

OMJ October Highlights

EDITORIAL

25- Hydroxyvitamin D: Explosion in Clinical Interest and Laboratory Requests

25-hydroxyvitamin D, 25(OH)D is the most abundant vitamin D metabolite in the circulation, representing the best indicator of the nutritional status of this fat-soluble vitamin. Two distinct forms exist: 25(OH)D3 from cutaneously derived vitamin D (cholecalciferol), the predominant natural source of vitamin D in humans and 25(OH)D2 from vitamin D2 (ergocalciferol), derived almost entirely from supplementation or fortification of food.¹ Worldwide, there has been an explosion of interest in the physiological, pathological, therapeutic and laboratory aspects of 25(OH)D. Request for its measurement has increased dramatically over the last few years with an annual increase of about 80-90%.^{2, 3} At the Clinical Biochemistry Laboratory of the Royal Hospital, Muscat, Sultanate of Oman, the annual request rate for serum 25(OH)D during 2009...

See page... **239**

REVIEW ARTICLE

Nanomedicine: Promising Tiny Machine for the Healthcare in Future-A Review

Nanomedicine uses nano-sized tools for the diagnosis, prevention and treatment of disease and to gain increased understanding of the complex underlying pathophysiology of disease. The ultimate goal is to improve the quality of life. The aim of nanomedicine may be broadly defined as the comprehensive monitoring, repairing and improvement of all human biological systems, working from the molecular level using engineered devices and nanostructures to achieve medical benefit. Most broadly, nanomedicine is the process of diagnosing, treating, and preventing disease and traumatic injury, relieving pain, and of preserving and improving human health, using molecular tools and molecular knowledge of the human body.¹ Nanomedicine offers the prospect of powerful new tools for the treatment of human diseases and the improvement of human biological systems using molecular...

See page... **242**

ORIGINAL ARTICLE

The Trends of DMARDS prescribed in Rheumatoid Arthritis Patients in Malaysia

Demographic	N = 128
Mean (SD) age (years)	52.7 (11.5)
Sex, n (%)	
Female	109 (85.2)
Male	19 (14.8)
Ratio (F : M)	
Ethnicity, n (%)	
Malay	35 (27.3)
Chinese	43 (33.6)
Indian	42 (32.8)
Others	8 (6.3)

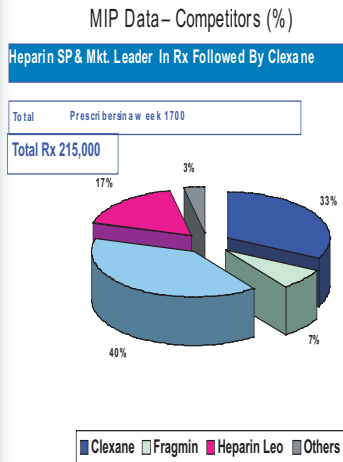
SD: Standard Deviation

Rheumatoid arthritis (RA) is a chronic, systemic, inflammatory disorder of unknown etiology which may be remitting, but if uncontrolled may lead to destruction of joints due to erosion of cartilage and bone leading to deformity. A Study by Wolfe et al. has shown that rheumatoid arthritis (RA) is associated with substantial long-term morbidity, mortality and healthcare costs.¹ Disease-modifying anti-rheumatic drugs...

See page... **260**

ORIGINAL ARTICLE

Product Management and Efficacy Evaluation of an Anti-Coagulant Enoxaparin (Clexane) in Pakistan

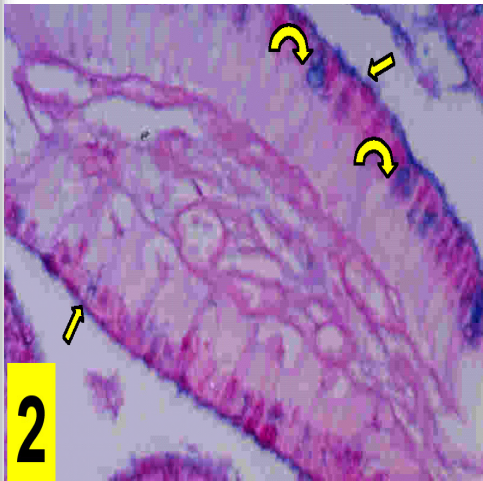


Product management is an effective way of identifying the variations in drug use and provides an understanding of how well a product is performing compared to its competitors on the market. Good management techniques increase the effectiveness of an organization by increasing the customer base and therefore, increase profitability. It involves several key areas such as; great product planning skills, product marketing, program management and project management. There are several processes that occur between product development and the final marketed product which is targeted to satisfy a specific...

See page... 264

ORIGINAL ARTICLE

Histological Changes in the Human Gallbladder Epithelium associated with Gallstones



Gallstone disease is a common health problem world wide including Saudi Arabia.¹ It is commonly believed that bile stasis is the prime factor for gallstone formation. The function of the gallbladder is not only to store bile, but also to concentrate it during the interdigestive phase by means of salt-dependent water reabsorption.² Epithelium of the gallbladder and biliary tract is exposed to high concentrations of potentially harmful exogenous and endogenous compounds excreted into primary bile.³ All columnar epithelial cells are lined by a blanket of mucus, a native physiological gel-like secretion which separates the host mucosal cells from...

See page... 269

ORIGINAL ARTICLE

Alterations in TSH and Thyroid Hormones following Mobile Phone Use

Parameter	Descriptions
No. of Participants	77
Age (Mean \pm SD)	22.82 \pm 2.52 Ranged 19.00-29.00
Sex	23 Males (29.9%), 54 Females (70.1%)
Marital Status	15 Married (19.5%) and 62 Single (80.5%)
Major	25 Radiology Students (33.3%) 50 Other Majors Including laboratory sciences, operating room, Nursing, obstetrics, medical records (66.7%)

Electromagnetic radiation in radiofrequency (RF) region has long been used for different types of information exchange. The rapidly increasing use of wireless communication systems has caused a growing public concern about possible health effects of electromagnetic fields (EMFs), particularly because the mobile phones operate in close proximity to brain.^{1,2} Mobile (cell) phones are low power, single channel two-way radios that emit signals via electromagnetic waves. The number of mobile phone users has dramatically increased throughout the world during the past decade and in some industrialized...

See page... 274