**WSA Discussion of 2022-350**

**Does Residual Invasive Disease in the Wide Local Excision after Diagnosis with Partial Biopsy Technique Influence Survival in Melanoma? A Matched-Pair Analysis of** **Multicenter Selective Lymphadenectomy Trial I and II**

**DR CHARLES ST HILL** (Las Vegas, NV): Do you know what the incidence of positive margin or residual melanoma is, when the intent was for excisional biopsy, as opposed to what you had? In your study, you show there are several significant differences between the initial groups, with respect to age and other important clinical pathologic characteristics. You used a case-matching method to control for these differences and to minimize bias before the remainder of your analysis. Did you consider using a propensity score matching method to achieve this reduction in bias, and if not, then why?

**DR TREVAN FISCHER** (Santa Monica, CA): We initially looked at the whole cohort of patients in Multicenter Selective Lymphadenectomy Trial (MSLT) I, both excisional and those who underwent a partial biopsy. The rate of positive margin in those who underwent excisional biopsy was very low, less than 10%. And in our clinical practice, we are seeing very few excisional biopsy patients come to us as their mechanism of diagnosis, and the vast majority have a partial biopsy technique. So, we wanted to see whether those patients had any changes in outcomes. That is why we chose to exclude the excisional biopsy patients up front.

Regarding your second question, we discussed this with our statistician. She felt that the database had a roughly equal number of patients in its cohort who had both, I think 55% to 45% of those who had wide excisions with residual vs not and she thought that matched-pairing would provide enough of a reduction in bias. Some of the biases that Dr Ramiscal mentioned, such as the clinical factors that led to someone to undergo an excisional biopsy or a partial technique, may go into this. Those are things we just cannot answer from the dataset.

**DR CHARLES SCOGGINS** (Louisville, KY): Dr Robert Martin presented very similar data in 2005; data from the Sunbelt Melanoma Trial, and presented that at the Southwestern Surgical Congress. He showed that, for the Sunbelt data, about 20% of patients underwent a shave biopsy. Dermatologists and family practice doctors perform a lot of shave biopsies. We only had 4% of patients after a shave biopsy have residual melanoma at the time of the wide local excision, and showed the exact same thing: there was no impact on outcomes. I am just wondering, given that, and given your results, is there any push from our society and from others to impact how dermatologists and primary care physicians are performing biopsies on lesions in their offices?

**DR TREVAN FISCHER** (Santa Monica, CA): I believe the Sunbelt trial looked at patients with lesions less than 2 mm; one would expect a shave biopsy would have a greater chance to get a complete excision on that thinner lesion. We included all sizes that were in MSLT, and we review National Comprehensive Cancer Network (NCCN) guidelines all the time in our fellows conferences. I think we were a little surprised how NCCN has not caught up to the practice of what is happening in the community, especially since our data is not the first that suggests there is no significant difference in survival. A growing body of work should suggest this, and I think pushing for guidelines changes may be coming.

**DR TERRY LAIRMORE** (Shreveport, LA): I want to ask a brief clarification question about how your study was designed. If I understand your definition of a partial biopsy, it includes those patients who had residual disease of any kind after their diagnostic biopsy. If so, then this would include not just patients who underwent a shave biopsy where the full thickness was not obtained and the Breslow level might be under-staged, but also patients who had a positive radial margin. These patients would still have undergone a full thickness excision with an accurate Breslow depth determined. Can you tell me how many of the patients in your study who underwent a partial biopsy underwent full thickness biopsy with a positive radial margin vs shave partial thickness biopsy?

**DR TREVAN FISCHER** (Santa Monica, CA): We excluded up front those patients who underwent a true excisional biopsy: one requiring closure with suture. The partial biopsy techniques included a punch, a shave, or an incisional biopsy, where the intent was not to remove the whole lesion. We did look at where the margin was positive, and I believe about 40% were positive in the deep margin. I do not off the top of my head remember the number of the peripheral margin, but we do wonder if the peripheral margin positivity in truncal melanoma could theoretically provide some sort of immunologic response to help improve survival. I think this is something we need to look at a little bit deeper, as to whether there are any molecular markers or immunologic profiles that we can see in these data.