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Taking stock in biotechnology futures

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Abstract

Investors now have a new tool to help them manage the risk associated with biotechnology investment. Individual and professional investors can more confidently invest in companies whose products take years to develop and potentially several more to gain regulatory approvals and commercialise. This paper focuses on the development of the first stock index futures for the biotechnology market. Together, the Chicago Mercantile Exchange and the NASDAQ Stock Market, Inc. have launched an investment product to help reduce risk and foster greater confidence in biotechnology investment. By managing risk in the biotech sector, Biotechnology Index futures should appeal to a broader base of investors while offering greater visibility to biotechs included in the Index.

INTRODUCTION

The market and promise for biotechnology often are characterised by high hopes tempered by the realisation of long product-to-market cycles. While biotechs tend to be riskier than other securities within the broader technology sector, investments in biotech companies have the potential to provide perhaps the greatest long-term impact on our lives as both an investment and because of the impact on our quality of life.

Consider these examples:

- corn, tobacco and rice that synthesise rare human proteins to literally grow life-saving drugs, such as plant-based insulin and vaccines for hepatitis B and cholera.
- A device that can read neurons firing in the brain of a paralysed patient enabling him to 'think' computer commands.
- Personalised DNA sequencing that enables development of designer drugs with no side effects.
- Mapping the genome of and curing common diseases such as malaria.

The good news is that these breakthroughs are but a brief glimpse of what is, or will soon be, possible thanks to sustained investment in biotechnology. This investment is two-fold – investment in companies, themselves, which in turn leads to increased investment in research and development. The better news is that investment in biotechnology has recently become more palatable to a wider investor/trader audience.

In April, the Chicago Mercantile Exchange (NYSE: CME), the largest futures exchange in the USA, and the Nasdaq Stock Market, Inc. (NASDAQ®)¹ announced a new way for individual and institutional investors to manage risk and the uncertainty associated with biotechnology investment. Through an expanded partnership, the exchanges will develop new derivatives contracts, including futures and options on futures contracts based on the NASDAQ Biotechnology Index® (NBI). These new contracts are the first futures designed specifically to hedge risk in the biotech sector, and will provide investors an alternative to other investment strategies, such as biotech-specific mutual funds or specialist unit trusts. The new CME E-mini™ NASDAQ Biotechnology Index futures contracts, expected to

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launch in September 2005, will be traded exclusively on the CME[®] Globex[®] electronic trading platform.

INDEXES AND FUTURES DEFINED

An index is a group of securities that an Index Provider selects as representative of a market, market segment or specific industry sector. The Index Provider determines the relative weightings of the securities in the index and publishes information regarding the market value of the index. Stock index futures are contracts to buy or sell the value of a specific stock index at a specific price on a specific date in the future. Businesses and individual traders trade stock index futures for different reasons, but primarily to try to profit or protect themselves from changes in the price of the underlying indexes. Financial professionals, such as pension and mutual fund managers, typically use index futures for managing risk and hedging portfolios against adverse price moves. Different from mutual funds or trusts, index futures offer a broader, representative cross-section of a market sector and, therefore can increase portfolio stability.

CME E-mini[™] NASDAQ Biotechnology Index futures contracts will make getting into the biotech market even easier for all investors and traders. Rather than having to pick individual stocks or companies and hoping to pick correctly, investors now will be able to trade the entire biotech territory at once by investing in biotech futures. For example, suppose an investor wants exposure to a broad-based index consisting of NASDAQ biotechnology stocks. Capital is limited; therefore, he or she normally would have to limit the purchase to a few carefully researched and well-chosen biotech securities or the BGI I-Shares exchange traded fund that tracks this NASDAQ index. Now individuals, both investors and traders, can diversify their investments by purchasing CME E-mini[™] NASDAQ Biotechnology Index futures contracts. By essentially

investing in the US biotech market as a whole rather than in a handful of individual biotech stocks, investors benefit from even greater diversification. If a few chosen stocks sharply decline in value or bust, an investor risks losing his or her entire investment. With biotech index futures, fluctuations in individual stocks are mitigated by overall market performance.

The CME E-mini[™] NASDAQ Biotechnology Index futures contracts will be based on the NASDAQ's Biotechnology Index, which launched in 1993 and now includes more than 150 components. The Index is managed by calculated under a modified capitalisation-weighted methodology (share price × number of shares outstanding). To be eligible for inclusion in the Index, a security must be listed on the NASDAQ Stock Market and meet the following criteria:

- The security US listing must be exclusively on the NASDAQ National Market (unless the security was dually listed on another US market prior to 1st January, 2004, and has continuously maintained such listing).
- The issuer of the security must be classified according to the FTSE[™] Global Classification System as either biotechnology or pharmaceutical.
- The security may not be issued by an issuer currently in bankruptcy proceedings.
- The security must have a market capitalisation of at least US\$200m.
- The security must have an average daily trading volume of at least 100,000 shares.
- The issuer of the security may not have entered into a definitive agreement or other arrangement which would likely result in the security no longer being in the Index.

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NASDAQ Biotechnology Index

- The issuer of the security may not have annual financial statements with an audit opinion that is currently withdrawn.
- The issuer of the security must have 'seasoned' on NASDAQ or another recognised market for at least six months; in the case of spin-offs, the operating history of the spin-off will be considered.

CME E-mini™ NASDAQ Biotechnology Index futures contracts will be sized at US\$50 times the NASDAQ Biotechnology Index, or approximately US\$33,000 at current index levels, and will have a tick size of 0.10 index points or US\$5.00. The contracts will trade on the CME Globex electronic trading platform Monday to Thursday from 3:30 p.m. to 3:15 p.m. ET, and from 5 p.m. to 3:15 p.m. ET on Sundays. As previously mentioned, NASDAQ also licenses an exchange traded fund on the biotech index to BGI (the BGI I-Shares NASDAQ Biotechnology ETF) which maintains more than US\$1.1bn in assets under management and averages more than 1.4 million shares per day.

CONCLUSION

With more 'retail appeal,' these innovative new CME E-mini™ NASDAQ Biotechnology Index futures contracts will not only provide new

hedging and risk management opportunities for a variety of investors worldwide, but also drive direct and indirect visibility for the many promising biotechnology companies listed in the Index. That opportunity for increased visibility can build investor confidence while greatly improving a biotech's ability to attract new and sustain current investments. And as all biotech companies well know, money is time – time needed for the critical processes of research and development, conducting drug trials, and gaining regulatory approvals.

Recently, biotechnology has been one of the most exciting and potentially rewarding industries for savvy investors. The launch of new investment options such as the CME E-mini™ NASDAQ Biotechnology Index futures contracts will enable all types of investor to invest and trade in the biotech sector with new tools. Index futures also have added benefit to the companies that are included in the index. With greater visibility and the opportunity to tap a broader community of investors and traders, the pressure on biotechs to quickly commercialise the next drug or secure that next round of funding may ease so they can better focus on their ultimate business of improving the quality of our lives, now and in the future.

Reference

1. URL: <http://www.NASDAQ.com>