

# THE CHANGING ROLE OF COMPLETION LYMPHADENECTOMY IN MELANOMA

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## DISCLOSURES

- I have no financial disclosures

## GOALS

- Discuss the impact of completion lymph node dissection on survival and recurrence
- Discuss the potential downfalls of completion node dissection
- Discuss a role for a minimally invasive approach to completion lymph node dissection
- Discuss the emergence of adjuvant therapy

ESTABLISHED IN 1812      FEBRUARY 13, 2014      VOL. 370 NO. 7

### Final Trial Report of Sentinel-Node Biopsy versus Nodal Observation in Melanoma

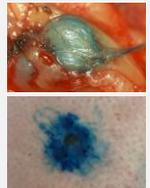
D.L. Morton, J.F. Thompson, A.J. Cochran, N. Mozzillo, O.E. Nieweg, D.F. Roses, H.J. Hoekstra, C.P. Karakousis, C.A. Puleo, B.J. Coventry, M. Kashani-Sabet, B.M. Smithers, E. Paul, W.G. Kraybill, J.G. McKinnon, H.-J. Wang, R. Elashoff, and M.B. Faries, for the MSLT Group\*

- Positive sentinel lymph node biopsy
- Early removal of nodal metastasis results in at least an improvement in disease-free survival

No improvement in melanoma-specific survival



Demonstrated in intermediate thickness melanoma (1.2-3.5 mm)



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- MSLT-I demonstrated sentinel lymph node status to be the most important prognostic factor in patients with clinically node-negative disease



## THE NEXT LOGICAL ???

- Does completion lymph node dissection extend survival in those patients with a positive sentinel lymph node biopsy?



### Melanoma Staging: Evidence-Based Changes in the American Joint Committee on Cancer Eighth Edition Cancer Staging Manual

Jeffrey E. Gershenwald, MD, PhD<sup>1</sup>, Richard A. Scolyer, MD<sup>2,3,4</sup>, Kenneth R. Hess, PhD<sup>5</sup>, Vernon K. Sondak, MD<sup>6</sup>, George V. Long, MD, PhD<sup>7</sup>, Mark A. Soslow, MD<sup>8</sup>, Alexander L. Lazar, MD, PhD<sup>9</sup>, Mark E. Finkel, MD<sup>10</sup>, John M. Kirkwood, MD<sup>11</sup>, Loren A. Moulton, MD, PhD<sup>12</sup>, Lauren E. Hogg, PhD<sup>13</sup>, Raymond M. Eggermont, MD, PhD<sup>14</sup>, Keith F. Huether, MD<sup>15</sup>, Charles M. Balch, MD<sup>16</sup>, John P. Thompson, MD<sup>17</sup>, for members of the American Joint Committee on Cancer Melanoma Expert Panel and the International Melanoma Database and Discovery Platform

- Melanoma Staging: AJCC 8<sup>th</sup> edition
- Simplification of Stage III disease
- The number of nodes needs to be determined to adequately stage the patient

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### Melanoma Staging: Evidence-Based Changes in the American Joint Committee on Cancer Eighth Edition Cancer Staging Manual

Jeffrey E. Gershenwald, MD, PhD<sup>1</sup>, Richard A. Scolyer, MD<sup>2,3,4</sup>, Kenneth R. Hess, PhD<sup>5</sup>, Vernon K. Sondak, MD<sup>6</sup>, George V. Long, MD, PhD<sup>7</sup>, Mark A. Soslow, MD<sup>8</sup>, Alexander L. Lazar, MD, PhD<sup>9</sup>, Mark E. Finkel, MD<sup>10</sup>, John M. Kirkwood, MD<sup>11</sup>, Loren A. Moulton, MD, PhD<sup>12</sup>, Lauren E. Hogg, PhD<sup>13</sup>, Raymond M. Eggermont, MD, PhD<sup>14</sup>, Keith F. Huether, MD<sup>15</sup>, Charles M. Balch, MD<sup>16</sup>, John P. Thompson, MD<sup>17</sup>, for members of the American Joint Committee on Cancer Melanoma Expert Panel and the International Melanoma Database and Discovery Platform

TABLE 1. Definition of Regional Lymph Nodes (N)

Category	Definition	Number of Nodes
N0	Regional nodes not examined or regional nodes not found or pathologic complete response with no detectable residual	0
N1	One ipsilateral level I node	1
N2	Two ipsilateral level I nodes	2
N3	Three ipsilateral level I nodes	3
N4	Four ipsilateral level I nodes	4
N5	Five ipsilateral level I nodes	5
N6	Six ipsilateral level I nodes	6
N7	Seven ipsilateral level I nodes	7
N8	Eight ipsilateral level I nodes	8
N9	Nine ipsilateral level I nodes	9
N10	Ten ipsilateral level I nodes	10
N11	One ipsilateral level I node and one ipsilateral level II node	2
N12	Two ipsilateral level I nodes and one ipsilateral level II node	3
N13	Three ipsilateral level I nodes and one ipsilateral level II node	4
N14	Four ipsilateral level I nodes and one ipsilateral level II node	5
N15	Five ipsilateral level I nodes and one ipsilateral level II node	6
N16	Six ipsilateral level I nodes and one ipsilateral level II node	7
N17	Seven ipsilateral level I nodes and one ipsilateral level II node	8
N18	Eight ipsilateral level I nodes and one ipsilateral level II node	9
N19	Nine ipsilateral level I nodes and one ipsilateral level II node	10
N20	Ten ipsilateral level I nodes and one ipsilateral level II node	11
N21	One ipsilateral level I node and one ipsilateral level II node and one ipsilateral level III node	3
N22	Two ipsilateral level I nodes and one ipsilateral level II node and one ipsilateral level III node	4
N23	Three ipsilateral level I nodes and one ipsilateral level II node and one ipsilateral level III node	5
N24	Four ipsilateral level I nodes and one ipsilateral level II node and one ipsilateral level III node	6
N25	Five ipsilateral level I nodes and one ipsilateral level II node and one ipsilateral level III node	7
N26	Six ipsilateral level I nodes and one ipsilateral level II node and one ipsilateral level III node	8
N27	Seven ipsilateral level I nodes and one ipsilateral level II node and one ipsilateral level III node	9
N28	Eight ipsilateral level I nodes and one ipsilateral level II node and one ipsilateral level III node	10
N29	Nine ipsilateral level I nodes and one ipsilateral level II node and one ipsilateral level III node	11
N30	Ten ipsilateral level I nodes and one ipsilateral level II node and one ipsilateral level III node	12
N31	One ipsilateral level I node and one ipsilateral level II node and one ipsilateral level III node and one ipsilateral level IV node	4
N32	Two ipsilateral level I nodes and one ipsilateral level II node and one ipsilateral level III node and one ipsilateral level IV node	5
N33	Three ipsilateral level I nodes and one ipsilateral level II node and one ipsilateral level III node and one ipsilateral level IV node	6
N34	Four ipsilateral level I nodes and one ipsilateral level II node and one ipsilateral level III node and one ipsilateral level IV node	7
N35	Five ipsilateral level I nodes and one ipsilateral level II node and one ipsilateral level III node and one ipsilateral level IV node	8
N36	Six ipsilateral level I nodes and one ipsilateral level II node and one ipsilateral level III node and one ipsilateral level IV node	9
N37	Seven ipsilateral level I nodes and one ipsilateral level II node and one ipsilateral level III node and one ipsilateral level IV node	10
N38	Eight ipsilateral level I nodes and one ipsilateral level II node and one ipsilateral level III node and one ipsilateral level IV node	11
N39	Nine ipsilateral level I nodes and one ipsilateral level II node and one ipsilateral level III node and one ipsilateral level IV node	12
N40	Ten ipsilateral level I nodes and one ipsilateral level II node and one ipsilateral level III node and one ipsilateral level IV node	13
N41	One ipsilateral level I node and one ipsilateral level II node and one ipsilateral level III node and one ipsilateral level IV node and one ipsilateral level V node	5
N42	Two ipsilateral level I nodes and one ipsilateral level II node and one ipsilateral level III node and one ipsilateral level IV node and one ipsilateral level V node	6
N43	Three ipsilateral level I nodes and one ipsilateral level II node and one ipsilateral level III node and one ipsilateral level IV node and one ipsilateral level V node	7
N44	Four ipsilateral level I nodes and one ipsilateral level II node and one ipsilateral level III node and one ipsilateral level IV node and one ipsilateral level V node	8
N45	Five ipsilateral level I nodes and one ipsilateral level II node and one ipsilateral level III node and one ipsilateral level IV node and one ipsilateral level V node	9
N46	Six ipsilateral level I nodes and one ipsilateral level II node and one ipsilateral level III node and one ipsilateral level IV node and one ipsilateral level V node	10
N47	Seven ipsilateral level I nodes and one ipsilateral level II node and one ipsilateral level III node and one ipsilateral level IV node and one ipsilateral level V node	11
N48	Eight ipsilateral level I nodes and one ipsilateral level II node and one ipsilateral level III node and one ipsilateral level IV node and one ipsilateral level V node	12
N49	Nine ipsilateral level I nodes and one ipsilateral level II node and one ipsilateral level III node and one ipsilateral level IV node and one ipsilateral level V node	13
N50	Ten ipsilateral level I nodes and one ipsilateral level II node and one ipsilateral level III node and one ipsilateral level IV node and one ipsilateral level V node	14

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Increase in nodal burden leads to a worse survival

### Melanoma Patients with Positive Sentinel Nodes Who Did Not Undergo Completion Lymphadenectomy: A Multi-Institutional Study

Sandra L. Wong, MD,<sup>1</sup> Donald L. M. Ann Surg Oncol (2014) 21:3115-3125  
 Jeffrey E. Gershenwald, MD,<sup>2</sup> Stanley P. J. J Clin Oncol (2014) 32:1798-1807  
 Haim Gutman, MD,<sup>3</sup> Michael S. Kelly, M. McMasters, MD, PhD,<sup>4</sup> Douglas Alexander M. M. Eggermont, MD,<sup>5</sup> A. Benedetto Cosimi, MD,<sup>6</sup> Adam L. I.

Journal of SURGICAL ONCOLOGY  
 ORIGINAL ARTICLE - MELANOMAS

#### Observation After a Positive Sentinel Lymph Node Biopsy in Patients with Melanoma

Zahra M. Bambash, MD,<sup>1</sup> Ismaïl T. Konstantinidis, MD,<sup>2</sup> Deborah Kuk, SchF,<sup>3</sup> Charlotte E. Ariyan, MD, PhD,<sup>4</sup> Mary Sue Brady, MD,<sup>5</sup> and Daniel G. Coit, MD<sup>6</sup>

- Previous retrospective studies are consistent with the results published in MSLT-II

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- Previous retrospective studies are consistent with the results published in MSLT-II
- One other prospective trial also showed similar results

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### Complete lymph node dissection versus no dissection in patients with sentinel lymph node biopsy positive melanoma (DeCOG-SLT): a multicentre, randomised, phase 3 trial

Ulrike Leiter\*, Rudolf Stadler\*, Cornelia Mauch, Werner Hohenberger, Norbert Brockmeyer, Constanza Belding, Cord Sunderkotter, Martin Kautz, Klaus-Werner Schulte, Percy Lehmann, Thomas Vogt, Jens Illich, Rudolf Hentrich, Wolfgang Garbner, Jan Christoph Simon, Ulrike Keim, Peter Martus, Claus Garbe, for the German Dermatologic Cooperative Oncology Group (DeCOG)

- DeCOG-SLT
- Multicenter, randomized phase 3 trial
- 483 agreed to random assignment
- Observation (n = 233)
- Completion lymph node dissection (n = 240)

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- DeCOG-SLT
- Multicenter, randomized phase 3 trial
- 483 agreed to random assignment
- Observation (n = 233)
- Completion lymph node dissection (n=240)
- Inclusion criteria
  - Cutaneous melanoma trunk, extremities
  - Breslow thickness  $\geq 1$  mm
  - Micrometastasis in SLN, including single cells
- EXCLUDED
  - Head and neck
  - Regional macrometastasis

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	Observation group	Complete lymph node dissection group
Number of patients	100 (50%)	100 (50%)
Age	66 (66%)	66 (66%)
Sex	50 (50%)	50 (50%)
Primary tumor	50 (50%)	50 (50%)
T1a	10 (10%)	10 (10%)
T1b	10 (10%)	10 (10%)
T2	10 (10%)	10 (10%)
T3	10 (10%)	10 (10%)
T4	10 (10%)	10 (10%)
T5	10 (10%)	10 (10%)
T6	10 (10%)	10 (10%)
T7	10 (10%)	10 (10%)
T8	10 (10%)	10 (10%)
T9	10 (10%)	10 (10%)
T10	10 (10%)	10 (10%)
T11	10 (10%)	10 (10%)
T12	10 (10%)	10 (10%)
T13	10 (10%)	10 (10%)
T14	10 (10%)	10 (10%)
T15	10 (10%)	10 (10%)
T16	10 (10%)	10 (10%)
T17	10 (10%)	10 (10%)
T18	10 (10%)	10 (10%)
T19	10 (10%)	10 (10%)
T20	10 (10%)	10 (10%)
T21	10 (10%)	10 (10%)
T22	10 (10%)	10 (10%)
T23	10 (10%)	10 (10%)
T24	10 (10%)	10 (10%)
T25	10 (10%)	10 (10%)
T26	10 (10%)	10 (10%)
T27	10 (10%)	10 (10%)
T28	10 (10%)	10 (10%)
T29	10 (10%)	10 (10%)
T30	10 (10%)	10 (10%)
T31	10 (10%)	10 (10%)
T32	10 (10%)	10 (10%)
T33	10 (10%)	10 (10%)
T34	10 (10%)	10 (10%)
T35	10 (10%)	10 (10%)
T36	10 (10%)	10 (10%)
T37	10 (10%)	10 (10%)
T38	10 (10%)	10 (10%)
T39	10 (10%)	10 (10%)
T40	10 (10%)	10 (10%)
T41	10 (10%)	10 (10%)
T42	10 (10%)	10 (10%)
T43	10 (10%)	10 (10%)
T44	10 (10%)	10 (10%)
T45	10 (10%)	10 (10%)
T46	10 (10%)	10 (10%)
T47	10 (10%)	10 (10%)
T48	10 (10%)	10 (10%)
T49	10 (10%)	10 (10%)
T50	10 (10%)	10 (10%)
T51	10 (10%)	10 (10%)
T52	10 (10%)	10 (10%)
T53	10 (10%)	10 (10%)
T54	10 (10%)	10 (10%)
T55	10 (10%)	10 (10%)
T56	10 (10%)	10 (10%)
T57	10 (10%)	10 (10%)
T58	10 (10%)	10 (10%)
T59	10 (10%)	10 (10%)
T60	10 (10%)	10 (10%)
T61	10 (10%)	10 (10%)
T62	10 (10%)	10 (10%)
T63	10 (10%)	10 (10%)
T64	10 (10%)	10 (10%)
T65	10 (10%)	10 (10%)
T66	10 (10%)	10 (10%)
T67	10 (10%)	10 (10%)
T68	10 (10%)	10 (10%)
T69	10 (10%)	10 (10%)
T70	10 (10%)	10 (10%)
T71	10 (10%)	10 (10%)
T72	10 (10%)	10 (10%)
T73	10 (10%)	10 (10%)
T74	10 (10%)	10 (10%)
T75	10 (10%)	10 (10%)
T76	10 (10%)	10 (10%)
T77	10 (10%)	10 (10%)
T78	10 (10%)	10 (10%)
T79	10 (10%)	10 (10%)
T80	10 (10%)	10 (10%)
T81	10 (10%)	10 (10%)
T82	10 (10%)	10 (10%)
T83	10 (10%)	10 (10%)
T84	10 (10%)	10 (10%)
T85	10 (10%)	10 (10%)
T86	10 (10%)	10 (10%)
T87	10 (10%)	10 (10%)
T88	10 (10%)	10 (10%)
T89	10 (10%)	10 (10%)
T90	10 (10%)	10 (10%)
T91	10 (10%)	10 (10%)
T92	10 (10%)	10 (10%)
T93	10 (10%)	10 (10%)
T94	10 (10%)	10 (10%)
T95	10 (10%)	10 (10%)
T96	10 (10%)	10 (10%)
T97	10 (10%)	10 (10%)
T98	10 (10%)	10 (10%)
T99	10 (10%)	10 (10%)
T100	10 (10%)	10 (10%)

### Complete lymph node dissection versus no dissection in patients with sentinel lymph node biopsy positive melanoma (DeCOG-SLT): a multicentre, randomised, phase 3 trial

Ulrike Leiter\*, Rudolf Stadler\*, Cornelia Mauch, Werner Hohenberger, Norbert Brodmeyer, Cora Bocking, Cord Sunderkotter, Martin Kautz, Klaus-Werner Schulte, Percy Lehmann, Thomas Vogt, Jens Ulrich, Rudolf Hrabal, Wolfgang Gehring, Jan Christoph Simon, Ulrike Kain, Peter Mautz, Claus Garbe, for the German Dermatologic Cooperative Oncology Group (DeCOG)

- Results
  - Median follow-up was 35 months
  - No significant difference in distant metastasis free-survival at 3 years between the two groups (p=0.87)

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- Results
  - Median follow-up was 35 months
  - No significant difference in distant metastasis free-survival at 3 years between the two groups (p=0.87)
  - No significant difference was seen in overall survival or recurrence-free survival

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### Complete lymph node dissection versus no dissection in patients with sentinel lymph node biopsy positive melanoma (DeCOG-SLT): a multicentre, randomised, phase 3 trial

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	Distant metastasis free survival	Overall survival	Recurrence free survival
Treatment group (observation vs complete lymph node dissection)	1.05 (95% CI 0.48-2.43)	0.43	1.12 (0.58-2.12)
Primary tumor size (T1-T2 vs T3-T4)	2.10 (0.73-6.10)	<0.0001	2.90 (0.98-8.42)
Primary tumor size (T1-T2 vs T3-T4) (pooled)	2.10 (0.73-6.10)	<0.0001	2.90 (0.98-8.42)
Primary tumor size (T1-T2 vs T3-T4) (pooled) (p=0.0001)	2.10 (0.73-6.10)	<0.0001	2.90 (0.98-8.42)
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Primary tumor size (T1-T2 vs T3-T4) (pooled) (p=0.0001) (p=0.0001) (p=0.0001) (p=0.0001) (p=0.0001)	2.10 (0.73-6.10)	<0.0001	2.90 (0.98-8.42)

Significant predictors of distant metastasis-free survival

- Tumor load in SLNB
- Breslow thickness

Complete lymph node dissection versus observation showed NO significant effect on survival

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### Complete lymph node dissection versus no dissection in patients with sentinel lymph node biopsy positive melanoma (DeCOG-SLT): a multicentre, randomised, phase 3 trial

Ulrike Leiter\*, Rudolf Stadler\*, Cornelia Mauch, Werner Hohenberger, Norbert Brodmeyer, Cora Bocking, Cord Sunderkotter, Martin Kautz, Klaus-Werner Schulte, Percy Lehmann, Thomas Vogt, Jens Ulrich, Rudolf Hrabal, Wolfgang Gehring, Jan Christoph Simon, Ulrike Kain, Peter Mautz, Claus Garbe, for the German Dermatologic Cooperative Oncology Group (DeCOG)

- Conclusion
  - Limitations → underpowered

Authors do not recommend CLND in patients with melanoma with lymph node metastasis of ≤ 1 mm

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### Completion Dissection or Observation for Sentinel-Node Metastasis in Melanoma

M.B. Faries, J.F. Thompson, A.J. Cochran, R.H. Andradbacka, N. Mozzillo, J.S. Zager, T. Jakkula, T.L. Bowles, A. Testori, P.D. Beetsch, H.J. Hoekstra, M. Moavrouf, C. Ingber, M.W.J.M. Weimers, M.S. Sabat, E.A. Levine, D. Agnieszka, M. Henderson, R. Duranovic, C.R. Rossi, R.L. News, S.D. Trocha, F. Wright, D.R. Byrd, M. Matter, E. Housh, A. Mackenzie-Ross, D.B. Johnson, P. Terheyden, A.C. Berger, T.L. Huoston, J.D. Wayne, B.M. Smithers, H.B. Neuman, S. Schneidman, J.S. Casshermahl, C.E. Arjona, D.C. Desai, L. Jacobie, K.M. McKinnon, A. Gausachs, P. Harony, S.D. Bines, J.M. Kane, R.J. Barth, G. McKinnon, J.M. Farma, E. Schultz, S. Vidal-Sicart, R.A. Hoeller, J.M. Lewis, R. Schen, M.C. Kelley, O.E. Nieweg, R.D. Noyes, D.S.B. Hoon, H.-J. Wang, D.A. Elashoff, and R.M. Elashoff

- MSLT-II
  - Multicenter, international randomized trial
  - 1939 patients underwent randomization into two groups
  - Observation
  - Completion node dissection

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### Completion Dissection or Observation for Sentinel-Node Metastasis in Melanoma

M.B. Faries, J.F. Thompson, A.J. Cochran, R.H. Andlbacka, N. Mozzillo, J.S. Zager, T. Jahnke, T.L. Bowles, A. Testori, P.D. Betsch, H.J. Hoekstra, M. Moncrieff, C. Ingvar, M.W.J.M. Wouters, M.S. Sabal, E.A. Levine, D. Agnese, M. Henderson, R. Durrmer, C.B. Rossi, R.I. Neves, S.D. Trocha, F. Wright, D.R. Byrd, M. Matter, E. Husak, A. MacKenzie-Ross, D.B. Johnson, P. Terheyden, A.C. Berger, T.L. Huston, J.D. Wayne, B.M. Smithers, H.B. Neuman, S. Schneebaum, J.E. Gershenwald, C.E. Aryan, D.C. Desai, L. Jacobs, K.M. McMansters, A. Geserich, P. Hersey, S.D. Bines, J.M. Kane, R.J. Barth, G. McKinnon, J.M. Farnia, E. Schultz, S. Vidal-Sicart, R.A. Hoefler, J.M. Lewis, R. Scheri, M.C. Kelley, O.E. Nieweg, R.D. Noyes, D.S.B. Hoon, H.J. Wang, D.A. Elashoff, and R.M. Elashoff

- MSLT-II
- Multicenter, international randomized trial
- Per-protocol analysis
- Observation (n = 824)
- Dissection (n = 931)

**Inclusion criteria:**

- Age 18-75
- ECOG 0-1
- Tumor-positive SLN

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### Completion Dissection or Observation for Sentinel-Node Metastasis in Melanoma

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- Primary end point
- Melanoma-specific survival
- Secondary end points
- Nodal recurrence-free survival
- Disease-free survival
- Distant metastasis-free survival

**Median follow-up – 43 months**

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**No significant difference in melanoma-specific survival or distant metastasis-free survival at 3 years**

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**At 3 years**

- DFS and nodal RFS are higher in the dissection group (p=0.02, p<0.001, respectively)

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**Subgroup analysis**

**Did not reveal any tumor or sentinel node characteristic that would help determine which subgroup of patients would benefit from completion lymph node dissection**

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### Completion Dissection or Observation for Sentinel-Node Metastasis in Melanoma

**Table 1. Hazard Ratios for Melanoma-Related Death, According to Multivariable Prognostic Factors\***

Prognostic Factor	Dissection Hazard Ratio (95% CI)	P Value	Observation Hazard Ratio (95% CI)	P Value
Sex: male vs. female	1.19 (0.89-1.59)	0.26	1.42 (0.98-2.02)	0.07
Age: per 1-yr increase	1.00 (0.99-1.01)	0.80	1.01 (0.99-1.02)	0.15
<b>Primary melanoma</b>				
<1.50 mm	1.00		1.00	
1.50-1.99 mm	1.64 (0.96-2.78)	0.07	2.46 (1.14-5.31)	0.04
≥2.00 mm	3.82 (2.19-6.64)	<0.001	4.31 (2.31-8.09)	<0.001
<b>Completion dissection vs. observation</b>				
Site of melanoma	1.97 (1.46-2.77)	<0.001	2.17 (1.33-3.58)	<0.001
Arm or leg†	1.00		1.00	
Head or neck	0.82 (0.44-1.48)	0.48	1.07 (0.36-2.84)	0.07
Trunk	1.20 (0.89-1.77)	0.28	1.02 (0.74-1.40)	0.82
No. of positive sentinel nodes				
≥1	1.00		1.00	
2	1.59 (0.71-3.53)	0.25	1.27 (0.62-2.60)	0.21
≥3	1.17 (0.41-3.26)	0.80	2.03 (0.93-4.85)	0.11
<b>Nonsentinel nodes: positive vs. negative</b>	1.78 (1.19-2.67)	0.005	NA	

**Multivariate Analysis**

- Impact of prognosis of the Non SLN
- Number of positive SLN's was not a significant prognostic factor

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**Adverse event-lymphedema At follow-up of 43 months**

- Observation Group-6%
- Dissection group-24%

**Mild-64% Moderate-33% Severe-3%**

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- MSLT-II demonstrated the prognostic significance of the nonsentinel-node status in those with a positive sentinel node disease

**NO SURVIVAL BENEFIT But....**

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### Completion Dissection or Observation for Sentinel-Node Metastasis in Melanoma

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- MSLT-II demonstrated the prognostic significance of the nonsentinel-node status in those with a positive sentinel node disease

**NO SURVIVAL BENEFIT But....**

**Staging and regional disease control**

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Will minimally invasive surgery help solve the puzzle?

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### Safety and Feasibility of Minimally Invasive Inguinal Lymph Node Dissection in Patients With Melanoma (SAFE-MILD): Report of a Prospective Multi-institutional Trial

Jalub, James W MD, Terashi, Akira M MD, Samak, Amol MD, Aryan, Charita E MD, Faries, Mark B MD, Zari, Sabaie JH MD, Neuman, Heather B MD, MRC, FACS, Inoue, Naoki MD, Faries, Jeffrey B MD, FACS, Aebischer, Bruce J MD, Blumstein, Kahl Y MD, MBS, Gross, Travis E MD, Ahmed, Jacob B (Jaber), Sultan, Venis J, PhD, Brady, Mary Sue MD, FACS, Tyler, Douglas MD, Wayne, Jeffrey D, MD, Nelson, Heidi MD

- SAFE-MILD trial
- Prospective, multi-institutional
- 87 had a MILD (88.5% were completed)

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**Safety and Feasibility of Minimally Invasive Inguinal Lymph Node Dissection in Patients With Melanoma (SAFE-MILDND): Report of a Prospective Multi-institutional Trial**

Amici, James W. MD, Troncoso, Alicia M. MD, Sarraf, Ahmad MD, Anyan, Charlotte E. MD, Faries, Mark B. MD, Zare, Sabino Jr. MD, Neuman, Heather B. MD, MBI, FACS, Vitsef, Nadia MD, Farma, Jeffrey M. MD, FACS, Averbach, Bruce J. MD, Blumenthal, Karl F. MD, MBI, Gritz, Travis E. MD, Ahmed, Jacob B. (Jabari), Sumari, Yusef J. PhD, Brady, Mary Sue MD, FACS, Tyler, Douglas MC, Wayne, Jeffrey D. MD, Neeson, Heidi MD

**SAFE-MILD trial**

Complications	Maximum Grade Complications (N = 87)			
	Grade 1	Grade 2	Grade 3	Total
Lymphedema	19 (21%)	26 (29%)	3 (3%)	47 (54%)
Wound infection	1 (1%)	9 (10%)	10 (11%)	20 (23%)
Hemorrhage	10 (11%)	2 (2%)	1 (1%)	13 (15%)
Seroma	3 (3%)	3 (3%)	6 (7%)	12 (14%)
Skin injury/ulceration	1 (1%)		2 (2%)	3 (3%)
Wound dehiscence	1 (1%)	1 (1%)		2 (2%)
Peripheral motor neuropathy			1 (1%)	1 (1%)
Other	2 (2%)	1 (1%)		3 (3%)
<b>Total</b>	<b>37 (43%)</b>	<b>42 (49%)</b>	<b>23 (26%)</b>	

41% of patients experienced lymphedema within 30 days of surgery  
 - Grade 1-17%  
 - Grade 2-22%  
 - Grade 3-2%

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**Safety and Feasibility of Minimally Invasive Inguinal Lymph Node Dissection in Patients With Melanoma (SAFE-MILDND): Report of a Prospective Multi-institutional Trial**

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- SAFE-MILD trial
- Risk of short-term morbidity is decreased

What effect will a minimally invasive approach have on long-term lymphedema??

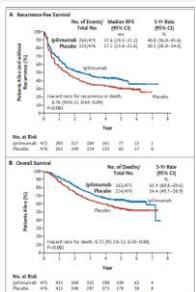
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ORIGINAL ARTICLE

**Prolonged Survival in Stage III Melanoma with Ipilimumab Adjuvant Therapy**

A.M.M. Eggermont, V. Chiarion-Sileni, J.J. Grob, B. Dummer, J.D. Wolchok, H. Schmidt, O. Hamid, C. Robert, P.A. Ascierto, J.M. Richards, C. Lebbé, V. Ferraresi, M. Smylie, J.S. Weber, M. Mao, L. Bastholt, L. Mortier, L. Thomas, S. Taha, A. Hauschild, J.C. Hassel, T.S. Hogg, C. Tachi, V. de Prá, G. de Schrijver, S. Sznyc, and A. Testori

- Emergence of adjuvant therapy with a proven benefit in survival
- Risk-benefit regarding adverse events



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ORIGINAL ARTICLE

**Adjuvant Nivolumab versus Ipilimumab in Resected Stage III or IV Melanoma**

J. Weber, M. Mandala, M. Del Vecchio, H.J. Gogas, A.M. Arance, C.L. Cowey, S. Dalle, M. Schneider, V. Chiarion-Sileni, I. Mangoni-Rodas, J.J. Grob, M.O. Butler, M.R. Middleton, M. Maio, V. Atkinson, P. Quaresima, B. Gonzalez, R.R. Kanchharia, M. Smylie, N. Meyer, L. Mortier, M.B. Adkins, G.V. Long, S. Bharia, C. Lebbé, P. Rudwinski, K. Yabuta, H. Yamazaki, T.M. Kim, V. de Prá, J. Selinger, A. Qureshi, J. Larkin, and P.A. Ascierto, for the CheckMate 238 Collaborators\*

The NEW ENGLAND JOURNAL of MEDICINE

NOVEMBER 8, 2017

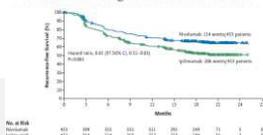
**Adjuvant Dabrafenib plus Trametinib in Stage III BRAF-Mutated Melanoma**

G.V. Long, A. Hauschild, M. Strohriegl, V. Chiarion-Sileni, J. Larkin, M. Hughes, C. D'Amico, A. Hausl, C. Robert, L. Mortier, J. Selinger, D. Schadendorf, T. Lorch, B. Platten, F.J. F. Zhang, G. Moshirani, J. Lopez, K. Inflich, K. Curran, and J.M. Kirkwood

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ORIGINAL ARTICLE

**Adjuvant Nivolumab versus Ipilimumab in Resected Stage III or IV Melanoma**

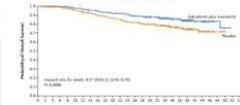


- Significant survival benefit in recurrence-free or overall survival
- 97% experienced adverse events
- Financial cost?

The NEW ENGLAND JOURNAL of MEDICINE

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**Adjuvant Dabrafenib plus Trametinib in Stage III BRAF-Mutated Melanoma**



All patients in these trials underwent a completion lymph node dissection

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"Stop To Learn"



QUESTIONS???