Investigating anti-allergic constituents in the traditional formula Minor Bupleurum Combination and their potential to block the Human histamine H1 receptor

Minor Bupleurum Combination (MBC) is a formula of seven botanicals used for Shaoyang syndrome in East Asia for more than 1800 years. This study was to investigate the potential antiallergic effects of MBC by evaluating the potential binding modes of compounds from SST to the human histamine H1 receptor. A virtual screening (VS) strategy based on the Multiple Fragment Molecular Dynamics (MFMD) method was applied in this study to screen for potential histamine receptor antagonist constituents in MBC of the 13 selected compounds, 10-gingerol, 6-gingerol, 6-shogaol, baicalin and baicalein demonstrated the ability to bind to the histamine H1 receptor at helices III, V and VI, and thus antagonize the action of histamine. The results of this study suggest that MBC may act as a histamine receptor antagonist and deserves further investigation of its antiallergic potential. To the author’s knowledge, this is the first time MFMD/VS has been used to demonstrate the histamine receptor antagonist action of active constituents in Minor Bupleurum Combination.

Biography
Paul Keogh is a qualified Naturopath and Medical Herbalist as well as the Co-founder and Technical Director of Global Therapeutics Pty Ltd. He has been researching and developing integrated Chinese and Western herbal medicine products for more than 25 years including 15 years in clinical practice.

Notes: