Investor and Media Inquiries:
David Pitts
Argot Partners
212-600-1902

Eric Bjerkholt
Sunesis Pharmaceuticals Inc.
650-266-3717

Sunesis Pharmaceuticals Regains NASDAQ Compliance

SOUTH SAN FRANCISCO, Calif., (March 3, 2011) – Sunesis Pharmaceuticals, Inc. (NASDAQ: SNSSD) today announced that it has received notification from The NASDAQ Stock Market that it has regained compliance with the minimum $1.00 per share bid price requirement. As per NASDAQ's Listing Rules, to regain compliance, the Company was required to evidence a closing bid price of $1.00 per share or more for at least ten consecutive days. On March 1, 2011, the closing bid price of the Company's common stock was $1.98 per share, the tenth consecutive day the stock price had closed above $1.00 per share.

About Sunesis Pharmaceuticals

Sunesis is a biopharmaceutical company focused on the development and commercialization of new oncology therapeutics for the treatment of solid and hematologic cancers. Sunesis has built a highly experienced cancer drug development organization committed to advancing its lead product candidate, vosaroxin, in multiple indications to improve the lives of people with cancer. For additional information on Sunesis, please visit http://www.sunesis.com.

This press release contains forward-looking statements. Forward-looking statements are based upon Sunesis' current expectations. Forward-looking statements involve risks and uncertainties. Sunesis' actual results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of these risks and uncertainties, which include, without limitation, risks and uncertainties related to Sunesis' ability to comply with the continued listing requirements of and maintain its listing on the NASDAQ Capital Market, need for substantial additional funding to complete the development and commercialization of vosaroxin, the risk that unfavorable economic and market conditions may make it more difficult and costly to raise additional capital, the risk that Sunesis' development activities for vosaroxin could be halted or significantly delayed for various reasons, the risk that Sunesis' clinical studies for vosaroxin may not demonstrate safety or efficacy or lead to regulatory approval, the risk that data to date and trends may not be predictive of future data or results, the risk that Sunesis' nonclinical studies and clinical studies may not satisfy the requirements of the FDA or other regulatory agencies, risks related to the conduct of Sunesis' clinical trials, risks related to the manufacturing of vosaroxin, and the risk that Sunesis' proprietary rights may not adequately protect vosaroxin. Risk factors related to Sunesis and its business are discussed under "Risk Factors" and elsewhere in Sunesis' Quarterly Report on Form 10-Q for the quarter ended September 30, 2010 and other filings with the Securities and Exchange Commission. Sunesis expressly disclaims any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in the company's

expectations with regard thereto or any change in events, conditions or circumstances on which any such statements are based.

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