

# Literatur zum Artikel

## Was ist richtig beim Thymom?

1. Ahmad U, Yao X, Detterbeck F, et al (2015) Thymic carcinoma outcomes and prognosis: results of an international analysis. *J Thoracic Cardiovasc Surg* 149: 95–100
2. Marino M, Müller-Hermelink HK (1985) Thymoma and thymic carcinoma. Relation of thymoma epithelial cells to the cortical and medullary differentiation of thymus. *Virchows Arch A Pathol Anat Histopathol* 407: 119–149
3. Müller-Hermelink HK, Marino M, Palestro G, et al (1985) Immunohistological evidences of cortical and medullary differentiation in thymoma. *Virchows Arch A Pathol Anat Histopathol* 408: 143–161
4. Travis WB, et al; Hrsq (2015) WHO histological classification of tumours of the thymus. In: World Health Organization classification of tumours of the lung, pleura, thymus and heart. IARC Press, Lyon
5. Marx A, Weis CA, Strobel P (2016) Thymome. *Pathologe* 37: 412–424
6. Network NCC (2018) NCCN clinical practice guidelines in oncology: thymomas and thymic carcinomas. Version 2.2018. [https://www.nccn.org/professionals/physician\\_gls/pdf/thymicpdf](https://www.nccn.org/professionals/physician_gls/pdf/thymicpdf)
7. Priola AM, Gned D, Veltri A, et al (2016) Chemical shift and diffusion-weighted magnetic resonance imaging of the anterior mediastinum in oncology: current clinical applications in qualitative and quantitative assessment. *Crit Rev Oncol Hematol* 98: 335–357
8. Marom EM (2013) Advances in thymoma imaging. *J Thorac Imaging* 28: 69–80
9. Nicholson AG, Detterbeck FC, Marino M, et al (2014) The IASLC/ITMIG Thymic Epithelial Tumors Staging Project: proposals for the T Component for the forthcoming (8th) edition of the TNM classification of malignant tumors. *J Thorac Oncol* 9 (9 Suppl 2): S73–80
10. Hwang Y, Park IK, Park S, et al (2016) Lymph node dissection in thymic malignancies: implication of the ITMIG lymph node map, TNM stage classification, and recommendations. *J Thorac Oncol* 11: 108–114
11. Detterbeck FC, Nicholson AG, Kondo K, et al (2011) The Masaoka-Koga stage classification for thymic malignancies: clarification and definition of terms. *J Thorac Oncol* 6 (7 Suppl 3): S1710–1716
12. Girard N, Ruffini E, Marx A, et al (2015) Thymic epithelial tumours: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. *Ann Oncol* 26 (Suppl 5): v40–55
13. Radovich M, Pickering CR, Felau I, et al (2018) The integrated genomic landscape of thymic epithelial tumors. *Cancer Cell* 33: 244–258
14. Marom EM, Rosado-de-Christenson ML, Bruzzi JF, et al (2011) Standard report terms for chest computed tomography reports of anterior mediastinal masses suspicious for thymoma. *J Thorac Oncol* 6 (7 Suppl 3): S1717–1723
15. Marom EM, Milito MA, Moran CA, et al (2011) Computed tomography findings predicting invasiveness of thymoma. *J Thorac Oncol* 6: 1274–1281
16. Scorsetti M, Leo F, Trama A, et al (2016) Thymoma and thymic carcinomas. *Crit Rev Oncol Hematol* 99: 332–350
17. Schmitt J, Loehrer PJ Sr (2010) The role of chemotherapy in advanced thymoma. *J Thorac Oncol* 5 (10 Suppl 4): S357–360
18. Lim YJ, Kim E, Kim HJ, et al (2016) Survival Impact of adjuvant radiation therapy in Masaoka stage II to IV thymomas: a systematic review and meta-analysis. *Int J Radiat Oncol Biol Phys* 94: 1129–1136
19. Blalock A, Mason MF, Morgan HJ, et al (1939) Myasthenia gravis and tumors of the thymic region: report of a case in which the tumor was removed. *Ann Surg* 110: 544–561
20. Wright CD (2008) Management of thymomas. *Crit Rev Oncol Hematol* 65: 109–120
21. Kark AE, Kirschner PA (1971) Total thymectomy by the transcervical approach. *Br J Surg* 58: 321–326
22. Landreneau RJ, Dowling RD, Castillo WM, et al (1992) Thoracoscopic resection of an anterior mediastinal tumor. *Ann Thorac Surg* 54: 142–144
23. Yoshino I, Hashizume M, Shimada M, et al (2002) Video-assisted thoracoscopic extirpation of a posterior mediastinal mass using the da Vinci computer enhanced surgical system. *Ann Thorac Surg* 74: 1235–1237
24. Hashizume M, Shimada M, Yoshino I, et al (2002) Departmental review of surgical cases in the last 17 years: Da Vinci system [Japanisch]. *Fukuoka Igaku Zasshi/Fukuoka Acta Med* 93 (3 Suppl): 47–48
25. Marulli G, Rea F, Melfi F, et al (2012) Robot-aided thoracoscopic thymectomy for early-stage thymoma: a multicenter European study. *J Thorac Cardiovasc Surg* 144: 1125–1130
26. Marulli G, Maessen J, Melfi F, et al (2016) Multi-institutional European experience of robotic thymectomy for thymoma. *Ann Cardiothorac Surg* 5: 18–25
27. Kang CH, Hwang Y, Lee HJ, et al (2016) Robotic thymectomy in anterior mediastinal mass: propensity score matching study with transsternal thymectomy. *Ann Thorac Surg* 102: 895–901
28. Kneuert PJ, Kamel MK, Stiles BM, et al (2017) Robotic thymectomy is feasible for large thymomas: a propensity-matched comparison. *Ann Thorac Surg* 104: 1673–1678
29. Zielinski M, Rybak M, Solarczyk-Bombik K, et al (2017) Subxiphoid uniportal VATS thymectomy. *J Visual Surg* 3: 171
30. Suda T (2017) Subxiphoid thymectomy: single-port, dual-port, and robot-assisted. *J Visual Surg* 3: 75
31. Scarci M, Pardolesi A, Solli P (2015) Uniportal video-assisted thoracic surgery thymectomy. *Ann Cardiothorac Surg* 4: 567–570
32. Ooi A, Qiang F (2016) Uniportal video assisted thoracoscopic surgery thymectomy (left approach). *J Visual Surg* 2: 12
33. Ooi A, Sibayan M (2016) Uniportal video assisted thoracoscopic surgery thymectomy (right approach). *J Visual Surg* 2: 13
34. Ried M, Hofmann HS, Dienemann H, et al (2018) Anwendung der hyperthermen intrathorakalen Chemotherapie (HITHOC) in Deutschland. *Zentralbl Chir*. doi: 10.1055/a-0573-2419
35. Levine GD, Rosai J (1976) A spindle cell variant of thymic carcinoid tumor. A clinical, histologic, and fine structural study with emphasis on its distinction from spindle cell thymoma. *Arch Pathol Lab Med* 100: 293–300
36. Bergh NP, Gatzinsky P, Larsson S, et al (1978) Tumors of the thymus and thymic region: I. Clinicopathological studies on thymomas. *Ann Thorac Surg* 25: 91–98
37. Wilkins EW Jr, Castleman B (1979) Thymoma: a continuing survey at the Massachusetts General Hospital. *Ann Thorac Surg* 28: 252–256
38. Masaoka A, Monden Y, Nakahara K, et al (1981) Follow-up study of thymomas with special reference to their clinical stages. *Cancer* 48: 2485–2492
39. Verley JM, Hollmann KH (1985) Thymoma. A comparative study of clinical stages, histologic features, and survival in 200 cases. *Cancer* 55: 1074–1086
40. Gamondes JP, Balawi A, Greenland T, et al (1991) Seventeen years of surgical treatment of thymoma: factors influencing survival. *Eur J Cardio-thorac Surg* 5: 124–131
41. Yamakawa Y, Masaoka A, Hashimoto T, et al (1991) A tentative tumor-node-metastasis classification of thymoma. *Cancer* 68: 1984–1987
42. Koga K, Matsuno Y, Noguchi M, et al (1994) A review of 79 thymomas: modification of staging system and reappraisal of conventional division into invasive and non-invasive thymoma. *Pathol Int* 44: 359–367
43. Tsuchiya R, Koga K, Matsuno Y, et al (1994) Thymic carcinoma: proposal for pathological TNM and staging. *Pathol Int* 44: 505–512
44. Asamura H, Nakagawa K, Matsuno Y, et al (2004) Thymoma needs a new staging system. *Interact Cardiovasc Thorac Surg* 3: 163–167
45. Travis WD, et al; Hrsq (2004) Pathology and genetics of tumours of the lung, pleura, thymus and heart. World Health Organization Classification of tumours. IARC Press, Lyon
46. Bedini AV, Andreani SM, Tavecchio L, et al (2005) Proposal of a novel system for the staging of thymic epithelial tumors. *Ann Thorac Surg* 80: 1994–2000

47. Moran CA, Walsh G, Suster S, et al (2012) Thymomas II: a clinicopathologic correlation of 250 cases with a proposed staging system with emphasis on pathologic assessment. *Am J Clin Pathol* 137: 451–461
48. Weissferdt A, Moran CA (2012) Thymic carcinoma, part 2: a clinicopathologic correlation of 33 cases with a proposed staging system. *Am J Clin Pathol* 138: 115–121
49. Savitt MA, Gao G, Furnary AP, et al (2005) Application of robotic-assisted techniques to the surgical evaluation and treatment of the anterior mediastinum. *Ann Thorac Surg* 79: 450–455
50. Rea F, Marulli G, Bortolotti L, et al (2006) Experience with the „da Vinci“ robotic system for thymectomy in patients with myasthenia gravis: report of 33 cases. *Ann Thorac Surg* 81: 455–459
51. Ro CY, Derose JJ Jr, Connery CP, et al (2006) Three-year experience with totally endoscopic robotic thymectomy. *Innovations* 1: 111–114
52. Cakar F, Werner P, Augustin F, et al (2007) A comparison of outcomes after robotic open extended thymectomy for myasthenia gravis. *Eur J Cardio-thorac Surg* 31: 501–504
53. Rückert JC, Ismail M, Swierzy M, et al (2008) Thoracoscopic thymectomy with the da Vinci robotic system for myasthenia gravis. *Ann NY Acad Sci* 1132: 329–335
54. Fleck T, Fleck M, Müller M, et al (2009) Extended videoscopic robotic thymectomy with the da Vinci telemanipulator for the treatment of myasthenia gravis: the Vienna experience. *Interact Cardiovasc Thorac Surg* 9: 784–787
55. Balduyck B, Hendriks JM, Lauwers P, et al (2011) Quality of life after anterior mediastinal mass resection: a prospective study comparing open with robotic-assisted thoracoscopic resection. *Eur J Cardio-thorac Surg* 39: 543–548
56. Pandey R, Garg R, Chandralekha, et al (2010) Robot-assisted thoracoscopic thymectomy: perianaesthetic concerns. *Eur J Anaesthesiol* 27: 473–477
57. Goldstein SD, Yang SC (2010) Assessment of robotic thymectomy using the Myasthenia Gravis Foundation of America Guidelines. *Ann Thorac Surg* 89: 1080–1085
58. Sivarajah M, Weksler B (2010) Robotic-assisted resection of a thymoma after two previous sternotomies. *Ann Thorac Surg* 90: 668–670
59. Weksler B, Tavares J, Newhook TE, et al (2012) Robot-assisted thymectomy is superior to transsternal thymectomy. *Surg Endosc* 26: 261–266
60. Schneider D, Tomaszek S, Kestenholz P, et al (2013) Minimally invasive resection of thymomas with the da Vinci® Surgical System. *Eur J Cardio-thorac Surg* 43: 288–292
61. Melfi F, Fanucchi O, Davini F, et al (2012) Ten-year experience of mediastinal robotic surgery in a single referral centre. *Eur J Cardio-thorac Surg* 41: 847–851
62. Nakamura H, Taniguchi Y, Fujioka S, et al (2012) First experience of robotic extended thymectomy in Japan for myasthenia gravis with thymoma. *Gen Thorac Cardiovasc Surg* 60: 183–187
63. Ye B, Tantai JC, Li W, et al (2013) Video-assisted thoracoscopic surgery versus robotic-assisted thoracoscopic surgery in the surgical treatment of Masaoka stage I thymoma. *World J Surg Oncol* 11: 157
64. Keijzers M, Dingemans AM, Blaauwgeers H, et al (2014) 8 years' experience with robotic thymectomy for thymomas. *Surg Endosc* 28: 1202–1208
65. Seong YW, Kang CH, Choi JW, et al (2014) Early clinical outcomes of robot-assisted surgery for anterior mediastinal mass: its superiority over a conventional sternotomy approach evaluated by propensity score matching. *Eur J Cardio-thorac Surg* 45: e68–73
66. Jun Y, Hao L, Demin L, et al (2014) Da Vinci robot-assisted system for thymectomy: experience of 55 patients in China. *Int J Med Robot Comput Assist Surgery* 10: 294–299
67. Bae MK, Lee SK, Kim HY, et al (2014) Recurrence after thymoma resection according to the extent of the resection. *J Cardiothorac Surg* 9: 51
68. Rowse PG, Roden AC, Corl FM, et al (2015) Minimally invasive thymectomy: the Mayo Clinic experience. *Ann Cardiothorac Surg* 4: 519–526
69. Ricciardi R, Melfi F, Maestri M, et al (2016) Endoscopic thymectomy: a neurologist's perspective. *Ann Cardiothorac Surg* 5: 38–44
70. Wilshire CL, Vallieres E, Shultz D, et al (2016) Robotic resection of 3 cm and larger thymomas is associated with low perioperative morbidity and mortality. *Innovations* 11: 321–326
71. Suda T, Kaneda S, Hachimaru A, et al (2016) Thymectomy via a subxiphoid approach: single-port and robot-assisted. *J Thorac Dis* 8 (Suppl 3): S265–271
72. Kamel MK, Rahouma M, Stiles BM, et al (2017) Robotic thymectomy: learning curve and associated perioperative outcomes. *J Laparoendosc Adv Surg Tech Pt A* 27: 685–690
73. Zheng Y, Cai YZ, Zhang HL, et al (2017) Robotic trans-subxiphoid extended thymectomy in a patient with thymoma-associated pemphigus. *J Thorac Dis* 9: E565–E569
74. Kawaguchi K, Fukui T, Nakamura S, et al (2018) A bilateral approach to extended thymectomy using the da Vinci Surgical System for patients with myasthenia gravis. *Surg Today* 48: 195–199
75. Kumar A, Goyal V, Asaf BB, et al (2017) Robotic thymectomy for myasthenia gravis with or without thymoma-surgical and neurological outcomes. *Neurol India* 65: 58–63
76. Di Crescenzo VG, Napolitano F, Panico C, et al (2017) Surgical approach in thymectomy: Our experience and review of the literature. *International journal of surgery case reports* 39: 19–24
77. Sakamaki Y, Kido T, Yasukawa M (2008) Alternative choices of total and partial thymectomy in video-assisted resection of noninvasive thymomas. *Surg Endosc* 22: 1272–1277
78. Onuki T, Ishikawa S, Iguchi K, et al (2010) Limited thymectomy for stage I or II thymomas. *Lung Cancer* 68: 460–465
79. Tseng YC, Hsieh CC, Huang HY, et al (2013) Is thymectomy necessary in nonmyasthenic patients with early thymoma? *J Thorac Oncol* 8: 952–958
80. Nakagawa K, Asamura H, Sakurai H, et al (2014) Does the mode of surgical resection affect the prognosis/recurrence in patients with thymoma? *J Surg Oncol* 109: 179–183
81. Nakagawa K, Yokoi K, Nakajima J, et al (2016) Is thymectomy alone appropriate for stage I (T1N0M0) thymoma? Results of a propensity-score analysis. *Ann Thorac Surg* 101: 520–526
82. Gu Z, Fu J, Shen Y, et al (2016) Thymectomy versus tumor resection for early-stage thymic malignancies: a Chinese Alliance for Research in Thymomas retrospective database analysis. *J Thorac Dis* 8: 680–686
83. Narm KS, Lee CY, Do YW, et al (2016) Limited thymectomy as a potential alternative treatment option for early-stage thymoma: a multi-institutional propensity-matched study. *Lung Cancer* 101: 22–27
84. Rusidanmu A, Huang S, Lv X (2018) Is thymomectomy sufficient for non-myasthenic early stage thymoma patients? A retrospective, single center experience. *Thorac Cancer* 9: 88–93
85. Yano M, Fujii Y, Yoshida J, et al (2017) A phase II study of partial and subtotal thymectomy for thymoma (JART02). *World J Surg* 41: 2033–2038
86. Tassi V, Ceccarelli S, Zannori C, et al (2017) Could thymomectomy be a reasonable option for non-myasthenic thymoma patients? *J Thorac Dis* 9: 3817–3824
87. Rückert JC, Gellert K, Rudolph B, et al (1996) Thorakoskopische Thymektomie wegen Myasthenie bei Thymom. *Aktuel Chir* 31: 55–57
88. Papatestas AE, Genkins G, Kornfeld P, et al (1987) Effects of thymectomy in myasthenia gravis. *Ann Surg* 206: 79–88
89. Schumacher E, Roth J (1912) Thymektomie bei einem Fall von Morbus Basedowi mit Myasthenie. *Grenzgeb Med Chir* 25: 746–765
90. Brierley JD, Gospodarowicz MK, Wittekind C (2016) TNM Classification of Malignant Tumors, 8th Edition; ISBN: 978-1-119-26356-2, Nov 2016, Wiley-Blackwell; P115–119