

News and Views

FDA Alerts Doctors and Patients About Risk of Complications When Implanted Pumps are Used to Deliver Pain Medications not Approved for Use with the Devices

The US Food and Drug Administration (FDA) has alerted healthcare providers and patients about the serious complications that can occur when using medications not approved for use with implanted pumps that deliver medication into the spinal fluid to treat or manage pain. Complications may include dosing errors, pump failure, opioid withdrawal, infection and other complications like pain, fever, vomiting, muscle spasms, cognitive changes, weakness and cardiac or respiratory distress.

Migraines that Affect Vision may Increase Risk of Atrial Fibrillation

People with migraine with aura were found to be 30% more likely to develop atrial fibrillation than people who did not have headaches and 40% more likely to develop atrial fibrillation than people with migraine with no aura, according to a study published in the November 14, 2018, online issue of the journal *Neurology*. Also, the stroke rate in the migraine with aura group was 4 out of 1,000 people annually compared to 2 out of 1,000 people annually in those with migraine without aura, and 3 of 1,000 people annually in those with no headache.

Treatment Withdrawal in Patients Who have Recovered from Dilated Cardiomyopathy Leads to Relapse

Results of the TRED-HF study show that many patients deemed to have recovered from dilated cardiomyopathy will relapse following treatment withdrawal. In this pilot study, treatment was withdrawn successfully in only 50% of patients, while 40% had a relapse of their dilated cardiomyopathy within 6 months. The results are published online November 11, 2018 in *The Lancet*.

Prednisone Prevents Paradoxical Tuberculosis-associated IRIS

Prednisone treatment during the first 4 weeks after the initiation of ART for HIV infection resulted in a lower incidence of tuberculosis-associated immune reconstitution inflammatory syndrome (IRIS) than placebo, without evidence of an increased risk of severe

infections or cancers in a study reported November 15, 2018 in the *New England Journal of Medicine*.

LT4 Monotherapy that Normalizes Serum TSH for Overt, Primary Hypothyroidism does not Normalize Total and LDL Cholesterol

A systematic review and meta-analysis of 99 studies published online August 15, 2018 in the *Journal of Clinical Endocrinology & Metabolism* concluded that in studies of levothyroxine (LT4) monotherapy at doses that normalized serum thyroid-stimulating hormone (TSH) for overt, primary hypothyroidism, not all systemic biological markers of thyroid hormone signaling were normalized, including the serum low-density lipoprotein (LDL) and total cholesterol levels.

Five-minute Hands-only CPR Kiosk Training as Effective as a 30-minute Class for Learning CPR Skills

People who learn hands-only CPR using a 5-minute, kiosk-based program performed CPR as well as those who attended a 30-minute, facilitator-led training session, according to a new research by the American Heart Association, which examined three methods of teaching hands-only CPR published November 12, 2018 in *Annals of Emergency Medicine*. People who watched the 1-minute training video scored lower than the classroom group in total score, but there were no significant differences in total score between classroom and kiosk participants.

Combining Two Imaging Modalities Helps View the Retina in Great Detail

Using two imaging modalities together - adaptive optics and angiography - can facilitate detailed visualization of live neurons, epithelial cells and blood vessels deep in the eye's light-sensing retina and may transform the detection and treatment of diseases such as age-related macular degeneration (ARMD), say investigators at the National Eye Institute (NEI).

Study Shows Better Prognosis with Metabolic Surgery vis-à-vis Medical Therapy in Type 2 Diabetes

In a systematic review and meta-analysis of 19 trials, people who underwent metabolic surgery saw 66% reduced odds for all-cause mortality, including

macrovascular complications when compared with medical therapy for patients with type 2 diabetes. These findings were presented at Obesity Week, a joint meeting of the Obesity Society and the American Society for Metabolic and Bariatric Surgery (ASMBS) in Nashville in Tennessee, USA.

Preventing Mother-to-child Transmission of Chagas Disease: From Control to Elimination

The World Health Organization (WHO) is shifting its focus towards active screening of girls and women of childbearing age to detect the presence of *Trypanosoma cruzi*, the causative parasite of Chagas disease. Recent evidence demonstrates that diagnosing and treating women of this age group before pregnancy can effectively prevent congenital transmission.

"Identifying pregnant women already infected with the parasite, as well as newborns and siblings, has been a major challenge in both endemic and non-endemic countries" said Dr Pedro Albajar Viñas, Medical Officer, WHO Department of Control of Neglected Tropical Diseases. *"With the progressive control of transmission by vectors and through blood transfusion, updating, reinforcing and expanding standardized screening measures for congenital transmission make absolute sense."*

Up to now, control and prevention strategies for Chagas disease largely relied on the early detection and treatment of infected newborns and siblings of pregnant women. But a recent shift in approaches to prevent transmission globally - including in non-endemic countries - is through active, systematic screening of girls and women at risk of infection and provides excellent opportunities for prevention of posterior transmission throughout pregnancy and birth... (WHO, Nov. 16, 2018)

A New Drug to Treat Travelers' Diarrhea

The US FDA has approved rifamycin, an antibacterial drug indicated for the treatment of adult patients with travelers' diarrhea caused by noninvasive strains of *Escherichia coli*, not complicated by fever or blood in the stool.

Inhaling Deodorant Spray to Get "High" can be Fatal

The *BMJ* has reported a case of a 19-year-old man under treatment for ketamine and cannabis abuse, who relapsed. In a bid to get high, he put a towel over his head and inhaled the spray from a deodorant. He quickly became hyperactive, before going into cardiac arrest and collapsing. Basic life support and

six rounds of defibrillation failed to revive him and he was admitted to intensive care where he was put into an induced medical coma. His condition did not improve and realising that further treatment would be pointless, doctors withdrew it and he died shortly afterwards.

As per the authors, the main toxic substance in deodorant spray inhalation is butane (hydrocarbon), which is lipophilic and therefore easily crosses the air-blood and blood-brain barrier. Butane dissolves into tissues with a high fat content such as the nervous system, fat tissue, liver and kidneys.

Different Types of Physical Activity Offer Varying Protection Against Heart Disease

New research, presented at the ACC Latin America Conference 2018 in Lima, Peru, found that while all physical activity is beneficial, static activities—such as strength training—were more strongly associated with reducing heart disease risks than dynamic activities like walking and cycling. Patients who did both types of physical activity had better outcomes than patients who simply increased the level of one type of activity.

Long-term Exposure to Road Traffic Noise may Increase Obesity Risk

Long-term exposure to road traffic noise is associated with increased risk of obesity, as per a study published in *Environment International* online November 16, 2018. A 10 dB increase in mean noise level was associated with a 17% increase in obesity.

Vagus Nerve Stimulation + Upper Limb Rehabilitation Improves Arm Function Post-stroke

Vagus nerve stimulation paired with rehabilitation was acceptably safe and feasible in patients with upper limb motor deficit after chronic ischemic stroke in a blinded randomized pilot study published in the journal *Stroke*.

Study Recommends Surveillance for Liver Cancer in Older Patients with Hepatitis B

Surveillance for hepatocellular carcinoma (HCC) should continue in patients older than 50 years, even after they have undergone 5 years of therapy for chronic hepatitis B, according to an analysis of the PAGE-B cohort presented November. 12, 2018 at The Liver Meeting 2018: American Association for the Study of Liver Diseases (AASLD) in San Francisco.

Increasing Tumor Stage is a Risk Factor for Local Regrowth of Rectal Cancer After Watch and Wait Management

A study evaluating factors affecting local regrowth after watch and wait for patients with rectal cancer and a clinical complete response following chemoradiotherapy in rectal cancer found some evidence that increasing clinical T (cT) stage increases the risk of local regrowth of the cancer.

Modulation of Gut Microbiome may Alleviate Immunotherapy-associated Colitis

Researchers have reported the first case series of immune checkpoint inhibitors-associated colitis successfully treated with fecal microbiota transplantation, with reconstitution of the gut microbiome and a relative increase in the proportion of regulatory T-cells within the colonic mucosa in the journal *Nature Medicine*, online November 12, 2018.

The First Treatment Specifically for Patients with Refractory Primary Hemophagocytic Lymphohistiocytosis

The US FDA has approved emapalumab-lzsg for the treatment of pediatric (newborn and above) and adult patients with primary hemophagocytic lymphohistiocytosis (HLH) who have refractory, recurrent or progressive disease or intolerance to conventional HLH therapy.

Persistent Inflammation Increases Chances of Adverse Outcomes in Post-PCI Patients

Patients who have persistently high levels of inflammation following percutaneous coronary intervention (PCI) for coronary artery disease (CAD) are significantly more likely to die from any cause or to have a heart attack within a year, according to a study of 7,026 patients published in the *European Heart Journal*, online November 19, 2018. Residual inflammatory risk (RIR) refers to the risk of further heart and blood vessel problems caused by vascular inflammation in patients with known CAD. High sensitivity C-reactive protein (hsCRP) is used as a biological marker to examine the level of risk.

ACOG New Guidelines on Dysmenorrhea and Endometriosis in Adolescents

The American College of Obstetricians and Gynecologists (ACOG) has published a new committee opinion on dysmenorrhea and endometriosis in

adolescents, online November 20, 2018. Some key recommendations include:

- Most adolescents experience primary dysmenorrhea, defined as painful menstruation in the absence of another pelvic disease.
- Recommended treatment is conservative surgical therapy for diagnosis and treatment combined with ongoing suppressive medical therapies to prevent endometrial proliferation.
- Nonsteroidal anti-inflammatory drugs (NSAIDs) should be the mainstay of pain relief for adolescents with endometriosis.
- Evaluate for secondary endometriosis, if dysmenorrhea does not improve or worsens while using recommended treatments, or who present with other symptoms immediately indicating secondary dysmenorrhea (e.g., a family history of endometriosis, abnormal or irregular bleeding or severe pain immediately following their first period).
- In adolescents, endometriotic lesions differ from those in older women; they are typically clear or red and can be difficult to identify for gynecologists unfamiliar with endometriosis in adolescents.

Eyes of CJD Patients Show Evidence of Prions

Researchers from the National Institutes of Health (NIH) have found evidence of prion seeding in the eyes of deceased patients of sporadic Creutzfeldt-Jakob disease (CJD). The retina consistently showed the highest seed levels; prion seeds were also present in the optic nerve, extraocular muscle, choroid, lens, vitreous and sclera. These results show that sCJD patients accumulate prion seeds throughout the eye, indicating the potential diagnostic utility as well as a possible biohazard.

USPSTF Recommends HIV PrEP for High-risk Patients

In a draft recommendation statement published online November 20, 2018 on its website, the US Preventive Services Task Force (USPSTF) recommends (“A” recommendation) that clinicians offer pre-exposure prophylaxis (PrEP) with effective antiretroviral therapy to persons who are at high risk of HIV acquisition.

Obesity Increases Risk of Type 2 Diabetes and Heart Disease

In a systematic review and meta-analysis of nearly 1 million participants, obesity was associated with an increased risk of developing type 2 diabetes and CAD but not with stroke. The study was published online

November 16, 2018 in *JAMA Network Open*. For each unit increase in body mass index (BMI), the risk of type 2 diabetes increased by 67%, while the risk of CAD increased by 20%.

Omalizumab is Effective as Rescue Therapy for Status Asthmaticus

A case report published November 20, 2018 in *Annals of Internal Medicine* describes the successful use of omalizumab as rescue therapy for refractory status asthmaticus in a 41-year-old man with a history of asthma with pollen allergy, who developed severe dyspnea while working at an outside construction site.

Complementary Treatments may Help Relieve Headache Patients

Acupuncture, massage, yoga, biofeedback, meditation and other complementary practices can have a positive effect on migraine and tension headaches, as reported at the American Headache Society's Scottsdale Headache Symposium in Scottsdale, Arizona.

Older Obese Never-smokers should also be Routinely Screened for COPD

In a study published in the *Journal of Obesity*, chronic obstructive pulmonary disease (COPD) is much more common among never smoking older women who are morbidly obese (BMI of 40 or higher) than among their female peers in the normal weight range (13.4% vs. 3.5%, respectively). Morbidly obese older men who have never smoked also had a much higher prevalence of COPD than never-smoking men who were normal weight (7.6% vs. 2.5%).

Increased Alcohol Consumption in Colder Climates, Says Study

According to new research from the University of Pittsburgh Division of Gastroenterology published online in *Hepatology*, as temperature and sunlight hours dropped, alcohol consumption increased. People living in colder regions with less sunlight drink more alcohol than their warm-weather counterparts. Climate factors also were tied to binge drinking and the prevalence of alcoholic liver disease.

Cabinet Approves the Allied and Healthcare Professions Bill, 2018 for Regulation and Standardization of Education and Services by Allied and Healthcare Professionals

The Union Cabinet chaired by Hon'ble Prime Minister Shri Narendra Modi has approved the Allied and

Healthcare Professions Bill, 2018 for regulation and standardization of education and services by allied and healthcare professionals. The Bill provides for setting up of an Allied and Healthcare Council of India and corresponding State Allied and Healthcare Councils which will play the role of a standard-setter and facilitator for professions of Allied and Healthcare.

Details:

- Establishment of a Central and corresponding State Allied and Healthcare Councils; 15 major professional categories including 53 professions in Allied and Healthcare streams.
- The Bill provides for Structure, Constitution, Composition and Functions of the Central Council and State Councils, e.g., Framing policies and standards, Regulation of professional conduct, Creation and maintenance of live registers, Provisions for common entry and exit examinations, etc.
- The Central Council will comprise 47 members, of which 14 members shall be ex-officio representing diverse and related roles and functions and remaining 33 shall be non-ex-officio members who mainly represent the 15 professional categories.
- The State Councils are also envisioned to mirror the Central Council, comprising 7 ex-officio and 21 non-ex-officio members and Chairperson to be elected from amongst the non-ex-officio members.
- Professional Advisory Bodies under Central and State Councils will examine issues independently and provide recommendations relating to specific recognized categories.
- The Bill will also have an overriding effect on any other existing law for any of the covered professions.
- The State Council will undertake recognition of allied and healthcare institutions.
- Offences and Penalties clause has been included in the Bill to check malpractices.
- The Bill also empowers the Central and State Governments to make rules.
- Central Govt. also has the power to issue directions to the Council, to make regulations and to add or amend the schedule.

Targets:

- An Interim Council will be constituted within 6 months of passing of the Act holding charge for a period of 2 years until the establishment of the Central Council.

- The Council at the Center and the States are to be established as body corporate with a provision to receive funds from various sources.
- Councils will also be supported by Central and State Governments respectively through Grant-in-aid as needed. However, if the State Government expresses inability, the Central Government may release some grant for initial years to the State Council.

Major Impact, including employment generation potential:

- Bring all existing allied and healthcare professionals on board during the first few of years from the date of establishment of the Council.
- Opportunity to create qualified, highly skilled and competent jobs in healthcare by enabling professionalism of the allied and healthcare workforce.
- High quality, multi-disciplinary care in line with the vision of Ayushman Bharat, moving away from a 'doctor led' model to a 'care accessible and team based' model.
- Opportunity to cater to the global demand (shortage) of healthcare workforce which is projected to be about 15 million by the year 2030, as per the WHO Global Workforce, 2030 report.

Expenditure involved:

Total cost implication is expected to be Rupees 95 crores for the first four years. About four-fifths of the total budget (i.e., Rupees 75 crores) is being earmarked for the States while the remaining fund will support the Central Council operations for 4 years and also establish the Central and State Registers.

Number of beneficiaries:

It is estimated that the Allied and Healthcare Professions Bill, 2018 will directly benefit around 8-9 Lakh existing Allied and Healthcare related professionals in the country and several other graduating professionals joining workforce annually and contributing to the health system. However, since this Bill is directed to strengthen the healthcare delivery system at large, it may be said that the entire population of the country and the health sector as a whole will be benefited by this Bill.

Background:

- In the current state of healthcare system, there exist many allied and healthcare professionals, who remain unidentified, unregulated and

underutilized. Our system is highly focused on efforts towards strengthening limited categories of professionals such as doctors, nurses and frontline workers (like Accredited Social Health Activist or ASHAs, Auxiliary Nurse Midwife or ANMs). However, numerous others have been identified over the years, whose potential can be utilized to improve and increase the access to quality driven services in the rural and hard to reach areas.

- Allied and Healthcare Professionals (A&HPs) constitute an important element of the health human resource network, and the skilled and efficient A&HPs can reduce the cost of care and dramatically improve the accessibility to quality driven healthcare services.
- Globally, A&HPs typically attend undergraduate degree program of a minimum of 3-4 years to begin with and may attain up to PhD level qualification in their respective streams. However, most of Indian institutions offering such courses lack standardization.
- Majority of the countries worldwide, have a statutory licensing or regulatory body that is authorised to license and certify the qualifications and competence of such professionals, particularly those involved in direct patient care (such as physiotherapist, nutritionist, etc.) or those whose occupation impact patient care directly (such as lab technologists, dosimetrists, etc.).
- Though such professionals have existed in the Indian healthcare system for many decades, a considerable gap in the allied and healthcare space is because of a lack of a comprehensive regulatory framework and absence of standards for education and training of A&HPs.
- The Bill thus seeks to establish a robust regulatory framework which will play the role of a standard-setter and regulator for Allied and Healthcare professions.

(Press Information Bureau. Nov. 22, 2018)

Skin Autofluorescence can Predict Type 2 Diabetes and Heart Disease

New research published online November 21, 2018 in the journal *Diabetologia* has shown that noninvasive skin autofluorescence measurement predicts incident type 2 diabetes, cardiovascular disease (CVD) and mortality in the general population independent of several traditional risk factors such as obesity, metabolic syndrome, glucose and A1c. A 1-unit higher

skin autofluorescence was associated with a 3-fold increase in risk of type 2 diabetes or CVD, and a 5 times increased risk of death.

Leafy Greens and Orange Juice Reduce Risk of Memory Loss in Men

Eating a diet rich in leafy greens, dark orange and red vegetables, berries and orange juice lowers the risk of memory loss over time in men, suggests a study published online November 21, 2018 in *Neurology*. The men who consumed the most vegetables were 34% less likely to develop poor thinking skills than the men who consumed the least amount of vegetables. The men who drank orange juice every day were 47% less likely to develop poor thinking skills than the men who drank less than one serving per month.

No Benefit with Probiotic in Children with Acute Gastroenteritis

Two randomized double-blind controlled trials published online in the *New England Journal of Medicine* showed that the probiotic *Lactobacillus rhamnosus* proved no more effective than placebo for treating young children with acute infectious gastroenteritis.

NSAIDs may be Administered to Postpartum Patients with Hypertensive Disorders of Pregnancy

Administration of NSAIDs to postpartum patients with hypertensive disorders of pregnancy is not associated with a change in blood pressure or requirement for antihypertensive medication, suggests a retrospective cohort study published in the December 2018 issue of *Obstetrics & Gynecology*.

Slower Walking Speed Associated with Greater Risk of Dementia

In a study published in the *Journal of the American Geriatrics Society*, participants with faster baseline walking speeds were at lower risk of developing dementia. Those with a greater decline in walking speed from Wave 1 to 2 were at greater risk of developing dementia. Participants with better baseline cognition were at lower risk of developing dementia.

National Blood Transfusion Council Advisory for Blood Banks and Potential Blood Donors to Prevent Zika Virus Infection in the Country by Blood Transfusion

All blood banks in the country should ensure following precautions:

- Blood banks strictly adhere to donor selection criteria and do proper donor screening. Blood banks must ask for travel history to ensure that individuals returning from outbreak zone are not accepted for blood donation till 120 days of return. These donors must be symptom-free during this period prior to blood donation.
- Blood banks should not accept blood from donors till 2 weeks following complete recovery from acute viral infection and cessation of any therapy/medications.
- Potential blood donors who have returned from outbreak zone should:
 - Not donate blood for 120 days from date of return.
 - Blood donors should report to blood bank if they develop sign and symptoms of Zika infection within 2 weeks of blood donation.
- The National Blood Transfusion Council (NBTC) has not approved any blood donor screening tests for Zika virus.
- No human plasma should be imported from Zika outbreak regions/countries.

WHO and EU Commit to Work Together to Accelerate Progress on Health

Dr Tedros Adhanom Ghebreyesus, Director-General of WHO has completed a series of meetings with President Juncker and senior European Commission officials. He also signed a joint statement with the European Parliament. Dr Tedros commended the fruitful cooperation between the Commission and WHO, particularly in the fields of antimicrobial resistance, strengthening health systems and preparedness for outbreaks of communicable diseases in developing countries. President Juncker confirmed the support of the European Commission to the Global Action Plan on Health and Well Being to accelerate progress to achieve Sustainable Development Goals, including goal number 3, related to healthy lives and well-being at all ages.

President Juncker and Dr Tedros also spoke about the importance of focusing on air pollution and agreed to jointly organize a Global Vaccination Summit, building on initiatives to increase vaccination and improve vaccination confidence in the EU, with the aim of avoiding unnecessary deaths from preventable diseases... (WHO, Nov. 21, 2018)

Study Shows Clinical Benefit of Treating Low-risk Stage-1 Hypertension

Korean National Health Insurance Database Analysis published in the December 2018 issue of the journal *Hypertension* has shown that the blood pressure (BP) associated with the lowest risk of all-cause mortality was 120 to <130 mmHg (systolic BP) and 70 to <80 mmHg (diastolic BP). There was an increased risk of myocardial infarction in patients with mean systolic BP <120 mmHg and diastolic BP <80 mmHg. BP <140/90 mmHg was associated with a significant reduction in the risk of mortality, stroke and end-stage renal disease, with the lowest mortality risk at BP ranges of 120 to <130 and 70 to <80 mmHg.

B₁₂ Deficiency is Common in Patients on Metformin

Vitamin B₁₂ should be monitored in patients with diabetes on metformin to avoid peripheral neuropathy, suggests a study presented November 21, 2018 at the Society for Endocrinology BES 2018 conference in Glasgow. The study found that 64% of patients had not been tested for vitamin B₁₂ deficiency. Almost 10% of patients were found to have vitamin B₁₂ deficiency, although only just over 6% were being treated.

Deceased-donor Acute Kidney Injury is not Associated with Kidney Allograft Failure

Use of kidneys from deceased donors with acute kidney injury (AKI) appears safe in multiyear follow-up and could make many more organs available for transplant, according to a multicenter study published November 20, 2018 in *Kidney International*.

Both Divide-and-Conquer and Stop-and-Chop Techniques Efficient in the Learning Curve for Cataract Surgeons

A study comparing two popular nuclear disassembly techniques for cataract surgeons in training concluded that both divide-and-conquer and stop-and-chop techniques are efficient in the learning curve. Stop and chop dissipates less energy in harder nuclei. Once surgeons reach sufficient experience with both techniques, they should switch to a stop-and-chop technique, allowing lower levels of ultrasound energy. The study is published in the journal *International Ophthalmology*, November 21, 2018.

A Multimodal Program may Reduce Job Stress Among ICU Nurses

In a randomized clinical trial including 198 intensive care unit (ICU) nurses in France, the prevalence of

job strain (assessed by a questionnaire that included psychological demand and decision latitude evaluation) was significantly reduced at 6 months among nurses in the 5-day intervention group (13%) that included education, role-play and debriefing compared with those in the control group (67%).

Ezetimibe Reduced First Cardiac Events in Older Adults

Results of the Ezetimibe in Prevention of Cerebro- and Cardiovascular Events in Middle- to High-risk, Elderly (75 years old or over) Patients with Elevated LDL-Cholesterol (EWTOPIA75) presented at the American Heart Association Scientific Sessions 2018 in Chicago show that ezetimibe reduced the rate of a first cardiac event—a composite of sudden cardiac death, myocardial infarction, coronary revascularization, and stroke—more than diet alone in 75- to 104-year-old Japanese patients with elevated LDL cholesterol and a second risk factor.

Study Shows Hydrocephalus as a New Complication of Congenital Zika Syndrome

Hydrocephalus may be a complication of congenital Zika syndrome, and the presenting signs and symptoms are challenging to recognize, says a study published online November 19, 2018 in *JAMA Neurology*. The researchers recommend that monitoring for hydrocephalus, including assessing the potential harbinger of cerebellar or brainstem hypoplasia, should be part of the standard care of these patients.

Over Half of Former ICU Patients Report Symptoms of Psychological Disorders

A study from the UK published in journal *Critical Care* shows that patients who have survived critical illnesses requiring care in an ICU frequently report symptoms of anxiety, Post-traumatic stress disorder (PTSD) and/or depression. Those reporting symptoms of depression after critical illness were at a greater risk of death.

Night Shifts and Unhealthy Lifestyle Together Increase the Risk of Developing Diabetes

Working night shifts and having an unhealthy lifestyle appear to have an additive effect on the likelihood of developing type 2 diabetes, and women with both have a greater risk than simply adding the impact of either factor alone. The study published online on November 21 in *BMJ* indicates that every 5 years of rotating night shift work increased the risk of type 2 diabetes by around 30%.

Voclosporin is Effective in Patients with Lupus Nephritis

The addition of low-dose voclosporin to mycophenolate mofetil and corticosteroids for induction therapy of active lupus nephritis (LN) results in a superior renal response compared to mycophenolate mofetil and corticosteroids alone, as per results of the AURA-LV trial published November 9, 2018 in the journal *Kidney International*. However, higher rates of adverse events including death were observed.

Gujarat Tops in Implementing Ayushman Bharat

Two months after the launch of Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY), Gujarat has emerged as the top performer of the Centre's ambitious health financing scheme. As of November 23, the state accounted for around 26% of the total number of hospital admissions cleared under the scheme so far.

AB-PMJAY, which was launched on September 23, promises health coverage of Rs. 5 lakh per family to over 10 crore poor families. Over 3.4 lakh beneficiaries have been treated under the scheme since its launch until November 24, according to the National Health Agency. Claims of Rs. 400 crore have been raised under this scheme so far, of which Rs. 350 crore has already been given out by the center and states, said a senior government official, requesting anonymity. Earlier this month, the finance ministry was asked for an additional Rs. 2,000 crore to keep the scheme running for the rest of this financial year, ET has learnt.

While Gujarat clocked in around 76,000 hospital admissions since September 23, Tamil Nadu ranked second at 54,273 and Chattisgarh third at 53,180, according to data from the health ministry. Karnataka and Maharashtra, which came on board for the scheme close to its launch, also rank among the top five performers at 40,216 and 27,237, respectively, ET has learned ... (*ET Bureau, November 26, 2018*).

Early HIV Diagnosis Means Successful Treatment

Late diagnosis of HIV remains a challenge across the WHO European Region. Every second newly diagnosed person has already reached an advanced stage of the infection. In the European Union/European Economic Area, the latest data from 2017 show that almost 90% of AIDS diagnoses happened within just 90 days of the HIV diagnosis. This indicates that the

majority of these AIDS cases could have been avoided with early diagnosis.

Yet being tested for HIV has never been easier. Across Europe, peer counselors, who are not necessarily medical professionals but have received special training, give advice, support and are able to deliver results in a matter of minutes at community-based testing facilities. In the event of a positive test result, confirmation at a healthcare facility will be needed. If confirmed, doctors follow-up and are then able to provide treatment using antiretroviral drugs. These drugs prevent the HIV infection from developing into AIDS and make it possible for people to live long, healthy lives with HIV. In the majority of cases, treatment leads to an undetectable level of the virus in the blood, meaning there is no need to fear transmitting the virus to sexual partners ... (*WHO Europe*).

Use of Tanning Bed Increases Risk of Second Melanoma

According to a retrospective study reported in the *Journal of the American Academy of Dermatology*, 56% of patients exposed to artificial ultraviolet radiation (arUVR) were diagnosed with a second primary melanoma within 1 year of their first diagnosis compared with 18% of patients who had not been exposed to arUVR.

Lipoprotein Levels may Inform Timing of Aortic Valve Replacement

The higher the plasma levels of certain lipoproteins and their components, the faster the progression of calcific aortic valve stenosis among people with mild-to-moderate jets - with no threshold found for this relationship. Valve stenosis was more likely to progress rapidly (V_{peak} going up by at least 0.20 m/s per year) with increasing baseline levels of: Lipoprotein(a), oxidized phospholipids on apolipoprotein B (OxPL-apoB) and oxidized phospholipids on apolipoprotein(a). These findings are published online in *JAMA Cardiology*.

Nonsurgical Approaches as Effective as Surgery in Patients with Gleason 9-10 Prostate Cancer

For prostate cancer patients with aggressive, Gleason 9-10 disease, treatment with aggressive radiotherapy (MaxRT) plus hormone therapy was at least as effective as an aggressive surgical approach (MaxRP) in a retrospective study reported in *JAMA Oncology*. The mortality outcomes were similar between the two groups of patients.

Risk of Falls with Trazadone Similar to that with Atypical Antipsychotics

Trazadone, which is often used as an alternative drug is also associated with similar risk of falls and major fractures as antipsychotics in seniors with dementia, according to new research in *CMAJ* (*Canadian Medical Association Journal*) reported online published November 26, 2018. Patients who were given trazadone had a rate of falls and major fractures, including hip fractures, similar to that of the group receiving atypical antipsychotics. But, trazadone was associated with a lower risk of death in these patients.

Obese Children, Unlike Obese Adults, do not have More Pain After Surgery

While obese adults often report more pain after surgery, the same does not appear to be true for obese children, according to the largest study of its kind presented at the Anesthesiology 2018 annual meeting in San Francisco. The findings suggest the current protocol for managing pain in children after surgery—in which dosing is based on the patient's actual body weight and not BMI or whether the child is considered obese—should continue.

FDA Approves an Oncology Drug that Targets a Key Genetic Driver of Cancer, Rather Than a Specific Type of Tumor

The US FDA has granted accelerated approval to larotrectinib, a treatment for adult and pediatric patients whose cancers have a specific genetic feature (biomarker). This is the second time the agency has approved a cancer treatment based on a common biomarker across different types of tumors rather than the location in the body where the tumor originated. The approval marks a new paradigm in the development of cancer drugs that are "tissue agnostic."

A Second Human Case of Rat Hepatitis Discovered, Making it also the Second Recorded Globally

A 70-year-old woman from the Wong Tai Sin district of Hong Kong was diagnosed with the disease this month, according to Hong Kong's Department of Health. She does not recall having direct contact with rodents or their excreta (feces and bodily fluids) and didn't notice any rodents in her residence, the Department of Health said in a statement. The woman was admitted to a

public hospital on May 4, 2017, for headache, anorexia, malaise, abdominal pain and palpitations, which she had developed since May 1, 2017. She soon recovered and was discharged 4 days later, on May 8. The woman had underlying illnesses, according to the Department of Health.

In September, the first case was reported, involving a 56-year old man. Before this, it was not known that the disease could be passed from rats to humans... (CNN)

One in 40 US Children has an ASD Diagnosis According to Parents

Researchers from the Health Resources and Services Administration's (HRSA) Maternal and Child Health Bureau, the Centers for Disease Control and Prevention, Harvard, Drexel, and George Washington Universities estimated that parents of 1 in 40 US children reported their child had autism spectrum disorder (ASD). The study is published online November 26, 2018 in the journal *Pediatrics*.

Lung Disease in Middle Age may be a Risk Factor for Dementia Later in Life

Middle-aged adults with lung disease may be at greater risk of developing dementia or cognitive impairment later in life, according to new research published online November 26, 2018 in the *American Journal of Respiratory and Critical Care Medicine*. Compared to those without lung disease, the odds of dementia or mild cognitive impairment were 58% higher among those with restrictive lung disease and 33% higher among those with obstructive lung disease. Low results on forced expiratory volume in 1 second (FEV1) and forced vital capacity (FVC) were also associated with dementia.

Cerebellar TMS may Improve Post-stroke Motor Functions in Post-stroke Hemiparesis

Transcranial magnetic stimulation of the cerebellum led to improved post-stroke motor functions in a small phase IIa randomized, double-blind sham-controlled trial in Italy as reported in *JAMA Neurology*. After 3 weeks of repetitive, intermittent theta-burst magnetic stimulation to the cerebellum (CRB-iTBS) and physical therapy, hemiparetic patients following ischemic stroke improved their ability to walk and keep their balance more than patients who received sham stimulation and physical therapy.

