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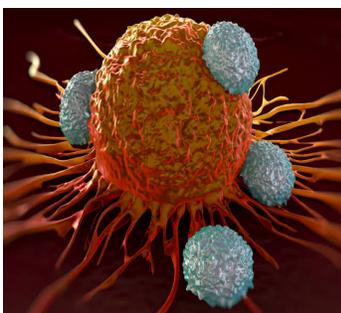


# PHARMAPEDIA

## PSGCP E-News Letter

VOL 2 / ISSUE 5 / OCT 2017 - JAN 2018

### Light Activated Cancer Drugs without Toxic Side Effects:



Cancer drugs in future can be activated by light and are devoid of side effects of traditional chemotherapy treatment made possible by The Monash Warwick Alliance, an intercontinental collaboration between University of Warwick, UK & Monash University,

Australia. It is a platinum based Chemotherapy that is completely inactive and non-toxic in the dark, the treatment can be inserted into cancerous areas. Its function is triggered only when direct light hits the molecule- causing the compound to degrade into active platinum and releasing ligand molecules to attack cancer cells. This fresh insight into the mechanics of the treatment offers new hope that photoactive chemotherapy drug candidates, such as trans,trans,trans- $\{Pt(N3)2(OH)2(py)2\}$ , will progress from the laboratory to future clinical trials.

[Ref: http://www.worldpharmanews.com/research/4291-light-activated-cancer-drugs-without-toxic-side-effects-fresh-insight#Wo5ug1ZVQRQ](http://www.worldpharmanews.com/research/4291-light-activated-cancer-drugs-without-toxic-side-effects-fresh-insight#Wo5ug1ZVQRQ)

### China develops a New Intranasal Flu Vaccine

Scientist in China have developed a new Intranasal Flu Vaccine using nano-technology that can target broad spectrum flu viruses and induce robust immune response. The intranasal nano-vaccine was developed by research group from Wuhan Institute of Virology of China. In this study, an Intranasalnano-vaccine worked well against infections of H1N1 and H9N2 virus in mice. The results, suggest that the 3M2e-rHF nano particle is a promising, needle free, intranasal administered, cross protective influenza vaccine.

[Ref: http://health.economicstimes.indiatimes.com/news/industry/china-develops-a-new-intranasal-flu-vaccine/62966656](http://health.economicstimes.indiatimes.com/news/industry/china-develops-a-new-intranasal-flu-vaccine/62966656)



## Digital Therapeutics enter the arena

Food & Drug administration (FDA) of America has given its approval to some Digital Therapeutics or Digiceuticals, which compliment or even substitute conventional drugs for treating many conditions, ranging from diabetes and asthma to substance abuse, anxiety, depression, insomnia & attention



deficit syndrome, hyper activity syndrome. Digital therapeutic involves a tracking sensor or coaching though an app. Digital Therapeutics do not have toxicities or other associated side effects. Additionally, these have the ability to reach the patient without the involvement of time and costs associated with respect to having regularly set foot in a hospital or doctor's office.

Ref: <http://blogs.economictimes.indiatimes.com>

## Virus cracking molecules advance fight against Hepatitis -B

Indiana university have made an important step forward in the design of drug that fight the Hepatitis B virus, which can cause liver failure and liver cancer. This study explains how the structure of Hepatitis-B virus changes when bound to an experimental drug. Researchers have found that certain molecules currently under clinical trial are able to crack the protective shell of the Hepatitis-B virus, suggesting it maybe possible to attack the virus after it is already taken hold in the body. This new study finds the virus cracking molecule can break apart this shell even after it has already assembled.

Ref: <http://dx.doi.org/10.7554/eLife.31473>

## Brain Teaser



### Challenge:

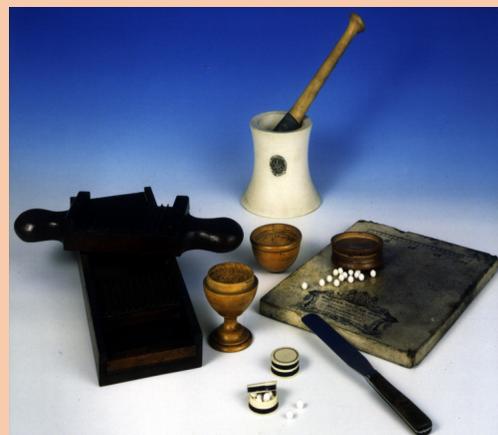
The pharmacy has an old style balance scale like the one in side. **You have only two measuring counter weights: \*30 grams \*5 grams**

**Divide 300 grams of powder medicine into 3 groups:**

**\*One of 150 grams \*One of 100 grams \*One of 50 grams BUT...**  
You can only weigh 3 times. Which means you can keep adding powder and manipulate the weights. But, when you take the powder off the scale, that will be the final weight.

**How would you do this and only use the scale for 3 measurements?**

## The Beautiful old (Photo)



Pill Making Equipment

### Dosage form Update

USFDA approved Biktarvy tablets ( Bictegravir sodium / Emtricitabine / Tenofovir alafenamide fumarate), 50 mg for the treatment of HIV-1 infection

USFDA approved Erleada tablets (apalutamide), 60 mg for the treatment of prostate cancer.

USFDA approved Oseltamivir phosphate for Oral Suspension 60mg/ml for the treatment of acute -influenza.

### Interesting facts

Benjamin Franklin beside scientist was a Pharmacist.

Lipitor (Atorvastatin) is the best selling drug of all time. It was introduced in 1997, making about \$125 billion.

Insulin is one of the most common medication that causes adverse events.

Ref: [www.pharmacytimes.com](http://www.pharmacytimes.com)

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