



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

DIVISION OF  
CORPORATION FINANCE

Mail Stop 3030

October 07, 2016

Via E-mail

Francois Michelon  
Chief Executive Officer  
ENDRA Inc.  
3600 Green Court, Suite 350  
Ann Arbor, MI 48105

**Re: ENDRA Inc.  
Amendment No. 1 to  
Draft Registration Statement on Form S-1  
Submitted September 21, 2016  
CIK No. 0001681682**

Dear Mr. Michelon:

We have reviewed your amended draft registration statement 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 providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. 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 the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our September 1, 2016 letter.

General

1. Throughout your disclosure where you discuss your anticipated regulatory pathway, please revise to indicate where you derived your estimates about regulatory pathway and timing, and indicate that these are estimates only, subject to significant uncertainty.

Use of Proceeds, page 33

2. We note your revisions made in response to prior comments 5 and 12 indicating the anticipated steps remaining to obtain European and U.S. regulatory approval. Please

expand your disclosure here and elsewhere as appropriate to indicate any additional steps beyond regulatory approval required to reach revenue generation.

Director Compensation, page 68

3. Please reconcile your response to prior comment 15 with Instruction 1 to Item 402(n)(2)(vii) and the Instruction to Item 402(r) of Regulation S-K.

Executive Officers, Directors and Corporate Governance, page 62

David Wells – Chief Financial Officer (Interim), page 63

4. Please tell us why you deleted the disclosure regarding Mr. Wells's positions "with several emerging growth companies."

You may contact Michael Fay at (202) 551-3812 or Brian Cascio, Accounting Branch Chief, at (202) 551-3676 if you have questions regarding comments on the financial statements and related matters. Please contact Laurie Abbott at (202) 551-8071 or me at (202) 551-3528 with any other questions.

Sincerely,

/s/ Amanda Ravitz

Amanda Ravitz  
Assistant Director  
Office of Electronics and Machinery

cc: Mark R. Busch  
K&L Gates LLP