

# Assemblase Pty Ltd

*Making slow reactions less slow*



“The science of today is the technology of tomorrow.”

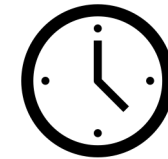
*- Edward Teller*

# Inefficiencies

Cost

Sustainability

Time



# Inefficiencies

Cost

Sustainability

Time

Increased yield

Less Waste

Faster reaction rate & product formation

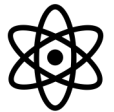
By-pass slow limiting steps

Multiple reactions sites can be reduced to one

## Assemblase Scaffold



Highly adaptable to any enzyme



Self Assembling



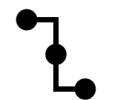
Stable



Sustainable



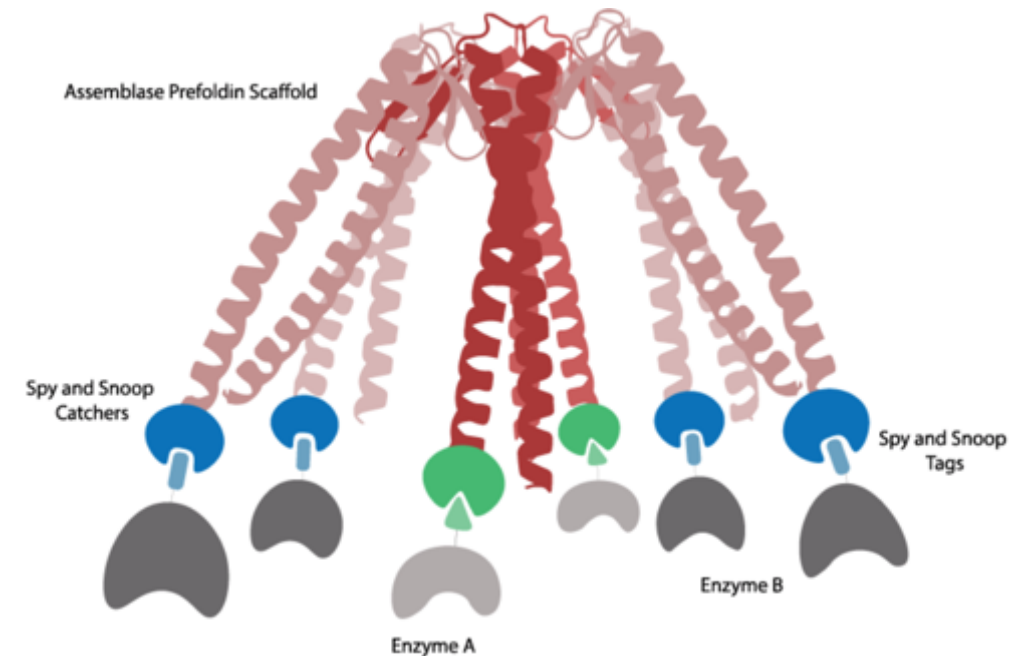
Thermally stable



Reduces accumulation of intermediaries by co-localisation



Multi step reactions instantaneous by substrate channelling



## ***The Assemblase scaffold makes Paclitaxel synthesis 6x more efficient***

Paclitaxel is a microtubule inhibitor, stopping cell division which leads to cell death



Baccatin III pathway is environmentally friendly



F2 PBS Status ensures all manufacturers will incorporate Assemblase



Paclitaxel is used to create other pharmaceuticals



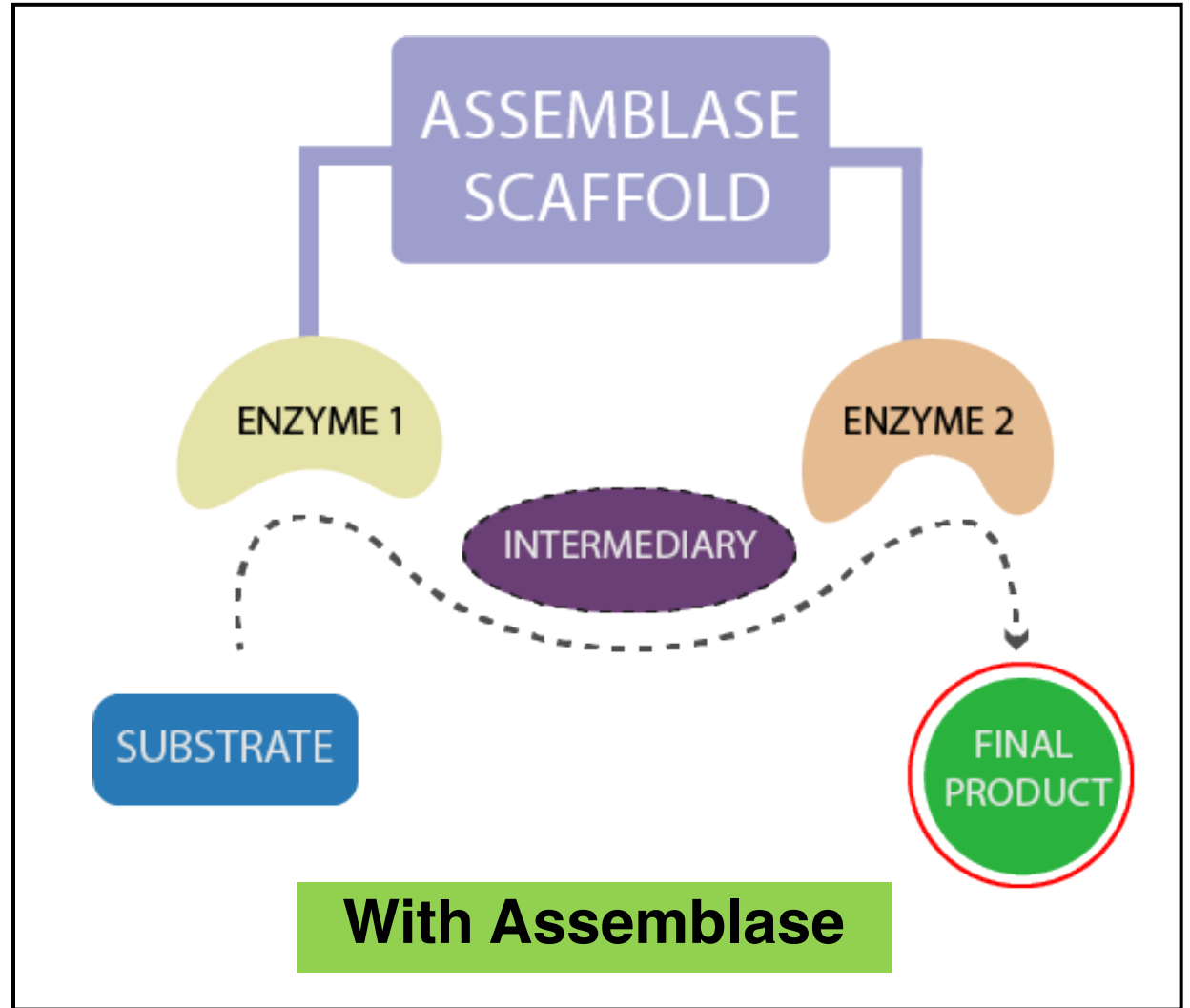
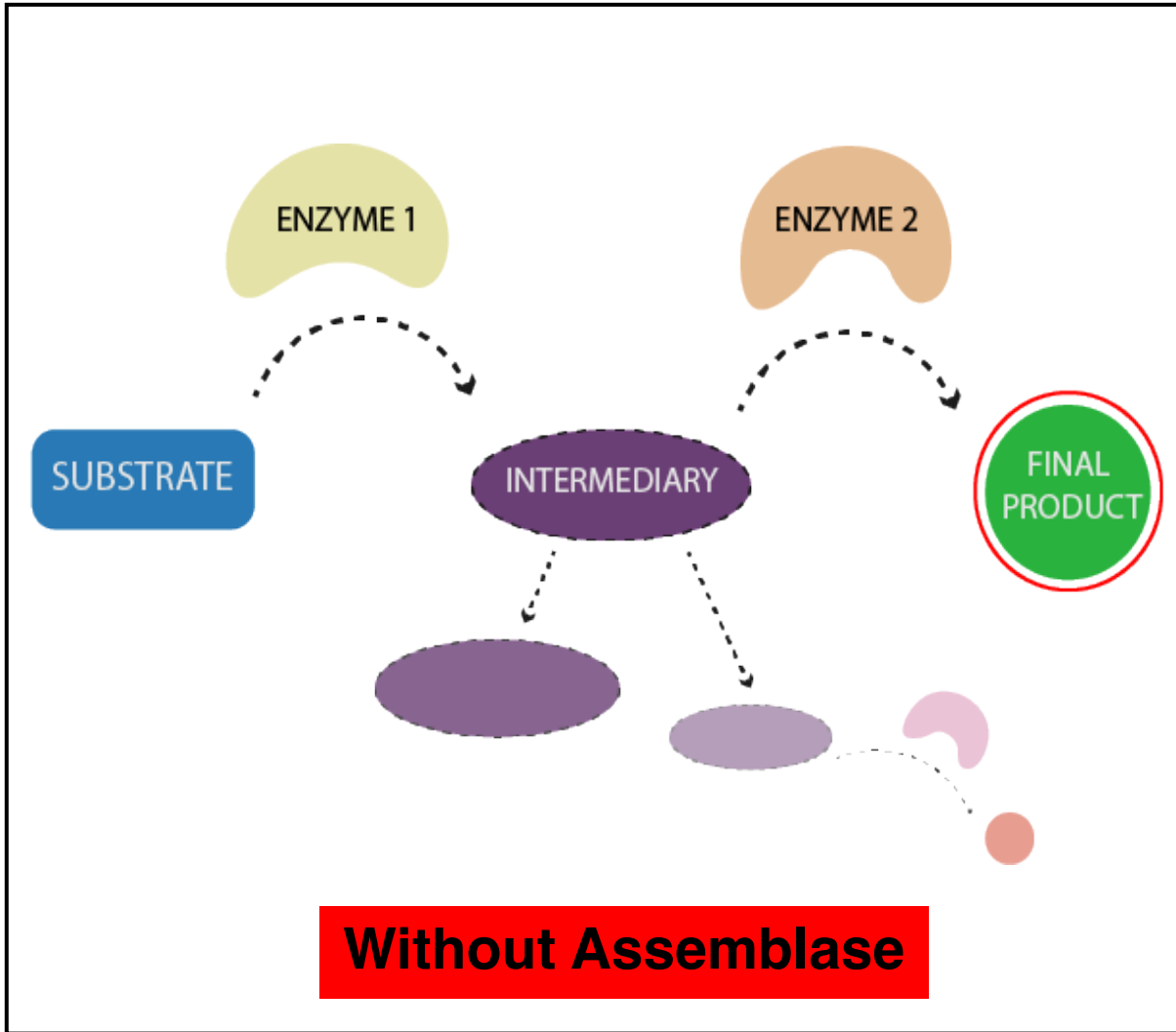
Assemblase production method recycles waste products

Global Sales	\$200,000,000 per annum
Australian Sales	\$11,000,000 per annum
Manufacturers Australia	6
PBS Classification	F2
Precursor	Abraxane, Taxoprexin, Opaxio
Use	Ovarian cancer, cervical cancer breast cancer cancer and drug eluting stent coating

*Source:*

<http://www.pbs.gov.au/pbs/search?term=PACLITAXEL&analyse=false&search-type=medicines>

# Assemblase - How It Works?



# Competition

Name	Assemblase	ProSci	Deltagen	Enzyme Solutions	Novozymes
Multi Enzyme	✓	✗	✗	✗	✗
Scaffold Structure	✓	✗	✗	✗	✗
Sustainable	✓	✗	✓	✓	✓
Personalised Service	✓	✗	✗	✓	✗
Consumer Goods	✓	✗	✗	✓	✓
Food and Perishables	✓	✗	✓	✓	✓
Textiles	✓	✗	✗	✓	✓
Waste Treatment	✓	✗	✗	✓	✓

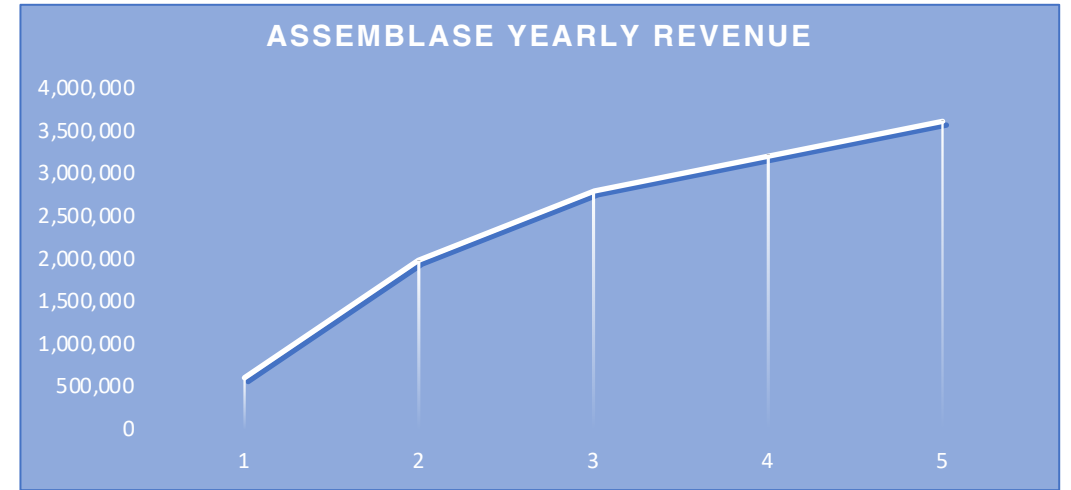
***The enzyme market is \$5.8 Billion annually estimated to reach \$6.4 Billion by 2020***

*Source:*

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4991975/>









## Outside Paclitaxel

Expansion into therapeutics and other biochemical reactions.

- Increase market share
- mitigating diversification risks



## Asia Pacific

Upon successful establishment in the Australian market movement within the geographic region will ensue.

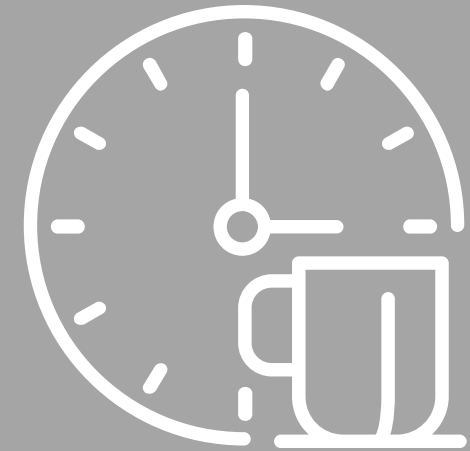
- Increase market share
- Exploit local knowledge and culture



## Acquisitions

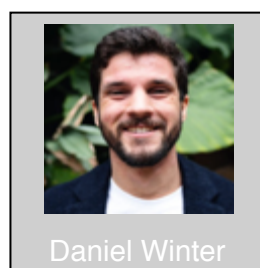
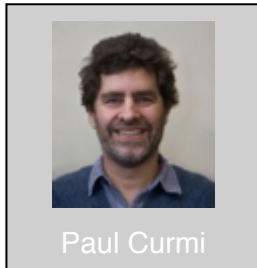
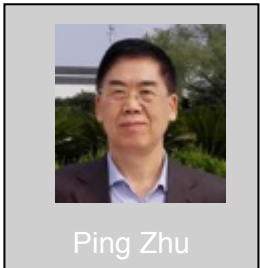
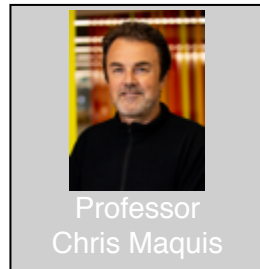
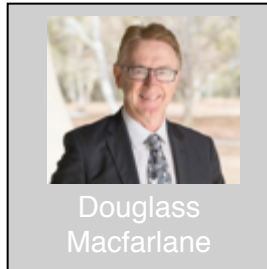
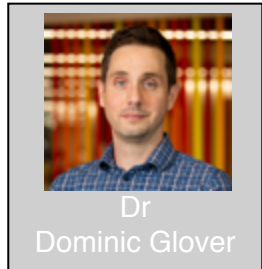
Expand to Europe and America using these companies as a special vehicle for sales.

- Mitigate cultural fit risk
- Mitigate regulation risks



# Endorsements

## Validation of Science



## Consulted & Expressed Interest:



Thank You



***Let's allow scientist to focus on  
'research' and not wait times***



## **Contact Details**

Edward Johnson

Assemblase Pty Ltd

CEO

UNSW.iGEM@gmail.com

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