



# DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY  
Tuesday 20220329

## Combo treatment for head and neck cancer

### Scientists develop new combo treatment for head and neck cancer (The Tribune:20220329)

<https://www.tribuneindia.com/news/health/scientists-develop-new-combo-treatment-for-head-and-neck-cancer-381506>

Scientists develop new combo treatment for head and neck cancer

An Israeli-led research team has developed a potential new treatment for head and neck cancer (HNC), using a targeted drug and immunotherapy, Ben Gurion University (BGU) in southern Israel has announced.

The findings, co-authored by Israeli, Chinese, French, German and US researchers, were published in the Journal for ImmunoTherapy of Cancer on Sunday, Xinhua news agency reported.

Through pre-clinical study, the researchers found a new treatment combination of Trametinib, a cancer drug that brings a type of killer white blood cells to the cancer site, and Anti-PD-1, an immunotherapy that not kills cancer cells directly but blocks a pathway on immune cells to make them more engaged in fighting tumors.

In traditional clinical treatment, Trametinib has not shown efficiency in inhibiting the targetted hyper-active pathway of cancer cells, said the research.

Researchers then analysed tumor-host interaction that facilitates immune escape in tumor-bearing mice, and found that using a short Trametinib treatment can make resistant tumors more sensitive to anti-PD-1 immunotherapy.

"We sincerely hope that oncologists will test this treatment combination in HNC patients, as improving immunotherapy efficacy is crucial for prolonging the survival of cancer patients," the study's correspondent author Moshe Elkabets was quoted by the BGU statement as saying.

## **Oral cancer**

### **Oral cancer patients with less circulating tumour cells live longer than those with more**

**As many as 500 patients analysed during the four-year long study (The Tribune:20220329)**

<https://www.tribuneindia.com/news/health/oral-cancer-patients-with-less-circulating-tumour-cells-live-longer-than-those-with-more-381216>

Oral cancer patients with less circulating tumour cells live longer than those with more  
Photo for representational purpose only. Thinkstock

A study conducted by a team of Indian researchers has found that oral cancer patients having a lesser number of circulating tumour cells (CTCs) in blood live longer than patients with a greater number of such cells.

The four-year long study, among the largest clinical trials in head and neck cancers in which 500 patients were analysed, was led by Dr Pankaj Chaturvedi of Tata Memorial Hospital, Mumbai, Dr Jayant Khandare and a team of Pune-based Actorius OncoDiscover Technology.

“Altogether 152 oral cancer patients were analysed and 1.5 ml blood per patient was monitored for the presence of CTCs,” Khandare told PTI.

“The study showed that patients with over 20 CTCs per 1.5 ml blood are more likely to have an advanced-stage disease and nodal metastasis (cancer cells breaking away from where they first formed), while patients with less than 12 CTCs per 1.5 ml blood survive for a longer period,” he said.

The study was published in the international peer-reviewed Journal Triple OOO recently, he added.

As per the national cancer registry, there are about 14 lakh cancer patients in India and about nine per cent of these (1.2 lakh) are in Maharashtra, Khandare said.

Cancer cases and deaths in Maharashtra have increased by 11,306 and 5,727, respectively in last three years, a collective increase of around eight per cent, he added.

The OncoDiscover test, funded by the government through Biotech Ignition Grant and Small Business Industry Research Initiative of the Department of Biotechnology, is the sole CTC test approved by Drugs Controller General of India as per the Medical Device Rules 2017, he said.

The test is used to detect CTCs for diagnosis of cancers like those of head and neck, breast, lung, colon and rectal, Khandare said. “Maharashtra Health Minister Rajesh Tope has evinced an interest in our work and will be visiting our Pune facility soon,” he added.

## **TB cases in South-East Asia:**

### **Annual investment of USD 3 billion needed to avert 45 lakh new TB cases in South-East Asia: WHO (The Tribune:20220329)**

For the first time in over a decade, the number of TB deaths increased globally in 2020

<https://www.tribuneindia.com/news/health/annual-investment-of-usd-3-billion-needed-to-avert-45-lakh-new-tb-cases-in-south-east-asia-who-380088>

Annual investment of USD 3 billion needed to avert 45 lakh new TB cases in South-East Asia: WHO

On World Tuberculosis Day, the WHO highlighted the urgent need for national, international and global stakeholders to invest at least USD 3 billion annually in the South-East Asia region to avert nearly 45 lakh new TB cases and prevent more than 15 lakh deaths due to the disease by 2025.

For the first time in over a decade, the number of TB deaths increased globally in 2020. In the South-East Asia region, it went up by nearly 10 per cent to more than seven lakh, with the COVID-19 pandemic reversing the progress achieved over the years in providing essential tuberculosis (TB) services and putting at risk the efforts to end TB, said Dr Poonam Khetrpal Singh, Regional Director, WHO, South-East Asia.

“Our momentum to end TB must not be halted. Finding increased investments and innovative financing mechanisms in ending TB will not only avert new TB cases and deaths but also avoid more than 31 million (3.1 crore) disability-adjusted life years in the region between now and 2025,” Singh said in a statement.

The World Health Organization (WHO) continues to accelerate efforts to end TB in all the countries in the region, in line with its flagship priorities, the global End TB Strategy, the UN Political Declaration on the Fight Against TB and Sustainable Development Goal target 3.3.

Throughout the COVID-19 response, countries have made commendable efforts to maintain essential health services, including for TB. In 2020, India launched a “Jan Andolan” or a people’s movement against the disease.

“Achieving the region’s USD 3 billion annual investment target is especially important given the impact of the COVID-19 pandemic. In addition to the 10 per cent increase in TB mortality

in the region in 2020, case notification dropped from 3.6 million (36 lakh) to 2.6 million (26 lakh) -- the same level as in 2015.

“After five years of growth, the region suffered an economic contraction of -5.4 per cent, pushing tens of millions of people into extreme poverty and exacerbating the social determinants of health,” Singh said.

In 2019, almost 23 per cent of the new TB cases in the South-East Asia region were attributable to undernutrition, which has since intensified among the poorest and most vulnerable, she added.

In all the countries in the region, the social and economic support for TB patients must be enhanced, they must be better integrated into social protection services and delineated into measures that are TB-specific, TB-inclusive and TB-sensitive, Singh said.

## **Costlier essential drugs**

### **10.7 per cent hike is too much of a burden (The Tribune:20220329)**

<https://www.tribuneindia.com/news/editorials/costlier-essential-drugs-381581>

Costlier essential drugs

Photo for representational purpose only.

After fuel, cooking gas, edible oils and essential commodities, another price rise has been announced, and this would really hurt. With the National Pharmaceutical Pricing Authority's approval, the prices of nearly 800 drugs on the National List of Essential Medicines, which are used to treat the majority of common ailments, will go up by 10.7 per cent beginning April 1, the first day of the next fiscal. The relief to the pharmaceutical industry, which has been demanding a substantial increase citing rising costs of raw material imports mainly due to the pandemic, comes at the cost of the consumers, already battling the inflation. Price controls, or fixing the maximum retail price, are in place for scheduled drugs, which constitute 16 per cent of the 6,000 formulations available in the market. As the Wholesale Price Index is used as the base to revise prices of scheduled drugs, its sharp rise, the explanation being forwarded is, got reflected in the new prices.

Medicines are a basic necessity, not an avoidable indulgence. Ensuring reasonable pricing, thus, is the state's duty, even if it means cushioning and rationalising the impact of rising manufacturing costs. Though medical devices such as coronary stents and knee implants, too, have come under the ambit of price controls in recent years, indicating an agenda for ethical practices, a substantial hike in prices of essential medicines bought off the counter by a vast number of people is difficult to justify. It seems to follow the pattern of arbitrary rate-lists practised by large sections of the costlier-by-the-day private healthcare system. On the issue of unethical and corrupt practices of giving gifts and offering freebies to doctors by pharma companies for prescribing their medicines, the Supreme Court recently sought the Centre's response to a PIL asking for regulatory and penalty guidelines.

The prices of petroleum products had stayed almost constant in the run-up to the state elections, and a hefty hike was expected after the results. That is being played out now. Costlier essential medicines, though, is a burden that needs some shedding.

## **Active Covid cases**

### **Active Covid cases decline to around 16,000 India records 1,270 new Covid cases (The Tribune:20220329)**

Active Covid cases decline to around 16,000  
Photo for representation purposes. Tribune

With 1,270 new coronavirus infections being reported in a day, India's total tally of Covid cases rose to 4,30,20,723, while the active cases further declined to 15,859, according to the Union Health Ministry data updated on Monday.

The death toll climbed to 5,21,035 with 31 daily fatalities, the data updated at 8 am stated.

The active cases constitute 0.04 per cent of the total infections, while the national recovery rate was recorded at 98.75 per cent, the health ministry said.

Of the 31 new fatalities, 25 were reported from Kerala.

A reduction of 328 cases was recorded in the active Covid caseload in a span of 24 hours.

The daily positivity rate was recorded at 0.29 per cent while the weekly positivity rate was 0.26 per cent, according to the health ministry.

As many as 4,32,389 Covid tests were conducted in the last 24 hours, taking the cumulative tests so far in the country to over 78.73 crore.

The number of recoveries surged to 4,24,83,829, while the case fatality rate was recorded at 1.21 per cent.

The cumulative doses administered in the country so far under the nationwide Covid vaccination drive has exceeded 183.26 crore.

A total of 5,21,035 deaths have been reported so far in the country, including 1,47,780 from Maharashtra, 67,797 from Kerala, 40,050 from Karnataka, 38,025 from Tamil Nadu, 26,151 from Delhi, 23,494 from Uttar Pradesh and 21,197 from West Bengal.

## **COVID-19 vaccination**

### **COVID-19 vaccination | Debate on over efficacy of booster doses (The Hindu:20220329)**

<https://www.thehindu.com/news/national/covid-19-vaccination-debate-on-over-efficacy-of-booster-doses/article65264530.ece>

Booster or natural infection will reduce the chance of another infection for just a few months, they say.

India has opened up COVID-19 vaccine booster dose for its 60-plus population while discussion continues on the merits of providing precaution dose to the general population of those over 18 years. Though the government is yet to make any announcement on the issue, experts and doctors are divided on how many booster doses are needed to minimise the negative outcome of the infection.

Booster doses are given with two objectives — to reduce the chance of getting infection and to reduce the chance of death, in the event of an infection. These two parameters must be seen separately, said Rajeev Jayadevan, vice-chairman, Research Cell, Indian Medical Association, Kerala.

## **BA2**

### **Data | Will BA.2 lead to another surge in India? (The Hindu:20220329)**

<https://www.thehindu.com/data/data-will-ba2-lead-to-another-surge/article65259902.ece>

Data show that the rise in cases recorded between December 2021 and mid-January 2022 in India (dubbed as the Omicron wave) was in most part due to the BA.2 sub-lineage. COVID-19 cases are peaking in several East and Southeast Asian and European countries. The surge is fuelled mainly by the BA.2 sub-lineage of the Omicron variant. The rapid rise has caused anxiety in India. Data show that the rise in cases recorded between December 2021 and mid-January 2022 in India (dubbed as the Omicron wave) was in most part due to the BA.2 sub-lineage. So, while the sub-lineage has just become dominant in other nations, it became dominant in India as early as January 2022. Moreover, hospitalisation data show that BA.2 is milder than the previous variants.

## **Mitochondria**

### **How mitochondria adapted to living within cells (The Hindu:20220329)**

<https://www.thehindu.com/sci-tech/how-mitochondria-adapted-to-living-within-cells/article65260518.ece>

Billions of years ago, a prokaryotic organism called archaea captured a bacterial endosymbiont. An organism that has been around from 2 billion years ago has given biologists from Centre for Cellular and Molecular Biology, Hyderabad (CCMB), a clue as to how mitochondria became an inseparable part of animal and plant cells. The researchers, led by Rajan Sankaranarayanan, identify two key transformations, one in the molecule known as DTD for short and another in the transfer-RNA (tRNA).

“Our lab works on a molecule called D-aminoacyl-tRNA deacylase (DTD). We observed some unexpected biochemistry of eukaryotic DTD that could be

## **T cell immune**

### **T cell immune responses seen a year after infection (The Hindu:20220329)**

<https://www.thehindu.com/sci-tech/t-cell-immune-responses-seen-a-year-after-infection/article65259153.ece>

Strong and longstanding T cell responses were seen even when people were not reinfected or vaccinated

Like in most countries where the Omicron variant had become dominant and caused a high spike in daily cases, the third wave in India propelled by Omicron caused a large number of reinfections in unvaccinated people and breakthrough infections even among the fully vaccinated. However, across the world, the Omicron variant was found to cause only mild disease in fully vaccinated people and in those with previous infection. This was real-world proof that previous infection and/or full vaccination with two doses provide protection against progression of disease to a severe form.

## **Swap transplant**

### **Swap transplant brings hope to two families (The Hindu:20220329)**

<https://www.thehindu.com/news/national/karnataka/swap-transplant-brings-hope-to-two-families/article65262076.ece>

There is now more awareness about swap transplants, says chairman of State Authorisation Committee for Organ transplantation

Two patients, who needed renal transplants after almost four years on dialysis, have found hope in two swap transplants in Bengaluru this month. The transplants took place between two families, who could not donate the organ to their family member because of blood group mismatch.

Pradeep Kumar (48), a graphic designer, wanted to donate his kidney to his wife Roopashree (38), but could not do so due to blood group mismatch. Another patient, Raja (44), an electrician, was going through a similar situation. His wife Ashwini, who wanted to donate her kidney to save her husband's life, could not do so also due to an incompatible blood group.

## **Endometriosis Awareness Month**

### **Endometriosis Awareness Month: Expert shares how the disease can affect women's fertility**

**Infertility, chronic pelvic pain, nausea, abdominal bloating, fatigue, depression and anxiety among others are some of the common issues associated with endometriosis (The Indian Express:20220329)**

<https://indianexpress.com/article/lifestyle/health/endometriosis-awareness-month-women-fertility-symptoms-treatment-7836175/>

endometriosisEndometriosis do not come as serious concerns to individuals and are, hence, usually missed by many. (File Photo)

Endometriosis is a disorder in which tissue that normally lines the uterus grows outside the uterus. It can lead to women experiencing extreme pain during the menstrual cycle, sexual intercourse and urination. Infertility, chronic pelvic pain, nausea, abdominal bloating, fatigue,

depression and anxiety among others are some of the common issues associated with endometriosis.

“The disease is estimated to affect roughly 10 per cent (190 million) women and girls, globally, who belong to the reproductive age, according to World Health Organisation. While very few women are aware of this condition,” Dr Aswati Nair, fertility consultant, Nova IVF Fertility, Delhi said.

ALSO READ |Is sabudana khichdi really a ‘superfood for women’? Experts elucidate  
To spread awareness about the same, Endometriosis Awareness Month is observed in March, every year. Started in 1993 by Endometriosis Association, it seeks to provide support for families affected by endometriosis and spread education about the disease.

Dr Nair shared that the symptoms of endometriosis do not come as serious concerns to individuals and are, hence, usually missed by many. “This causes a delay between noticing the onset of symptoms and diagnoses of the disorder.”

fertility Endometriosis can also lead to infertility, the expert shares. (Source: Getty Images/Thinkstock)

According to the expert, this disease can also lead to infertility in women. She said, “If a woman has endometriosis, it becomes difficult for the woman to become pregnant due to the lining around the uterus. According to the American Society of Reproductive Medicine, around 30 per cent to 50 per cent of women face infertility in this condition.”

Endometriosis influences fertility in the following ways, as shared by Dr Nair.

- \*Adhesions
- \*Distorted anatomy of the pelvis
- \*Scarred fallopian tubes
- \*Inflammation of the pelvic structures
- \*Altered immune system functioning
- \*Changes in the hormonal environment of the eggs
- \*Impaired implantation of a pregnancy
- \*Altered egg quality

ALSO READ |Irregular periods: Gynaecologist explains all about the causes, and the cures  
Explaining the treatment, she added, “At the time of surgery, your doctor or fertility expert will evaluate the endometriosis and the depth of the disease that you have with its size, location and amount. With this you would get to know the stage of the disease which can be considered minimal – Stage 1, mild – Stage 2, moderate – Stage 3, or severe – Stage 4. Based on the stage of the endometriosis you and your doctor will get to know how it will affect your pregnancy.”

“Women who have severe endometriosis can experience considerable scarring, damaged ovaries and blocked fallopian tubes and also difficulty becoming pregnant. Such women should consult fertility experts as they might require advanced fertility treatment,” the fertility expert suggested.

## Pregnancy

### **Why pregnant people should get vaccinated for Covid-19, a maternal care expert explains**

**In making the decision about getting vaccinated against COVID-19, pregnant people must consider the potential risks of the vaccine, as well as any potential harm from becoming infected with SARS-CoV-2, the virus that causes COVID-19(The Indian Express:20220329)**

<https://indianexpress.com/article/lifestyle/health/why-pregnant-people-should-get-vaccinated-for-covid-19-a-maternal-care-expert-explains-7829304/>

Pregnancy is often a time of sweet anticipation. But the ongoing pressure to make the right decisions for the health and well-being of both the pregnant person and the unborn child tempers this excitement. (Source: Getty Images/Thinkstock)

I don a gown, gloves and a mask to enter the hospital room of a new mother who is sick with COVID-19.

She lies in bed, exhausted between coughing spells; her day-old infant rests comfortably across the room. She contracted COVID-19 the week before her due date and was hospitalised when her labour began.

Given the mother's illness and her inability to care for the newborn, we make plans for the infant to go home with his father on his second day of life. But his mother will need to remain hospitalized to recover from COVID-19 and from her delivery.

The couple's other two children at home need care as well. The road to recovery will be long for this family, but fortunately the mother's illness does not end up requiring intensive care or mechanical ventilation.

This outcome is not what the family had imagined when they made the decision for her not to get vaccinated against COVID-19 during her pregnancy.

**ALSO READ |Doctor suggests five health tips for those living with endometriosis**

Unfortunately, scenarios like this have become far too common for me and other care providers during the COVID-19 pandemic. During the latest omicron surge, it was not unusual to have four or five patients with active COVID-19 infections on the labour and delivery unit at a time.

Pregnancy is often a time of sweet anticipation. But the ongoing pressure to make the right decisions for the health and well-being of both the pregnant person and the unborn child tempers this excitement.

And undoubtedly, the decision-making around COVID-19 vaccination adds another layer of stress.

The relative novelty of COVID-19 in our lives, fear of the unknown and abundant misinformation often complicate these decisions. Advice comes during pregnancy from many directions, including well-meaning friends and family, and sometimes even from strangers.

It's worth noting that the decisions a person makes during pregnancy stem from the desire to avoid doing anything that could cause complications in the pregnancy or be harmful to the fetus.

At the same time, it is also important that a parent do everything possible to protect the well-being of the pair.

As a family physician specializing in maternity care, I often hear of the challenges and confusion pregnant people feel in making these important decisions.

My role is to respect pregnant people in their autonomy and to provide evidence-based information that may help inform their decision.

Vaccination during pregnancy provides important protection for newborns. (Source: Getty Images/Thinkstock)

In making the decision about getting vaccinated against COVID-19, pregnant people must consider the potential risks of the vaccine, as well as any potential harm from becoming infected with SARS-CoV-2, the virus that causes COVID-19. These two sides of the same coin are important in the discussion and the ultimate decision the patient makes.

Simply avoiding action is not the answer. Each pregnant person should carefully consider the decision and not passively accept doing nothing as the safer option, since the choice to do nothing is likely a choice to accept the risk of preventable harm.

COVID-19 has caused serious illness requiring hospitalisation in over 30,000 pregnant people in the United States, with 292 deaths as of mid-March 2022. The risk for severe disease is higher in pregnancies that are complicated by advanced age, high body mass index, hypertension and diabetes.

Pregnant people infected by COVID-19 are three times more likely to need critical care than people who aren't pregnant. Death is rare in pregnant people, but COVID-19 causes a significant increase in that risk.

Health disparities have become more evident during the pandemic. Black and Latino populations have disproportionately experienced COVID-19 infection, serious illness and death.

This disparity remains in pregnant people, with the infection rate in pregnant Latino people nearly twice that of white counterparts.

Vaccinations to protect against serious illness from COVID-19 are recommended for all pregnant people or those considering pregnancy by leading health organisations, including the Centers for Disease Control and Prevention, the American Academy of Family Physicians and others.

The mRNA vaccines developed by Pfizer and Moderna are recommended for people who are pregnant in an initial two-dose series followed by a booster immunization five months later. The immunity produced has been shown to reduce severity of illness, pregnancy complications, stillbirth and maternal death.

In mid-February, 68 per cent of pregnant people over age 18 were fully vaccinated, compared with 75 per cent in the general adult population. Complications from the vaccine are rare and mild, similar to complications patients who aren't pregnant. There is no increased risk of miscarriage, infertility or pregnancy complications related to the vaccine.

Additionally, vaccination during pregnancy provides important protection for newborns. Pregnant people who are vaccinated pass antibodies in blood through the umbilical cord to the fetus, and this has been shown to provide protection from serious illness from COVID-19 for the newborn for up to six months.

Research studying newborns in 20 pediatric hospitals across 17 states showed that 84 per cent of hospitalised infants less than 6 months old were born to unvaccinated people.

ALSO READ |Irregular periods: Gynaecologist explains all about the causes, and the cures  
And infants born to people vaccinated with two doses of mRNA vaccines were 61 per cent less likely to be hospitalised with COVID-19. Since vaccination is unlikely to be available for newborns in the foreseeable future, protecting this vulnerable population through vaccination during pregnancy is the best option.

It is natural for pregnant people to have some uncertainty about the decision to get the COVID-19 vaccine. They are likely to be unsure and to have their own conflicted feelings about it, and they may be receiving conflicting advice from family and friends. I believe it's important to provide empathy and respect for this ambivalence while sharing information about the safety of the vaccine and the risks of COVID-19 illness.

People who are pregnant should receive the most up-to-date information based on evidence to help guide their decisions on getting vaccinated. If they decide to get vaccinated, it can be helpful for family members or others to remove any access barriers that might stand in the way.

On the other hand, a pregnant person who decides against getting vaccinated needs to be provided with other additional supports such as guidance on masks and on avoiding high-risk exposures to reduce the risk of illness.

The ripple effects of COVID-19 go well beyond the person with the infection, particularly in pregnancy. It's clear that the vaccine can help prevent serious illness in pregnant people and that it is one way to prevent newborns from going home without their mothers, either temporarily or permanently.

## **Alzheimer's**

### **Is there a link between Covid brain fog, chemo brain and Alzheimer's? (New Kerala:20220329)**

Several researchers have found a common link between people who have undergone chemotherapy for any life-threatening disease and previously -> View it--> <https://www.newkerala.com/news/2022/46032.htm>

## **Genes**

### **Genes may be responsible for couples not wanting to have kids: Study (New Kerala:20220329)**

Genetic variants that damage the genome are associated with reduced reproductive success and an increased likelihood of not having children, -> View it--> <https://www.newkerala.com/news/2022/45917.htm>

## **Antiretroviral therapy**

### **Why HIV remains in human body even after antiretroviral therapy (New Kerala:20220329)**

While antiretroviral therapy (ART) is known to limit HIV replication leading to elimination of most infected cells, the virus is never fully elimi-> View it--> <https://www.newkerala.com/news/2022/45728.htm>

## **Menopause**

### **New study suggests working shifts may delay onset of menopause (New Kerala:20220329)**

: Non-traditional shifts can disturb lifestyle and sleeping habits and it is also known that they have a negative effect on employees' health. A ne-> View it-->  
<https://www.newkerala.com/news/2022/45705.htm>