78) | 81/107 (76) | 86/107 (80) |
| 18 months | 54/69 (78) | 52/69 (75) | 56/69 (81) |
| 24 months | 30/37 (81) | 29/37 (78) | 30/37 (81) |

^aThe PRO questionnaire completion rate was calculated using the number of patients with non-missing PRO data at baseline and at a post-baseline visit, divided by the number of patients eligible for the respective visit. ^bFor the global health status/QoL subscale. ^cFor the FACT-G subscale. ^dFor the VAS score. EORTC QLQ-C30, European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire C30; FACT-M, Functional Assessment of Cancer Therapy-Melanoma; PRO, patient-reported outcome; VAS, visual analogue scale.

Supplemental Figure S1. PRESERV MEL study design. AE, adverse event; DMFS, distant metastasis-free survival; HCRU, healthcare resource utilization; HRQoL, health-related quality of life; OS, overall survival; RFS, relapse-free survival.

