



# Meet Neem Biotech

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# Ajoene

- (E, Z)-4, 5, 9-trithiadodeca-1, 6, 11-triene 9-oxide
  - A transformation product of Allicin.
- Our approach is not “Classical Antibiotic”. It rather focuses on interfering with Virulence factors.
  - *Alternatives to Antibiotics – a pipeline portfolio review (Lancet Infectious Disease 2016, 16:239-251)*
- Received Orphan Drug Designation by the FDA for the Treatment of *Pseudomonas aeruginosa* infections in CF patients in April 2016.
  - EMA application in progress

# Mechanisms of Action

- Quorum Sensing Inhibition
  - Affects *rhIA* expression
  - Concentration dependent reduction in homoserine lactone
- Disrupts enzyme function
  - Will penetrate the bacterial membrane and thiolate cysteine residues resulting in a conformational change which causes the protein to malfunction.
- Functions most effectively when used synergistically with aminoglycoside antibiotics.