

## Changes in sun protection behaviour after diagnosis of high-risk primary melanoma

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### Background

Melanoma survivors are at high risk of developing a second primary melanoma (Bradford et al 2010). Standard clinical recommendations about sun safety aim to minimise this risk, but longitudinal data are lacking after diagnosis in regard to patients' compliance with sun protection advice.

### Methods

We applied repeated measures latent class analysis to information collected via self-administered questionnaires about primary prevention behaviour at time of diagnosis and then six-monthly for two years after diagnosis from patients with clinical stage IB-II melanoma in Queensland, Australia (Smithers et al, 2015). Multivariable regression analysis was conducted to determine factors associated with behaviour trajectories after diagnosis.

### Results

Among 448 male and 341 female melanoma patients, sunscreen use after diagnosis fell into three trajectories: 'stable, never-use' (26% males; 12% females), 'stable, sometimes-use' (35% males; 29% females) and 'increased to often-use' (39% males; 59% females). Most male melanoma patients reduced their weekend sun exposure (either 'high to moderate' (60%) or 'moderate to low' (18%) levels), although 22% remained 'stable, high'. Among female patients, 33% reduced their weekend sun exposure ('moderate to low'), with the remainder having trajectories of either 'stable, moderate' (48%) or fluctuating 'moderate-high' (19%). Male patients, smokers, those with lower education, with some tanning ability, or those who did not perform regular self skin-checks were more likely to have trajectories of inadequate sun protection.

### Conclusion

Identifying melanoma patients with inadequate sun protection behaviours at diagnosis would assist clinicians to provide targeted education.

### References

- Bradford PT, Michal Freedman D, Goldstein AM, et al. 2010. Increased Risk of Second Primary Cancers After a Diagnosis of Melanoma. *Archives of dermatology* 146:265-272.
- Smithers BM, Hughes MCB, Beesley VL, et al. 2015. Prospective study of patterns of surgical management in adults with primary cutaneous melanoma at high risk of spread, in Queensland, Australia. *Journal of Surgical Oncology* 112:359-365.