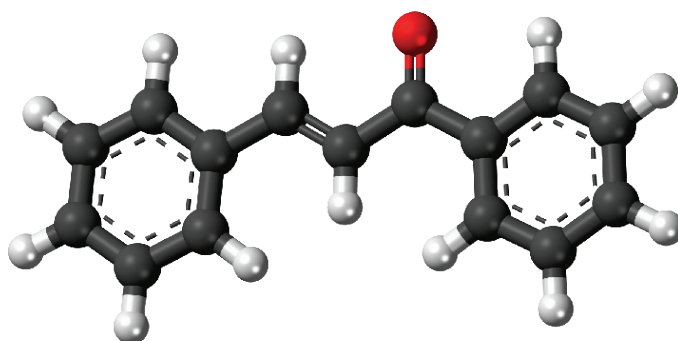


## NOVEL CHALCONE DERIVATIVE FOR CANCER TREATMENT

### BACKGROUND

Researchers of the Medical University of Vienna have identified highly active synthetic chalcones derived from the chalcone scaffold. These cytotoxic compounds were found and developed by modifying the chalcone lead structure concurrent with in vitro tests to evaluate their cytotoxic potential in different cancer cell lines. Compounds were thoroughly tested regarding their efficacy in inhibiting proliferation and viability in cancer cell lines of the hematopoietic system.



### Ball-and-stick model of the chalcone molecule

([https://commons.wikimedia.org/wiki/File:Chalcone\\_3D\\_ball.png](https://commons.wikimedia.org/wiki/File:Chalcone_3D_ball.png))

### BENEFITS

From these tests, one representative emerged, which **inhibits proliferation of CLL cells in vitro at very low concentrations and simultaneously displays less effect on healthy donor cell growth.**

The combination of the new chalcone compound with the targeting agents, Idelalisib and Ibrutinib, which are novel compounds in the treatment of hematological malignancies, displayed **higher cytotoxicity on CLL cells** than Idelalisib and Ibrutinib alone.

### NEXT STEPS

- determination of cytotoxicity in a pre-clinical experimental system
- In depth analysis regarding the mode of action

### REFERENCE:

493.14

### APPLICATIONS:

- Treatment of lymphomas
- Treatment of solid tumors

### IPR:

EP14182679 28.08.2014  
WO 2016/030510

### COOPERATION

#### OPTIONS:

- Development partnership
- License agreement, or other

### CONTACT:

#### Claudia Ballaun

Medical University of Vienna  
Spitalgasse 23, 1090 Vienna  
+43-1-40160 25203  
claudia.ernst-ballaun@  
meduniwien.ac.at  
[www.meduniwien.ac.at](http://www.meduniwien.ac.at)