

850P: A dynamic recurrence risk prediction tool for adjuvant therapy in stage III melanoma

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Background

- Adjuvant treatment with dabrafenib/trametinib (dab/tram) and anti-PD-1 antibodies (PD1) reduce the risk of recurrence and distant-metastasis in patients with resected stage III melanoma^{1,2,3,4,5}.
- Applying stage and treatment-specific clinical trial data to patients at time points during the course of treatment to inform follow-up and prognostication is difficult.

Objectives

• To develop a web app to guide discussions about risk of recurrence with or without therapy at baseline and during a patient's treatment journey.

Methods

• Individual survival data from patients with resected AJCC v8 stage IIIA-D melanoma treated with adjuvant dab/tram^{1,2}, PD1^{3,4,5} or observation^{1,2,3,4} on clinical trials were extracted from published Kaplan-Meier curves⁶.

Table 1. Patient numbers used to inform conditional RFS rate estimates^{1,3,5}

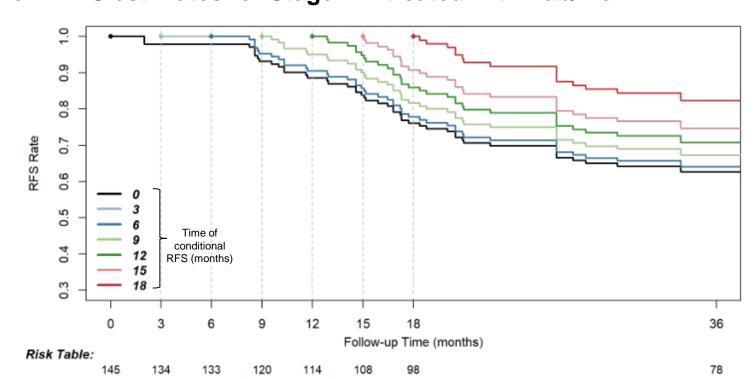
| Stage | Dab/ | PD1 | Placebo |
|--------|------|-----|---------|
| AJCCv8 | Tram | | |
| IIIA | 50 | 45 | 79 |
| IIIB | 145 | 280 | 344 |
| IIIC | 217 | 499 | 453 |
| IIID | 22 | 38 | 35 |

Table 2. Patient numbers used to inform conditional DMFS rate estimates^{2,4,5}

| Stage AJCCv8 | Dab/ | PD1 | Placebo |
|-----------------|------|-----|---------|
| AJCCv8 | Tram | | |
| IIIA | 39 | 10 | 92 |
| IIIB | 154 | 297 | 308 |
| IIIC | 214 | 468 | 484 |
| IIID | 17 | 39 | 42 |

- This data informed our conditional survival curves and with these results we
 were able to develop a user-friendly online calculator that provides recurrence
 risks, adjusted for time survived, for patients with resected stage III melanoma at
 commencement of therapy as well as at various time points thereafter.
- Below is one example of the dynamic Kaplan-Meier survival estimates used to inform the results of the recurrence risk prediction tool:

Figure 1. RFS estimates for Stage IIIB treated with Dab/Tram

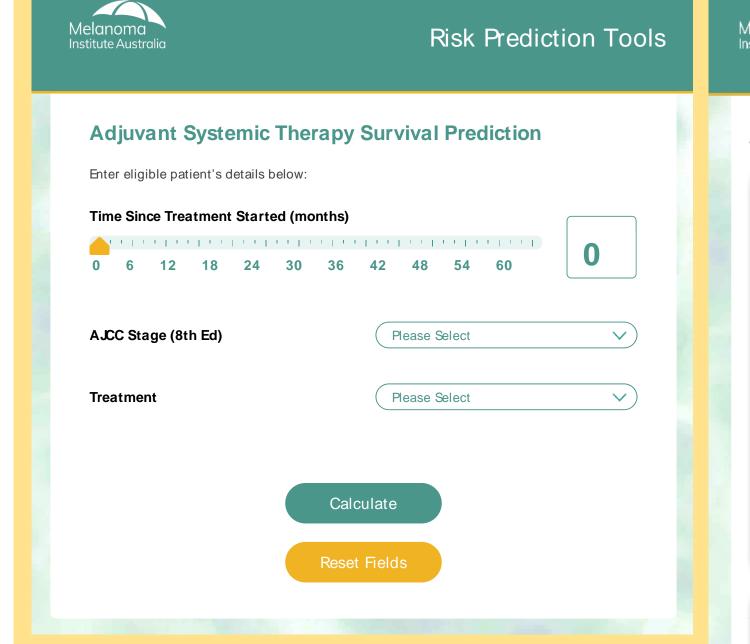


- o Risk of recurrence is 37% over median follow up 61mo (95% CI 60-63)
- If recurrence free at 12mo, remaining risk of recurrence is 29% and risk of recurrence over next 6 months is 14%.

Results: Risk Prediction Tool

Input Page

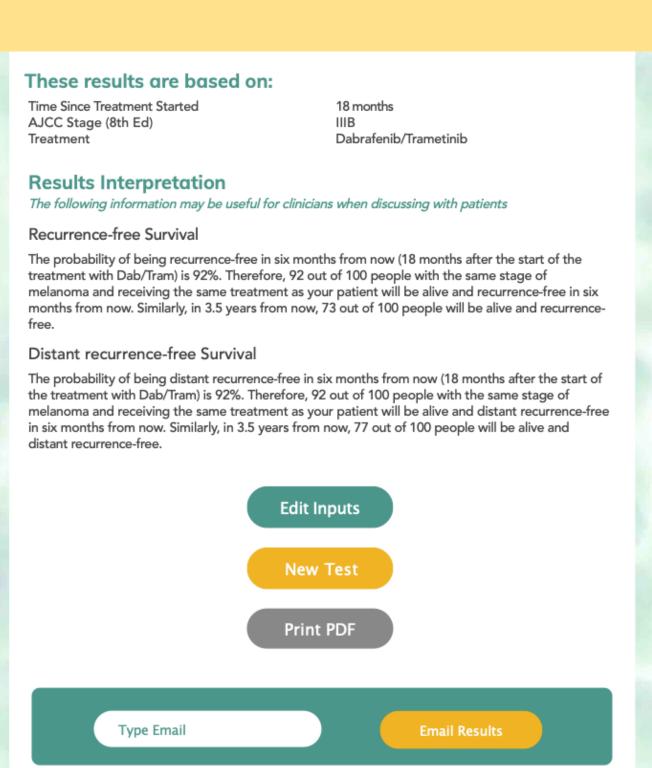
Output Page Example



Once published, tool will be available on

http://www.melanomarisk.org.au





Conclusions

- This tool provides risks of recurrence in a user-friendly, easy-access location and will help guide discussions about risk of recurrence with or without therapy at baseline and at threemonthly intervals during a patient's treatment journey.
- The tool will help inform frequency of surveillance imaging and follow-up allowing for rationalising of health resources.
- More data will be incorporated as they become available (including for stage II and IV melanoma), further increasing the accuracy and applicability of the tool over time.

References

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