

Total Synthesis of Portimines A and B

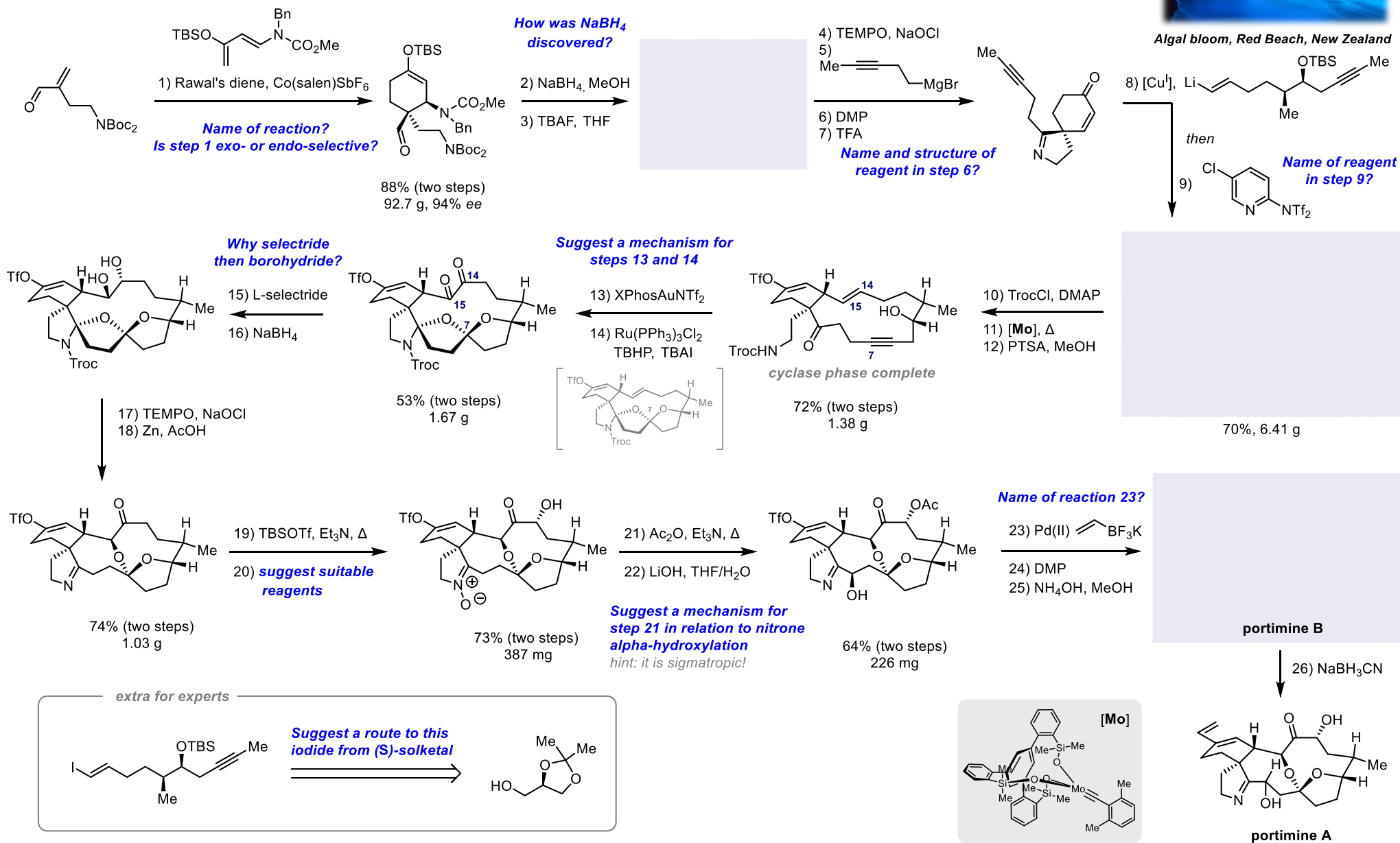
Clementson Group Problem Session

Friday 2nd October 2026

Portimine A was isolated from an algal bloom (*Vulcanodinium rugosum*) off the coast of New Zealand in 2013. Portimine B was later isolated in 2018. Portimine A shows potent cytotoxic activity. Your task is to fill in the **missing intermediates** and answer the **questions** below.



Algal bloom, Red Beach, New Zealand



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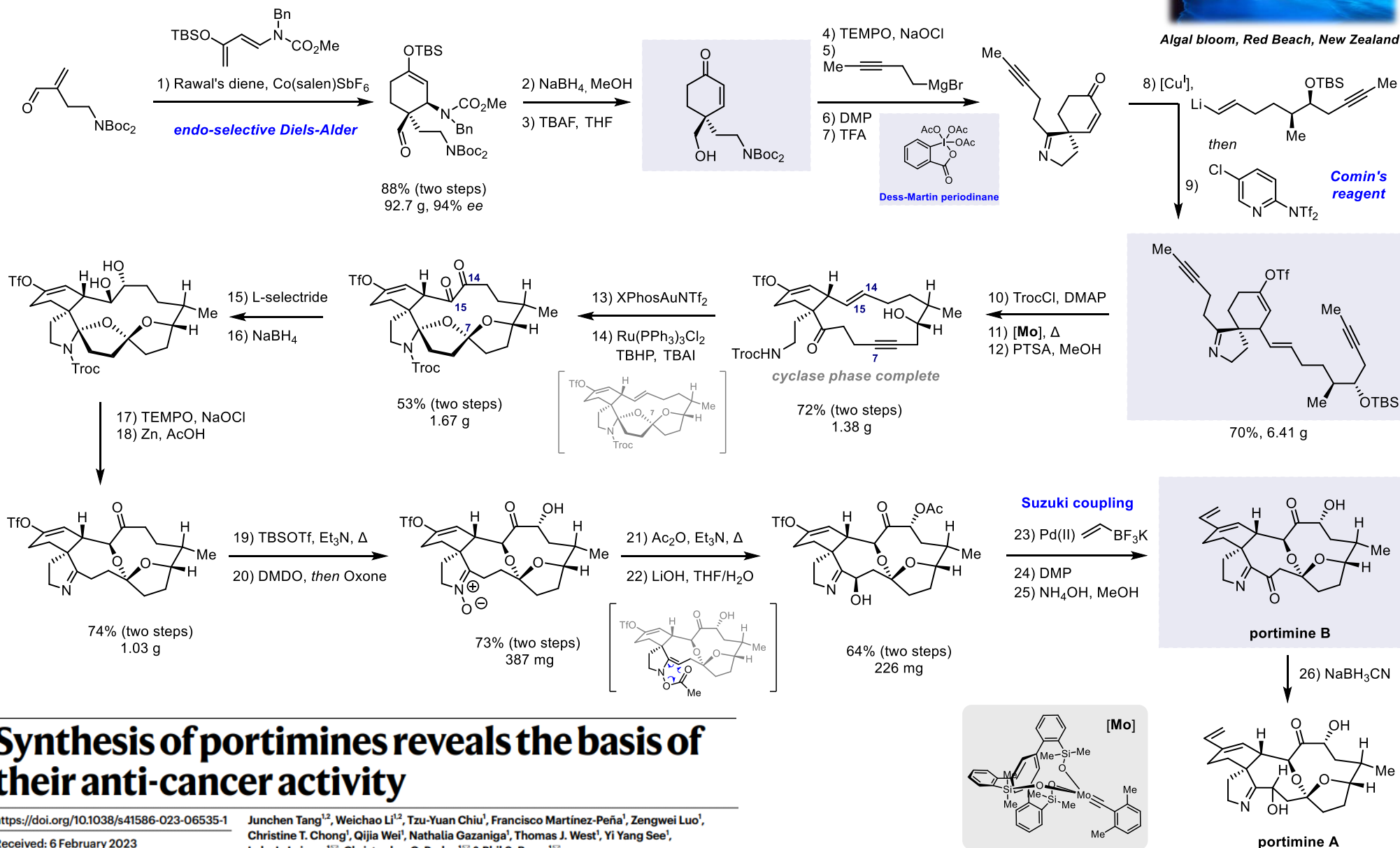
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Synthesis of portimines reveals the basis of their anti-cancer activity

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