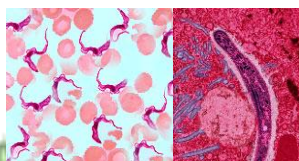


# The Evolution of the Novel Antibacterial Drug, MGB-BP3



*Staphylococcus aureus* and its medicine



Future therapeutic targets: *Trypanosom* (sleeping sickness), *Plasmodia* (malaria)



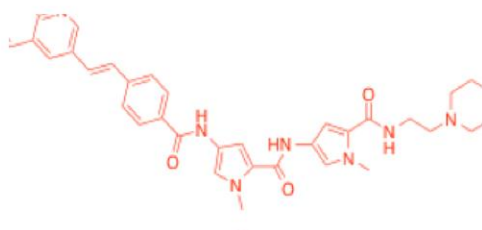
*Clostridium difficile* and its medicine  
Clinical trials due to start in **2014**.



Melanoma and hepatitis C virus

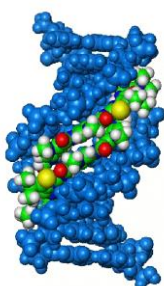
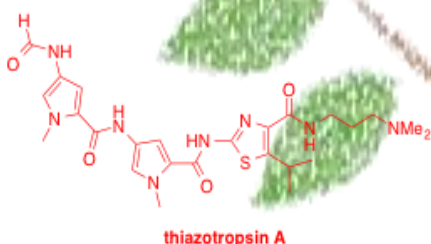


**2010:** Preclinical development programme begins with MGB-Biopharma, a new Scottish company supported by *SE* and *Scottish angel syndicate funds*.



**2013:** MGB-Biopharma obtains approval for clinical trials of BP3 for *Clostridium difficile* infections. Developments continue for other infections.

**2004:** The properties of thiazotropsin A published.

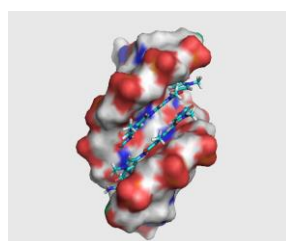


**2004-10:** University of Strathclyde continues to support project with royalties from *Leuovorin*, a commercialisation success of the 1990s.

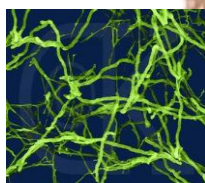
**2006:** Key UK patent for BP3 filed, now granted internationally.

**2003:** First synthesis of the drug, **BP3**, (above centre) by Dr Abedawn Khalaf; its exceptional antibacterial activity is shown in next 2 years.

**2002-4:** *Scottish Enterprise Proof of Concept* funds the drug discovery project.



**2001:** The Strathclyde team decides how to improve on distamycin by planning a better fit to DNA. *Synergy Fund* (Strathclyde and Glasgow Universities) finances research. **Thiazotropsin A** is the first designed and substantially improved compound.



**1961:** Distamycin discovered by Arcamone in Italy from *Streptomyces distallicus*; it has significant biological activity but is toxic and unselective.