Issuer Free Writing Prospectus dated January 28, 2019 Relating to Preliminary Prospectus dated January 28, 2019 Filed Pursuant to Rule 433 Registration No. 333-229394

Kiniksa Pharmaceuticals, Ltd. Announces Proposed Public Offering and Concurrent Private Placement

HAMILTON, Bermuda (January 28, 2019) — Kiniksa Pharmaceuticals, Ltd. (Nasdaq: KNSA) ("Kiniksa," "we," and "our") announced today that it is commencing a public offering of 8,000,000 Class A common shares. In addition, Kiniksa expects to grant the underwriters a 30-day option to purchase up to 1,200,000 additional Class A common shares. All of the Class A common shares are being offered by Kiniksa.

Concurrent with the public offering, Kiniksa intends to sell, subject to the consummation of the public offering and other customary conditions, in a private placement exempt from the registration requirements of the Securities Act of 1933, as amended (the "Securities Act"), 2,000,000 Class A1 common shares to one or more existing shareholders affiliated with certain of Kiniksa's directors at a sale price equal to the price to the public in the public offering. However, the consummation of the public offering is not contingent on the consummation of this concurrent private placement.

J.P. Morgan Securities LLC, Goldman Sachs & Co. LLC and Barclays Capital Inc. are acting as joint book-running managers for the public offering. Wedbush Securities Inc. and JMP Securities LLC are acting as co-managers for the public offering.

Kiniksa has filed a registration statement (including a prospectus) with the Securities and Exchange Commission (the "SEC") for the public offering to which this communication relates, which has not yet become effective. Before you invest, you should read the prospectus in that registration statement and other documents Kiniksa has filed with SEC for more complete information about Kiniksa and the public offering. You may get these documents for free by visiting EDGAR on the SEC's website at www.sec.gov. Alternatively, a copy of the preliminary prospectus relating to the public offering may also be obtained, when available, by contacting: J.P. Morgan Securities LLC, Attention: Broadridge Financial Solutions, 1155 Long Island Avenue, Edgewood, NY 11717, via telephone: 1-866-803-9204, or via email at prospectus-eq_fi@jpmchase.com; from Goldman Sachs & Co. LLC, Attention: Prospectus Department, 200 West Street, New York, New York 10282, via telephone: 1-866-471-2526, or via email: prospectus-ny@ny.email.gs.com; or from Barclays Capital Inc., Attention: Broadridge Financial Solutions, 1155 Long Island Avenue, Edgewood, NY 11717, Telephone: 1 (888) 603-5847, Email: barclaysprospectus@broadridge.com.

The information included herein relates only to the public offering and updates, and should be read together with, the preliminary prospectus dated January 28, 2019, included in the registration statement on Form S-1 (File No. 333-229394), which may be accessed on the SEC website at http://www.sec.gov as follows (or if such address has changed, by reviewing Kiniksa's filings for the relevant date on the SEC web site): https://www.sec.gov/Archives/edgar/data/1730430/000104746919000263/a2237498zs-1.htm

The Class A1 common shares to be sold in the concurrent private placement have not been registered under the Securities Act or under any state securities laws and, unless so registered may not be offered or sold in the United States except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act and applicable state securities laws.

This press release shall not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of these securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction.

About Kiniksa

Kiniksa is a biopharmaceutical company focused on discovering, acquiring, developing and commercializing therapeutic medicines for patients suffering from debilitating diseases with significant unmet medical need. Kiniksa has a pipeline of five product candidates, across various stages of development, focused on autoinflammatory and autoimmune conditions. Kiniksa is currently enrolling subjects in a single, pivotal Phase 3 clinical trial of rilonacept, a weekly, subcutaneously-injected, recombinant fusion protein that blocks IL-1α and IL-1β signaling, in recurrent pericarditis, and a global Phase 2 clinical trial of mavrilimumab, a monoclonal antibody inhibitor targeting GM-CSFRα, in giant cell arteritis. Kiniksa plans to advance KPL-716, a monoclonal antibody inhibitor targeting OSMRβ, into an adaptive design Phase 2a/2b clinical trial in prurigo nodualis as well as an exploratory Phase 2 pilot study in multiple diseases characterized by chronic pruritus in the first half of 2019. Kiniksa also intends to file investigational new drug applications for KPL-045, a monoclonal antibody targeting CD30L, and KPL-404, a monoclonal antibody targeting CD40, in the second half of 2019.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. In some cases, you can identify forward looking statements by terms such as "may," "will," "should," "expect," "plan," "anticipate," "could," "intend," "target," "project," "contemplate," "believe," "estimate," "predict," "potential" or "continue" or the negative of these terms or other similar expressions, although not all forward-looking statements contain these identifying words. All statements contained in this press release that do not relate to matters of historical fact should be considered forward-looking statements, including without limitation, statements regarding the public offering and concurrent private placement and the timing of the clinical development of our product candidates.

These forward-looking statements are based on management's current expectations. These statements are neither promises nor guarantees, but involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements, including without limitation, the following: potential delays or difficulties in developing our product candidates or obtaining

regulatory approval for our product candidates, including the uncertain process for obtaining regulatory approval and the potential inability to demonstrate safety and efficacy to the satisfaction of applicable regulatory authorities; unfavorable global economic or market conditions; and volatility in the share price of our Class A common shares.

These and other important factors discussed under the caption "Risk Factors" in our preliminary prospectus filed with the SEC on January 28, 2019 relating to our registration statement on Form S-1 (File No. 333-229394), and our other reports filed with the SEC could cause actual results to differ materially from those indicated by the forward-looking statements made in this press release. Any such forward-looking statements represent management's expectations and estimates as of the date of this press release. While we may elect to update such forward-looking statements at some point in the future, we disclaim any obligation to do so, even if subsequent events cause our views to change. These forward-looking statements should not be relied upon as representing our views as of any date subsequent to the date of this press release.

Every Second Counts!TM

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