

Malignant Melanoma of Skin

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Data Source: Cancer registry information on melanomas of skin (both in situ and invasive) diagnosed 2004-2005.

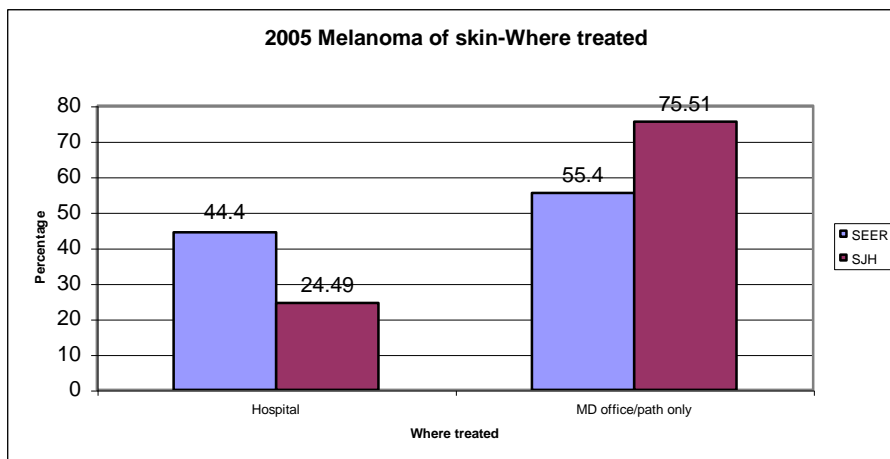
Reason for Report: To determine locally why we seem to have a greater incidence of melanoma than the national statistics as documented in the table below:

Incidence Rates per 100,000 Population		
	Whatcom	National*
2000	29.97	17.05
2001	38.1	18.33
2002	34.84	18.79
2003	55.01	19.16
2004	42.86	18.67
2005	40.37	20.24

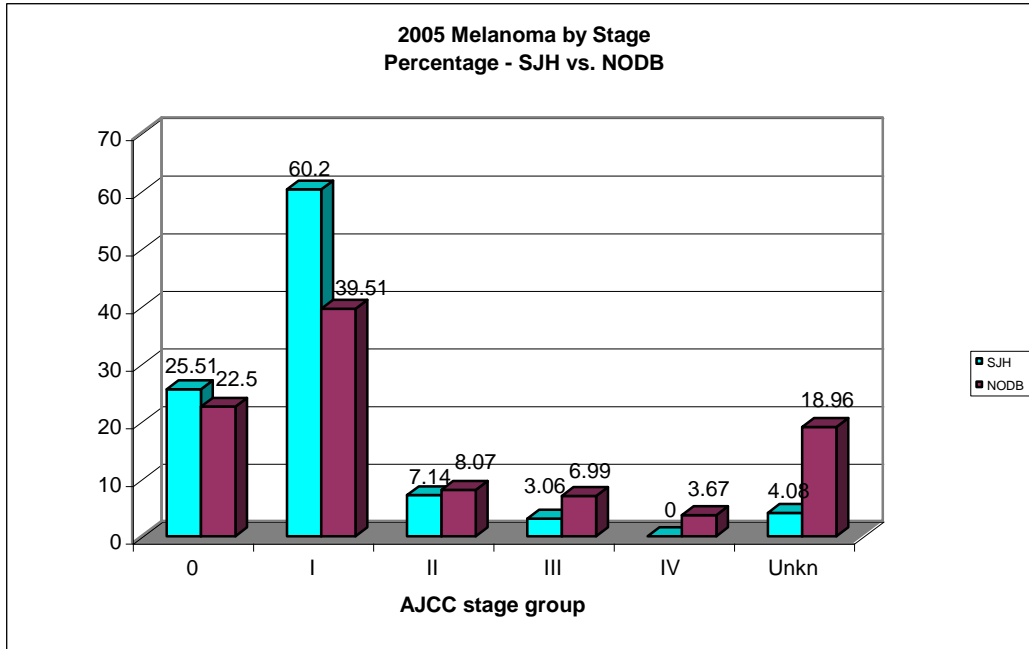
*estimates

Findings: During this time period, there were 117 cases of melanoma diagnosed in 2004 and 98 cases of melanoma diagnosed in 2005. The above graph in calculated without in situ cases; however the rest of this report includes them. This information was compared to 2005 information gathered by the SEER registry at Fred Hutchinson Cancer Research Center (FHCRC).

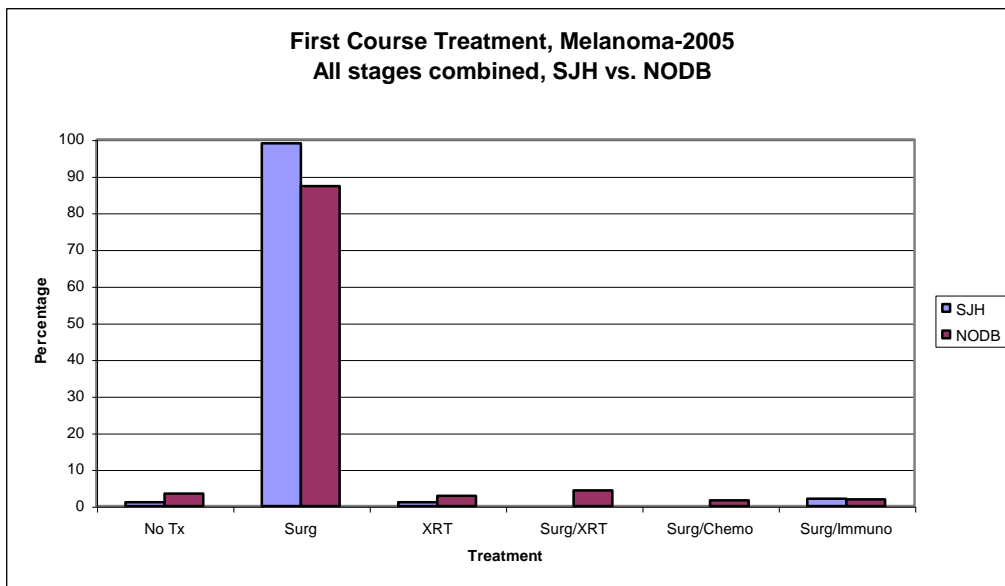
At St Joseph Hospital (SJH) cancer registry, we also collect cases that were diagnosed and treated in the physician office only. There is speculation that other hospital registries do not capture the “out of hospital” cases, so therefore our numbers might be higher because of this. The following graph shows the distribution of the SJH & SEER registries treated in physician offices vs. hospitals:



The following graph shows the distribution of cases by stage in percentages between St. Joseph Hospital and IMPAC's NODB™. We did not use SEER information in this graph since they do not utilize the AJCC staging scheme. Cases reported to SJH seem to be of a lower stage however the NODB™ has a higher percentage of unknown staged (or not staged) cases. A lower stage of cases in our Registry might be consistent with the greater numbers of "out of hospital" diagnoses.



The following table demonstrates how melanomas were treated in 2005 in Whatcom County compared to the NODB™. A large majority of the cases were treated with surgery alone both locally and with hospitals reports to the NODB™.



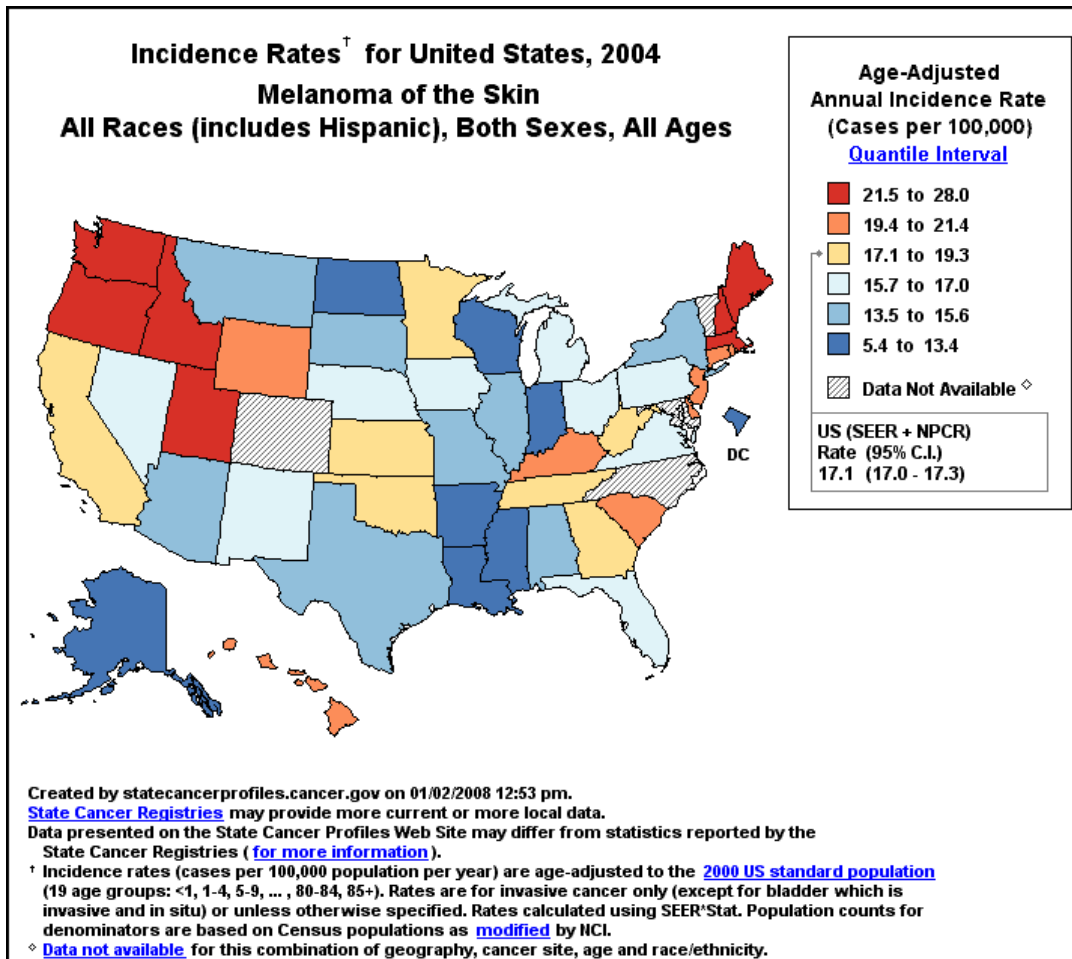
The table below compares age at diagnosis between St. Joseph Hospital (SJH), the National Cancer Data Base (NCDB) of the Commission on Cancer and the National Oncology Data Base™(NODB) of IMPAC Medical system. SJH has a larger number of

young patients of college age, which may reflect the presence of WWU students in our community.

Age at Diagnosis - Melanoma of skin
Comparing NCDB, NODB (IMPAC) & SJH

Age Group	NCDB	NODB	SJH
<15		0.17	
15-29	4.29	4.06	16.16
30-39	7.81	7.77	11.11
40-49	14.69	14.51	13.13
50-59	20.35	20	24.24
60-69	19.83	20.29	17.17
70-79	19.85	19.9	10.1
80-89	12	11.23	8.08
90+	1.17	2.07	

The following graphic shows the incidence of melanoma in 2004 from SEER registries. It should be noted that SEER registries might not cover all states. The incidence rates for Whatcom Count and Washington State are higher than the national average. In talking with the Washington State Registry, it was noted that not all states gather information from the physician offices if pathology is not sent to a path lab. This is also true for the SEER registries. It should also be noted that in situ cases of melanoma are not reported at the national level.



The following shows the percentage of patients who were diagnosed with melanoma who also have had another primary diagnosed.

2000 = 20 (28.2%)
 2001 = 19 (23.8%)
 2002 = 27 (33.3%)
 2003 = 24 (26.4%)
 2004 = 37 (33.9%)

The percentages of cases diagnosed & treated in the physician office only by year are shown below. The percentage of cases seen in the physician office only consistently remains higher than those treated in the hospital setting.

2000 = 60 (76.5%)
 2001 = 67 (83.8%)
 2002 = 62 (76.5%)
 2003 = 68 (74.7%)
 2004 = 82 (75.2%)
 2005 = 74 (75.5%)

These two tables compare sex, age, and race of patients diagnosed with melanoma between SJH and NODB™. The average age for SJH is mostly in the mid 50's whereas the NODB™ has an average age of 60. Both databases have an increasing number of unknown race codes, which in part may be due to privacy practices. (This practice will cause difficulty in obtaining observed survival since race is used in the calculations to determine probability of dying.)

Malignant Melanoma diagnosed at St. Joseph Hospital & physician offices Years 2000-2005								
	Sex		Ave age	Race			Residence at dx	
	Male	Female		White	Unkn*	Black	Whatcom	other
2000	37	34	52	98.59%		1.40%	62	9
2001	43	37	55	95%	5%		71	9
2002	35	46	54	86.41%	13.58%		68	13
2003	47	44	56	85.71%	14.28%		87	4
2004	44	75	56	78.00%	12%		109	10
2005	46	52	52	74.51%	24.48%		92	6

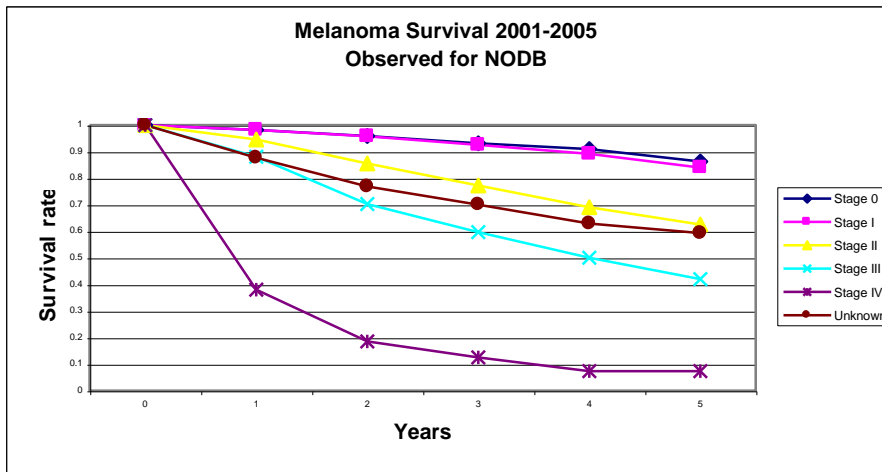
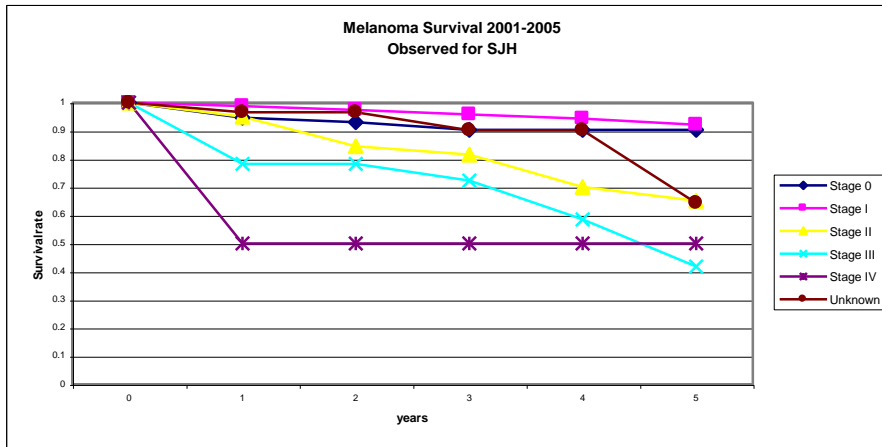
*This is partly due to fact that race isn't always reported to the registry from the MD offices.

Malignant Melanoma from IMPAC's National Oncology Data Base (NODB) Years 2002-2005							
	Sex		Ave age	Race			
	Male	Female		White	Black	Asian	Unkn*
2002	790	638	59	97.97%	0.90%	0.13%	0.97%
2003	835	667	60	96.87%	0.73%	0.26%	2.12%
2004	1147	866	60	97.42%	0.59%	0.04%	1.93%
2005	1247	1065	60	95.46%	0.86%	0.34%	3.32%

*This is partly due to fact that race isn't always reported to the registry.

Survival of melanoma seen in the SJH registry is compared to analytic cases reported to the NODB™.

Stage for stage, the survival on Malignant Melanoma patients is at least as good if not better than the national numbers.



Conclusions: There has been a consistent annual increased incidence of Malignant Melanoma in the St. Joseph Hospital registry. This has been a cause of alarm and uncertainty as to its significance.

This study can provide some reassurances. One hypothesis for the greater numbers has been the single community Pathology assessment, ensuring that all cases of Melanoma are reported here. The greater incidence of Melanoma is Washington State as a whole is, in part due to the penetration of the SEER database giving a more accurate reflection of true incidence. This is further confirmed by the noticeably larger number of patients in our community diagnosed and treated in physician offices which otherwise might go

unreported. This is further confirmed by the greater number of lower stage Melanoma that would more likely be diagnosed and treated in a physician office.

The second hypothesis for a greater incidence has been the presence of Western Washington University (WWU) in the community which may have students diagnosed with melanoma yet not be counted in or population, hence artificially increasing our incidence. This hypothesis is supported by the larger number of college age young people diagnosed in our community as compared to the national data.

Hence the greater incidence of Melanoma is perhaps due to both a more accurate counting of cases, as well as the presence of 13,000 college students who would artificially increase our incidence.

Of note, the survival of all stages of Melanoma is at least as good, if not better than the national numbers.

References:

1. Commission on Cancer, National Cancer Database (NCDB). Available at: <http://web.facs.org/ncdbbmr/ncdbbenchmarks9.cfm> Assessed January 2008.
2. National Oncology Database (NODB) of IMPAC Medical systems. Available at: www.impac.com/, support plus (restricted access). Accessed January 2008.
3. Surveillance, Epidemiology & End Results (SEER) registry at Fred Hutchinson Cancer Research Center (information ran by their epidemiology department).
4. National Cancer Institute State Cancer Profiles. Available at: <http://statecancerprofiles.cancer.gov/> Accessed January 2008.

Reported to cancer committee: 2/14/08

Distributed to dermatologists: March 2008