The San Diego Union-Tribune

WEDNESDAY • JANUARY 18, 2017

Business

MARKETS

▼ 63.28 **Dow** 19,891.00
▼ 16.16 **Nasdaq** 5,547.49
▼ 4.88 **S&P 500** 2,270.44
▼ 0.02 **10-yr. T-note** 2.36%
▲ $0.76 **Oil** $53.01
▲ $3.20 **Gold** $1,199.80
▼ flat **Silver** $16.80

Euro 0.9420 • **Peso** 21.7850

BANK STOCKS DRAG DOWN INDEXES: A bad day for bank stocks pulled the Dow Jones industrial average to its third straight loss Tuesday. The financial sector suffered a 2.3 percent drop.

BRIEFLY

2,400 LAYOFFS AT LOWE'S: Lowe's says it's told approximately 2,400 full-time workers that they will be laid off. The majority of the cuts are at the store level, with other cuts occurring at distribution centers, customer support centers and vice presidents at the company's corporate office in Mooresville, N.C. The company said it's providing severance and outplacement resources to displaced workers.

$49B TOBACCO DEAL: British American Tobacco said on Tuesday that its sweetened offer to buy the stake in Reynolds American that it did not already own had been accepted, a $49 billion deal that would create a tobacco giant with a significant presence around the world. The purchase would create the world's largest publicly traded tobacco business, based on net

SOUTHWEST TO OFFER FLIGHTS TO LOS CABOS FROM SAN DIEGO

BY LORI WEISBERG

Southwest Airlines announced Tuesday it will start flying to Los Cabos from San Diego in April, marking the airline's first nonstop service between Lindbergh Field and Mexico.

The once-daily flight to Los Cabos International Airport, which serves the popular tourist towns San Jose del Cabo and Cabo San Lucas, will start April 25, with booking available beginning today.

Southwest will join two other airlines — Alaska and Spirit — that also offer nonstop service to the southern Baja California destination. Spirit's flights are seasonal, not year-round.

The addition of Los Cabos brings to 31 the number of destinations Southwest will serve from San Diego. It has been regularly expanding service, announcing last week that it would add five nonstop destinations.

"This month we'll celebrate our 35-year anniversary with San Diego. It's a mile-

SEE SOUTHWEST • C4

REUTERS FILE

Southwest already flies nonstop to the Los Cabos airport from Los Angeles and Orange County.

SCIENTISTS, S.D. BIOTECH WILL TEST NEUROPATHY DRUG

BY BRADLEY J. FIKES

UC San Diego and Canadian scientists said they have discovered a potential way to prevent and reverse peripheral neuropathy — a painful and disabling condition affecting 40 million Americans and hundreds of millions worldwide.

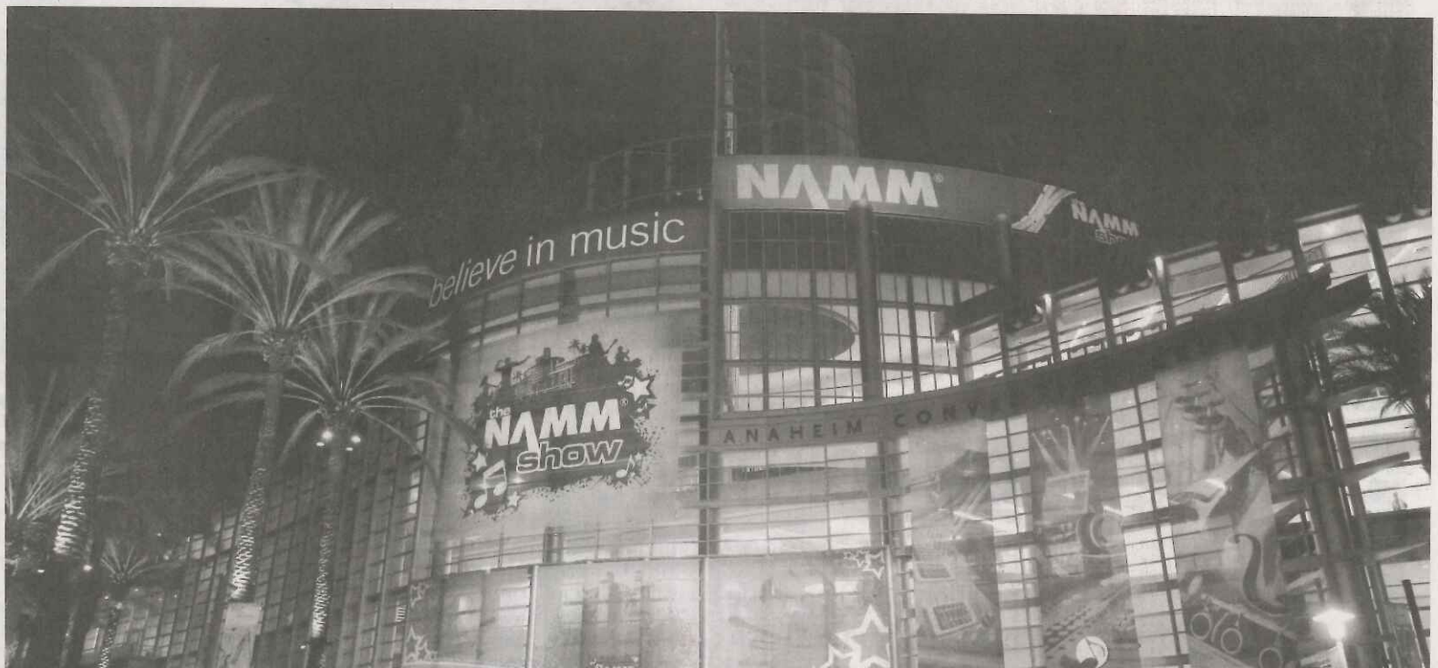
A Phase 1 clinical trial of a drug based on this finding — designed to assess safety — is scheduled to be launched in April by a San Diego startup, WinSanTor. A Phase 2 trial to test proof of concept is expected to begin by the end of this year.

The drug, pirenzepine, is already approved in other countries for treating stomach ulcers. So it's expected to be proven safe

SEE PIRENZEPINE • C4

"It's the closest thing to Fantasy Island for a musician you can imagine!"

Richard McDonald • executive vice president for the Fender Musical Instruments Corp.



PIRENZEPINE • Drug already OK'd for other uses

FROM C1

for neuropathy patients, and further development of the medication should be straightforward, said Stanley Kim, CEO of WinSanTour.

The Phase 1 trial is set to take place in Canada, while the Phase 2 trial is intended to be conducted in Canada, Asia and Europe, Kim said. Eventual Phase 3 trials would be more widespread and could include Southern California. For more information on the testing, visit winsantor.com.

Peripheral neuropathy can cause tingling, numbness, pain, burning or paralysis. In the United States, it's most often a result of diabetes but can be caused by a wide range of conditions including Charcot-Marie-Tooth disease, HIV and chemotherapy treatment.

Scientists led by Paul Fernyhough of the University of Manitoba in Winnipeg, Canada, and Nigel Calcutt of UC San Diego published their research Tuesday in the Journal of Clinical Investigation. The study can be found at j.mp/pneuropath.

The scientists found that giving pirenzepine or similar compounds to animals led to nerve repair — and alleviated neuropathic symptoms. They saw these effects in Type 1 and Type 2 diabetes, chemotherapy-induced neuropathy and HIV-related disease.

The targeted compounds blocked receptors found on nerve cells called muscarinic acetylcholine receptors, which are activated by the neurotransmitter acetylcholine. Pirenzepine was the best of its class for preventing or reversing neuropathy, Kim said.

WinSanTor was established in 2011, but the company didn't start operations until about three years later after it received grants, Kim said. Funding has come from the National Institutes of Health, the Canadian Institutes of Health Research and the St. Boniface Hospital Foundation.

HOWARD LIPIN U-T

Stanley Kim is the co-founder and CEO of WinSanTor, which was established in 2011.

Besides its use for ulcers, pirenzepine has been tested as a gel applied to the eyes to reduce myopia in children, as well as a treatment for overactive bladder.

"We're taking a drug that was shown safe orally and in the eyes and applying it on someone's skin," Kim said. "We don't know for sure, but we're pretty confident it's safe topically."

In a topical formulation, the medication must penetrate the skin surface to reach the nerve fibers damaged in neuropathy, Fernyhough said. Inhibiting the receptors should allow regeneration.

"What we've discovered, which is novel, is that these muscarinic receptors in these neurons provide a sort of tonic (sustained) inhibition of ongoing growth," Fernyhough said.

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