



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-4631

December 30, 2013

Via E-Mail

Mr. Alain J. Castro
Chief Executive Officer and Director
Ener-Core, Inc.
9400 Toledo Way
Irvine, CA 92618

Re: Ener-Core, Inc.
Amendment No. 1 to Registration Statement on Form S-1
Filed December 23, 2013
File No. 333-192612

Dear Mr. Castro:

We have reviewed your response letter and the above-referenced filing, and have the following comment.

Selling Stockholders, page 15; Related Party Transactions, page 39

1. The revised disclosure in footnote (22) on page 17 indicates that the SAIL entities acquired the shares of common stock being registered for resale in April and June 2013 when you were a shell company. Stockholders who receive shares of common stock from a shell company are considered underwriters in connection with any resale of those shares of common stock. For guidance you may wish to refer to Securities Act Release No. 33-8869. Additionally, the offering of the shares of common stock by the SAIL entities must be conducted at a fixed price because you are ineligible to use Form S-3 for a primary offering and are unable to conduct an at the market offering under Rule 415(a)(1)(x). Please revise the registration statement accordingly. Alternatively, you may remove the SAIL entities as selling stockholders from this registration statement.

As appropriate, please amend your filing in response to this comment. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

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You may direct questions to Edward M. Kelly, Senior Counsel, at 202-551-3728 or Erin K. Jaskot, Staff Attorney, at (202) 551-3442.

Sincerely,

/s/ Erin K. Jaskot, *for*

Pamela A. Long
Assistant Director

cc: Via E-Mail
Kevin K. Leung, Esq.
LKP Global Law, LLP