



Universiteit  
Leiden  
The Netherlands

**ASO visual abstract: Is a history of optimal staging by SLNB in the era prior to adjuvant therapy associated with improved outcome once melanoma patients have progressed to advanced disease?**

Blankenstein, S.A.; Bonenkamp, J.J.; Aarts, M.J.B.; Berkmortel, F.W.P.J. van den; Blank, C.U.; Blokk, W.A.M.; ... ; Akkooi, A.C.J. van

**Citation**

Blankenstein, S. A., Bonenkamp, J. J., Aarts, M. J. B., Berkmortel, F. W. P. J. van den, Blank, C. U., Blokk, W. A. M., ... Akkooi, A. C. J. van. (2022). ASO visual abstract: Is a history of optimal staging by SLNB in the era prior to adjuvant therapy associated with improved outcome once melanoma patients have progressed to advanced disease? *Annals Of Surgical Oncology*, 30, 587-588. doi:10.1245/s10434-022-12719-2

Version: Publisher's Version

License: [Licensed under Article 25fa Copyright Act/Law \(Amendment Taverne\)](#)

Downloaded from: <https://hdl.handle.net/1887/3564011>

**Note:** To cite this publication please use the final published version (if applicable).



## ASO Visual Abstract: Is a History of Optimal Staging by SLNB in the Era Prior to Adjuvant Therapy Associated with Improved Outcome Once Melanoma Patients have Progressed to Advanced Disease?

Stephanie A. Blankenstein, MD<sup>1</sup>, Johannes J. Bonenkamp, MD<sup>2</sup>, Maureen J. B. Aarts, MD<sup>3</sup>, Franchette W. P. J. van den Berkmortel, MD, PhD<sup>4</sup>, Christian U. Blank, MD, PhD<sup>5</sup>, Willeke A. M. Blox, MD, PhD<sup>6</sup>, Marye J. Boers-Sonderen, MD, PhD<sup>7</sup>, Alfons J. M. van den Eertwegh, MD, PhD<sup>8</sup>, Margreet G. Franken, PhD<sup>9</sup>, Jan Willem B. de Groot, MD, PhD<sup>10</sup>, John B. A. G. Haanen, MD, PhD<sup>5</sup>, Geke A. P. Hospers, MD, PhD<sup>11</sup>, Ellen W. Kapiteijn, MD, PhD<sup>12</sup>, Olivier J. van Not, MD<sup>15,19</sup>, Djura Piersma, MD, PhD<sup>13</sup>, Rozemarijn S. van Rijn, MD, PhD<sup>14</sup>, Karijn P. M. Suijkerbuijk, MD, PhD<sup>15</sup>, Astrid A. M. van der Veldt, MD, PhD<sup>16</sup>, Gerard Vreugdenhil, MD<sup>17</sup>, Hans M. Westgeest, MD<sup>18</sup>, Michel W. J. M. Wouters, MD, PhD<sup>1,19,20</sup>, and Alexander C. J. van Akkooi, MD, PhD<sup>1</sup>

<sup>1</sup>Department of Surgical Oncology, Netherlands Cancer Institute-Antoni van Leeuwenhoek, Amsterdam, The Netherlands; <sup>2</sup>Department of Surgical Oncology, Radboud University Medical Centre, Nijmegen, The Netherlands; <sup>3</sup>Department of Medical Oncology, GROW School for Oncology and Developmental Biology, Maastricht University Medical Centre+, Maastricht, The Netherlands; <sup>4</sup>Department of Internal Medicine, Zuyderland Medical Centre Geleen-Heerlen, Sittard-Geleen, The Netherlands; <sup>5</sup>Department of Medical Oncology, Netherlands Cancer Institute-Antoni van Leeuwenhoek, Amsterdam, The Netherlands; <sup>6</sup>Department of Pathology, University Medical Center Utrecht, Utrecht, The Netherlands; <sup>7</sup>Department of Medical Oncology, Radboud University Medical Centre, Nijmegen, The Netherlands; <sup>8</sup>Department of Medical Oncology, Cancer Center Amsterdam, Amsterdam UMC, Location VU University Medical Center (VUmc), Amsterdam, The Netherlands; <sup>9</sup>Institute for Medical Technology Assessment, Erasmus School of Health Policy & Management, Erasmus University, Rotterdam, The Netherlands; <sup>10</sup>Oncology Center Isala, Isala, Zwolle, The Netherlands; <sup>11</sup>Department of Medical Oncology, University Medical Centre Groningen, University of Groningen, Groningen, The Netherlands; <sup>12</sup>Department of Medical Oncology, Leiden University Medical Centre, Leiden, The Netherlands; <sup>13</sup>Department of Internal Medicine, Medisch Spectrum Twente, Enschede, The Netherlands; <sup>14</sup>Department of Internal Medicine, Medical Center Leeuwarden, Leeuwarden, The Netherlands; <sup>15</sup>Department of Medical Oncology, University Medical Center Utrecht, Utrecht, The Netherlands; <sup>16</sup>Departments of Medical Oncology and Radiology & Nuclear Medicine, Erasmus Medical Center, Rotterdam, The Netherlands; <sup>17</sup>Department of Internal Medicine, Maxima Medical Center, Veldhoven, The Netherlands; <sup>18</sup>Department of Internal Medicine, Amphia Hospital, Breda, The Netherlands; <sup>19</sup>Scientific Bureau, Dutch Institute for Clinical Auditing, Leiden, The Netherlands; <sup>20</sup>Department of Biomedical Data Sciences, Leiden University Medical Center, Leiden, The Netherlands

This study including patients with unresectable stage IIIC or IV melanoma from a prospectively collected, nationwide database showed no difference in disease outcome for patients who were or were not staged with SLNB at diagnosis of the primary tumor (<https://doi.org/10.1245/s10434-022-12600-2>).

## Is a History of Optimal Staging by SLNB in the Era Prior to Adjuvant Therapy Associated With Improved Outcome Once Melanoma Patients Have Progressed to Advanced Disease?

Hypothesis: Early identification of lymph node metastasis by SLNB leads to increased awareness of possible metastases during the follow-up, which could lead to better outcomes for patients once metastasized.

Data retrieved from DMTR: a prospectively collected, nationwide database of patients with unresectable stage IIIC or stage IV (advanced) melanoma

Patients previously treated with WLE alone ↔ MSS difference? ↔ Patients previously treated with WLE + SLNB

WLE: wide local excision, SLNB: sentinel lymph node biopsy, DMTR: Dutch Melanoma Treatment Registry, MSS: melanoma-specific survival

Advanced melanoma patients  
N=2,581

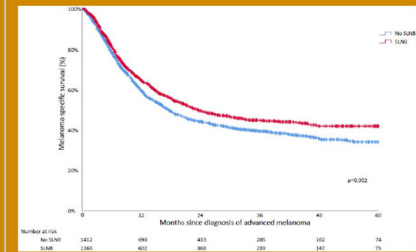
Previous WLE  
N=1,412

Previous WLE + SLNB  
N=1,169

Median MSS after diagnosis advanced disease: 18 months (95% CI 15-20)

Median MSS after diagnosis advanced disease: 23 months (95% CI 19-29)

MSS after diagnosis of advanced disease



Multivariate analyses: SLNB not associated with MSS benefit after diagnosis of advanced disease.

Prognostic factors: gender, age, ulceration of primary tumor, WHO performance status, year of diagnosis of advanced disease, LDH level, and presence of brain metastases.

Conclusion: Once patients have unresectable stage IIIC or stage IV (advanced) melanoma, there was no difference in disease outcome for patients who were or were not previously staged with an SLNB.

Blankenstein, et al. *Ann Surg Oncol*.  
Visual Abstract for @AnnSurgOncol

ANNALS OF  
SURGICAL  
ONCOLOGY

**DISCLOSURES** S.B. has declared no conflicts of interest. J.B. has declared no conflicts of interest. M.A. has advisory board/consultancy honoraria from Amgen, Bristol Myers Squibb, Novartis, MSD-Merck, Merck-Pfizer, Pierre Fabre, Sanofi, Astellas, and Bayer. Research grants Merck-Pfizer. Not related to current work and paid to institute. F.v.d.B. has declared no conflicts of interest. C.B. has received commercial research grants from Novartis, BristolMyers Squibb, and NanoString; is a paid advisory board member for Bristol Myers Squibb, MSD, Roche, Novartis, GlaxoSmithKline, AstraZeneca, Pfizer, Lilly, GenMab, and Pierre Fabre; and holds ownership interest in Uniti Cars, Neon Therapeutics, and Forty Seven. W.B. has declared no conflicts of interest. M.B.S. has consultancy/advisory relationships with Pierre Fabre, MSD, and Novartis, all paid to institution. A.v.d.E. has received research study grants not related to this paper from Sanofi, Roche, Bristol-Myers Squibb, TEVA, and Idera. He has received travel expenses from MSD Oncology, Roche, Pfizer, and Sanofi and speaker honoraria from Bristol-Myers Squibb and Novartis. M.F. has advisory relationships with Roche Nederland BV and Daiichi Sankyo, paid to the institution. J.d.G. has consultancy/advisory relationships with Bristol Myers Squibb, Pierre Fabre, Servier, MSD, and Novartis. J.H. has advisory relationships with Aimm, Achilles Therapeutics, Amgen, AstraZeneca, Bayer, Bristol Myers Squibb, BioNTech, GSK, Immunocore, Ipsen, MSD, Merck Serono, Molecular Partners, Novartis, Neogene Therapeutics, Pfizer, Roche/Genentech, Sanofi, Seattle Genetics, Third Rock Ventures, and Vaximm and has received research grants not related to this paper from Amgen, Bristol Myers Squibb, MSD, BioNTech, Neogene

Therapeutics, and Novartis. All grants were paid to the institutions. G.H. has consultancy/advisory relationships with Amgen, Bristol Myers Squibb, Roche, MSD, Pfizer, Novartis, and Pierre Fabre and has received research grants not related to this paper from Bristol Myers Squibb and Seerave, paid to the institution. E.K. has consultancy/advisory relationships with Bristol Myers Squibb, Novartis, Merck, and Pierre Fabre, and received research grants not related to this paper from Bristol Myers Squibb. O.v.N. has declared no conflicts of interest. D.P. has declared no conflicts of interest. R.v.R. has received advisory board/consultancy honoraria from Pfizer and an expert meeting fee from Roche. K.S. has advisory relationships with Bristol Myers Squibb, Novartis, MSD, Pierre Fabre, and Abbvie and received honoraria from Novartis, MSD, and Roche, all paid to institution. A.v.d.V. has consultancy relationships with Bristol Myers Squibb, MSD, Sanofi, Merck, Pfizer, Ipsen, Eisai, Roche, Pierre Fabre, and Novartis, all paid to the institute. G.V. has declared no conflicts of interest. H.W. has declared no conflicts of interest. M.W. has declared no conflicts of interest. Through A.v.A., N.K.I. has received compensation for advisory roles from Amgen, BMS, Novartis, MSD-Merck, Merck-Pfizer, Pierre Fabre, Sirius Medical, Sanofi, and 4SC, and N.K.I. has received grants from Amgen and Merck-Pfizer.

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.