Greater Des Moines Dermatology: Dr. Abrahamson: **Melanoma** www.greaterdesmoinesdermatology.com
Over 80,000 new cases/yr in the US. An estimated 8,000 will die of disease/year. The incidence is increasing. The lifetime risk is estimated at 1 in 50 in the U.S. Prognosis is highly dependent on early detection. The primary prognostic measure is Breslow Depth. Patients with Breslow of 0 (99+% 5 year survival), Breslow < 1 mm (95 - 85% 5 year survival), Breslow > 4 mm and ulcerated (45% chance of 5-year survival). Other much weaker risk factors include involved lymph nodes, ulceration, mitotic activity, and male sex. If diagnosed with melanoma, several items will be discussed. Excision offers the best chance at cure and should be performed as soon as possible. (JAAD 2018:78:40-6). Unfortunately, traditional adjuvant therapy including chemotherapy, radiation, lymph node dissection, and immunotherapy prior to 2015 did **NOT** have a significant survival benefit. Sentinel node has **never** shown an overall survival benefit including the Selective Lymphadenectomy Trial (MLST I&II), Sunbelt Melanoma Trial, and DeCOG-SLT but sentinel node may be used as a staging tool. **DecisionDX** may replace the need for sentinel Node:**skinmelanoma.com**. In children, sentinel node often leads to inaccurate risk representation IntJDerm 2000 Nov39. There is **NO EVIDENCE** that total lymph node dissection improves 10-year overall or melanoma-specific survival and may be detrimental to many immunotherapies and typically is argued for reduction of local regional recurrence **NOT** long term overall survival when compared with wide local excision and observation (MSLT-II ClinicalTrials.gov NCT00297895.) "Sentinel Node biopsy:who needs it" Dr. Coldiron Dermatology News Feb 2018 page 18 **www.mdedge.com/edermatologynews/cold-iron-truth**
--Depending on the size of the tumor, staging modalities may be discussed including sentinel node for tumors >1.5 to 4 mm. Long term monitoring is recommended of the entire body for a second **NEW primary**. Use of sentinel node and lymph node dissection is declining due to improved survival benefit of PD-1, CTLA-4, and laphervec.--Ways to reduce future risk. Use SPF >50 sunscreen daily. Wear protective clothing/**UPF rated**. Wear a hat at all times. Check all of your skin and lymph node basins monthly. Have regular follow-up. Additional therapy and follow-up will be discussed. There is increased risk for 1st degree relatives. A newer test will likely replace sentinel node due to its limited staging value. This test is the Decision DX-melanoma test (31 gene expression profile**) (skinmelanoma.com**). Leaving lymph nodes intact may be beneficial in CTLA4, PD-1, and talimogene herparepvec as these drugs are activating the immune system. These medications look better than any prior therapy for Stage III and IV disease!!!---A CTLA4-antibody T cell activator (www.yervoy.com), tyrosine kinase inhibitors (www.zelboraf.com), MEK inhibitor, antibody to programmed cell death receptor pembrolizumab and nivolumab (PD-1), and talimogene laherparepvec (www.imlygic.com) are FDA approved. PV10 dye and Cloned CD4 T cell therapy (lymphocyte transfer/adoptive cell transfer) are pending approval 2020. www.onclive.com
Drug Search: www.cancer.gov/publications/dictionaries/cancer-drug **Clinical Trial Search**: www.clinicaltrials.gov
--Sentinel lymph node biopsy and melanoma: 2010 update: Part I JAAD May 2010: 62: 723-34 and Part II 737-750 and Sentinel node biopsy and standard of care for melanoma:A re-evaluation of the evidence: JAAD.May 2010 880-884.-Sentinel node biopsy and standard of care for Melanoma: JAAD May 2009, Vol 60 #5: 872-875.-Sentinel Node Issues of controversy/ discussion:JAAD 2007 56,2: 347 and JAAD 2006;54:19-27-Sentinel Lymph Node Biopsy in Melanoma: Coping with Incomplete Information; Call for Further Investigations and Sentinel Lymph Node Biospy in Melanoma:The Gulf Between Presentation and Reality. Skin med Dermatology for the Clinician.Vol8, Issue 4, 222- 226.-N Engl J Med .2014;370:599-609 and 663-66 - Melanoma and melanocytic tumors of uncertain malignant potential in children,adolescents and young adults-Standford Experience.2010:27(3):244-254. Atypical Spitzoid Tumors and Sentinel node biopsy:a systematic review. Lanect Oncology 2014 15(4):e178-183. NEJM 2017 jun8 doi:10.1056/NEJMe1704290, Journal of Surgical Oncology 2019 no overall survival (OS) benefit for completion lymph node dissection (CLND) in patients with melanoma characterized by a positive sentinel lymph node
www.aad.org, www.melanoma.org, www.melanomacare.org, www.hereditarymelanoma.com, www.cancer.org, www.cdc.gov/cancer, http://cancernet.nci.nih.gov, www.skincancer.org, www.nccn.org, www.cancer.gov, www.nlm.nih.gov/medlineplus/skincancer.html, http://cancertrials.nci.nih.gov, www.emedicine.com, U of Iowa protocols ENT department "melanoma" www.jaad.org/article/S0190-9622(18)32588-X/fulltext https://wiki.uiowa.edu/display/protocols/Home, www.mdedge.com/edermatologynews/coldiron-truth
AJCC 2018 Revised Melanoma Staging Breslow depth: vertical height of the melanoma=granular layer to deepest point
0 Intraepithelial/in situ melanoma (T0N0M0) 100% (STAGE 0)
T1a < 0.8 mm without ulceration (BreslT1aN0M0) (STAGE IA)
T1b 0.81-1.00 mm NO ulceration (T1bN0M0) (STAGE IB) or <0.08mm with ulceration (T2aN0M0) (STAGE IB)
T2a 1.01-2 mm NO ulceration (T2bN0M0) (STAGE IIA) T2b 1-2 mm with ulceration (T2bN0M0) (STAGE IIA)
T3a 2 - 4 mm NO ulceration (T3aN0M0) (STAGE IIA) T3b 2 - 4 mm with ulceration (T3bN0M0) (STAGE IIB)
T4 > 4 mm NO ulceration (T4N0M0) (STAGE IIB) T4b > 4mm WITH ulceration (T4N0M0) (STAGE IIC)
N1a One clinically occult node (microscopic) N1b one clinically detected node N1c: No regional nodes involved + intransit mets
N2a 2-3 clinically occult nodes (microscopic) N2b 2-3 clinically detected nodes N2c 2or3 mixed findings
N3a 4 or more nodes (microscopic) N3b 4 or more clinically detected nodes N3c 4 or more nodes mixed pattern
M1a Distant mets to skin/muscle/lymph nodes M1b Distant mets to lung M1c Distant mets to non-CNS visceral site M1d CNS involved
M1a(0): LDH negative M1a(1): LDH elevated Lung: M1b(0) and M1b(1) CNS: M1d(0) and M1d(1).
Distant skin, subcutaneous, or nodal mets (any TanyNM1a) (19% - 6%) If LDH elevated, then M1a(1)
American Joint Committee on Cancer Staging System for Cutaneous Melanoma. J Clin Oncol 2001; 19:3635-3548
https://cancerstaging.org/referencestools/deskreferences/Documents/47.Melanoma.pdf
Prognosis Calculators: 1) www.lifemath.net/cancer/melanoma/outcome 2) www.melanomaprognosis.net