Novel Pleuromutilin Antibiotics

OCR Number: OCR 7106

Description:

**Total Synthesis and Synthetic Route for Novel Antibiotics**

- **About the Pleuromutilins**
  - Bacterial protein synthesis inhibitor
  - Pleuromutilins approved/in the clinic
    - Approved (retapamulin; Altabax®) for topical use (impetigo)
    - Phase 3: Itraconazol (oral) various bacterial indications
- **Current production Pleuromutilins**
  - >3000 semisynthetic derivatives prepared modulated at C14
  - Little other exploration due to synthetic difficulties
- **Future Production/Novel Pleuromutilins**
  - Total synthesis at high efficiency
    - Commercially viable route, high overall yield, short convergent synthesis
    - Ability to modulate ring size, introduce atomic substitutions, conduct deep SAR
  - Complete stereocontrol
  - Total synthesis facilitates novel chemistry
- **OCR7106 IP Status:**
  - Accepted to Science
  - Provisional patents filed
  - Both available under CDA

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