



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

August 9, 2011

Via email

P. Kay Wagoner, Ph.D.
Chief Executive Officer and President
Icagen, Inc.
4222 Emperor Blvd., Suite 350
Durham, NC 27703

**Re: Icagen, Inc.
Schedule 14D-9
Filed August 3, 2011
File No. 05-81358**

Dear Dr. Wagoner:

We have reviewed the above referenced filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your filings, by providing the requested information, or by advising us of when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Item 4. The Solicitation or Recommendation, page 11

(b) Background of the Transaction, page 12

1. Supplement the disclosure to clarify the following:

- the specific number of parties that expressed a preliminary interest in engaging in discussions regarding potential collaborations with Icagen between November 2010 to June 2011;
- material qualitative and/or quantitative factors regarding a transaction with Pfizer that were discussed by the Board members between April 13-April 27, 2011;
- further details regarding all material discussions of contingent value rights and whether this option was discussed after the Board received the proposal of \$6 per

share and if not, why not;

- the material issues discussed and considered by Icagen management, the Board and/or J.P. Morgan between May 19-May 24, 2011;
- further detail regarding the components of the J.P. Morgan valuation presentation that were discussed at length by the Board at its June 2 meeting;
- the difference, expressed in quantitative terms, of the proposal offered by Company A versus Pfizer (i.e., the difference in the relative premium to the stock price being offered by Company A versus the premium offered by Pfizer); and,
- the “key issues” that remained open and were negotiated between July 12-19, 2011.

2. We note that retention agreements may be executed between Dr. Wagoner and other members of Icagen’s management team. Revise to disclose, the material terms, if any, surrounding the negotiations of such retention agreements.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company is in possession of all facts relating to the disclosure, the company is responsible for the accuracy and adequacy of the disclosures it has made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

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Please direct any questions to me at (202) 551-3757. You may also contact me via facsimile at (202) 772-9203. Please send all correspondence to us at the following ZIP code: 20549-3628.

Sincerely,

/s/ Mellissa Campbell Duru

Mellissa Campbell Duru
Special Counsel
Office of Mergers & Acquisitions

Cc (via email): Hal Leibowitz, Esq.
Wilmer Cutler Pickering Hale and Dorr LLP