

Supplement dated August 7, 2023  
To Prospectus dated December 30, 2022



**Up to \$200,000,000**

**Common Stock**

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This supplement (this “**Supplement**”) supplements the prospectus, dated December 30, 2022 (the “**Prospectus**”), relating to the offer and sale of shares of common stock, par value \$0.001 per share, of Arcturus Therapeutics Holdings Inc. (the “**Company**”) having an aggregate offering price of up to \$200,000,000 from time to time through Cantor Fitzgerald & Co. (“**Cantor**”) and Wells Fargo Securities, LLC (“**Wells Fargo**”), as sales agents. Sales of shares of our common stock under the Prospectus and this Supplement, if any, may be made by any method deemed to be an “at the market offering” as defined in Rule 415(a)(4) promulgated under the Securities Act of 1933, as amended. This Supplement should be read in conjunction with the Prospectus. Capitalized terms used and not defined herein shall have the meanings ascribed to such terms in the Prospectus.

This Supplement is being filed to reflect the amendment of the Sales Agreement by and among the Company, Cantor and Wells Fargo to include William Blair & Company, L.L.C. (“**William Blair**”) as an additional sales agent. Accordingly, each reference to “Cantor and Wells Fargo” or “Cantor or Wells Fargo” in the Prospectus is hereby amended to include William Blair.

The validity of the securities offered by this Supplement will be passed upon for us by Dentons US LLP, New York, New York. Certain legal matters in connection with this offering will be passed upon for the agent by Paul Hastings LLP, New York, New York.

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**Cantor**

**Wells Fargo Securities**

**William Blair**