

- Terminology Committee of the IHPBA. Terminology of liver anatomy and resections. *HPB* 2000;2:333–339.
- Zech CJ, Herrmann KA, Reiser MF, et al. MR imaging in patients with suspected liver metastases: value of liver-specific contrast agent Gd-EOB-DTPA. *Magn Reson Med Sci* 2007;6:43–52.
- Koh DM, Collins DJ, Wallace T, et al. Combining diffusion-weighted MRI and Gd-EOB-DTPA-enhanced MRI improves the detection of colorectal liver metastases. *Br J Radiol* 2012;85:980–989.
- Joyce DL, Wahl RL, Patel PV, et al. Preoperative positron emission tomography to evaluate potentially resectable hepatic colorectal metastases. *Arch Surg* 2006;141:1220–1226.
- Ruers TJ, Wiering B, van der Sijp JR, et al. Improved selection of patients for hepatic surgery of colorectal liver metastases with (18)F-FDG PET: a randomized study. *J Nucl Med* 2009;50:1036–1041.
- Shaverdian N, Pinchot SN, Zarebczan B, et al. Utility of 111-indium-pentetreotide scintigraphy in patients with neuroendocrine tumors. *Ann Surg Oncol* 2013;20:640–645.
- Vauthey JN, Chanoui A, Do KA, et al. Standardized measurement of the future liver remnant prior to extended liver resection: methodology and clinical associations. *Surgery* 2000;127:512–519.
- Zimmitti G, Roses RE, Andreou A, et al. Greater complexity of liver surgery is not associated with an increased incidence of liver-related complications except for bile leak: an experience with 2,628 consecutive resections. *J Gastrointest Surg* 2013;17:57–74.
- Timmerman RD, Kavanagh BD. Stereotactic body radiation therapy. *Curr Prob Cancer* 2005;29:120–157.
- Kavanagh BD, Timmerman RD. Stereotactic radiosurgery and stereotactic body radiation therapy: an overview of technical considerations and clinical applications. *Hematol Oncol Clin North Am* 2006;20:87–95.
- ASTRO Model Policy: Stereotactic Body Radiation Therapy. <https://www.astro.org/Practice-Management/Reimbursement/Model-Policies.aspx>. Accessed January 26, 2014.
- Mukesh BM, Barnett GC, Wilkinson JS, et al. A randomized controlled trial of Intensity Modulated Radiotherapy (IMRT) for early breast cancer: 5-year results confirm superior overall cosmesis. *J Clin Oncol* 2013;31:4488–4495.
- Cardinale RM, Wu Q, Benedict SH, et al. Determining the optimal block margin on the planning target volume for extracranial stereotactic radiotherapy. *Int J Radiat Oncol Biol Phys* 1999;45:515–520.
- Yeas RJ, Kalend A. Local stem cell depletion model for radiation myelitis. *Int J Radiat Oncol Biol Phys* 1988;14:1247–1259.
- Rushhoven K, Kavanagh BD, Cardenes H, et al. Multi-institutional phase I/II trial of stereotactic body radiation therapy for liver metastasis. *J Clin Oncol* 2009;27:1572–1578.
- Rule W, Timmerman R, Tong L, et al. Phase I dose-escalation study of stereotactic body radiotherapy in patients with hepatic metastases. *Ann Surg Oncol* 2011;18:1081–1087.
- Pan CC, Kavanagh BD, Dawson LA, et al. Radiation-associated liver injury. *Int J Radiat Oncol Biol Phys* 2010;76:S94–S100.
- Timmerman RD. An overview of hypofractionation and introduction to this issue of Seminars in Radiation Oncology. *Semin Radiat Oncol* 2008;18:215–222.
- Barney BM, Markovic SN, Laack NN, et al. Increased bowel toxicity in patients treated with a vascular endothelial growth factor inhibitor (VEGF) after stereotactic body radiation therapy. *Int J Radiat Oncol Biol Phys* 2013;87:73–80.
- Abdalla EK, Barnett C, Doherty D, et al. Extended hepatectomy in patients with hepatobiliary malignancies with and without preoperative portal vein embolization. *Arch Surg* 2002;137:675–680.
- Farges O, Belghiti J, Klammanesh R, et al. Portal vein embolization before right hepatectomy: prospective clinical trial. *Ann Surg* 2003;237:208–217.
- Fischer C, Melstrom LG, Arnaoutakis D, et al. Chemotherapy after portal vein embolization to protect against tumor growth during liver hypertrophy before hepatectomy. *JAMA Surg* 2013;148:1103–1108.
- Jaeck D, Bachellier P, Nakano H, et al. One or two-stage hepatectomy combined with portal vein embolization for initially nonresectable colorectal liver metastases. *Am J Surg* 2003;185:221–229.
- Campbell AM, Bailey IH, Burton MA. Tumor dosimetry in human liver following hepatic yttrium-90 microsphere therapy. *Phys Med Biol* 2000;46:487–498.
- Lau WY, Kennedy AS, Kim YH, et al. Patient selection and activity planning guide for selective internal radiotherapy with yttrium-90 resin microspheres. *Int J Radiat Oncol Biol Phys* 2012;82:401–407.
- Kennedy AS, Salem R. Radioembolization (yttrium-90 microspheres) for primary and metastatic hepatic malignancies. *Cancer J* 2010;16:163–175.
- Sjoquist KM, Goldstein D, Bester L. A serious complication of selected internal radiation therapy: case report and literature review. *Oncologist* 2010;15:830–835.
- Schonewolf CA, Patel B, Gensure RH, et al. Patterns of failure in colorectal patients with liver metastases after yttrium-90 radioembolization. *Am J Clin Oncol* 2012 [ePub ahead of print].
- Kulik LM, Atassi B, van Holsbeeck L, et al. Yttrium-90 microspheres (TheraSphere®) treatment of unresectable hepatocellular carcinoma: Downstaging to resection, RFA and bridge to transplantation. *J Surg Oncol* 2006;94:572–586.
- Høyer M, Swaminath A, Bydder S, et al. Radiotherapy for liver metastases: a review of evidence. *Int J Radiat Oncol Biol Phys* 2012;82:1047–1057.
- Borgelt BB, Gelber R, Brady LW, et al. The palliation of hepatic metastases: results of the Radiation Therapy Oncology Group pilot study. *Int J Radiat Oncol Biol Phys* 1981;7:587–591.
- Leibel SA, Pajak TF, Massullo V, et al. A comparison of misonidazole sensitized radiation therapy to radiation therapy alone for the palliation of hepatic metastases: results of a Radiation Therapy Oncology Group randomized prospective trial. *Int J Radiat Oncol Biol Phys* 1987;13:1057–1064.
- Soliman H, Ringash J, Jiang H, et al. Phase II trial of palliative radiotherapy for hepatocellular carcinoma and liver metastases. *J Clin Oncol* 2013;31:3980–3986.
- Tomlinson JS, Jarnagin WR, DeMatteo RP, et al. Actual 10-year survival after resection of colorectal liver metastases defines cure. *J Clin Oncol* 2007;25:4575–4580.
- Andreou A, Aloia TA, Brouquet A, et al. Margin status remains an important determinant of survival after surgical resection of colorectal liver metastases in the era of modern chemotherapy. *Ann Surg* 2013;257:1079–1088.
- House MG, Ito H, Gonen M, et al. Survival after hepatic resection for metastatic colorectal cancer: trends in outcomes for 1,600 patients during two decades at a single institution. *J Am Coll Surg* 2010;210:744–752.
- Wei AC, Greig PD, Grant D, et al. Survival after hepatic resection for colorectal metastases: a 10-year experience. *Ann Surg Oncol* 2006;13:668–676.
- Choti MA, Sitzmann JV, Tiburi MF, et al. Trends in long-term survival following liver resection for hepatic colorectal metastases. *Ann Surg* 2002;235:759–766.
- Scheele J, Stang R, Altendorf-Hofmann A, et al. Resection of colorectal liver metastases. *World J Surg* 1995;19:59–71.
- Carpizo DR, Arc C, Jarnagin WR, et al. Liver resection for metastatic colorectal cancer in patients with concurrent extrahepatic disease: results in 127 patients treated as a single center. *Ann Surg Oncol* 2009;16:2138–2146.
- Pulitano C, Bodingbauer M, Aldrighetti L, et al. Liver resection for colorectal metastases in presence of extrahepatic disease: results from an international multi-institutional analysis. *Ann Surg Oncol* 2011;18:1380–1388.
- Groeschl RT, Pilgrim CH, Hanna EM, et al. Microwave ablation for hepatic malignancies: A multiinstitutional analysis. *Ann Surg* 2014;259:1195–1200.
- Kingham TP, Tanoue M, Eaton A, et al. Patterns of recurrence after ablation of colorectal cancer liver metastases. *Ann Surg Oncol* 2012;19:834–841.
- Martin RC, Scoggins CR, McMasters KM. Safety and efficacy of microwave ablation of hepatic tumors: a prospective review of a 5-year experience. *Ann Surg Oncol* 2010;17:171–178.
- Siperstein AE, Berber E, Ballem N, et al. Survival after radiofrequency ablation of colorectal liver metastases: 10-year experience. *Ann Surg* 2007;246:559–565.
- Abdalla EK, Vauthey JN, Ellis LM, et al. Recurrence and outcomes following hepatic resection, radiofrequency ablation, and combined resection/ablation for colorectal liver metastases. *Ann Surg* 2004;239:818–825.
- Park IJ, Kim HC, Yu CS, et al. Radiofrequency ablation for metachronous liver metastasis from colorectal cancer after curative surgery. *Ann Surg Oncol* 2008;15:227–232.
- Portier G, Elias D, Bouche O, et al. Multicenter randomized trial of adjuvant fluorouracil and folic acid compared with surgery alone after resection of colorectal liver metastases: FFC04 ACHBTH AURC 9002 trial. *J Clin Oncol* 2006;24:4976–4982.
- Mity E, Fields AL, Bleiberg H, et al. Adjuvant chemotherapy after potentially curative resection of metastases from colorectal cancer: a pooled analysis of two randomized trials. *J Clin Oncol* 2008;26:4906–4911.
- Ychou M, Hohenberger W, Thezenas S, et al. A randomized phase III study comparing adjuvant 5-fluorouracil/folic acid with FOLFIRI in patients following complete resection of liver metastases from colorectal cancer. *Ann Oncol* 2009;20:1964–1970.
- Nordlinger B, Sorbye H, Glimelius B, et al. Perioperative chemotherapy with FOLFOX and surgery versus surgery alone for resectable liver metastases from colorectal cancer (EORTC Intergroup trial 40983): a randomised controlled trial. *Lancet* 2008;371:1007–1016.
- Nordlinger B, Sorbye H, Glimelius B, et al. Perioperative FOLFOX chemotherapy and surgery versus surgery alone for resectable liver metastases from colorectal cancer (EORTC 40983): long-term results of a randomised, controlled, phase 3 trial. *Lancet Oncol* 2013;14:1208–1215.
- Allen PJ, Kemeny N, Jarnagin W, et al. Importance of response to neoadjuvant chemotherapy in patients undergoing resection of synchronous colorectal liver metastases. *J Gastrointest Surg* 2003;7:109–115.
- Shindoh J, Loyer EM, Kopetz S, et al. Optimal morphologic response to preoperative chemotherapy: an alternate outcome end point before resection of hepatic colorectal metastases. *J Clin Oncol* 2012;30:4566–4572.
- Gallagher DJ, Zheng J, Capanu M, et al. Response to neoadjuvant chemotherapy does not predict overall survival for patients with synchronous colorectal hepatic metastases. *Ann Surg Oncol* 2009;16:1844–1851.
- Delaunoy T, Alberts SR, Sargent DJ, et al. Chemotherapy permits resection of metastatic colorectal cancer: experience from Intergroup N9741. *Ann Oncol* 2005;16:425–429.

57. Adam R, Delvart V, Pascal G, et al. Rescue surgery for unresectable colorectal liver metastases downstaged by chemotherapy: a model to predict long-term survival. *Ann Surg* 2004;240:644–657.
58. Broquet A, Abdalla EK, Kopetz S, et al. High survival rate after two-stage resection of advanced colorectal liver metastases: response-based selection and complete resection define outcome. *J Clin Oncol* 2011;29:1083–1090.
59. Gruenberger B, Tamandl D, Schueller J, et al. Bevacizumab, capecitabine, and oxaliplatin as neoadjuvant therapy for patients with potentially curable metastatic colorectal cancer. *J Clin Oncol* 2008;26:1830–1835.
60. Van Cutsem E, Rivera F, Berry S, et al. Safety and efficacy of first-line bevacizumab with folfox, xelox, folfri and fluoropyrimidines in metastatic colorectal cancer: The BEAT study. *Ann Oncol* 2009;20:1842–1847.
61. Saltz LB, Clarke S, Diaz-Rubio E, et al. Bevacizumab in combination with oxaliplatin based chemotherapy as first-line therapy in metastatic colorectal cancer: a randomized phase III study. *J Clin Oncol* 2008;26:2013–2019.
62. Van Cutsem E, Kohne CH, Hitt E, et al. Cetuximab and chemotherapy as initial treatment for metastatic colorectal cancer. *N Engl J Med* 2009;360:1408–1417.
63. Bokemeyer C, Bondarenko I, Makhson A, et al. Fluorouracil, leucovorin, and oxaliplatin with and without cetuximab in the first-line treatment of metastatic colorectal cancer. *J Clin Oncol* 2009;27:663–671.
64. Kesmodel SB, Ellis LM, Lin E, et al. Preoperative bevacizumab does not significantly increase postoperative complication rates in patients undergoing hepatic surgery for colorectal cancer liver metastases. *J Clin Oncol* 2008;26:5254–5260.
65. Mahfud M, Breitenstein S, El-Badry AM, et al. Impact of preoperative bevacizumab on complications after resection of colorectal liver metastases: case-matched control study. *World J Surg* 2010;34:92–100.
66. Folprecht G, Gruenberger T, Bechstein WO, et al. Tumour response and secondary resectability of colorectal liver metastases following neoadjuvant chemotherapy with cetuximab: The CELIM randomised phase 2 trial. *Lancet Oncol* 2010;11:38–47.
67. Ye LC, Liu TS, Ren L, et al. Randomized controlled trial of cetuximab plus chemotherapy for patients with KRAS wild-type unresectable colorectal liver-limited metastases. *J Clin Oncol* 2013;31:1931–1938.
68. Vauthey JN, Pawlik TM, Ribero D, et al. Chemotherapy regimen predicts steatohepatitis and an increase in 90-day mortality after surgery for hepatic colorectal metastases. *J Clin Oncol* 2006;24:2065–2072.
69. Aloia T, Sebah M, Plasse M, et al. Liver histology and surgical outcomes after preoperative chemotherapy with fluorouracil plus oxaliplatin in colorectal cancer liver metastases. *J Clin Oncol* 2006;24:4983–4990.
70. Rubbia-Brandt L, Audard V, Sartoretto P, et al. Severe hepatic sinusoidal obstruction associated with oxaliplatin-based chemotherapy in patients with metastatic colorectal cancer. *Ann Oncol* 2004;15:460–466.
71. Karoui M, Penna C, Amin-Hashem M, et al. Influence of preoperative chemotherapy on the risk of major hepatectomy for colorectal liver metastases. *Ann Surg* 2006;243:1–7.
72. Viganò L, Capussotti L, De Rosa G, et al. Liver resection for colorectal metastases after chemotherapy: impact of chemotherapy-related liver injuries, pathological tumor response, and micrometastases on long-term survival. *Ann Surg* 2013;258:731–740.
73. Cho CS, Curran S, Schwartz LH, et al. Preoperative radiographic assessment of hepatic steatosis with histologic correlation. *J Am Coll Surg* 2008;206:480–488.
74. Fernandez FG, Ritter J, Goodwin JW, et al. Effect of steatohepatitis associated with irinotecan or oxaliplatin pretreatment of resectability of hepatic colorectal metastases. *J Am Coll Surg* 2005;200:845–853.
75. Kemeny N, Huang Y, Cohen AM, et al. Hepatic arterial infusion of chemotherapy after resection of hepatic metastases from colorectal cancer. *N Engl J Med* 1999;341:2039–2048.
76. Clancy TE, Dixon E, Perlis R, et al. Hepatic arterial infusion after curative resection of colorectal cancer metastases: a meta-analysis of prospective clinical trials. *J Gastrointest Surg* 2005;9:198–206.
77. Kemeny NE, Melendez FD, Capanu M, et al. Conversion to resectability using hepatic artery infusion plus systemic chemotherapy for the treatment of unresectable liver metastases from colorectal carcinoma. *J Clin Oncol* 2009;27:3465–3471.
78. Kemeny N, Jarnagin W, Paty P, et al. Phase I trial of systemic oxaliplatin combination chemotherapy with hepatic arterial infusion in patients with unresectable liver metastases from colorectal cancer. *J Clin Oncol* 2005;23:4888–4896.
79. Auer RC, White RR, Kemeny NE, et al. Predictors of a true complete response among disappearing liver metastases from colorectal cancer after chemotherapy. *Cancer* 2010;116:1502–1509.
80. Benoist S, Brouquet A, Penna C, et al. Complete response of colorectal liver metastases after chemotherapy: does it mean cure? *J Clin Oncol* 2006;24:3939–3945.
81. Goere D, Gaujoux S, Deschamp F, et al. Patients operated on for initially unresectable colorectal liver metastases with missing metastases experience a favorable long-term outcome. *Ann Surg* 2011;254:114–118.
82. Fong T, Fortner J, Sun RL, et al. Clinical score for predicting recurrence after hepatic resection for metastatic colorectal cancer: analysis of 1001 consecutive cases. *Ann Surg* 1999;230:309–318.
83. Blazer DG 3rd, Kishi Y, Maru DM, et al. Pathologic response to preoperative chemotherapy: a new outcome end point after resection of hepatic colorectal metastases. *J Clin Oncol* 2008;26:5344–5351.
84. Pawlik TM, Scoggins CR, Zorzi D, et al. Effect of surgical margin status on survival and site of recurrence after hepatic resection for colorectal metastases. *Ann Surg* 2005;241:715–722.
85. Are C, Gonen M, Zazzali K, et al. The impact of margins on outcome after hepatic resection for colorectal metastasis. *Ann Surg* 2007;246:295–300.
86. de Haas RJ, Wicherts DA, Flores E, et al. R1 resection by necessity for colorectal liver metastasis: is it still a contraindication to surgery? *Ann Surg* 2008;248:626–637.
87. Hoyer M, Roed H, Traberg HA, et al. Phase II study on stereotactic body radiotherapy of colorectal metastases. *Acta Oncol* 2006;45:823–830.
88. Chang DT, Swaminath A, Kozak M, et al. Stereotactic body radiotherapy for colorectal liver metastases. *Cancer* 2011;117:4060–4069.
89. Herfarth KK, Hof H, Bahner ML, et al. Assessment of focal liver reaction by multiphase CT after stereotactic single-dose radiotherapy of liver tumors. *Int J Radiat Oncol Biol Phys* 2003;57:444–451.
90. Stinauer MA, Diot Q, Westerly DC, et al. Fluorodeoxyglucose positron emission tomography response and normal tissue regeneration after stereotactic body radiation therapy to liver metastases. *Int J Radiat Oncol Biol Phys* 2012;83:e613–e618.
91. Mayo SC, de Jong MC, Pulitano C, et al. Surgical management of hepatic neuroendocrine tumor metastasis: results from an international multi-institutional analysis. *Ann Surg Oncol* 2010;17:3129–3136.
92. Cho CS, Labow DM, Tang L, et al. Histologic grade is correlated with outcome after resection of hepatic neuroendocrine neoplasms. *Cancer* 2008;113:126–134.
93. Sarmiento JM, Heywood G, Rubin J, et al. Surgical treatment of neuroendocrine metastases to the liver: a plea for resection to increase survival. *J Am Coll Surg* 2003;197:29–37.
94. Chen H, Hardacre JM, Uzar A, et al. Isolated liver metastases from neuroendocrine tumors: does resection prolong survival? *J Am Coll Surg* 1998;187:88–92.
95. Strosberg JR, Cheema A, Kvols LK. A review of systemic and liver-directed therapies for metastatic neuroendocrine tumors of the gastroenteropancreatic tract. *Cancer Control* 2011;18:127–137.
96. Raymond E, Dahan L, Raoul JL, et al. Sunitinib malate for the treatment of pancreatic neuroendocrine tumors. *N Engl J Med* 2011;364:501–513.
97. Yao JC, Shah MH, Ito I, et al. Everolimus for advanced pancreatic neuroendocrine tumors. *N Engl J Med* 2011;364:514–523.
98. Gupta S, Johnson MM, Murthy R, et al. Hepatic arterial embolization and chemoembolization for the treatment of patients with metastatic neuroendocrine tumors: variables affecting response rates and survival. *Cancer* 2005;104:1590–1602.
99. Saxena A, Chua TC, Bester L, et al. Factors predicting response and survival after yttrium-90 radioembolization of unresectable neuroendocrine tumor liver metastases: a critical appraisal of 48 cases. *Ann Surg* 2010;251:910–916.
100. Kulke MH, Siu LL, Tepper JE, et al. Future directions in the treatment of neuroendocrine tumors: consensus report of the National Cancer Institute Neuroendocrine Tumor clinical trials planning meeting. *J Clin Oncol* 2011;29:934–943.
101. Kennedy AS, DeZarn WA, McNeillie P, et al. Radioembolization for unresectable neuroendocrine hepatic metastases using resin 90Y-microspheres: Early results in 148 patients. *Am J Clin Oncol* 2008;31:271–279.
102. King J, Quinn R, Glenn DM, et al. Radioembolization with selective internal radiation microspheres for neuroendocrine liver metastases. *Cancer* 2008;113:921–929.
103. Sato T. Locoregional management of hepatic metastasis from primary uveal melanoma. *Semin Oncol* 2010;37:127–138.
104. Groeschl RT, Nachmany I, Steel JL, et al. Hepatectomy for noncolorectal non-neuroendocrine metastatic cancer: a multi-institutional analysis. *J Am Coll Surg* 2012;214:769–777.
105. Turley RS, Peng PD, Reddy SK, et al. Hepatic resection for metastatic gastrointestinal stromal tumors in the tyrosine kinase inhibitor era. *Cancer* 2012;118:3571–3578.