

Melanoma EBRT Decision Tree : Updated March 2013

Melanoma Stage I T1a and T1b ECRIC 67%	Surgery Est 99%	No Radiotherapy
	No surgery e.g. medically inoperable Est 1%	Radiotherapy 0.2 % ECRIC 50 Gy/20# ² , 60 Gy/30# ³ , 30 Gy/5# ¹ over 2.5 weeks
Stage II ECRIC 20%	Surgery Est 99%	Adjuvant RT if +ve margin and further surgery not possible, Desmoplastic[with extensive neurotropism, [trial TROG],ulcerated,T4 RT 48 Gy/20# ^{4,5} , MDA 30 Gy/5# ¹ two per week over 2.5 weeks Est 5%
		No RT Est 95%
	Medically inoperable Est 1%	Radiotherapy 50 Gy/20# ² , 60 Gy/30# ³ , 30 Gy/5# ¹ over 2.5 weeks Est 95% No RT Est 5%
Stage III ECRIC 12%	Surgery Radiotherapy	Regional Radiotherapy in High risk as per TROG≥1 parotid,≥2 cervical or axillary, ≥ 3 groin nodes, Extra nodal spread, ≥ 3 cm neck or axilla node, ≥4 cms in groin. LND then adjuvant RT RT 48 Gy/20# ^{4,5} , MDA 30 Gy/5# ¹ two per week over 2.5 weeks 4% ECRIC
		No Radiotherapy 96 % ECRIC
Stage IV ECRIC 1%	Symptoms- Radiotherapy 26 % ECRIC	Local symptoms -Bleeding 6-8 Gy/1#, ulceration Metastases 30 Gy/10 #, 20 gy/5 #, 8 Gy/1# Brain consider surgery + WBRT, stereotactic RS Bone metastases 8 Gy/1#, 20 Gy/5#
	No Radiotherapy 74 % ECRIC	BSC

Cancer registry registrations only for new cases not recurrence therefore recurrence and lymphatic nodal irradiation under estimated.

Clinical estimates are in Red

Melanoma References

1. K. KIAN ANG,*: LESTER J. PETERS,* RANDAL S. WEBER,? WILLIAM H. MORRISON,*ROBERT A. FRANKENTHALER,~ ADAM S. GARDEN,* HELMUTH GOEPFERT,CHUL S. HA* AND ROBERT M. BYERS+POSTOPERATIVE RADIOTHERAPY FOR CUTANEOUS MELANOMA OF THE HEAD AND NECK REGION. Int. J. Radiation Oncology Biol. Phys., Vol. 30, No. 4, pp. 795-798, 1994
2. W. T. SAUSE, M.D., J. S. COOPER, M.D.,* S. RUSH, M.D.,* C. T. AGO, M.D.,3 D. COSMATOS, PH.D.,~ C. T. COUGHLIN, M.D.,' NORA JANJAN, M.D.6 AND JAMES LIPSETT, M.D.' FRACTION SIZE IN EXTERNAL BEAM RADIATION THERAPY IN THE TREATMENT OF MELANOMA. Int J Radiation Oncology Biol. Phys.,Vol. 20. PP. 429-432
3. DANIEL T. CHANG, M.D., ROBERT J. AMDUR, M.D., CHRISTOPHER G. MORRIS, M.S.,AND WILLIAM M. MENDENHALL, M.D. ADJUVANT RADIOTHERAPY FOR CUTANEOUS MELANOMA: COMPARING HYPOFRACTIONATION TO CONVENTIONAL FRACTIONATION. Int. J. Radiation Oncology Biol. Phys., Vol. 66, No. 4, pp. 1051–1055, 2006

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4. M. A. Henderson, B. Burmeister, J. F. Thompson, J. Di Iulio, R. Fisher, A. Hong, R. Scolyer, K. Shannon, H. Hoeksma, J. Ainslie; Adjuvant radiotherapy and regional lymph node field control in melanoma patients after lymphadenectomy: Results of an intergroup randomized trial (ANZMTG 01.02/TROG 02.01). Citation: *J Clin Oncol* 27:18s, 2009 (suppl; abstr LBA9084)
5. J. OVERGAARD, M.D., H. VON DER MAASE, M.D.,* AND M. OVERGAARD, M.D.3. A RANDOMIZED STUDY COMPARING TWO HIGH-DOSE PER FRACTION RADIATION SCHEDULES IN RECURRENT OR METASTATIC MALIGNANT MELANOMA. *Int. J Radiation Oncology Biol Phys.* Vol. 11, pp. 1837-1839
6. BETH M. BEADLE, M.D., PH.D.,* B. ASHLEIGH GUADAGNOLO, M.D., M.P.H.,* MATTHEW T. BALLO, M.D.,* JEFFREY E. LEE, M.D.,y JEFFREY E. GERSHENWALD, M.D.,y JANICE N. CORMIER, M.D., M.P.H.,y PAUL F. MANSFIELD, M.D.,y MERRICK I. ROSS, M.D.,y AND GUNAR K. ZAGARS, M.D.* RADIATION THERAPY FIELD EXTENT FOR ADJUVANT TREATMENT OF AXILLARY METASTASES FROM MALIGNANT MELANOMA. *Int. J. Radiation Oncology Biol. Phys.*, Vol. 73, No. 5, pp. 1376–1382, 2009
7. JOHN FRENCH, F.C.A.M.R.T., M.SC., C.H.E.,* COLLEEN MCGAHAN, M.SC.,† GRAEME DUNCAN, M.D., F.R.C.P.C.,‡ SONCA LENGOC, R.T.T., B.SC.,* JENNY SOO, R.T.T., B.SC.,* AND JERRY CANNON, A.C.T HOW GENDER, AGE, AND GEOGRAPHY INFLUENCE THE UTILIZATION OF RADIATION THERAPY IN THE MANAGEMENT OF MALIGNANT MELANOMA. *Int. J. Radiation Oncology Biol. Phys.*, Vol. 66, No. 4, pp. 1056–1063, 2006

Guidelines

R. Dummer, A. Hauschild, M. Guggenheim, L. Jost & G. Pentheroudakis Melanoma: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. *Annals of Oncology* 21 (Supplement 5): v194–v197, 2010

NCCN Guidelines 2011. v 1.2012

http://www.nccn.org/professionals/physician_gls/pdf/melanoma.pdf