

## [Diabetes drug may help treat breast cancer](#)

Researchers in China have discovered that a drug used to treat diabetes could be effective against a form of deadly breast cancer.

More than 70,000 people die from breast cancer in China every year, according to the national cancer center.

Triple-negative breast cancer is particularly aggressive among the four clinical subtypes of breast cancer, said Dong Chenfang, a professor at Zhejiang University School of Medicine. It has a tendency to quickly spread or metastasize to the brain and lungs. There are currently no effective targeted therapies for this form of breast cancer, which is therefore often fatal, according to Dong. Dong and his colleagues found that the levels of a metabolic enzyme called AKR1B1 were significantly elevated in triple-negative breast cancer cells and that this was associated with increased rates of metastasis and shorter survival times.

The researchers also found epalrestat, a drug that inhibits AKR1B1 and is approved in Japan to treat diabetic complications, was able to block the growth and metastasis of the cancer cells.

Dong said the finding is still in the experimental stage. Whether epalrestat can be applied to the clinical treatment still needs further tests.

A detailed research article was published on March 7 in the Journal of Experimental Medicine.

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## [UN forum helps China tackle ageing problems](#)



UN Economic and Social Commission for Asia and the Pacific (ESCAP) and Zhongshan College based in China's Nanjing City hold a Regional Expert Forum on Integrated Care for Older on March 17, 2017, with an aim to enhance the access of older persons to services in China, including health and long-term care services. [Xu Lin/China.org.cn]

The UN Economic and Social Commission for Asia and the Pacific (ESCAP), in cooperation with Zhongshan College based in Nanjing City, launched a forum on Friday aiming to help older people gain better access to health and long-term care services in China.

The three-day Regional Expert Forum on Integrated Care for Older People is organized within the framework of a project entitled "strengthening national capacity for promoting and protecting the rights of elders." It particularly focuses on the provision and financing of long-term care.

Dr. Nagesh Kumar, director of ESCAP's Social Development Division, said population ageing was now a major problem facing the whole world, and one of the key challenges in achieving the 2030 Agenda on Sustainable Development.

The number of older persons in the region is expected to almost triple from 514 million in 2015 to more than 1.31 billion by 2050. By then, one in four people will be over 60 years of age, out of which number those over 80 year will constitute about one-fifth.

This demographic phenomenon will have a profound impact on the wellbeing of all generations. Older persons are among the groups most likely to be left behind if no adequate policies are adopted. Increasing numbers of elderly will require long-term care, and it is increasingly difficult for their needs to be met by family care alone.

Therefore, Kumar said, population ageing requires innovative policies, especially to address the increasing demand for healthcare services. Using Information and Communication Technologies is one possible approach to increase healthcare access .

One good thing was that the expanding care sector can become a growth sector and a sector driving employment opportunities. "If we train people adequately to provide care for older persons, we can achieve two goals: we increase the quality of care that older persons receive and we increase the potential for them to find decent jobs in the care sector."

At the forum, Zhongshan College was appointed as the INIA (International Institute on Ageing) Zhongshan Satellite Center by the United Nations. Chen Yi, Chairman of Board of Zhongshan College, told China.org.cn that the college is working on the project of Human Resource Development Center for Elderly, featuring a student internship base, a rehabilitation hospital, a nursing home, a training center and a research center of ageing development. The college has provided training in elderly care for more than 15,000 persons so far.

China now has less than 300,000 paramedics, and only 40,000 have qualification certificates, said Professor Jiang Fuxin, president of Zhongshan College. Based on the international standard, China needs a total of 10 million paramedics.

To fill in the gap, the college is offering eight majors of elderly service and management, community-based rehabilitation, community management and service, rehabilitation treatment technology and nursing, etc. A major of rehabilitative engineering technology will be introduced within this year.

Officials, experts, scholars and entrepreneurs from 21 Asia-Pacific countries and regions attended the forum.

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## [China creates world's 1st coal-to-ethanol production line](#)

China has successfully created the world's first production line to turn coal into ethanol, or drinking alcohol, the Chinese Academy of Sciences said on Friday.

Created by Shaanxi Yanchang Petroleum and the academy's Dalian Institute of Chemical Physics in Liaoning province, the production line went into operation in January and has the capacity to make more than 100,000 metric tons of pure ethanol every year, according to Liu Zhongmin, the institute's deputy director.

By 2020, China will build a factory capable of producing 1 million tons of ethanol each year using the same technology, he said.

The country currently produces 7 million tons of ethanol each year using other methods, which can "hardly satisfy" its industrial and energy needs,

according to Liu.

“Most countries produce ethanol using food, such as corn or sugar cane, but this is not a viable option for China given its massive population,” he said.

“By turning China’s abundant coal resources into ethanol, the technology will help safeguard our energy and food security,”

Moreover, ethanol is a green fuel and versatile ingredient. “Utilizing it could reduce our dependency on fossil fuels, and make our industrial production and energy structure more environmental friendly,” Liu said.

In addition to alcoholic beverages, ethanol can be used to produce thousands of everyday products from plastics to detergents. It can also replace more toxic ingredients, such as methanol, during industrial production.

Other uses include mixing it with petroleum to increase its fuel efficiency and reduce pollution. An abundant supply of ethanol would also make ethanol-fueled vehicles more viable, Liu said.

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## [China home to two of top three Asian universities](#)

[unable to retrieve full-text content]Chinese mainland is home to two of the top three universities in Asia, according to research published on Thursday by the Times Higher Education (THE).