## Pharmacological Evaluation of Novel Indole-2-carboxamides As Potent Lipid-Lowering Agents in Triton-WR-1339-Induced Hyperlipidemic Rats

Tariq Al-Qirim<sup>a,\*</sup>, Moyad Shahwan<sup>a</sup>, Ghassan Shattat<sup>a</sup>, Yusuf Al-Hiari<sup>b</sup>, Ghassan Abu Sheikha<sup>a</sup>, and Syed Zaidi<sup>c</sup>

- <sup>a</sup> Faculty of Pharmacy, Al-Zaytoonah Private University, Amman 11733, Jordan.
- Fax: 00962 6 4291432. E-mail: qirim70@yahoo.com
- Faculty of Pharmacy, University of Jordan, Amman, Jordan
  VA Palo Alto Health Care System, Stanford School of Medicine, Stanford University, Silicon Valley, CA, USA
- \* Author for correspondence and reprint requests
- Z. Naturforsch. **64c**, 619–625 (2009); received May 27/July 7, 2009

The lipid-lowering effects of two novel antihyperlipidemic agents, BMI2C [N-(4-benzoylphenyl)-5-methoxy-1H-indole-2-carboxamide] and DDMI2C [N-(9,10-dihydro-9,10-dioxoanthracen-2-yl)-5-methoxy-1H-indole-2-carboxamide], were studied using hyperlipidemic rats as an experimental model; hyperlipidemia was developed by intraperitoneal injection of Triton WR-1339 (200 mg/kg body weight). At a dose of 15 mg/kg body weight, BMI2C and DDMI2C significantly reduced elevated plasma triglyceride levels after 7 and 24 h. Furthermore, BMI2C and DDMI2C significantly reduced elevated plasma total cholesterol levels after 24 h. Interestingly, high-density lipoprotein-cholesterol levels were significantly increased in all treated groups. These findings indicate that the two studied novel compounds have a promising potential in the treatment of hyperlipidemia and atherosclerosis.

Key words: BMI2C [N-(4-Benzoylphenyl)-5-methoxy-1H-indole-2-carboxamide], DDMI2C [N-(9,10-Dihydro-9,10-dioxoanthracen-2-yl)-5-methoxy-1H-indole-2-carboxamide], Antihyperlipidemic Activity