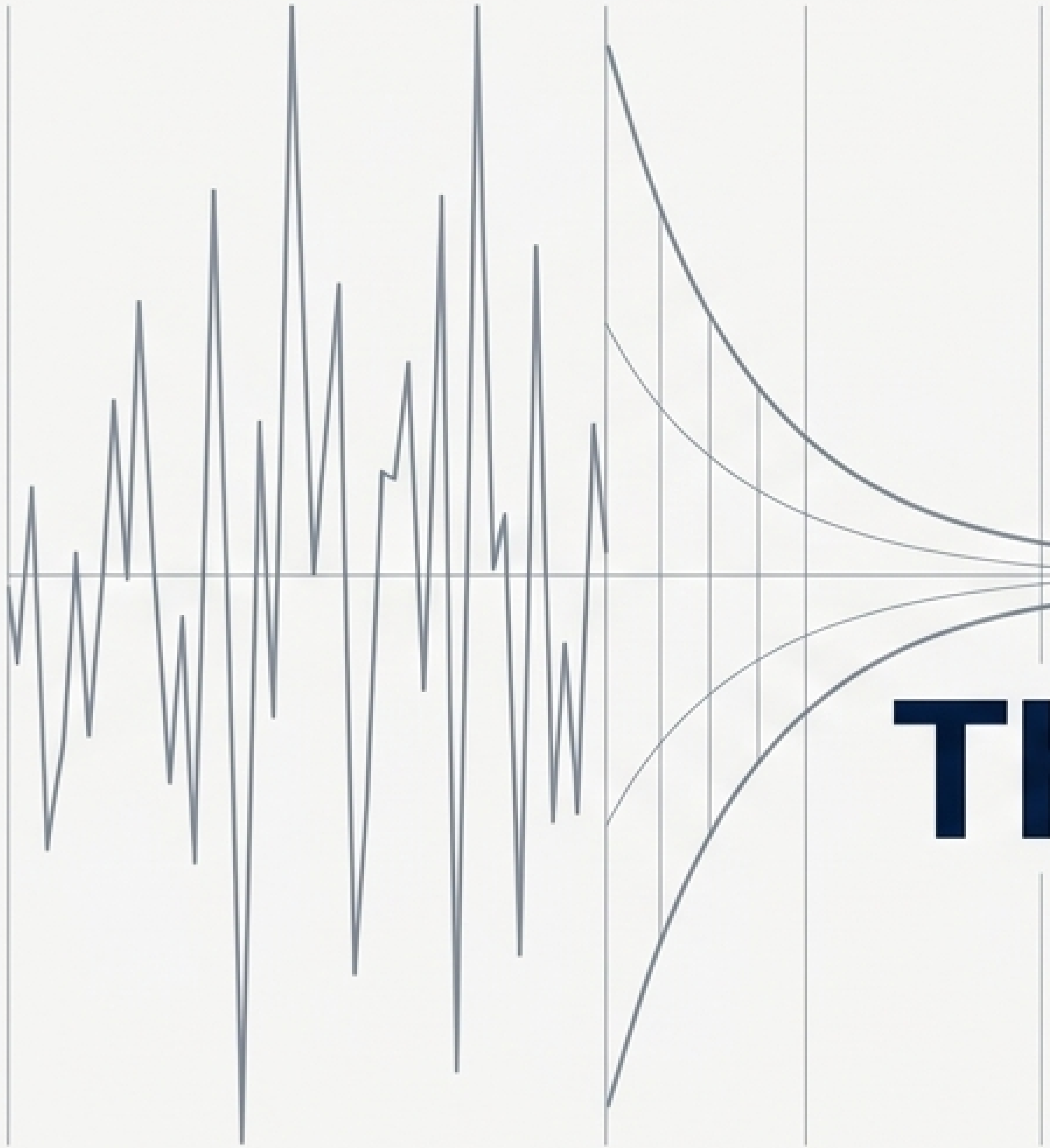
Alpha Query Intelligence (AQI) Research Brief



# The RVX Duration Edge

## Isolating High-Probability IWM Triggers in Low-Volatility Regimes.

N = 1,647 Trading Days | Target: RVX < 20

# The alpha generation trigger requires a specific duration threshold

## RVX < 20 Drives IWM Longs

A sub-20 Russell Volatility Index is structurally bullish for small caps.

## Duration is the Edge

Merely crossing the threshold is insufficient; the edge compounds over consecutive days.

## >92% Probability

Surviving to the 11-15 day threshold triggers a >92% probability of positive IWM returns.

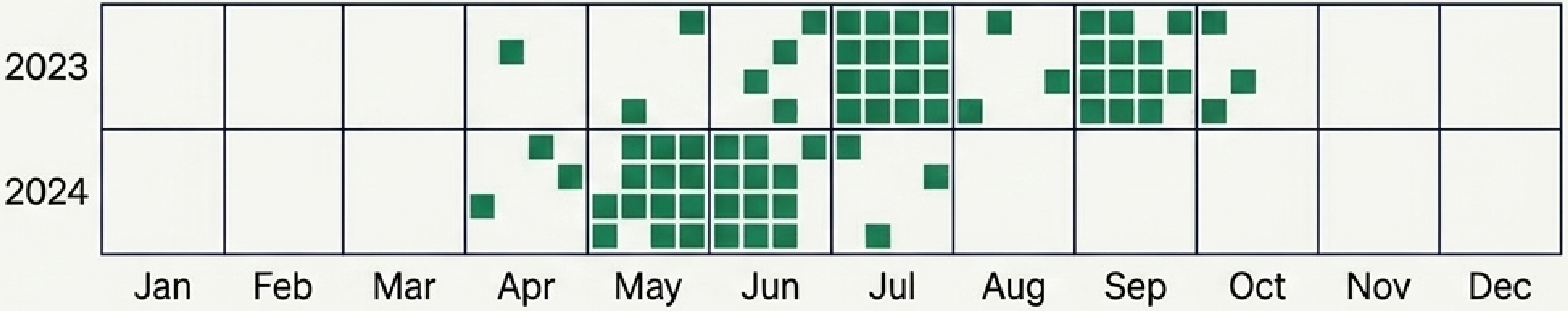
# Low-volatility regimes are historically scarce but currently clustering

# 9.47%

Total historical frequency of RVX < 20

**51 days** recorded in 2023 (peak concentrations in July and September)

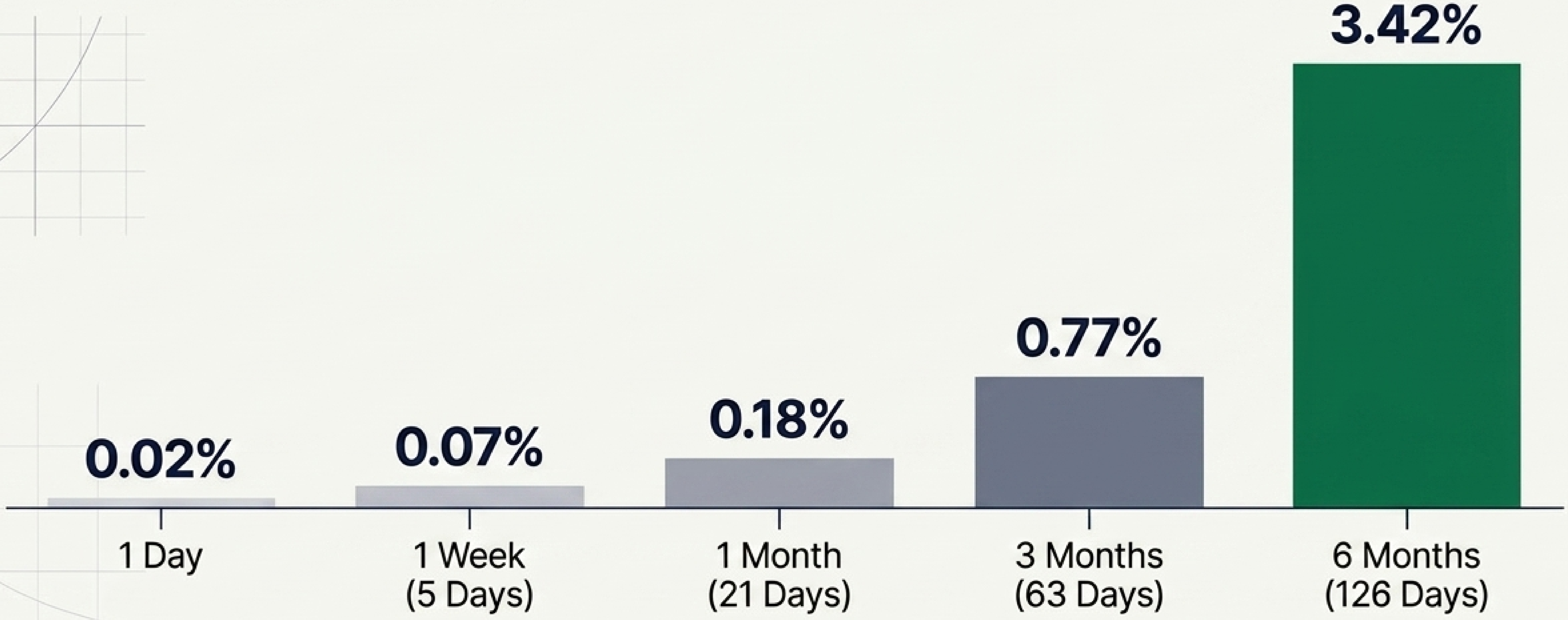
**39 days** recorded year-to-date in 2024 (peak concentrations in May and June)




**The market is currently generating low-volatility pockets at an accelerated, seasonal rate.**

# Forward returns accelerate systematically under the 20 volatility threshold

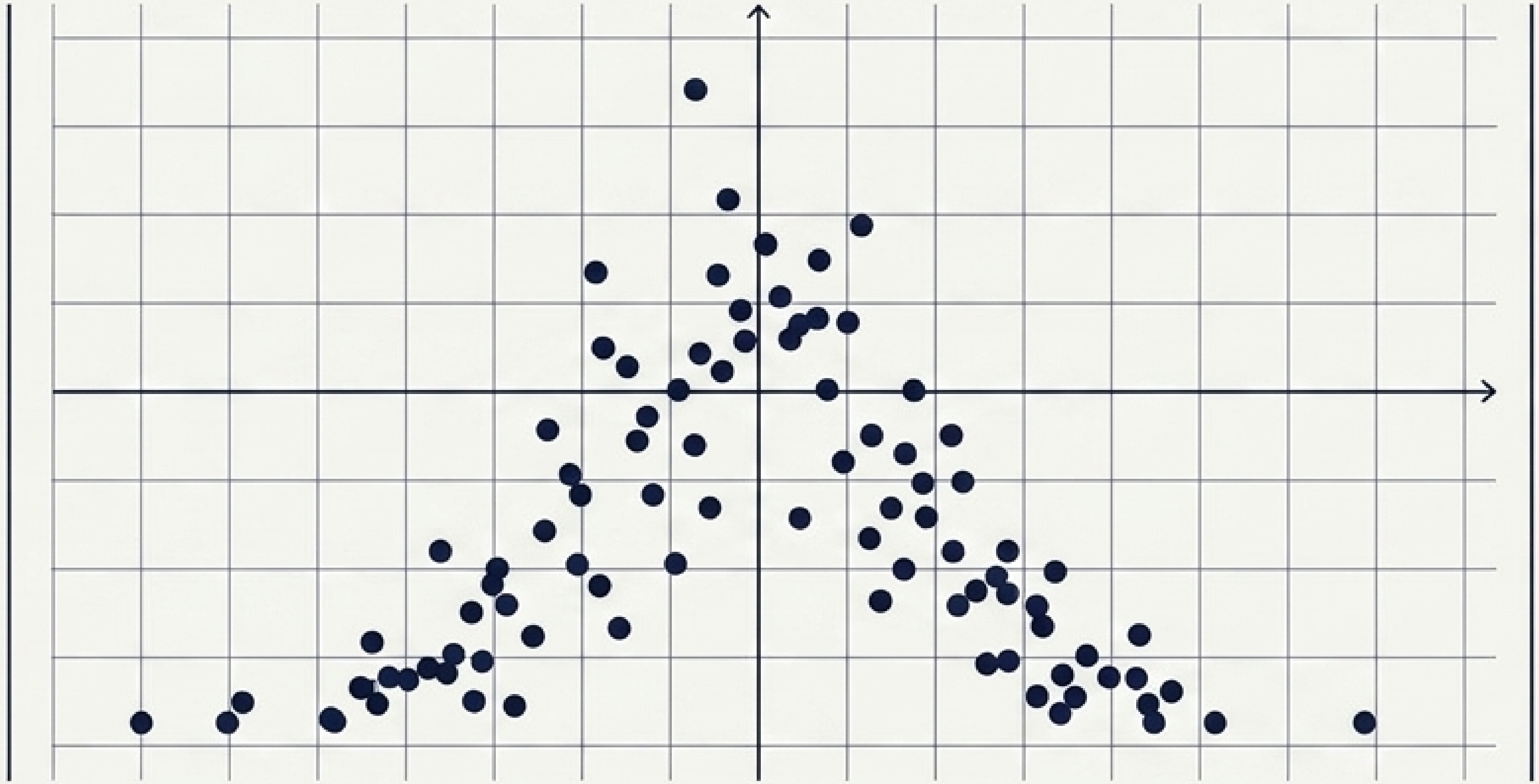
The return profile strictly strengthens and compounds as the time horizon extends within the sub-20 environment.



# Consecutive days below the threshold form measurable streak events

**97**

**Distinct Streak Events identified.**



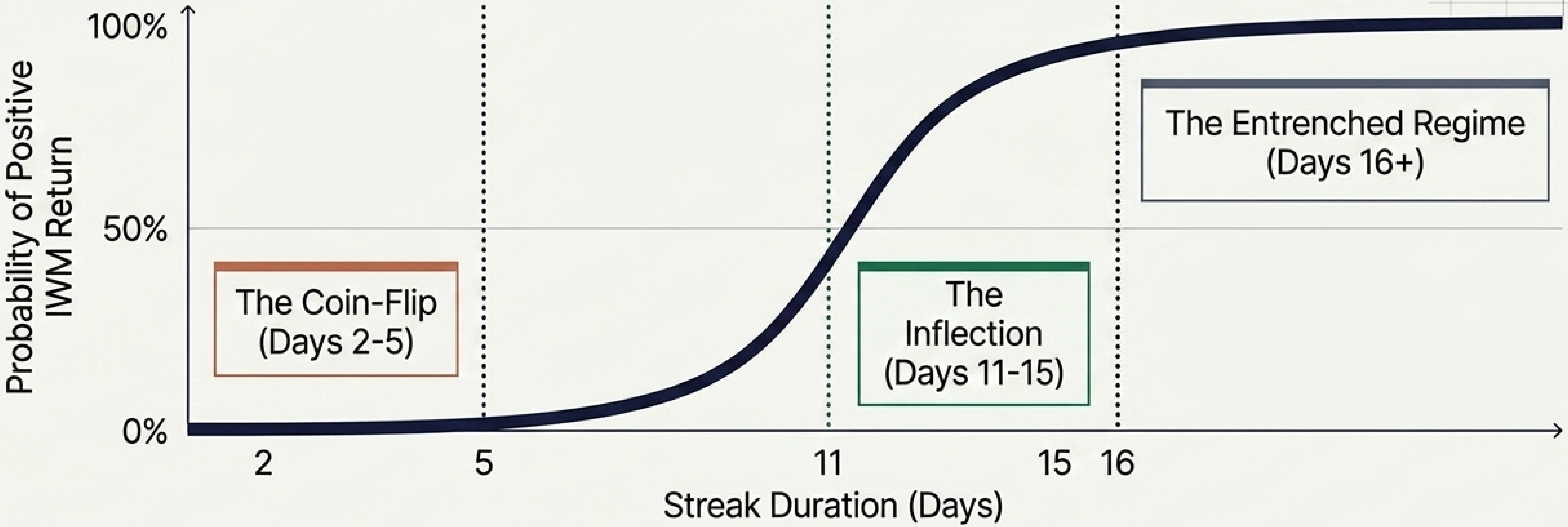
Average Duration = **19.86 days.**

Average IWM Return = **+2.00%.**

Statistical variance across these events measures 11.73, with a standard deviation of 3.42%.

The market averages nearly a full trading month (19.86 days) of continuous suppression once a streak takes hold, generating highly consistent small-cap yield.

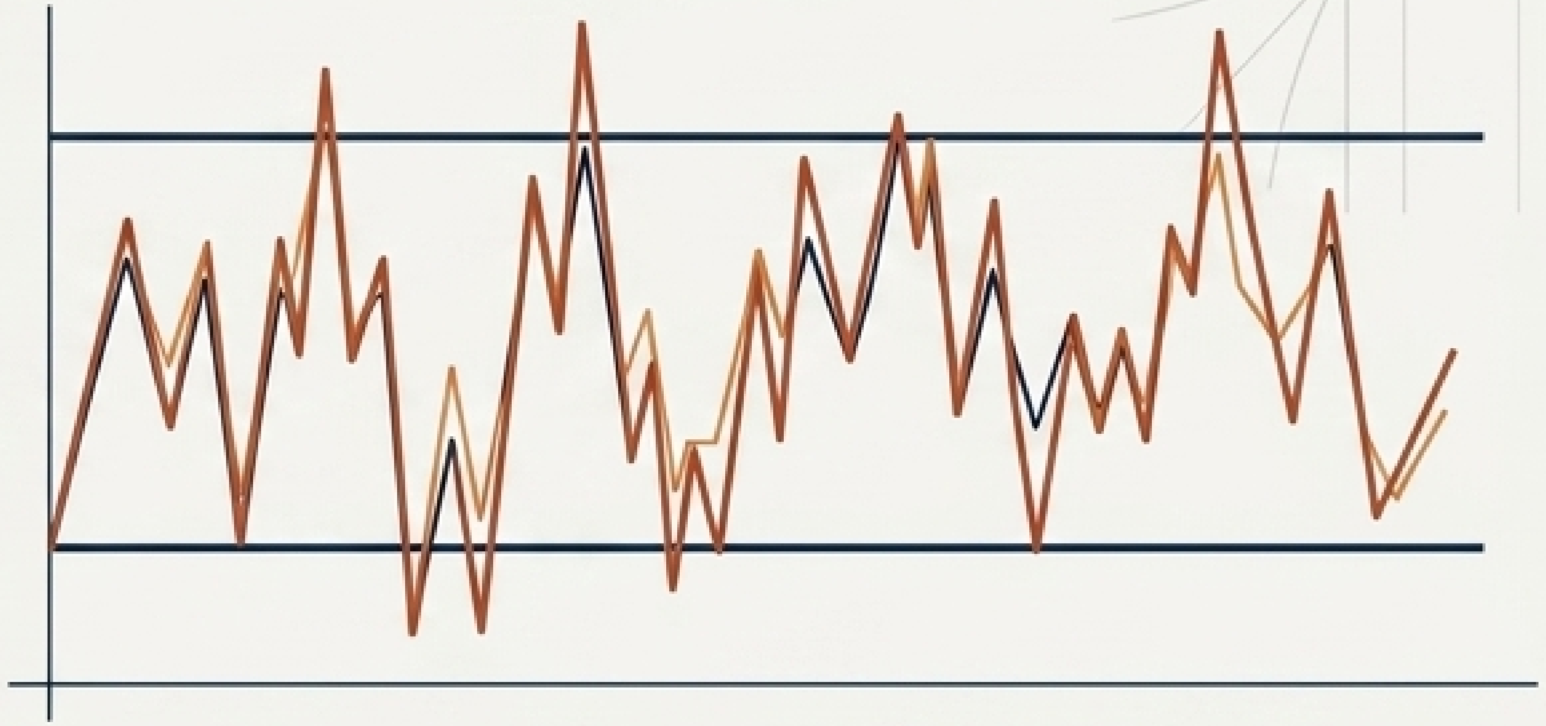
# The Phase Transition maps the leap from noise to directional signal




Statistical variance across these events measures 11.73, with a standard deviation of 3.42%.

The market averages nearly a full trading month (19.86 days) of continuous suppression once a streak takes hold, generating highly consistent small-cap yield.

# Days 2-5 present a false signal characterized by mean-reverting risk



**52.5%**

**Probability of a positive IWM return**

The volatility contraction in this window has not yet proven its durability. Capital deployed here faces a coin-flip probability of success due to the high risk of a mean-reverting volatility spike. Early entry is structurally suboptimal.

# The Day 11-15 window triggers extreme probability asymmetry

**>92%**

**Probability of a positive IWM return**

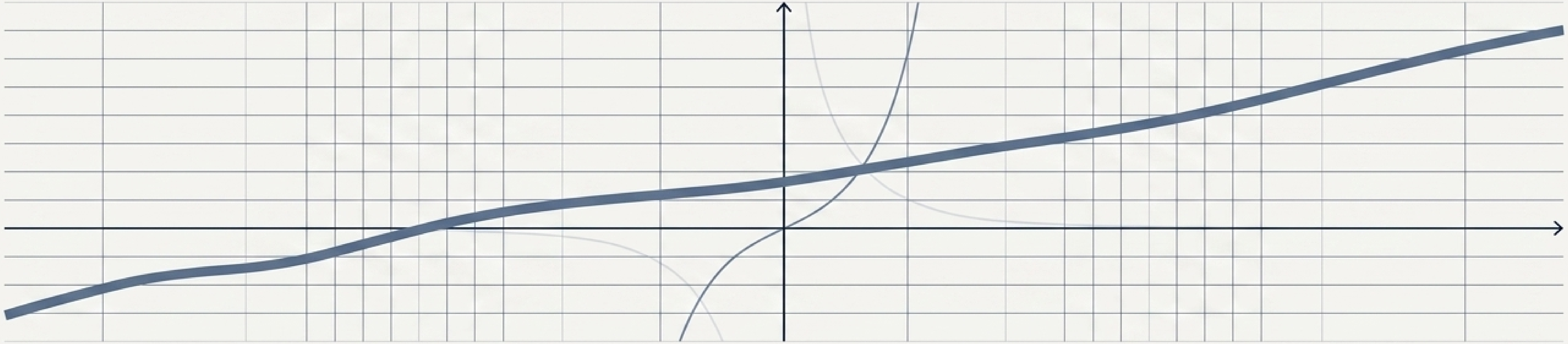
### Mathematical Filter

Surviving to Day 11 acts as a rigorous mathematical filter against false signals. The market transitions from a fragile state to a high-conviction directional bias.

### Strategic Stance

This is the precise entry threshold for aggressive long delta exposure in the Russell 2000.

# Streaks extending beyond three weeks become self-sustaining tailwinds



## Timeline

Days 16+ (The Entrenched Regime).

## Market Stability

Regimes lasting beyond three weeks maintain exceedingly high probabilities of both continuing the sub-20 RVX state and generating positive IWM returns. The environment is now stable.

## Strategic Pivot

Pivot from aggressive entry behavior to trend-riding. The average streak historically resolves around the 19.86-day mark, signaling the window to trail stops.

# The AQI Regime Classification Matrix

| DURATION (DAYS) | WIN PROBABILITY | MARKET STATE | STRATEGIC ACTION |
|---|---|---|---|
| 2-5 Days | 52.5% | Fragile / Mean-Reverting | Wait & Observe |
| 11-15 Days | >92% | Crystallized Signal | Deploy Long Delta |
| 16+ Days | High Continuation | Self-Sustaining Trend | Ride & Trail Stops |

# Structuring the trade around the Day 11 duration threshold

**RVX Closes < 20 for 11 Consecutive Days**

### Equity PMs

Rotate capital into small-cap exposure (IWM) to capture the 92% historical probability of upside.

### Options/Vol Traders

Sell IWM puts or put spreads. The established low-vol regime supports premium collection with minimal risk of aggressive downside expansion.

### Risk Managers

Expand risk limits on existing long portfolios, as the entrenched regime signals a mathematically safe environment for beta exposure.

# Alpha Query Intelligence

## Quantitative Research & Systematic Strategy

Historical quantitative probabilities, including the >92% win rate and 19.86 day average streak duration, do not guarantee future performance. This document serves as a statistical research brief for sophisticated capital allocators and does not constitute direct financial advice.