

## Health is Wealth

### New Malaria Drug Could be 'Game Changer' Clinical Trials of KAF156 Begin in 9 Countries Across Africa and Asia

The first new malaria drug to emerge for 20 years is beginning clinical trials in nine countries across Africa and Asia. KAF156 could be "a game changer", its developers say, at a time when the malaria parasite is evolving resistance to existing treatments. Novartis, the Swiss drug company, has developed KAF156 in collaboration with Medicines for Malaria Venture (MMV), a public-private partnership, and charities including the Wellcome Trust and Gates Foundation. Research suggests that the new medicine quickly clears malaria infection, including resistant strains, and blocks transmission of the parasite, said Vas Narasimhan, Novartis head of drug development. About 500 adults and children suffering from malaria will take part in the trial over the next couple of years in two Asian and seven African countries.

They will receive various doses of KAF156 combined with an old antimalarial called lumefantrine. Results will be compared with a combination therapy based on artemisinins, which are the best antimalarials available today but are becoming less effective as resistance increases. "To build on the gains made against malaria since the turn of the century, we need new medicines that are effective across all types of resistance patterns and geographies, and that are easy to administer, especially to children," said David Reddy, MMV chief executive. "With the trial of KAF156-lumefantrine now under way, the MMV — Novartis partnership is drawing closer to the exciting prospect of such a new medicine that would be a powerful tool to fight the disease."

## How to Get Rid of Blackheads

Blackheads are the vaguely different sibling of zits, and like zits, squeezing them can be addictive. Blackheads is types of acne. Blackheads are caused when sebum (the skin's natural oil) convokes and hardens in the pores. The congesting toxins which are being expelled through your skin from the blood and lymph fluid cartels with sebum creating a pasty glue. The exposed tip becomes oxidized and black, consequently the name – blackheads.

Mainly blackheads are dark due to the presence of a dark pigment. This dark pigment color is not the result of dirt in the pores. Blackheads are often not distinct to an observer. However surfeit of pores on the skin surface can cause pain or itching. The most troubling facet of blackheads for many people is the scarring that can occur. Mostly blackheads are present on skin is the consequence of oily skin and blocked pores. A good cleansing routine is one of the perfect ways to remove blackheads. Apply an astringent. It helps reduce oiliness. Washing with soap and water once or twice daily is a best way to keep debris and oils from the day aggregating on the skin surface. Salicylic acid and benzoyl peroxide are both common over-the-counter treatments for acne.

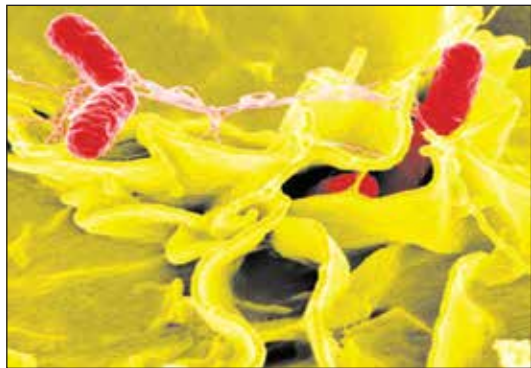
Benzoyl peroxide exfoliates the skin and the anti-bacterial agents in it clear the excessive debris from the skin to help

prevent infections once used as an element of a three step process. Do not employ a facial scrub if you have the other bad acne which it could spread the acne and make it worse.



**Blackheads can be temporarily reduced by home remedies. Tomatoes are very useful when treating blackheads. Sunbathing or use of sun-beds in temperation can be helpful. Make a paste by mixing 1 tsp limejuice and 1 tsp of finely powdered cinnamon. Apply it on the affected area prior going to bed. Wash it off in the morning.**

## Cholesterol-lowering Drugs May Fight Infectious Disease



### Typhoid, Ebola Use Cholesterol to Enter Cells

Source: Duke University Summary: Scientists found a gene variant that affects cholesterol levels also could increase the risk of contracting typhoid fever. A common cholesterol-lowering drug could protect animal models against Salmonella Typhi, the culprit behind the potentially deadly infection. The findings give insight into the mechanisms that govern human susceptibility to infectious disease and point to possible avenues to protect against pathogens like Salmonella or Ebola whose entry into host cells is regulated by cholesterol.

## Science & Technology

### Study Gives First Proof That The Earth Has a Natural Thermostat

Lead scientist, Dr Philip Pogge von Strandmann (University College London and Birkbeck, University of London) said: "From looking at the relative abundance of lithium isotopes in ocean-derived rocks, we were able to confirm that chemical weathering is the driver of the Earth's natural thermostat. When there is a warmer climate, there is more weathering, and when it is cooler there is less weathering: this is what you would expect, given that chemical reactions go faster with increasing temperature.

New data provides the first proof that the Earth has a natural thermostat which enables the planet to recover from extremes of climate change - but the recovery timescales are significant. This work was presented at the Goldschmidt conference in Paris, and has just been published in the peer-reviewed journal *Geochemical Perspectives Letters*\*. The idea of a natural temperature thermostat was first proposed in 1981, but until now no-one has been able to provide data to show that the recovery from the hot and cold temperature fluctuations were associated with a specific mechanism.



Now a group of British scientists has shown that recovery from global cooling events is associated with changes in the rate of weathering of rocks, which is the main mechanism of removing CO2 from the atmosphere. In weathering, rocks are dissolved by rain and river water; the process removes CO2 from the atmosphere, which is then transported to the seas by rivers to be locked up in carbon-rich rocks such as limestone. The more weathering, the more CO2 is removed from the atmosphere.

The team had previously found evidence supporting the role of weathering in cooling the Earth in times of high temperature. This current work confirms that a slow-down of weathering takes place in cold periods, and supports the concept of an "Earth thermostat". The researchers were able to use the Lithium isotope ratios in rocks as a measure of weathering. They examined rocks from the period of the Hirnantian glaciation around 445 million years ago which correspond with the second greatest extinction of life in history, when around 85% of marine species were wiped out, due to the cooling and a dramatic drop in sea levels (estimated at around 80m) as water was locked into ice fields and glaciers.

The samples show that global chemical weathering rate declined by a factor of four temporarily during the SC cooling that caused the glaciation, removing less CO2, allowing the climate to recover from the cooling.

### Iran up in Arms as Apple Removes Popular Apps

Apple removes at least 10 of Iran's most popular apps from its online store in move company says has been done to comply with US sanctions.



TEHRAN - "We are unable to include your app on the App Store," a message sent to some of those companies reportedly said. "Under the US sanctions regulations, the App Store cannot host, distribute, or do business with apps or developers connected to certain US embargoed countries."

The US lifted some sanctions on Iran, particularly in the aviation sector, under a 2015 nuclear deal that saw Tehran limit its atomic program.

But American individuals and companies are still barred from doing any business with Iranians because of much older and non-nuclear related sanctions on the Islamic republic.

"There are removed apps which did not have financial transactions, and due to sanctions, some of them were registered in countries other than Iran too," the minister, Azari Jahromi, said on Twitter.

**Iran's youthful and well-connected population own some 40 million smart phones, six million of them iPhones, the government-owned Iran Daily newspaper reported.**

More than 4,500 Iranian netizens have signed an online petition urging Apple chief executive Tim Cook "to recognise our rights as Apple customers".

"I've always been an Apple user, but despite preferring them... I'm now going to switch to Android," a user going by the name Xerexes wrote on Twitter.

"Technology is best when it brings people together. We shouldn't limit or keep others from using and developing it!" tweeted Ferial Govashiri, who used to work as a personal assistant to former US president Barack Obama but is now at Netflix.

Owners of devices that run on Android can still download Iranian apps from the online store for Google, also an American company, but they are still unable to use paid apps in the country.

## Japan in Race to Build Driverless Tractor

Farmer Takashi Nakajima on his lettuce field in Nagano prefecture: Japan is seeking to perfect automated tractors in an effort to stem the country's agricultural decline © Bloomberg



Greying farmers, a rural exodus and low food self-sufficiency have thrust Japan's biggest agricultural machinery giants into a national race to build a driverless tractor. The quest to perfect the "robo-tractor", which has been encouraged by the cabinet office and is viewed as a way to stem the demise of Japanese agriculture, is expected to see the first generation of machines go on sale next year. The technology estimated to add 50 per cent to the cost of a normal tractor — seeks to boost the effective manpower on Japan's farmland, firstly by working fields with driverless tractors running alongside those piloted by humans to allow emergency intervention. As artificial intelligence, tracking and safety

technologies improve, say Yanmar, Kubota and Iseki the three companies each leading competing robot-tractor projects the vehicles will increasingly be left alone to till the farmerless expanses on the

islands of Hokkaido and Kyushu. Unlike other countries where autonomous tractors are being designed to work huge fields of wheat, corn and soybeans, Japan's focus is on more intricate business of smaller, water-logged rice paddies — a technology the likes of Yanmar and Kubota expect to export elsewhere in Asia. Japan's need for robot farming equipment, said Kouki Ono of Iseki's advance technology engineering department, is obvious: "At the turn of the millennium in Hokkaido, each farmer worked an average of 18.9 hectares; today that ratio has risen to 30.1 hectares and is on course to rise as the population shrinks. There are not enough tractor operators per hectare," he added.

## Lebanese Minister of Foreign Affairs

### GIBRAN BASSIL

In Atlanta on September 17, 2017

After Participating in the Divine Liturgy at Saint Joseph Maronite Catholic Church at 11:00 am

Lunch shall be Served  
Time: 1:00 pm.  
Place: T.B.D.

Open Invitation to The Lebanese Community At Large

For more information  
Please Call (404) 525-2504

R.S.V.P. before September 13, 2017

