

CONTENTS

Volume 16 Number 3 August 2018

Review articles

- 157 Cell-free nucleic acids in urine as potential biomarkers of kidney disease
MARIANNA GYURÁSZOVÁ, ALEXANDRA KOVALČÍKOVÁ, JANKA BÁBÍČKOVÁ, JÚLIUS HODOSY and LUBOMÍRA TÓTHOVÁ
- 165 A survey on applying machine learning techniques for management of diseases
ENAS M.F. EL HOUBY
- 175 Legislation, regulation and policies issues of orphan drugs in developed countries from 2010 to 2016
PETRA MARESOVA, BLANKA KLIMOVA and KAMIL KUCA

Original research articles

- 180 Effect of gender, age, diet and smoking status on the circadian rhythm of ascorbic acid (vitamin C) of healthy Indians
RANJANA SINGH, ABBAS ALI MAHDI, RAJ KUMAR SINGH, CATHY LEE GIERKE and GERMAINE CORNELISSEN
- 186 Oral melatonin administration improves the objective and subjective sleep quality, increases 6-sulfatoxymelatonin levels and total antioxidant capacity in patients with fibromyalgia
M. YOLANDA CASTAÑO, MARIA GARRIDO, JONATHAN DELGADO-ADÁMEZ, SARA MARTILLANES, M. ÁNGELES GÓMEZ and ANA BEATRIZ RODRÍGUEZ
- 192 Influence of skin permeation enhancers on the transdermal delivery of palonosetron: An *in vitro* evaluation
ANROOP B. NAIR, SHERY JACOB, BANDAR E. AL-DHUBIAB and RAKAN NASER ALHUMAM
- 198 Induction of caspase-mediated apoptosis using *Alnus japonica* extracts in AGS human gastric carcinoma cells
SEONG-EUN KIM, YON-SUK KIM, WOEN-BIN SHIN, JIN-SU PARK, SANG-HO MOON, BYONG-TAE JEON and PYO-JAM PARK
- 208 NTPDase, 5'-nucleotidase and adenosine deaminase activities and purine levels in serum of sickle cell anemia patients
LÍVIA G. CASTILHOS, STEPHEN A. ADEFEGHA, PEDRO H. DOLESKI, TATIANA M.D. BERTOLDO, CESAR EDUARDO J. MORITZ, EMERSON A. CASALI and DANIELA B.R. LEAL
- 214 Quantification of uPA in breast tumour tissue extracts by microarray immunoassay: Comparison with ELISA technology
LIU SHI, THOMAS GEHIN, YANN CHEVOLOT, WILLIAM JACOT, PIERRE-JEAN LAMY and EMMANUELLE LAURENCEAU
- 221 Fruit waste (peel) as bio-reductant to synthesize silver nanoparticles with antimicrobial, antioxidant and cytotoxic activities
ANNU, SHAKEEL AHMED, GURPREET KAUR, PRAVEEN SHARMA, SANDEEP SINGH and SAIQA IKRAM
- 232 Lectin-based analysis of human milk immunoglobulin G fucosylated variants in relation to milk maturation and perinatal risk factors
JOLANTA LIS-KUBERKA, MAGDALENA ORCZYK-PAWIŁOWICZ, BARBARA KRÓLAK-OLEJNIK, MARTA BERGHAUSEN-MAZUR, KAROLINA BARAŃSKA and IWONA KAŃNIK-PRASTOWSKA
- 241 Effect of selected 8-hydroxyquinoline-2-carboxanilides on viability and sulfate metabolism of *Desulfovibrio piger*
IVAN KUSHKEVYCH, MONIKA VÍTEŽOVÁ, JIŘÍ KOS, PETER KOLLÁR and JOSEF JAMPÍLEK