



## G000 Strategic Volatility Fund

## *Strategy Description*

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This presentation describes one of the Proteom Fund strategies, the G000 Strategic Volatility Fund, which is one of 20 fund series within the overall fund. Proteom comprises a master/feeder structure. The Bermuda based Proteom Fund Ltd is the master fund; the Proteom Global Equity Fund Ltd is a Bermuda feeder fund, while the Proteom Equity Fund LLC is a US feeder fund.

**More information on the Proteom Fund, including information about other fund series, is given on the web site at [www.proteomcapital.com](http://www.proteomcapital.com)**

# Disclaimer

All information herein is qualified in its entirety by the more detailed information contained in the relevant Confidential Private Placement Memorandum. This brochure does not constitute an offer to sell or a solicitation of an offer to purchase any investment product, which can only be made by the Confidential Private Placement Memorandum. An investment in the partnership and/or fund described herein involves significant investment considerations and risks which are described in the Confidential Private Placement Memorandum. Each potential investor should read the Confidential Private Placement Memorandum in its entirety and should carefully consider the risk warnings and disclosures set out therein before making an investment decision.

**Past performance is no guarantee of future results.**

While every effort has been made to provide data from sources considered to be reliable, no guarantee of accuracy is given. Contents of the brochure are subject to change and periodic revisions without prior notice.

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The purpose of presentation is to provide basic information about the Proteom Fund, its management and one of its principal strategies. We will look in some detail at the track record of the strategy and identify the source of its superior performance. We will discuss elements of the technical know-how underpinning the strategy, as well as aspects of risk management and execution.

More information about the Proteom Fund, its management, the technologies and the strategies can be found in:

1. The Technical Presentation
2. The 2-page Strategy Summary
3. The Zephyr Style Advisor Report
4. The Detailed Strategy Analysis
5. The Fund's Due Diligence Questionnaire

**All of the above are available on the Proteom web site at [www.proteomcapital.com](http://www.proteomcapital.com)**

## Concept



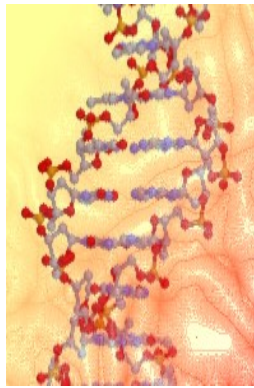
“Using the power of computational econometrics to navigate financial markets.”

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Jonathan Kinlay founded the investment research and consultancy firm Investment Analytics in 1998. The firm provides independent research focusing on applications of sophisticated mathematical and financial modeling techniques to problems of strategy development and repair, performance analysis and risk management for clients in the investment management industry in Europe and North America. Investment Analytics has developed a highly successful proprietary investment program based on sophisticated econometric models that are used to forecast asset volatility and identify option arbitrage opportunities. The program was licensed to the hedge fund Caissa Capital, which Mr. Kinlay founded in 2002, before going on to found the Proteom Fund in 2004.

# Investment Objectives

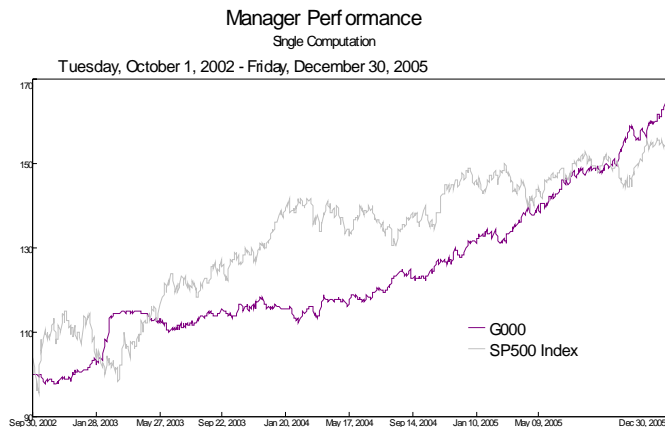
- Return
  - Annual Returns 10%-15%
  - Volatility 6% - 9%
  - Sharpe Ratio > 1.3
- Risk
  - Drawdown < 1 qtr. avg. return
  - Portfolio beta < +/- 0.1
  - Correlation with SP500 < +/-0.1
  - Correlation with VIXX < +/- 0.1



The goals of the strategy are:

- to produce equity-type returns in the region of 10%-15% a year with bond-type risk in single digits (6%-9%).
- the strategy should have low beta and be uncorrelated with major US equity and volatility indices (S&P500 and VIX).

# Historical Performance



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Live tests of the strategy since October 2002 show that the investment objectives can be achieved.

This is the daily asset value of investing in the S&P500 Index and the Proteom G000 Fund. This asset value is net of all fees, including trade fees, management fees, and incentive fees. This strategy uses no leverage.

## Performance Summary

Oct 2002 -Dec 2004	SP500	G000
Compound Return	13.97%	16.38%
Downside Risk	9.56%	4.14%
Volatility	14.67%	6.83%
Beta		-0.02
Sharpe	0.87	2.24
Information Ratio		0.15
<b>Annualized Alpha</b>		<b>15.66</b>

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- Returns net of all trading costs, management and performance fees

The strategy has achieved a superior risk-adjusted rate of return over the period since Oct 2002, with an annualized alpha of 15.66%. All investment objectives are met. The low beta (and correlation) support the theory that the strategy is a source of uncorrelated alpha.

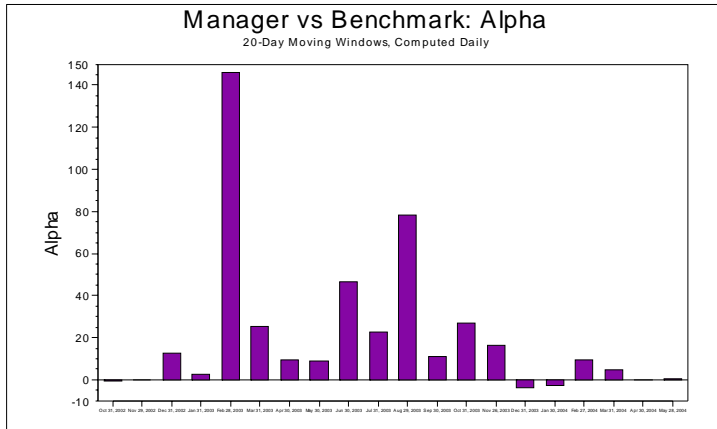
# Monthly Returns

<b>2002</b>										<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>2002</b>
<b>Fund</b>										-1.14	-0.10	2.36	<b>1.09</b>
<b>Index</b>										8.64	5.71	-6.03	<b>8.00</b>
<b>2003</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>2003</b>
<b>Fund</b>	2.51	10.45	0.49	-0.71	-1.46	-0.62	0.34	2.18	-0.19	1.35	1.99	-1.83	<b>14.88</b>
<b>Index</b>	-2.74	-1.70	0.84	8.10	5.09	1.13	1.62	1.79	-1.19	5.50	0.71	5.08	<b>26.38</b>
<b>2004</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>2004</b>
<b>Fund</b>	-1.81	1.60	1.78	-0.38	0.89	0.68	1.16	2.11	0.00	2.51	2.84	1.39	<b>13.45</b>
<b>Index</b>	1.73	1.22	-1.64	-1.68	1.21	1.80	-3.43	0.23	0.94	1.40	3.86	3.25	<b>8.99</b>
<b>2005</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>2005</b>
<b>Fund</b>	1.51	-1.66	3.46	1.24	3.51	1.73	2.44	-0.47	1.35	5.49	0.90	3.06	<b>24.82</b>
<b>Index</b>	-2.53	1.89	-1.91	-2.01	3.00	-0.01	3.60	-1.12	0.69	-1.77	3.52	-0.10	<b>3.00</b>

## Notes:

1. Live trading in the period Oct 2002 – July 2004
2. Returns are net of trading costs and management fees.

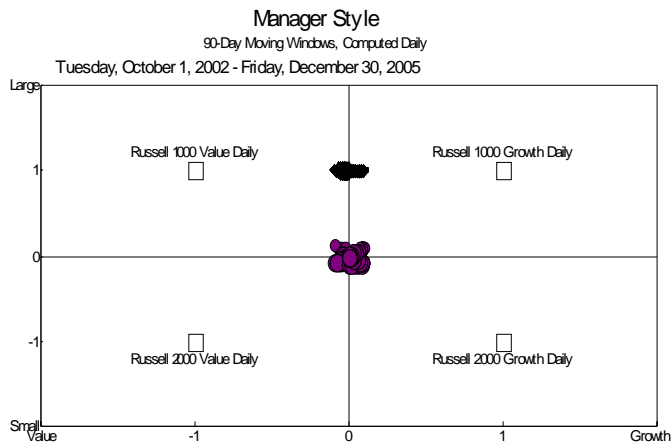
# Alpha Generation



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Analysis shows that the strategy consistently generates positive alpha during varying market conditions: during periods when the market is strong or weak, and also when volatility levels are relatively high or low.

# Style Analysis



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Detailed analysis using the Zephyr Style Advisor System indicates that the strategy operates with a style close to that of a non-directional market neutral strategy. This finding confirms that the strategy is making money from arbitrage opportunities rather than from directional trades.

## Experience



- Jonathan Kinlay, PhD
  - CEO of Proteom Capital Management Ltd.
  - Founder \$350M Caissa Capital fund
  - Managed \$50M hedge fund for 7 Years
  - Founder, Investment Analytics
  - Adjunct Professor, new York University



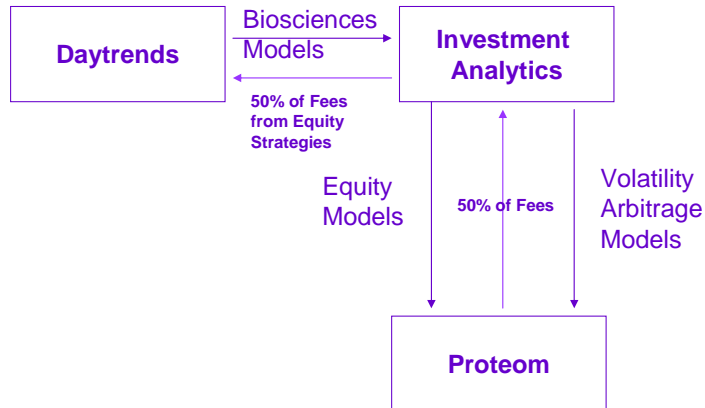
- Haftan Eckholdt, PhD
  - Graduate degrees Cornell & Columbia
  - Biostatistician for 10 years
  - Headed Biometry in Neuroscience
  - Founded Daytrends Inc. in 2000

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Jonathan Kinlay and Haftan Eckholdt have been working together since 2000. Jonathan headed a diligence team at Investment Analytics which was hired by the funding partners. Haftan Eckholdt founded DayTrends to design investment strategies using computational biology. Eventually they decided to work together to offer a range of strategies based on that technology.

Jonathan has been involved in investment management since the early 1980's initially with Natwest and Chase Manhattan banks and then as a Director of a European hedge fund. More recently, in 2002 he founded the Caissa Capital hedge fund which had \$170M under management in its volatility arbitrage strategies when Mr Kinlay left to establish Proteom in 2004.

## Ownership Structure



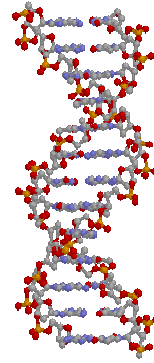
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Investment Analytics originated the econometric methodologies underpinning the volatility arbitrage strategies and owns all of the intellectual property, which is made available to Proteom under license. Investment Analytics receives 50% of the management and performance fees generated from volatility arbitrage strategies.

Daytrends originated the biosciences methodologies which underpin the equity strategies and owns all of the intellectual property. This is made available to Proteom via Investment Analytics, which holds a master license from Daytrends. Investment Analytics receives 50% of the management and performance fees generated from the equity strategies, which is then passed through to Daytrends.

# Investment Approach

- Investment Universe
  - 200 most liquid S&P 500 index members
  - Around 400-600 long/short stock & option positions
  - Option spreads 40-50 days out
- Portfolio Construction
  - Econometric forecasting models
  - Long/Short volatility portfolios
- Risk Management
  - Intraday Value-at-Risk monitoring
  - Risk management technique for extreme moves



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Using S&P500 members has several advantages.

- It provides diversification, especially since we typically invest in about 200 members.
- These members have a great deal of liquidity, by definition.
- We use the SPY for hedging, which is also very liquid, and very inexpensive, and provides a stable relationship to the benchmark.

Sophisticated econometric models are used to forecast future volatility and identify option arbitrage opportunities. Genetic algorithms are used to construct long/short volatility portfolios that have performance characteristics meeting the investment objectives.

The portfolio VaR is monitored in real time and the portfolio is crash-protected against extreme market risk.

## Advantages

- Superior Performance
  - Annual alpha of 15.66%
  - Sharpe ratio 2.24
- Low Risk
  - Zero beta
  - Uncorrelated
  - Volatility
  - Downside risk



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- The Sharpe ratio for the period from Oct 2002 is 2.24 for the strategy compared to just 0.87 for the benchmark
- The annual alpha over the period was 15.66%
- The portfolio is highly diversified and has comparable volatility to the S&P500 index.
- The strategy performed well during periods when the market was weak or strong, and when volatility was relatively high or low.
- The strategy beta is negligible and the strategy is uncorrelated with both equity and volatility indices.
- Strategy downside risk at 4.14% is less than half that of the benchmark (9.56%)

## Advantages

- **Unique Proprietary Technology**
  - Sustainable competitive advantage
  - Consistent strategy alpha
- **Capacity & Scalability**
  - \$billions capacity in S&P500 universe
  - Non-discretionary trading and automated execution platform offer rapid scalability
- **Experienced team**
  - 20 years money management experience
  - Profitable track record quantitative strategies



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- The technology is licensed to Proteom from the investment research and consulting firm Investment Analytics. It comprises sophisticated quantitative econometric algorithms that have been developed by the firm.
- The direct linkage of the modelling systems to the trading platform facilitates the execution of designated trades at very high speeds and low cost. That technology enables the rapid scaling up of the investment portfolios as new investment capital is received.
- The team has direct experience of developing and implementing highly successful investment strategies based on complex innovative analytical methods

# Portfolio Construction

- Proprietary volatility forecasting models
  - Six different model types per stock
  - Adaptable to current market conditions
    - Regime shift detection models
- Model Management System
  - Updates models daily
  - Produces volatility forecasts
  - Identifies mispriced options
  - Constructs portfolio
  - Creates trading sheet



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Proteom uses an investment program developed by the investment research and consulting firm Investment Analytics. The program operates on a ground-up approach with several different individual models for every asset in the investment universe. Each model emphasizes different aspects of volatility behavior and will perform best under different market conditions. The types of model include: **Long Memory models, Mean Reverting models, Multifactor models, Skewness & Kurtosis models, Asymmetry models and Markov models.**

There are between 4-6 models for each stock. With 200 stocks in the investment universe, there are in excess of 800 models in total.

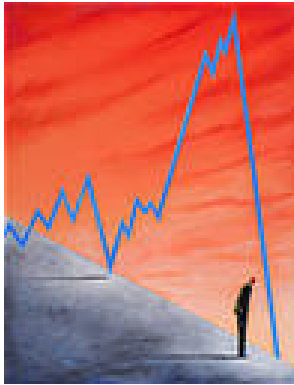
The models are maintained by a Model Management System ("MMS") that analyses the data processed by the data management system, updates each of the models, produces current forecasts and evaluations the performance of each of the models. The MMS rates each model on the basis of approximately 30 different criteria and compares the current performance of each model with its historical performance, with the performance of other models of the same process and with the performance of models for other asset processes. The MMS then selects the best models, whose aggregate results lie in the upper quartile of performance. In this way the system automatically biases volatility forecasts to favor models best suited to current market conditions, while filtering out models which are currently performing with lower accuracy.

Note that, in addition to the forecasting models, there is a class of models whose purpose is to detect regime shifts in the underlying volatility processes. Regime shifts may occur as a result of, for instance, merger activity, new product launches, or large-scale changes in the firm's capital structure. They may also occur across entire markets, as happened in Asian markets in 1997. Our models detect these kind of changes very quickly and reliably: for instance they have detected regime shifts in stocks like IBM in the mid-1980's when the IBM PC was launched; also automotive stocks in the early 1980's at the time of the Chrysler bail-out; and in banking stocks during the Latin-American debt crisis of the late 1980's. More recently, they identified regime shifts in the technology sector in the mid 1990's and again in 2000. Various complex econometric procedures are applied to examine and adjust models for volatility processes which have undergone a regime shift. The regime-shift detection procedures make the entire methodology much more robust and reliable than most stat. arb. systems.

The final stage of the modelling process entails the creation and distribution a trading sheet containing the detailed trading recommendations. The sheet gives the current volatility forecast for every stock in the investment universe, but highlights only those option trades which meet the pricing differential criterion. Options that have been selected for purchase (sale) are highlighted in blue (red), and the sheet gives the market bid and offer prices and the theoretical price based on the systems volatility forecasts. In addition, the output shows the quantity of options to be bought or sold, the % price differential and the option delta, so that trades can readily be executed on a market-neutral basis.

Trading sheets are contained in an Excel workbook, which is emailed by an automated email server to a specified list of email recipients, usually members of the trading and risk management team.

# Risk Management

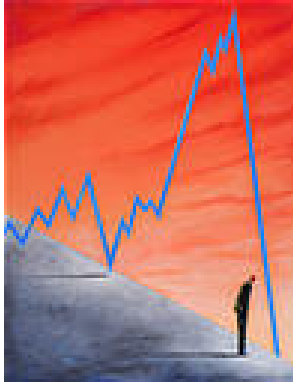


- Extreme Markets / Event Risk
  - Operate portfolio within Value-at-Risk limit
  - Stress test for 20% down move
  - CrashMetrics methodology to hedge tail risk
  - Diversification (across stocks, option maturities, multiple entry points)
- Volatility Risk
  - Stress test for 50% increase in volatility
  - Attempt to remain Gamma positive or limit negative Gamma
  - Buy cheap wing protection

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- The SVF portfolio is operated within a 1% daily VaR limit (95% confidence). There have been fewer than expected penetrations of that limit since inception.
- In addition the portfolio is stress tested for 20% market crashed to ensure that losses are within limits. The portfolio is very highly diversified across 300 stocks, with multiple option strikes and maturities. The degree of diversification is comparable to that of the entire S&P 500 index. We also use CrashMetrics specifically to hedge the tail risk in the portfolio.
- The portfolio is also stress tested for quantum leaps in volatility. We attempt to keep the portfolio Gamma neutral or positive in the wings and also Theta positive (which we achieve by buying cheap Gamma and selling expensive Theta).

# Risk Management



- Liquidity Risk

- Screen stocks for liquidity
- Invest in only most highly liquid SP500 names (plus SPX and QQQ)
- Maximum allocation to any single stock is 4% of capital

- Execution Risk

- Monitor earnings
- Screen trades in stocks with M&A activity, FDA approvals, etc

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•All of the stocks in the universe are screened to ensure adequate liquidity both in the options and underlying stocks (for hedging purposes). The allocation to any individual names is capped at 4% of capital.

•At the time of execution model recommendations are screened by experienced traders for event-specific risks such as earnings, FDA approval decisions, or merger activity.

# Execution

## REDIPlus<sup>®</sup> Electronic Trade Platform



- Across all major exchanges
- Minimize visibility of execution
- Fast & efficient
- Low cost (no brokerage fees)
- Trade inside bid-offer spread
- Minimal market impact

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The REDI system is the foremost and most widely used automated execution system available. Trades amounting to \$billions of dollars are executed daily on the REDI platform in program trading strategies. The Proteom system has been trading **live** on the REDI platform since 2003.

The execution platform allows us to trade across all the major exchanges, although the electronic ISE exchange provides the greatest volume and liquidity. Unlike using brokers, the electronic system allows us to trade the portfolio with complete anonymity and very low cost – at or lower than the price paid by most floor traders. Because we trade only the most liquid of the S&P500 stocks, there is minimal market impact and slippage between model prices and the prices achieved in execution.

# Investor Information

## TERMS OF INVESTMENT

<b>Management Fees</b>	2%
<b>Performance Allocation</b>	25%
<b>Minimum Investment</b>	\$1 million US
<b>Subscriptions</b>	Monthly
<b>Redemptions</b>	Quarterly, 30 days notice 5% penalty in year 1
<b>Lock-up</b>	None
<b>High Water Mark</b>	Yes
<b>Managed Account Minimum</b>	\$30 million US

## Service Team

<b>Legal</b>	USA: Coudert Brothers Bermuda: Appleby Spirling Hunter
<b>Prime Broker</b>	Goldman Sachs
<b>Custodian</b>	Spear Leeds Kellogg
<b>Auditor</b>	Ernst & Young
<b>Administrator</b>	Bisys

## Summary

- Proprietary econometric models
- Long/Short volatility arbitrage
- Consistent, uncorrelated alpha
- Experienced, competent team

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G000 Strategic Volatility Fund is a stat. arb. product that uses proprietary econometric techniques to create and manage long-short, volatility portfolios capable of producing double-digit, uncorrelated alpha with low risk. The Fund is managed by a highly competent technical team with extensive experience of creating successful quantitative investment strategies.

## Further Information

- Proteom Web Site: [www.proteomcapital.com](http://www.proteomcapital.com)
  - User name: pinvestor
  - Password: proteom
- Go to the Proteom web site for:
  - Technical Presentation
  - Two Page Strategy Summary
  - Zephyr Style Advisor report
  - Detailed Strategy Analysis
  - Due Diligence Information
  - Offering Documents

## Contact

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# Notes

1. Proteom Capital Management Ltd is the Investment Manager of the Proteom Fund Ltd.
2. Returns for the Proteom Fund, herein include the reinvestment of dividends, capital gains and other earnings.
3. Nothing herein should be construed as a solicitation of clients, or as an offer to sell or a solicitation of an offer to invest in the fund. Such activities may be made only pursuant to a private placement memorandum. As a matter of practice, Proteom Capital Management Ltd does not solicit clients.
4. NO REPRESENTATION IS MADE THAT ANY INVESTOR IN THE FUND WILL OR IS LIKELY TO ACHIEVE RESULTS COMPRABLE TO THOSE SHOWN OR WILL MAKE ANY PROFIT AT ALL OR WILL BE ABLE TO AVOID INCURRING SUBSTANTIAL LOSSES.
5. While every effort has been made to provide data from sources considered to be reliable, no guarantee of accuracy is given.
6. The contents herein are subject to change without prior notice.
7. This brochure is typically updated as at the most recent calendar month end.
8. Historical data are presented for informational purposes only.
9. Except where stated, funds managed by Proteom do not attempt to track any index or benchmark.
10. Benchmark data are total returns for the indices for the periods shown and are for comparison purposes only.
11. Cumulative benchmark data and performance data are compounded monthly.
12. Volatility is measured by the annualized standard deviation of monthly returns.
13. Investment programs described herein contain significant risks.
14. Proteom Equity Fund LLC is an onshore fund generally open to qualified US investors, as defined.
15. Proteom Global Equity Fund Ltd is an offshore fund generally open to qualified non-US investors, as defined.
16. This presentation is provided for information purposes only and is subject to, and qualified fully by the funds Confidential Private Placement Memorandum (PPM) and related documents.