## Open Peer Review on Qeios

## Antifungal PC945

National Cancer Institute

## Source

National Cancer Institute. <u>Antifungal PC945</u>. NCI Thesaurus. Code C158821.

A synthetic triazole antifungal agent, with activity against a variety of pathogenic fungi that can potentially be used against invasive pulmonary aspergillosis. Upon inhalation of the antifungal PC945 by nebulizer, PC945 is delivered in high concentrations to the lungs and resides in the lung tissues for a long period of time with minimal systemic exposure. PC945 selectively binds to and inhibits the CYP450-dependent 14-alpha-sterol demethylase in fungi, thereby preventing the production of ergosterol, which is an essential constituent of the fungal cell membrane. This results in fungal cell lysis and inhibits fungal infection in the lungs.