



FRANKLIN
TEMPLETON



A Franklin Templeton Company

Putnam

VT U.S. Research Fund

Summary Prospectus | May 1, 2026

Class IA (-), Class IB (-)

Before you invest, you may want to review the fund's prospectus, which contains more information about the fund and its risks. You can find the fund's prospectus, statement of additional information, reports to shareholders and other information about the fund online at www.franklintempleton.com/prospectus. You can also get this information at no cost by calling 1-800-225-1581 or by sending an e-mail request to funddocuments@putnam.com.

The fund's prospectus and statement of additional information, both dated May 1, 2026, as may be supplemented, are all incorporated by reference into this Summary Prospectus.

Prior to May 1, 2026, Putnam VT U.S. Research Fund was named Putnam VT Research Fund.

Goal

The fund seeks capital appreciation.

Fees and expenses

The following table describes the fees and expenses you may pay if you buy, hold and sell shares of the fund. **You may pay other fees, such as brokerage commissions and other fees to financial intermediaries, which are not reflected in the tables and examples below.** The fees and expenses information does not reflect insurance-related charges or expenses borne by contract holders indirectly investing in the fund. If it did, expenses would be higher.

Annual Fund Operating Expenses (expenses you pay each year as a percentage of the value of your investment)

Share class	Management fees	Distribution and service (12b-1) fees	Other expenses	Total annual fund operating expenses
Class IA	0.53%	None	0.15%	0.68%
Class IB	0.53%	0.25%	0.15%	0.93%

Example

The following hypothetical example is intended to help you compare the cost of investing in the fund with the cost of investing in other funds. The example does not reflect insurance-related charges or expenses. If it did, expenses would be higher. It assumes that you invest \$10,000 in the fund for the time periods indicated and then redeem or hold all your shares at the end of those periods. It assumes a 5% return on your investment each year and that the fund's operating expenses remain the same (except that any applicable fee waiver or expense reimbursement is reflected only through its expiration date). Your actual costs may be higher or lower.

Share class	1 year	3 years	5 years	10 years
Class IA	\$69	\$217	\$378	\$846
Class IB	\$95	\$297	\$515	\$1,144

Portfolio turnover

The fund pays transaction-related costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher turnover rate may indicate higher transaction costs. These costs, which are not reflected in annual fund operating expenses or the above example, affect fund performance. The fund's turnover rate in the most recent fiscal year was 70%.

Investments, risks, and performance

Investments

Under normal circumstances, the fund will invest at least 80% of its net assets (plus the amount of borrowings for investment purposes, if any) in equity securities of companies located in the United States. This policy may be changed only after 60 days' notice to shareholders. Equity securities include common stocks, preferred stocks, and convertible securities. The fund considers a company to be located in the United States if the company's securities trade in the United States, the company is headquartered or organized in the United States or the company derives a majority of its revenues or profits in the United States.

The fund invests mainly in common stocks (growth or value stocks or both) of large U.S. companies that the Investment Manager, as defined below, believes have favorable investment potential. The fund's portfolio managers work with sector analysts from the Putnam Equity Research team to identify high-conviction stocks within an analyst's respective sector, using a bottom-up, fundamental research investment process. The Investment Manager may consider, among other factors, a company's valuation, financial strength, growth potential, competitive position in its industry, projected future earnings, cash flows, and dividends when deciding whether to buy or sell investments. The Investment Manager attempts to mitigate risk in the portfolio by applying an integrated process to identify, assess, monitor, and address unintended risks.

Risks

It is important to understand that you can lose money by investing in the fund.

Market risk: The value of investments in the fund's portfolio may fall or fail to rise over extended periods of time for a variety of reasons, including general economic, political or financial market conditions, investor sentiment and market perceptions, government actions, geopolitical events or changes, outbreaks of infectious illnesses or other widespread public health issues, and factors related to a specific issuer, asset class, geography, industry or sector. These and other factors may lead to increased volatility and reduced liquidity in the fund's portfolio holdings, may negatively impact the fund's performance, and may exacerbate other risks to which the fund is subject.

Common stock risk: Common stock represents an ownership interest in a company. The value of a company's stock may fall or fail to rise as a result of factors directly relating to that company, such as decisions made by its management or lower demand for the company's products or services. A stock's value may also fall because of factors affecting not just the company, but also other companies in the same industry or in a number of different industries, such as increases in production costs. Companies whose stocks the Investment Manager believes are undervalued by the market may have experienced adverse business developments or may be subject to special risks

that have caused their stocks to be out of favor. Growth stocks may be more susceptible to earnings disappointments, and value stocks may fail to rebound. From time to time, the fund may invest a significant portion of its assets in companies in one or more related industries or sectors, which would make the fund more vulnerable to adverse developments affecting those industries or sectors.

Large shareholder transaction risk: The fund is subject to the risk that shareholders will purchase or redeem large quantities of shares of the fund. The fund may be an investment option for mutual funds that are managed by the Investment Manager and its affiliates as “funds of funds.” Additionally, other investors from time to time may make substantial investments in the fund. Such shareholders may at times be considered to control the fund. In addition, a large number of shareholders may collectively purchase or redeem fund shares in large amounts rapidly or unexpectedly. Large shareholder transactions may adversely affect the fund’s liquidity and net assets. These redemptions may also adversely affect the fund’s performance if the fund is forced to sell securities, which may also increase the fund’s brokerage costs.

Management and operational risk: There is no guarantee that the investment techniques, analyses, or judgments that the Investment Manager applies in making investment decisions for the fund will produce the intended outcome or that the investments selected for the fund will perform as well as other securities that were not selected for the fund. The Investment Manager, or the fund’s other service providers, may experience disruptions or operating errors that could negatively impact the fund.

The fund may not achieve its goal, and it is not intended to be a complete investment program. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency.

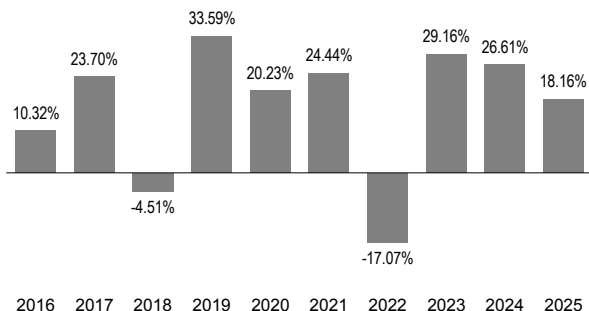
Performance

The accompanying bar chart and table provide some indication of the risks of investing in the fund. The bar chart shows changes in the fund’s performance from year to year for Class IA shares. The table shows the average annual total returns of each class of the fund that has been in operation for at least one full calendar year and also compares the fund’s performance with the average annual total returns of a broad measure of market performance and an additional index with characteristics relevant to the fund. Performance for classes other than those shown may vary from the performance shown to the extent the expenses for those classes differ. The fund makes updated performance information, including its current net asset value per share, available at www.franklintempleton.com.

The fund's past performance (before and after taxes) is not necessarily an indication of how the fund will perform in the future.

Insurance-related charges or expenses are not reflected in the performance information below, and if those charges were included, returns would be less than those shown.

Annual total returns for class IA shares



Best Quarter:	Q2 2020	21.49%
Worst Quarter:	Q1 2020	-19.00%

Average annual total returns

(for periods ended 12/31/25)

Share class	1 year	5 years	10 years
Class IA	18.16%	14.80%	15.36%
Class IB	17.88%	14.52%	15.07%
Russell 3000 Index (no deduction for fees, expenses or taxes)	17.15%	13.15%	14.29%
S&P 500 Index (no deduction for fees, expenses or taxes)	17.88%	14.42%	14.82%

Important data provider notices and terms are available at www.franklintempletondatasources.com. Such information is subject to change.

Your fund's management

Investment Manager

Putnam Investment Management, LLC ("Putnam Management" or the "Investment Manager")

Sub-advisors

Franklin Advisers, Inc. ("Franklin Advisers")

Franklin Templeton Investment Management Limited ("FTIML")

The Putnam Advisory Company, LLC ("PAC")

Portfolio managers

Jacquelyne J. Cavanaugh

Portfolio Manager of Putnam Management and portfolio manager of the fund since 2014.

Robert Gray

Portfolio Manager of Putnam Management and portfolio manager of the fund since April 2026.

Kathryn Lakin

Portfolio Manager of Putnam Management and portfolio manager of the fund since 2014.

Matthew LaPlant, CFA

Portfolio Manager of Putnam Management and portfolio manager of the fund since 2023.

Andrew O'Brien, CFA

Portfolio Manager of Putnam Management and portfolio manager of the fund since 2018.

William Rives, CFA

Portfolio Manager of Putnam Management and portfolio manager of the fund since 2019.

Purchase and sale of fund shares

Fund shares are offered to separate accounts of various insurance companies and to funds offered exclusively to separate accounts of insurance companies that have an agreement with the fund's distributor, Franklin Distributors, LLC (the "Distributor"). The fund requires no minimum investment, but insurers may require minimum investments from those purchasing variable insurance products for which the fund is an underlying investment option. Insurers may purchase or sell shares on behalf of separate accounts by submitting an order to the Distributor any day the New York Stock Exchange ("NYSE") is open. Some restrictions may apply.

Tax information

Generally, owners of variable insurance contracts are not taxed currently on income or gains realized with respect to such contracts. However, some distributions from such contracts may be taxable at ordinary income tax rates and distributions to contract owners younger than 59 ½ may be subject to a 10% penalty tax. For more information, please see the prospectus (or other offering document) for your variable insurance contract.

Payments to insurance companies

The fund is offered as an underlying investment option for variable insurance contracts. The fund and its related companies may make payments to the sponsoring insurance company (or its affiliates) and dealers for distribution and/or other services. These payments may create an incentive for the insurance company to include the fund, rather than another investment, as an option in its products and may create a conflict of interest for dealers in recommending the fund over another investment. The prospectus (or other offering document) for your variable insurance contract may contain additional information about these payments.

Information about the Summary Prospectus, Prospectus, and SAI

The summary prospectus, prospectus, and SAI for a fund provide information concerning the fund. The summary prospectus, prospectus, and SAI are updated at least annually and any information provided in a summary prospectus, prospectus, or SAI can be changed without a shareholder vote unless specifically stated otherwise. The summary prospectus, prospectus, and the SAI are not contracts between the fund and its shareholders and do not give rise to any contractual rights or obligations or any shareholder rights other than any rights conferred explicitly by federal or state securities laws that may not be waived.

Additional information, including current performance, is available at www.franklintempleton.com, by calling 1-800-225-1581, or by e-mailing Putnam at funddocuments@putnam.com.

