

Ignyta, Inc.  
Form SC 13G  
September 11, 2017  
UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

OMB APPROVAL  
OMB Number: 3235-0145  
Expires: February 28, 2009  
Estimated average burden  
hours per response... 10.4

SCHEDULE 13G

Under the Securities Exchange Act of 1934

(Amendment No. \_\_)\*

Ignyta, Inc.  
(Name of Issuer)

Common Stock, par value \$0.0001 per share  
(Title of Class of Securities)

451731103  
(CUSIP Number)

August 31, 2017  
(Date of Event which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

Rule 13d-1(b)

Rule 13d-1(c)

Rule 13d-1(d)

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\* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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CUSIP NO. 451731103

1 Names of Reporting  
Persons.  
I.R.S. Identification Nos. of  
above persons (entities only)

Cormorant Global  
Healthcare Master Fund, LP

2 Check the Appropriate Box  
if a Member of a Group (See  
Instructions)

(a)

(b)

3 SEC Use Only  
Citizenship or Place of  
Organization.

4 Cayman Islands

5 Sole Voting Power

0 shares

6 Shared Voting Power

Number  
of Shares 2,489,380 shares

Beneficially  
Owned by Refer to Item 4 below.  
Each 7 Sole Dispositive Power

Reporting  
Person With 0 shares

8 Shared Dispositive Power

2,489,380 shares

Refer to Item 4 below.  
Aggregate Amount  
Beneficially Owned by Each  
Reporting Person

9 2,489,380 shares

10 Refer to Item 4 below.  
Check if the Aggregate  
Amount in Row (9)  
Excludes Certain Shares  
(See Instructions)  N/A

11

Percent of Class  
Represented by Amount in  
Row (9)\*

4.4%

Refer to Item 4 below.  
Type of Reporting Person  
(See Instructions)

12

PN (Partnership)

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CUSIP NO. 451731103

1 Names of Reporting  
Persons.  
I.R.S. Identification Nos. of  
above persons (entities only)

Cormorant Global  
Healthcare GP, LLC

2 Check the Appropriate Box  
if a Member of a Group (See  
Instructions)

(a)

(b)

3 SEC Use Only  
Citizenship or Place of  
Organization.

4 Delaware

5 Sole Voting Power

0 shares

6 Shared Voting Power

Number  
of Shares 2,489,380 shares

Beneficially  
Owned by Each 7 Sole Dispositive Power

Reporting  
Person With 0 shares

8 Shared Dispositive Power

2,489,380 shares

Refer to Item 4 below.  
Aggregate Amount  
Beneficially Owned by Each  
Reporting Person

9 2,489,380 shares

10 Refer to Item 4 below.  
Check if the Aggregate  
Amount in Row (9)  
Excludes Certain Shares  
(See Instructions)  N/A

11

Percent of Class  
Represented by Amount in  
Row (9)\*

4.4%

Refer to Item 4 below.  
Type of Reporting Person  
(See Instructions)

12

OO (Limited Liability  
Company)

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CUSIP NO. 451731103

1 Names of Reporting  
Persons.  
I.R.S. Identification Nos. of  
above persons (entities only)

Cormorant Asset  
Management, LLC

2 Check the Appropriate Box  
if a Member of a Group (See  
Instructions)

(a)

(b)

3 SEC Use Only  
Citizenship or Place of  
Organization.

4 Delaware

5 Sole Voting Power

0 shares

6 Shared Voting Power

Number  
of Shares 3,000,000 shares

Beneficially  
Owned by Refer to Item 4 below.  
Each 7 Sole Dispositive Power

Reporting  
Person With 0 shares

8 Shared Dispositive Power

3,000,000 shares

Refer to Item 4 below.  
Aggregate Amount  
Beneficially Owned by Each  
Reporting Person

9 3,000,000 shares

10 Refer to Item 4 below.  
Check if the Aggregate  
Amount in Row (9)  
Excludes Certain Shares  
(See Instructions)  N/A

11

Percent of Class  
Represented by Amount in  
Row (9)\*

5.3%

Refer to Item 4 below.  
Type of Reporting Person  
(See Instructions)

12

OO (Limited Liability  
Company)

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CUSIP NO. 451731103

Names of Reporting  
Persons.  
I.R.S. Identification Nos. of  
above persons (entities only)

1 Bihua Chen

2 Check the Appropriate Box  
if a Member of a Group (See  
Instructions)

(a)

(b)

3 SEC Use Only  
Citizenship or Place of  
Organization.

4 United States

5 Sole Voting Power

0 shares

6 Shared Voting Power

Number  
of Shares 3,000,000 shares

Beneficially  
Owned by Refer to Item 4 below.  
Each 7 Sole Dispositive Power

Reporting  
Person With 0 shares

8 Shared Dispositive Power

3,000,000 shares

Refer to Item 4 below.  
Aggregate Amount  
Beneficially Owned by Each  
Reporting Person

9 3,000,000 shares

10 Refer to Item 4 below.  
Check if the Aggregate  
Amount in Row (9)  
Excludes Certain Shares  
(See Instructions)  N/A

11 Percent of Class  
Represented by Amount in

Row (9)\*

5.3%

Refer to Item 4 below.  
Type of Reporting Person  
(See Instructions)

12

IN (Individual)

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CUSIP NO. 451731103

Item 1.

(a) Name of Issuer

Ignyta, Inc.

(b) Address of Issuer's Principal Executive Offices

4545 Towne Centre Court  
San Diego, CA 92121

Item 2.

(a) Name of Person Filing

Cormorant Global Healthcare Master Fund, LP  
Cormorant Global Healthcare GP, LLC  
Cormorant Asset Management, LLC  
Bihua Chen

(b) Address of Principal Business Office or, if none, Residence

200 Clarendon Street, 52nd Floor  
Boston, MA 02116

(c) Citizenship

Cormorant Global Healthcare Master Fund, LP - Cayman Islands  
Cormorant Global Healthcare GP, LLC - Delaware  
Cormorant Asset Management, LLC - Delaware  
Bihua Chen - United States

(d) Title of Class of Securities

Common Stock

(e) CUSIP Number

451731103

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CUSIP NO. 451731103

Item 3. If this statement is filed pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is  
a:

- (a)  Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o).
- (b)  Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).
- (c)  Insurance Company as defined in Section 3(a)(19) of the Act
- (d)  Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8).
- (e)  An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E);
- (f)  An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F);
- (g)  A parent holding company or control person in accordance with § 240.13d-1(b)(1)(ii)(G);
- (h)  A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i)  A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
- (j)  A non-U.S. institution in accordance with §240.13d-1(b)(1)(ii)(J);
- (k)  Group, in accordance with §240.13d-1(b)(1)(ii)(K).

Item 4. Ownership\*\*\*

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

(a) Amount Beneficially Owned\*\*\*

Cormorant Global Healthcare Master  
Fund, LP – 2,489,380 shares  
Cormorant Global Healthcare GP, LLC -  
2,489,380 shares  
Cormorant Asset Management, LLC –  
3,000,000 shares  
Bihua Chen – 3,000,000 shares

(b) Percent of Class

Cormorant Global Healthcare Master  
Fund, LP – 4.4%  
Cormorant Global Healthcare GP, LLC –  
4.4%  
Cormorant Asset Management, LLC – 5.3%  
Bihua Chen – 5.3%

Number of shares as to which such person

(c) has:

(i) sole power to vote or to direct the vote

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CUSIP NO. 451731103

Cormorant Global Healthcare Master Fund, LP - 0 shares  
Cormorant Global Healthcare GP, LLC - 0 shares  
Cormorant Asset Management, LLC - 0 shares  
Bihua Chen - 0 shares

(ii) shared power to vote or to direct the vote

Cormorant Global Healthcare Master Fund, LP – 2,489,380 shares  
Cormorant Global Healthcare GP, LLC - 2,489,380 shares  
Cormorant Asset Management, LLC – 3,000,000 shares  
Bihua Chen - 3,000,000 shares

(iii) sole power to dispose or to direct the disposition of

Cormorant Global Healthcare Master Fund, LP - 0 shares  
Cormorant Global Healthcare GP, LLC - 0 shares  
Cormorant Asset Management, LLC - 0 shares  
Bihua Chen - 0 shares

(iv) shared power to dispose or to direct the disposition of

Cormorant Global Healthcare Master Fund, LP – 2,489,380 shares  
Cormorant Global Healthcare GP, LLC - 2,489,380 shares  
Cormorant Asset Management, LLC - 3,000,000 shares  
Bihua Chen - 3,000,000 shares

\*\*\* Shares reported herein for Cormorant Asset Management, LLC represent shares which are beneficially owned by Cormorant Global Healthcare Master Fund, LP (the “Fund”), as reported herein, and shares which are beneficially owned by a managed account (the “Account”). Cormorant Global Healthcare GP, LLC serves as the general partner of the Fund, and Cormorant Asset Management, LLC serves as the investment manager to both the Fund and the Account. Bihua Chen serves as the managing member of Cormorant Global Healthcare GP, LLC and Cormorant Asset Management, LLC. Each of the Reporting Persons disclaims beneficial ownership of the shares reported herein except to the extent of its or his pecuniary interest therein.

Item 5. Ownership of Five Percent or Less of a Class

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following [ ].

Item 6. Ownership of More than Five Percent on Behalf of Another Person

Not applicable.

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CUSIP NO. 451731103

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company

Not applicable.

Item 8. Identification and Classification of Members of the Group

Not applicable.

Item 9. Notice of Dissolution of Group

Not applicable.

Item 10. Certification

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

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CUSIP NO. 451731103

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this Statement is true, complete and correct.

September 11, 2017

CORMORANT GLOBAL HEALTHCARE  
MASTER FUND, LP

By: Cormorant Global Healthcare GP, LLC  
its General Partner

By: /s/ Bihua Chen  
Bihua Chen, Managing Member

CORMORANT GLOBAL HEALTHCARE  
GP, LLC

By: /s/ Bihua Chen  
Bihua Chen, Managing Member

CORMORANT ASSET MANAGEMENT,  
LLC

By: /s/ Bihua Chen  
Bihua Chen, Managing Member

/s/ Bihua Chen  
Bihua Chen